Systemwalker

FUJITSU

Systemwalker Service Quality Coordinator

User's Guide (Console Edition)

Windows/Solaris/Linux

J2X1-7660-01ENZ0(01)
September 2012

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

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

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

Conventions used in this document

- Edition-specific information

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

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

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

- Information specific to Windows or UNIX versions

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

  [Windows]

  This indicates that the article relates specifically to Windows versions.

  [UNIX]

  This indicates that the article relates specifically to UNIX versions.

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

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

  This indicates that the article relates specifically to Solaris versions.

Symbols

The symbols used with commands are explained below.

[Entry example]

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

[Meaning of each symbol]

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

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

Acknowledgement

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

September 2012

Revision History

Details of Revisions	Location	Manual Code
Add "Interstage(TxnAnalysis)JavaEE" as a node to the tree in the definition screen.	1.2.1	J2X1-7660-01ENZ0(01) J2X1-7660-01ENZ2(01)
Add explanation of the transaction breakdown analysis of the Java EE environment.	1.2.2.9, 3.2	
Add explanaton of amount of memory on board about server distribution by rscource usage condition (Summary) and List of rscource usage condition (Detail).	4.2.1.1.1	

Contents

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

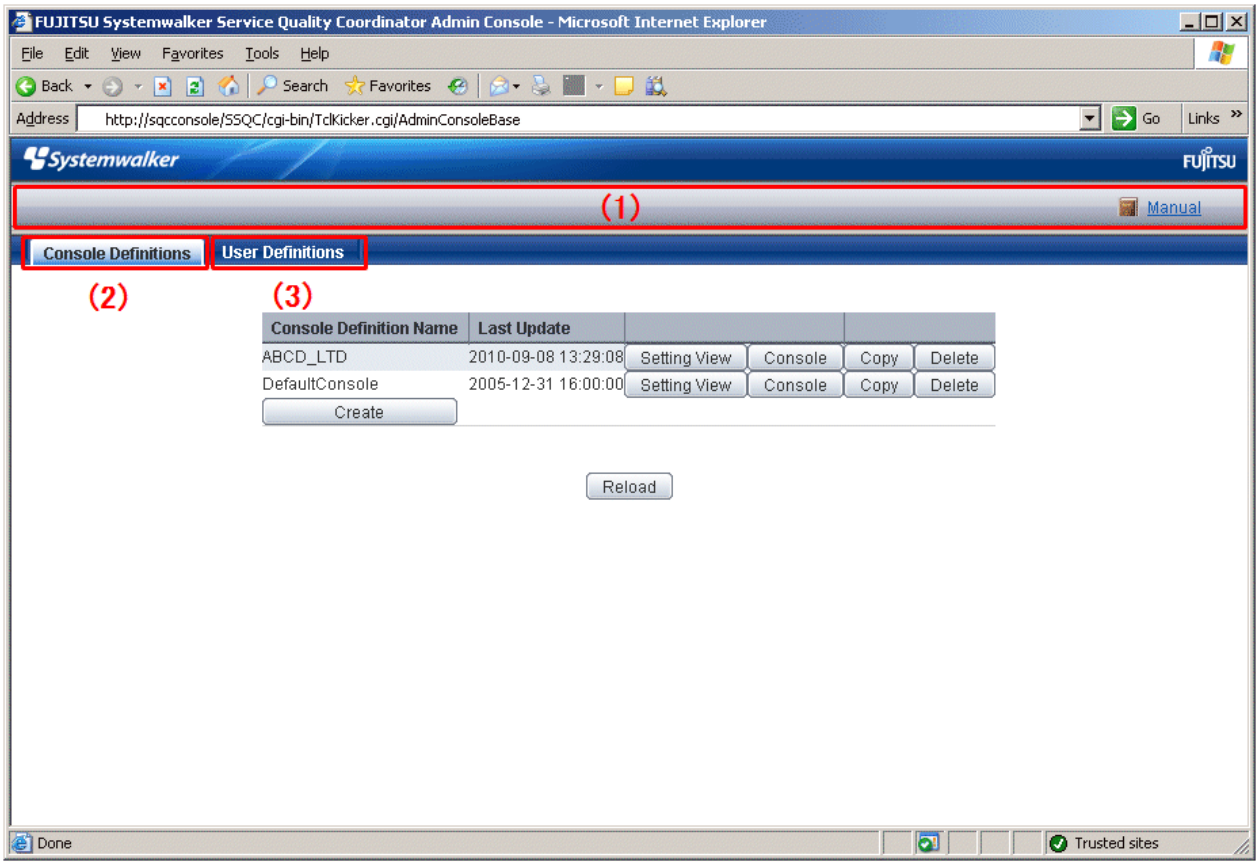
In order to communicate with the management server, a virtual directory must be registered on the Web server. Refer to "How to Set Up Basic Authentication for Operation Management Clients" in the *Installation Guide* when setting up basic authentication in the Admin Console.

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



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.

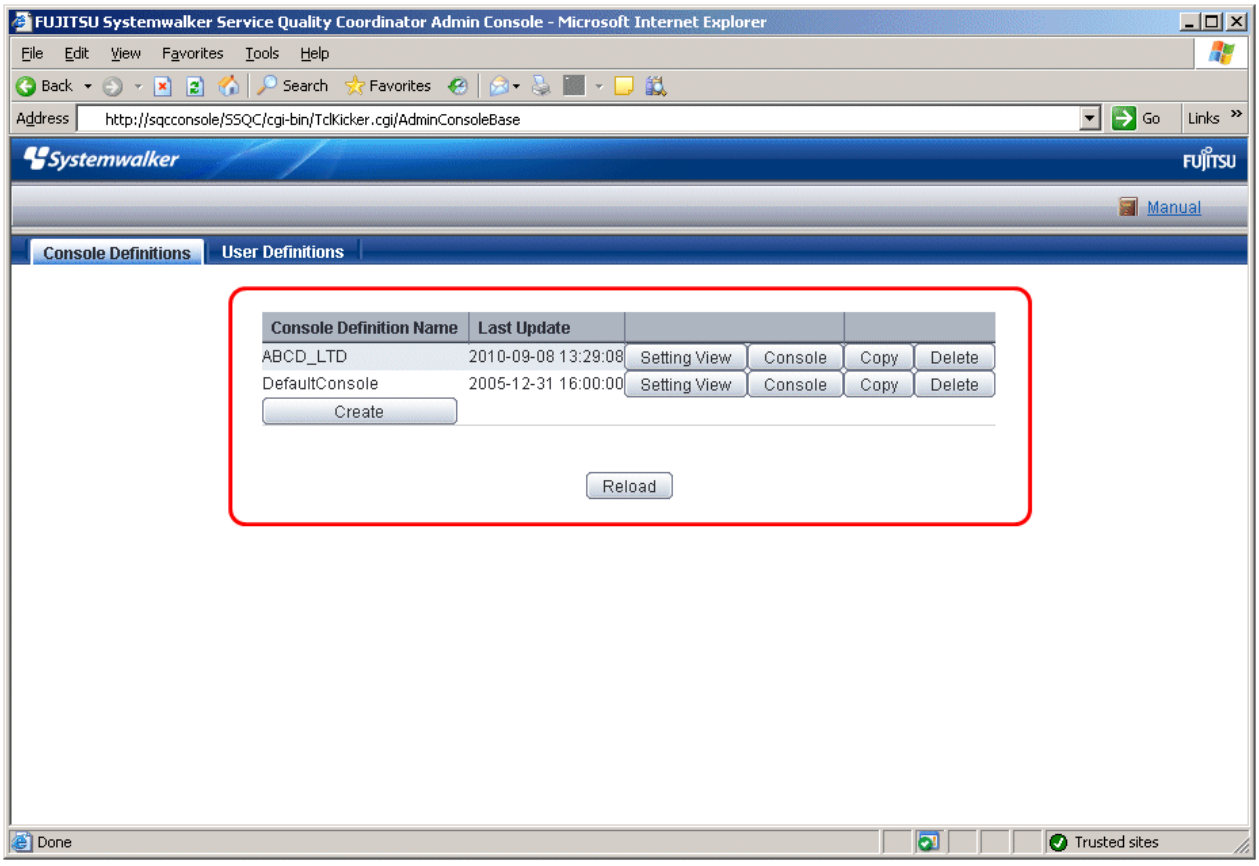
1.1 Console Definitions Window

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

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.*

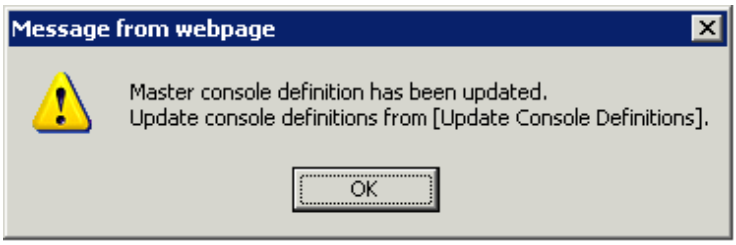
1.2 Setting View

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**.

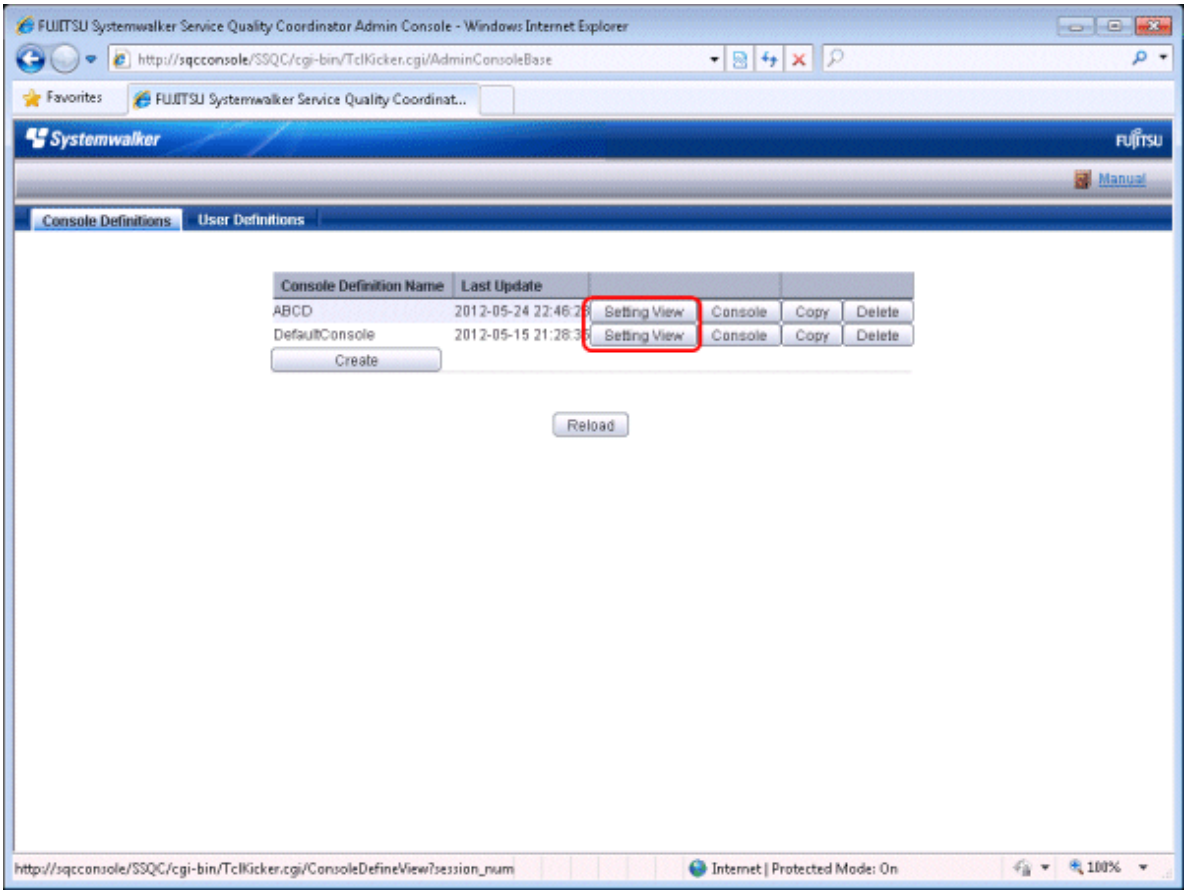
Note

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



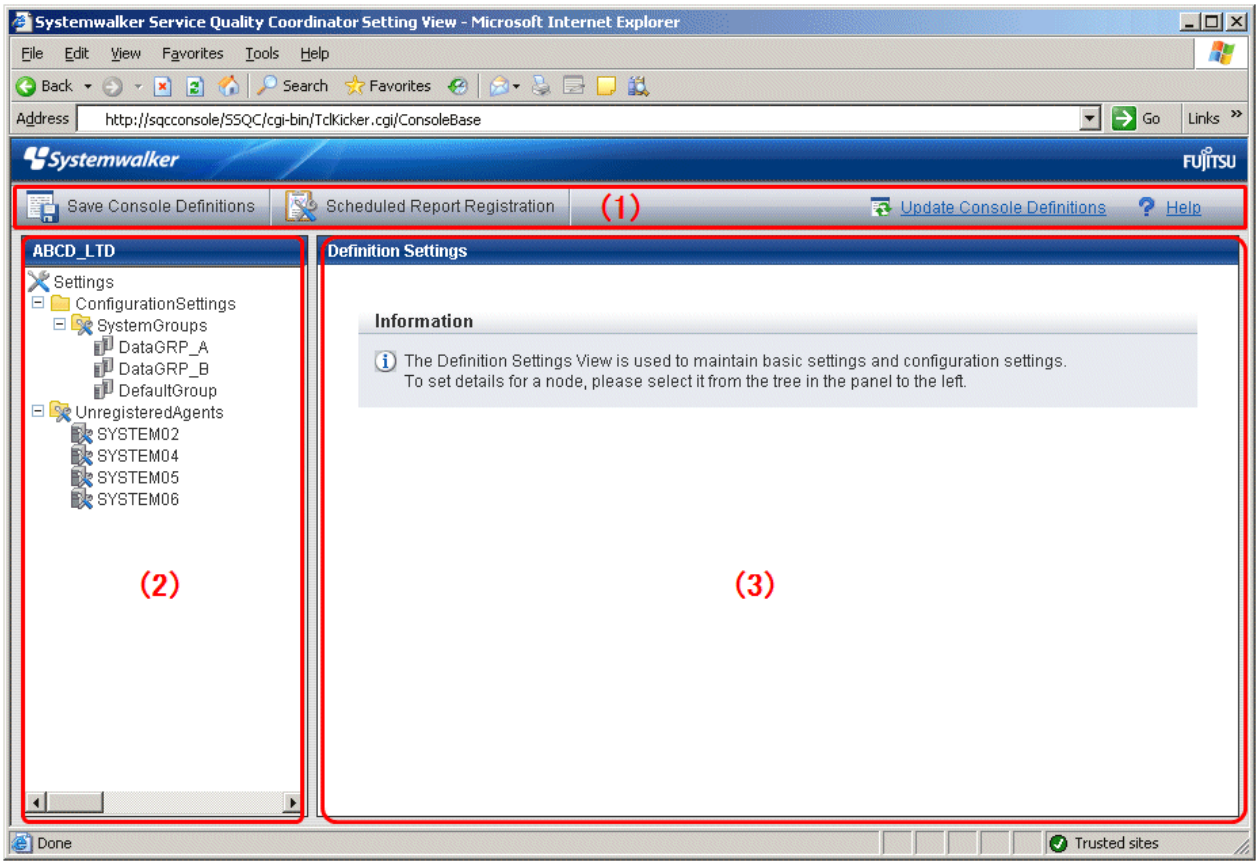
In this case, click **OK** and then click **Update Console Definition** on the displayed definition window.

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: - **Save Console Definitions** Saves the console definition. - **Register Scheduled Report** Opens a new Console window. - **Update Console Definition** Reloads console definitions. - **Help** Open the *User's Guide (Console Edition)*.
(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	Deletes a configuration definition. If the **OK** button is clicked in response to the deletion prompt, the information will be deleted. Point The trees in any other Console windows that may be open at the same time are not updated automatically. It will be necessary to reload the tree using the procedures described in "3.1.2.1 Reloading the Summary tree"or "3.2.2.1 Reloading the Drilled-Down tree".
View	Opens an information display window.
Apply	Completes information entry and closes the window. At the same time, any information that has been added or modified will be applied to the local console definitions. Point The trees in any other Console windows that may be open at the same time are not updated automatically. It will be necessary to reload the tree using the procedures described in "3.1.2.1 Reloading the Summary tree"or "3.2.2.1 Reloading the Drilled-Down tree".
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	This is the default level that is displayed when the **Setting View** opens. It displays **Settings**, which is the root of the tree, and the system groups. When the system group node is selected, the display switches to the system group tree.

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

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

Icon	Meaning
	Indicates the Setting function (the root of the tree).
	Indicates that the node is used to return to the previous level.
	Indicates a folder used to store collected information.
	Indicates a system group.
	Indicates individual servers such as 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	--
Instances	--
Resources	"1.2.2.5 Resources"
Interstage(TxnAnalysis)JavaEE	--
Server Instances	--
TxnIDs	"1.2.2.9 TxnIDs"
Interstage(TxnAnalysis)	--
Work Units	--
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

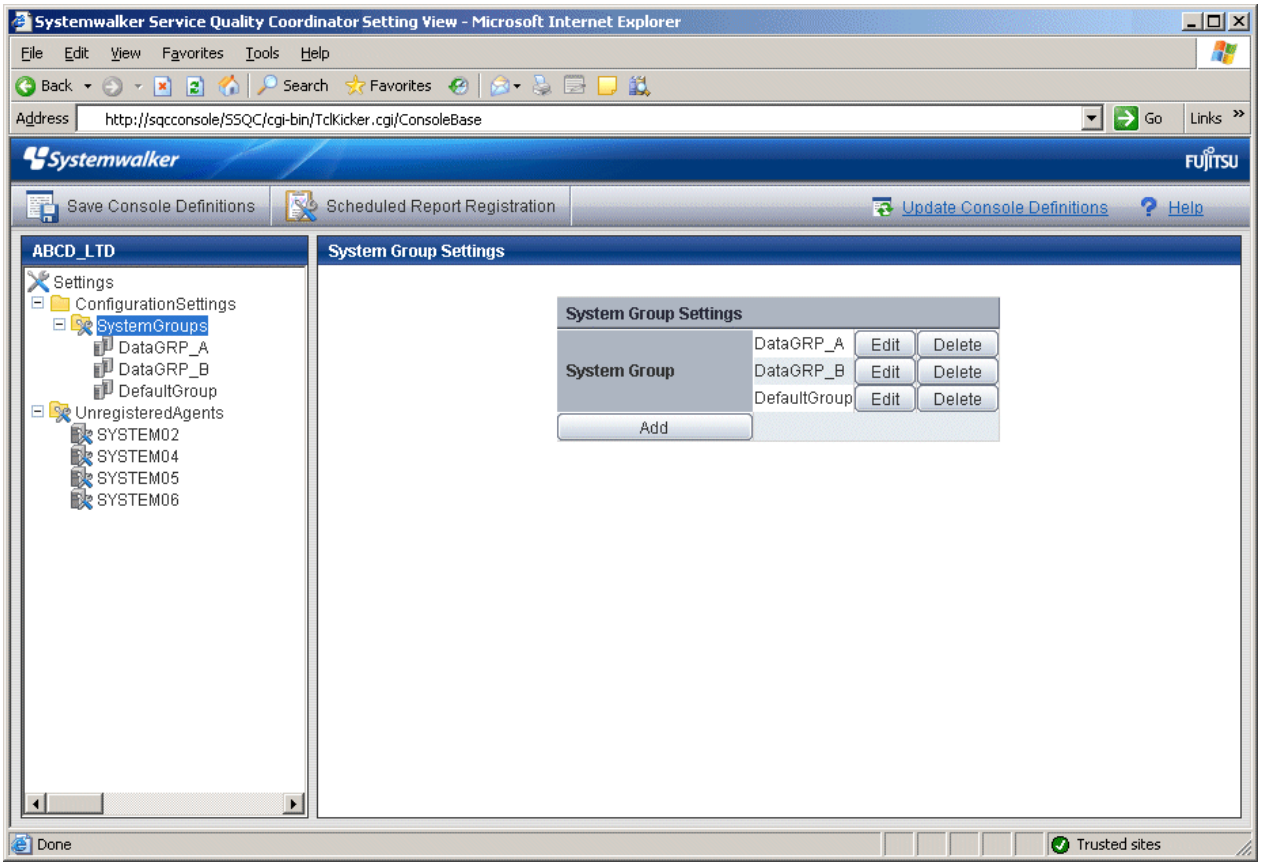
This node registers system groups.

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.

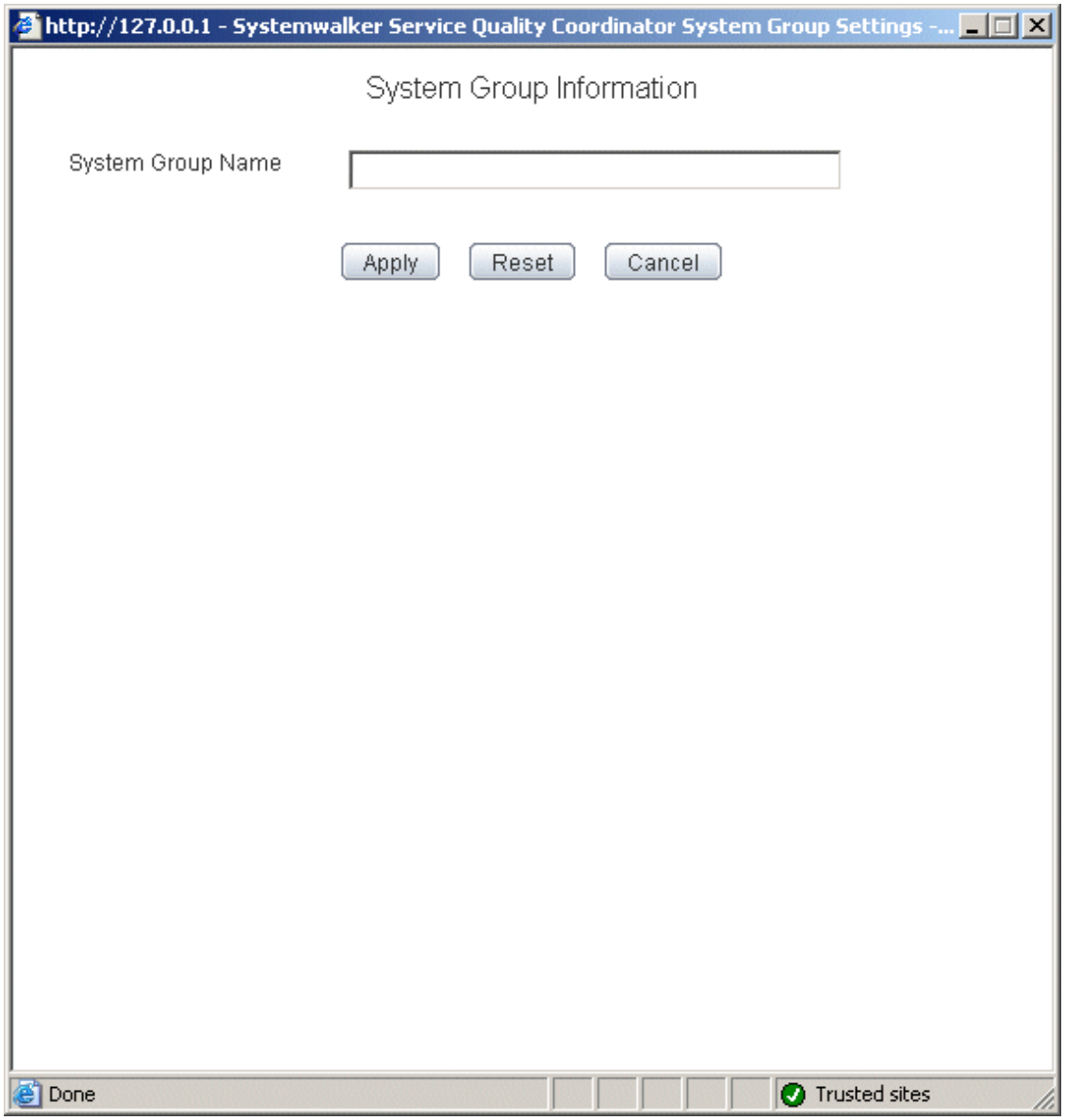
Managed host must belong to a group.

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**	Set a display name that will be used to identify the system group. Set a name that is unique within the management configuration. Note, however, that it does not matter if the same name is also used as an Agent name or a Proxy Manager name. The following characters can be used for system group names: - Alphanumeric characters - Symbols (except for \ : , < > $ " ' [ ] = &)

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

2. 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

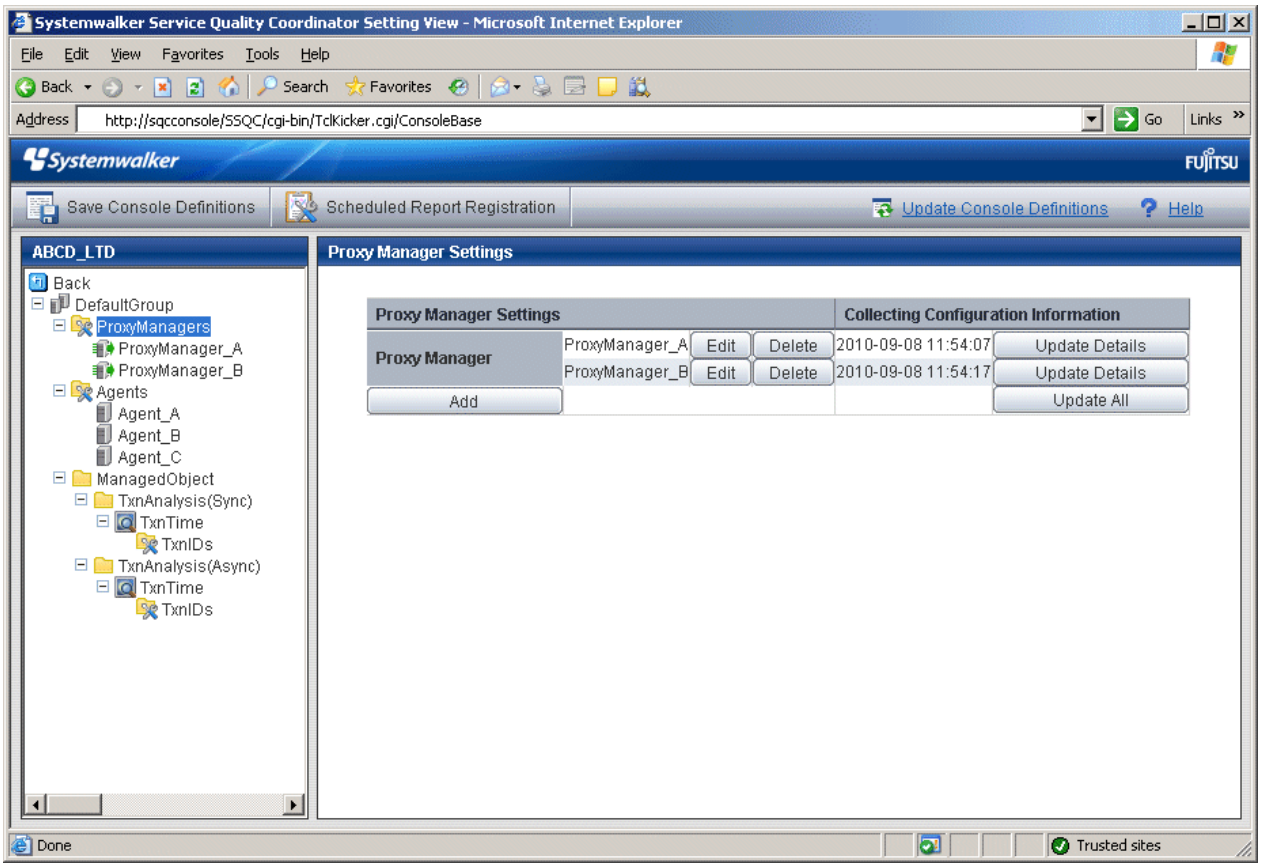
This node registers Proxy Managers that will be managed.

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

Point

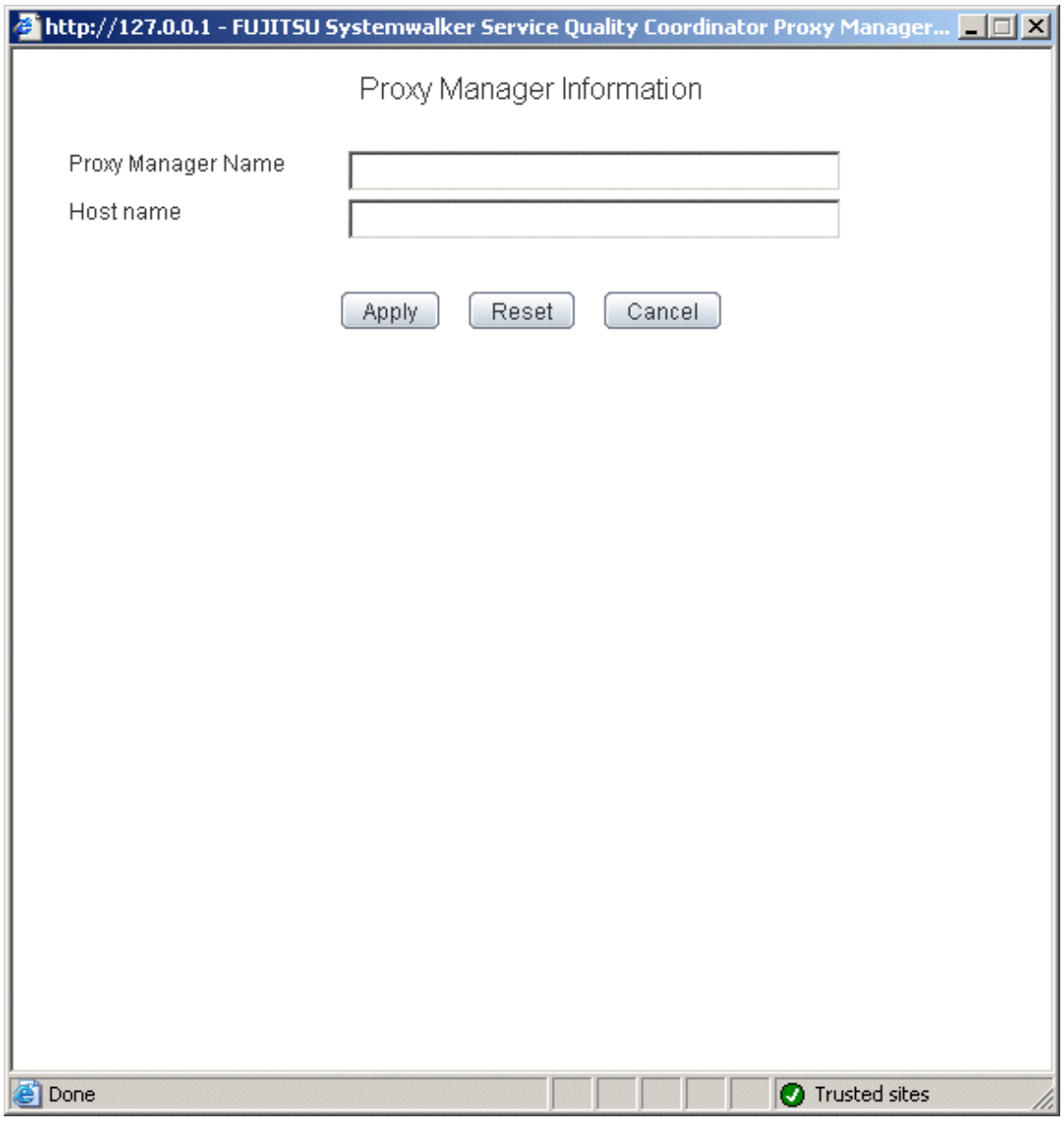
To collect information with a Manager and not a Proxy Manager, register the Manager as a Proxy Manager.

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 Search Favorites
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
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.



Node name	Setting item name	Description
ProxyManagers	Proxy Manager Name	Specify the display name for identifying the Proxy Manager. 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. The following characters can be used for Proxy Manager names: - Alphanumeric characters - Symbols (except for \ : , < > $ " ' [ ] = &)

Node name	Setting item name	Description
		Platform dependent characters can not be used. The Proxy Manager name can be no longer than 64 characters.
	Host Name	Specify the identifier for the Proxy Manager. The same system name cannot be registered more than once within a single group, but identical host names can be registered in different groups. **Point** 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). 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.

2. 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.

3. 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 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.xm

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*.

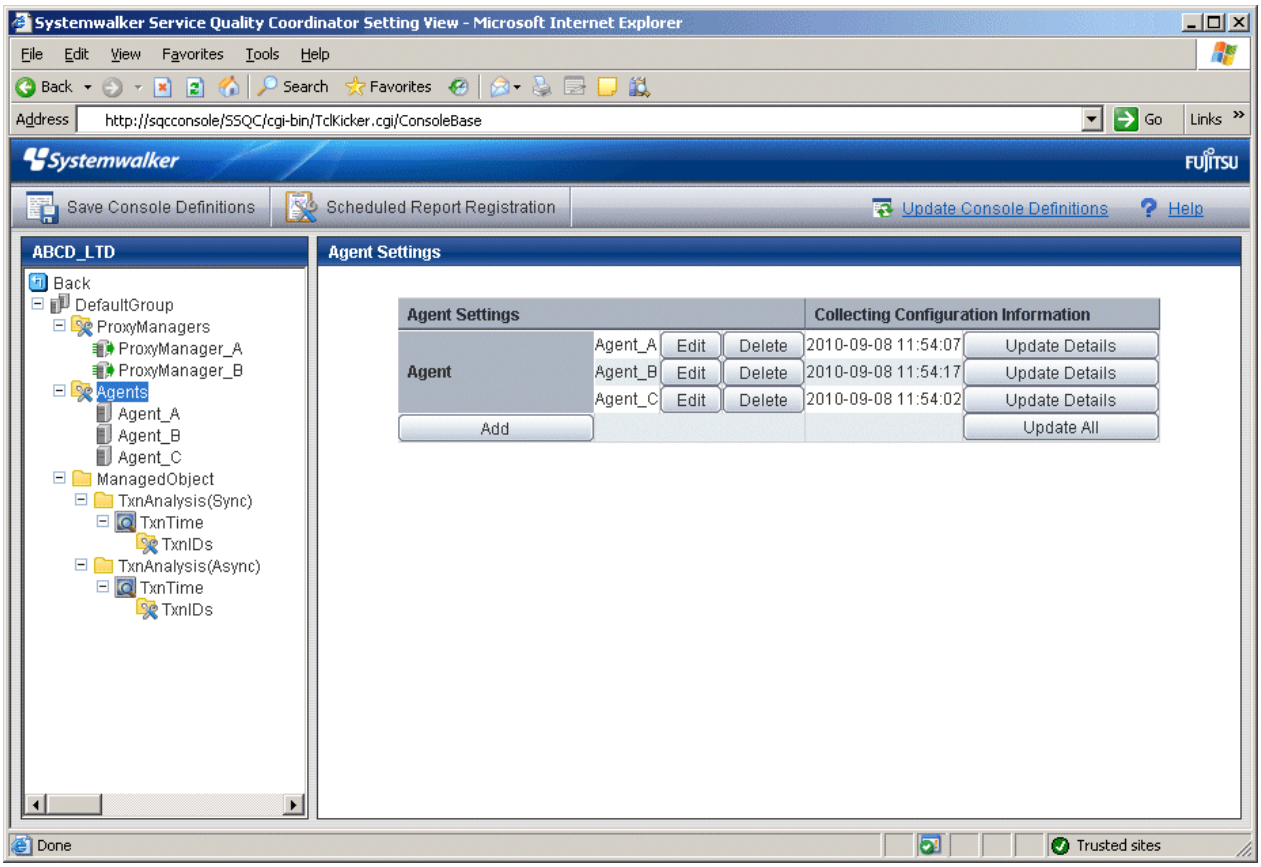
1.2.2.3 Agents

This node registers Agents that will be managed.

Point

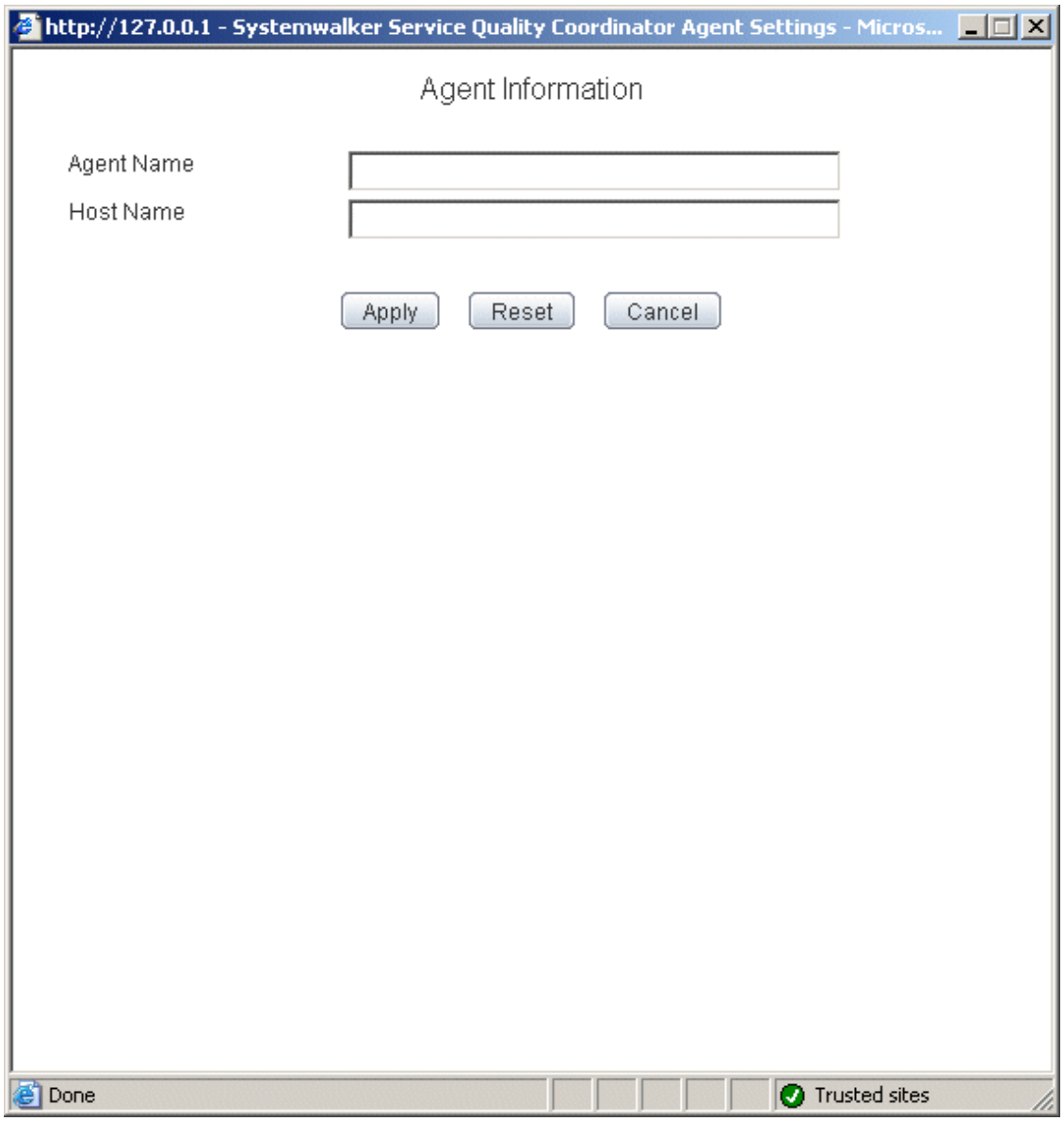
Agent registration can also be performed easily with the **Register Agent with System Group** window. Refer to "1.2.3 Unregistered Agents Information (UnregisteredAgents)" for details. Note that the **Register Agent with System Group** window cannot be used when "pull" operations are being performed. 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 Search Favorites
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
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.



Node name	Setting item name	Description
Agents	**Agent Name**	Specify the display name for identifying the Agent. Set a name that is unique within the management configuration. Note, however, that it does not matter if the same name is also used as a system group name or a ProxyManger name. The following characters can be used for Agent names: - Alphanumeric characters - Symbols (except for \ : , < > $ " ' [ ] = &) Platform dependent characters can not be used. The Agent name can be no longer than 64 characters.

Node name	Setting item name	Description
	Host Name	Specify the identifier for the Agent. The same host name cannot be registered more than once within a single group, but identical system names can be registered in different groups. If a single Agent is used in multiple businesses, it is possible to create a system group for each business and to register the same Agent with each one. However, a different character string should be used in the Agent name (display name). The identifier is 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. **Point** For clustered Agent operations, specify either a physical host name or a physical IP address.

2. 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.

3. 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 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

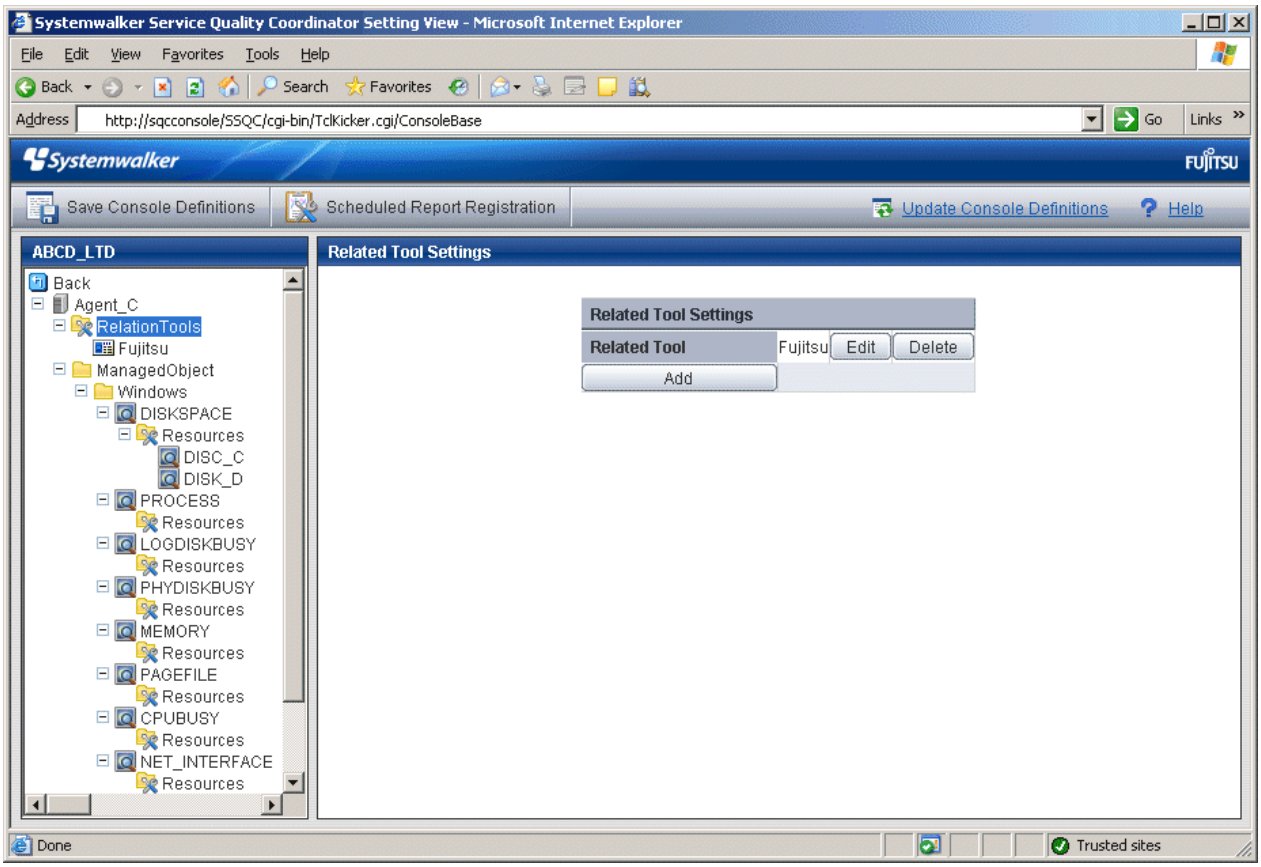
The registers Agent and configuration information is collected can be done by the command. Refer to "sqcSetupConsoleDefine (Console Definition Configuration Command)" and "sqcGetXMLConfig (Configuration Information Collection Command)" in the *Reference Guide*.

1.2.2.4 RelationTools

When Proxy Managers and Agents are registered, a folder named "RelationTools" will be created.

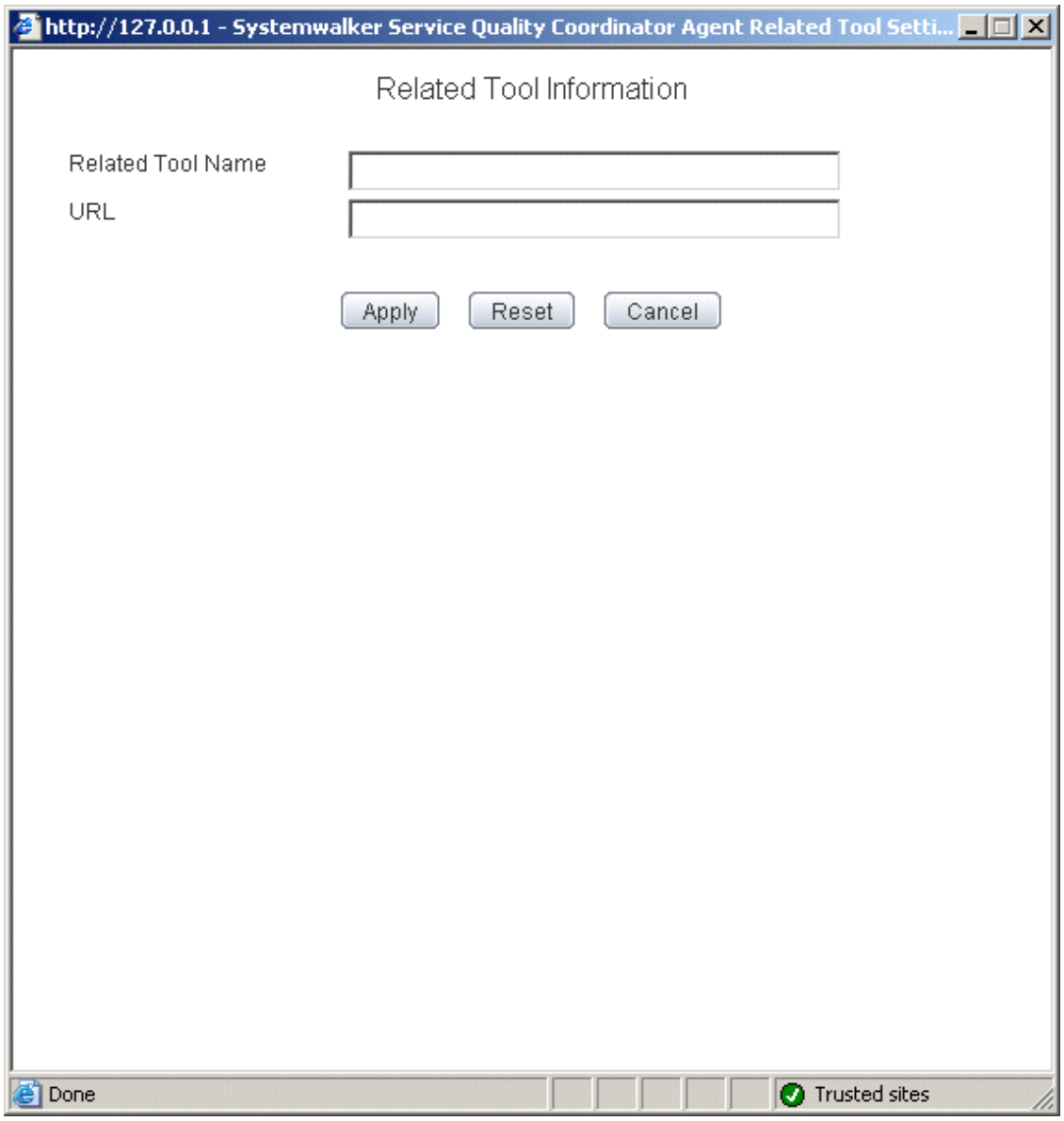
To call the related tools (that can be called from URLs) from this product's Drilled-Down display, set up this folder as well.

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


Systemwalker Service Quality Coordinator Setting View - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
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.



Node name	Setting item name	Description
RelationTools	**Related Tool Name**	Specify the display name for identifying the tool. The following characters can be used for related tool names: - Alphanumeric characters - Symbols (except for \ : , < > $ " ' [ ] = &) Platform dependent characters can not be used. The related tool name can be no longer than 64 characters. Existing related tool name cannot be used.

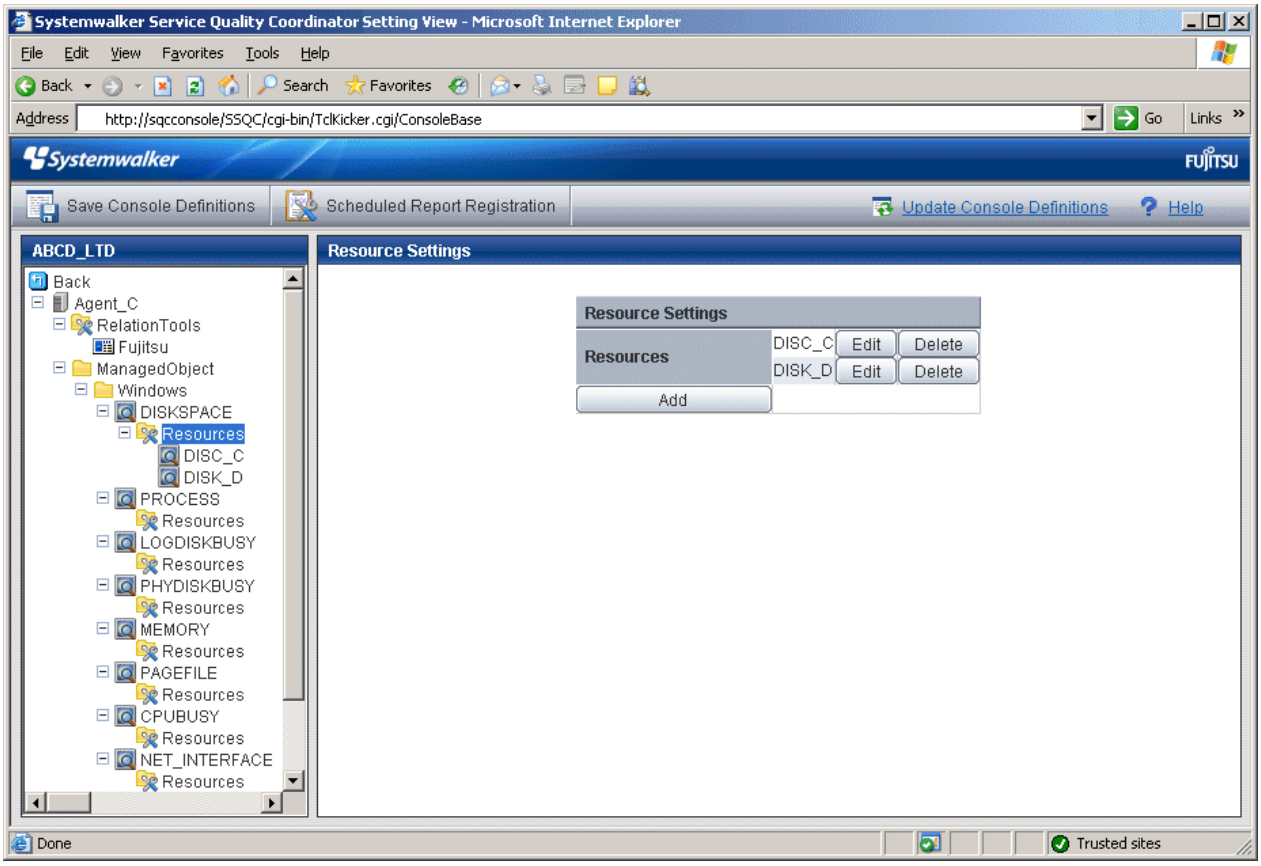
Node name	Setting item name	Description
	URL	Specify the URL to call.

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.

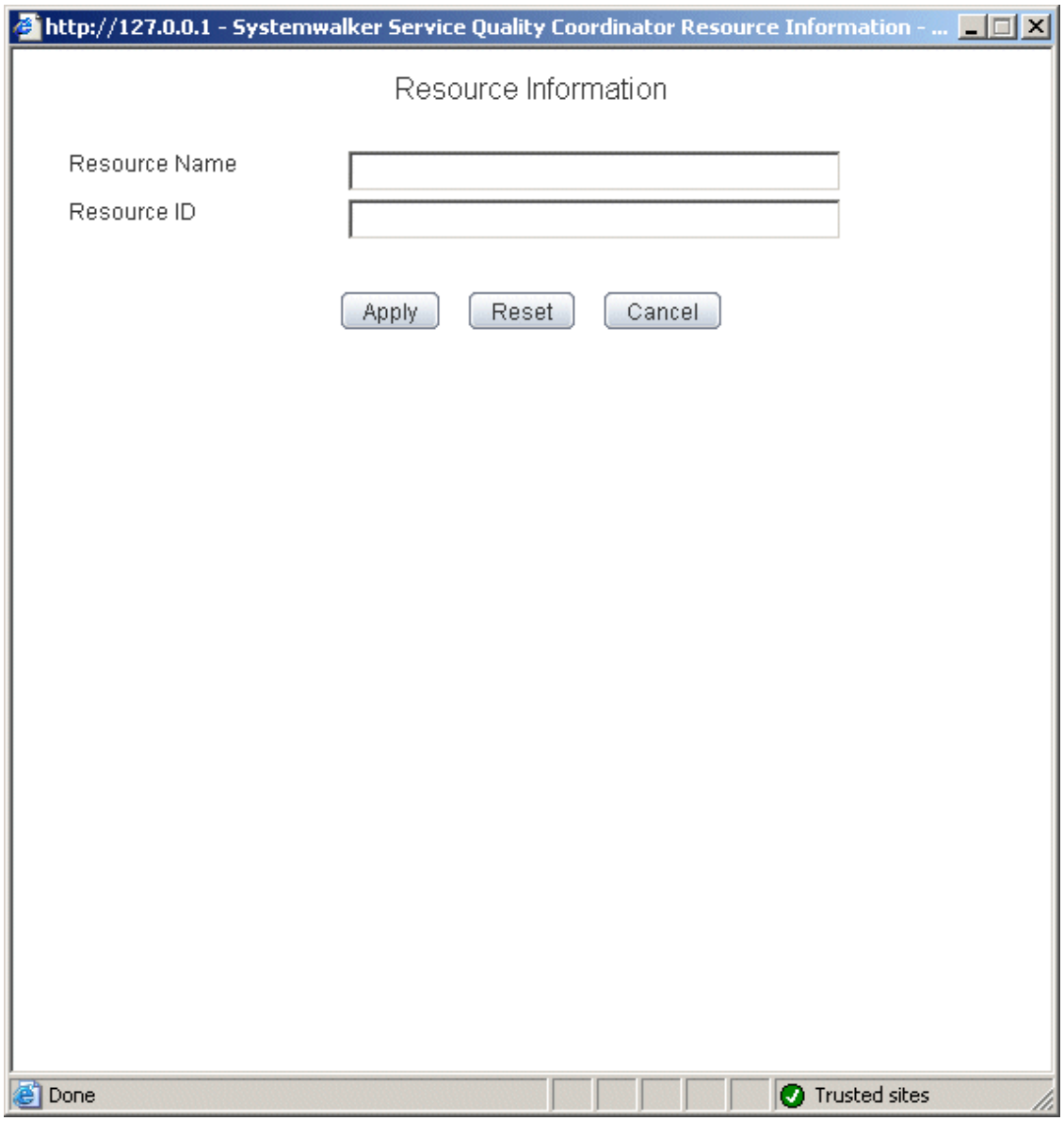
Refer to "3.2.3.3 Displaying resources" for details on displaying resources with the Drilled-Down display function.

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

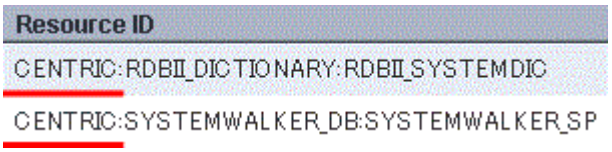
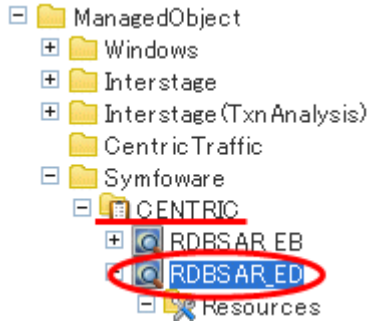
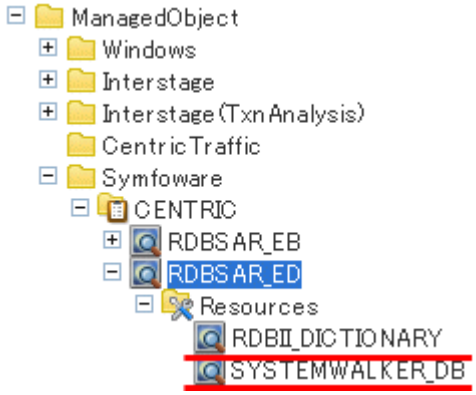


Procedure

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**	Specify the display name for identifying the resource. Set a name that is unique within the target **Resources** folder The following characters can be used for resource names: - Alphanumeric characters - Symbols (except for \ , < > $ " ' [ ] = &) Platform dependent characters can not be used. The resource name can be no longer than 64 characters.
	Resource ID	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.

Node name	Setting item name	Description
		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. Example: When "RDBSAR_ED" is selected, the following strings are displayed in the **Resource ID** column of the Drilled-Down display content:  In addition, "CENTRIC" appears in the tree as a node that represents an instance.  In this case, specify "RDBII_DICTIONARY" and "SYSTEMWALKER_DB" that appear below "CENTRIC".  Resource IDs can be filtered using a prefix. Instead of specifying the entire resource ID, it is possible to specify only the initial portion that needs to be matched. Specify a resource ID name that is unique within the **Resources** folder. Up to 64 characters (alphanumeric characters and symbols) can be used for the resource ID except for the following: \ , < > " $ ' [ ] = &

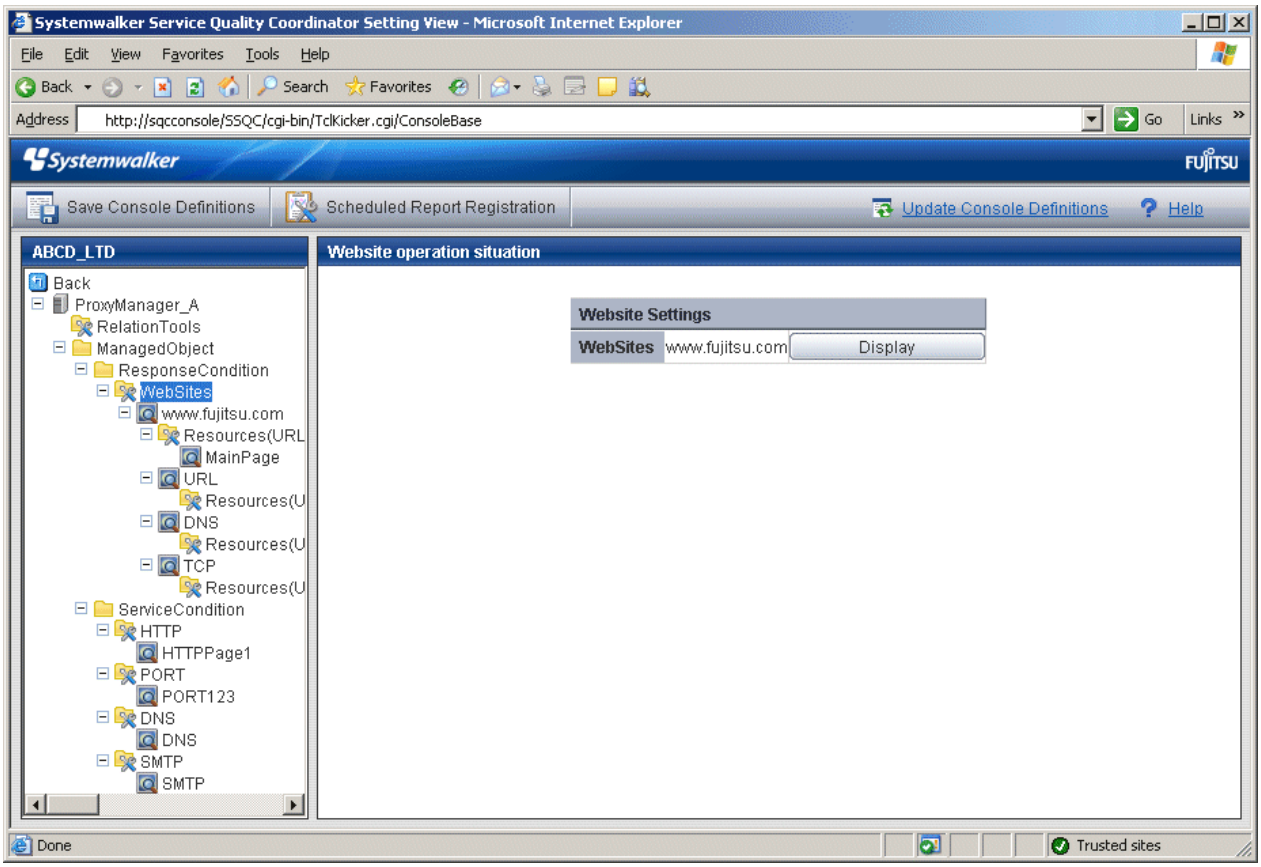
1.2.2.6 WebSites

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

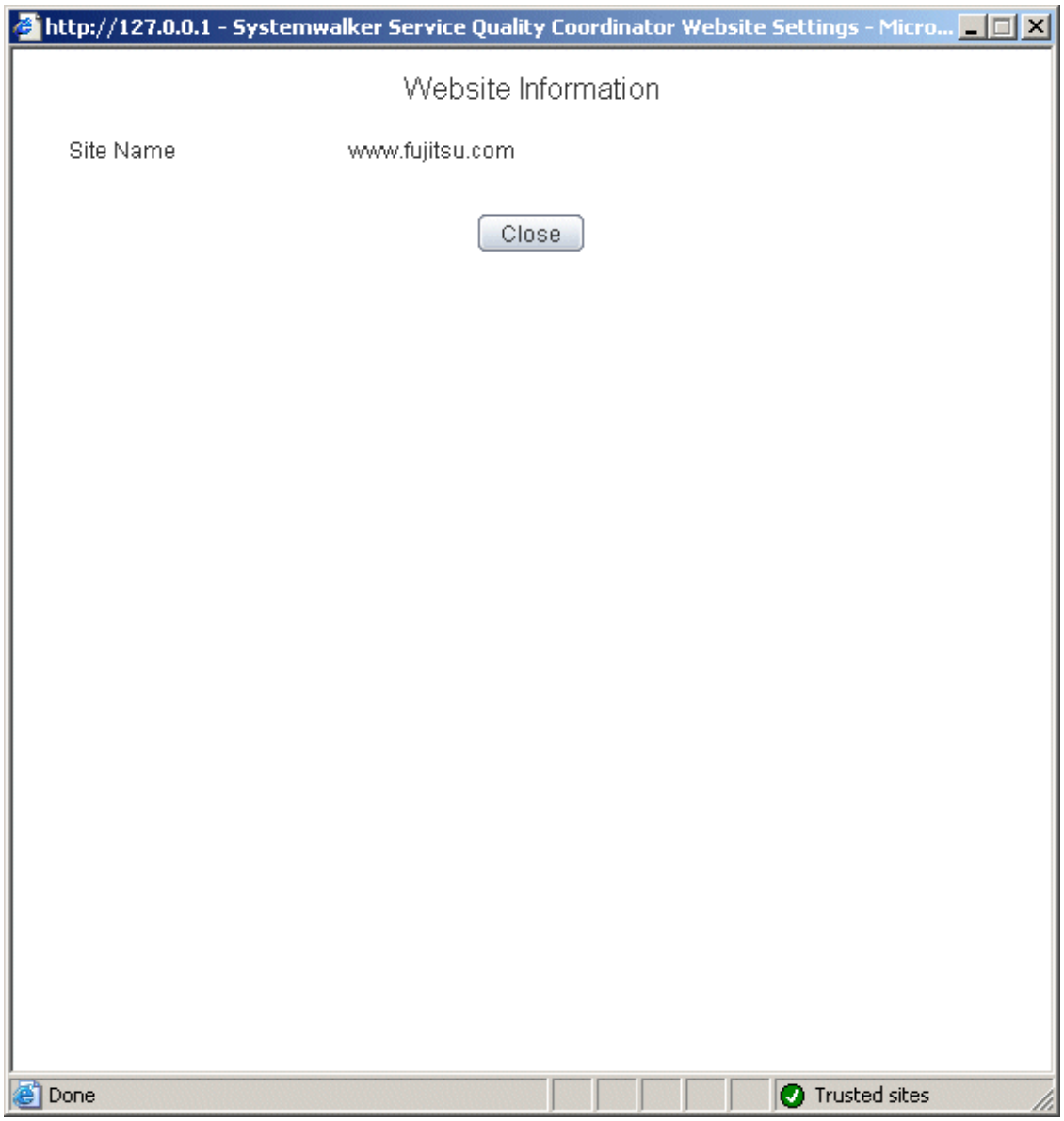
This node is displayed only if "Managed object configuration information (response and managed object configuration information)" explained in "A.2 Response/Operation Information Collection Policy Setup Command" has been defined.

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.

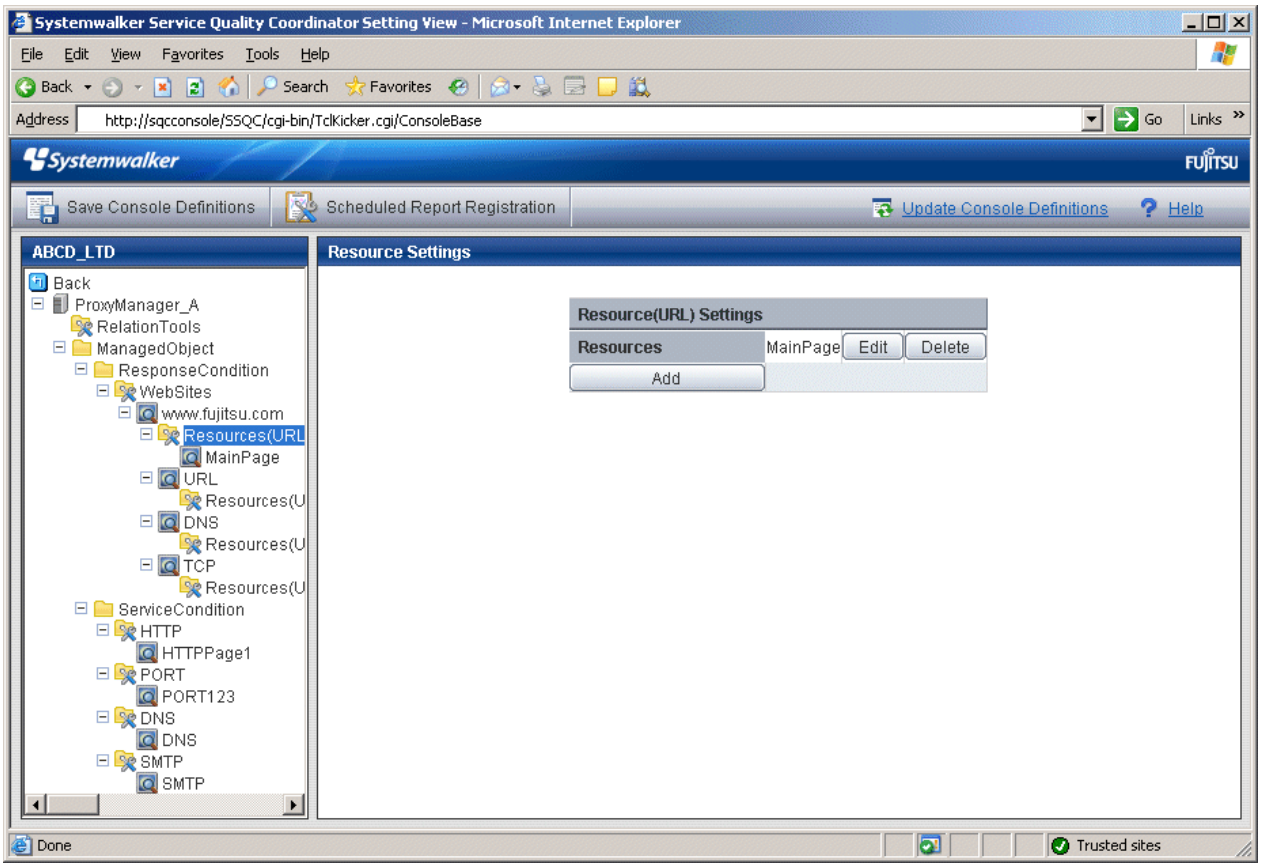
1.2.2.7 Resources (URL)

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.

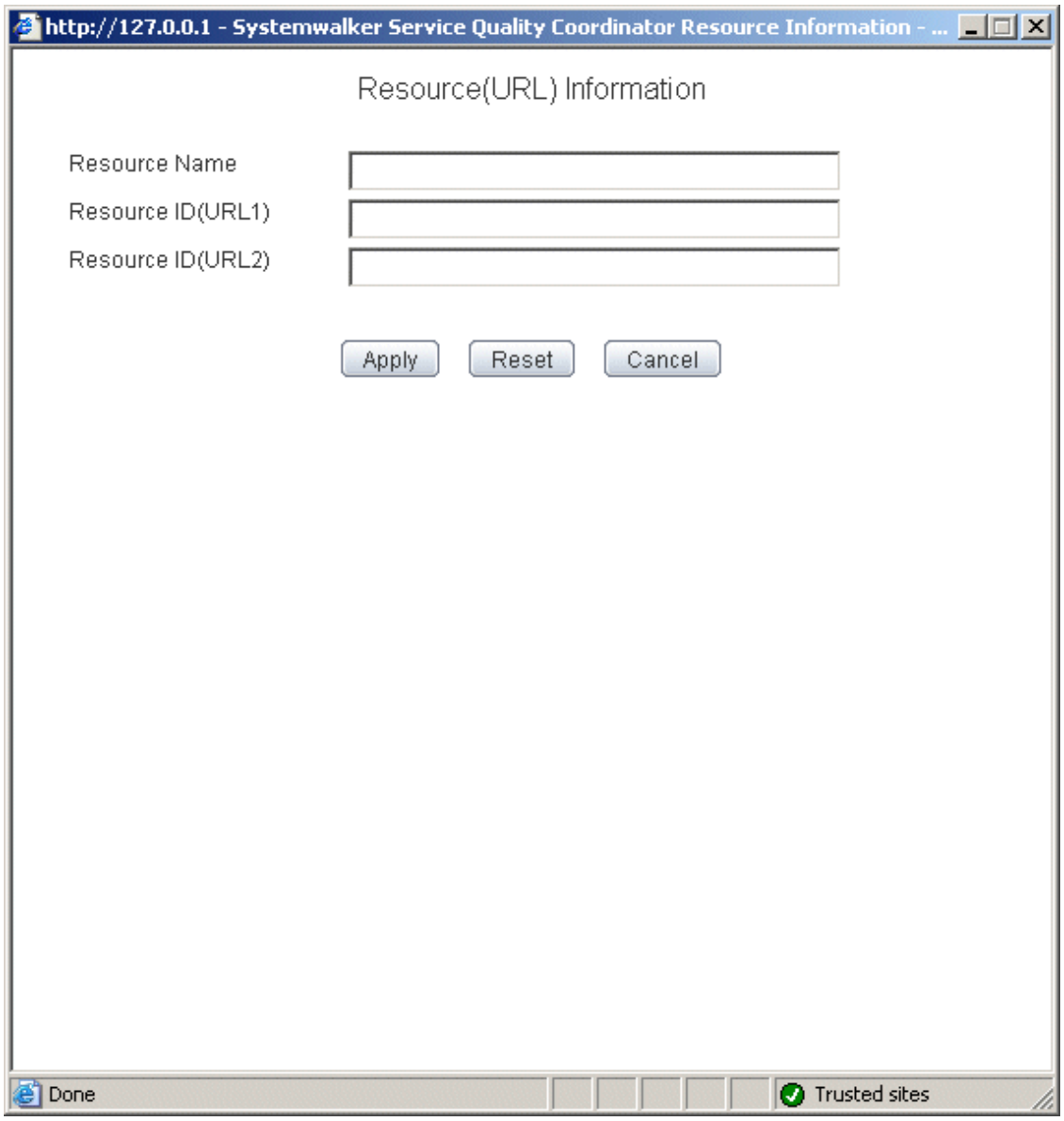
Refer to "3.2.3.3 Displaying resources" for details on displaying resources with the Drilled-Down display function.

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


Systemwalker Service Quality Coordinator Setting View - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
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
ProxyManager_A
RelationTools
ManagedObject
ResponseCondition
WebSites
www.fujitsu.com
Resources(URL
MainPage
URL
Resources(U
DNS
Resources(U
TCP
Resources(U
ServiceCondition
HTTP
HTTPPage1
PORT
PORT123
DNS
DNS
SMTP
SMTP
Resource Settings
Resource(URL) Settings
Resources
MainPage
Edit
Delete
Add
Done
Trusted sites

Procedure

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



Node name	Setting item name	Description
Resources(URL)	**Resource Name**	Specify the display name for identifying the resource. Set a name that is unique within the target **Resources** folder The following characters can be used for resource names: - Alphanumeric characters - Symbols (except for \ , < > $ " ' [ ] = &) Platform dependent characters can not be used. The resource name can be no longer than 64 characters.

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

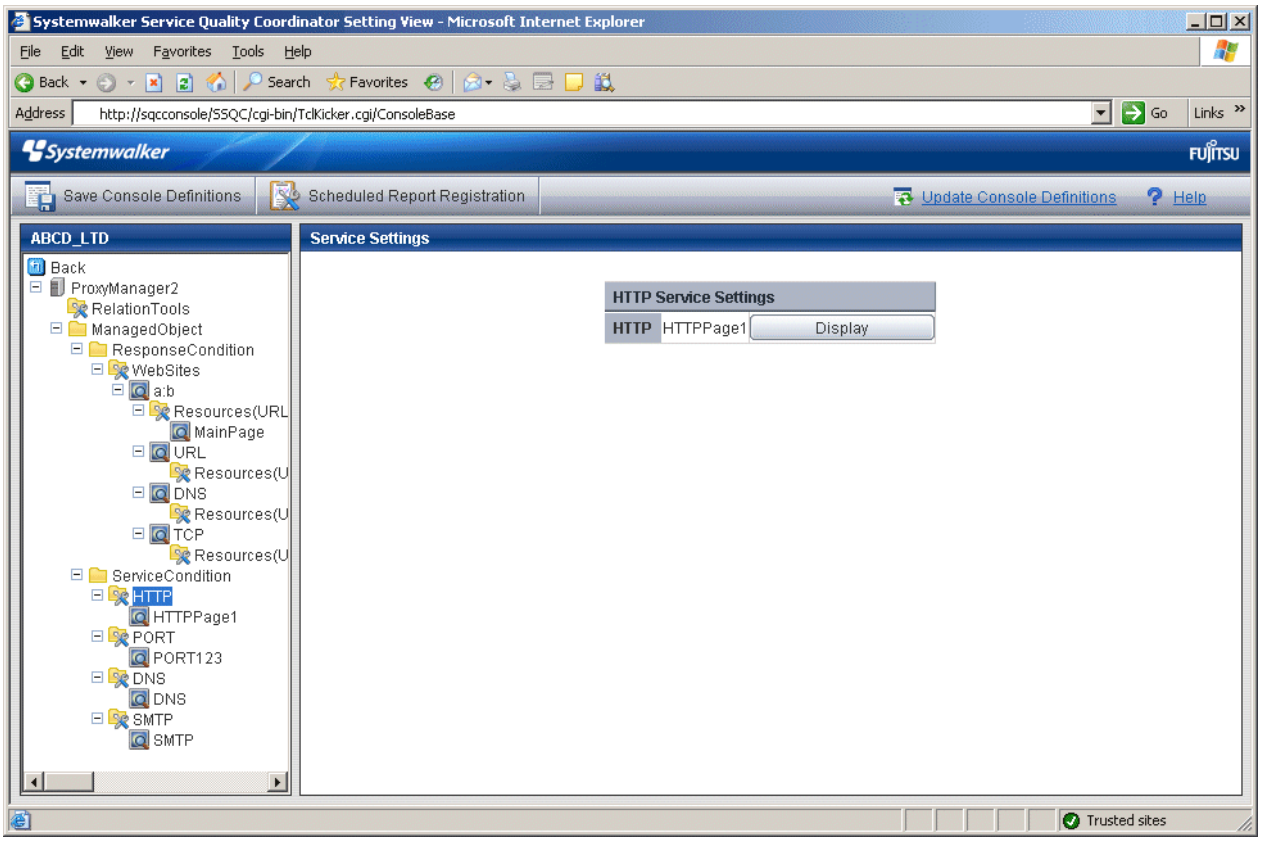
1.2.2.8 HTTP/PORT/DNS/SMTP

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

Precondition of function

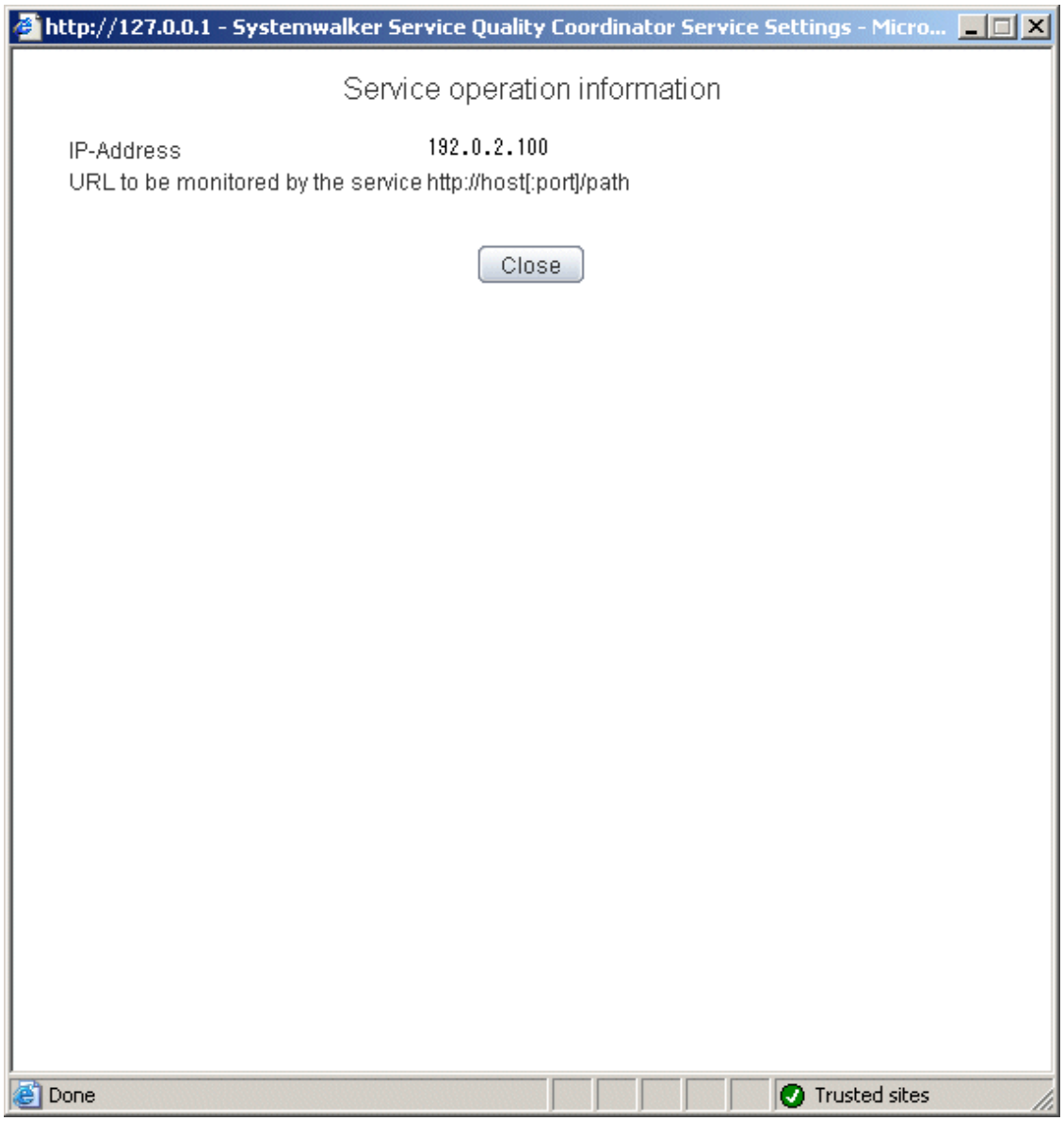
These nodes are displayed only if "Managed object configuration information (response and managed object configuration information)" explained in "A.2 Response/Operation Information Collection Policy Setup Command" has been defined.

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


Systemwalker Service Quality Coordinator Setting View - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
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
ProxyManager2
RelationTools
ManagedObject
ResponseCondition
WebSites
a:b
Resources(URL
MainPage
URL
Resources(U
DNS
Resources(U
TCP
Resources(U
ServiceCondition
HTTP
HTTPPage1
PORT
PORT123
DNS
DNS
SMTP
SMTP
Service Settings
HTTP Service Settings
HTTP
HTTPPage1
Display
Trusted sites

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.

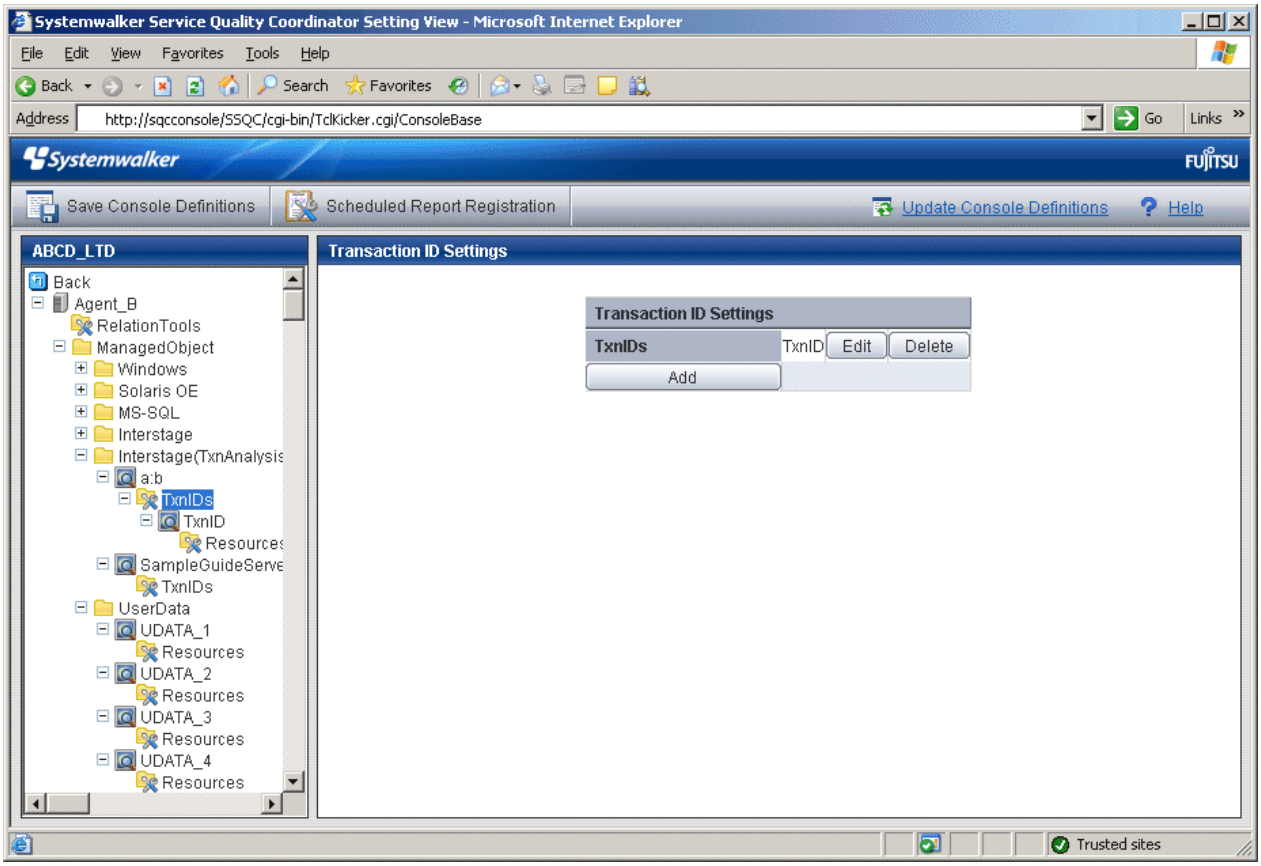
Node name	Display item name	Displayed content
DNS	**IP-Address**	Displays the IP address defined by DNS service operation management on a Manager or Proxy Manager.
	Port	Displays the port defined by DNS service operation management on a Manager or Proxy Manager.
	Resolved DNS host name	Displays the host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

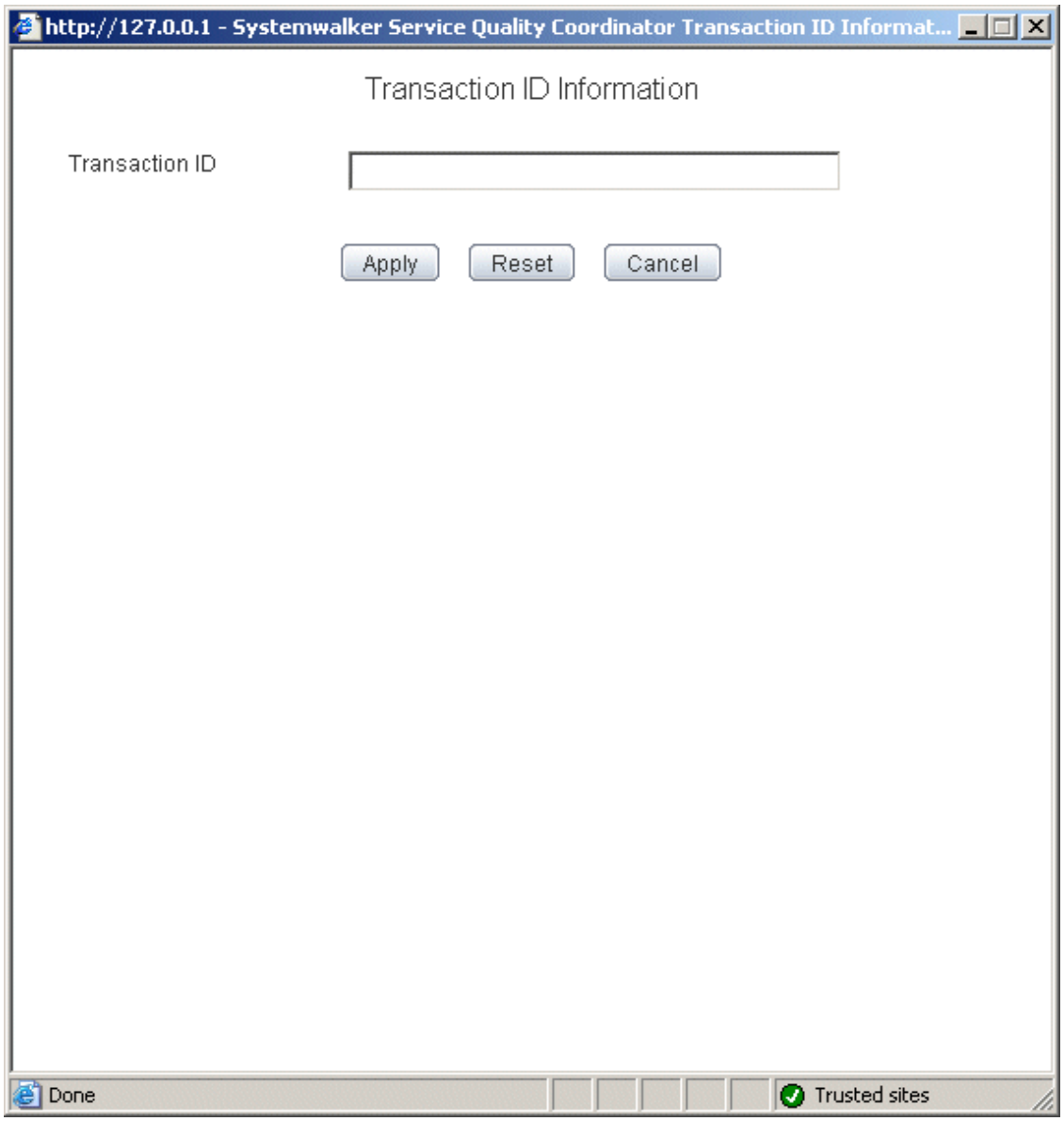
For an overview of transaction breakdown analysis, refer to "Transaction breakdown analysis" in the *User's Guide* and "3.2.4.3 Interstage(TxnAnalysis)JavaEE/Interstage(TxnAnalysis) tree" of this manual.

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**	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. 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. **Resource ID** - *Server Instance name:transaction ID:component type: ...* - *Work Unit name:transaction ID:component type:...*

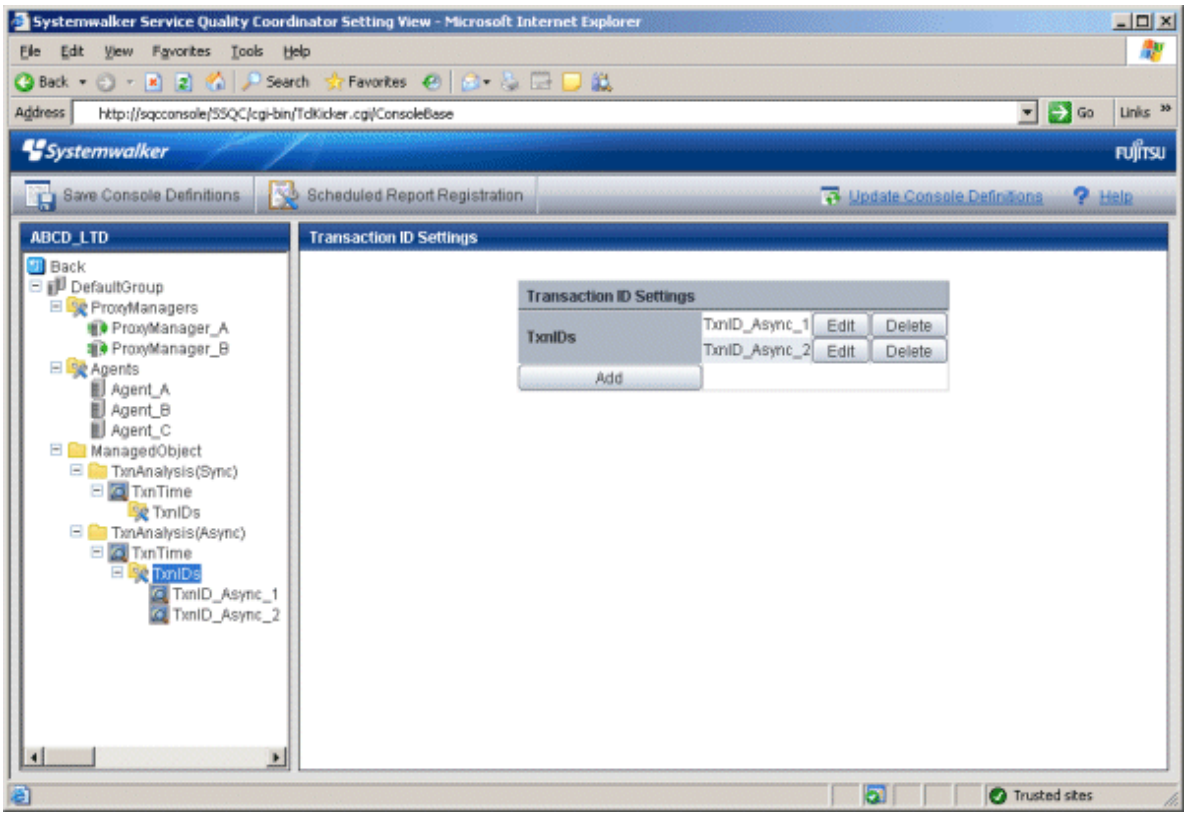
Node name	Setting item name	Description
		- **The transaction ID format** *transaction number(process ID)* **Point** The transaction number is a serial number within the process. If Work Unit process concurrency is set to a value of 2 or more, there is a chance that the transaction number will be duplicated.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

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.

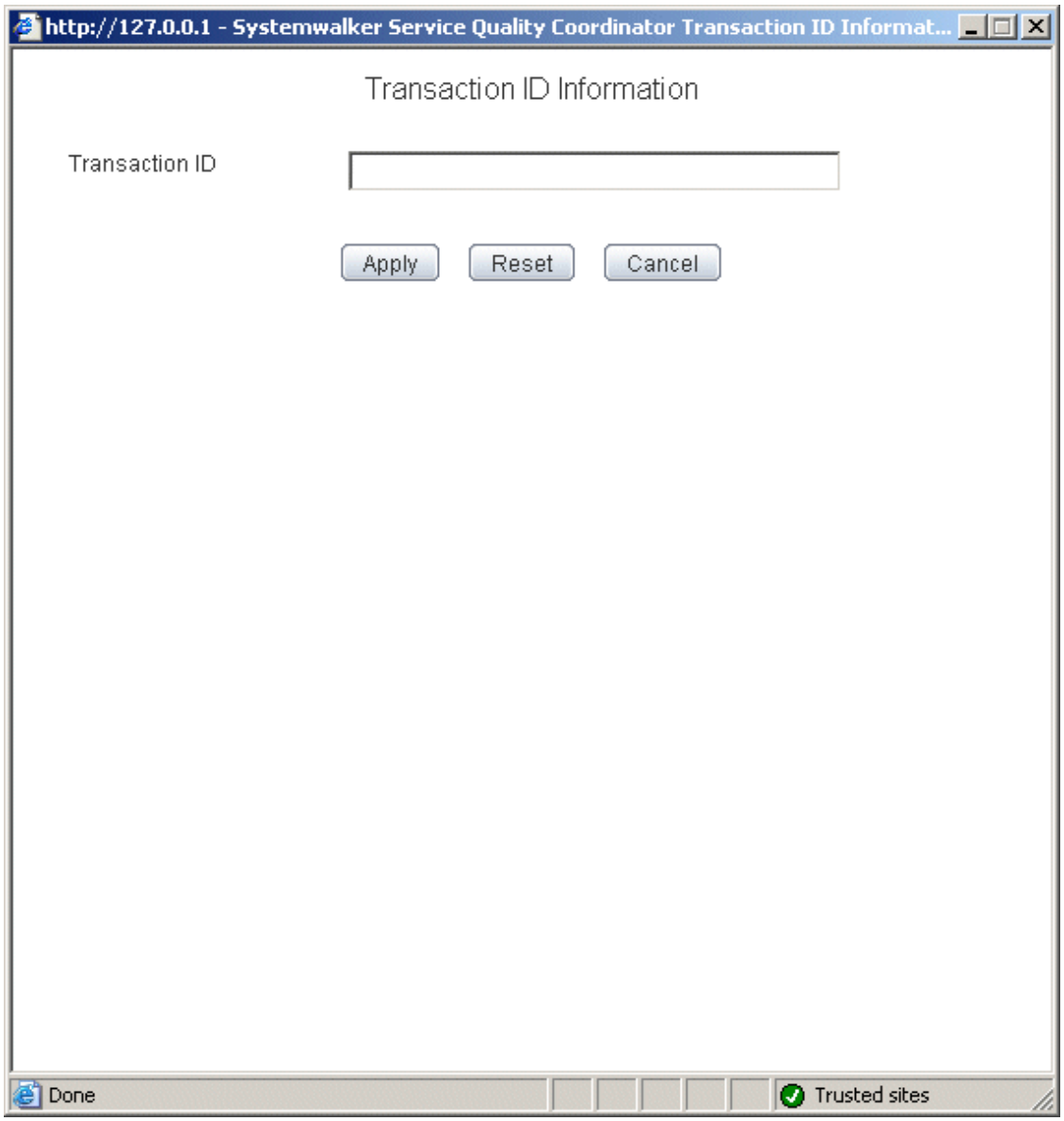
For an overview of transaction breakdown analysis, refer to "3.2.4.3 Interstage(TxnAnalysis)JavaEE/ Interstage(TxnAnalysis) tree" of this manual.

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


Systemwalker Service Quality Coordinator Setting View - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
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
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
Trusted sites

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.

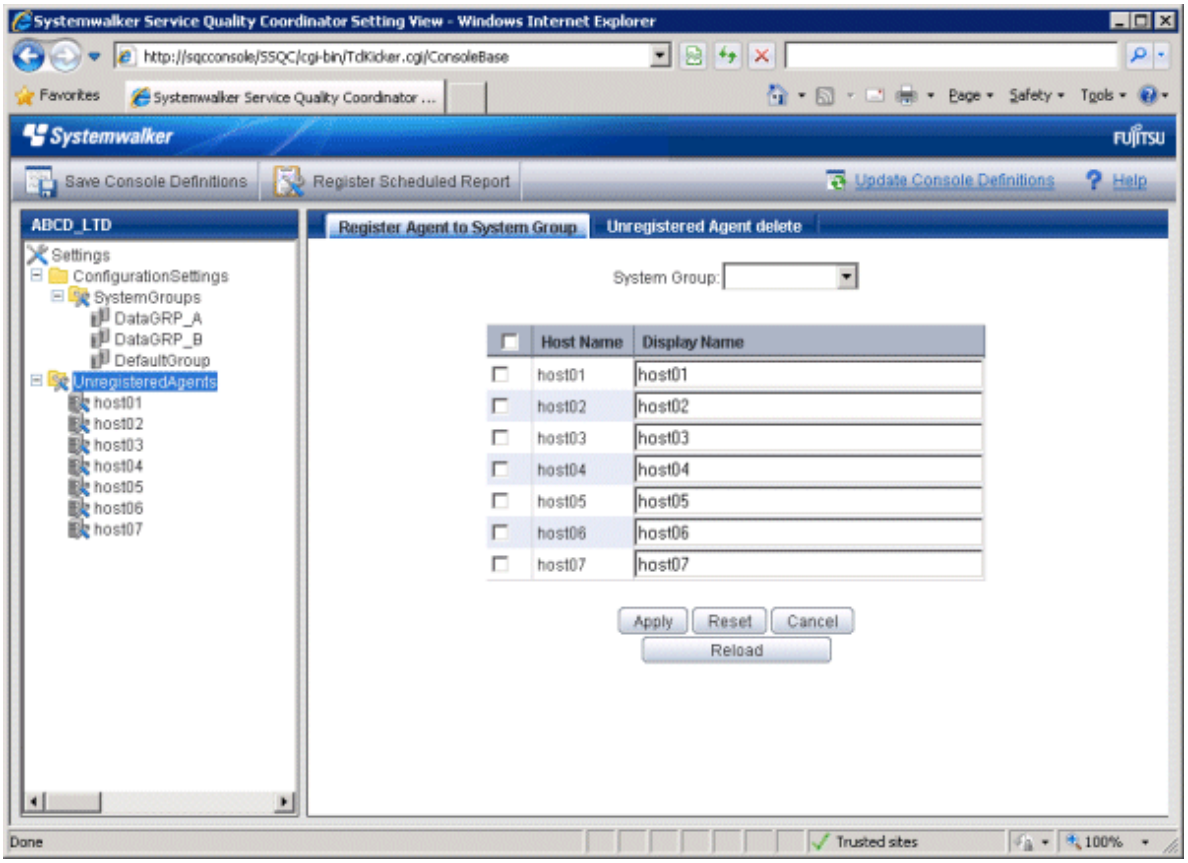
1.2.3.1 Registering Information about Unregistered Agents

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
		Set a name that is unique within the management configuration. (The system name is set by default.) The following characters can be used for display names: - Alphanumeric characters - Symbols (except for \ : , < > $ " ' [ ] = &) Platform dependent characters can not be used. The display name can be no longer than 64 characters.

Procedure

1. Specify the system group of the registration destination

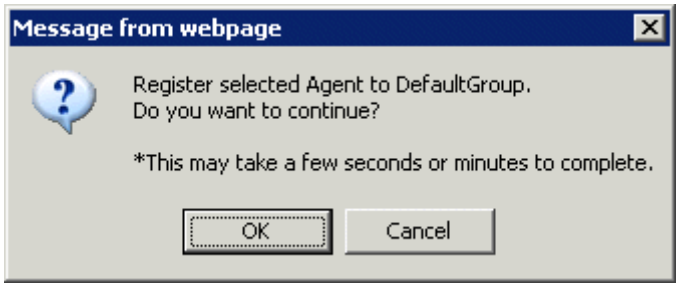
   If the system group is not yet registered, a group called "DefaultGroup" will be displayed.

   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.



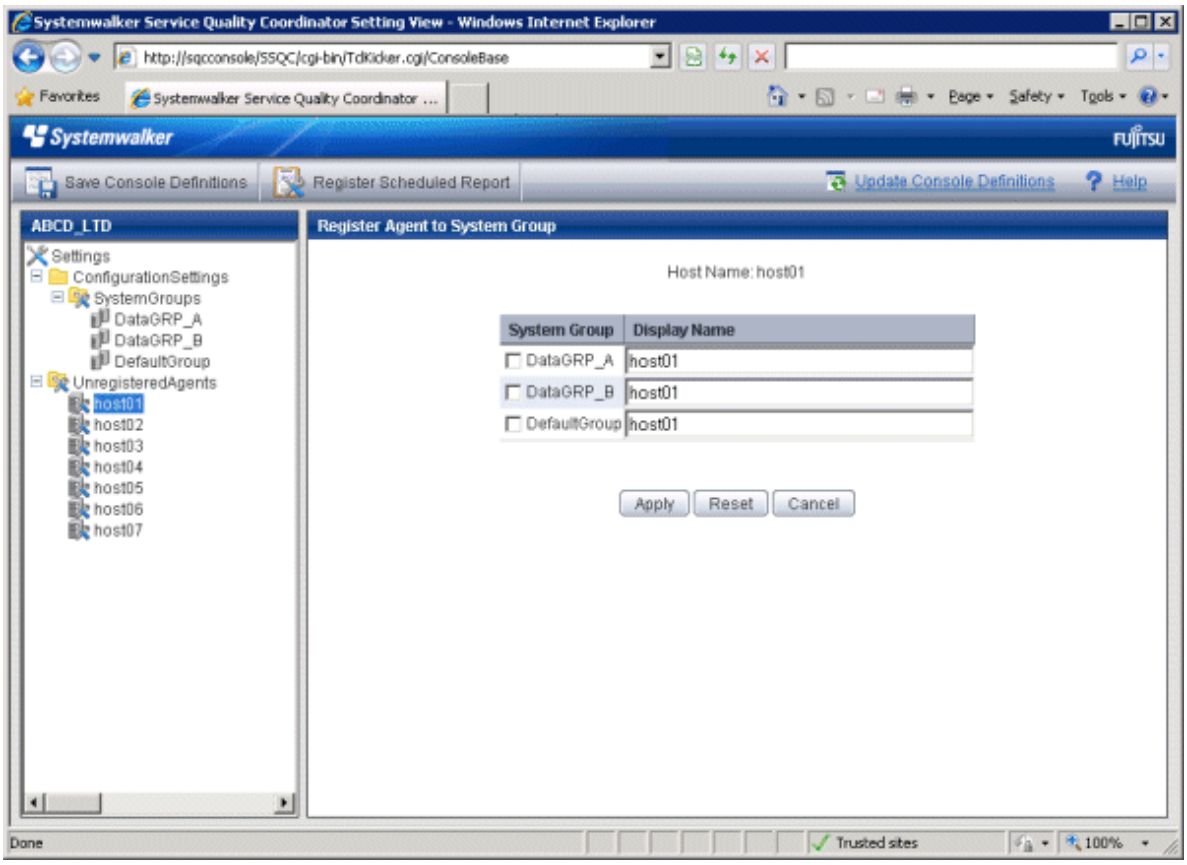
   Click the **Cancel** button to return to the original window without performing registration processing.

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	This corresponds to the Agent name specified in the **Agent Information** window. Set a name that is unique within the management configuration. (The system name is set by default.) The following characters can be used for display names: - Alphanumeric characters - Symbols (except for \ : , < > $ " ' [ ] = &) Platform dependent characters can not be used. The display name can be no longer than 64 characters.

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 DefaultGroupwill 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

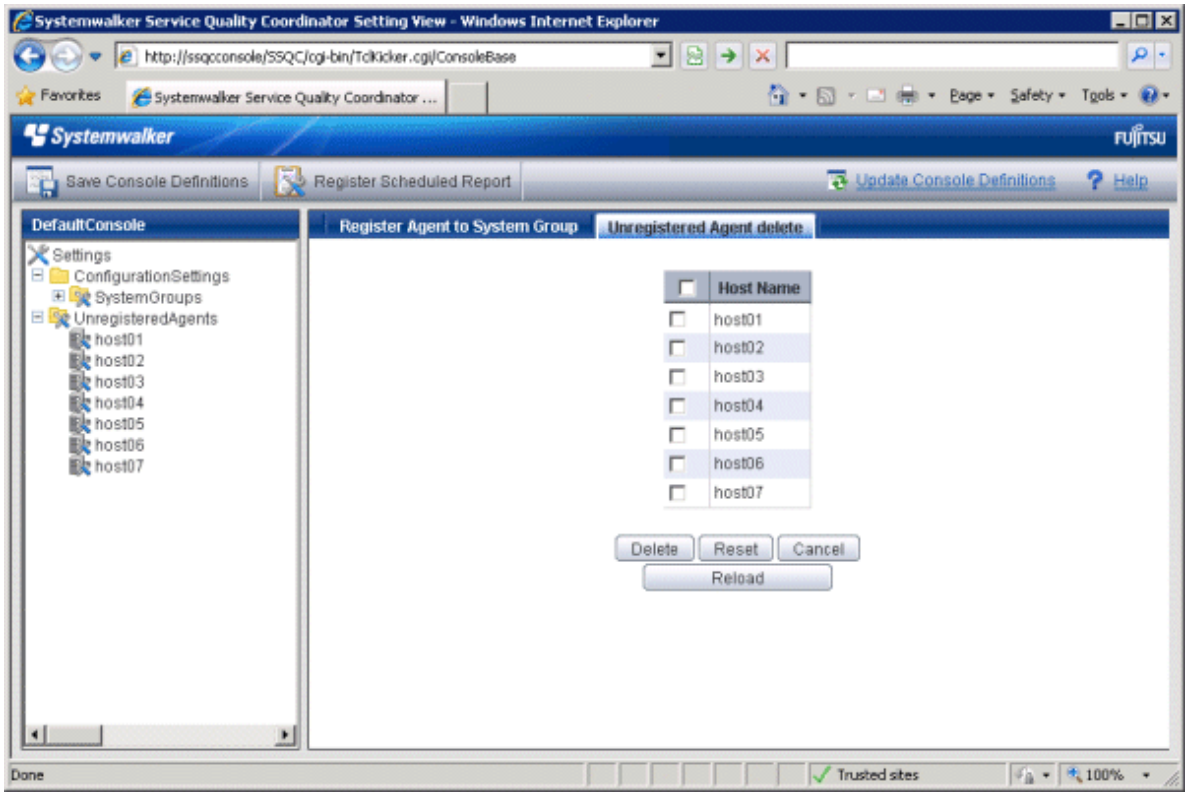
This function is only valid if there is only one set of console definitions registered in the PDB of the Manager environment that the operation management client is connected to. Agents will only be deleted from the PDB in the Enterprise Manager or Manager environment that the operation management client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



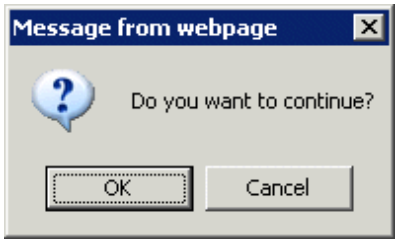
Node name	Setting item name	Setting content
UnregisteredAgents	**Delete**	Select the checkboxes for the unregistered Agents to be deleted.
	Host Name	The display names for the unregistered agents are displayed in the **Unregistered Agent List Registration** window.

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.

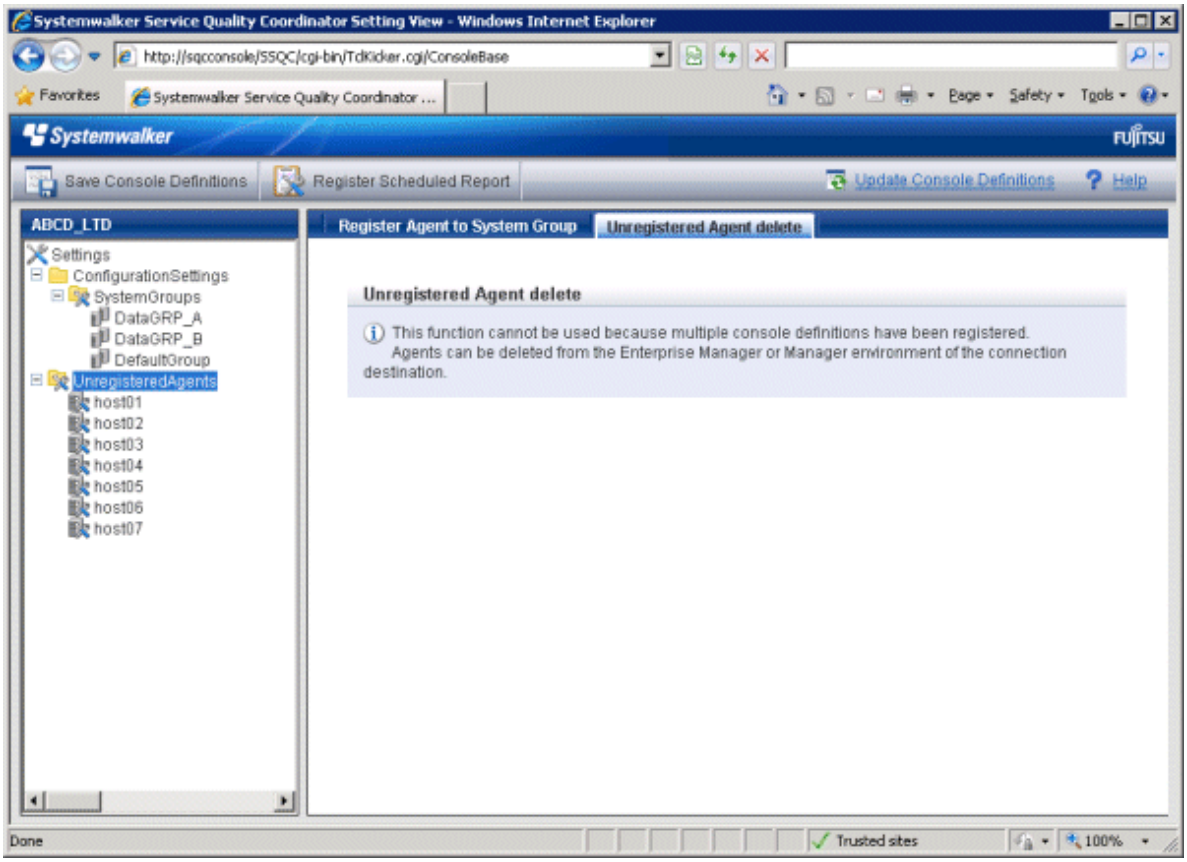


   Click the **OK** button to start the deletion processing.

   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).

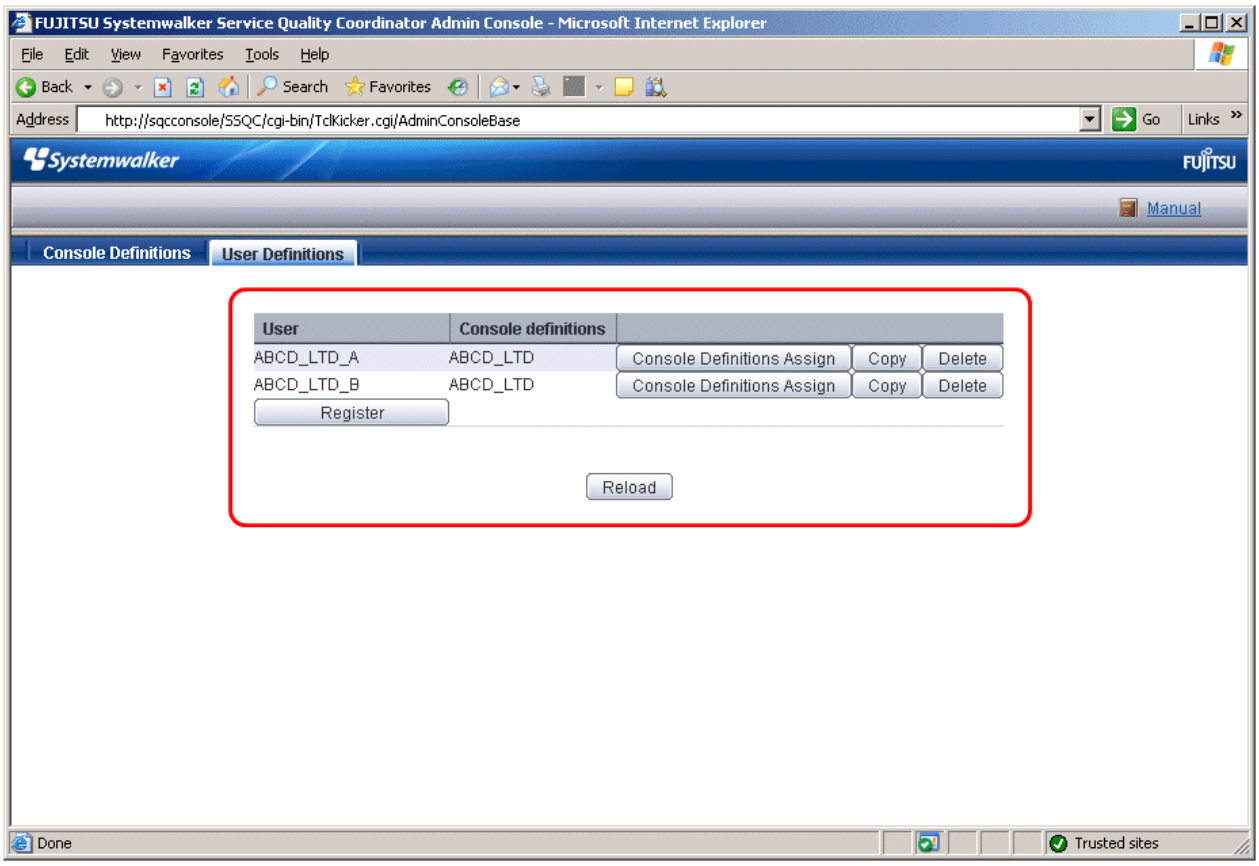
1.3 User Definitions Window

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

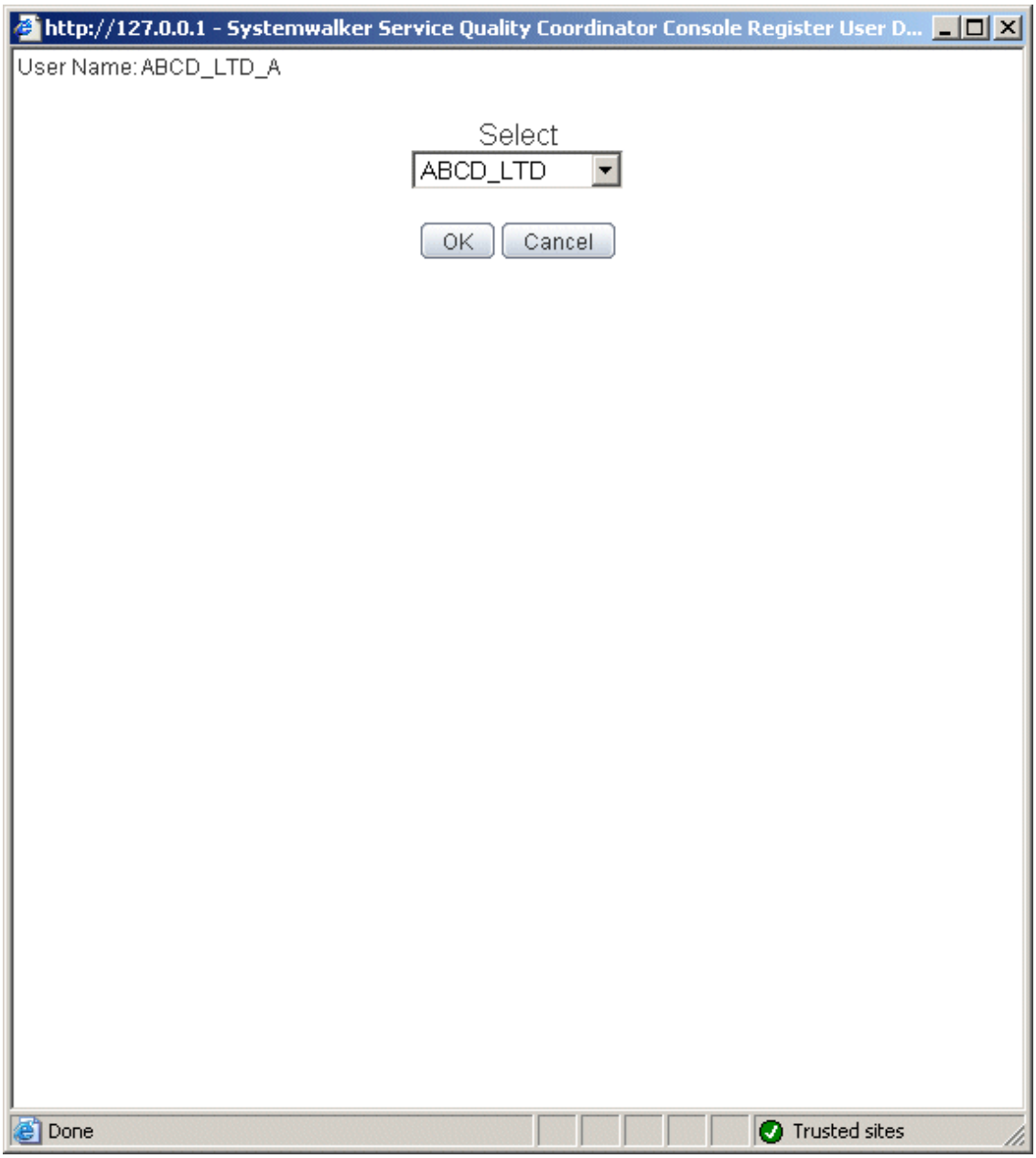
The **User Definitions** window contains a number of operation buttons.

The following table explains the operation of each button.

Button	Operation
Register	Registers a new user definition. After clicking this button, enter the name of the user definition to be created in the prompt that is displayed. The following characters can be used for user names: - Alphanumeric characters - Symbols (other than $\'",:[]<>=&/*?) Platform dependent characters can not be used. "AdminConsole" and "admin" cannot be used as a user name. User names are not case sensitive. The user name can be no longer than 64 characters. Existing user names cannot be used.
Console Definitions Assign	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 *Installation Guide*.
Copy	Copies the specified user definition with the specified name. After clicking this button, enter the name of the user definition to be copied in the prompt that is displayed. Existing user names cannot be used. Note Launch HTML cannot be copied.
Delete	Deletes the specified user definition.
Reload	Displays user definitions using the latest information.

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

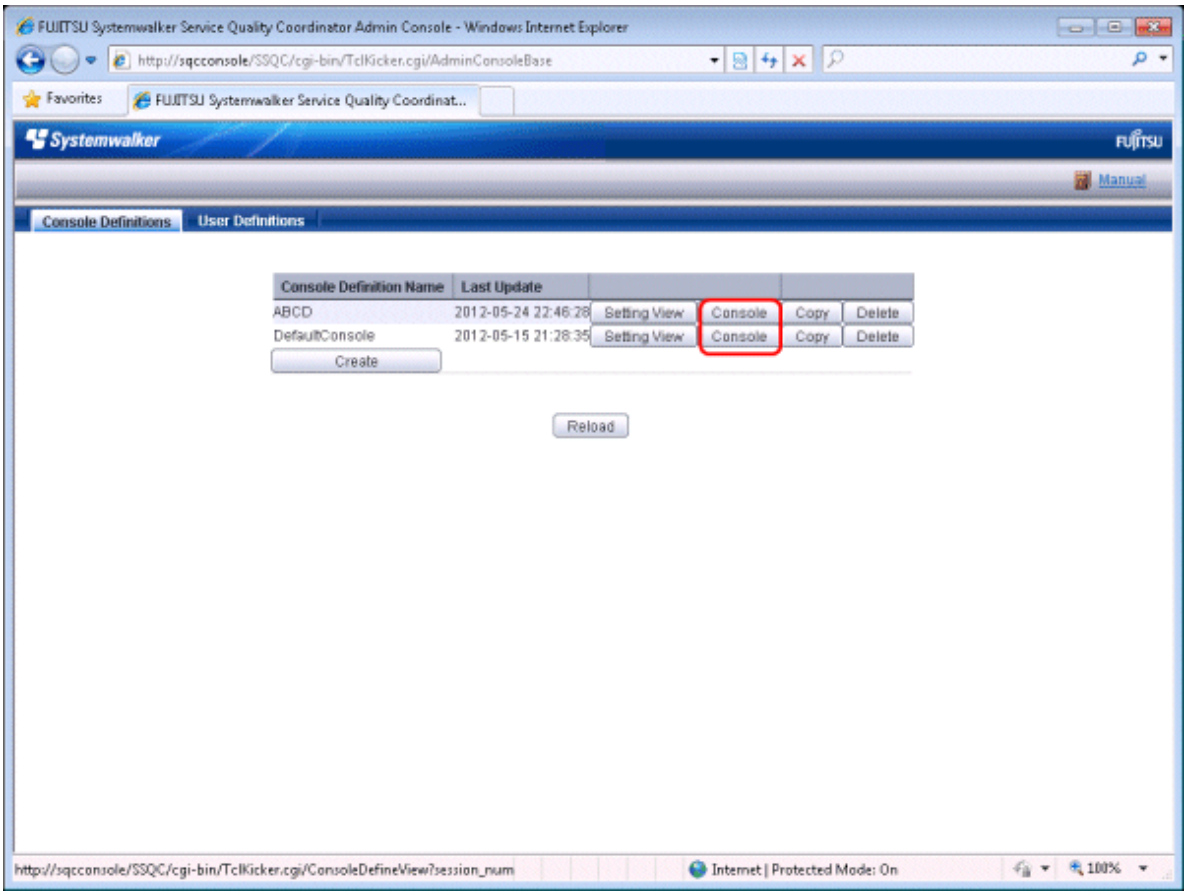
Or

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".

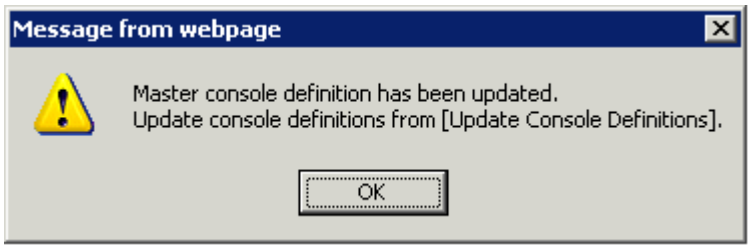
To enter user names, first make basic authentication settings for each user by referring to "How to Set Up Basic Authentication for Operation Management Clients" in the *Installation Guide*.

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.

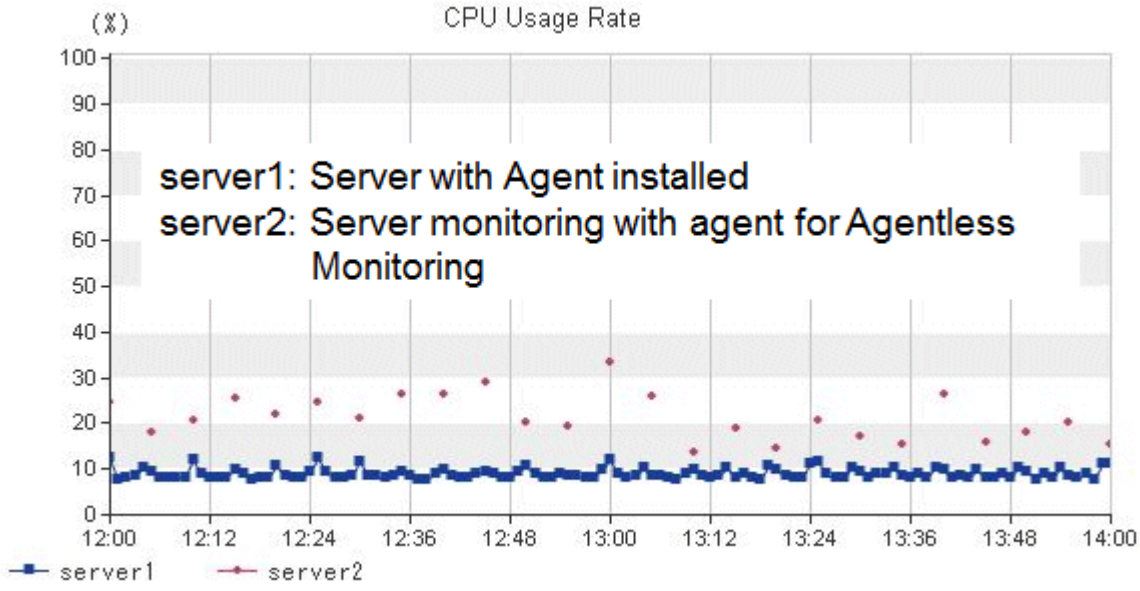


About the graphs

The graphs displayed in the console have the following peculiarities.

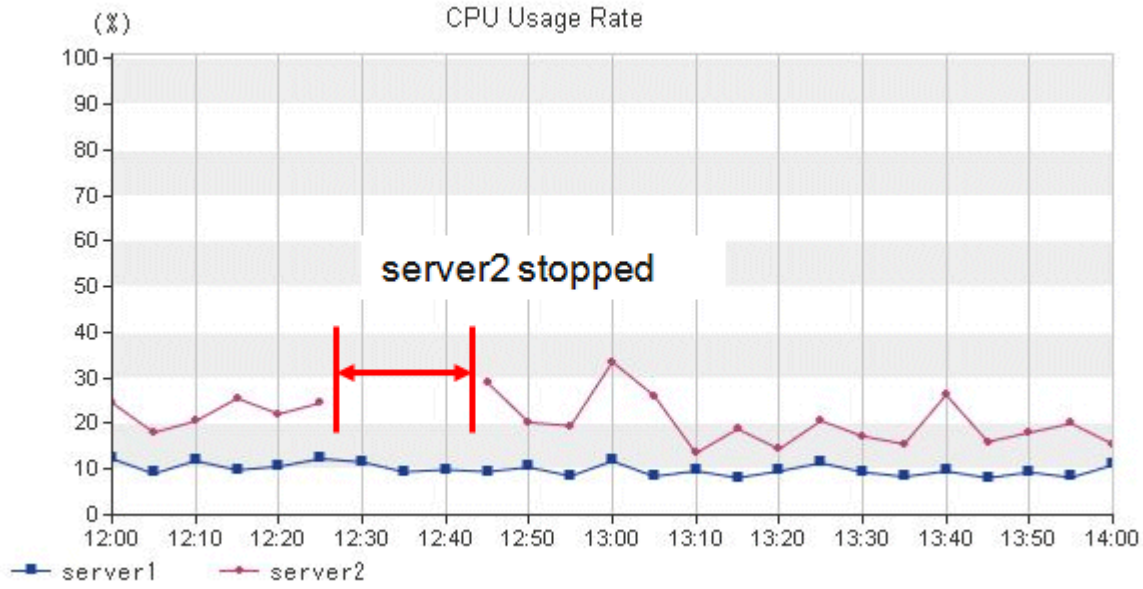
- When you display in line graphs information collected at different intervals from different agents (for example information from a server with an Agent installed and information from a server being monitored by an agent for Agentless Monitoring), the display may be affected. Create system groups of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

Example



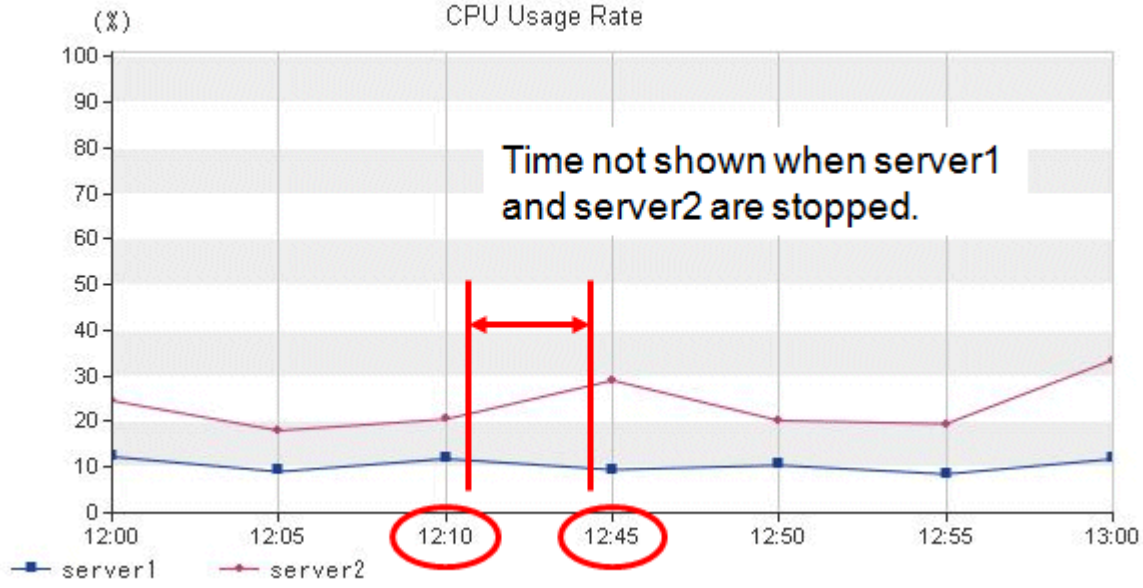
- In the summary view, when multiple Agents are displayed in a line graph and some of the Agents have been stopped, the times when they are stopped are not displayed.

Example



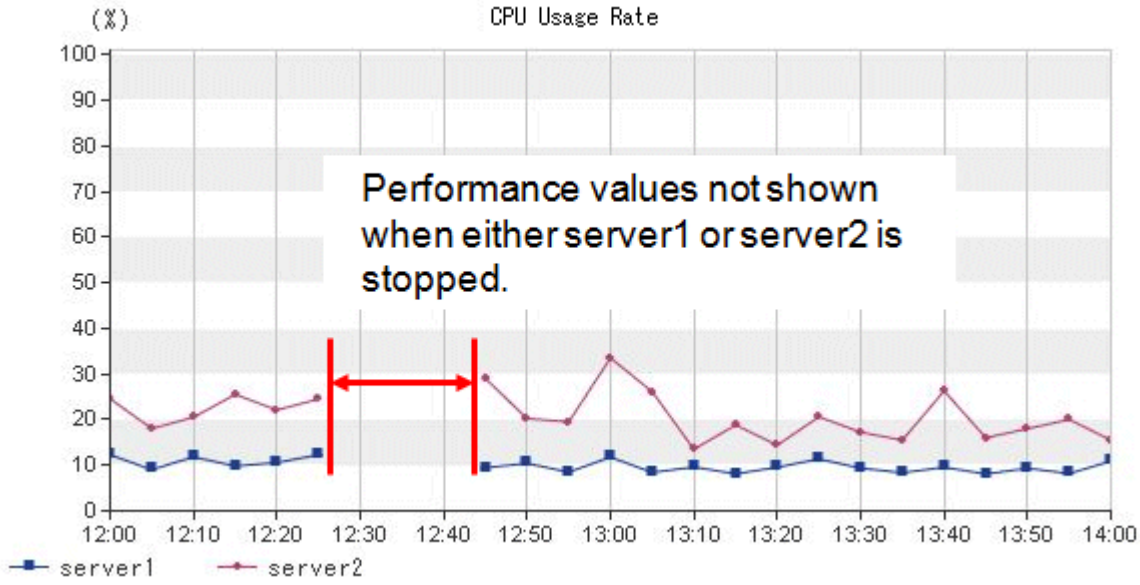
- In the summary view, when all monitored Agents have stopped and information is not being collected, the times when performance information is not being collected are not displayed in the line charts and area charts.

Example



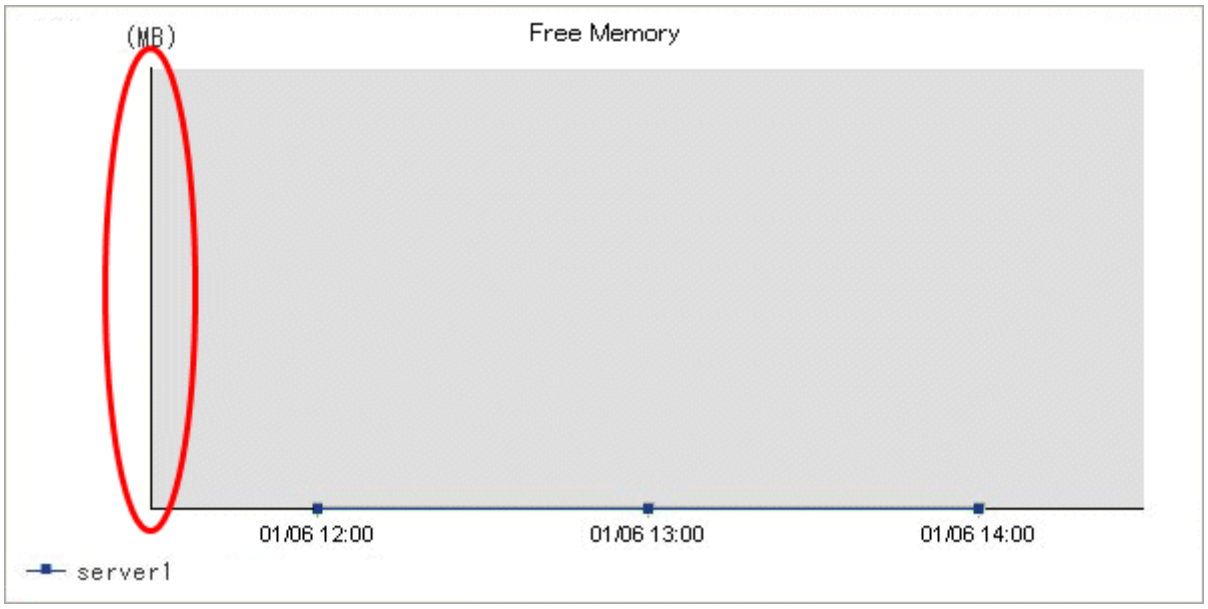
- In the analysis/planning window and Scheduled Reports window, when Agents have stopped, the performance values at times when they are stopped are not displayed in the line charts and area charts.

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

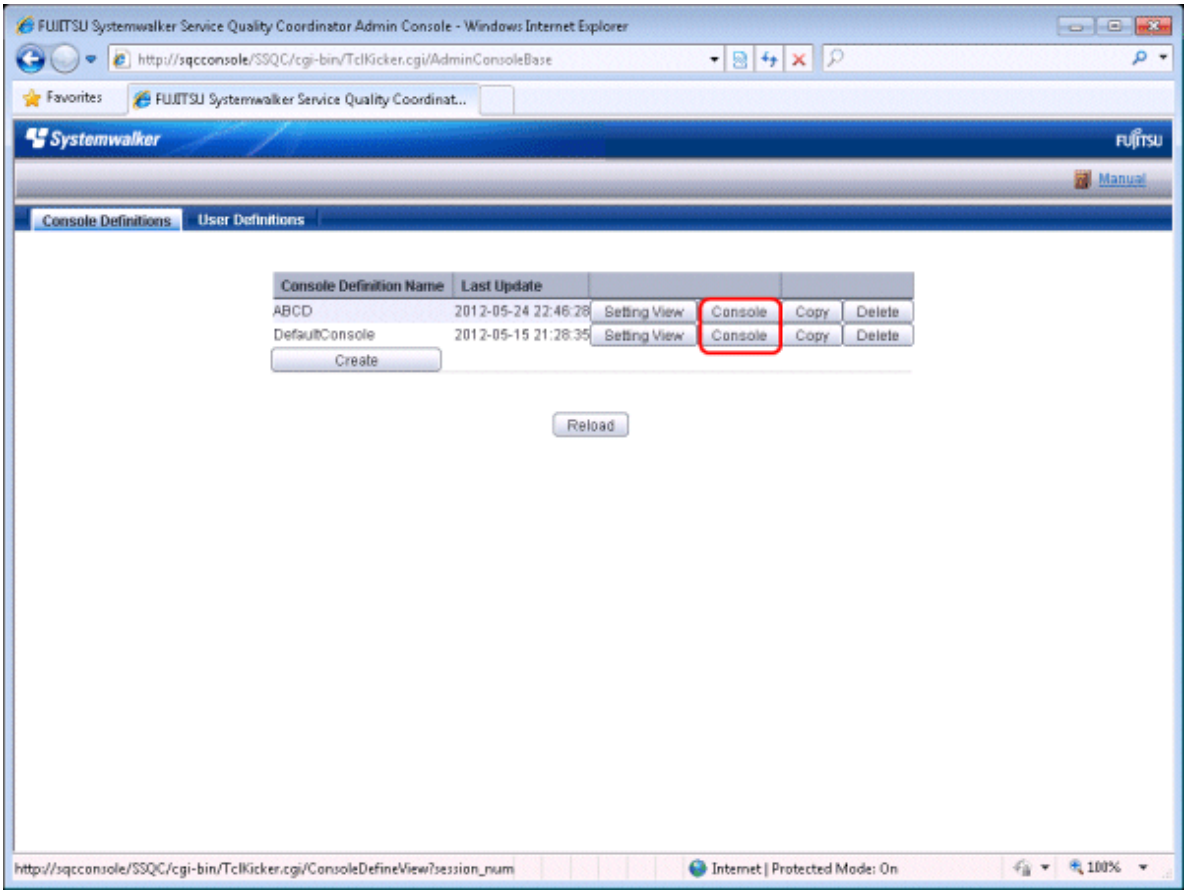


Chapter 3 Monitoring Window

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.

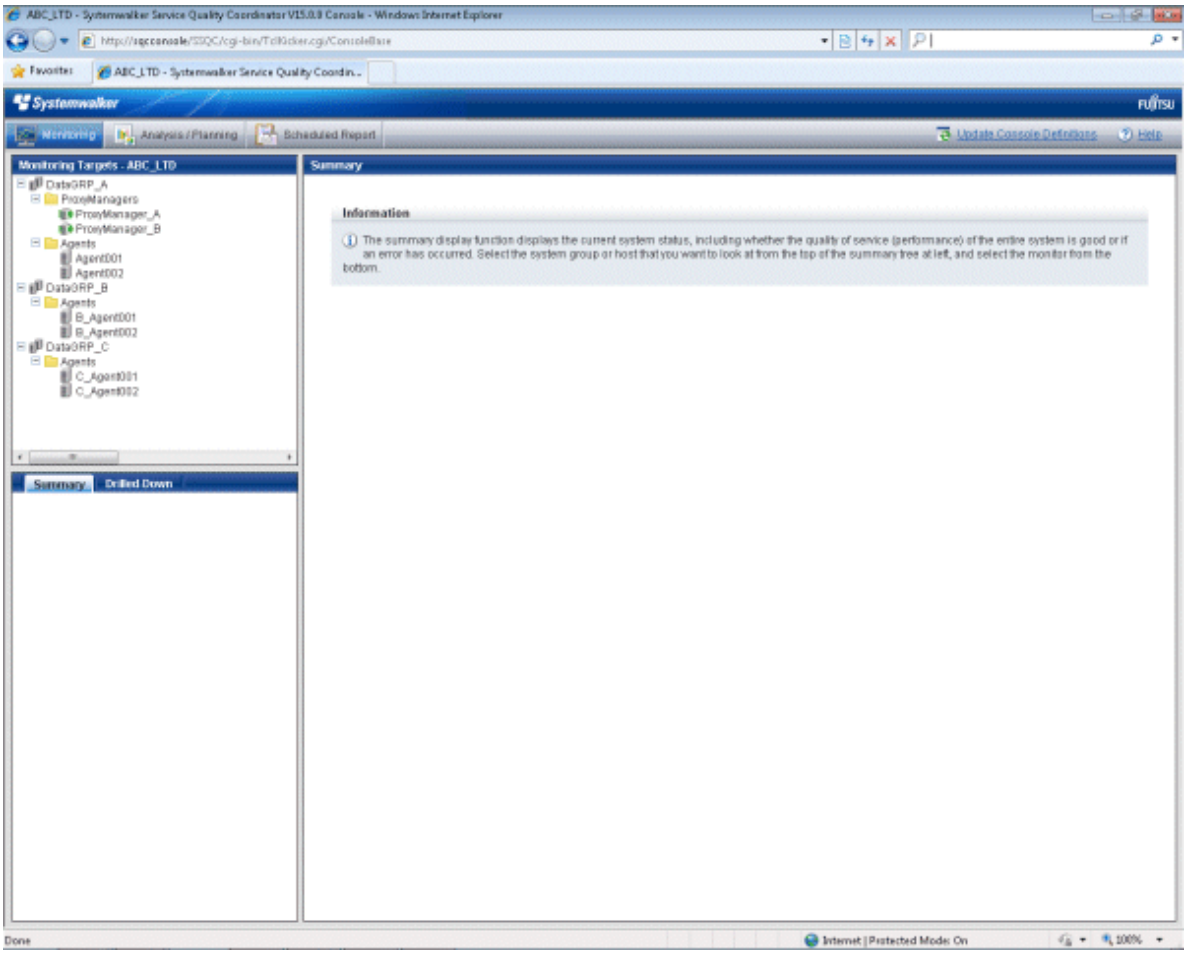
Starting

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.

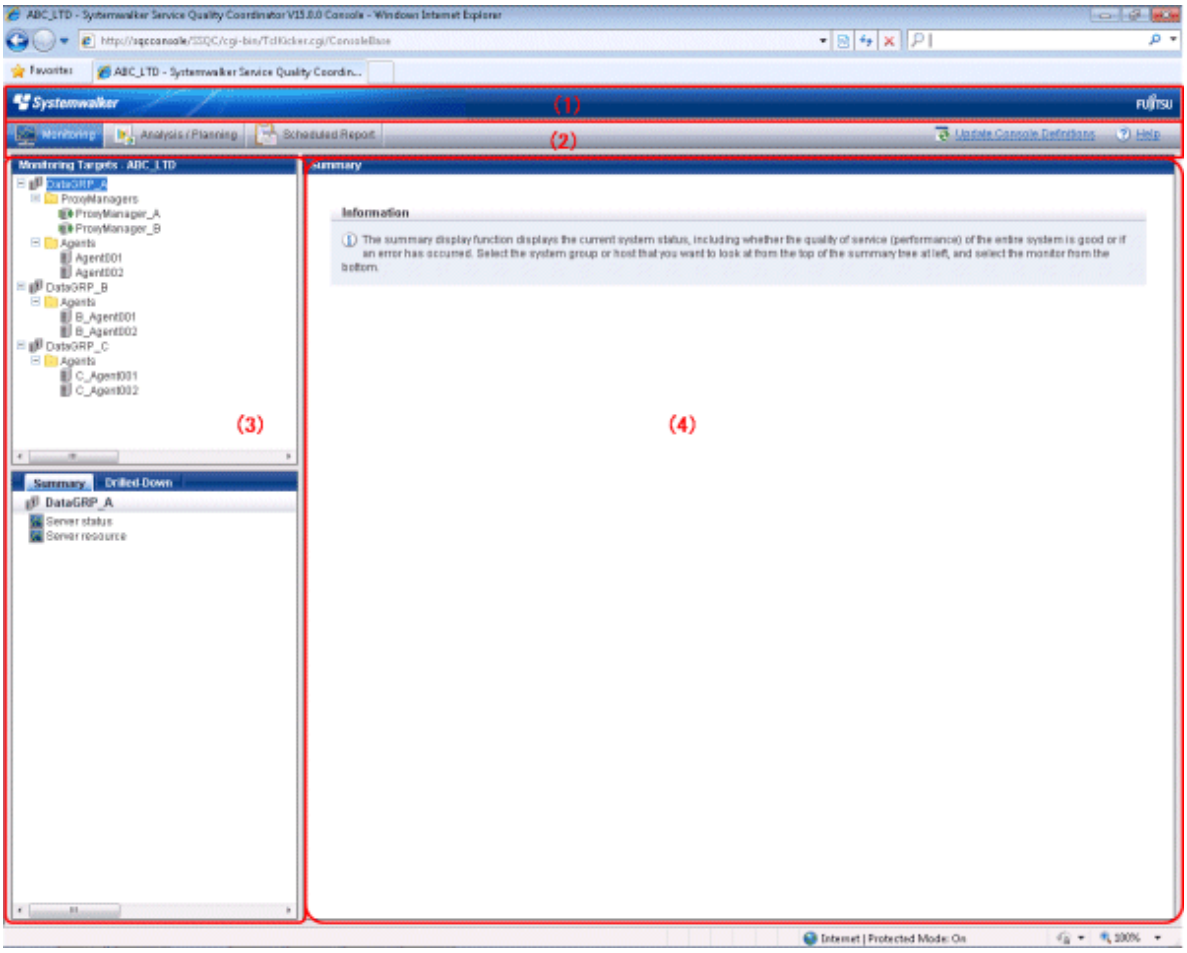


Note

- 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: - **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.

Item No.	Component	Description
		- **Help** Opens the *User's Guide (Console Edition)*.
(3)	Tree display area	The **Summary** view and the **Drilled-Down** display are displayed in tree structure. It is possible to switch between the two display functions by clicking the relevant tabs. By default, the **Summary** view will be displayed when the Console is first opened.
(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 Monitor name	Outline
Yes	No	No	Server Status AgentStatusMonitor	Agent status display **Point** Information of CPU, Memory, and Disk is displayed as "-" when the status of Agent under VMware vCenter is "Running".
Yes	Yes	No	Service operation ServiceAvailMonitor	Summary of service operational information Operational status of the HTTP/DNS/SMTP/PORT services (color-coded display)
Yes	Yes	No	End user response UserResponseMonitor	Summary of end user response information End user response time
Yes	No	Yes	Server resource ServerMonitor	Summary of server performance information CPU usage rate

SG	PM	Agt	Node name at the bottom part of Summary tree Monitor name	Outline
				Free memory rate 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 Monitor name	Outline
				available memory, and disk I/O count of "VMware(Physical)Monitor".
No	No	Yes	VMware(resource pool) VMware(ResourcePool)Monitor	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".
Yes	No	Yes	Hyper-V(host) HyperV(Physical)Monitor	Hyper-V physical performance information summary CPU usage rate Memory usage **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". **Note** The Memory usage is displayed since Windows Server 2008 R2 Service Pack1.
No	No	Yes	Hyper-V(Virtual machine stack) HyperV(Virtual)StackMonitor	Hyper-V virtual performance information stack graph CPU usage rate **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

SG	PM	Agt	Node name at the bottom part of Summary tree Monitor name	Outline
				of guest operating systems will be shown exceeding 100%. This graph makes it easy to see which guest OS is using the CPU. 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".
No	No	Yes	KVM(Virtual machine stack) KVM(Virtual)StackMonitor	Red Hat virtualization function (KVM) 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 "ServerMonitor".
No	No	Yes	Xen(Virtual machine stack) Xen(Virtual)StackMonitor	Red Hat virtualization function (Xen) 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.

SG	PM	Agt	Node name at the bottom part of Summary tree Monitor name	Outline
				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".
No	No	Yes	Solaris Zone(Virtual machine stack) SolarisZone(Virtual)StackMonitor	Solaris Zone Virtualization function virtual performance information stack graph CPU usage rate Memory usage Point This graph makes it easy to see which Zone is using the CPU, disk, and memory. 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".
Yes	No	Yes	Solaris Zone(Solaris 10) ZoneMonitor(Solaris10)	Summary of Solaris Zone performance information CPU usage rate Memory usage rate Point If Solaris zones are bound to processor sets, the CPU usage will be 100% for each processor set.
Yes	No	No	Solaris Zone(Solaris 10) (Virtual machine stack) ZoneStackMonitor(Solaris10)	Stack graph for Solaris Zone(Solaris 10) performance information Stack graph for CPU usage rates Stack graph for memory usage rates Point If Solaris zones are bound to processor sets, the CPU usage will be 100% for each processor set. To display a stack graph for CPU usage rates, it is necessary to create a system group for each processor set.
Yes	No	Yes	Web transaction WebTrnMonitor	Summary of Web transaction volume information

SG	PM	Agt	Node name at the bottom part of Summary tree Monitor name	Outline
				Request count Traffic volume
Yes	No	Yes	Network TcpNetworkMonitor	Summary of Systemwalker Resource Coordinator (Network) performance information Transmission line problems (including adjoining lines)
Yes	No	Yes	Storage StorageMonitor	Summary of Systemwalker Resource Coordinator (Storage) performance information Maximum read response time Maximum write response time Maximum disk usage rate
No	No	Yes	VMPool ROR(VMPool)Monitor	Summary of VM pool CPU usage rate Memory usage rate
No	No	Yes	StoragePool ROR(StoragePool)Monitor	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. -
No	No	Yes	NetworkPool ROR(NetworkPool)Monitor	Summary of network pool NetworkPool usage rate
No	No	Yes	ServerPool ROR(ServerPool)Monitor	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. -
No	No	Yes	AddressPool ROR(AddressPool)Monitor	Summary of address pool AddressPool usage rate

SG	PM	Agt	Node name at the bottom part of Summary tree Monitor name	Outline
				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 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 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 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 Maximum current heap usage rate for JavaVM
Yes	No	Yes	Interstage(JServerCluster) Interstage(IJServerCluster)Monitor	Summary of Interstage Application Server Java VM performance information 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 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) TxnSyncMonitor	Summary of Interstage Application Framework Suite performance information The number of transactions that have been executed

SG	PM	Agt	Node name at the bottom part of Summary tree Monitor name	Outline
				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	Summary of Interstage Business Application Server Open Java Framework performance information 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)	Summary of Interstage Service Integrator performance information Sequence processing number (unit of group)
Yes	No	Yes	Interstage(ISI Sequence Detail) ISI SequenceMonitor(Detail)	Summary of Interstage Service Integrator performance information Sequence processing number (unit of sequence)
Yes	No	Yes	Interstage(ISI Queue Summary) ISI QueueMonitor(Summary)	Summary of Interstage Service Integrator performance information Number of queue stays (unit of group)
Yes	No	Yes	Interstage(ISI Queue Detail) ISI QueueMonitor(Detail)	Summary of Interstage Service Integrator performance information Number of queue stays (unit of sequence)
Yes	No	Yes	WebLogicServer WebLogicServerMonitor	Summary of Oracle WebLogic Server Java VM performance information Mean value of amount of use of heap of Java VM (present) Garbage collection
Yes	No	Yes	Operation Manager OperationMgrMonitor	Summary of Systemwalker Operation Manager performance information Change in job concurrency 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

SG	PM	Agt	Node name at the bottom part of Summary tree Monitor name	Outline
			MS-.NET_Monitor	The number of requests waiting to be processed The number of requests
Yes	No	Yes	SAP SAP Monitor	SAP performance information summary Dialog response time Number of enqueue requests and queue length Background usage rate Number of RFC calls waiting to be executed
Yes	No	Yes	Symfoware SymfowareMonitor	Summary of Symfoware Server performance information Buffer hit rate The number of times that the buffer has been used up SQL count
Yes	No	Yes	Oracle OracleMonitor	Summary of Oracle Database Server performance information Buffer hit rate Exclusive control wait count
Yes	No	Yes	MS-SQL MS-SQL_Monitor	MS-SQL performance information summary Buffer cache hit rate The number of deadlocks The number of transactions
Yes	No	Yes	User data UserDataMonitor	Information about user data

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.

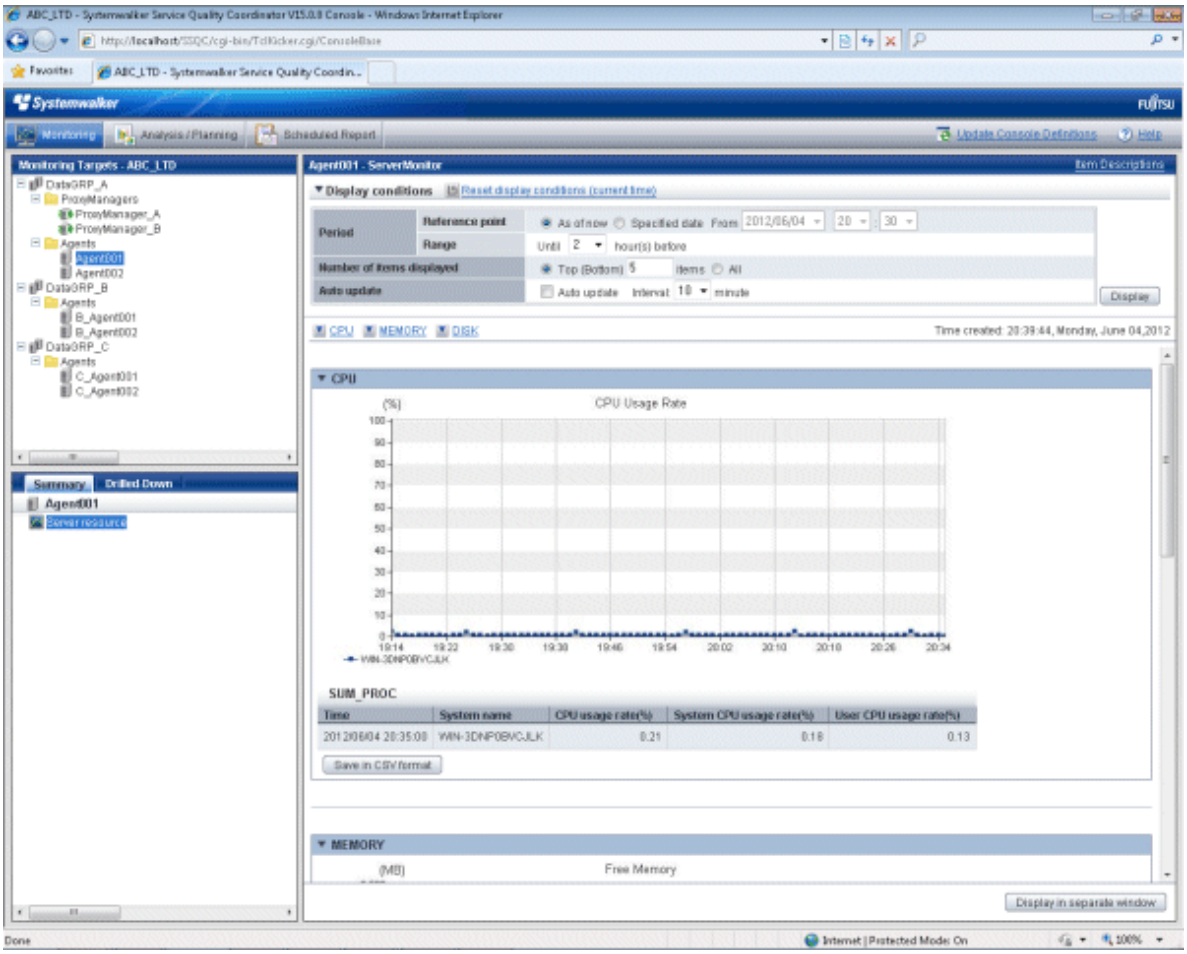
Icon	Meaning
	Indicates a folder used to store collected information.
	Indicates individual Proxy Manager hosts.
	Indicates individual Agent hosts.
	Indicates each monitor

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	Select the reference point for displaying the Monitor. The following reference points can be selected: **As of now**, **Specified date** If **As of now** is selected, the Monitor will be displayed with the current time as the reference point. If the **Specified date** is selected, any time up to three days before the current time can be selected as the reference point.
Range	Select the display range as the number of hours leading up to the present time or another specified time. The following display periods can be selected: 1, 2, 4, 8, 12, 18 and 24 hours The default period is 2 hours.
Number of items displayed	For the number of display items, either "All" or an arbitrary number of items can be specified. Point 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. The number of data items to display in the report is about up to10. The graph might collapse by explanatory notes in case of 10 or more.
Auto Update/ Interval	To perform updates automatically, select the interval and check the check box. The following update intervals can be selected: 1, 3, 5 and 10 minutes The default value is 10 minutes. 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. 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. Please remove the check on the check box when you stop the auto update.

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, and if Internet Explorer is the browser being used, 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 anaysis (Java EE environment)
Interstage(TxnAnalysis)	Interstage transaction breakdown analysis (J2EE environment)

Item	Outline
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
StorageResouce	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
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 Red Hat virtualization function (KVM) performance information
Xen	Detailed Red Hat 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.

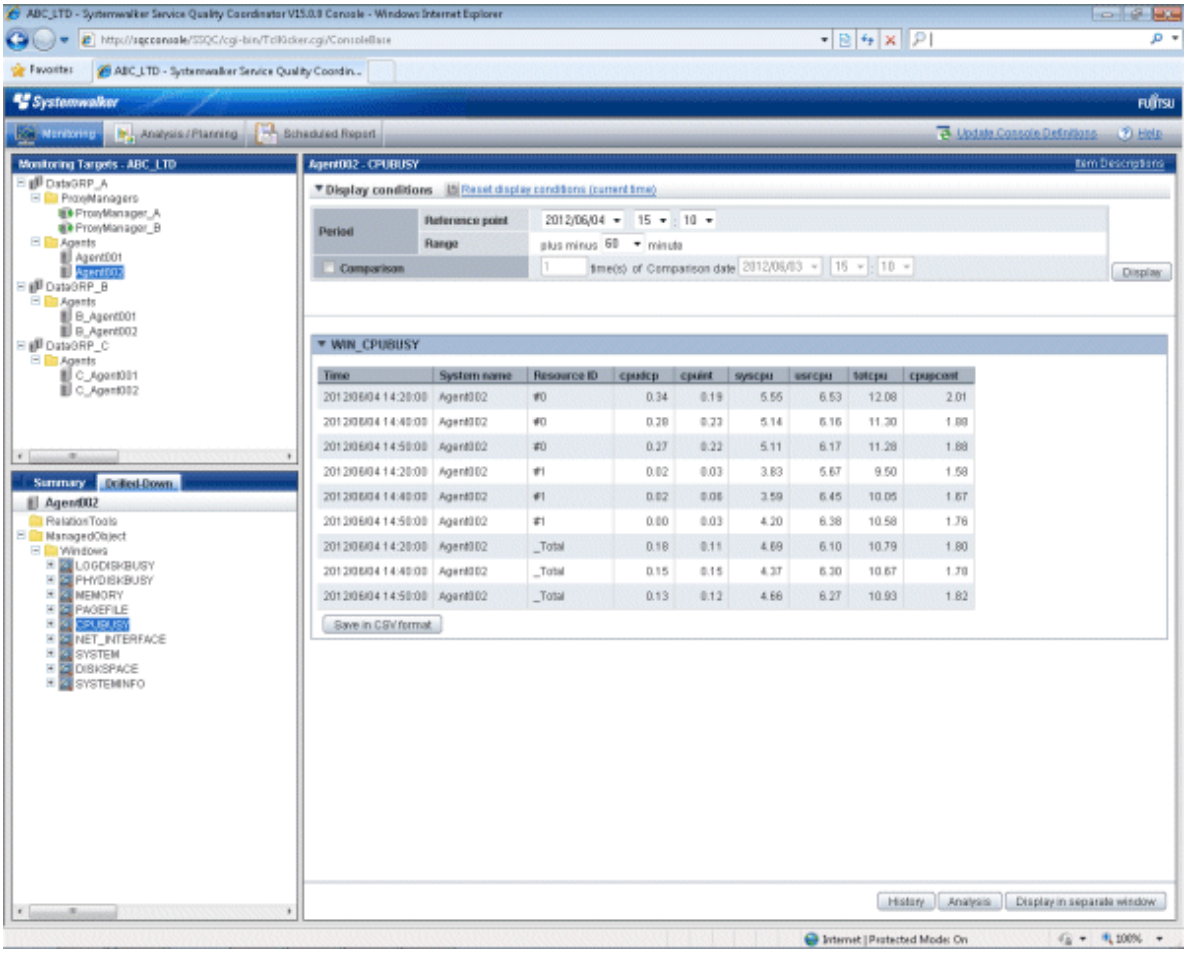
Icon	Meaning
	Indicates a system group.
	Indicates a folder used to store collected information.
	Indicates individual Proxy Manager hosts.
	Indicates individual Agent hosts.
	Indicates each Drilled-Down display item.
	Indicates an instance defined by a middleware product, etc.
	Indicates a related tool.
	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	Select the time that will be used as the starting point for the Drilled-Down display. A time up to one week prior to the present time can be selected. The current time is selected by default when the window is opened.
Range	This option is used to select how many minutes either side of the starting point will be used as the Drilled-Down display's range. The following display ranges can be selected: 180, 120, 60, 30, 10 and 0 minutes The default is 60 minutes.

Option	Description
	If "0" (minutes) is selected, the time specified in the **Date** option will be indicated by a pinpoint.
Comparison date /Multiple	Comparison 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**. Any time up to one week before the current time can be selected for **Comparison date**. The default is one day before the day when the window is opened. Specify a real number between 0.001 and 1000 for the multiplying factor. The default is 1. 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. 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. Note As for the following Drilled-Down display items, this function is off the subject. ResponseCondition TxnAnalysis(Sync) TxnAnalysis(Async) TxnAnalysis(OssJava) Workload

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

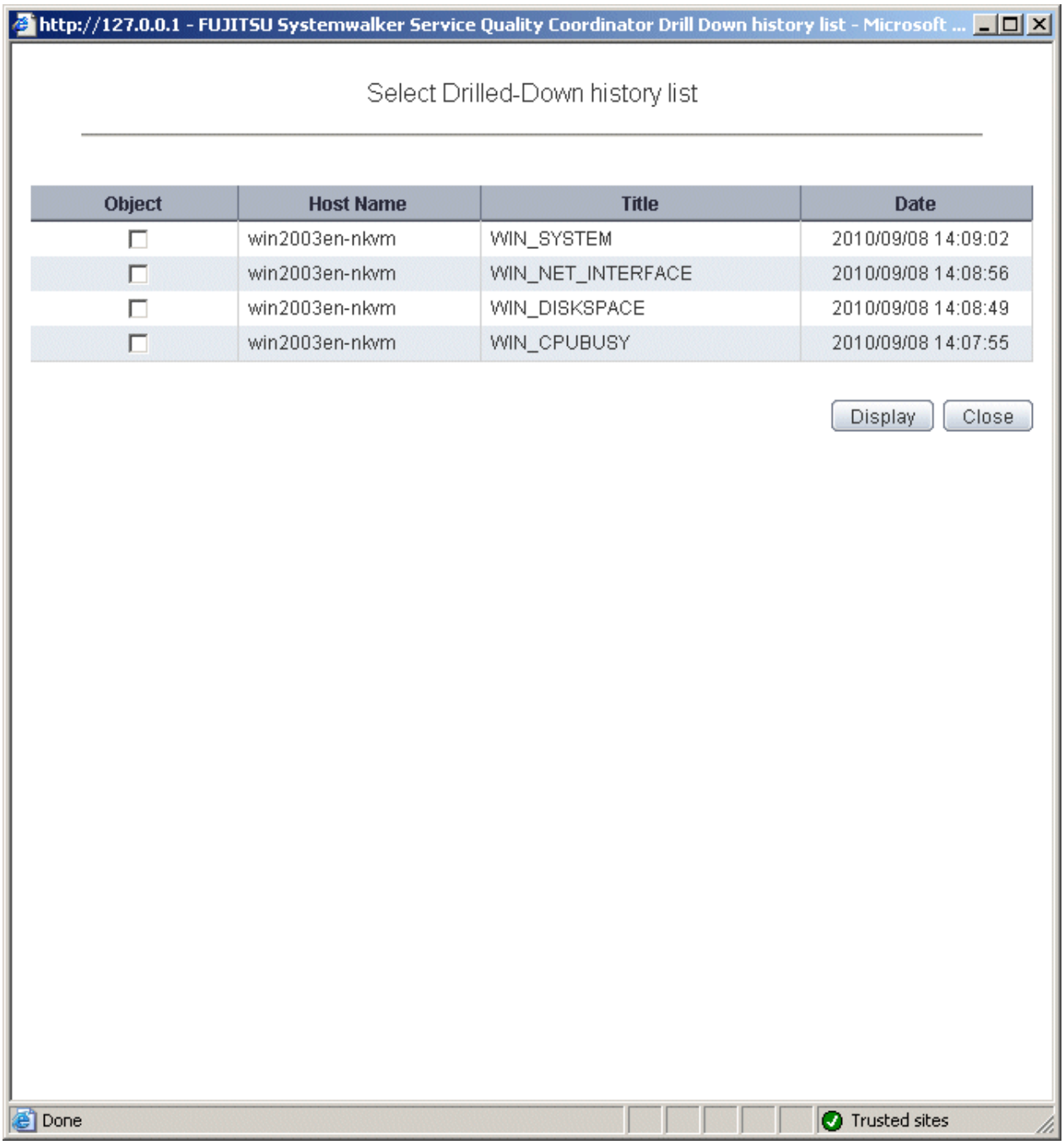
By clicking on the **Display in separate window** button in the lower right of the Drilled-Down display window, the Drilled-Down display content in the current view is opened in a separate window.

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.

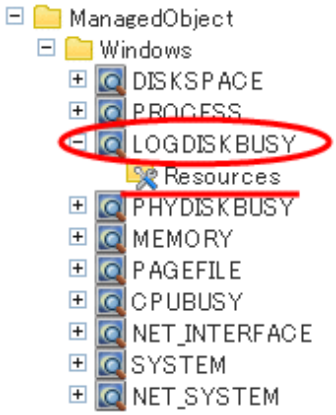


By selecting any of the check boxes shown in the list and clicking the **Show** button, the selected Drilled-Down display content can be displayed in a single window.

This enables multiple items to be listed together and compared.

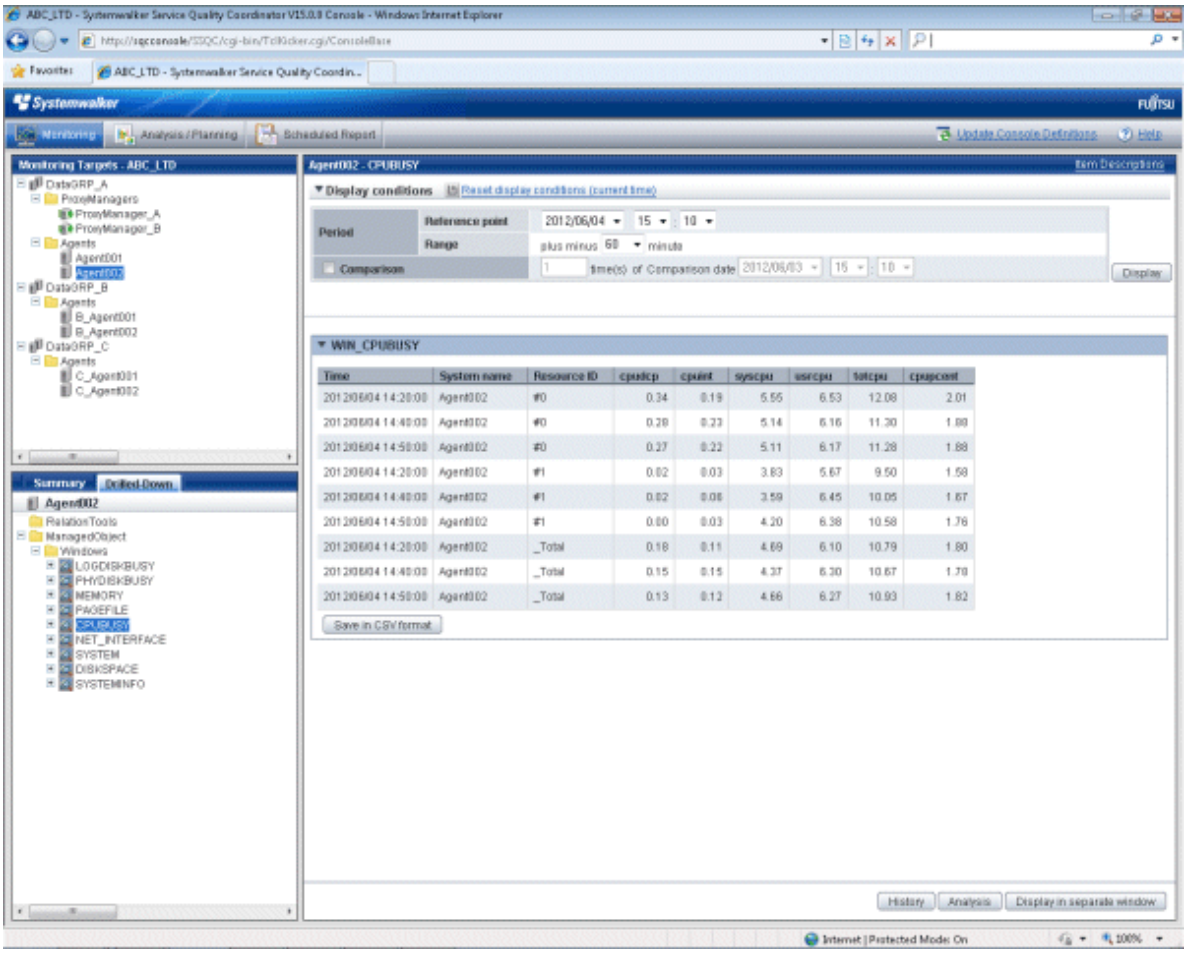
3.2.3.3 Displaying resources

Some of the nodes in the **ManagedObject** folder created automatically by collecting configuration information contain a **Resources** folder.

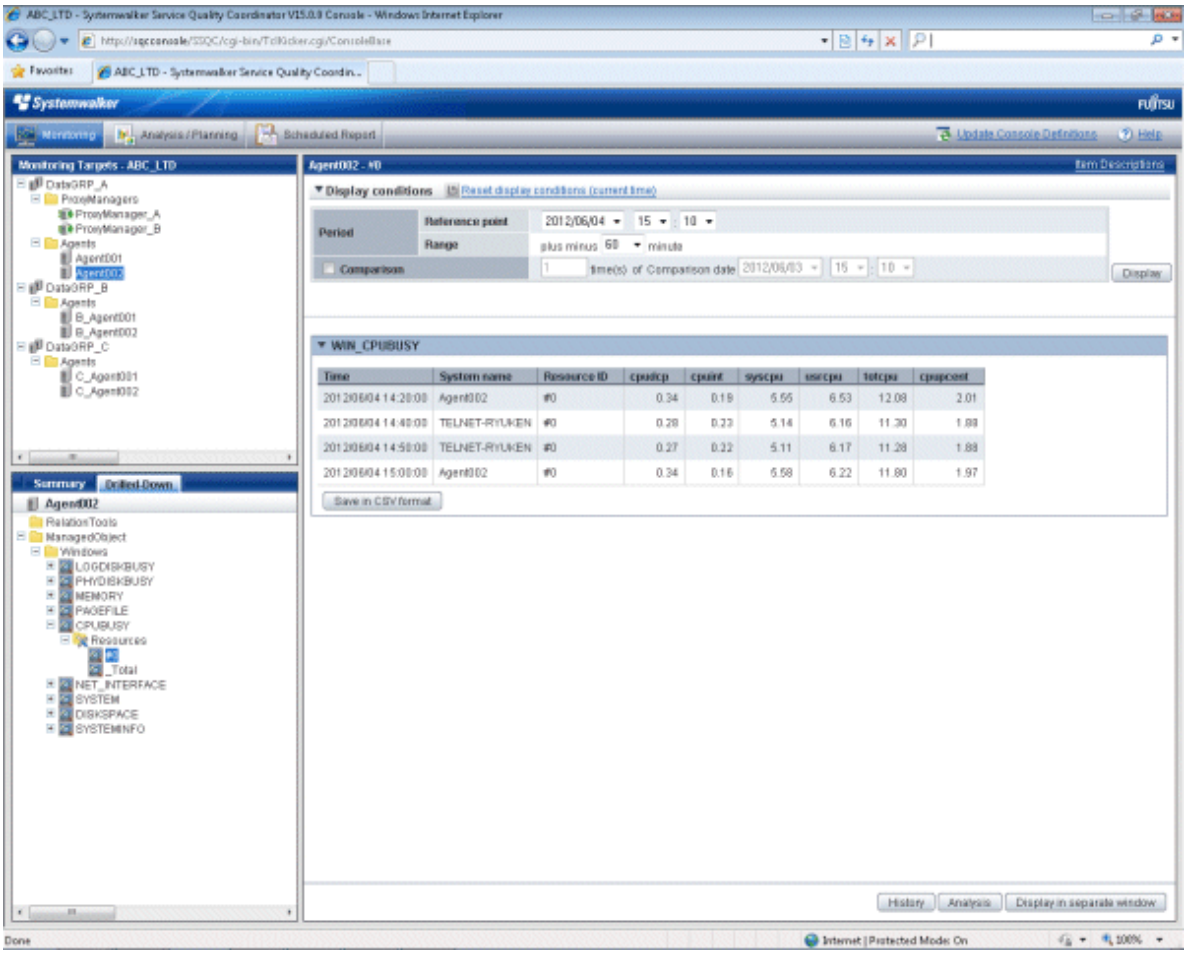


By defining resources for this type of node, the user can display. By defining resources for this type of node, the user can display the content of specific resources in the Drilled-Down display.

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



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.

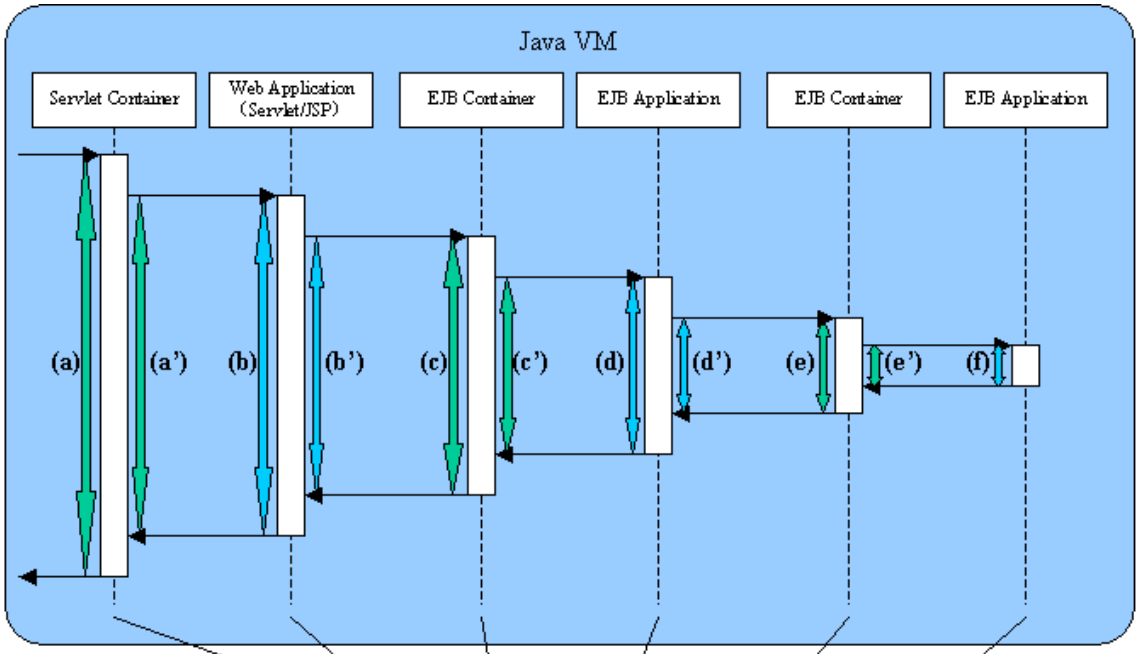
Viewing transaction breakdown analysis content

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.

Point

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.



Time	System name	Resource ID	resptime	blocktim
2004/08/01 12:00:00.864	AP-SV	WV name: TxnID: ServletContainer: Web Application name: Request URL	(a)	(a')
2004/08/01 12:00:01.003	AP-SV	WV name: TxnID: Servlet: Web Application name: Servlet name	(b)	(b')
2004/08/01 12:00:01.025	AP-SV	WV name: TxnID: EJBContainer: EJB Application name: Method name	(c)	(c')
2004/08/01 12:00:01.087	AP-SV	WV name: TxnID: Session Bean: EJB Application name: Method name	(d)	(d')
2004/08/01 12:00:01.172	AP-SV	WV name: TxnID: EJBContainer: EJB Application name: Method name	(e)	(e')
2004/08/01 12:00:01.206	AP-SV	WV name: TxnID: Session Bean: EJB Application name: Method name	(f)	

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: EJBContainer: EJB application name: method name

- EJB application (Session Bean)

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

- EJB application (Entity Bean)

  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 (Session Bean)

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

- EJB application (Entity Bean)

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

Note

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 SSQC 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 SSQC transaction IDs and Interstage context IDs

Note

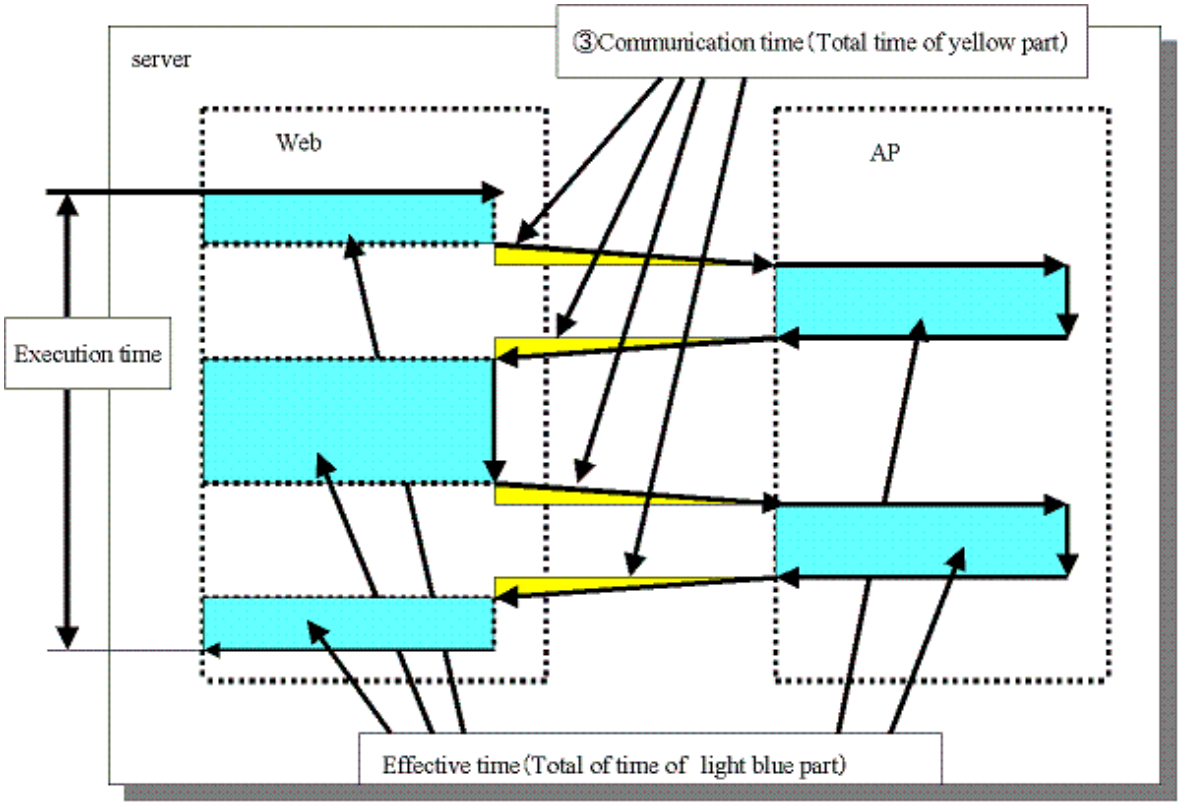
Refer to "1.2.2.10 TxnIDs for TxnAnalysis(Sync), TxnAnalysis(Async), and TxnAnalysis(OssJava)" for information about "The effective transaction time and the total communication time for the transaction ", "The starting times, finishing times and effective times for the activities in transactions" and " A list of correspondences between SSQC 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)

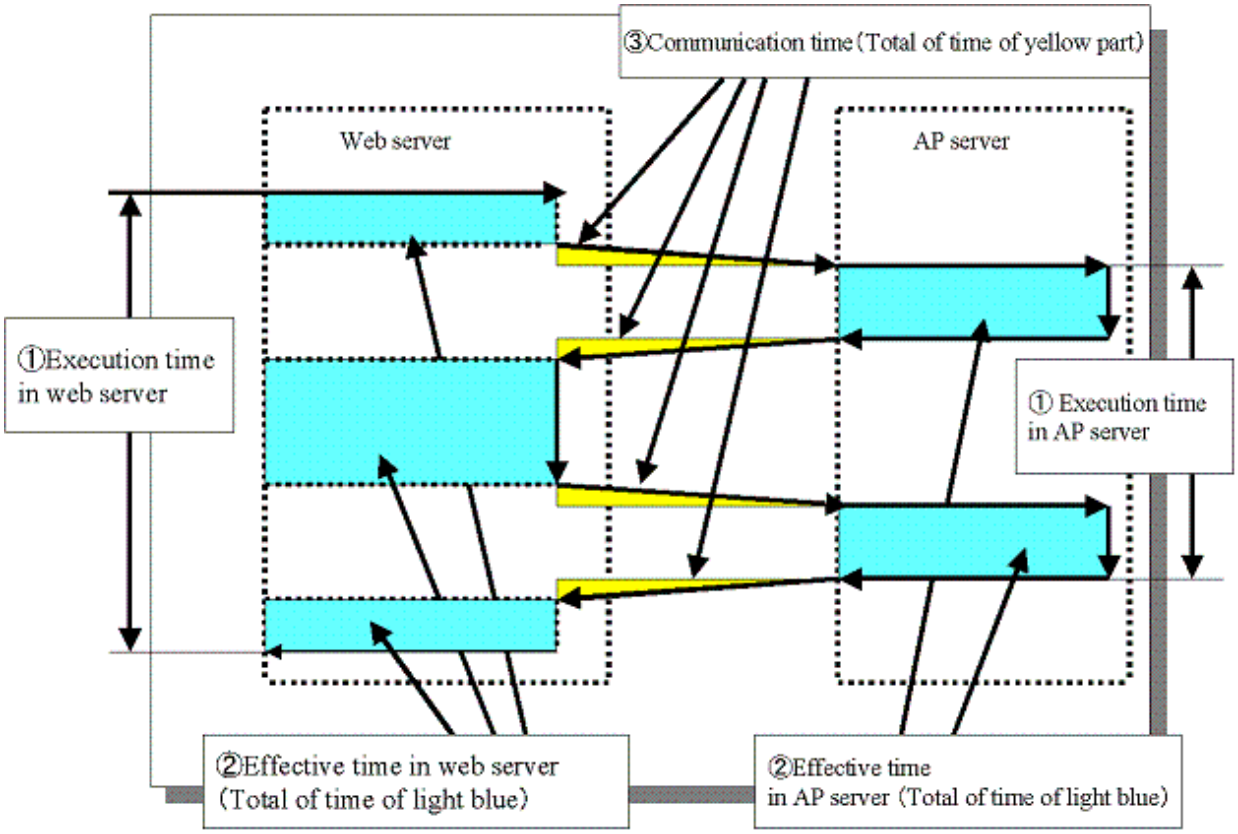
Note

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

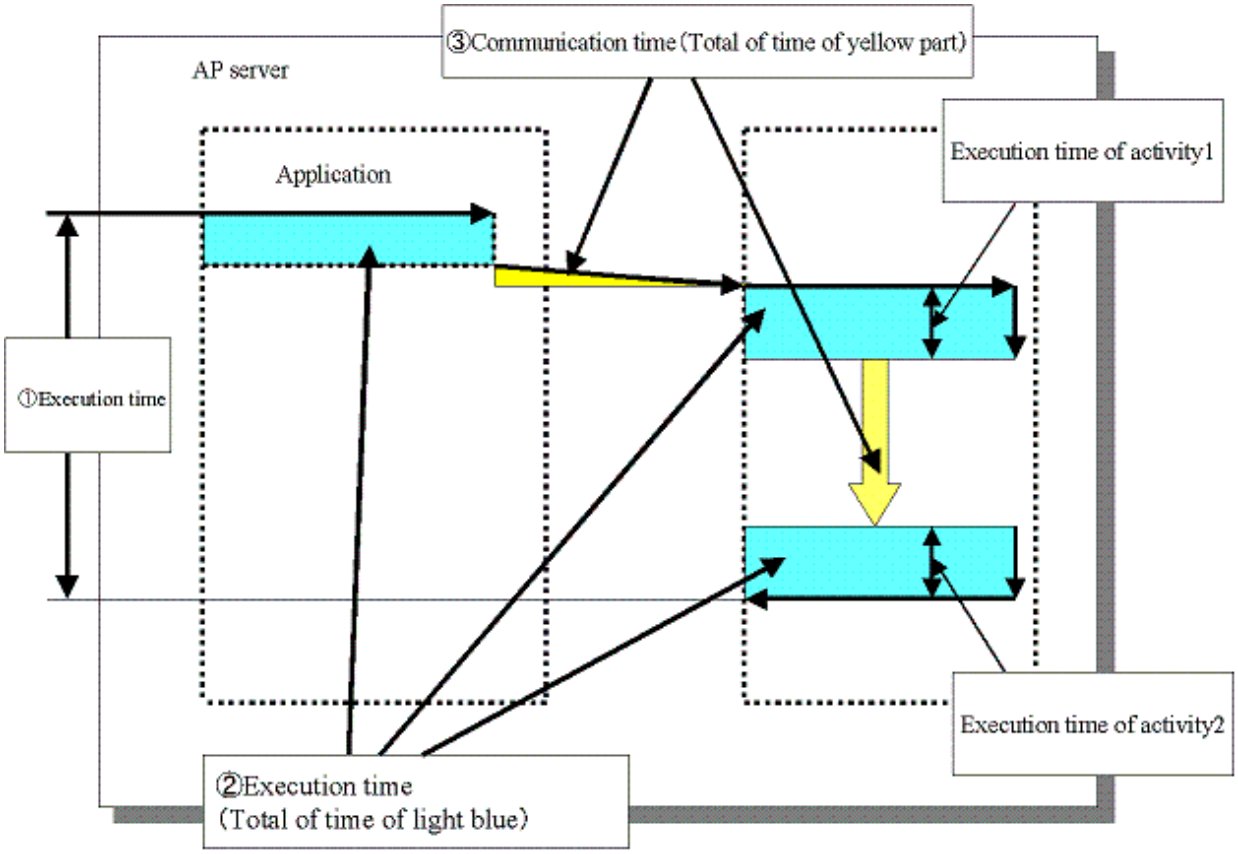
- Representation of execution time, effective time and communication time for a synchronous transaction (where the transaction is executed within a single server)



- 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 name	Specifies the type and name (display name) of the target to be displayed. 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

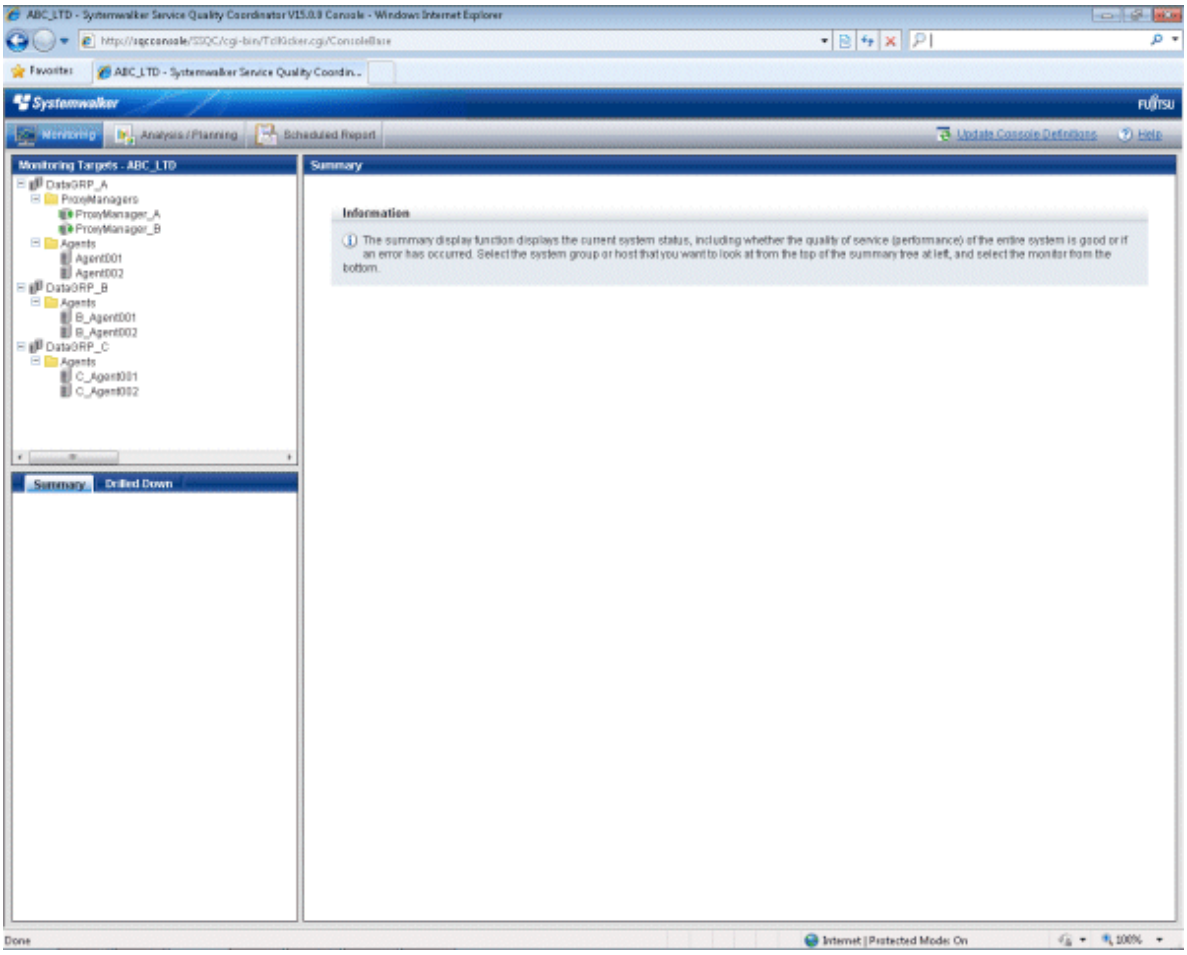
Example of Summary view invocation

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

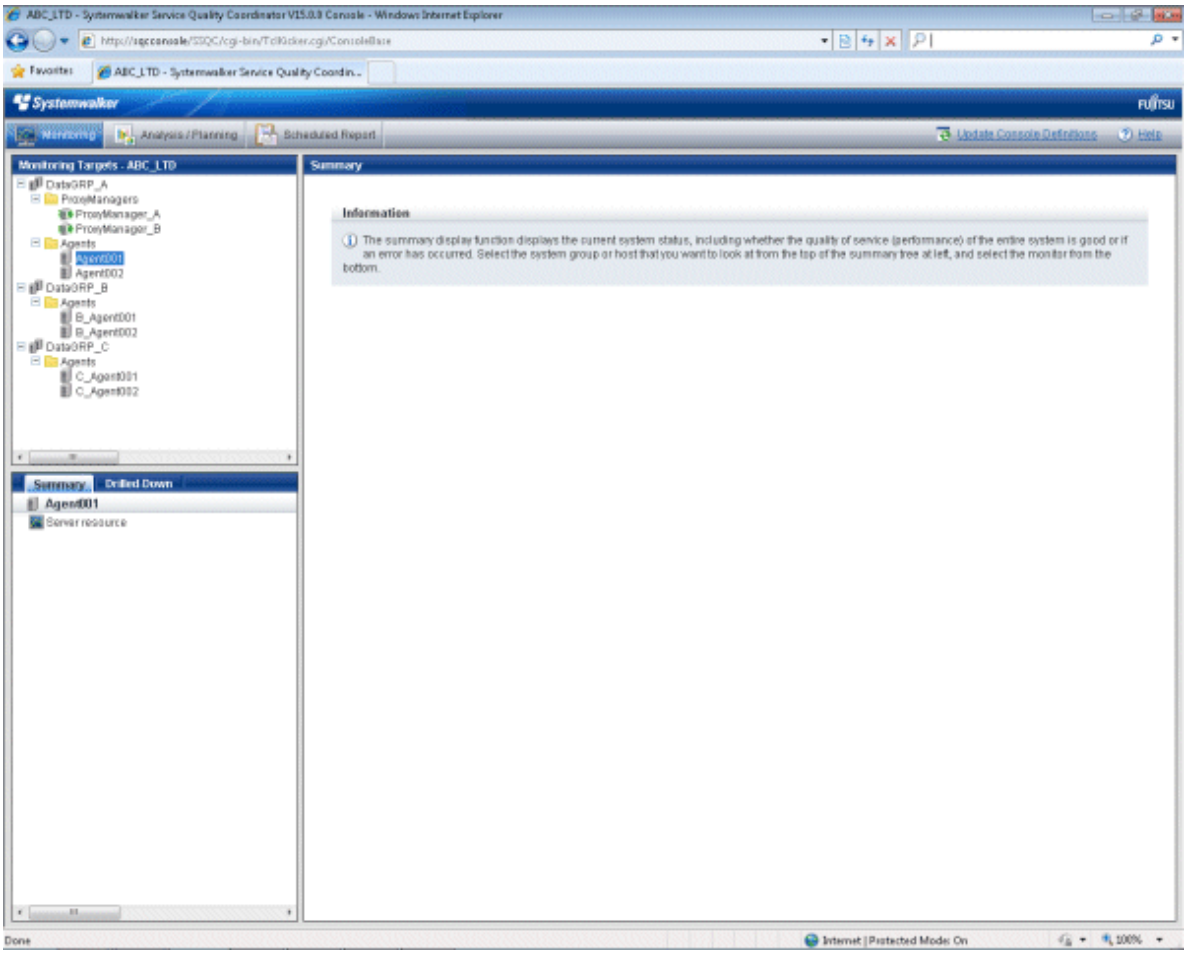
When the "mode" and "type/name" parameters are specified, the Console will start with the targets selected in the Summary tree.

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]



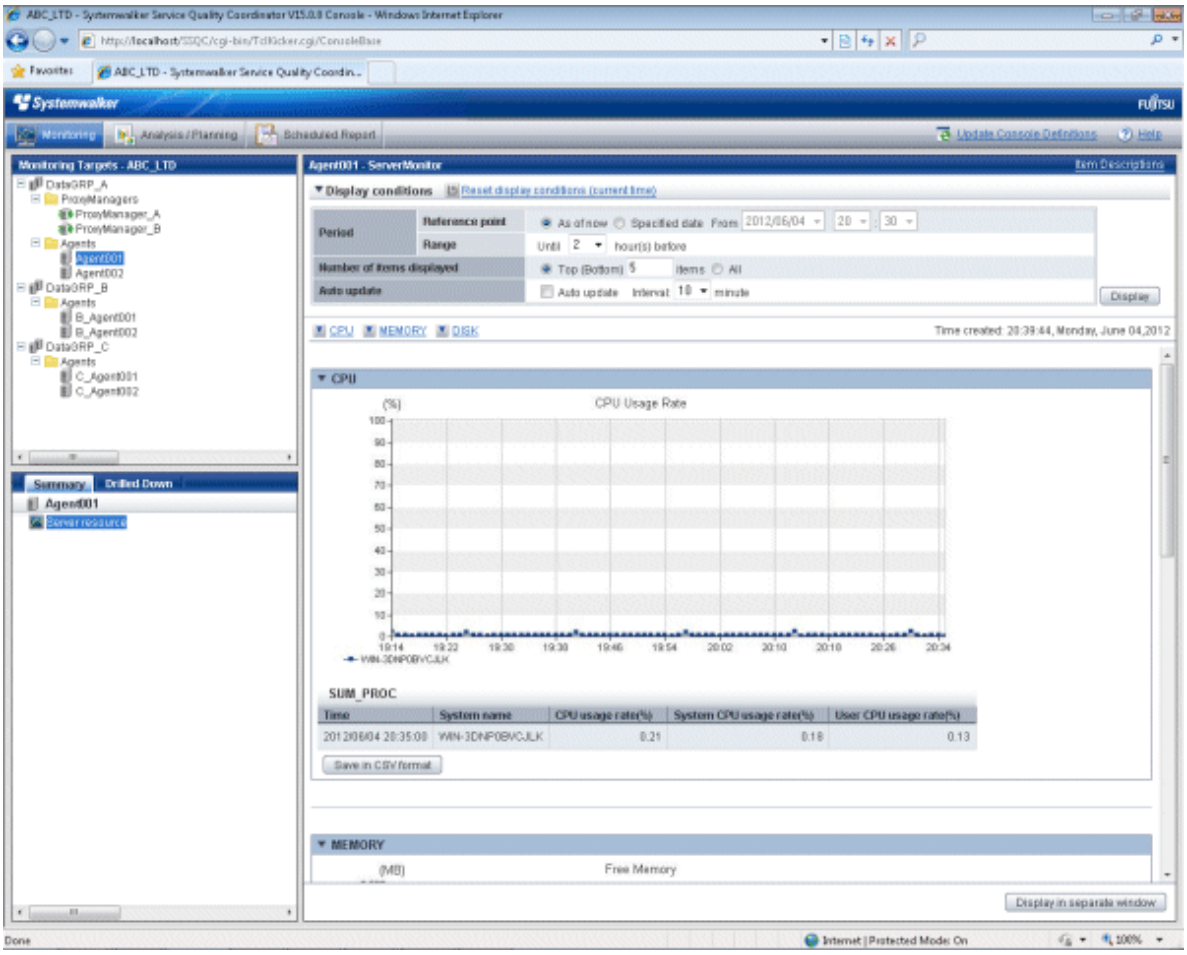
Example of monitored content invocation

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
	"ProxyManager" "Agent" **Point** "name" cannot specify some characters (such as #, ?, +, \ and $) in an URL directly. Use URL encoding to specify any of these characters. **Note** If "SystemGroup", "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."

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	

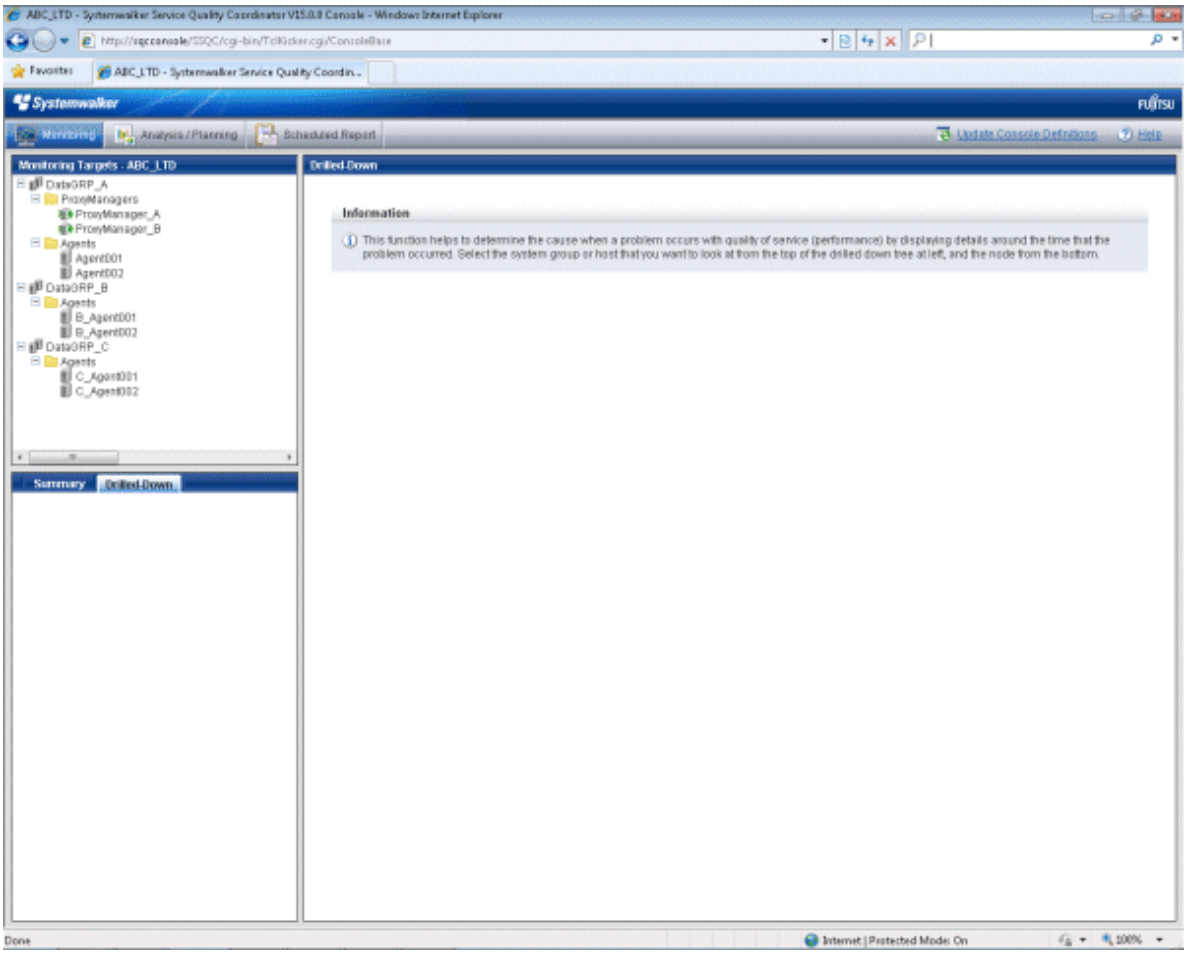
Example of Drilled-Down display invocation

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

[Sample URL entry for invocation]

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

[Sample startup window]



Example of Drilled-Down display target invocation

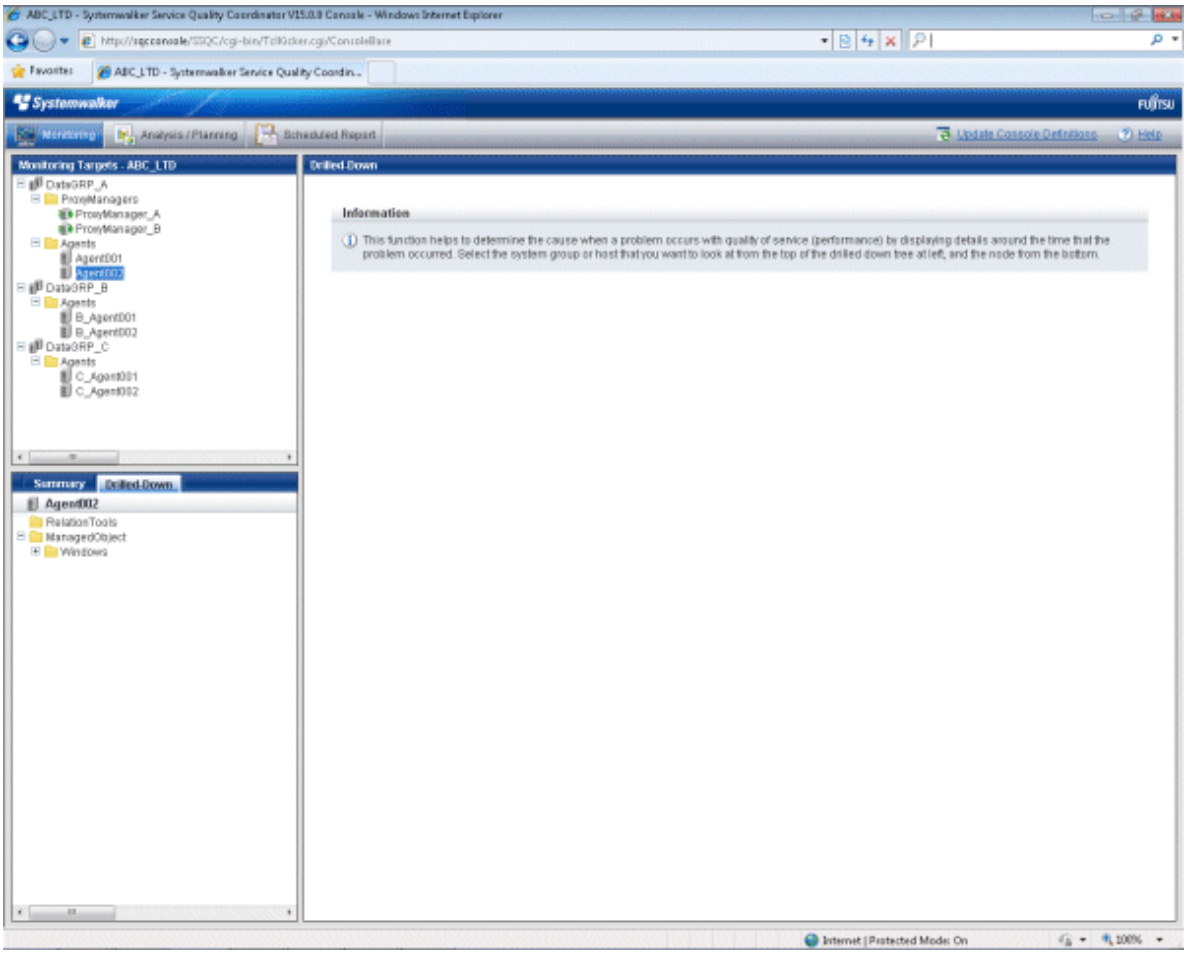
When the "mode" and "type/name" parameters are specified, the Console will start with the targets selected in the Drilled-Down tree.

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]


ABC_LTD - Systemwalker Service Quality Coordinator V15.0.0 Console - Windows Internet Explorer
Systemwalker
FUJITSU
Monitoring
Analysis / Planning
Scheduled Report
Update Console Definitions
Help
Monitoring Targets - ABC_LTD
DataGRP_A
ProxyManagers
ProxyManager_A
ProxyManager_B
Agents
Agent001
Agent002
DataGRP_B
Agents
B_Agent001
B_Agent002
DataGRP_C
Agents
C_Agent001
C_Agent002
Summary
Drilled-Down
Agent002
RelationTools
ManagedObject
Windows
Drilled-Down
Information
This function helps to determine the cause when a problem occurs with quality of service (performance) by displaying details around the time that the problem occurred. Select the system group or host that you want to look at from the top of the drilled down tree at left, and the node from the bottom.
Internet | Protected Mode: On
100%

Chapter 4 Analysis/Planning Window

In the Service level management function, performance information that this product collected can be displayed in the form of various reports according to the grain size and the purpose of information. In Analysis/Planning Window and Scheduled Report Registration View, a target scenario of the operation is classified as a Category and prepared. The analysis and the planning along the purpose the report displayed in the Category is sequentially confirmed can be done.

In Analysis/Planning Window, to confirm it for a mid/long-term analysis and the planning of the service quality to prevent the trouble beforehand, the report can be displayed at once.

Point

The condition of each console Definition of a past analysis/planning result and the registered analysis is preserved. Please refer to "5.5 Storing Reports (Administrator Tasks)" for details.

4.1 Types of Categories

It explains the Category classified according to the purpose of the operation.

Usage	Scenario	Category	Description
My Category	-	-	It is possible to use it by freely making the Category, and registering the report. Please refer to "4.3.1.1.1 My Category Management" for details. When the registration ending report before V13.5.0 is shifted, it is displayed as "Transition report" Category in "My Category". Please refer to Installation Guide "Work by the operation management client" for the Transition.
Planning	Virtual aggregate	P2V(Physical to Virtual)	The resource status is understood, and P2V can be simulated.
	Effective resource use	VMware virtual machine relocation	The grasp of the resource status of a virtual host of VMware and the relocation simulation of the virtual machine can be done.
		VMware resource allocation optimization	The resource status of the virtual machine of VMware can be understood.
		VMware tuning guidance	It can be confirmed whether there is problem in the status of the resource of a virtual host of VMware and the virtual machine and the situation by the tuning guidance.
	Demand forecast	VMware Resource pool	The demand for the resource of the resource pool of VMware is predictable.

Usage	Scenario	Category	Description
		ServerView Resource Orchestrator Resource pool	The demand for the resource of the resource pool of ServerView Resource Orchestrator is predictable.
	Increment simulation	Response simulation	The response time when the number of requests in the future is forecast from historical earnings, and the server is added is simulated.
	Generic report	Generic report	The report of the forecast can be used in the future used by the planning.
Performance analysis	Virtualization software	VMware	The performance of a cluster of VMware, a resource pool, a virtual host, and the virtual machine can be analyzed.
		Hyper-V	A virtual host of the Hyper-V and the performance of the virtual machine can be analyzed.
		Linux Virtualization function (KVM)	A virtual host of Red Hat virtualization function (KVM) and the performance of the virtual machine can be analyzed.
		Linux Virtualization function (Xen)	The performance of Red Hat 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.

Usage	Scenario	Category	Description
	OS	Windows	The performance of Windows can be analyzed.
		UNIX	The performance of UNIX can be analyzed.
		OS common	OS generic performance can be analyzed.
	Web	Web transaction	The performance of the Web transaction can be analyzed.
	Application	Interstage Application Server(IJServer Cluster)	The performance of Interstage Application Server(IJServer 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.
		Workload	The performance of Workload Organizer can be analyzed.
	Database	Symfoware Server	The performance of Symfoware Server can be analyzed.
		Oracle Database	The performance of Oracle Database can be analyzed.
		Microsoft SQL Server	The performance of Microsoft SQL Server 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	Operation information on service can be analyzed.
		End user response	The response of the END USER can be analyzed.
	Generic report	Generic report	The report of the comparison etc. can be used in the time series display used by the performance analysis and the past.
History	-	History	The report made once can be displayed.

Point

The Category of "Solaris Zone(Solaris 10)", "TcpNetwork", and "Workload" is not displayed in default.

Please perform the following procedures when you want to display it.

Procedure

1. Scenario_Template.xml that is is backed up as follows.

   <Operation Management Client installation directory>\www\html\admin\SLC\Scenario_Template.xml

2. The following Files are renamed, and Scenario_Template.xml is replaced.

   [Before]

   <Operation Management Client installation directory>\www\html\admin\SLC
   \Scenario_Template_for_OldEdition.xml

   [After]

   <Operation Management Client installation directory>\www\html\admin\SLC\Scenario_Template.xml

3. Please confirm the console and confirm the following Categories are displayed clicking the display and "Analysis/Planning" tab.

   - Solaris Zone(Solaris 10)
   - TcpNetwork
   - Workload

Note

The following analyses and reports before V13.5 have changed to the following reports by the improvements such as Windows and making of a common report of UNIX. Information that had been registered with an analysis and a regular report before V13.5 is not succeeded to V15.0 about these reports, and register again, please.

Before V13.5	V15.0
Category:Full System Inspection Analysis/Report Report:Distribution of rsc. usage cond. (Windows)	Usage:Planning Scenario:Virtual aggregate Category:P2V(Physical to Virtual) Report:Server distribution by rsc. usage cond.(Summary)
Category:Full System Inspection Analysis/Report Report:Distribution of rsc. usage cond. (UNIX)	
Category:Full System Inspection Analysis/Report Report:List of rsc. usage cond. (Windows)	Usage:Planning Scenario:Virtual aggregate Category:P2V(Physical to Virtual) Report:List of rsc. usage cond. (Detail)
Category:Full System Inspection Analysis/Report Report:List of rsc. usage cond. (UNIX)	
Category:Categorized Diagnostic Analysis/Report Report:Resource piling(Windows)	Usage:Planning Scenario:Virtual aggregate Category:P2V(Physical to Virtual)

Before V13.5	V15.0
Category:Categorized Diagnostic Analysis/ Report Report:Resource piling(UNIX)	Report:P2V simulation
Category:Categorized Diagnostic Analysis/ Report Report:Estimated response time(Requests)	Usage:Planning Scenario:Increment simulation Category:Response simulation Report:Response simulation (Request count)
Category:Categorized Diagnostic Analysis/ Report Report:Estimated response time(Servers)	Usage:Planning Scenario:Increment simulation Category:Response simulation Report:Response simulation (Adding servers)

4.2 Types of Reports

It explains the kind of the report included in the Category explains by 4.1 Types of Categories.

The meaning of the sign of the first line of "Analysis method of setting the Element and the condition" column in the table of this chapter is as follows.

- G : System Group
- H : Host

4.2.1 Planning

It explains each Category about the report used by the Planning.

Note, forecast and simulation results displayed in each report are calculated in the fujitsu's own way based on past performance. The results are only as a guide under your computing environment. It is no guarantee of operation under the real environment. Please be forewarned.

4.2.1.1 Virtual aggregate

4.2.1.1.1 P2V(Physical to Virtual)

Report	Analysis method of setting Element and condition	Item	Description
Server distribution by rsc. usage cond. (Summary)	G System group specification	- Server Distribution - By CPU Usage Rate - Server Distribution - By Memory Usage Rate - Server Distribution - By Disk I/O Count	The resource of a physical server of the entire System has been effectively used or the Confirmation of the resource situation can be done. Only information after the change is displayed about the server of the correspondence when there is a change in the resource of the memory increase etc. in the specified period. - When you examine a virtual consolidating

Report	Analysis method of setting Element and condition	Item	Description
		- Server Distribution - By Disk Throughput - Server Distribution - By Count for Data Sent/Received over Network - Server Distribution - By Network Throughput - Hardware resources information	A high consolidating effect is achieved when there are a lot of servers with low usage rate. When the server with high usage rate is consolidated, it is necessary to note it because a lot of resources are used. **Point** - Displayed CPU performance (MHz) is a performance data of installed CPU 1 core. - Displayed amount of memory installed is an amount of memory to be available for actual use.
List of rsc. usage cond. (Detail)	G System group specification	- CPU usage rate - Memory usage rate - Disk I/O count - Disk throughput - Count for data sent/ received over network - Network throughput - Hardware resources information	The Confirmation of the resource status and the amount of the installing resource (CPU and memory) of a physical server of the entire System can be done. - Only the period after the change is displayed about the server of the correspondence when there is a change in the resource of the memory increase etc. in the specified period. - Information on all the resources is displayed in "ALL" sheet by the list when preserving it by the Excel form. In the installed CPU 1 core, displayed CPU performance (MHz) is performance data. **Point** - Displayed CPU performance (MHz) is a performance data of installed CPU 1 core. - Displayed amount of memory installed is an amount of memory to be available for actual use.
P2V simulation	- For P2V simulation display only	- CPU Usage - Memory Usage - Disk I/O Count - Disk Throughtput - Count for Data Sent/Received over Network - Network Throughput	The amount of the resource use when the selected server is consolidated in one virtual environment can be simulated. The combination of consolidated servers is considered when there is bias by the value too large, and time zone and day of the week through the period. When a permissible threshold is set, whether the value is greatly exceeded is confirmed. It is not possible to use it in a regular report.

Note

Neither the above-mentioned nor the report type of the server observed with Agent or Agent for Agentless Monitoring before Systemwalker Service Quality Coordinator V13.5.0 are displayed.

4.2.1.2 Effective resource use

4.2.1.2.1 VMware virtual machine relocation

Note

The report of this Category cannot be used for VMware ESX (ssh connection) because there is itemses that cannot be collected.

Report	Analysis method of setting Element and condition	Item	Description
VMware rsc. usage cond.(List of host)	G System group specification	- CPU usage rate - CPU usage - Memory usage rate - Memory usage - Disk I/O count - Disk throughput - Count for data sent/ received over network - Network throughput - Hardware resources information	The resource status of the VMware virtual host registered in the System group is understood. A virtual host that there is becoming empty in the resource is detected as a virtual host who consolidates it. Displayed Total CPU performance (MHz) is a performance data of the total of all cores of installed CPU.
VMware rsc. usage cond. (Virtual machine stack)	H System group and host specification	- CPU Usage - Memory Usage - Disk I/O Count - Disk Throughput - Count for Data Sent/ Received over Network - Network Throughput	The virtual machine being arranged by a virtual host and the amount of the resource use are confirmed to a virtual host in the movement origin examined with "VMware rsc. usage cond.(List of host)" in the piling graph. The amount of the resource use of each virtual machine in the movement origin is confirmed, and which virtual machine is moved to which moving destination candidate's host is examined.
VMware virtual machine relocation simulation	- For VMware virtual machine relocation	- CPU Usage - Memory Usage - Disk I/O Count - Disk Throughput	The amount of the resource use when the virtual machine examined as a movement origin is relocated in a virtual host who examines it as a moving destination is simulated. The result is good at the graph of the time series according to time zone and a day of the week at the Confirmation. It is not possible to use it in a regular report.

Report	Analysis method of setting Element and condition	Item	Description
	simulation only	- Count for Data Sent/ Received over Network - Network Throughput	

4.2.1.2.2 VMware resource allocation optimization

Note

The report of this Category cannot be used for VMware ESX (ssh connection) because there is itemses that cannot be collected.

Report	Analysis method of setting Element and condition	Item	Description
VMware rsc. usage cond.(List of virtual machine)	H System group and host specification	- CPU usage rate - CPU usage - Memory usage rate - Memory usage	The resource status of the virtual machine on a virtual host who selects it is displayed by the list. It sorts by CPU utilization and the memory usage rate, the virtual machine that there is becoming empty in the resource is detected, and whether the resource allocation can be reduced to the virtual machine with low usage rate is examined. 100% of CPU utilization is one physical CPU. Therefore, it is likely to be displayed exceeding 100%.

4.2.1.2.3 VMware tuning guidance

Note

The report of this Category cannot be used for VMware ESX (ssh connection) and VMware ESX 3.5 because there is itemses that cannot be collected.

Report	Analysis method of setting Element and condition	Item	Description
VMware CPU tuning guidance	H System group and host	- Tuning guidance	There is no problem in CPU status of the host and the virtual machine or the Confirmation can be done. It refers when the guidance is displayed.

Report	Analysis method of setting Element and condition	Item	Description
	specification	- Virtual Host, CPU Usage Rate	- **Host's CPU utilization : for 20% or more all 90% or more always and the delay probabilities of CPU of the virtual machine always.** CPU waiting has been generated by CPU overload. Please examine the increase of physical CPU. - **Host's CPU utilization is generated, and CPU utilization of either of 90% or more, always.** Please examine the allocation review of virtual CPU to the virtual machine. - **CPU utilizations other than host (0) : for 20% or less all 90% or more always and the delay probabilities of CPU of the virtual machine always.** CPU waiting has not been generated though CPU is overload. Please examine the exchange for CPU with a high CPU performance when processing speed of the batch processing etc. is slow. **[Attention Level]** CPU Usage Rate >= 90 %
		- Virtual Machine, CPU Usage Rate - Virtual Machine, Average CPU Usage Rate - Virtual Machine, CPU Wait Rate	- 100% of CPU utilization is one physical CPU. Therefore, it is likely to be displayed exceeding 100%. - **CPU utilization of the virtual machine) (CPU always : for 90% or more though there is no problem in host's CPU utilization.** Please review the allocation of virtual CPU to the virtual machine. (Virtual CPU not used with other virtual machines is allocated.) Or, please confirm whether there is problem in a specific application that operates in the virtual machine. Please move the virtual machine of the Element to another host or another virtual machine when there is no problem. - **The delay probability of CPU always : for 20% or more though there is no problem in CPU utilization of the virtual machine.** There is a possibility of excessively allocating virtual CPU. Please review the ratio of the over committing.

Report	Analysis method of setting Element and condition	Item	Description
			[Attention Level] Average CPU Usage Rate (1CPU) >= 90 % CPU Wait Rate >= 20 %
VMware Memory(Host) tuning guidance	H System group and host specification	- Tuning guidance	There is no problem in virtual host's memory usage or the Confirmation can be done. It refers when the guidance is displayed.
		- Virtual Host, Swap Occurrence Status	- **When the swap has been generated** Memory shortage occurs. Please examine the memory increase. **[Attention Level]** Swap Occurrence Status > 0 MB
		- Virtual Host, Memory Usage Status	- **When the amount of the swapping is larger than 0** There is a possibility that the swapping was generated in the past. Please confirm whether memory shortage occurred, except when the virtual machine is made and it starts. **[Attention Level]** Swap Amount > 0 MB/sec - **When the amount of memory compaction is larger than 0** There is a symptom of physical memory shortage. Please examine the memory increase when the problem is caused on the performance side. **[Attention Level]** Memory Extension Amount > 0 MB/sec - **When the amount of the balloon generation is larger than 0** There is a symptom of physical memory shortage. Please examine the memory increase when the problem is caused on the performance side. **[Attention Level]** Balloon Occurrence Amount > 0 MB/sec
		- Virtual Host, Memory Usage	- **When an empty memory capacity is the entire less than 6%** There is a possibility of the sign with insufficient physical memories of the

Report	Analysis method of setting Element and condition	Item	Description
			ballooning, memory compaction, and the swap, etc. Please examine the memory increase in preparation for memory shortage. **[Attention Level]** Free Memory Amount < 6 %
VMware Memory(Virtual machine) tuning guidance	H System group and host specification	- Tuning guidance	There is no problem in the memory usage of the virtual machine or the Confirmation can be done. It refers when the guidance is displayed.
		- Virtual Machine, Swap Occurrence Status(Reads/ Writes)	- **When the swap situation of the occurrence (read or write) is larger than 0** The swap is generated, and the memory is insufficient. Please examine permanent of the memory. **[Attention Level]** Swap Occurrence Status(Reads) > 0 MB Swap Occurrence Status(Writes) > 0 MB
		- Virtual Machine, Swap Wait Rate	- **When the swap delay probability is larger than 0** CPU waiting of the virtual machine is generated, and the memory is insufficient. Please examine the review of the memory quota for the virtual machine of the Element. **[Attention Level]** Swap Wait Rate > 0 %
		- Virtual Machine, Swap Amount	- **When the amount of the swap use is larger than 0** There is a possibility that the swapping has been generated in the past. Please confirm whether memory shortage occurred, except when the virtual machine is made and it starts. **[Attention Level]** Swap Amount > 0 MB/sec
		- Virtual Machine, Memory Compression Amount	- **When the memory compaction situation is larger than 0** There is a symptom of physical memory shortage. Please examine the memory increase when the problem is caused on the performance side.

Report	Analysis method of setting Element and condition	Item	Description
			[Attention Level] Memory Compression Amount > 0 MB/sec
		- Virtual Machine, Memory Extension Amount	- **When the memory expansion situation is larger than 0** There is a symptom of physical memory shortage. Please examine the memory increase when the problem is caused on the performance side. **[Attention Level]** Memory Extension Amount > 0 MB/sec
		- Virtual Machine, Balloon Occurrence Amount	- **When the amount of the balloon use is larger than 0** There is a symptom of physical memory shortage. Please examine the memory increase when the problem is caused on the performance side. **[Attention Level]** Balloon Occurrence Amount > 0 MB/sec
VMware Physical Disk	H System group and host specification	- Virtual Host, Physical Disk Throughput(Reads/Writes) - Virtual Host, Physical Disk I/O Count	The throughput and the input-output frequency of virtual host's disk can be understood. - **When CM(Controller Module) exceeds the maximum performance of each disk unit** Please change the arrangement of the RAID group with a high load, and examine diversification of loads. - **When the RAID group that exceeds the maximum performance of the disk unit exists** Please add the RAID group and examine diversification of loads. Please examine the change to RAID0+1 and RAID1 when you use RAID5.
		- Virtual Host, Physical Disk Driver Access Performance(Reads/ Writes)	The driver access performance of virtual host's disk is good at the Confirmation. - **The disk access performance always : for 4ms or more.** a. Please decrease the number of virtual machines installed in one data store when two or more machines are

Report	Analysis method of setting Element and condition	Item	Description
			installed in one data store (diversification of loads). b. Please review the RAID configuration of the RAID group that specifies it for the data store. (review of disk increase and RAID Level) c. Please confirm the breakdown of the virtual disk in the same RAID group (data store). **[Attention Level]** Physical Disk Driver Access Performance(Reads) >=4 ms #Always Physical Disk Driver Access Performance(Writes) >=4 ms #Always
		- Virtual Host, Physical Disk Kernel Access Performance(Reads/ Writes)	The kernel access performance of virtual host's disk is good at the Confirmation. - **Physical Disk Kernel Access Performance(Reads/Writes) always for 20ms or more.** a. Please decrease the number of virtual machines installed in one data store when two or more machines are installed in one data store (diversification of loads). b. Please review the RAID configuration of the RAID group that specifies it for the data store. (review of disk increase and RAID Level c. Please confirm the breakdown of the virtual disk in the same RAID group (data store). **[Attention Level]** Physical Disk Kernel Access Performance(Reads) >=20 ms #Always Physical Disk Kernel Access Performance(Writes) >=20 ms #Always
VMware Virtual Disk	H System group and host specification	- Virtual Disk Throughput - Virtual Disk I/O Count	The throughput and the input-output frequency of the disk of the virtual machine can be understood. - **When CM(Controller Module) exceeds the maximum performance of each disk unit** Please change the arrangement of the RAID group with a high load, and examine diversification of loads.

Report	Analysis method of setting Element and condition	Item	Description
			- **When the RAID group that exceeds the maximum performance of the disk unit exists** Please add the RAID group and examine diversification of loads. Please examine the change to RAID0+1 and RAID1 when you use RAID5.
		- Virtual Disk, Access Performance(Reads/ Writes)	The disk access performance of the virtual machine is good at the Confirmation. Please confirm the disk access performance.
VMware Physical NIC	H System group and host specification	- Physical NIC, Network Usage Rate(Transmission/ Reception)	The Network percentage utilisation of physical NIC can be understood. - **When "Network Usage Rate(Transmission)" has passed the threshold** a. The load of physical NIC has risen. Please review of physical network configuration and divide the segment. (Please confirm which virtual machine occupies the band of physical NIC referring to VMware virtual NIC.) - **When "Network Usage Rate(Reception)" has passed the threshold** a. The load of physical NIC has risen. Please review of physical network configuration and divide the segment. (Please confirm which virtual machine occupies the band of physical NIC referring to VMware virtual NIC.) b. Please add physical NIC to vSwitch connected with physical NIC with a high load.(teaming) **[Attention Level]** Network Usage Rate >= Threshold #Always Line: Threshold Leased line: 80 % Switching hub: 60 % Repeater hub: 30 %
		- Physical NIC, Packet Drop Rate(Transmission/ Reception)	The packet drop rate of physical NIC can be understood. - **When the packet drop rate (Reception) is larger than 0%** Please add virtual CPU if CPU utilization of the virtual machine is confirmed, and CPU

Report	Analysis method of setting Element and condition	Item	Description
			utilization is high. Moreover, please execute the review of network configuration of the virtual machine. - **When the packet drop rate (Transmission) is larger than 0%** Please confirm the Network percentage utilisation of physical NIC, and move the virtual machine connected with physical NIC with large value to vSwitch connected with another physical NIC. Or, please add physical NIC to vSwitch connected with physical NIC where the packet drop has been generated.(teaming) **[Attention Level]** Packet Drop Rate(Transmission) > 0 % Packet Drop Rate(Reception) > 0 %
VMware Virtual NIC	H System group and host specification	- Virtual NIC, Network Usage (Transmission/ Reception)	The Confirmation of the amount of the Network use of virtual NIC can be done.
		- Virtual NIC, Packet Drop Rate (Transmission/ Reception)	The Confirmation of the packet drop rate of virtual NIC can be done. Note The following are not displayed for VMware ESX 3.5, VMware ESX 4.0, and VMware ESX/ ESXi 4.1. - Virtual NIC, Packet Drop Rate (Transmission) - Virtual NIC, Packet Drop Rate (Reception)

4.2.1.3 Demand forecast

4.2.1.3.1 VMware Resource pool

Report	Analysis method of setting Element and condition	Item	Description
Resource pool (CPU)	H System group, host and	- Resource Pool(CPU) (demand forecast)	VMware is CPU utilization of the manage resource pool, and the regression analysis is done from historical earnings, and how many resources is used is forecast.

Report	Analysis method of setting Element and condition	Item	Description
(demand forecast)	resource ID specification		
Resource pool (Memory) (demand forecast)	H System group, host and resource ID specification	- Resource Pool(Memory) (demand forecast)	VMware is a memory percentage utilisation of the manage resource pool, and the regression analysis is done from historical earnings, and how many resources is used is forecast.

4.2.1.3.2 ServerView Resource Orchestrator Resource pool

Report	Analysis method of setting Element and condition	Item	Description
VM pool (CPU) (demand forecast)	H System group, host and resource ID specification	- VM pool (CPU) (demand forecast)	ServerView Resource Orchestrator does the regression analysis from historical earnings, and forecasts how many resources to use CPU utilization of manage VM pool.
VM pool (Memory) (demand forecast)	H System group, host and resource ID specification	- VM pool (Memory) (demand forecast)	ServerView Resource Orchestrator does the regression analysis from historical earnings, and forecasts how many resources to use the memory percentage utilisation of manage VM pool.
Storage pool (demand forecast)	H System group, host and resource ID specification	- Storage pool (demand forecast)	ServerView Resource Orchestrator is a percentage utilisation of the manage storage pool, and the regression analysis is done from historical earnings, and how many resources is used is forecast.
Network pool	H	- Network pool (demand forecast)	ServerView Resource Orchestrator does the regression analysis from a past performance of the percentage utilisation

Report	Analysis method of setting Element and condition	Item	Description
(demand forecast)	System group, host and resource ID specification		of the manage Network pool, and how many resources is used is forecast.
Server pool (demand forecast)	H System group, host and resource ID specification	- Server pool (demand forecast)	ServerView Resource Orchestrator is a percentage utilisation of the manage server pool, and the regression analysis is done from historical earnings, and how many resources is used is forecast.
Address pool (demand forecast)	H System group, host and resource ID specification	- Address pool (demand forecast)	ServerView Resource Orchestrator is a percentage utilisation of the manage address pool, and the regression analysis is done from historical earnings, and how many resources is used is forecast.

4.2.1.4 Increment simulation

4.2.1.4.1 Response simulation

Report	Analysis method of setting Element and condition	Item	Description
Request count (Future prediction)	H For request count (Future prediction) only	- Request count(Future prediction)	Performance information on the Web transaction is forecast and the number of requests in the future is forecast from historical earnings by the regression analysis. Whether how much number of requests in the future increases compared with present can be understood.
Response simulation (Request count)	- For response simulation (Request	- Request Times(Request Increase)	Performance information on OS of the server that composes performance information and the system of the Web transaction can be simulated and the tendency in the response time of a day when the correlation is analyzed from historical earnings, and the number of requests (times the present number of requests how many) increases be simulated. The

Report	Analysis method of setting Element and condition	Item	Description
	count/ Adding servers) only		judgment can be done whether the improvement to be necessary at the response time. It is not possible to use it in a regular report. **Point** The response simulation analyzes the relationship with performance information (OS) on a past number of service requests and each server, simulates the response time, and the accuracy of the simulation improves if the time zone that becomes a noise without the request processing and the direct relationship like the batch processing etc. at nighttime is not included. The accuracy of the simulation can be confirmed by the reliability of "High","Medium"and"Low" displayed after the time of the response of the table. It is shown for "High" to be able to simulate the noise few, and to be able to simulate it by high accuracy. Moreover, it is not possible to simulate when performance information does not exist and the correlation with performance information on number of requests and OS is hardly obtained, and 'N/A' is displayed in the table. Reliability can be improved by lengthening the analysis period by setting the analytical condition, and setting to exclude the time zone that becomes a noise like the batch processing etc. at nighttime from the analysis Element. Please refer to "How to Change the Analysis/Planning Window" for the setting method of the analytical condition.
Response simulation (Adding servers)	- For response simulation (Request count/ Adding servers) only	- Request Times(Adding servers)	Performance information on OS of the server that composes performance information and the system of the Web transaction can be simulated and the tendency in the response time of a day when the correlation is analyzed from historical earnings, and the server is added be simulated. If servers how many are added to which layer of Web/ application/database, the judgment is good whether the response is improved. It is not possible to use it in a regular report. **Point** The accuracy at the simulated response time improves to the response simulation when an enough correlation is obtained because the number of requests and the correlation with performance information on OS are analyzed and simulated.

Report	Analysis method of setting Element and condition	Item	Description
			Strength of the above-mentioned correlation is displayed in the table as reliability by three stageds ("High","Medium" and "Low"). An enough correlation is obtained, and it is shown to be able to simulate the response time comparatively by high accuracy for "High". It is shown that an enough correlation is not obtained, and the accuracy at the response time has decreased for "Medium" and "Low". There is a possibility that processing without the number of requests and the direct relationship like the batch etc. at the performance information necessary for calculation shortage, and nighttime influences as a noise. For this case, the setting of the analytical condition is changed as follows, and there is a possibility that reliability can be improved. - The analysis period is lengthened. - Time zone that the service such as nighttimes and holidays does not operate is set at time outside the service. Please refer to "4.3 How to Operate the Analysis/Planning Window" for the setting method of the analytical condition. **Note** It becomes impossible to analyze when performance information does not exist, and quite a lot of processing without the number of requests and the direct relationship operates, and the correlation with performance information on number of requests and OS is hardly obtained, and 'N/A' is displayed in the value of the table. In this case, it is possible to analyze by changing the setting of the analytical condition as follows and there is a possibility of becoming it. - The analysis period is lengthened. - Time zone that the service such as nighttimes and holidays does not operate is set at time outside the service. Please refer to "4.3 How to Operate the Analysis/Planning Window" for the setting method of the analytical condition.

4.2.1.5 Generic report

4.2.1.5.1 Generic report

Report	Analysis method of setting Element and condition	Item	Description
Future forecast display	H For future forcast display only	-	The value of the specified field is displayed in the regression line graph.

4.2.2 Performance analysis

It explains each category about the report used by the performance analysis.

4.2.2.1 Virtualization software

4.2.2.1.1 VMware

Report	Analysis method of setting Element and condition	Item	Description
VMware (Cluster)	H System group and host specification	- CPU Usage - Memory Usage	The amount of CPU use and the memory utilization of the cluster are displayed. Which cluster uses CPU or the memory from this graph can be understood. **Point** CPU of each cluster and the status of the memory can be understood. Moreover, host's CPU, memory, and disk can be understood by displaying "VMware(Host)".
VMware (Resource pool)	H System group and host specification	- CPU Usage - Memory Usage	The amount of CPU use and the memory utilization of the resource pool are displayed. Which resource pool uses CPU or the memory from this graph can be understood. **Point** CPU at each resource pool and the status of the memory can be understood. Moreover, host's CPU, memory, and disk can be understood by displaying "VMware(Host)". When a virtual resource is insufficient and the resource of physics has become empty, the review of the allocation can be examined by seeing which resource pool whether to use the resource in this report.
VMware (Host)	G	- CPU Usage Rate	The status of physics of CPU, the memory, and the disk is confirmed.

Report	Analysis method of setting Element and condition	Item	Description
	System group specification	- Free Memory Amount - Disk I/O Count	
VMware (Virtual machine)	H System group and host specification	- CPU Usage Rate	CPU usage rates by guest OSs are stacked for display. This graph makes it easy to see which guest is 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 usage by guest OSs 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 OSs 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 see information about the physical CPU, memory, and disk by displaying "VMware (Host)". When virtual resources are running low and physical resources are available, the manager can see which guests are using the resources in this report and reallocate resources if necessary. **Note** The name of the service console and the kernel driver, etc. might be included as a virtual machine name for VMware ESX (ssh connection).	

4.2.2.1.2 Hyper-V

Report	Analysis method of setting Element and condition	Item	Description
Windows server	G System group specification	- CPU Usage Rate - Free Memory - Physical Disk Busy - Disk Usage Rate	Bias of the status of CPU, the disk, and the memory and the peak are understood.

Report	Analysis method of setting Element and condition	Item	Description
HyperV (Host)	G System group specification	- CPU Usage Rate	How much has become empty can be understood. how many CPU of physics used The memory and the disk of physics can be understood by displaying an empty memory capacity and a physical disk busy rate of "Windows server".
HyperV (Virtual machine)	H System group and host specification	- CPU Usage Rate	CPU usage rates by guest OSs are stacked for display. This graph makes it easy to see which guest is 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 usage by guest OSs are stacked for display. This graph makes it easy to see which guest is using the memory.
		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 see information about the physical CPU, memory, and disk by displaying "Windows server". When virtual resources are running low and physical resources are available, the manager can see which guests are using the resources in this report and reallocate resources if necessary.	

4.2.2.1.3 Linux Virtualization function (KVM)

Report	Analysis method of setting Element and condition	Item	Description
UNIX server	G System group specification	- CPU Usage Rate - Free Memory - Physical Disk Busy - Disk Usage Rate	Bias of the status of CPU, the disk, and the memory and the peak of the server registered in the system group are understood.
KVM (Virtual machine)	H System group and host specification	- CPU Usage Rate	CPU usage rates by guest OSs are stacked for display. This graph makes it easy to see which guest is 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%.

Report	Analysis method of setting Element and condition	Item	Description
		- Memory Usage	Memory usage by guest OSs 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 OSs 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 see information about 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 which guests are using the resources in this report and reallocate resources if necessary.	

4.2.2.1.4 Linux Virtualization function (Xen)

Report	Analysis method of setting Element and condition	Item	Description
UNIX server	G System group specification	- CPU Usage Rate - Free Memory - Physical Disk Busy - Disk Usage Rate	Bias of the status of CPU, the disk, and the memory and the peak of the server registered in the system group are understood.
Xen (Virtual machine)	H System group and host specification	- CPU Usage Rate	CPU usage rates by guest OSs are stacked for display. This graph makes it easy to see which guest is 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 usage by guest OSs 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 OSs 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.	

Report	Analysis method of setting Element and condition	Item	Description
		It is also possible to see information about 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 which guests are using the resources in this report and reallocate resources if necessary.	

4.2.2.1.5 Solaris Zone

Report	Analysis method of setting Element and condition	Item	Description
UNIX server	G System group specification	- CPU Usage Rate - Free Memory - Physical Disk Busy - Disk Usage Rate	Bias of the status of CPU, the disk, and the memory and the peak of the server registered in the system group are understood.
Solaris Zone (Virtual machine)	H System group and host specification	- CPU Usage Rate	CPU utilization of the zone piles up and it is displayed. Which zone uses CPU from this graph can be understood.
		- Memory Usage	The memory utilization of the zone piles up and it is displayed. Which zone uses the memory from this graph can be understood.
		Point CPU of each zone and the status of the memory can be understood. Moreover, CPU, the memory, and the disk of Global Zone can be understood by displaying "UNIX server". When the resource of the zone is insufficient, and the resource of physics has become empty, the review of the allocation can be examined by seeing which zone whether to use the resource in this report.	

4.2.2.1.6 Solaris Zone(Solaris 10)

This category is not displayed in default. Please refer to the point of "4.1 Types of Categories" when you display it.

Report	Analysis method of setting Element and condition	Item	Description
Solaris Zone(Solaris 10)	G System group specification	- CPU Usage Rate - Memory Usage	The situation of the resource of Solaris Zone is confirmed about the server registered in the system group. Point CPU utilization becomes the unit of the processor set with 100% when the Solaris zone is in the processor set and it uses it.
Solaris Zone(Solaris 10) CPU	H System group and host specification	- CPU Usage Rate	The tendency to CPU utilization of the Solaris zone and the peak are understood. Point CPU utilization becomes the unit of the processor set with 100% when the Solaris zone is in the processor set and it uses it.
		- CPU Usage Time	The tendency to the Solaris zone at CPU used hours and peaks are understood.
Solaris Zone(Solaris 10) memory	H System group and host specification	- Memory Usage	The tendency to the memory percentage utilisation of the Solaris zone and the peak are understood.
		- Virtual Memory Size	The virtual memory size of Solaris zone tendency and the peak are understood.
		- Real Memory Size	The real memory size of Solaris zone tendency and the peak are understood.
Solaris Zone(Solaris 10) CPU(Contour)	H System group and host specification	- CPU Usage Rate	The tendency and the peak of CPU utilization where the height of CPU utilization is expressed by the contour line can visually be caught. The use of a long series of data of about one month is required. Point CPU utilization becomes the unit of the processor set with 100% when the Solaris zone is in the processor set and it uses it.
Solaris Zone(Solaris 10) memory(Contour)	H System group and host specification	- Memory Usage	The tendency and the peak of the memory percentage utilisation where the height of the memory percentage utilisation is expressed by the contour line can visually be caught. The use of a long series of data of about one month is required.

4.2.2.2 Network

4.2.2.2.1 Systemwalker Centric Manager (Network)

Report	Analysis method of setting Element and condition	Item	Description
Centric Manager traffic	H System group and host specification	- Line utilization rate	Check deviations and peaks in the line utilization rate.
		- Number of octets	Check deviations and peaks in the number of octets.
Centric Manager packet	H System group and host specification	- Number of packets	Check deviations and peaks in the number of packets.
		- 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

Report	Analysis method of setting Element and condition	Item	Description
Network Manager network traffic	H System group, host and resource ID specification	- 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 System group, host and resource ID specification	- 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 System group, host and resource ID specification	- 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 System group, host and resource ID specification	- 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.

Report	Analysis method of setting Element and condition	Item	Description
Network Manager drop packet	H System group, host and resource ID specification	- 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.
Network Manager transfer packet	H System group, host and resource ID specification	- 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 System group, host and resource ID specification	- Input discard packets - Output discard packets	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 System group, host and resource ID specification	- 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 System group, host and resource ID specification	- 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 System group, host and resource ID specification	- RTT - Ping	This item displays 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 in default. Please refer to the point of "4.1 Types of Categories" when you display it.

Report	Analysis method of setting Element and condition	Item	Description
TcpNetwork	H System group, host and resource ID specification	- Number of TCP packets transferred	If application processing performance is poor even though there are no problems with server resources (CPU, memory, disk), network performance may be causing a bottleneck.
		- Size of TCP packets transferred	Take measures with reference to the graph.

Report	Analysis method of setting Element and condition	Item	Description
		- Resend rate, duplicated reception rate, packet loss rate	Take measures with reference to the graph.
		- Network problem situation	Take measures with reference to the graph.

4.2.2.3 Storage

4.2.2.3.1 ETERNUS SF Storage Cruiser(SAN Storage)

Report	Analysis method of setting Element and condition	Item	Description
Storage CM CPU usage rate	H System group, host and resource ID specification	- CM CPU Usage Rate	Check deviations 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 System group, host and resource ID specification	- CM(ROE) CPU Usage Rate	Check deviations and peaks in the CM(Controller Module) CPU usage rate. There is a possibility that a large amount of accesses to the encryption volume and the accesses to RAID6 are generated when the ROE Usage Rate is high. There is a possibility that a large amount of accesses to the volume not encrypted and the accesses of the RAID Level to RAIDGroup except RAID6 are generated when the ROE Usage Rate is low, and CM CPU Usage Rate is high.
Storage disk busy	H System group, host and resource ID specification	- Disk Busy	Check deviations and peaks in the disk usage rate. When the disk usage rate is 80% or greater, highload 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 System group, host and resource	- Throughput	Check deviations and peaks in the throughput.

Report	Analysis method of setting Element and condition	Item	Description
	ID specification		
Storage IOPS	H System group, host and resource ID specification	- IOPS	Check deviations and peaks in the IOPS.
Storage response time	H System group, host and resource ID specification	- Response time	Check deviations and peaks in the response time.
Storage cache hit rate	H System group, host and resource ID specification	- Cache Hits	Check deviations and peaks in the cache hit rate.

4.2.2.3.2 ETERNUS SF Storage Cruiser(NAS)

Report	Analysis method of setting Element and condition	Item	Description
NAS CPU usage rate	H System group, host and resource ID specification	- NAS CPU usage rate	Used to grasp CPU usage rate bias and peaks.
NAS NFS OPS	H System group, host	- NAS NFS OPS	Used to grasp NFS handling performance bias and peaks.

Report	Analysis method of setting Element and condition	Item	Description
	and resource ID specification		
NAS CIFS OPS	H System group, host and resource ID specification	- NAS CIFS OPS	Used to grasp CIFS handling performance bias and peaks.
NAS HTTP OPS	H System group, host and resource ID specification	- NAS HTTP OPS	Used to grasp HTTP handling performance bias and peaks.
NAS network traffic	H System group, host and resource ID specification	- Amount of network input data - Amount of network output data	Used to grasp network traffic bias and peaks.
NAS Amount of DISK R/W data	H System group, host and resource ID specification	- Amount of reading data from disk - Amount of writing data to disk	Used to grasp disk read and write data amount bias and peaks.
NAS Amount of tape R/W data	H System group, host and resource ID specification	- Amount of reading data from tape - Amount of writing data to tape	Used to grasp tape read and write data amount bias and peaks.

4.2.2.4 OS

4.2.2.4.1 Windows

Report	Analysis method of setting Element and condition	Item	Description
Windows server	G System group specification	- CPU Usage Rate - Free Memory - Physical Disk Busy - Disk Usage Rate	The status of the resource of the server registered in the system group is confirmed.
Windows CPU	H System group and host specification	- CPU Usage Rate(User, System)	Check deviations 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. It is necessary to consider taking measures such as increasing or upgrading the CPUs, adjusting the application execution schedule, or relocating some applications to a different server. **[Attention Level]** CPU usage rate > 80 %
		- CPU Queue Length	If the number of CPU queue requests is consistently high, increasing the number of CPUs may be more effective than upgrading the CPU. 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. **[Attention Level]** CPU queue length > 2
Windows physical disk	H System group and host specification	- Disk Busy	It can be used to ascertain the load deviation and load peaks of each disk. If the physical disk busy rate exceeds 60 % intermittently, the disk load is causing a bottleneck and performance problems are either occurring now or may occur in the future. **[Attention Level]** Physical disk busy >= 60 %
		- Disk Queues	It can be used to ascertain the deviation and peaks of I/O requests for each disk. 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 measures such as distributing the disk load or adding disks. **[Attention Level]** Number of physical disk queue requests >= 2

Report	Analysis method of setting Element and condition	Item	Description
Windows disk space	H System group and host specification	- Disk Usage Rate	It can be used to ascertain the usage deviation and load peaks of each disk.
Windows memory	H System group and host specification	- Free Memory	It can be used to ascertain the deviation and peaks of available memory capacity. 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. **[Attention Level]** Available memory capacity < 4 MB
		- Page ins/ Page outs	Take measures with reference to the graph.
Windows process	H System group and host specification	- CPU Time	This graph makes it possible to identify processes that consume much CPU time.
		- Working set Size	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	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 System group and host specification	- CPU Usage Rate	The rise and fall of the CPU usage rate is represented by contour lines. These enable the user to visually grasp peaks and deviations in the usage rate. This analysis is premised on long-term data usage of approximately one month.
Windows physical disk(Countour)	H System group and host specification	- Physical Disk Busy	The rise and fall of the physical disk busy rate is represented by contour lines. These enable the user to visually grasp peaks and deviations in the physical disk busy rate. This analysis is premised on long-term data usage of approximately one month.
Windows memory(Contour)	H System group and host specification	- Free Memory	The rise and fall of available memory capacity is represented by contour lines. These enable the user to visually grasp peaks and deviations in memory usage. This analysis is premised on long-term data usage of approximately one month.

4.2.2.4.2 UNIX

Report	Analysis method of setting Element and condition	Item	Description
UNIX server	G System group specification	- CPU Usage Rate - Free Memory - Physical Disk Busy - Disk Usage Rate	The status of the resource of the server registered in the system group is confirmed.
UNIX CPU	H System group and host specification	- CPU Usage Rate(User, System)	Check deviations 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. It is necessary to consider taking measures such as increasing or upgrading the CPUs, adjusting the application execution schedule, or relocating some applications to a different server. **[Attention Level]** CPU usage rate > 80 %
		- CPU Queue Length	If CPU queue length > 10 or if CPU execution wait time rate > 90% and (the number of queue requests) / (the number of processors) > 2, response may be being degraded because multiple processes are waiting for CPU allocation. 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. If CPU execution wait time rate > 90% and the number of queue requests < 1, a single program may be monopolizing the CPU. 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. **[Attention Level]** CPU execution wait time rate > 90% and the number of queue requests < 1 Note This information is displayed when a Solaris server is analysis and reported.

Report	Analysis method of setting Element and condition	Item	Description
UNIX physical disk	H System group and host specification	- Average Disk Busy	Check deviations and peaks in workload per disk. If the average disk busy exceeds 60%, the access waiting time will be easy to notice, and it is said that the average access time including waiting time be doubled or tripled if the average disk busy exceeds 80%. If the average disk busy consistently exceeds 80%, a bottleneck may be degrading performance, or such a problem may be about to occur. The bottleneck by disk busy is determined by the following items. It is necessary to consider taking measures such as increasing disks or moving files to disks of which the workload is low (review the data layout). Physical disk busy Service time in disk access Number of disk waiting request **[Attention Level]** Physical disk busy >= 60% and Service time >= 30(ms) and Number of disk waiting request >= 2
		- Service Times	Service time refers to the average time that is required to process a single I/O request completely. It includes the time to wait for the completion of processing for existing requests in an I/O queue. **[Attention Level]** Service time >= 30(ms)
		- Physical Disk Waiting Request Number	Check deviations and peaks in I/O request per disk. If the service time of disk access >= 30(ms) and the number of waiting request is a lot, access requests to the disk may concentrate. It is necessary to review the data layout. If the service time of disk access >= 30(ms) and the number of waiting request is not a lot, a disk device which is workload is high may be connected to the same controller. **[Attention Level]** Service time >= 30(ms) and Disk waiting request number < 2
UNIX disk space	H System group and host	- Disk Usage Rate	It can be used to ascertain the usage deviation and load peaks of each disk.

Report	Analysis method of setting Element and condition	Item	Description
	specification		
UNIX memory	H System group and host specification	- Free Memory	It can be used to ascertain the deviation and peaks of available memory capacity. If the amount of available memory intermittently approaches the value of the kernel parameter "lotsfree" (unit: KB), insufficient memory may be causing a bottleneck and performance problems are either occurring now or they may occur in the future. **[Attention Level]** Available memory capacity < lotsfree
		- Swap ins/ Swap outs	When only swap-in operations are occurring A temporary shortage of memory has caused swapped-out processes to be swapped in. This does not indicate a problem. When only swap-out operations are occurring A temporary shortage of memory has caused an unnecessary process to be swapped out. This does not indicate a problem. This kind of problem occurs when a large number of processes are created temporarily. When both swap-in and swap-out operations occur In current versions of UNIX, it is normal for no swapping to occur. If both swap-in and swap-out operations occur, it is likely that the system is suffering from a serious memory shortage and it will be necessary to install more memory. Note This information is displayed when a Solaris server is analyzed and reported.
UNIX process	H System group and host specification	- CPU Time	This graph makes it possible to identify processes that consume a large amount of CPU time.
		- Memory Usage	In computers that are suffering from insufficient memory, this graph can be used to identify which processes are causing the problem. Note The graph of a memory use rate according to the process top 10 is not displayed in Linux.
UNIX CPU(Contour)	H System group and host specification	- CPU Usage Rate	The rise and fall of the CPU usage rate is represented by contour lines. These enable the user to visually grasp peaks and deviations in the usage rate. This analysis is premised on long-term data usage of approximately one month.

Report	Analysis method of setting Element and condition	Item	Description
UNIX physical disk(Contour)	H System group and host specification	- Physical Disk Busy	The rise and fall of the physical disk busy rate is represented by contour lines. These enable the user to visually grasp peaks and deviations in the physical disk busy rate. This analysis is premised on long-term data usage of approximately one month.
UNIX memory(Contour)	H System group and host specification	- Free Memory	The rise and fall of available memory capacity is represented by contour lines. These enable the user to visually grasp peaks and deviations in memory usage. This analysis is premised on long-term data usage of approximately one month.

4.2.2.4.3 OS common

Report	Analysis method of setting Element and condition	Item	Description
Disk space	G System group specification	- Disk Usage Rate - Disk Availability	The status of the disk of the server registered in the system group is confirmed.

4.2.2.5 Web

4.2.2.5.1 Web transaction

Report	Analysis method of setting Element and condition	Item	Description
Web transaction	G System group specification	- Request count - Traffic - Error count	Check deviations and peaks in the number of requests in each service and the time required by requests. If the number of requests in each service or the time required by requests exceeds the expected value, the user can consider measures such as adding another Web server.
Web transaction request	H System group, host	- Web transaction	Check deviations and peaks in the volume of traffic in each service. If the volume of traffic exceeds the expected value, the user can consider measures such as adding another Web server.

Report	Analysis method of setting Element and condition	Item	Description
	and resource ID specification	request(Request Count,Time Taken)	
Web transaction hitserver	H System group, host and resource ID specification	- Hit Server Count	Check how often server hits are occurring in each service.
Web transaction hitclient	H System group, host and resource ID specification	- Hit Client Count	Check how often client hits are occurring in each service.
Web transaction hitremote	H System group, host and resource ID specification	- Hit Remote Count	Check how often remote hits are occurring in each service.
Web transaction traffic	H System group, host and resource ID specification	- Traffic	Check deviations and peaks in the volume of traffic in each service. If the volume of traffic exceeds the expected value, the user can consider measures such as adding another Web server.
Web transaction error	H System group, host and resource ID specification	- Error count	Check how often errors are occurring in each service.

4.2.2.6 Application

4.2.2.6.1 Interstage Application Server(IJServer Cluster)

Report	Analysis method of setting Element and condition	Item	Description
Interstage IJServer Cluster	G System group specification	- Current Heap Size - Current Perm - Garbage Collection	The heap of Java VM of the server registered in the system group, the quantity consumed in the Perm area, and the generation frequency of the garbage collection are confirmed.
Interstage IJServer Cluster JVM	H System group, host and resource ID specification	- Heap Size(avg/max/min)	Check deviations and peaks in the heap information.
		- Perm Size(avg/max/min)	Check deviations and peaks in the Perm area information.
		- Garbage collections	Check deviations and peaks in the frequency of garbage collection.
Interstage IJServer Cluster JTA	H System group, host and resource ID specification	- Transaction(avg/max/min)	Check deviations and peaks in transaction counts.
Interstage IJServer Cluster JDBC	H System group, host and resource ID specification	- Connection Pool(avg/max/min)	Information about JDBC connections that are pooled by Interstage. Check deviations and peaks in connection counts.
		- 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 period until a connection is returned. This information relates to waiting for the connection to be returned. Check deviations and peaks in the frequency of connection waiting and the number of threads that are waiting for a connection.
Interstage IJServer Cluster THREADPOOL	H System group, host and resource ID specification	- Work items in queue	Information about the number of work items in the queue. Check the number of work items in the queue.
		- Total busy threads	Information about the total number of busy threads in the thread pool. Check the number of busy threads in the thread pool.
		- Average completio	Statistical information about the average completion time of work items.

Report	Analysis method of setting Element and condition	Item	Description
		n time of work items	Check the average completion time of work items.
		- Total usable threads	Information about the total number of usable threads in the thread pool. Check the number of usable threads in the thread pool.

4.2.2.6.2 Interstage Application Server(Work Unit)

Report	Analysis method of setting Element and condition	Item	Description
Interstage(EJB)	G System group specification	- EJB Application Processing Time	The processing time of the EJB application of the server registered in the system group is confirmed.
Interstage(TD)	G System group specification	- Object Processing Time	The processing time of the transaction application of the server registered in the system group is confirmed.
Interstage(CORBA)	G System group specification	- Implementation Repository ID Processing Time	The processing time of the CORBA application of the server registered in the system group is confirmed.
Interstage(IJServer)	G System group specification	- Current Heap Size - Current Perm	The heap of JavaVM of the server registered in the system group and the quantity consumed in the Perm area are confirmed.
Interstage EJB application	H System group, host and resource ID specification	- EJB Application Processing Time(avg/max/min)	The maximum, minimum and mean processing times for EJB applications. - When the maximum processing time for an entire period (one day) is long and the mean processing time is close to the maximum processing time The following causes are possible: - There is a performance-related problem with the server application. - The load on the system is high.

Report	Analysis method of setting Element and condition	Item	Description
			Review the server applications and the system, giving particular attention to the above factors. - When the maximum, minimum and mean processing times within a specific period are long The load on the system may be high during a specific time period. Measure the performance information of other server applications as well to confirm the load status. - When the maximum processing time is long but the mean processing time is short and close to the minimum processing time The following causes are possible: - 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)	The maximum, minimum and mean times from when a client receives a request until a method commences processing. - When the maximum, minimum and mean wait times during a specific period are long The load on the system may be high during a specific time period. Measure the performance information of other server applications as well to confirm the load status. - When the maximum wait time is long but the mean wait time is short and close to the minimum wait time The following causes are possible: - 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 mean 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 measures to raise the performance of server applications, such as increasing the number of concurrent processes in the Work Unit definition.
		- Requests / Wait Queues	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. - When there are many processes and process wait requests within a specific period

Report	Analysis method of setting Element and condition	Item	Description
			The number of requests to a server application within a specific period has increased. If the performance of a server application is not sufficient to handle the number of requests from a client, take measures to raise the performance of server applications, such as increasing the number of concurrent processes in the Work Unit definition. Measure the performance information of other server applications as well to confirm the load status. - When the number of process wait requests is large but the mean wait time is short Use the isinfobj command to regularly check the queue status, and also check the load status during the collection interval.
		- VM memory used	Maximum and mean values of the amount of VM memory used. 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.
		- Sessions	The number of current EJB objects. If the number of EJB objects becomes larger than the number of connected clients, the "remove" method may not have been issued to the "create" method. Review the client applications.
Interstage CORBA application	H System group, host and resource ID specification	- Processing Time(avg/max/min)	The maximum, minimum and mean processing times for CORBA applications. - When the maximum processing time for an entire period (one day) is long and the mean processing time is close to the maximum processing time The following causes are possible: - There is a performance-related problem with theserver application. - The load on the system is high. - When the maximum, minimum and mean processing times within a specific period are long The load on the system may be high during a specific time period. Measure the performance information of other server applications as well to confirm the load status. - When the maximum processing time is long but the mean processing time is short and close to the minimum processing time The following causes are possible: - 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.

Report	Analysis method of setting Element and condition	Item	Description
		- Wait Time(avg/ max/min)	The maximum, minimum and mean times from when a client receives a request until an operation commences processing. - When the maximum, minimum and mean wait times during a specific period are long The load on the system may be high during a specific time period. Measure the performance information of other server applications as well to confirm the load status. - When the maximum wait time is long but the mean wait time is short and close to the minimum wait time The following causes are possible: - 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 mean 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 measures to raise the performance of server applications, such as increasing the number of concurrent processes in the Work Unit definition.
		- Requests / Wait Queues	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. - When there are many processes and process wait requests within a specific period 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 measures to raise the performance of server applications, such as increasing the number of concurrent processes in the Work Unit definition. Measure the performance information of other server applications as well to confirm the load status. - When the number of process wait requests is large but the mean wait time is short Use the isinfobj command to regularly check the queue status, and also check the load status during the collection interval.
Interstage transaction application	H System group, host and resource	- Object Processing Time(avg/ max/min)	The maximum, minimum and mean processing times for transaction applications. - When the maximum processing time for an entire period (one day) is long and the mean processing time is close to the maximum processing time

Report	Analysis method of setting Element and condition	Item	Description
	ID specification		The following causes are possible: - There is a performance-related problem with the server application. - The load on the system is high. - When the maximum, minimum and mean processing times within a specific period are long The load on the system may be high during a specific time period. Measure the performance information of other server applications as well to confirm the load status. - When the maximum processing time is long but the mean processing time is short and close to the minimum processing time The following causes are possible: - 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)	The maximum, minimum and mean times from when a client receives a request until an object commences processing. - When the maximum, minimum and mean wait times during a specific period are long The load on the system may be high during a specific time period. Measure the performance information of other server applications as well to confirm the load status. - When the maximum wait time is long but the mean wait time is short and close to the minimum wait time The following causes are possible: - 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 mean 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 measures to raise the performance of server applications, such as increasing the number of concurrent processes in the Work Unit definition.

Report	Analysis method of setting Element and condition	Item	Description
		- Requests/ Wait queues	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. - When there are many processes and process wait requests within a specific period 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 measures to raise the performance of server applications, such as increasing the number of concurrent processes in the Work Unit definition. Measure the performance information of other server applications as well to confirm the load status.
Interstage IJServer JVM	H System group, host and resource ID specification	- Heap Size(avg/ max/min)	Check deviations and peaks in the heap information.
		- Perm Size(avg/ max/min)	Check deviations and peaks in the Perm area information.
		- Garbage collections(avg/max /min)	Check deviations and peaks in the frequency of garbage collection.
Interstage IJServer JTA	H System group, host and resource ID specification	- Transaction(avg/max /min)	Displays information about transactions used by applications. Check deviations and peaks in transaction counts.
Interstage IJServer JDBC	H System group, host and resource ID specification	- Connection Pool(avg/ max/min)	Information about JDBC connections that are pooled by Interstage. Check deviations and peaks in connection counts.
		- 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 period until a connection is returned. This information relates to waiting for the connection to be returned. Check deviations and peaks in the frequency of connection waiting and the number of threads that are waiting for a connection.
		- Establishment of Physical Connectio	Information about established connections and discarded connections. Check deviations and peaks in the number of established connections.

Report	Analysis method of setting Element and condition	Item	Description
		n(avg/max/min)	
		- Acquisition of Connection from Application(avg/max/min)	Information about connections used by applications. Check deviations and peaks in the number of allocated connections, etc.
Interstate IJSserver SERVLET CONTAINER	H System group, host and resource ID specification	- Number sum total of Threads(avg/max/min)	Information about the total number of threads. Check deviations and peaks in thread counts.
		- Number of Threads currently in progress(avg/max/min)	Information about the number of threads currently being processed. Check the number of threads currently being processed.
Interstate IJSserver SERVLET WEBMODULE	H System group, host and resource ID specification	- Session(avg/max/min)	Check the number of valid sessions.
Interstate IJSserver EVENT SERVICE	H System group, host and resource ID specification	- 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

Report	Analysis method of setting Element and condition	Item	Description
WebLogic Server	G System group specification	- Current heap size - Garbage collection	The generation frequency of JavaVM heap information and the garbage collection of the server registered in the system group is confirmed.

4.2.2.6.4 Microsoft .NET

Report	Analysis method of setting Element and condition	Item	Description
MS-.NET	G System group specification	- Requests Count - Wait Queues	Requests Count and Wait Queues of the server registered in the system group are confirmed.
MS-.NET ASP.NET	H System group, host and resource ID specification	- Waiting Demands for Processing Count	Allows the number of requests waiting to be processed for MS-SQL to be ascertained. - When the maximum processing time for an entire period (one day) is long and the mean processing time is close to the maximum processing time The following causes are possible: - 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 mean processing times within a specific period are long The load on the system may be high during a specific time period. Measure the performance information of other server applications as well to confirm the load status. - When the maximum processing time is long but the mean processing time is short and close to the minimum processing time The following causes are possible: - The system load became high temporarily. - There is a performance-related problem with a server application under specific conditions.

Report	Analysis method of setting Element and condition	Item	Description
			Review the system and server applications, giving particular attention to the above factors.
		- Application Reboot Count	Allows Application Reboot Count to be ascertained. Take measures with reference to the graph.
		- Worker Process Reboot Count	Allows Worker Process Reboot Count to be ascertained. Take measures with reference to the graph.
MS-.NET Applications	H System group, host and resource ID specification	- Transaction Count	The number of MS-.NET transactions can be checked. Take measures with reference to the graph.
		- Number of Execution Requests	The number of MS-.NET execution requests can be checked. Take measures with reference to the graph.
		- Sessions Count	The number of active MS-.NET sessions can be checked. Take measures with reference to the graph.
		- Error Count	The total number of MS-.NET errors can be checked. Take measures with reference to the graph.
MS-.NET Remote procedure	H System group, host and resource ID specification	- Total Number of Remote Procedure Calls	Allows the total number of remote procedure calls for MS-SQL to be ascertained. Take measures with reference to the graph.

4.2.2.6.5 SAP NetWeaver

Report	Analysis method of setting Element and condition	Item	Description
SAP	G System group specification	- Dialog Response Time - Enqueue Enqueue Requests/ Queue Length	Dialog Response Time of SAP of the server registered in the system group, Enqueue Enqueue Requests/Queue Length, Background Utilization, and Execution Waiting RFC Total Calls are confirmed.

Report	Analysis method of setting Element and condition	Item	Description
		- Background Utilization - Execution Waiting RFC Total Calls	
SAP Enqueue(Request)	H System group, host and resource ID specification	- 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 the time that parallel processes spend waiting to access lock table.
		- Server time	Track and compare trends and peaks in the time spent in the enqueue server.
		- 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 System group, host and resource ID specification	- Queue Length	Track and compare trends and peaks in the queue length for enqueue server monitoring objects.
		- 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 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 frontend standby times.

Report	Analysis method of setting Element and condition	Item	Description
	specification	- 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.
		- Dialog steps	Track and compare trends and peaks in the number of Dialog steps.
SAP Spool	H System group, host and resource ID specification	- Load Factor	Track and compare trends and peaks in the load 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 System group, host and resource ID specification	- 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 System group, host and resource ID specification	- Response Time	Track and compare trends and peaks in the response times for each Dialog step for SAP Update Tasks (V1).
		- Dispatcher wait time	Track and compare trends and peaks in the dispatcher standby times in dispatcher queues for SAP Update Tasks (V1).
		- Load factor(V1)	Track and compare trends and peaks in the load rate for update task work processes for SAP Update Tasks (V1).
		- Errors(V1)	Track and compare trends and peaks in the number of errors that have occurred for Update 1 work process.
		- Load factor(V2)	Track and compare trends and peaks in the load rate for Update 2 task work processes for SAP Update Tasks (V2).
		- Errors(V2)	Track and compare trends and peaks in the number of errors that have occurred for Update 2 work process.

Report	Analysis method of setting Element and condition	Item	Description
SAP Roll Paging	H System group, host and resource ID specification	- 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 System group, host and resource ID specification	- Extended Memory Utilization	Track and compare trends and peaks in the usage rate for extended memory.
		- Heap Memory Utilization	Track and compare trends and peaks in the usage rate for heap memory.
		- 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 System group, host and resource ID specification	- Buffer Utilization	Track and compare trends and peaks in the buffer usage rate.

4.2.2.6.6 Workload

This category is not displayed in default. Please refer to the point of "4.1 Types of Categories" when you display it.

Report	Analysis method of setting Element and condition	Item	Description
Workload	H System group, host and resource ID specification	- Allocated CPU - Used CPU	Allows the amount of allocated CPU resources and the amount of used CPU resources for a single resource module to be ascertained and compared. Take measures with reference to the graph.

4.2.2.7 Database

4.2.2.7.1 Symfoware Server

Report	Analysis method of setting Element and condition	Item	Description
Symfoware	G System group specification	- Buffer hit ratio - Buffer Dry up - SQL executions - Deadlocks	Buffer cache hit ratio, Deadlocks Count, and SQL executions etc. of Symfoware of the server registered in the system group are confirmed.
Symfoware shared buffer	H System group, host and resource ID specification	- Buffer Hit Ratio	The rate at which the shared buffer was hit (%). Fine-tune the shared buffer. 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.
		- Buffer Dry Up	The number of times that no unused buffers were available. Fine-tune the shared buffer.
Symfoware log area	H System group, host and resource ID specification	- Recovery Log Over Count	The number of times that the recovery log overflowed and a checkpoint occurred. Check the size of the recovery log, and increase it as necessary.
		- Transaction Entry Dry Up Count	Indicates if the transaction entries have been used up. Increase the number of transaction entries.
		- BI Log Dry Up Count	Indicates if the BI log area has been used up. Increase the size of the BI log area.
Symfoware disk I/O	H System group, host and resource ID specification	- DB Space I/O	The number of I/O operations for each database space during a specified period of time. Take measures with reference to the graph.
Symfoware database space usage rate	H System group, host and resource ID	- Database Space Usage Rate	It can be used to ascertain the usage deviation and load peaks of each database space.

Report	Analysis method of setting Element and condition	Item	Description
	specification		

4.2.2.7.2 Oracle Database

Report	Analysis method of setting Element and condition	Item	Description
Oracle	G System group specification	- Buffer cache hit ratio - Deadlocks	Buffer cache hit ratio and Deadlocks Count etc. of Oracle of the server registered in the system group are confirmed.
Oracle SGA	H System group, host and resource ID specification	- 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. Note: - "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. If Oracle8 or earlier is being used and latch waiting occurs to the REDO log buffer cache, decrease the value of the initialization parameter "LOG_SMALL_ENTRY_MAX_SIZE". If the above tuning is not effective, increase the value of the initialization parameter "LOG_SIMULTANEOUS_COPIES".
		- Library Cache Hit Ratio	The library cache stores the SQL statements that have been analyzed and can be executed. Increase the value of the initialization parameter "SHARED_POOL_SIZE". Pay attention to the remaining physical memory capacity.

Report	Analysis method of setting Element and condition	Item	Description
		- 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 System group, host and resource ID specification	- 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". Note: - "PGA_AGGREGATE_TARGET" is a new initialization parameter that was added in Oracle9i. - Pay attention to the remaining memory capacity. - 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.
Oracle disk I/O	H System group, host and resource ID specification	- Amount of free table space area	Displays the minimum value for the available table space capacity. Expand or add data files.
		- Volume of database I/O	Displays the volume of database I/O. Take measures with reference to the graph.
Oracle resource conflict	H System group, host and resource ID specification	- Ratio of zero rollback segment wait time	Ideally, rollback segment header waiting should be kept to zero or a very small amount. If rollback segments are being used, more should be added as the number is insufficient. Note: If the UNDO table space is being used in Oracle9i or later, tuning will take place automatically.
Oracle table space usage rate	H System group, host and resource ID specification	- Oracle tablespace	It can be used to ascertain the usage deviation and load peaks of each tablespace.

4.2.2.7.3 Microsoft SQL Server

Report	Analysis method of setting Element and condition	Item	Description
MS-SQL	G System group specification	- Buffer cache hit ratio - Deadlocks Count - Transaction Count	Buffer cache hit ratio and Deadlocks Count etc. of SQL Server of the server registered in the system group are confirmed.
MS-SQL ACCESS METHOD	H System group, host and resource ID specification	- Full Scan Count - Index Count	Allows the access method for MS-SQL to be ascertained and compared. Take measures with reference to the graph.
MS-SQL Server BUFFER	H System group, host and resource ID specification	- Buffer Cache Hit Count	Enables the number of MS-SQL buffer cache hits to be determined. Take measures with reference to the graph.
		- Access Count	Enables the number of MS-SQL accesses to be determined. Take measures with reference to the graph.
MS-SQL Server CMGR	H System group, host and resource ID specification	- Cache hit rate	Enables the MS-SQL cache hit rate to be determined. Take measures with reference to the graph.
		- Hits Count	Enables the number of MS-SQL hits to be determined. Take measures with reference to the graph.
MS-SQL Server DATABASES	H System group, host and resource ID specification	- Transaction Count	Enables the number of MSSQL transactions to be determined. Take measures with reference to the graph.
		- Active Transaction Count	Enables the number of MSSQL active transactions to be determined. Take measures with reference to the graph.
		- Log Area Ratio	Enables the MS-SQL log area ratio to be determined. Take measures with reference to the graph.
MS-SQL Server GENERAL STATISTICS	H System group, host and resource ID	- Number of Connected Users	Allows the number of connected users for MS-SQL to be ascertained. Take measures with reference to the graph.

Report	Analysis method of setting Element and condition	Item	Description
	specification		
MS-SQL Server LOCKS	H System group, host and resource ID specification	- Deadlocks Count	Allows the number of deadlocks for MS-SQL to be ascertained. Take measures with reference to the graph.
		- Number of standby waiting lock requests	The number of MS-SQL standby waiting lock requests can be understood. Take measures with reference to the graph.
MS-SQL Server MEMORY	H System group, host and resource ID specification	- Total Amount of Memory	Allows the memory capacity for MS-SQL to be ascertained. Take measures with reference to the graph.
MS-SQL Server STATISTICS	H System group, host and resource ID specification	- Number of SQLS Batch Requests	Allows the number of requests for MS-SQL to be ascertained. Take measures with reference to the graph.

4.2.2.8 Job

4.2.2.8.1 Systemwalker Operation Manager

Report	Analysis method of setting Element and condition	Item	Description
Operation Manager	G System group specification	- Job multiplicity - Number of execution waiting jobs - Number of jobs that have	The job multiplicity and the number etc. of Executing waiting jobs of Systemwalker Operation Manager of the server registered in the system group are confirmed.

Report	Analysis method of setting Element and condition	Item	Description
		exceeded the predicted time - Number of jobs that end - Number of Error Jobs	
Operation Manager subsystem	H System group, host and resource ID specification	- Job multiplicity of each Subsystem(Job multiplicity,Network / Distributed execution job multiplicity)	Check deviations and peaks in the job concurrency of different subsystems. 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	Check deviations 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	Check deviations 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 measures to reduce the level of job concurrency.
		- Number of jobs that have exceeded the predicted time of	Check deviations 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 measures to reduce the level of job concurrency.

Report	Analysis method of setting Element and condition	Item	Description
		each Subsystem	
		- Number of completed jobs by subsystem	Check deviations 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.
		- Number of error jobs by subsystem	Check the number of error jobs in different subsystems.
Operation Manager queue	H System group, host and resource ID specification	- Job multiplicity of each Queue (Job multiplicity,Network / Distributed execution job multiplicity)	Check deviations and peaks in the job concurrency of different queues. 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	Check deviations and peaks in the job net concurrency of different queues.
		- Number of execution waiting jobs of each Queue	Check deviations 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	Check deviations 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 measures to reduce the level of job concurrency.
		- Number of jobs that have exceeded the predicted time of	Check deviations 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 measures to reduce the level of job concurrency.

Report	Analysis method of setting Element and condition	Item	Description
		each Queue	
Operation Manager project	H System group, host and resource ID specification	- Job multiplicity of each Project	Check deviations and peaks in the job concurrency 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	Check deviations and peaks in the job net concurrency of different projects.
		- Number of execution waiting jobs of each Project	Check deviations 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	Check deviations 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 measures to reduce the level of job concurrency.
		- Number of jobs that have exceeded the predicted time of each Project	Check deviations 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 measures to reduce the level of job concurrency.
		- Number of completed jobs by project	Check deviations and peaks in the number of completed jobs in different projects. The number of completed jobs by project also includes the following number of error jobs by project.
		- Number of error jobs by project	Check the number of error jobs in different projects.

4.2.2.9 Service bus

4.2.2.9.1 Interstage Service Integrator

Report	Analysis method of setting Element and condition	Item	Description
ISI Sequence	G System group specification	- Number of transactions	Sequence information on ISI of the server registered in the system group is confirmed.
ISI Queue	G System group specification	- Number of retention	Queue information on ISI of the server registered in the system group is confirmed.
ISI Sequence	H System group, host and resource ID specification	- Number of transactions	Bias of the processing number of each sequences and the peak are understood.
ISI Queue	H System group, host and resource ID specification	- Number of retention	Bias of the number of stays and the peak of each queue are understood.

4.2.2.10 Service

4.2.2.10.1 Service operational information

Report	Analysis method of setting Element and condition	Item	Description
HTTP service	G For service operational information only	- HTTP Operating rate	The situation of the HTTP service of the watch Element registered in the system group is confirmed.
SMTP service	G For service operational	- SMTP Operating rate	The situation of the SMTP service of the watch Element registered in the system group is confirmed.

Report	Analysis method of setting Element and condition	Item	Description
	information only		
DNS service	G For service operational information only	- DNS Operating rate	The situation of the DNS service of the watch Element registered in the system group is confirmed.
PORT service	G For service operational information only	- PORT Operating rate	The situation of PORT of the watch Element registered in the system group is confirmed.

4.2.2.10.2 End user response

Report	Analysis method of setting Element and condition	Item	Description
End user response	G System group specification	- End user response	The situation of the response of URL registered in the system group is confirmed.

4.2.2.11 Generic report

4.2.2.11.1 Generic report

Report	Analysis method of setting Element and condition	Item	Description
Time-series	H Detailed specification	-	The following are included in **Performance analysis** subordinate's category. Displays specified field values as chronological graphs and tables.
Summary data time series display	H	-	Display the summary data as a time-series graph or table.

Report	Analysis method of setting Element and condition	Item	Description
	Detailed specification		
Correlation display	H For correlation / composition only	-	Displays two specified field values as correlation graphs and regression line graphs.
Contour display	H For contour display only	-	Displays specified field values as contour graphs. This assumes that data will be used over a long period of time(about one month)
Comparison display of the past	H For comparison display of the past only	-	Displays a graph that allows hourly data from the past month and the past week to be compared side-by-side with the data for the base day.
Transition comparison display according to day	H For transition comparison display according to day display only	-	Displays a graph that compares data trends for the specified date and time period.
Composite display	H For correlation / composition only	-	Displays a graph that allows two different items (such as response times and CPU usage) to be compared side-by-side.

4.2.3 History

The History is explained.

4.2.3.1 History

4.2.3.1.1 History

Report	Analysis method of setting Element and condition	Item	Description
-	-	-	The analysis window history can store up to 50 reports. If this number is exceeded, reports will be automatically deleted in chronological order. **Point** If there are report that are not to be deleted, click the Display button to open the display window, then use the File menu of the browser to save the analysis windows to any folder. **Note** As for the report made before V13.5, **Registered Name** is displayed in the column of **Report Name**.

4.3 How to Operate the Analysis/Planning Window

It explains the operating instruction of **Analysis/Plannning** Window.

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"

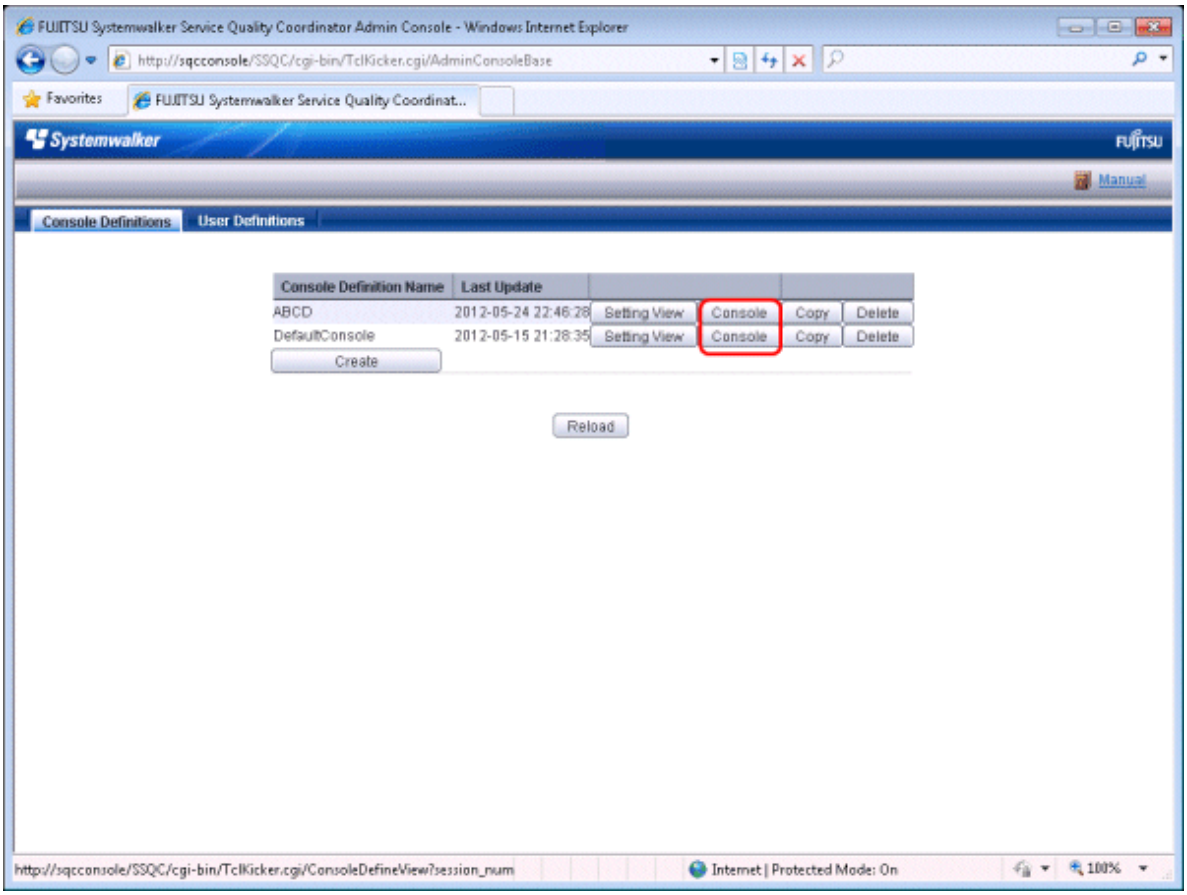
"ohd_update error."

"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".

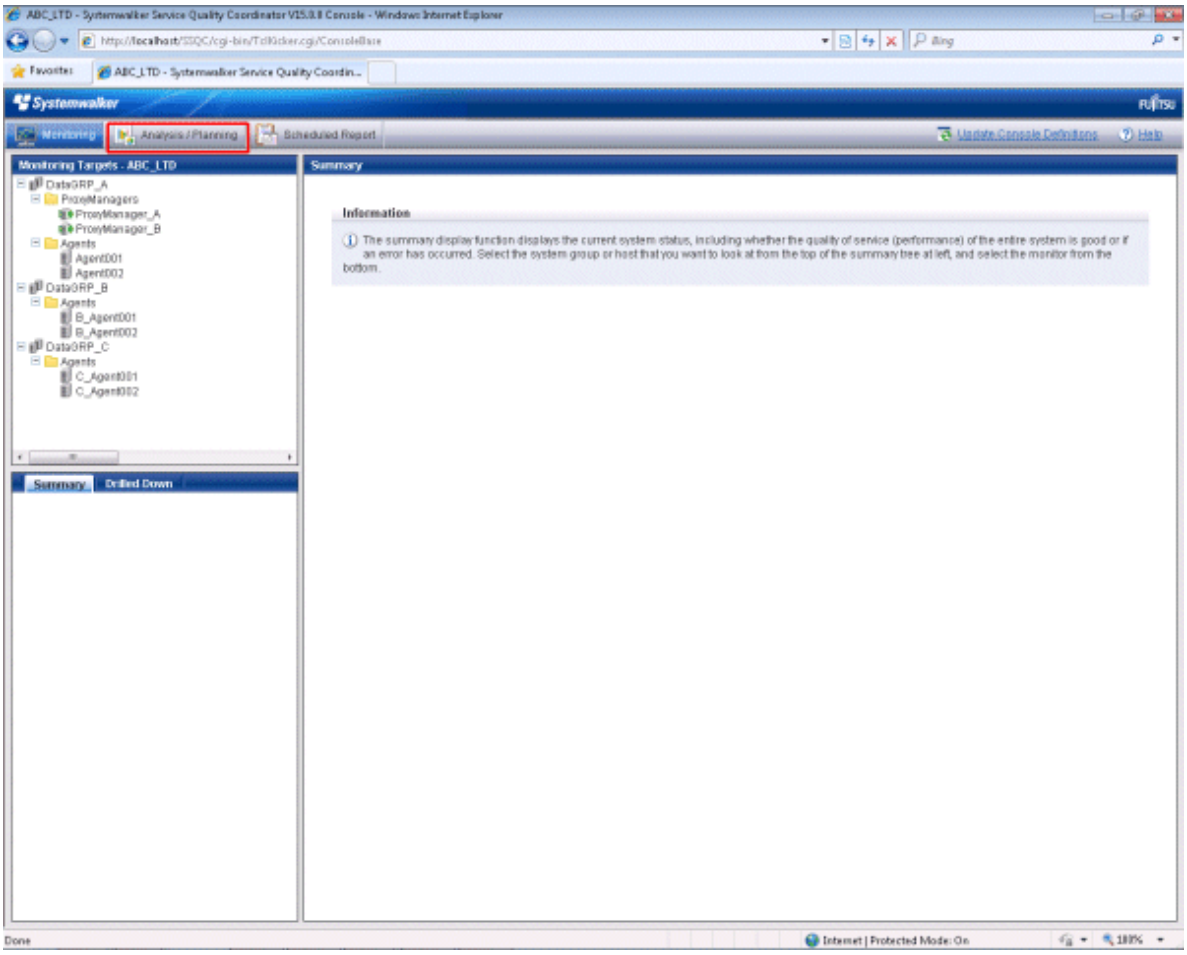
Starting

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 the **Analysis/Planning** menu from the global navigation bar in the Console to start.

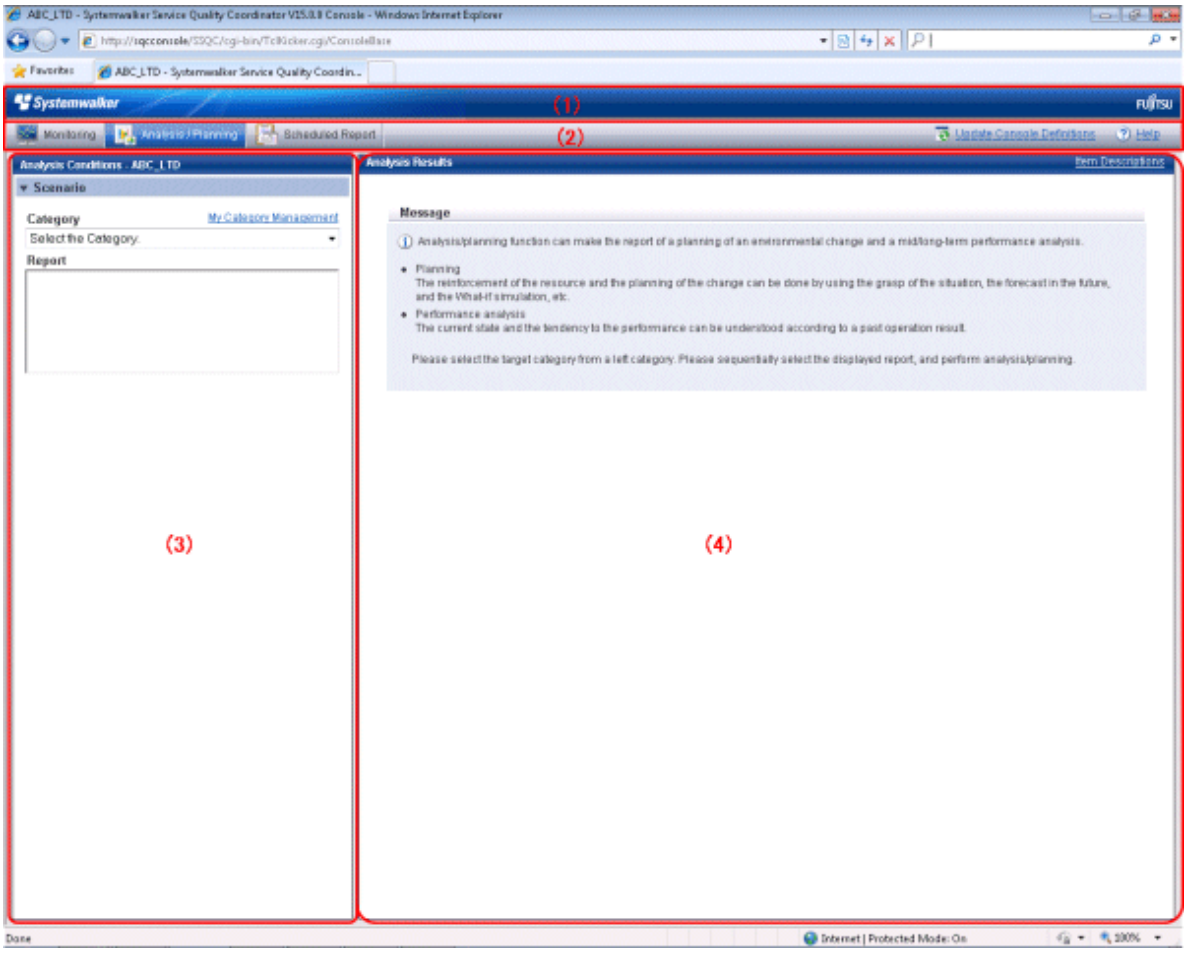


Note

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

Analysis/Planning Window configuration

The **Analysis/Planning** window will appear as below.



The **Analysis/Planning** window 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: - **Monitoring** Opens the monitoring window. Allows checks on the current status and isolates faults when they occur. - **Analysis/Planning** Opens the analysis/Planning window. A mid/long-term analysis and the planning of the service quality 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 Definition** Reloads the console definitions. - **Help** Opens the User's Guide (Console Edition).

Item No.	Component	Description
(3)	Analysis conditions area	The analytical condition in the selection of the category and the report and each report is set and it is possible to register. It explains the operating instruction of the Analysis conditions area by the next paragraph.
(4)	Content display area	Contents of each report are displayed.

Basic operation of Analysis/Planning Window

The **Analysis/Planning** windows perform the following operation

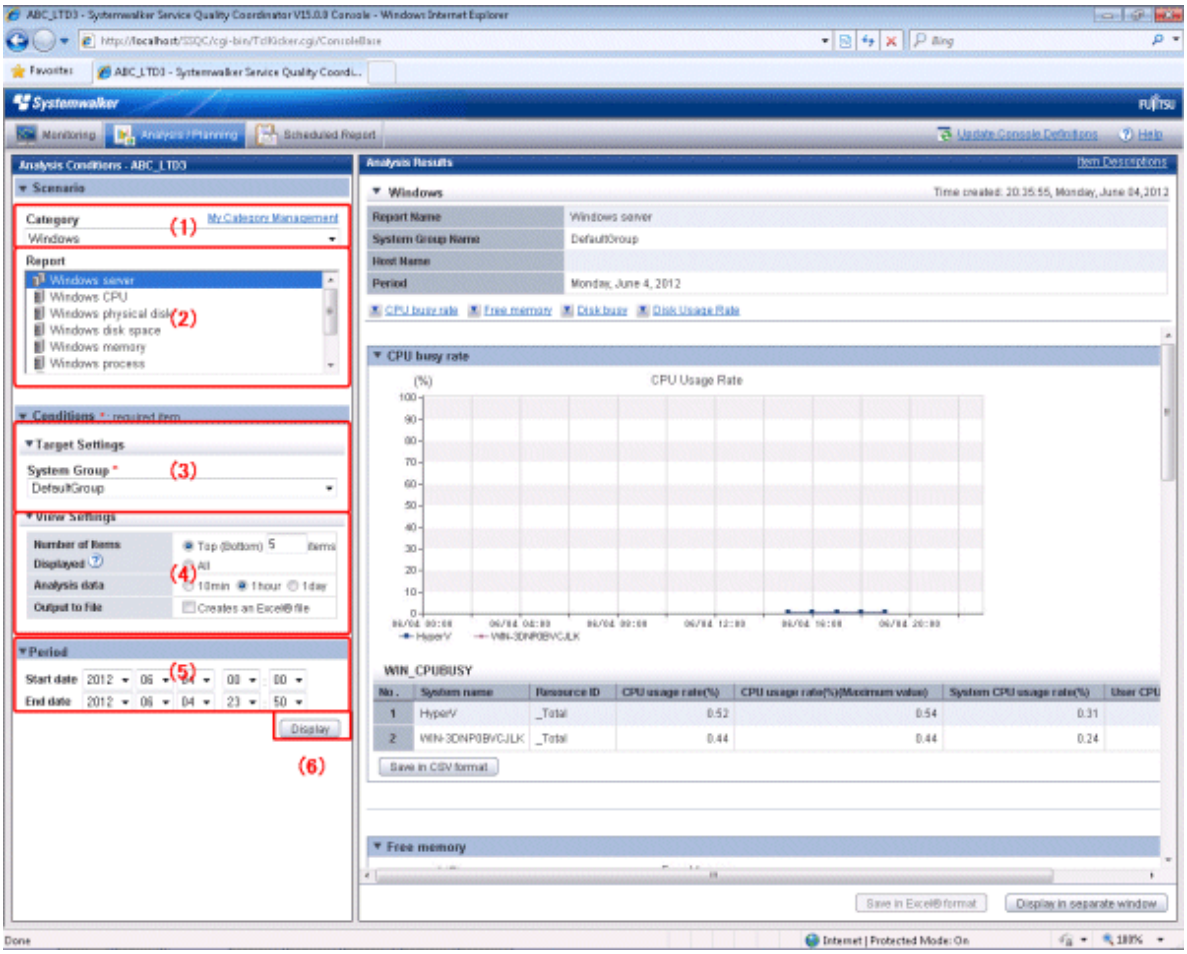
Operation	Description
The report is made by using the scenario	The analysis and the planning along the purpose the report displayed in the category is sequentially confirmed can be done. The My Category of the template and each console that the product offers that the user registers can be used. The condition of Analysis/Planning can be preserved for the My Category.
Refer to the history of the made report	The history of the made report is displayed. The analysis window history can store up to 50 reports. If this number is exceeded, reports will be automatically deleted in chronological order.

The My Category is edited	The following of the My Category of each console that the user registers can be done.
	- Management of My Category
	  - Addition of category
	  There is a method of copying the report registered in other categories after a method of copying an existing category and an empty category are made.
	  - Change of category name
	  - Deletion of category
	- Management of report
	  - Addition of report
	  - Change of report name
	  - Deletion of report
	- Preservation of Analysis/Planning condition
	  There is a method of preservation putting the method and the alias that preserves the condition in the report that has been selected as it is.

See

Please refer to "Basic operation of Analysis conditions area" for the operating instruction of the analytical condition.

Analysis conditions area configuration



Basic operation of Analysis conditions area

Item No.	Component	Description
(1)	Categories	The Category is selected according to the purpose of the operation.
(2)	Report	The Report is selected according to the purpose of the operation.
(3)	Target Settings	It specifies it concerning the object of the report.
(4)	View Settings	Specifies the data interval, the number of display items and File output for the report. The way the number of display items is displayed depends on the report types 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 ten or more.

Item No.	Component	Description
		The setting of the graph size etc. can be done by a **Detail Settings** according to the kind of the report.
(5)	Period specifications	Specifies the periods for analysis.
(6)	Operation buttons(to display)	Button for displaying the results of analysis as content.

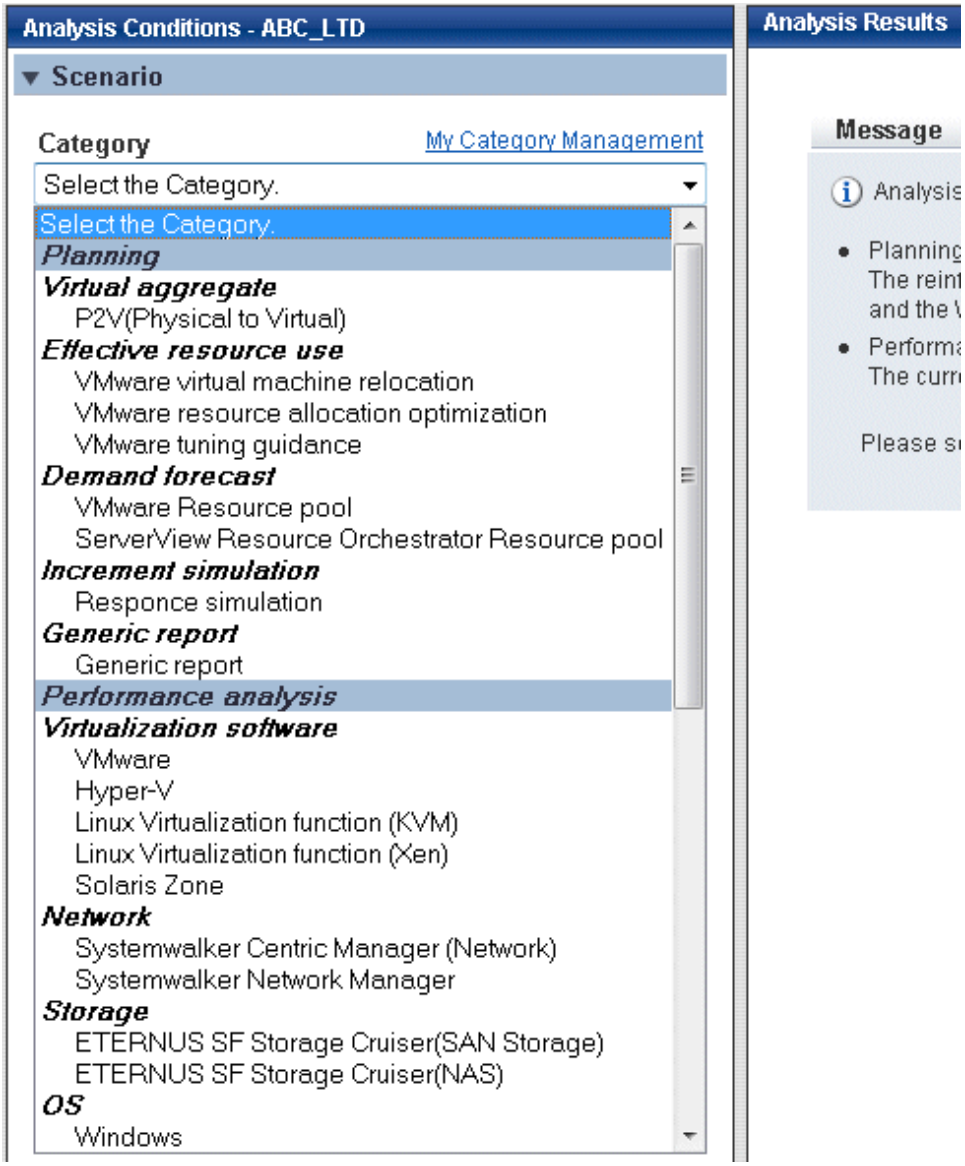
4.3.1 Scenario

The scenario of each purpose of the operation is prepared on the **Analysis/Planning** window. The analysis and the planning along the purpose the displayed report is sequentially confirmed can be done.

4.3.1.1 Category

The report that Systemwalker Service Quality Coordinator offers is classified into the Category of the hilt matched to the purpose of the operation. One report might be classified into two or more categories.

It comes to be able to select the report registered in the category by selecting the Category.

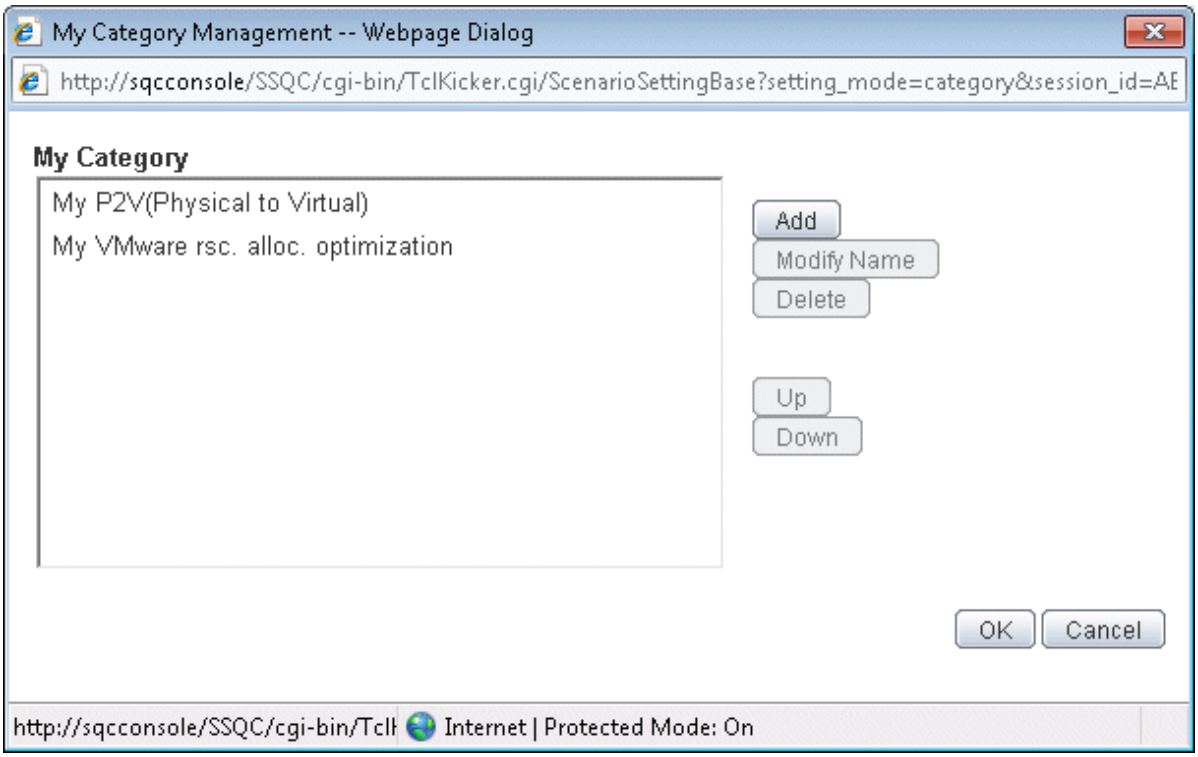


If **My Category Management** is clicked **My Category Management** window will be displayed. **My Category Management** is possible to delete it the addition and the change of the Category.

4.3.1.1.1 My Category Management

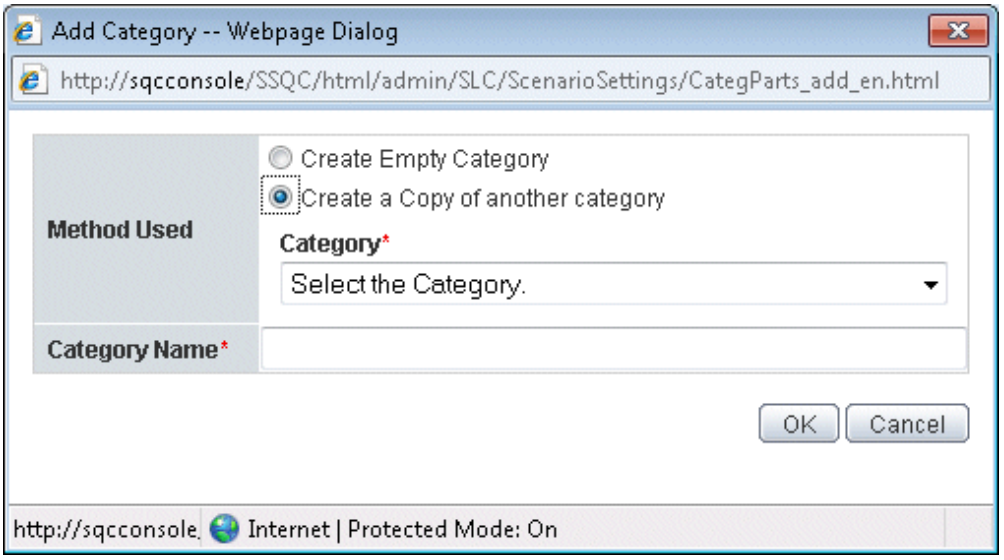
My Category Management Window

My Category Management window is possible to delete it the addition and the change of the Category.



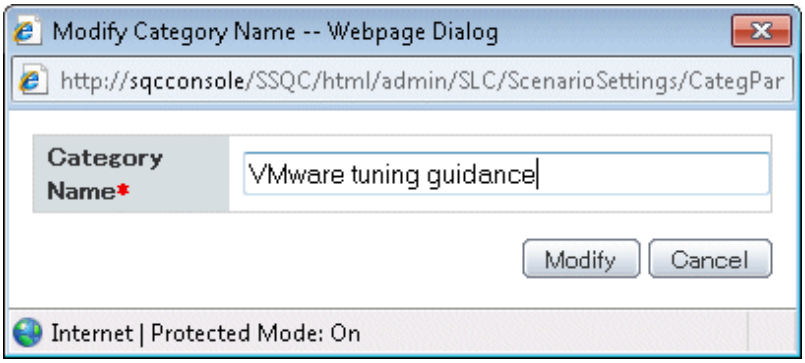
Item name	Description
My Category	The registered categories will be displayed by a list.
Add	**Add Category** window to add the category newly is displayed.
Modify Name	**Modify Category Name** to change the name of the category has been selected by the **My Category** is displayed.
Delete	The category has been selected by the **My Category** is deleted. Please delete and click **OK** button by the confirmation screen when it is unquestionable.
Up Down	The category has been selected by the **My Category** is moved up and down.

Add Category Window



Item name		Description
Method Used	Create Empty Category	An empty Category is made. The report is registered back.
	Create a Copy of another category	The copy of another category is made. It comes to be able to select **Category** by selecting the radiobutton. The report registered in the copied category can be changed later.
	Category	When another category is copied, it selects it.
Category Name		The displayname to identify the scenario is specified. A new category name is specified for which addition method. Please set to become unique in the Console Definition. The following characters can be used for Category Name: - Alphanumeric characters - Symbols (except for $ " ' [ ] < > / ? | ; : * \ & , = % # +) Platform dependent characters can not be used. The Agent name can be no longer than 36 characters.

Modify Category Name Window

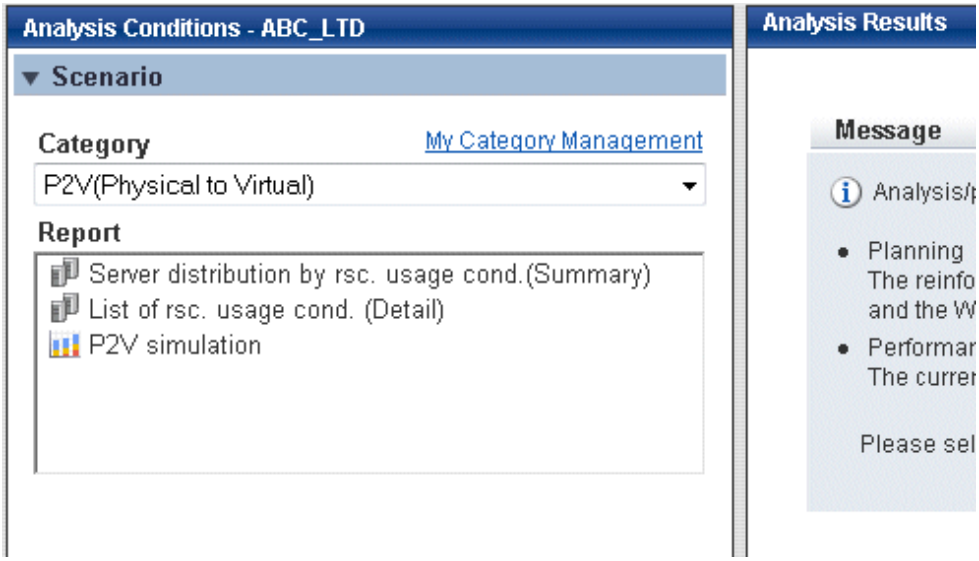


Item name	Description
Category Name	The displayname to identify the scenario is specified. A new category name is specified for which addition method. Please set to become unique in the Console Definition. The following characters can be used for Category Name: - Alphanumeric characters - Symbols (except for $ " ' [ ] < > / ? | ; : * \ & , = % # +) Platform dependent characters can not be used. The Agent name can be no longer than 36 characters.

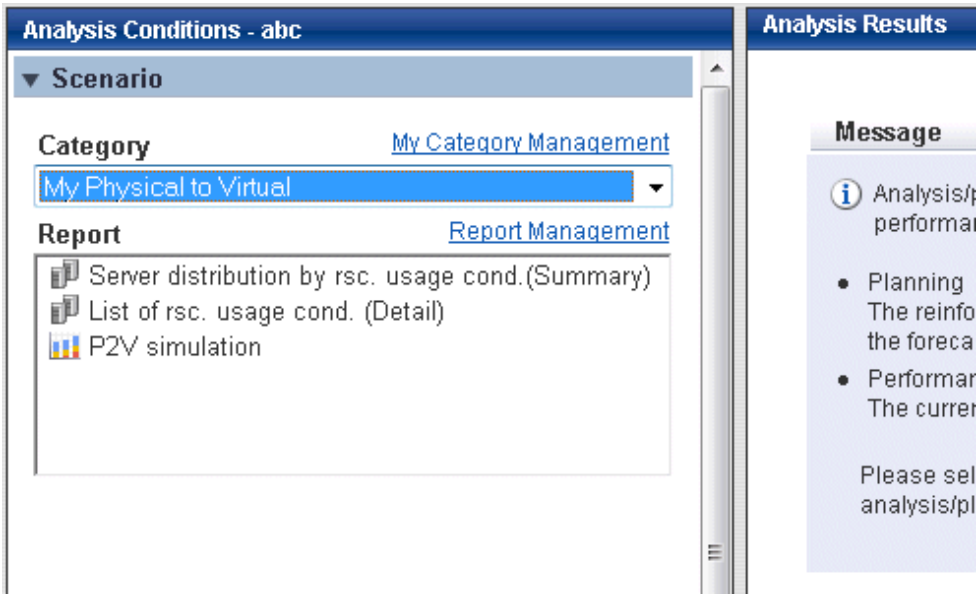
4.3.1.2 Report

The report is selected according to the purpose.

The item of the **Condition** changes by the selected report.



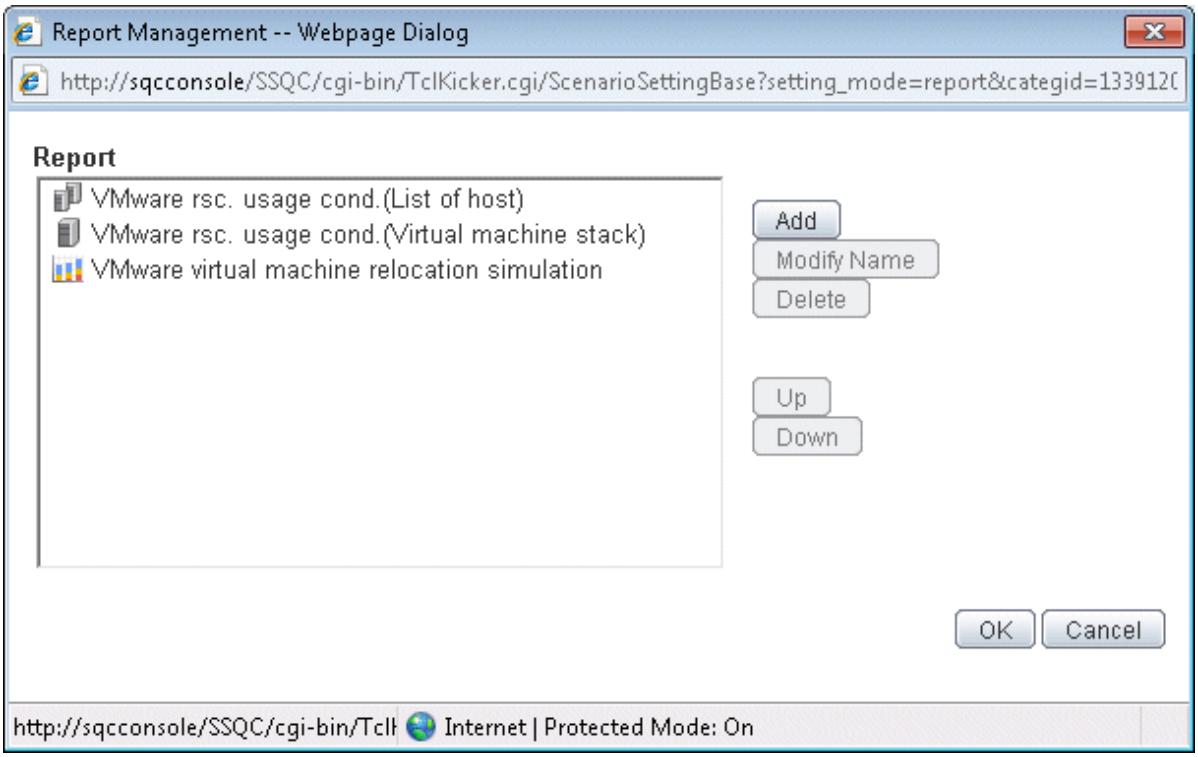
When the My Category is selected, **Report Management** is displayed. **Report Management** window when **Report Management** is clicked is displayed, and it is possible to delete it the addition and the change of the report.



4.3.1.2.1 Report Management

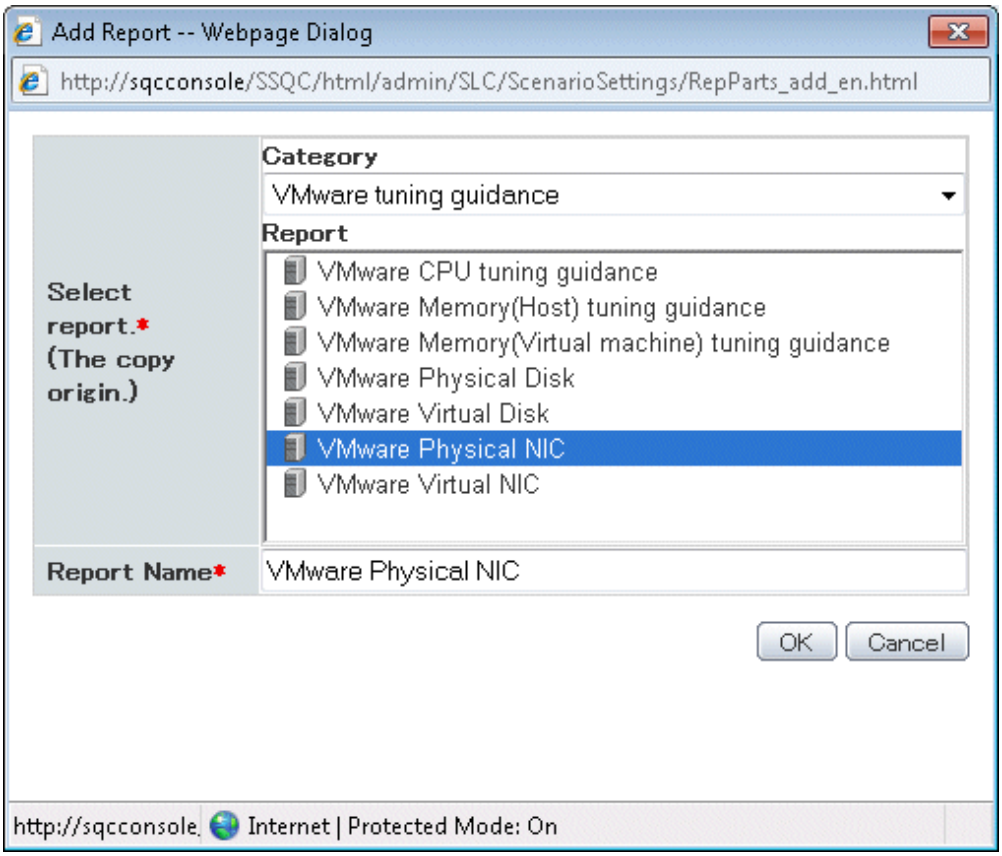
Report Management Window

The My Category can be deleted on **Report Management** window. as for the addition, and the change it as for the report



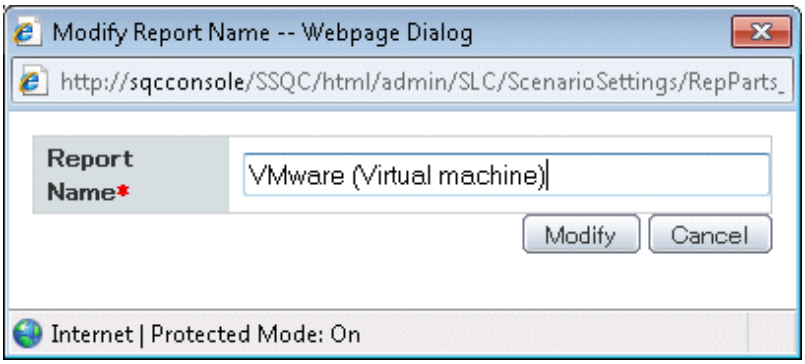
Item name	Description
Report	The registered reports will be displayed by a list.
Add	**Add Report** window to add the report newly is displayed.
Modify Name	**Modify Report Name** window to change the name of the report has been selected by the **Report** is displayed.
Delete	The report has been selected by the **Report** is deleted. Please delete and click OK button by the confirmation screen when it is unquestionable.
Up Down	The report has been selected by the **Report** is moved up and down.

Add Report Window



Item name		Description
Select report.(The copy origin.)	Category	The category including the report to be copied is selected.
	Report	The report to be copied is selected from the list.
Report Name		The name of the selected report is displayed with **Report**. The displayname to identify the report and the condition settings is specified. Please set to become unique in the Category. The following characters can be used for Category Name: - Alphanumeric characters - Symbols (except for $ " ' [ ] < > / ? | ; : * \ & , = % # +) Platform dependent characters can not be used. The Agent name can be no longer than 50 characters.

Modify Report Name Window



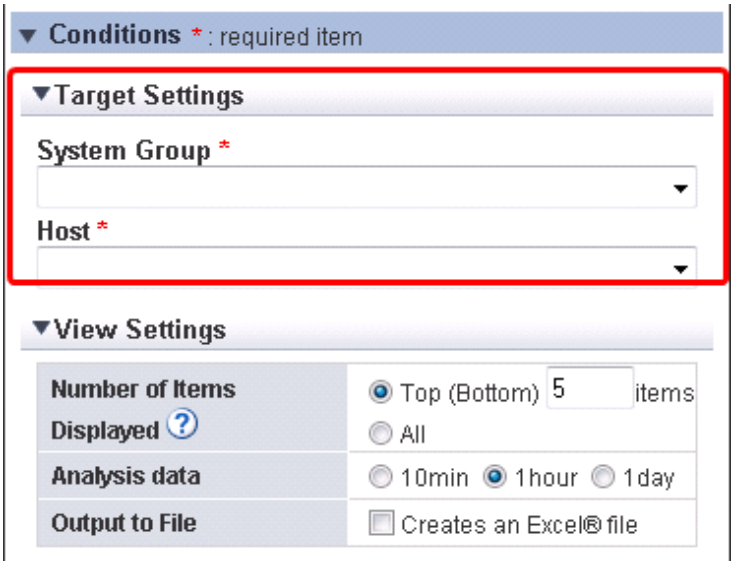
Item name	Description
Report Name	The displayname to identify the report and the condition settings is specified. Please set to become unique in the Category. The following characters can be used for Category Name: - Alphanumeric characters - Symbols (except for $ " ' [ ] < > / ? | ; : * \ & , = % # +) Platform dependent characters can not be used. The Agent name can be no longer than 50 characters.

4.3.2 Conditions

4.3.2.1 Target Settings

When report is selected, setting items about the target will be displayed. The items vary depending on report you selected.

Below is an example for selecting system group and host.



The following explains the items respectively.

System group specification

Item	Description
System Group	Select the system group to be analyzed from the drop-down list box.

System group and host specification

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

System group, host and resource ID specification

Item	Description
System Group	Select the system group to be analyzed from the drop-down list box.
Host	Select the host to be analyzed from the drop-down list box. The list box displays the hosts that have been registered with the selected system group.
Resource ID	The content specified for Resource ID depends on the type. The content that can be input for each type of report is explained below. Note that only alphanumeric characters and symbols (except for \,<>"$'[]=&) can be used. The maximum length is 128 characters.

For future forcast display only

Item	Description
System Group	Select the system group to be analyzed from the drop-down list box.
Host	Select the host that to be analyzed from the drop-down list box. The list box displays the hosts that have been registered with the selected system group. ALL_SERVER means all the hosts of the system group.
Record ID Field Name Display by difference	Specify the target record id and field name for the analysis. For the record id, only options corresponding to the selected host will be displayed. For the field name, only options corresponding to the selected record ids will be 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 Reference Guide for details on the record id and field names that can be specified.
Resource ID	Specify the resource ID to be targeted for analysis. If nothing is specified, all resource IDs will be targeted.  Point Resource IDs can be retrieved by right-truncating the resource ID according to a specified search string. Example:

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

Detailed specification

Item	Description
System Group	Select the system group to be analyzed from the drop-down list box.
Host	Select the host to be analyzed from the drop-down list box. The list box displays the hosts that have been registered with the selected system group. When ALL_SERVER is selected, all hosts in the system group are analyzed.
Record ID Field name Display by difference	Specify the target record id and field name for the analysis. For the record ID, only options corresponding to the selected host will be displayed. For the field name, only options corresponding to the selected category name will be 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 Reference Guide for details on the record id and field names that can be specified.
Resource ID	Specify the resource ID to be targeted for analysis. If nothing is specified, all resource IDs will be targeted. **Point** Resource IDs can be retrieved by right-truncating the resource ID according to a specified search string. Example: For example, if the two resource IDs "AAA123" and "AAA456" exist, both can be targeted by specifying "AAA".

Regarding 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 may not be displayed. Create system groups of agents that have same collection intervals.

For correlation/composition only

Item		Description
System Group		Select the system group to be analyzed from the dropdown list box.
Data 1 specification Data 2 specification	Host1 Host2	Select a host containing some of the data to be displayed from the drop-down list box. The list box displays the hosts that have been registered with the selected system group. When ALL_SERVER is selected, all hosts in the system group are targeted.
	Record ID1 Record ID2	Specify one of the record id/field name pairs to be displayed.

Item		Description
	Field name1 Field name2	For the record ID, only options corresponding to the selected hosts will be displayed. For the field name, only options corresponding to the selected record id will be 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 Reference Guide for details on the record id and field names that can be specified.
	Resource ID1 Resource ID2	Specify one of the resource IDs to be displayed. If nothing is specified, all resource IDs will be targeted. **Point** Resource IDs can be retrieved by right-truncating the resource ID according to a specified search string. Example: If the two resource IDs "AAA123" and "AAA456" exist, both can be targeted by specifying "AAA".

For contour display only

Item	Description
System Group	Select the system group to be analyzed from the drop-down list box.
Host	Select the host to be analyzed from the drop-down list box. The list box displays the hosts that have been registered with the selected system group. When ALL_SERVER is selected, all hosts in the system group are analyzed.
Record ID	Specify the target record id and field name for the analysis.
Field name	For the field name, only options corresponding to the selected record id will be 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 Reference Guide for details on the record id and field names that can be specified.
Resource ID	Specify the resource ID to be targeted for analysis. If nothing is specified, all resource IDs will be targeted. **Point** Resource IDs can be retrieved by right-truncating the resource ID according to a specified search string. Example: For example, if the two resource IDs "AAA123" and "AAA456" exist, both can be targeted by specifying "AAA".

For comparison display of the past only

Item	Description
System Group	Select the system group to be analyzed from the drop-down list box.
Host	Select the host to be analyzed from the drop-down list box. The list box displays the hosts that have been registered with the selected system group. When ALL_SERVER is selected, all hosts in the system group are analyzed.
Record ID Field name Display by difference	Specify the target record id and field name for the analysis. For the field name, only options corresponding to the selected record id will be 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 Reference Guide for details on the record id and field names that can be specified.
Resource ID	Specify the resource ID to be targeted for analysis. If nothing is specified, all resource IDs will be targeted. Point Resource IDs can be retrieved by right-truncating the resource ID according to a specified search string. Example: For example, if the two resource IDs "AAA123" and "AAA456" exist, both can be targeted by specifying "AAA".
Report base day	Specify the target date for comparison.

For transition comparison display according to day display only

Item	Description
System Group	Select the system group to be analyzed from the drop-down list box.
Host	Select the host to be analyzed from the drop-down list box. The list box displays the hosts that have been registered with the selected system group. When ALL_SERVER is selected, all hosts in the system group are analyzed.
Record ID Field name Display by difference	Specify the target record id and field name for the analysis. For the field name, only options corresponding to the selected record id will be 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 Reference Guide for details on the record id and field names that can be specified.
Resource ID	Specify the resource ID to be targeted for analysis. If nothing is specified, all resource IDs will be targeted. Point Resource IDs can be retrieved by right-truncating the resource ID according to a specified search string.

Item	Description
	Example: For example, if the two resource IDs "AAA123" and "AAA456" exist, both can be targeted by specifying "AAA".

For P2V simulation display only

Item		Description
System Group		Select the target system group for P2V simulation from the drop-down list box.
Aggregation candidate		First click the Add button to display the Add Aggregation candidate view, then select the candidates and click OK. More than 1 candidate can be selected. The selected hosts will be listed. The maximum number of candidates is 50. If you want to set aside a host that has been selected as candidate, click Delete button at the right of the host.
Aggregation target's information	Direct input of installed resource/Aggregate to a host in operation	If the target host has been registered in the system group, select [Aggregate to a host in operation]. The amount of CPU and Memory of the specified host will be displayed as black lines in the displayed graph. If not registered, select [Direct input of installed resource].
	CPU Core Number Memory	If [Direct input of installed resource] is selected, specify the CPU clock (GHz), core number and memory (GB) of the target server by value. - Specify a value from 0.001 to 1000 as CPU (Clock). - Specify an interger from 1 to 1000 for Core Number. - Specify a value from 0.001 to 1000000 for Memory. The specified information about CPU and Memory will be displayed as black lines in the displayed graph.
	Host	If [Aggregate to a host in operation] is selected, select target host from the drop-down list box. It can not be the same as an aggregation candidate.

Note

- If monitored using an agent of V13.5.0 or before, the server will not be listed as aggregation candidate or aggregation target.
- If you want to make a virtual machine as aggregation candidate, monitoring the server performance (OS) of the virtual machine by agent of agent-based monitoring or agentless monitoring.

For VMware virtual machine relocation simulation only

Item		Description
System Group		Select the target system group for virtual machine relocation simulation from the drop-down list box.
Relocation candidate	Host Virtual machine	First click the Add button to display the Add Relocation candidate view, and then select from the list box the host moving from. From Virtual machine list, select the virtual machine for the relocation candidate and click OK button. More than 1 virtual machine can be selected. If you want to add virtual machines for relocation candidate from more than 1 virtual host, repeat the above procedure.
	Relocation candidate	The selected relocation candidates will be displayed. Display format is "host name:virtual machine name". The maximum number of relocation candidates is 50. The maximum number of selectable hosts that holding the virtual machines of relocation candidate is 5. If you want to set aside a host that has been selected as the relocation candidate, click the Delete button on the right of the host.
Aggregation target's information	Direct input of installed resource/Aggregate to a host in operation	If the target host has been registered in the system group, select [Aggregate to a host in operation]. The amount of CPU and Memory of the specified host will be displayed as black lines in the displayed graph. If not registered, select [Direct input of installed resource].
	Host	If [Aggregate to a host in operation] is selected, select target host from the drop-down list box. It can not be the same as an relocation candidate.
	CPU Core Number Memory	If [Direct input of installed resource] is selected, specify the CPU clock (GHz), core number and memory (GB) of the target server by value. - Specify a value from 0.001 to 1000 as CPU (Clock). - Specify an interger from 1 to 1000 for Core Number. - Specify a value from 0.001 to 1000000 for Memory. The specified information about CPU and Memory will be displayed as black lines in the displayed graph.

Note

- The target for virtual machine relocation simulation is VMware only.
- If monitored using an agent of V13.5.0 or before, the server will not be listed as relocation candidate or aggregation target.
- The virtual host which has stopped for over 5 hours will not be displayed in the list of the virtual machine of the relocation candidate.
- Immediately after the virtual machine migration, select the virtual machine by the name before migration. The list of virtual machines is updated once an hour.

For request count (Future prediction) only

Item	Description
System Group	Select the target system group for analysis from the drop-down list box.
Host	Select the target host for analysis from the drop-down list box. For the host, only those registered in the selected system group will be displayed. ALL_SERVER means all the hosts in the system group.
Service Name	Specify the service name (resource ID) set according to Managing the Volume of Web Transactions. All the services will be extracted if omitted. Resource IDs can be retrieved by right-truncating the resource ID according to a specified search string.

For response simulation (Request count/Adding servers) only

Item	Description
System Group	Select the target system group for analysis from the drop-down list box.
Server Group (layer 1)	Hosts registered in the system group will be divided into Web server (layer 1), application server (layer 2) and database server (layer 3). First click Add button to display Add Host view, then from Host list, select a host and click OK button. Make sure you specify host that holding agents with Managing the Volume of Web Transactions to Server Group (layer 1). Server Group (layer 2) and Server Group (layer 3) can be ignored. Maximum number of total hosts that can be added to layer 1 to 3 is 50. Point The performance information used for application server and database server is CPU informaation. The setting of linkage middleware such as Interstage Application Server and Symfoware Server is unnecessary.
Server Group (layer 2)	
Server Group (layer 3)	
Service Name	Specify the service name(resource ID) set according to Managing the Volume of Web Transactions. All the services will be extracted if omitted. Resource IDs can be retrieved by right-truncating the resource ID according to a specified search string.
Request Coefficient	Specify the expected request count (times compared with now). Make use of request count(Future prediction) to predict this value. If 1 is specified, current request count will be used in simulation. Range: from 0.1 to 9999.9
Adding Servers	This will be displayed in case of Response simulation (Adding servers). Specify the number of servers adding to each server group. Range: from 0 to 99
Times other than service time	Specify the period when the service is not running or the request count is very few, such as late night, holiday or scheduled maintenance time.

Item	Description
	The precision of simulation will become higher, if your exclude such periods of time during which processing that have nothing to do with request is be performed. Select the week day, hour, minute from drop-down list box to specify the week day and period of time for Times other than service time. The maximum number of conditions that can be specified is 10. **Point** The values of table of response(request count) and response(adding servers) are displayed as '-'(hyphen) for the period of time specified by "All".

For service operational information only

Item	Description
System Group	Select the system group to be analyzed from the drop-down list box.

4.3.2.1.1 Resource ID specification

Specified the resource ID content of each report type is shown.

Report type	Resource ID
Web transaction request Web transaction hitserver Web transaction hitclient Web transaction hitremote Web transaction traffic Web transaction error	The following specified content differs according to the type: In the report of the following, the service name is specified. For Generic report, specify the service name and the URL connected by a colon (:). Example: imagine:/SSQC/console.html If only the service name is specified, all the data for that service name will be targeted for reporting. **Note** Please specify what defined with Inclusion of Transaction Log Definitions file (tlawatch.ini) for URL. Please refer to User's Guide "Transaction Log Definitions" for Transaction Log Definitions file (tlawatch.ini).
Interstage EJB application	Specify the name of an EJB application. To monitor the performance of an EJB container, specify the name of the EJB container.
Interstage CORBA application	Specify the implementation repository ID.
Interstage transaction application	Specify the object name.
Interstage IJServer JVM Interstage IJServer JTA	Specify the object name.

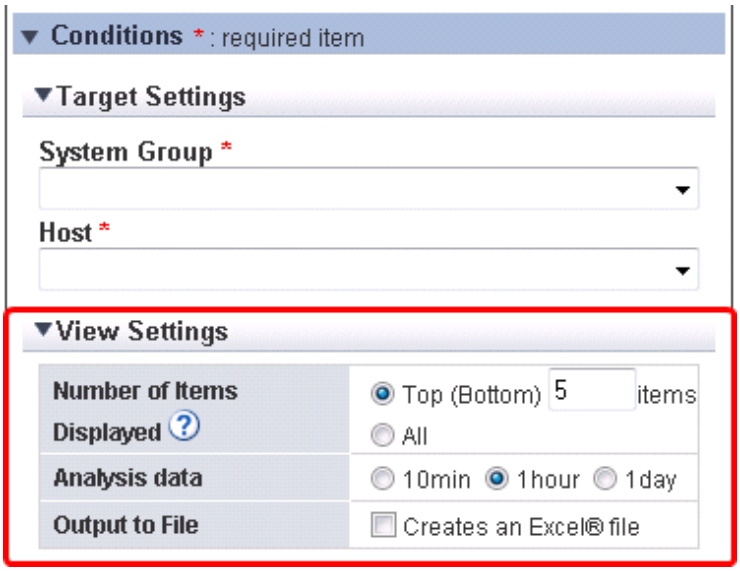
Report type	Resource ID
Interstage IJServer JDBC	
Interstage IJServer SERVLET WebModule	
Interstage IJServer EVENT SERVICE	
Symfoware shared buffer	Specify the RDB system name. Point Using alphanumeric characters is recommended.
Symfoware log area	
Symfoware disk I/O	
Oracle SGA	Specify the instance name. Point Using alphanumeric characters is recommended.
Oracle PGA	
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.
NetworkManager 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 (:).

Report type	Resource ID
	Example: 00GR730#######GR73E02U####IA000003######:0x30000 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	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.
Storage IOPS	
Workload	Specify resource module names separated by a colon (:). Example 1: To specify a single module name module1: Example 2: To specify multiple module names module1:module2: If no name is specified, all modules will be targeted.

4.3.2.2 Display setting

When the report is specified, a set item concerning the display is displayed. The content is different depending on the specified report type.

It is an example of the screen of specifying the display number, the analysis data, and the File output as follows.



Item	Description
Number of Items Displayed	The number of datas when analyzing it is selected. An optional data number is the following. - Top(Bottom) The integer from 1 to 1000 can be input. - The data for the input number of cases is displayed. - The number of cases that can be displayed in the graph is about up to ten. The graph might collapse by explanatory notes in case of ten or more. - All All datas are displayed.
Analysis data	The interval of the data when analyzing it is selected. An optional data interval is the following. - 10min The data-hold period: For 7 days (default) - It is suitable for the analysis of the level during a day. - 1hour The data-hold period: For 6 weeks (default) - It is suitable for the analysis of about one week. - 1day The data-hold period: 13 months (default) - It is suitable for the analysis for one month or more. - There is the one of an impossible Selection by the report. Note Even if it specifies for the period for the data-hold period, the data is not displayed.
Output to File	The content of contents is output as a File of the Excel(R) form.

Item	Description
	When "Creates an Excel(R) file" check box is checked, "Save in Excel(R) format" button the analysis and under the report contents becomes effective. Contents displayed to click this button can be downloaded by the Excel(R) form. **Note** Please nullify redirecting of the clipboard when operating it by a remote, desktop connection etc. **Note** When the file is downloaded from "Save in Excel(R) format", the file of the extension of xlsx or xlsm can be downloaded. Please make macro effective when you open the file of the extension of xlsm. **Information** Please change Internet Explorer settings in the case the file of the xml form is downloaded when the file is downloaded from "Save in Excel(R) format". **Internet Options** > **Security** tab > **Custom level of corresponding zone** > **Miscellaneous**. Disable **Open files based on content, not file extension**.
Times other than service time	The time zone that becomes the Element of the display is specified. The operation initiating season and the end season are specified.
Threshold(Arbitrariness): CPU Memory	CPU utilization and the memory percentage utilisation that allows it by the server consolidating ahead are specified by the percentage. (It is possible to omit it.) It is displayed in a red line in the displayed graph when specifying it. CPU: Please input the number of 10-100. (unit: %) The memory: Please input the number of 10-100. (unit: %)
Analysis mode	The simulation method is specified. - [Hourly] The maxima (mean value) of each consolidating candidate's server of the amount of the resource use according to time zone is calculated, piled up, and displayed. Unquestionable for the resource every time after consolidating is good at the Confirmation. - [Weekly] The maxima (mean value) of each consolidating candidate's server of the amount of the resource use according to a day of the week is calculated, piled up, and displayed. Unquestionable for the resource every day of the week after consolidating is good at the Confirmation. - [time-line] The amount of the resource use of each consolidating candidate's server is piled up and displayed.

4.3.2.2.1 Detail Settings

"Detail Settings" is displayed by the kind of the report. The content is different depending on the kind of the specified report.

"Detail Settings" is displayed at the report Selection while having shut. Please click the titlebar of "Detail Settings" when setting it in detail.

Figure 4.1 "Detail Settings" region closed.

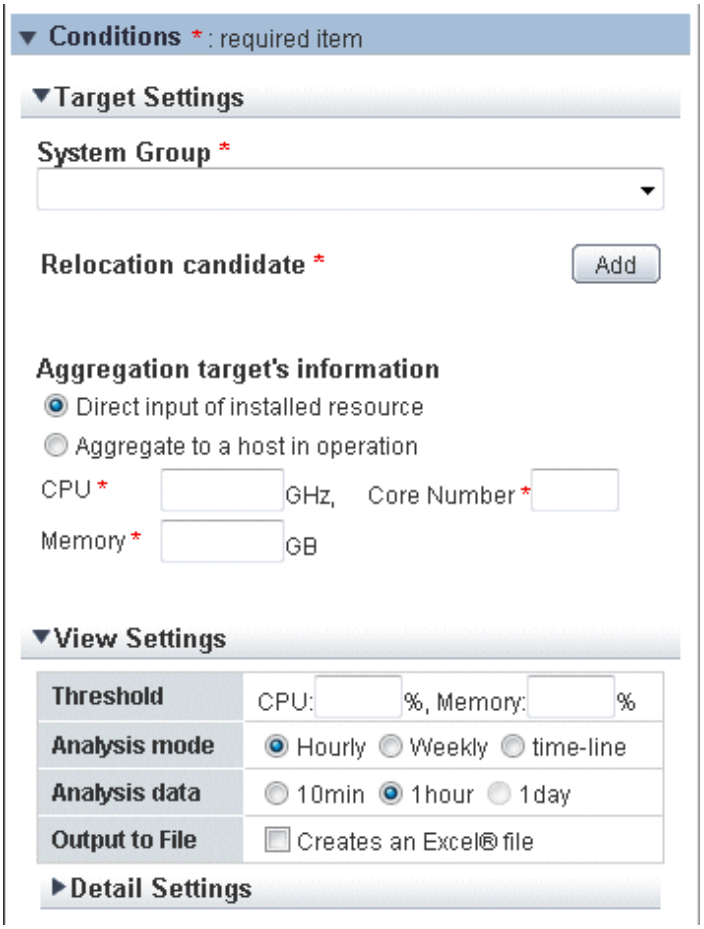
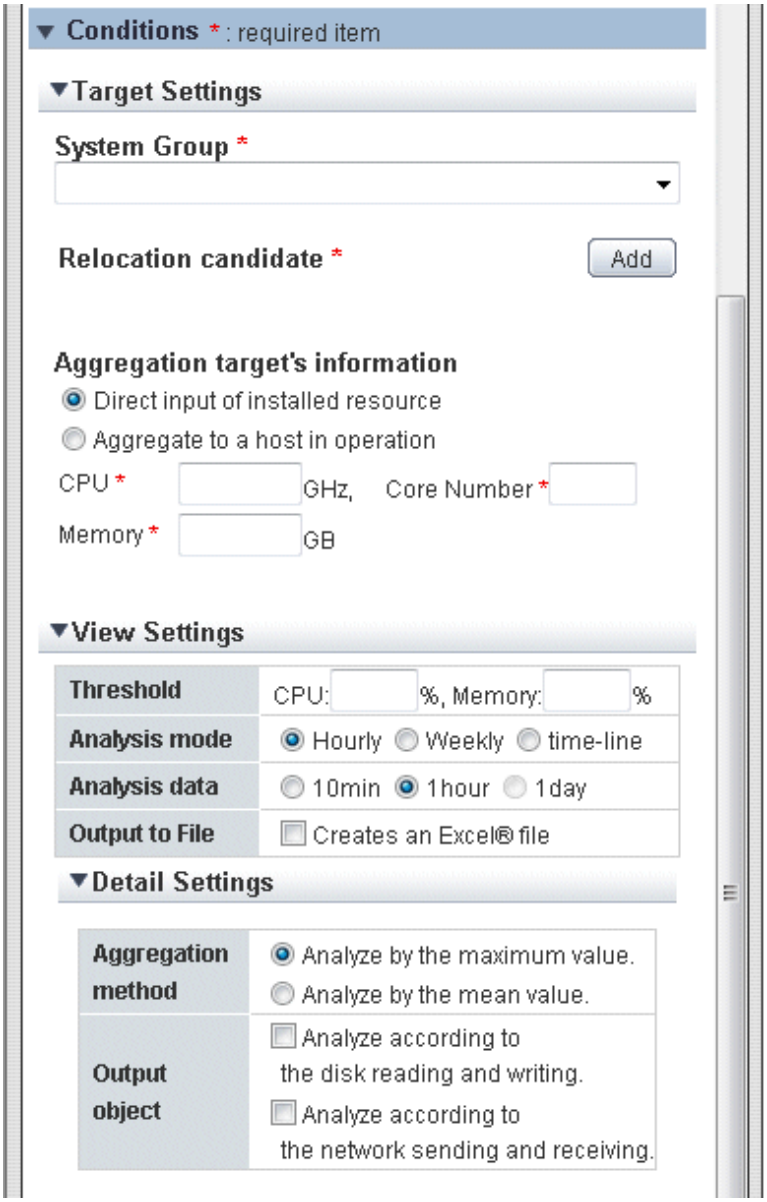


Figure 4.2 "Detail Settings" region opened.



Generic report

Item	Description
Title	The title of the graph and the table is specified. Please refer to figure below "Graph that was details set and displayed (Example)" for the image when it specifies it. The following characters can be used for the title. - Alphanumeric character - Symbols (except for $"'[]<>/ ?|;:*\&,.=%) The platform dependent character cannot be used. The limitation of length is within 24 characters. The record identity is displayed to the graph title in the title of the field name and the table when not specifying it.

Item	Description
Unit	The unit of Y axis in the graph is specified. Please refer to figure below "Graph that was details set and displayed (Example)" for the image when it specifies it. The following characters can be used for the unit. - Alphanumeric character - Symbols (except for $'"[]<>/ ?|;:*\&,.=) The platform dependent character cannot be used. The limitation of length is within 8 characters. The unit is not displayed when not specifying it.
Graph Size	The size in the output graph is specified in every the pixel. The integer from 200 to 1500 can be specified. Default is 700 pixels in width, and 300 pixels in height. (Contour mappings are 750 pixels in width, and 500 pixels in height.) The specification of the value more than the default value is recommended.
Graph Range(Y Axis)	- "Minimum" and "Maximum" specify the range of Y axis. "Minimum" and "Maximum" of "Graph that was details set and displayed (Example)" are set when specifying it (The numerical value of the scale of the maxima might not be displayed). - The numerical value within the range of 10000000000000 can be specified from -10000000000000. - It is displayed over data range when not specifying it. - "Width of scale" specifies the interval of the scale. - It becomes a value for which "Width of scale" in figure below "Graph that was details set and displayed (Example)" is specified when specifying it. - The numerical value can be specified within the range from 0 to 10000000000000. - The width of the scale is automatically decided when not specifying it.
Threshold	The threshold is specified. Please refer to figure below "Graph that was details set and displayed (Example)" for the image when it specifies it. The numerical value within the range of 10000000000000 can be specified from -10000000000000. It is likely not to be displayed in the graph according to the range of Y axis even if it specifies it.

Figure 4.3 Graph that was details set and displayed (Example)

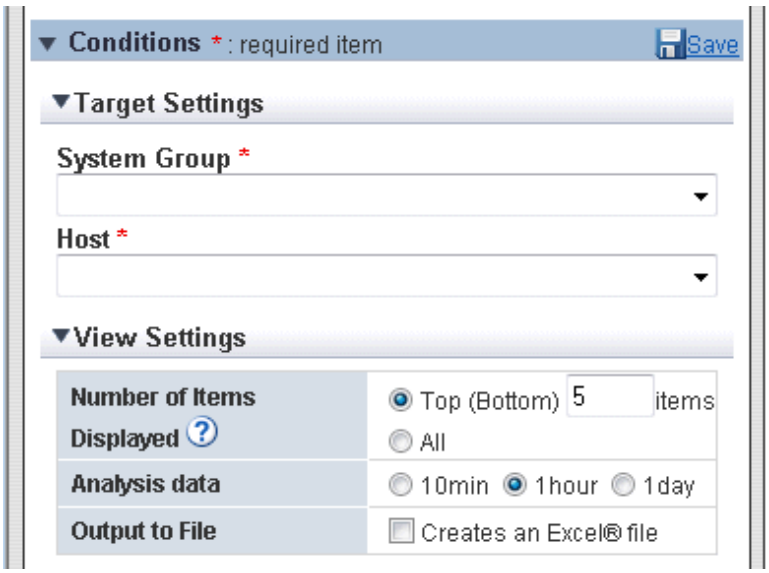
Another

Item		Description
Output object	Analyze according to the disk reading and writing.	To display the distribution graph and the table of reading and writing, it selects it.
	Analyze according to the network sending and receiving.	To display the distribution graph and the table according to sending and receiving, it selects it.
Graph setting(X Axis)	CPU usage rate	When the graph is set, it selects it. The default of "Scale Number" is 10. The default of "Scale Max" is 100. "Scale Max": Please input the integer of 10-100. (unit: %) "Scale Number": Please input the integer of 2-10.
	Memory usage rate	When the graph is set, it selects it. The default of "Scale Number" is 10. The default of "Scale Max" is 100. "Scale Max": Please input the integer of 10-100. (unit: %) "Scale Number": Please input the integer of 2-10.
	Disk I/O Count	When the graph is set, it selects it. All graphs are common to this setting. The default of "Scale Number" is 10. "Scale Max": Please input the integer of 10-1000000000. (unit: count/sec) "Scale Number": Please input the integer of 2-10.
	Disk Throughput	When the graph is set, it selects it. All graphs are common to this setting. The default of "Scale Number" is 10.

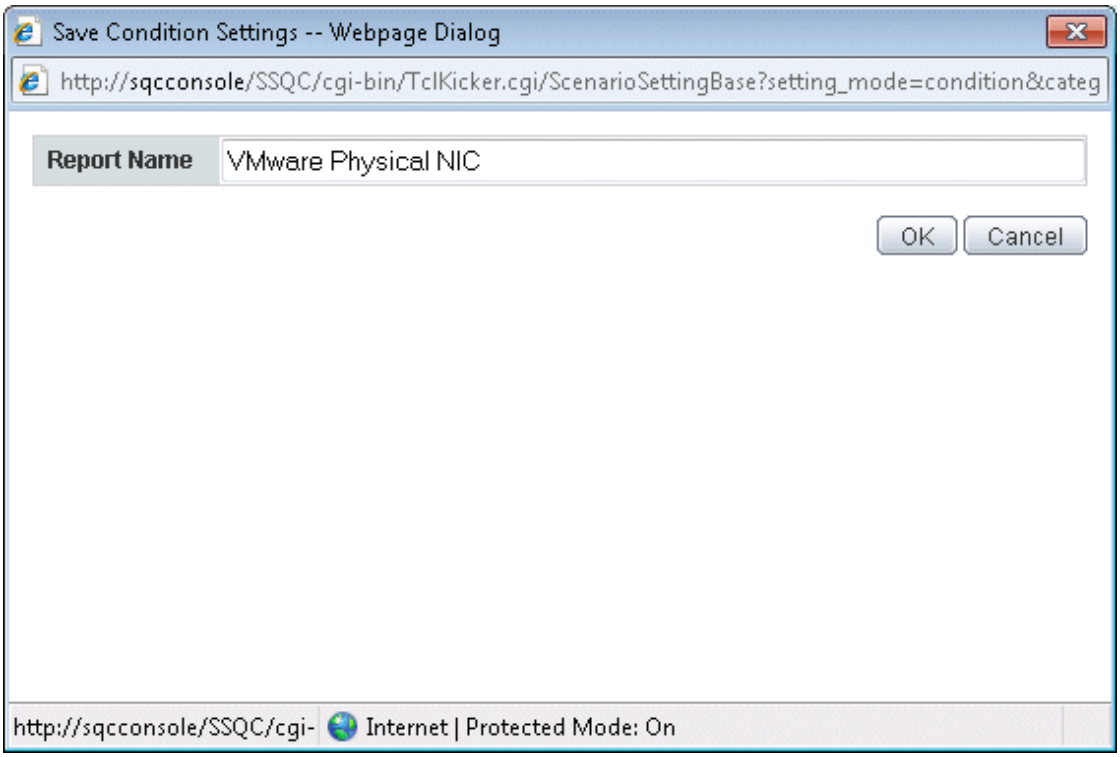
Item		Description
		"Scale Max": Please input the integer of 10-1000000000. (unit: MB/sec) "Scale Number": Please input the integer of 2-10.
	Count for data sent/received over network	When the graph is set, it selects it. All graphs are common to this setting. The default of "Scale Number" is 10. "Scale Max": Please input the integer of 10-1000000000. (unit: count/sec) "Scale Number": Please input the integer of 2-10.
	Network Throughput	When the graph is set, it selects it. All graphs are common to this setting. The default of "Scale Number" is 10. "Scale Max": Please input the integer of 10-1000000000. (unit: MB/sec) "Scale Number": Please input the integer of 2-10.
Aggregation method	Analyze by the maximum value.	Whether whether it analyzes it by the maxima is analyzed by the mean value is selected.
	Analyze by the mean value.	
Threshold		The threshold is specified by the percentage. "Threshold": Please input the integer of 1-100. (unit: %)
Server Group (layer 1)		The displayname of the server group is specified. The following characters can be used for the displayname. - Alphanumeric character - Symbols (except for $'"[]<>/?;:* \&.=) The platform dependent character cannot be used. The limitation of length is within 36 characters.
Server Group (layer 2)		
Server Group (layer 3)		

4.3.2.3 Preservation of condition setting

The condition of setting it by "Conditions" can be preserved for "My Category" by clicking "Save".



The superscription is preserved in the report that has been selected or it preserves it by the alias.

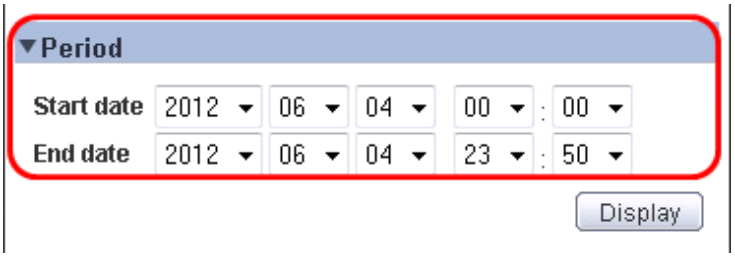


Item	Description
Report Name	The name of the report selected by "Scenario" is displayed. If report-name is not changed, the selected report is preserved in the superscription. It is added to the category selected by the report "Scenario" of the name specified that report-name is changed. The following characters can be used for the displayname. - Alphanumeric character - Symbols (except for $'"[]<>/?;:* \&,=%#+) The platform dependent character cannot be used. The limitation of length is within 50 characters.

4.3.3 Period

"Period" region is displayed by the kind of the report. The content is different depending on the specified report type.

It is an example of the screen as follows.



Period/Analysis Period

Item	Description
Start date End date	The period assumed to be an analysis Element is specified. The date and time are selected from the pull-down menu, and the starting date of the analysis and the completion date are specified.

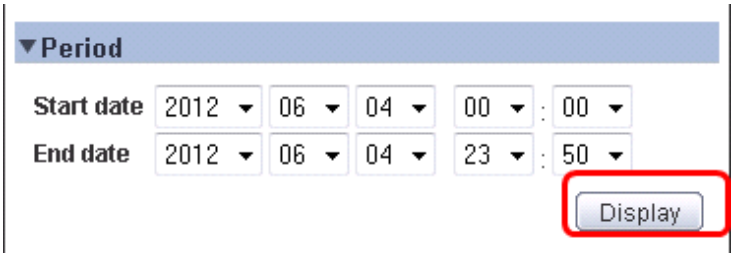
Forecast Date

-

Item	Description
Date	The specified forecast until the date is done. The date is selected from the pull-down menu.

4.3.4 Operation button(Display)

It explains the operation button.



button	Description
Display	The report is made on the specified condition. It becomes possible to be displayed in contents display area at the right of the analysis screen, and to display the history the report.

The message with "Loading... " is displayed in contents display area while making contents.

The operation of "Display" button is canceled while displaying this message.

4.3.5 Contents display area

It explains the operating instruction for displayed the report contents.

Sorting of table

The selected column is sorted when the heading of the arbitrary column of the table displayed in the report contents is selected and the table can be sorted to the key.

As for sorting, the toggle operates in ascending order/descending order.

Note

- Sorting the numerical value operates correctly only for the numerical value all the values of a specified column. When the null value etc. are contained, it is not possible to sort it correctly.
- If number of digits (yyyy/mm/dd hh:mm:ss etc.) is not arranged, sorting the date/time cannot be correctly sorted. It is necessary to note it for the data input as a user data.

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

The following buttons are prepared under the report contents.

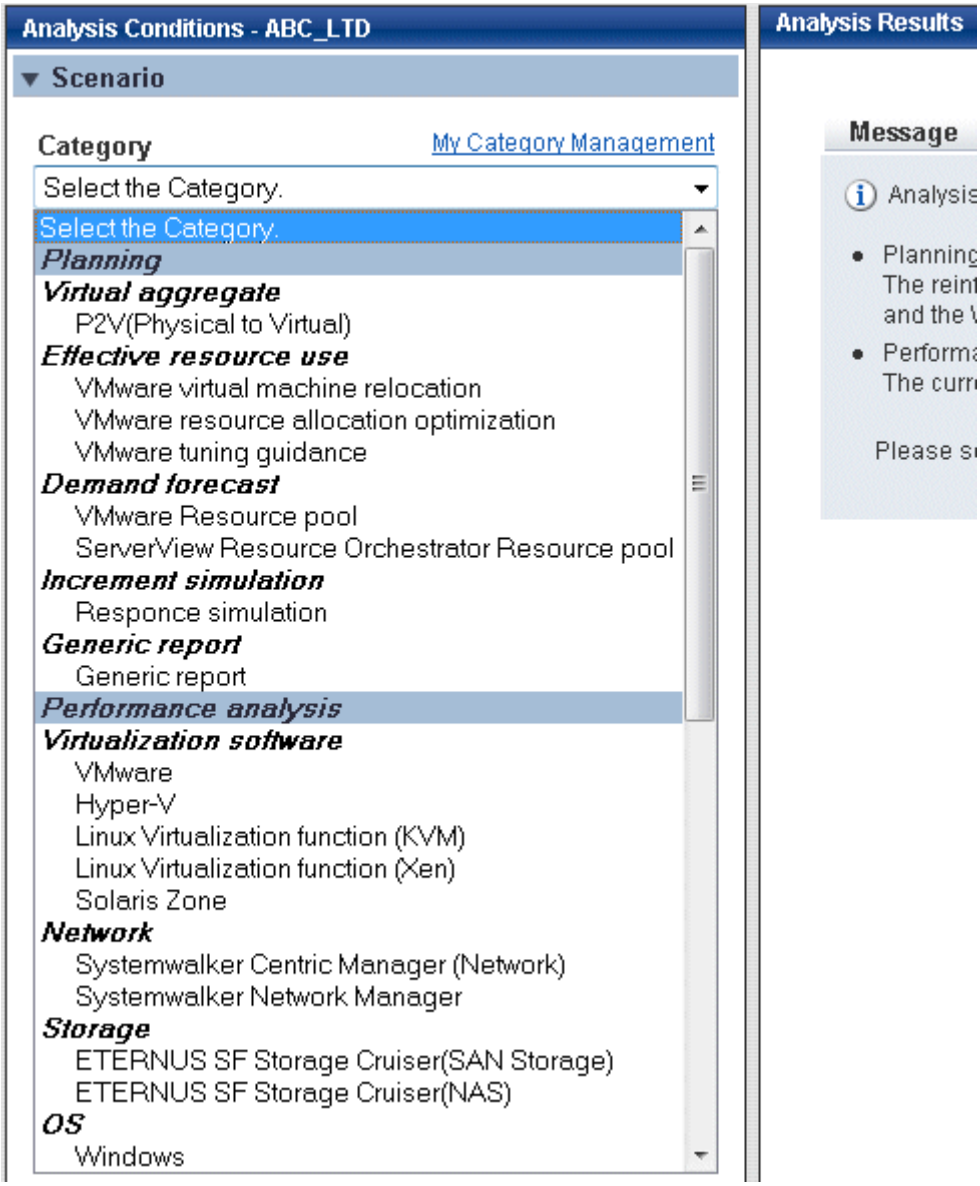
- **Save in CSV format**
  The data within the displayed range can be downloaded by Comma Separated Value.
- **Save as Excel**(R)
  When analysis display, and a regular report is made, it is displayed when "Creates an Excel(R) file" check box is checked. Displayed contents can be downloaded by the Excel(R) form.
- **Display in separate window**
  It is possible to display it in another window.
- **Print**
  Displayed contents can be printed.

4.4 Use of Analysis/Planning Window

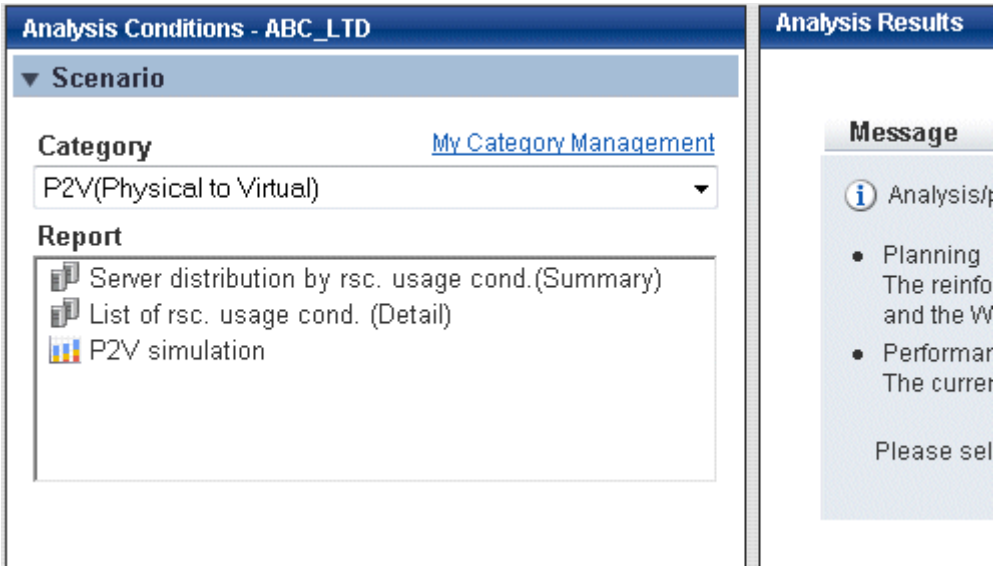
4.4.1 The scenario is used and the produce of the report.

It explains the report by using the scenario and it explains the method of the produce.

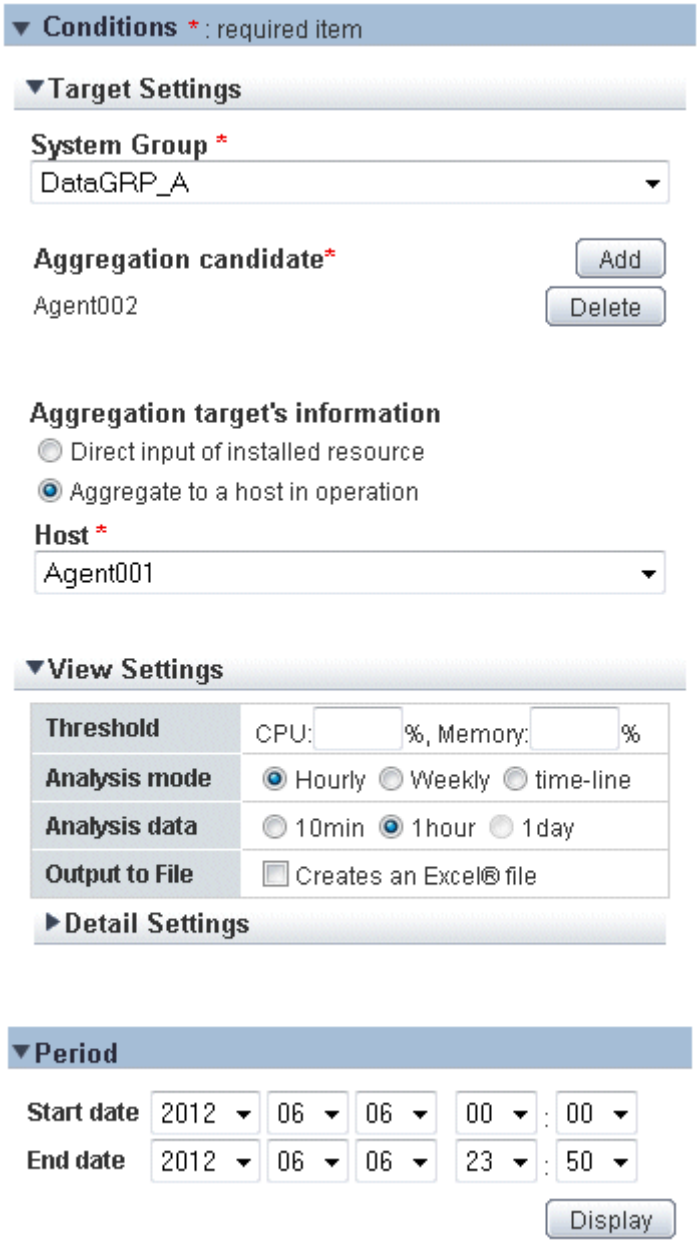
1. The category is selected.



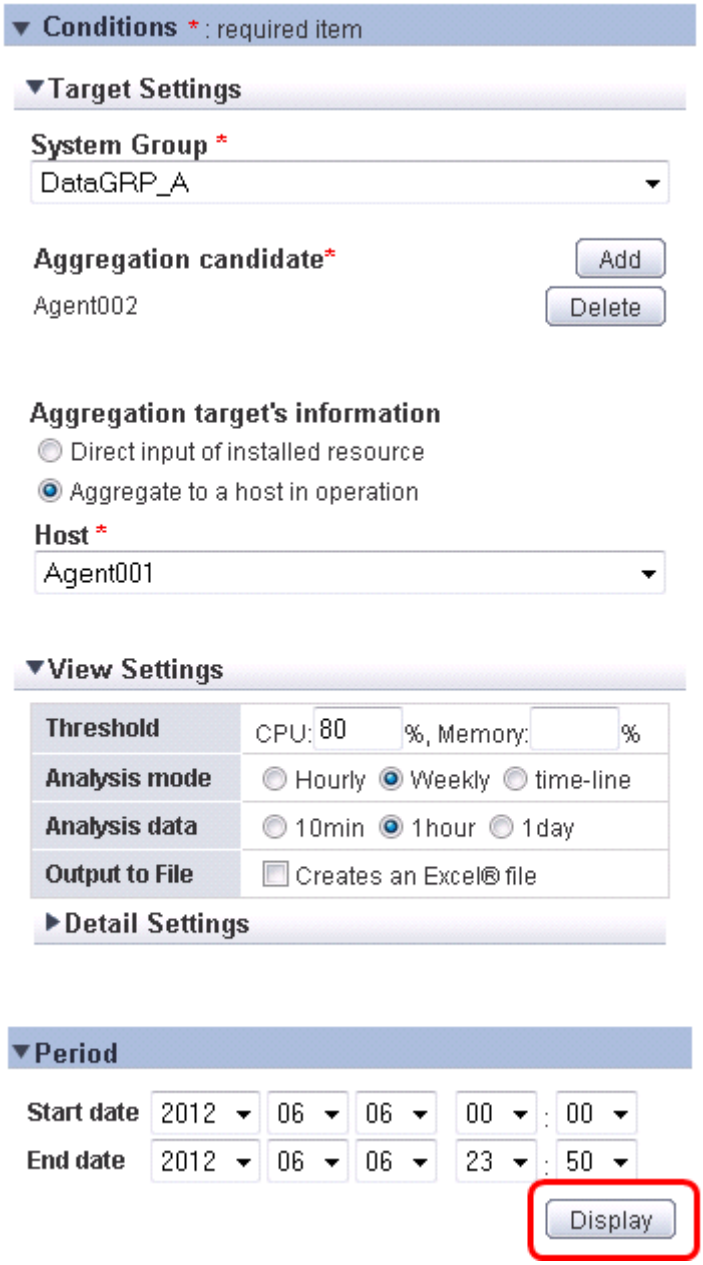
2. Because the report registered in the selected category is displayed, a target report is selected.



3. Itemses such as "Conditions" and "Period" are properly set.



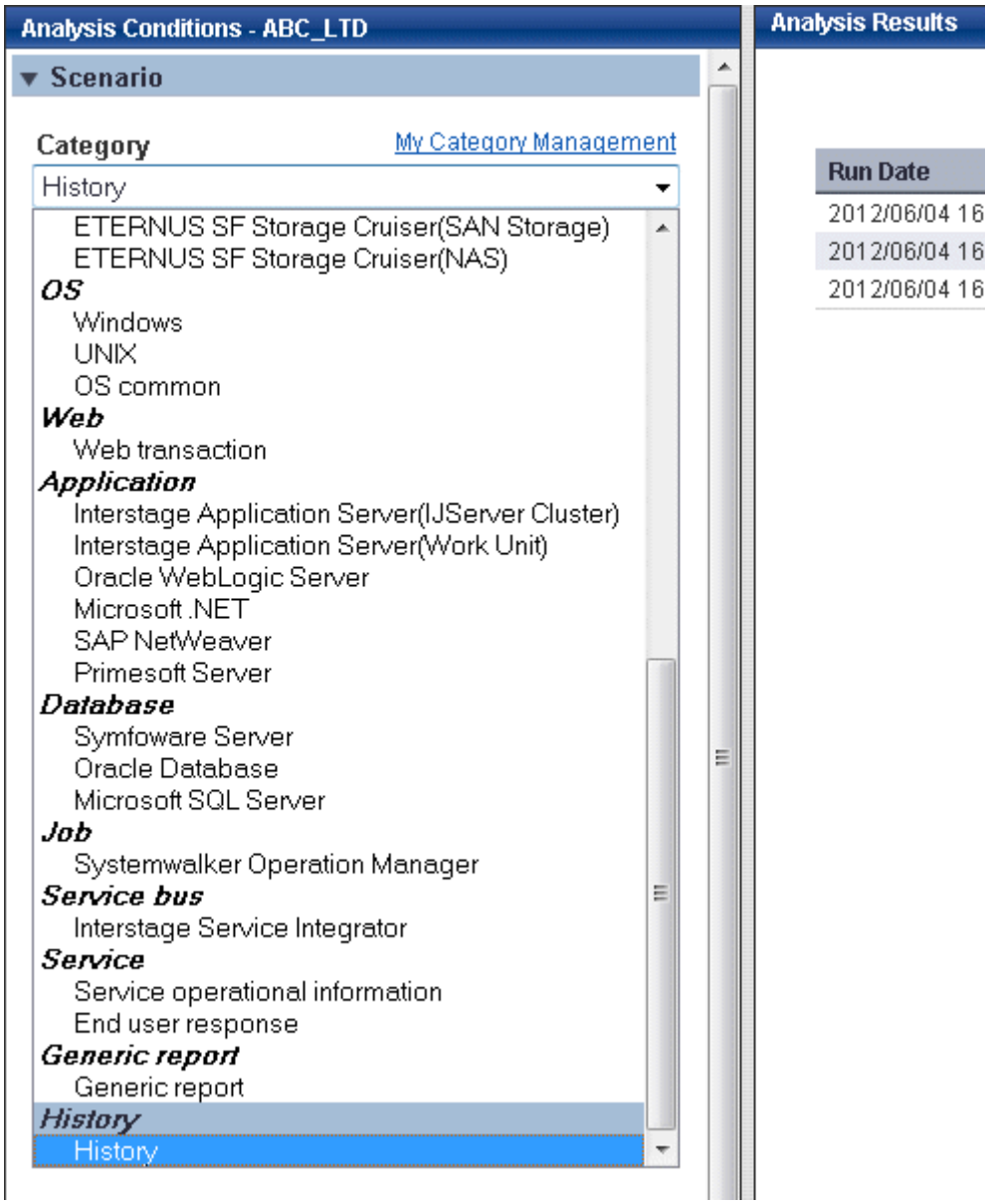
4. "Display" button under the analysis condition region is clicked.



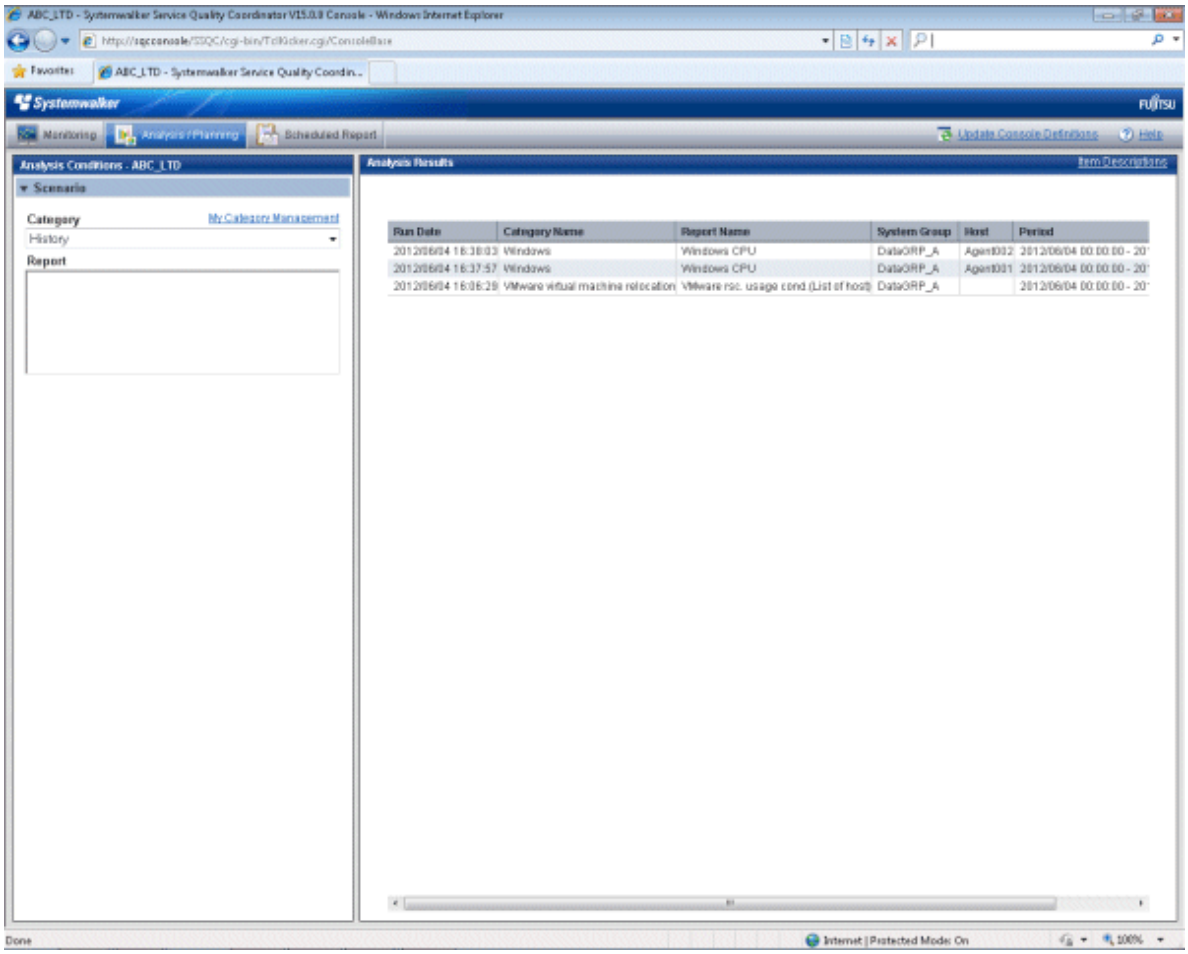
4.4.2 Refer to the history of the made report.

It explains the method of referring to the history of the made report.

1. "History" of the category is selected.



2. When the each line of the displayed list is clicked, the report of the correspondence made before is displayed in another window. The histories of the report are preserved up to 50.
   The amount that exceeds it is automatically deleted from an old analysis screen of the date and time of creation.



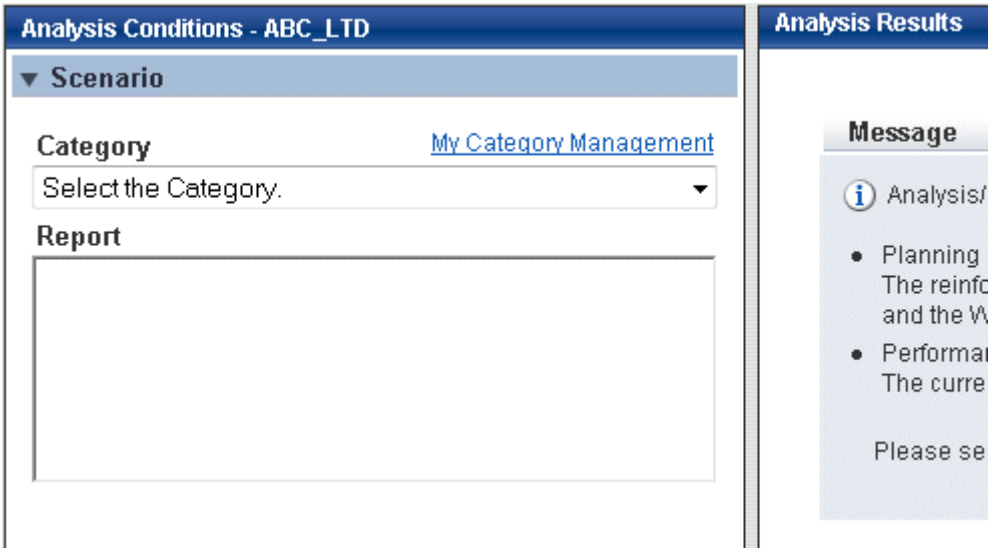
Point

The report that is not the deletion equipment can be preserved from browser's "File" menu to the arbitrary folder in the window that selects the line and was opened.

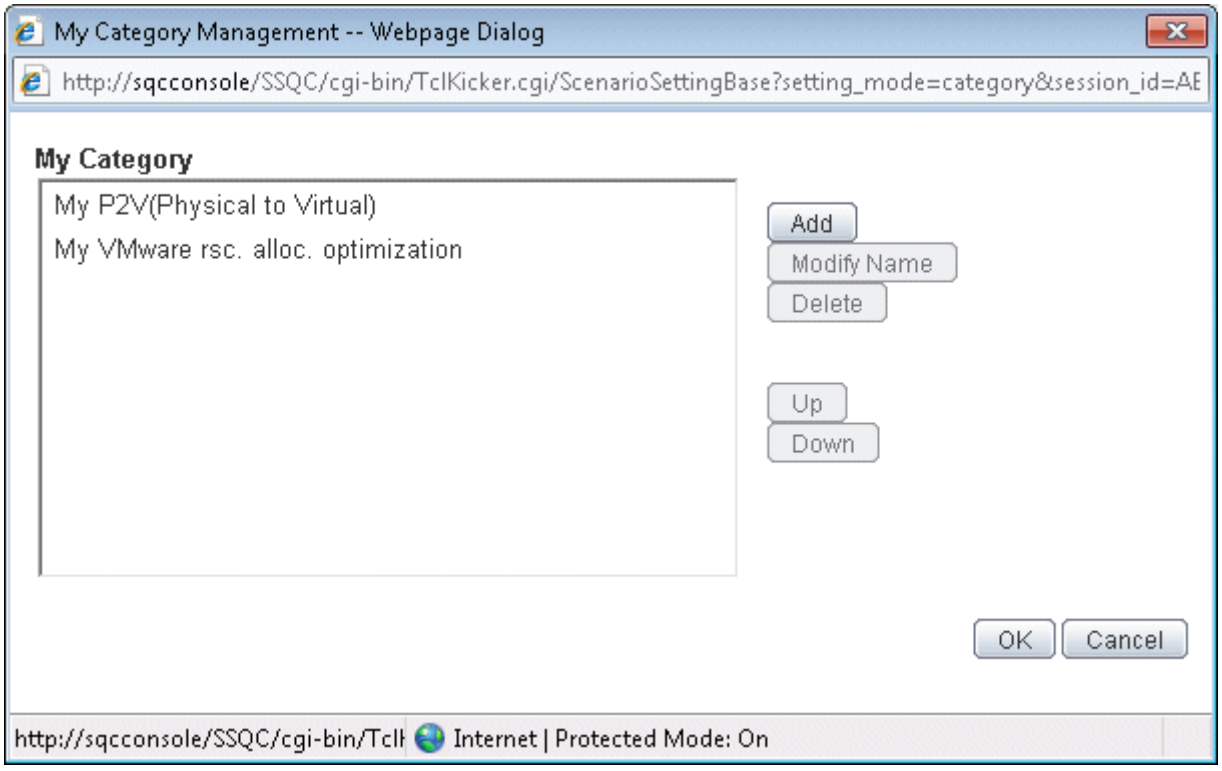
4.4.3 The scenario is newly registered, and the condition in the report is preserved.

It explains the method of newly registering the scenario and preserving the condition in the report.

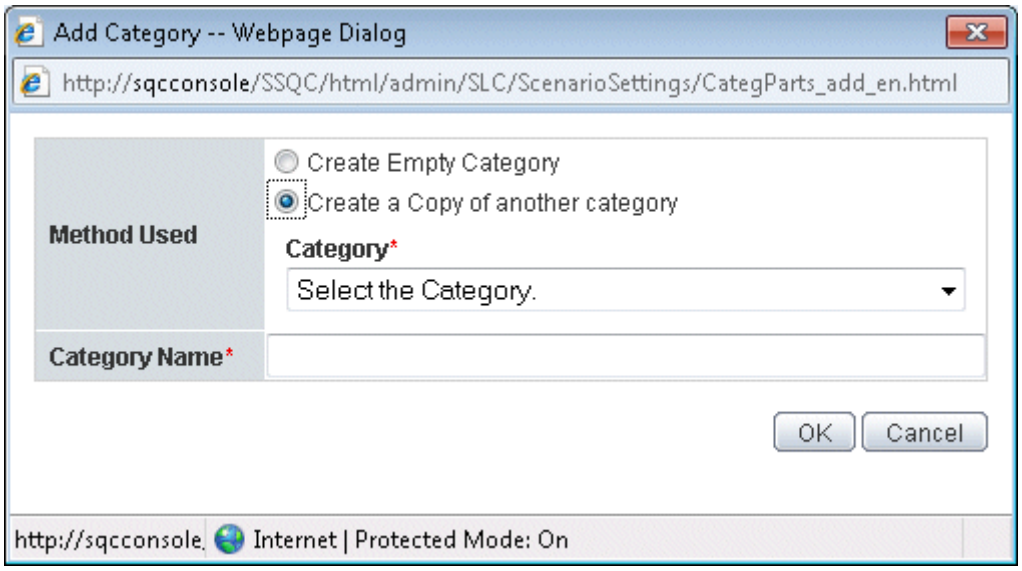
1. "My Category Management" in "Category" column is clicked.



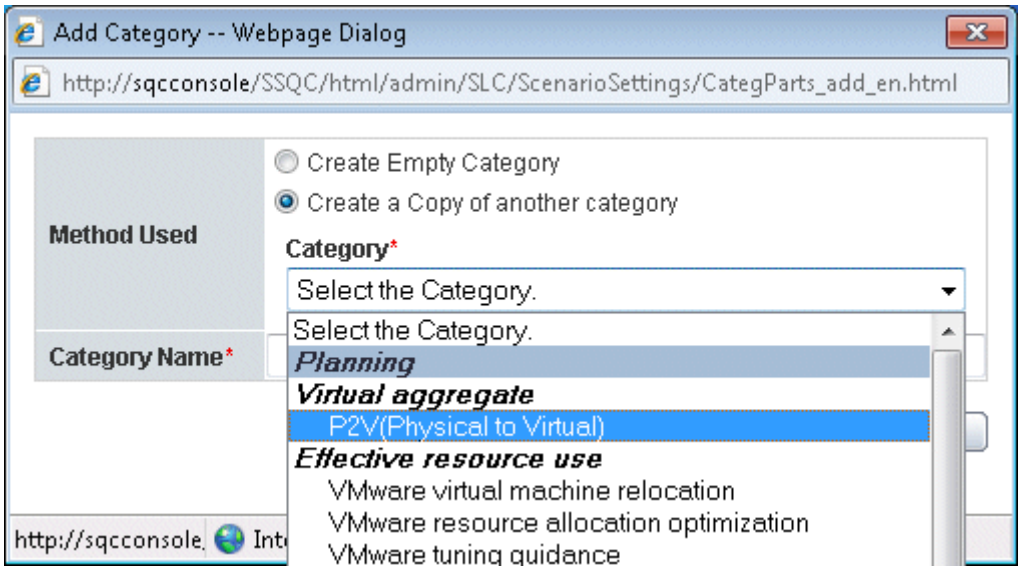
2. "Add" button is clicked in the displayed "My Category Management" window.



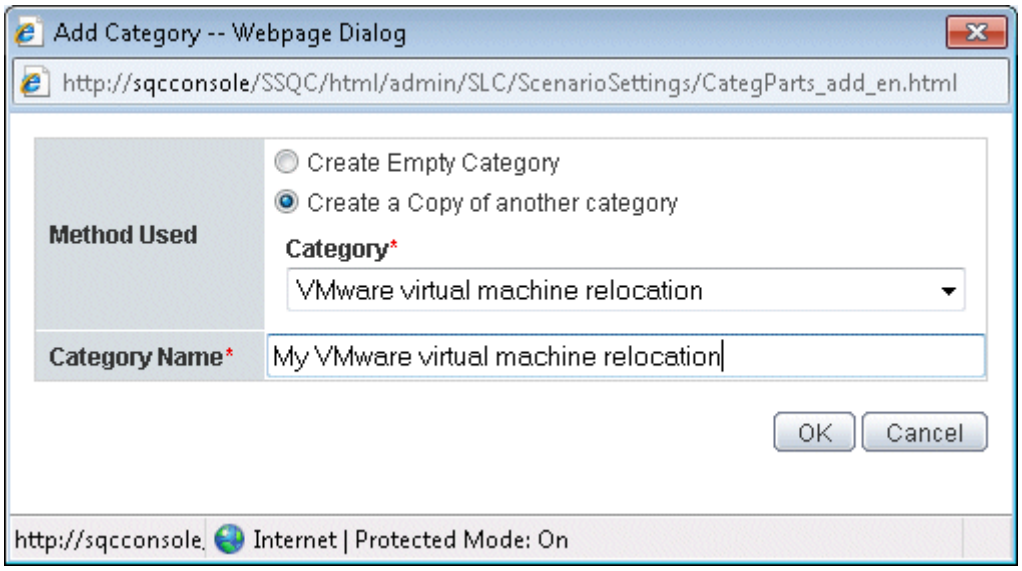
3. "Create Empty Category" or "Create a Copy of anther category" button is selected in the displayed "Add Category" window.



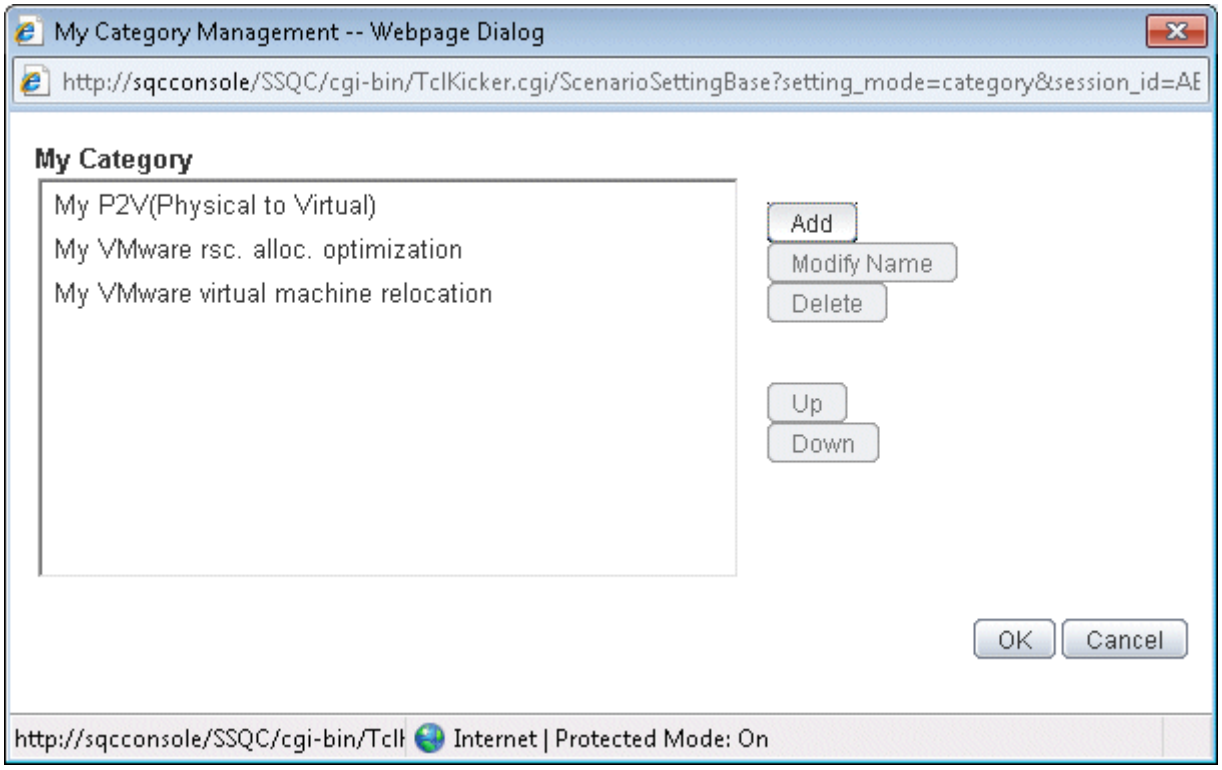
4. When "Create a Copy of anther category" is selected, the category registered in the console is selected.



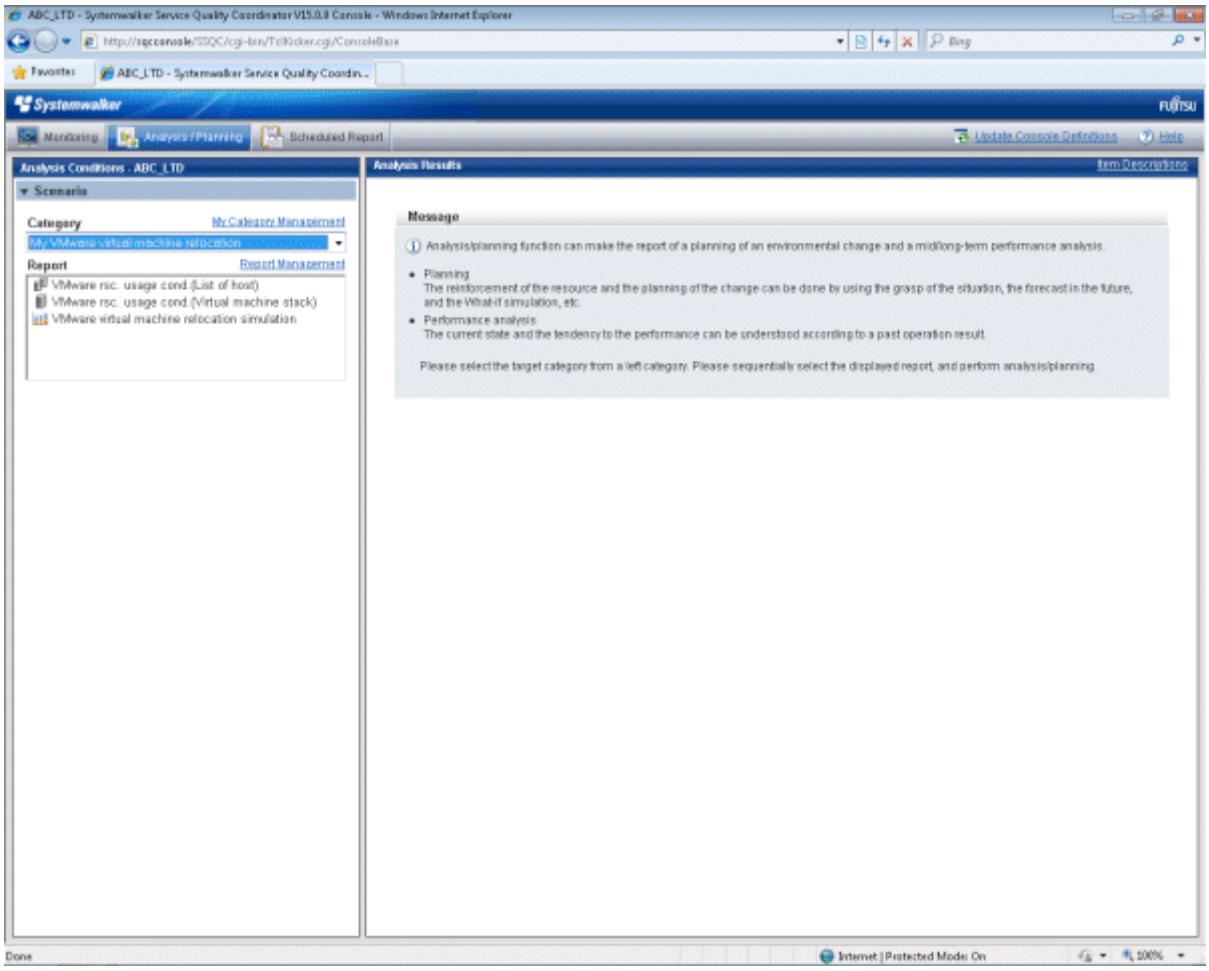
5. The name of a new category is input to "Category Name" column, and OK button is clicked.



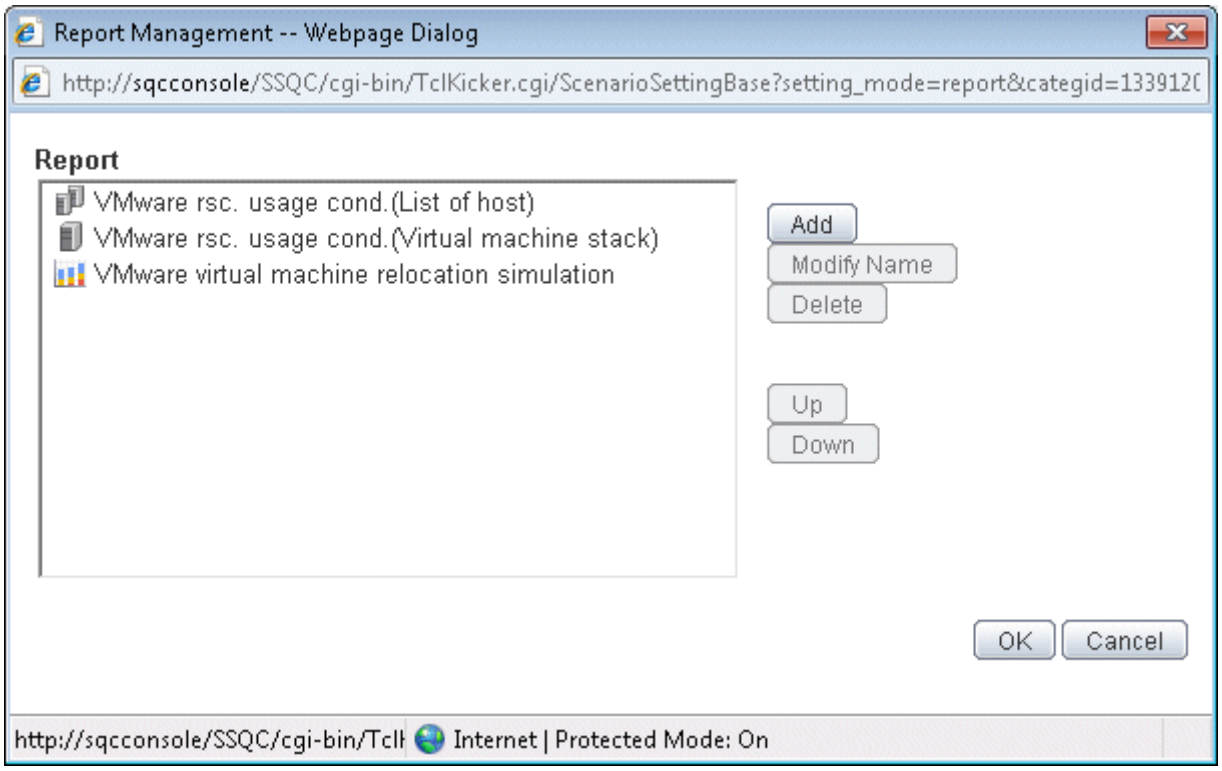
6. OK button is clicked in "My Category Management" window.



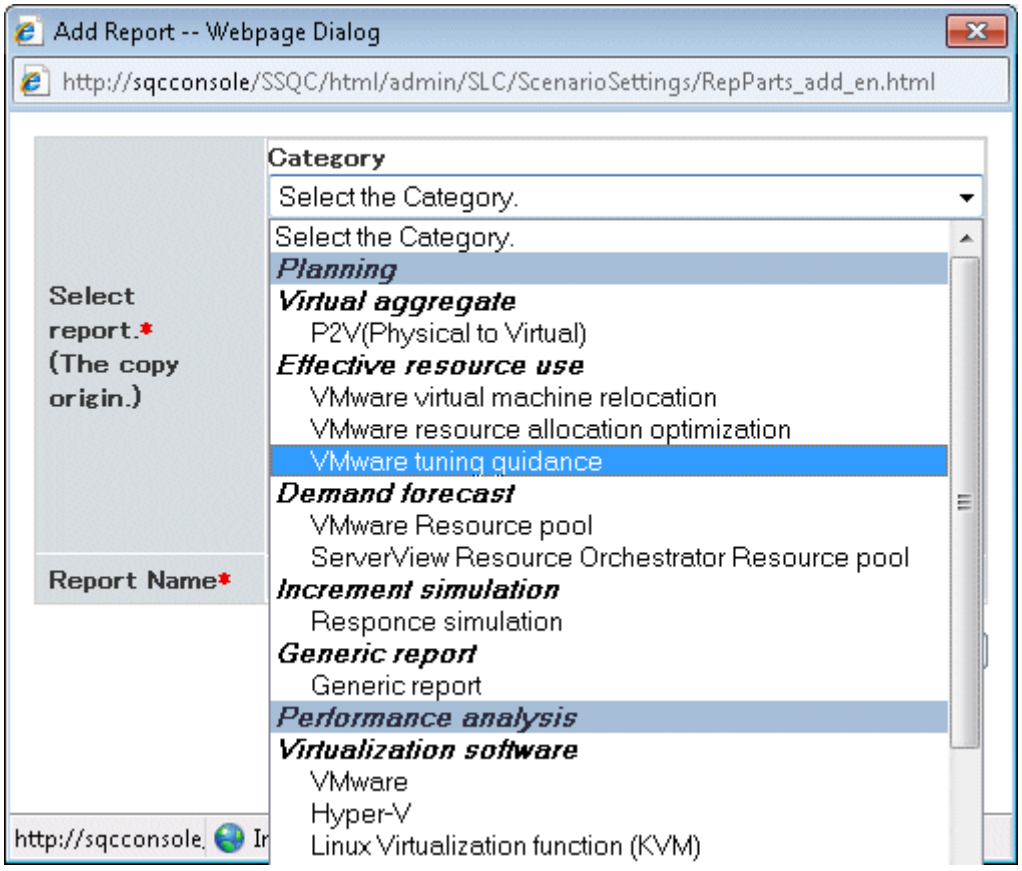
7. When a target report is not registered in the category newly registered, "Report Management" in "Report" column is clicked.



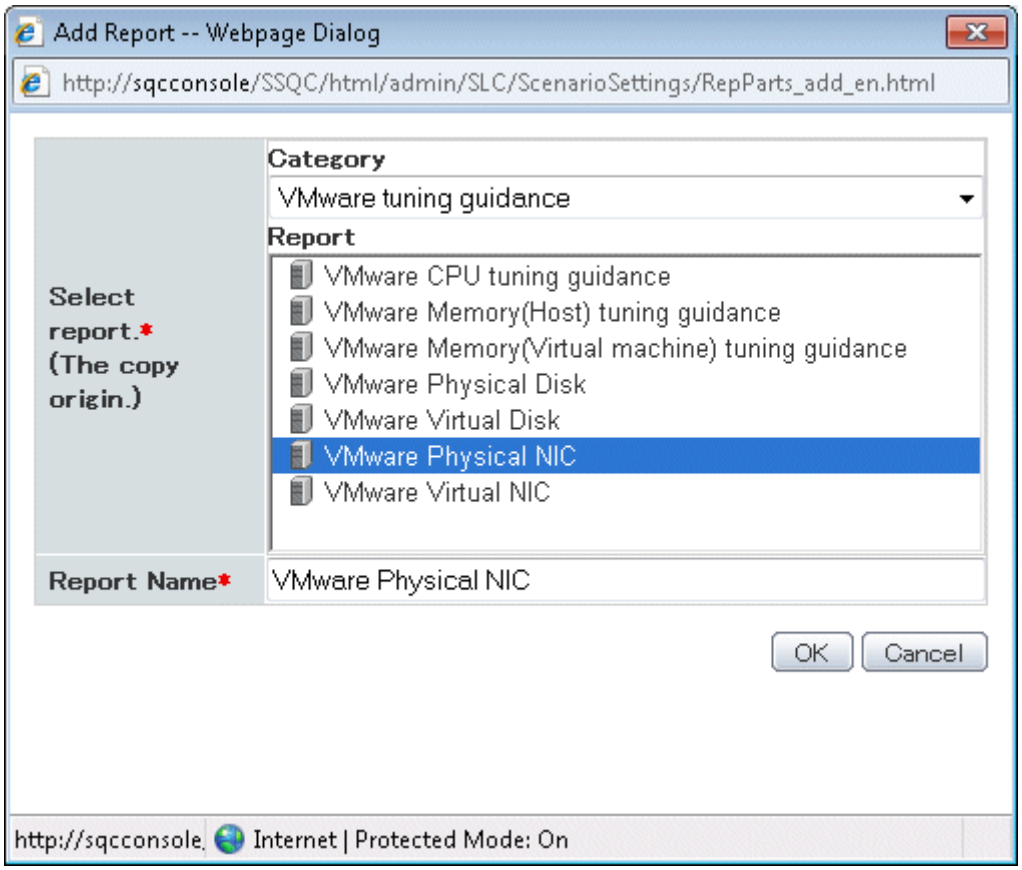
8. "Add" button is clicked in the displayed "Report Management" window.



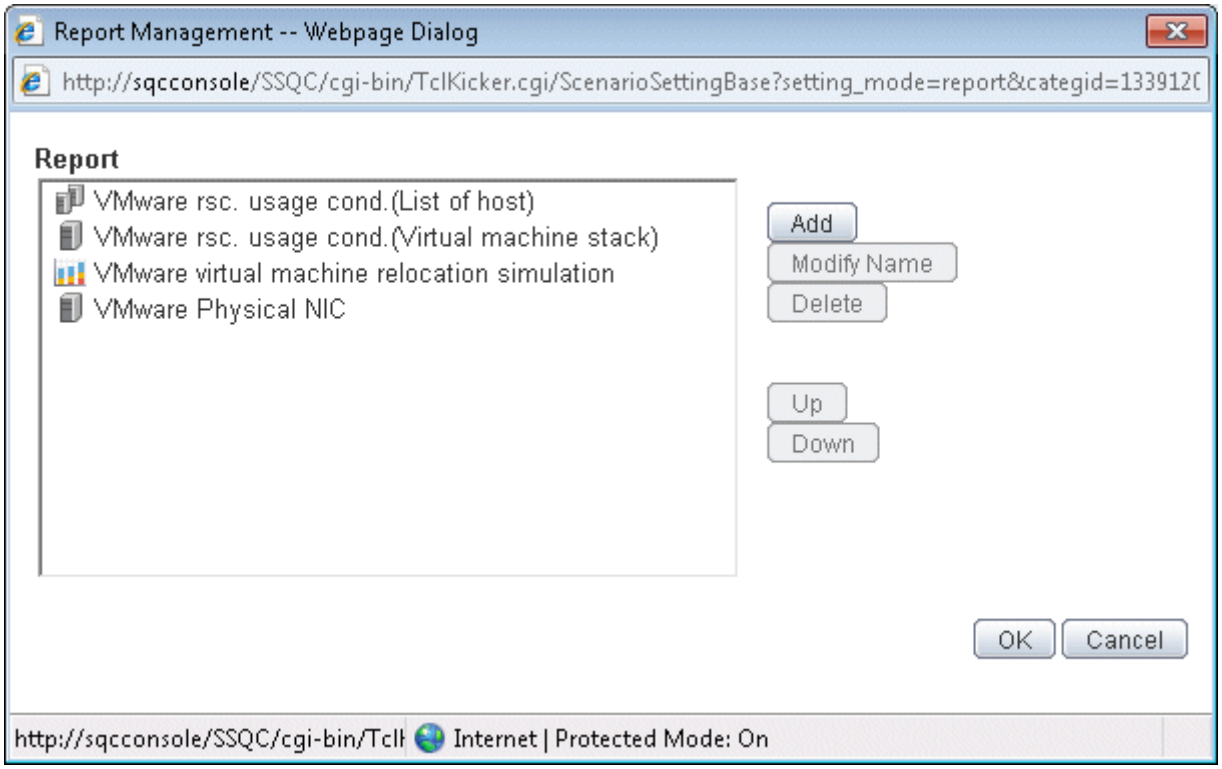
9. The category including the report to be copied is selected in the displayed "Add Report" window.



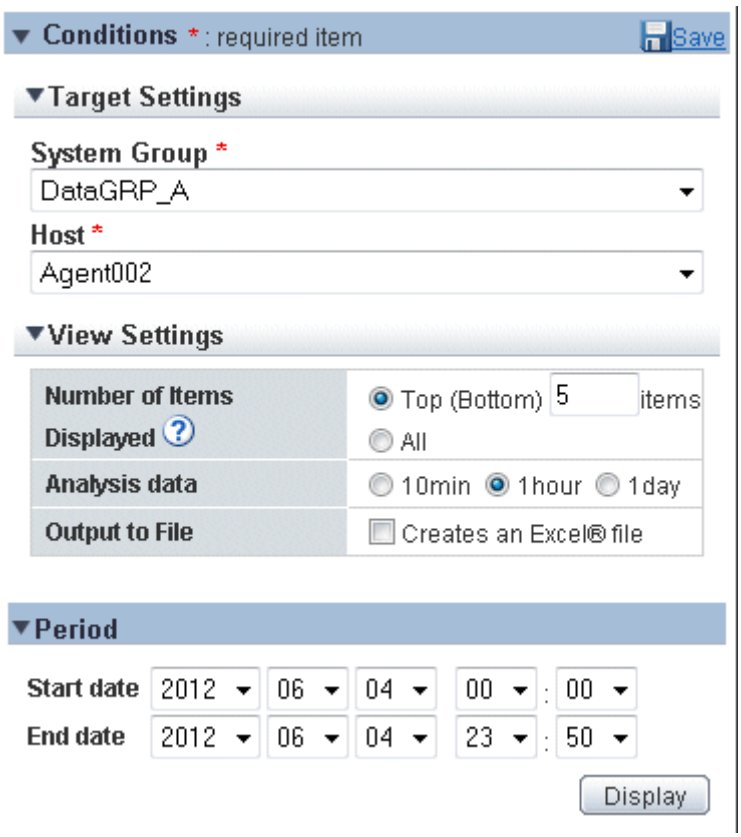
10. Because the list display is done, the report included in the selected category selects the report to be copied. Two or more reports can be selected. After the Selection, OK button is clicked.



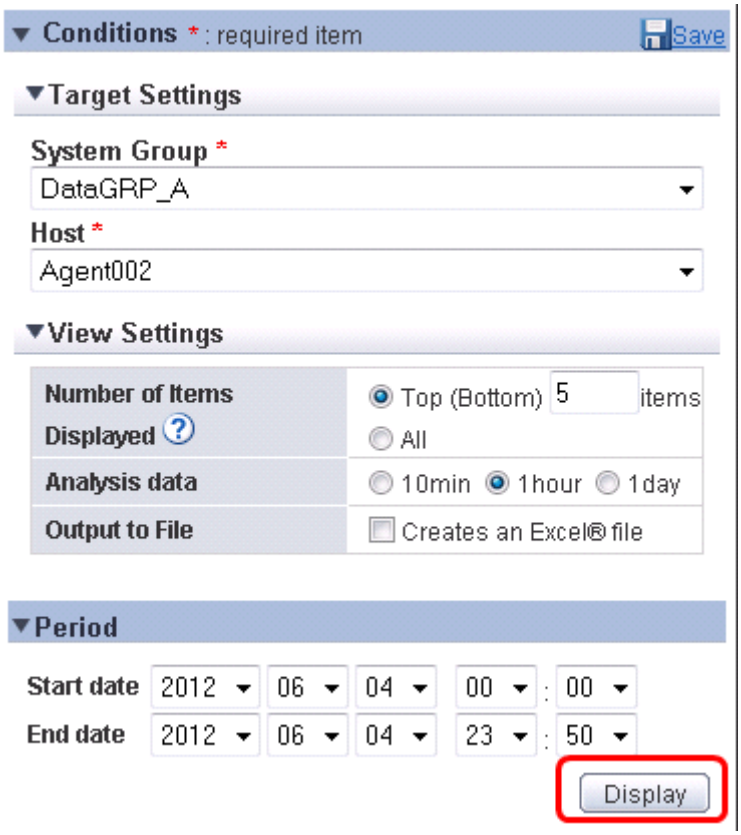
11. "OK" button is clicked in "Report Management" window.



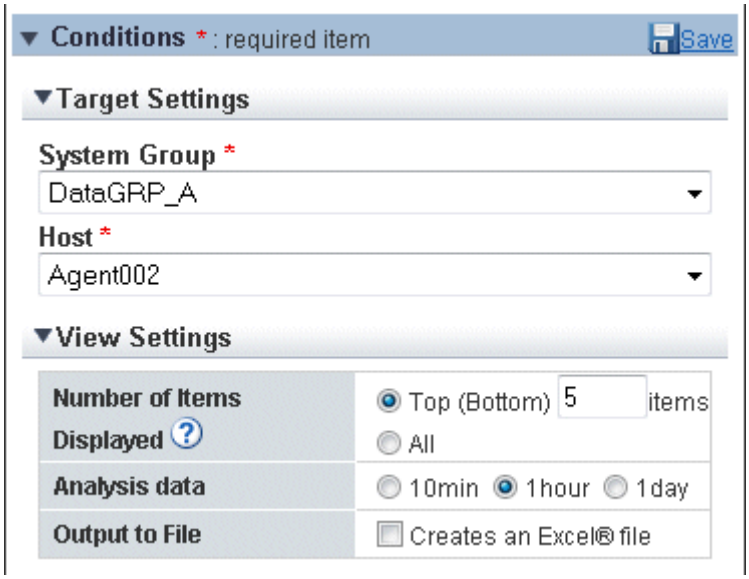
12. "Conditions" and "Period" are properly set.



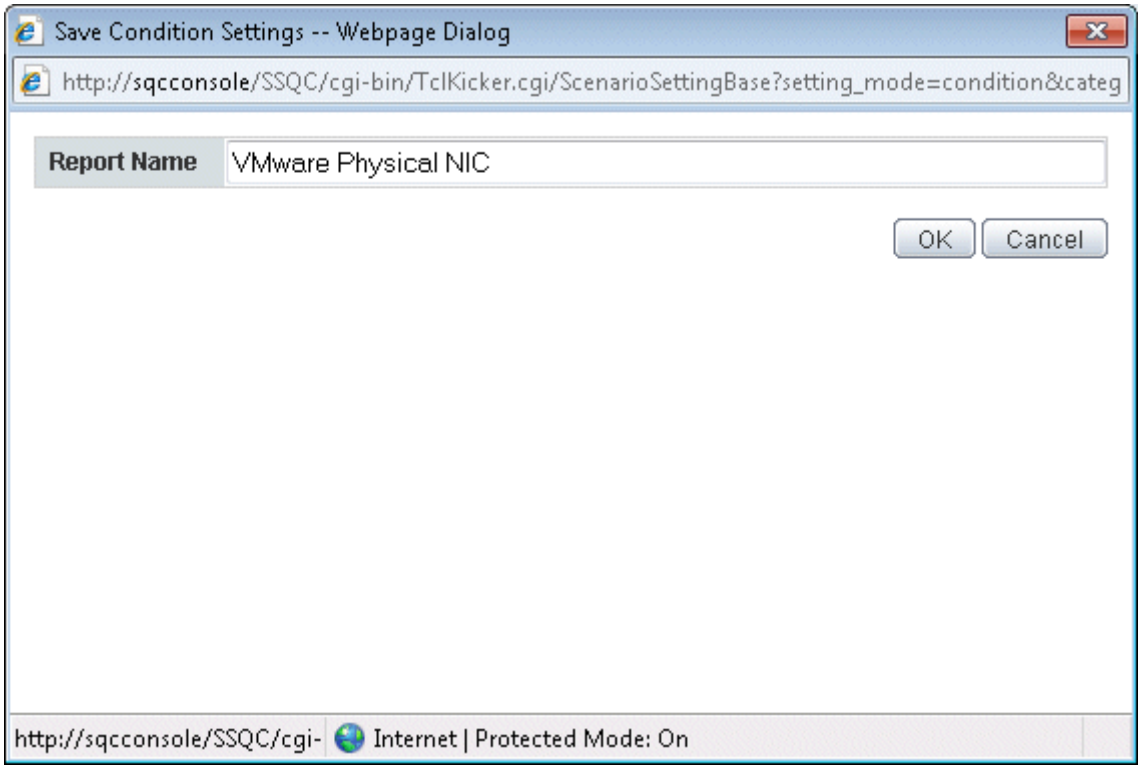
13. "Display" button under the analysis condition region is clicked.



14. When the condition setting is preserved, "Save" in "Conditions" column is clicked with the displayed report if it is unquestionable.



15. Arbitrary report-name is input in the displayed "Save Condition Setting" window, and "OK" button is clicked. When report-name is changed, it is added to the category that the report of the condition specifying it selected. When neither the category nor report-name have been changed, it is overwrited by the report in the Selection.

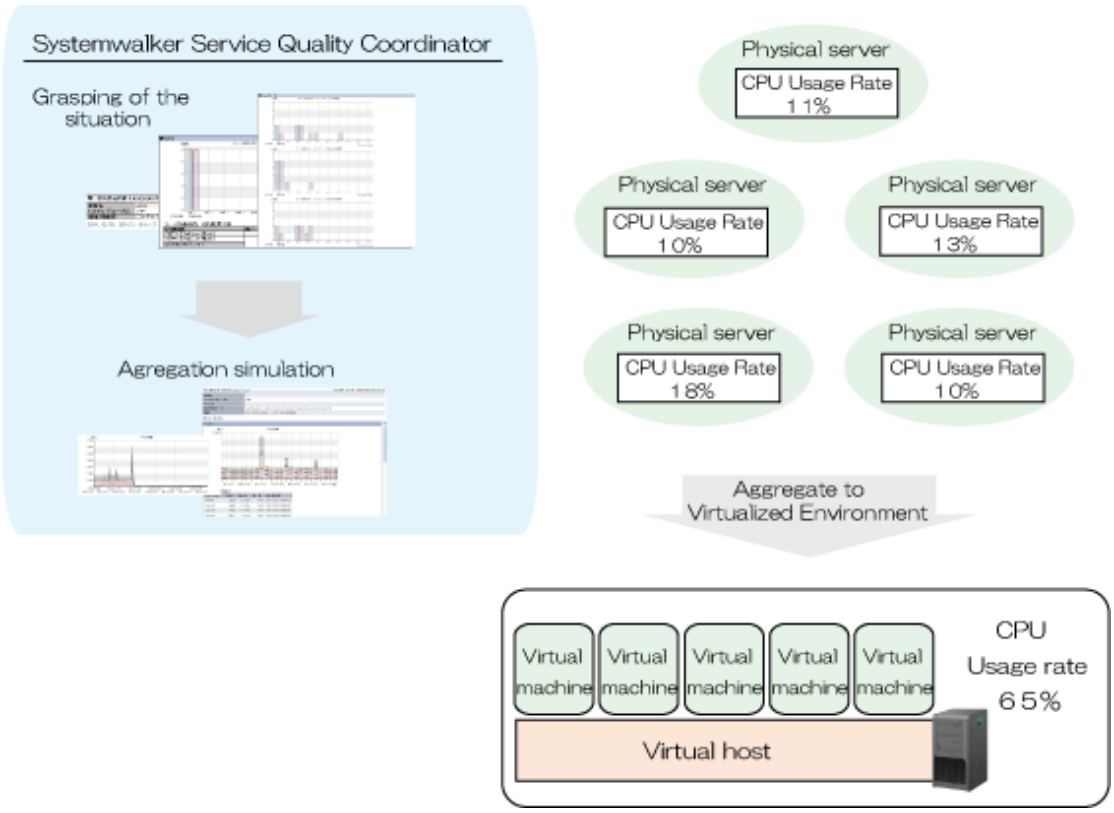


4.5 Operation Using Scenario

4.5.1 Simulation when physical server is consolidated in virtual environment:[P2V(Physical to Virtual)]

When a physical server is consolidated in the virtual environment, the simulation with high accuracy based on the operation result can be done in Systemwalker Service Quality Coordinator.

Because it can be confirmed whether there is problem in prior based on the simulation result, it is possible to consolidate it in the best virtual environment.



Here, it explains the procedure of the simulation that uses the scenario of the **P2V(Physical to Virtual)** category.

Point

A virtual consolidating can be examined about the host in the same system group by the following procedures.

Grasp of current state

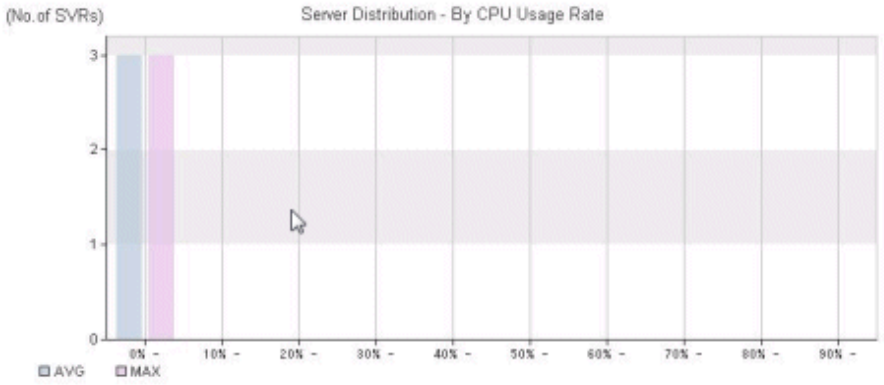
1. The **Server distribution by rsc. usage cond.(Summary)** report of the **P2V(Physical to Virtual)** category is selected with **Analysis/Planning** window, the analytical condition is set, and the report is displayed.

   Please refer to "4.3 How to Operate the Analysis/Planning Window" for the setting method of the analytical condition.

▼ 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

▼ CPU



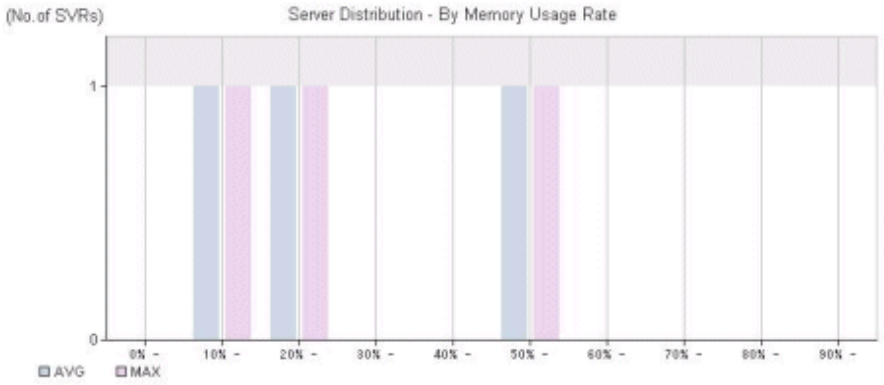
Server Distribution - By CPU Usage Rate

CPU usage rate	0% -	10% -	20% -	30% -	40% -	50% -	60% -	70% -	80% -	90% -
AVG usage rate [Number of servers (Ratio in %)]	3 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
MAX usage rate [Number of servers (Ratio in %)]	3 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)

Save in CSV format

Save in CSV format [OSRESOURCE_PROCESSOR]

▼ Memory



Server Distribution - By Memory Usage Rate

Memory usage rate	0% -	10% -	20% -	30% -	40% -	50% -	60% -	70% -	80% -	90% -
AVG usage rate [Number of servers (Ratio in %)]	0 (0%)	1 (33%)	1 (33%)	0 (0%)	0 (0%)	1 (33%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
MAX usage rate [Number of servers (Ratio in %)]	0 (0%)	1 (33%)	1 (33%)	0 (0%)	0 (0%)	1 (33%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)

Save in CSV format

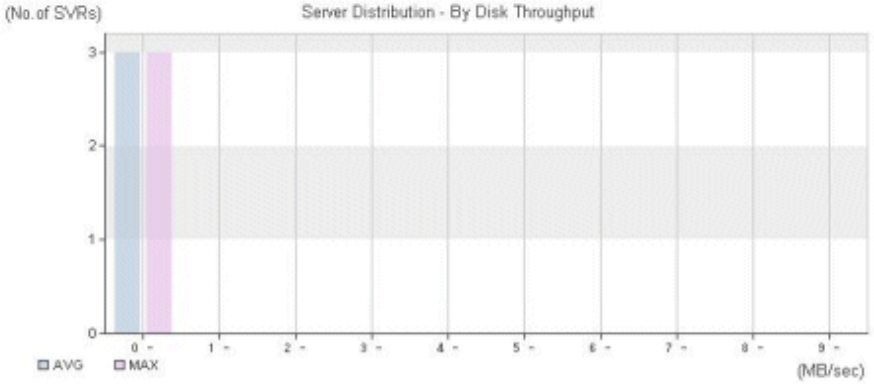
Save in CSV format [OSRESOURCE_MEMORY]

Save in CSV format [OSRESOURCE_SYSTEMINFO]

▼ Disk

Server Distribution - By Disk I/O Count

Disk I/O count(count/sec)	0 -	1 -	2 -	3 -	4 -	5 -	6 -	7 -	8 -	9 -
AVG I/O count [Number of servers (Ratio in %)]	0 (0%)	1 (33%)	1 (33%)	0 (0%)	1 (33%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
MAX I/O count [Number of servers (Ratio in %)]	0 (0%)	1 (33%)	0 (0%)	1 (33%)	0 (0%)	0 (0%)	1 (33%)	0 (0%)	0 (0%)	0 (0%)



Server Distribution - By Disk Throughput

Disk throughput(MB/sec)	0 -	1 -	2 -	3 -	4 -	5 -	6 -	7 -	8 -	9 -
AVG throughput [Number of servers (Ratio in %)]	3 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
MAX throughput [Number of servers (Ratio in %)]	3 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)

Save in CSV format

Save in CSV format [OSRESOURCE_PHYDISK]

Server Distribution - By Count for Data Sent/Received over Network

Count for data sent/received over network(count/sec)	0 -	71 -	142 -	213 -	284 -	355 -	426 -	497 -	568 -	639 -
AVG count for data sent/received [Number of servers (Ratio in %)]	1 (33%)	1 (33%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (33%)
MAX count for data sent/received [Number of servers (Ratio in %)]	1 (33%)	1 (33%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (33%)

Server Distribution - By Network Throughput

Network throughput(MB/sec)	0 -	1 -	2 -	3 -	4 -	5 -	6 -	7 -	8 -	9 -
AVG throughput [Number of servers (Ratio in %)]	3 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
MAX throughput [Number of servers (Ratio in %)]	3 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)

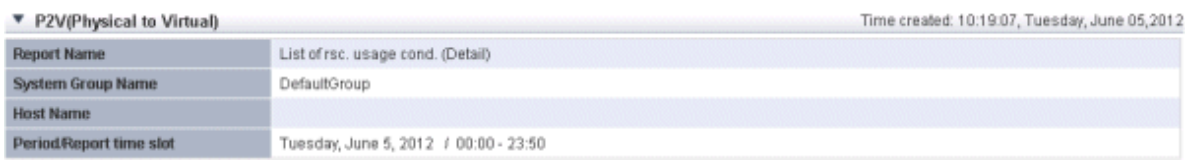
Save in CSV format

Save in CSV format [OSRESOURCE_NET_INTERFACE]

The situation whether the resource of the entire server that becomes the Element of a virtual consolidating is used or do not use it can be understood at one view. When the server that cannot use the server resource enough is consolidated, the effect or more is achieved.

2. The **List of rsc. usage cond. (Detail)** report of the **P2V(Physical to Virtual)** category is selected on analysis/planning screen, the analytical condition is set, and the report is displayed.

   Please refer to "4.3 How to Operate the Analysis/Planning Window" for the setting method of the analytical condition.



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	0.60	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	700.89	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, the resource quota and the amount of each dripping toast of the resource use are displayed by the list.

For instance, it sorts with CPU usage rate and Memory usage rate, and the host that there is becoming empty in the resource is confirmed. The host with a low percentage utilisation is examined as a consolidating candidate.

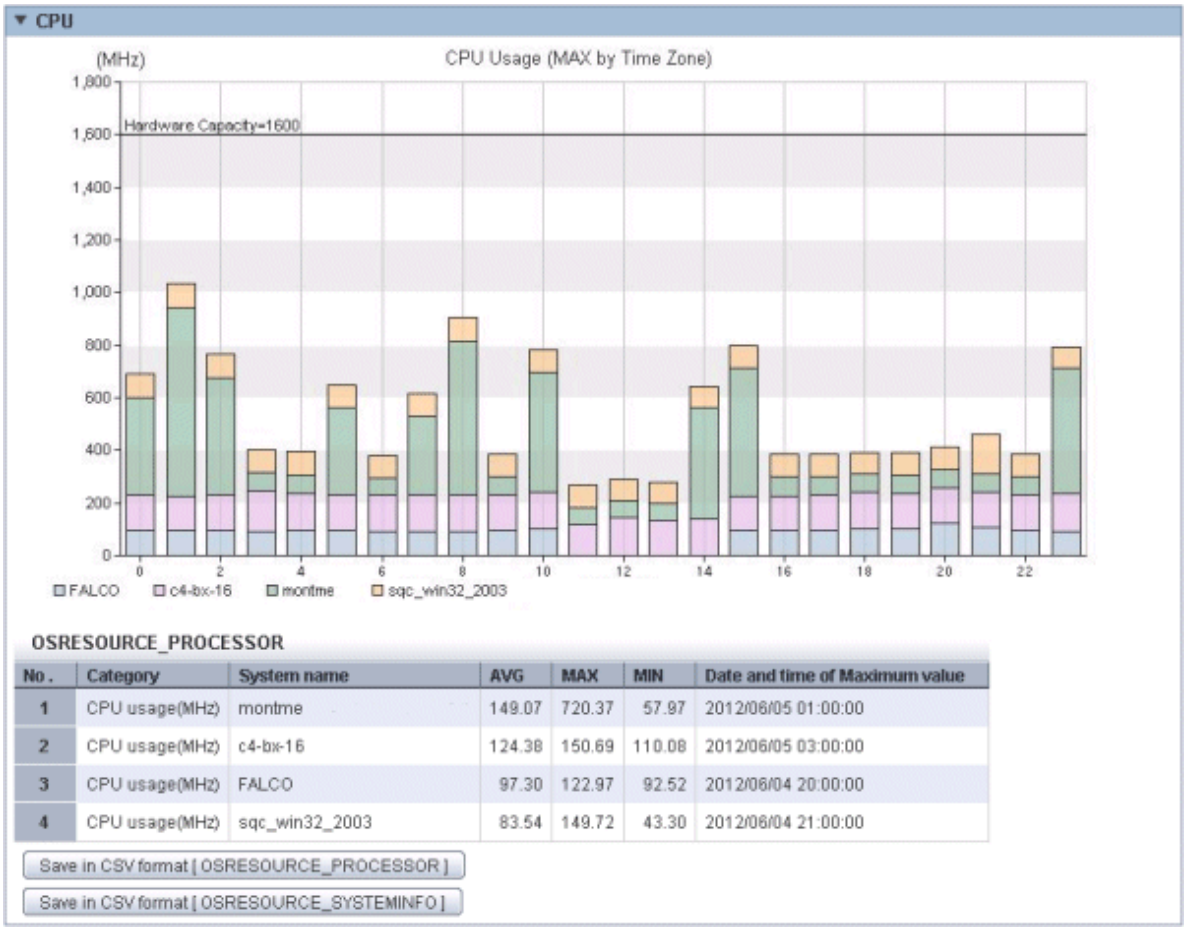
Please confirm whether the throughput of the disk and the Network is large about the host who makes it to the consolidating candidate.

Simulation of consolidating

1. The **P2V simulation** report of the **P2V(Physical to Virtual)** category is selected with **Analysis/Planning** window, the analytical condition is set, and the report is displayed.

   Please refer to "4.3 How to Operate the Analysis/Planning Window" for the setting method of the analytical condition.

   - Simulation method: Each time zone



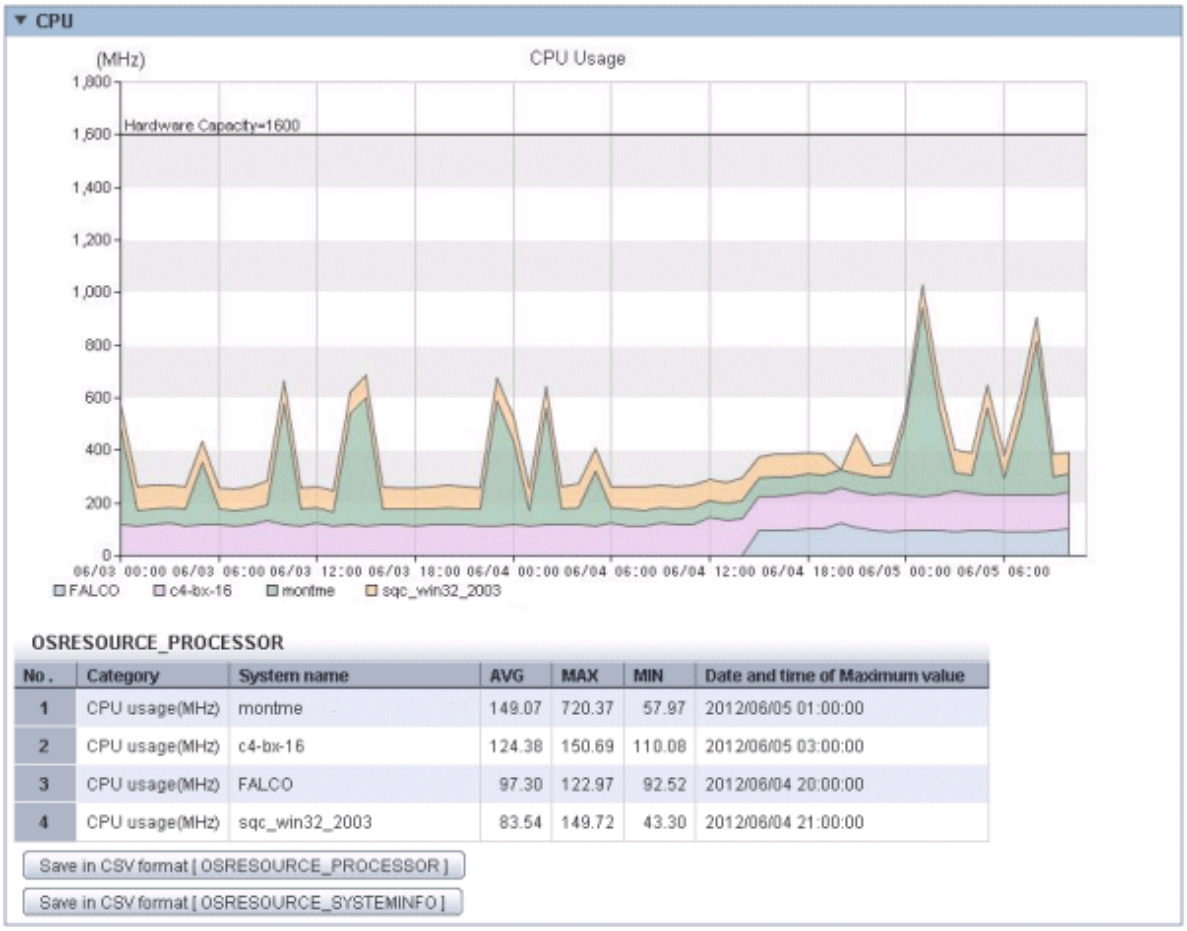
OSRESOURCE_PROCESSOR

No.	Category	System name	AVG	MAX	MIN	Date and time of Maximum value
1	CPU usage(MHz)	montme	149.07	720.37	57.97	2012/06/05 01:00:00
2	CPU usage(MHz)	c4-bx-16	124.38	150.69	110.08	2012/06/05 03:00:00
3	CPU usage(MHz)	FALCO	97.30	122.97	92.52	2012/06/04 20:00:00
4	CPU usage(MHz)	sqc_win32_2003	83.54	149.72	43.30	2012/06/04 21:00:00

Save in CSV format [OSRESOURCE_PROCESSOR]

Save in CSV format [OSRESOURCE_SYSTEMINFO]

- Simulation method: Time series



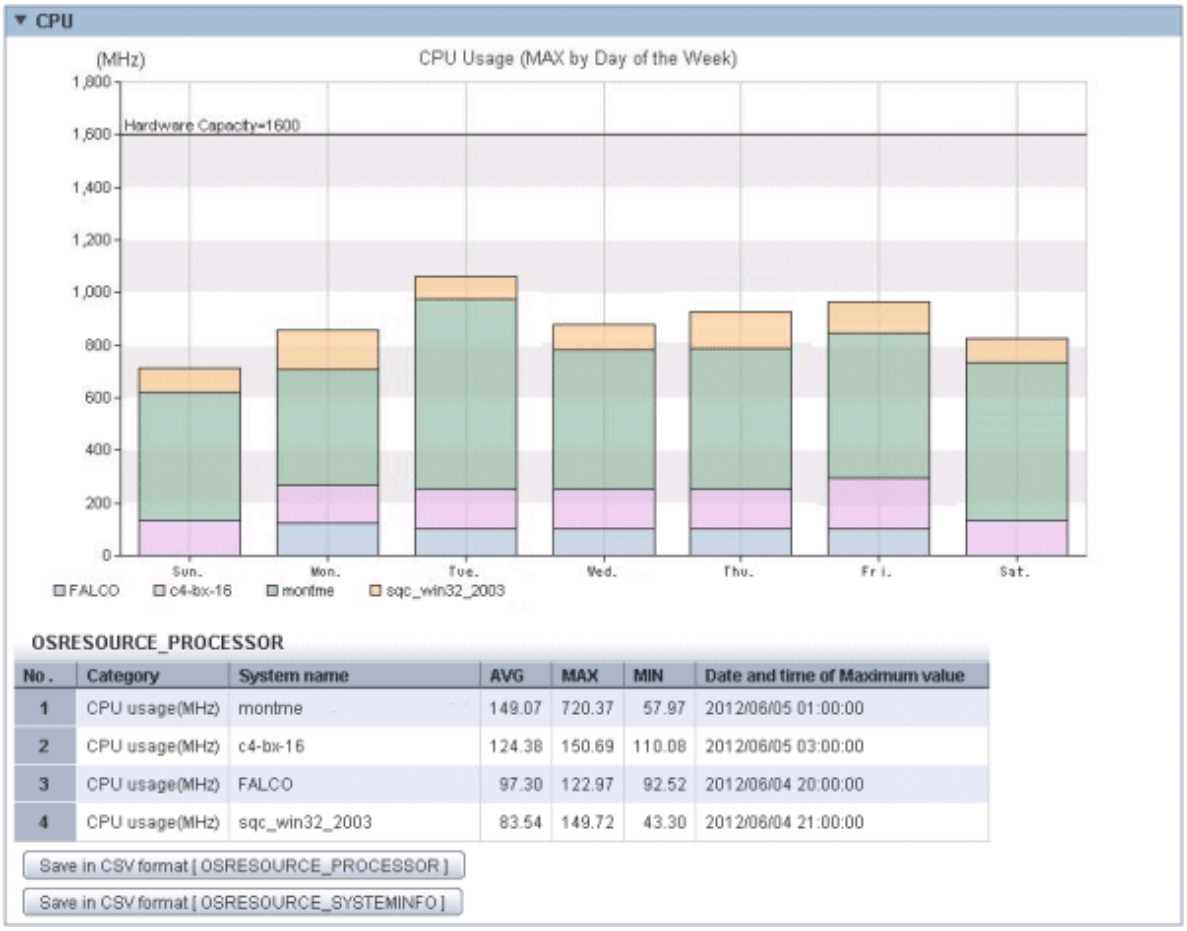
OSRESOURCE_PROCESSOR

No.	Category	System name	AVG	MAX	MIN	Date and time of Maximum value
1	CPU usage(MHz)	montme	149.07	720.37	57.97	2012/06/05 01:00:00
2	CPU usage(MHz)	c4-bx-16	124.38	150.69	110.08	2012/06/05 03:00:00
3	CPU usage(MHz)	FALCO	97.30	122.97	92.52	2012/06/04 20:00:00
4	CPU usage(MHz)	sqc_win32_2003	83.54	149.72	43.30	2012/06/04 21:00:00

Save in CSV format [OSRESOURCE_PROCESSOR]

Save in CSV format [OSRESOURCE_SYSTEMINFO]

- Simulation method: Each day of the week



No.	Category	System name	AVG	MAX	MIN	Date and time of Maximum value
1	CPU usage(MHz)	montme	149.07	720.37	57.97	2012/06/05 01:00:00
2	CPU usage(MHz)	c4-bx-16	124.38	150.69	110.08	2012/06/05 03:00:00
3	CPU usage(MHz)	FALCO	97.30	122.97	92.52	2012/06/04 20:00:00
4	CPU usage(MHz)	sqc_win32_2003	83.54	149.72	43.30	2012/06/04 21:00:00

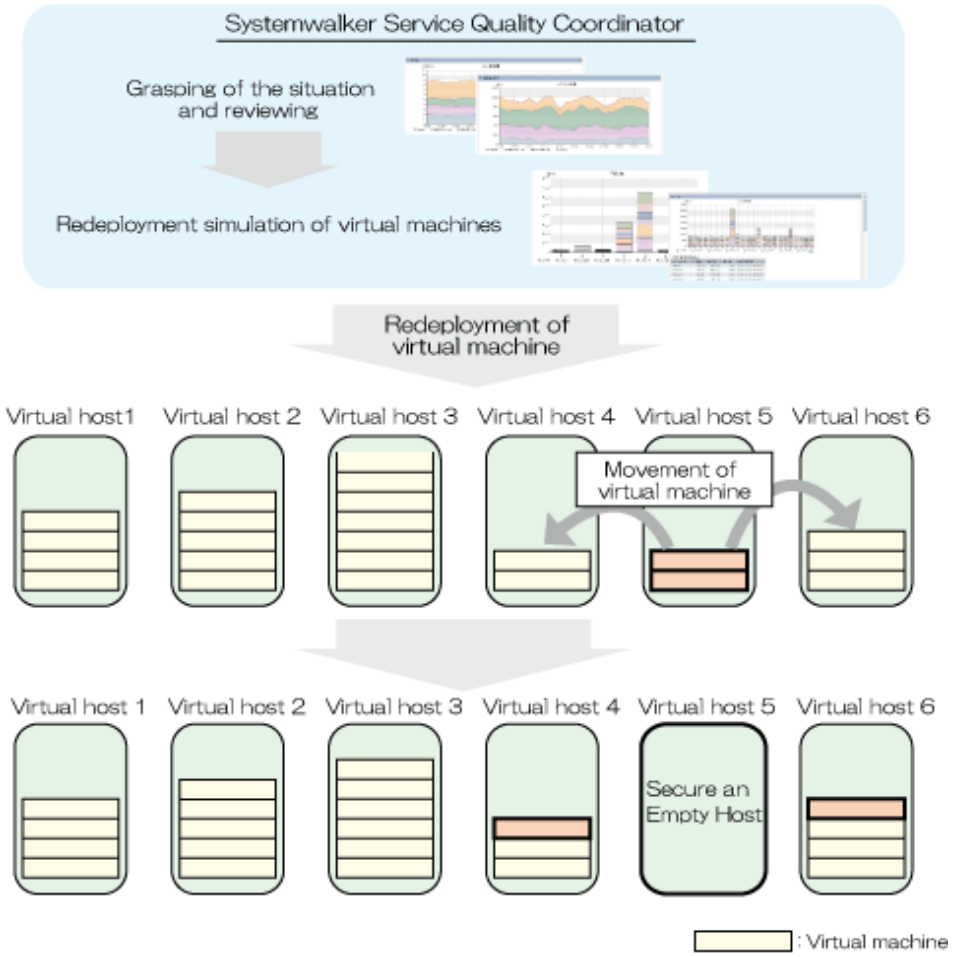
Information on the host who consolidates it is displayed in the piling graph and the table.

The combination of hosts who consolidate it is examined when there is bias by the value too large, and time zone and day of the week, etc. about each resource through the period.

When the threshold is set, whether the value is greatly exceeded is confirmed.

4.5.2 Simulation when virtual machine is relocated:[VMware virtual machine relocation]

The resource status when the virtual machine is moved from another host to the host of the over committing operation by using Systemwalker Service Quality Coordinator can be simulated beforehand. The virtual machine is moved based on this simulation result, and an empty host is secured.



Here, it explains the procedure of the simulation that uses the scenario of the **VMware virtual machine relocation** category.

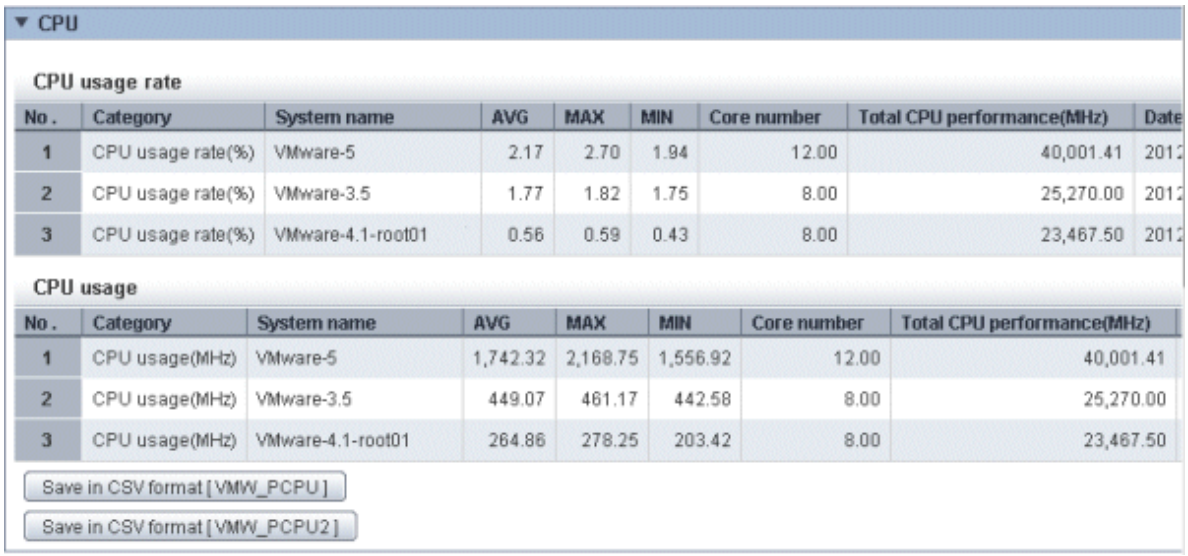
Point

Relocation can be examined about a virtual host in the same system group by the following procedures.

Grasp of current state

1. The **VMware rsc. usage cond.(List of host)** report of the **VMware virtual machine relocation** category is selected with **Analysis/Planning** window, the analytical condition is set, and the report is displayed.

   Please refer to "4.3 How to Operate the Analysis/Planning Window" for the setting method of the analytical condition.



▼ CPU

CPU usage rate

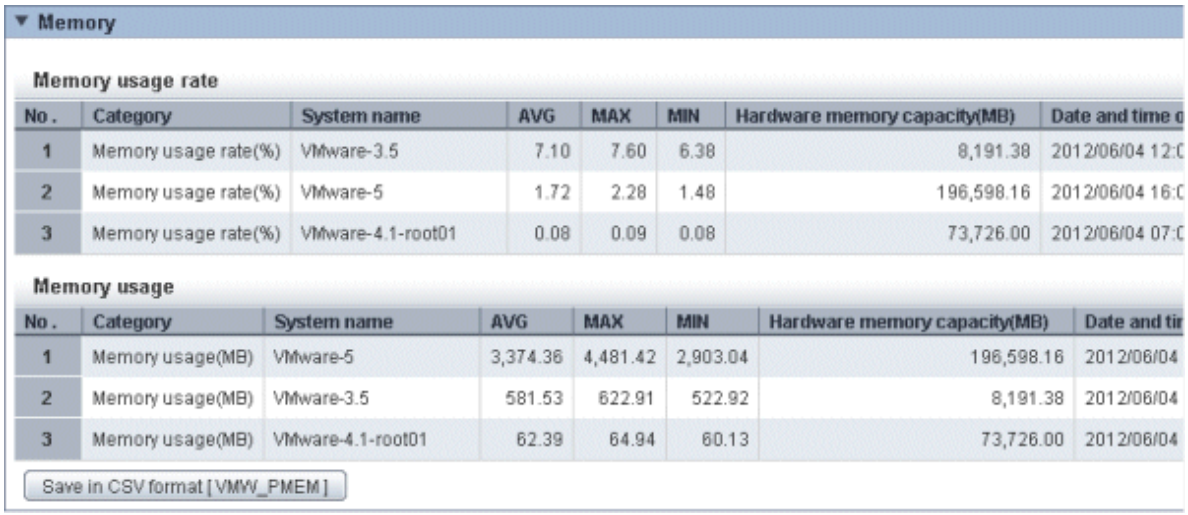
No.	Category	System name	AVG	MAX	MIN	Core number	Total CPU performance(MHz)	Date
1	CPU usage rate(%)	VMware-5	2.17	2.70	1.94	12.00	40,001.41	2012
2	CPU usage rate(%)	VMware-3.5	1.77	1.82	1.75	8.00	25,270.00	2012
3	CPU usage rate(%)	VMware-4.1-root01	0.56	0.59	0.43	8.00	23,467.50	2012

CPU usage

No.	Category	System name	AVG	MAX	MIN	Core number	Total CPU performance(MHz)
1	CPU usage(MHz)	VMware-5	1,742.32	2,168.75	1,556.92	12.00	40,001.41
2	CPU usage(MHz)	VMware-3.5	449.07	461.17	442.58	8.00	25,270.00
3	CPU usage(MHz)	VMware-4.1-root01	264.86	278.25	203.42	8.00	23,467.50

Save in CSV format [VMW_PCPU]

Save in CSV format [VMW_PCPU2]



▼ Memory

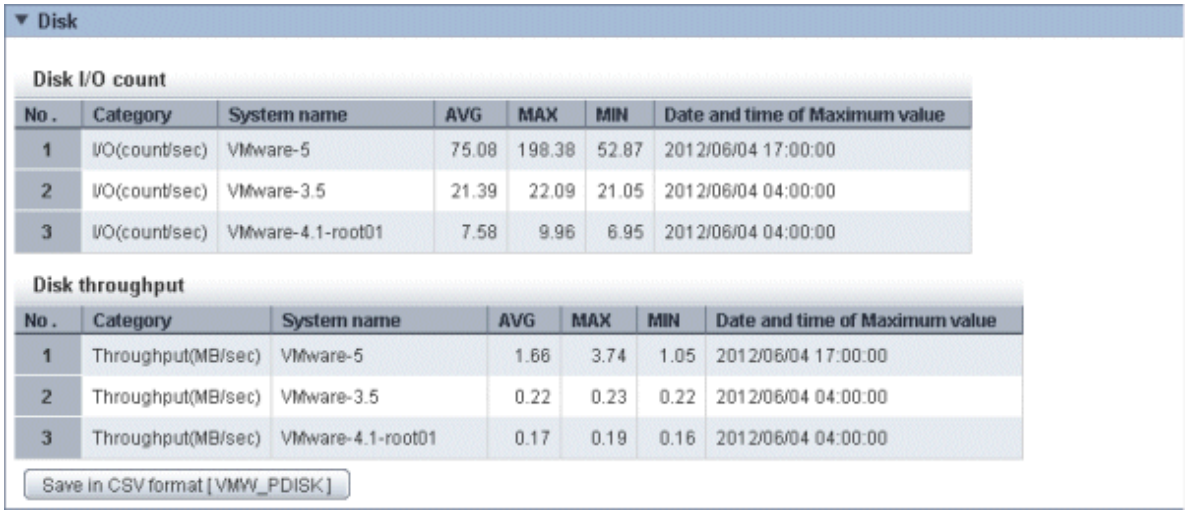
Memory usage rate

No.	Category	System name	AVG	MAX	MIN	Hardware memory capacity(MB)	Date and time o
1	Memory usage rate(%)	VMware-3.5	7.10	7.60	6.38	8,191.38	2012/06/04 12:0
2	Memory usage rate(%)	VMware-5	1.72	2.28	1.48	196,598.16	2012/06/04 16:0
3	Memory usage rate(%)	VMware-4.1-root01	0.08	0.09	0.08	73,726.00	2012/06/04 07:0

Memory usage

No.	Category	System name	AVG	MAX	MIN	Hardware memory capacity(MB)	Date and ti
1	Memory usage(MB)	VMware-5	3,374.36	4,481.42	2,903.04	196,598.16	2012/06/04
2	Memory usage(MB)	VMware-3.5	581.53	622.91	522.92	8,191.38	2012/06/04
3	Memory usage(MB)	VMware-4.1-root01	62.39	64.94	60.13	73,726.00	2012/06/04

Save in CSV format [VMW_PMEM]



▼ Disk

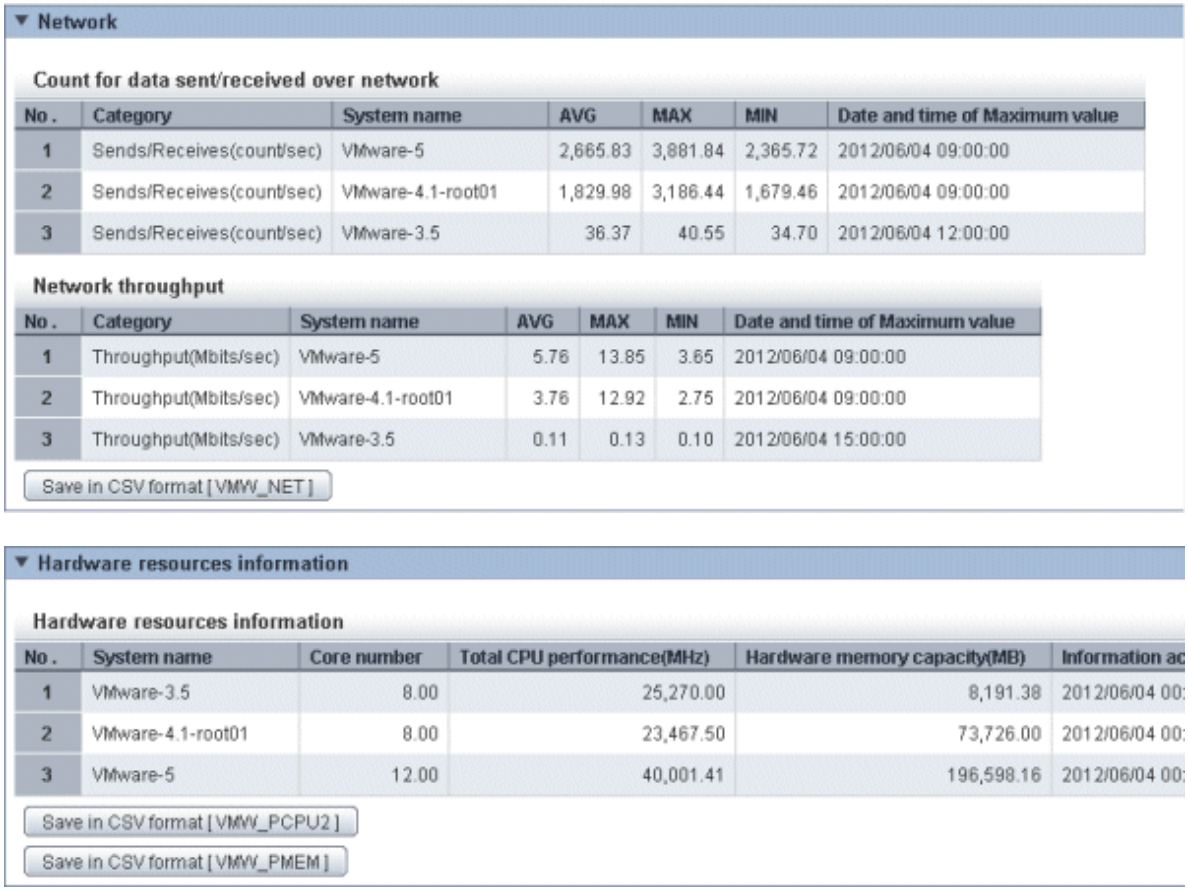
Disk I/O count

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]

The resource quota and the amount of the resource use of each virtual host are displayed by the list.

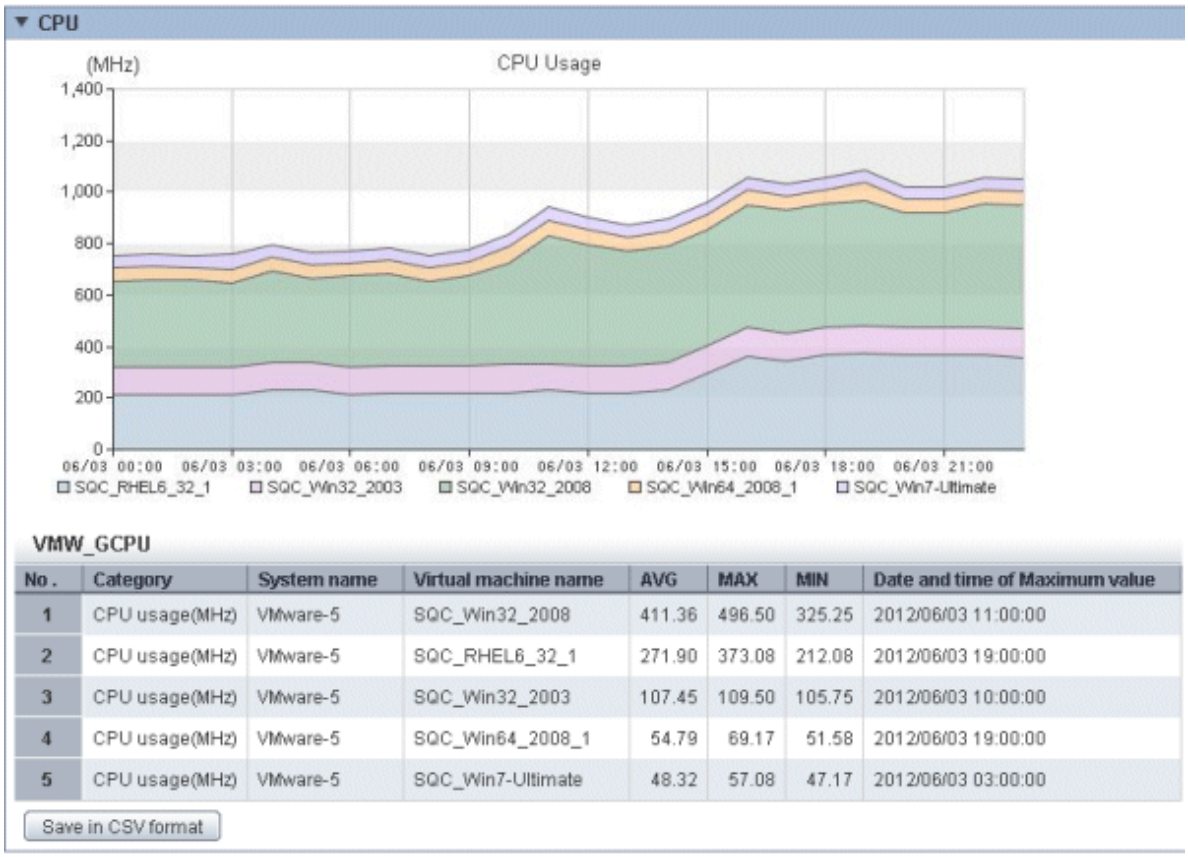
For instance, it sorts with CPU usage rate and Memory usage rate, and the host that there is becoming empty in the resource is confirmed. The movement origin and, next, the host with a low percentage utilisation is examined as a moving destination with the host with the lowest percentage utilisation.

Please confirm whether the throughput of the disk and the Network is large about the host who assumes the examination object as a movement former reaching moving destination.

Examination of relocation

1. The **VMware rsc. usage cond.(Virtual machine stack)** report of the **VMware virtual machine relocation** category is selected with **Analysis/Planning** window, the analytical condition is set, and the report is displayed.

   Please refer to "4.3 How to Operate the Analysis/Planning Window" for the setting method of the analytical condition.

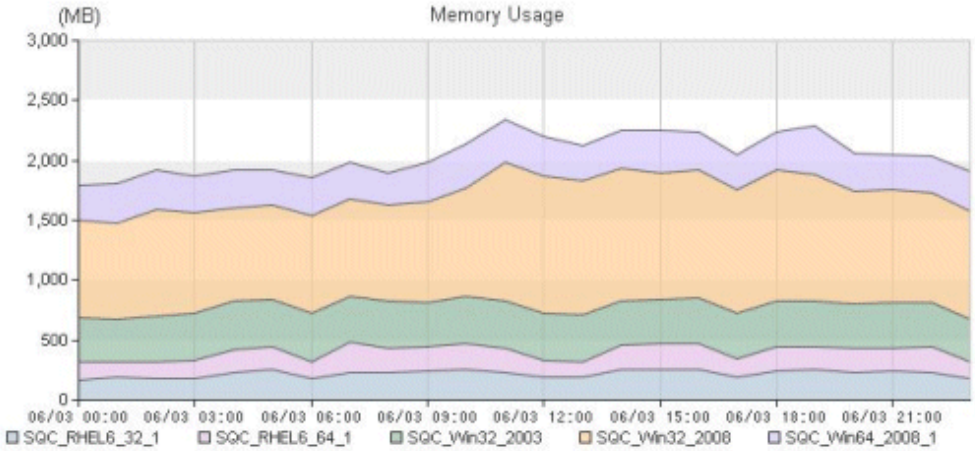


VMW_GCPU

No.	Category	System name	Virtual machine name	AVG	MAX	MIN	Date and time of Maximum value
1	CPU usage(MHz)	VMware-5	SQC_Win32_2008	411.36	496.50	325.25	2012/06/03 11:00:00
2	CPU usage(MHz)	VMware-5	SQC_RHEL6_32_1	271.90	373.08	212.08	2012/06/03 19:00:00
3	CPU usage(MHz)	VMware-5	SQC_Win32_2003	107.45	109.50	105.75	2012/06/03 10:00:00
4	CPU usage(MHz)	VMware-5	SQC_Win64_2008_1	54.79	69.17	51.58	2012/06/03 19:00:00
5	CPU usage(MHz)	VMware-5	SQC_Win7-Ultimate	48.32	57.08	47.17	2012/06/03 03:00:00

Save in CSV format

▼ Memory

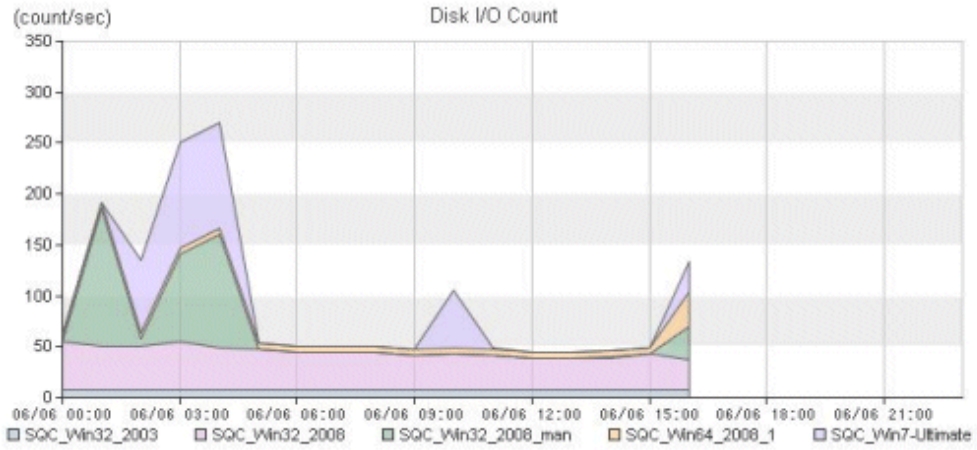


VMW_MEM

No.	Category	System name	Virtual machine name	AVG	MAX	MIN	Date and time of Maximum value
1	Memory usage(MB)	VMware-5	SQC_Win32_2008	941.75	1,163.94	782.79	2012/06/03 11:00:00
2	Memory usage(MB)	VMware-5	SQC_Win32_2003	380.07	413.24	348.16	2012/06/03 06:00:00
3	Memory usage(MB)	VMware-5	SQC_Win64_2008_1	322.26	407.32	266.69	2012/06/03 19:00:00
4	Memory usage(MB)	VMware-5	SQC_RHEL6_32_1	220.24	260.32	171.57	2012/06/03 10:00:00
5	Memory usage(MB)	VMware-5	SQC_RHEL6_64_1	181.96	255.77	129.14	2012/06/03 07:00:00

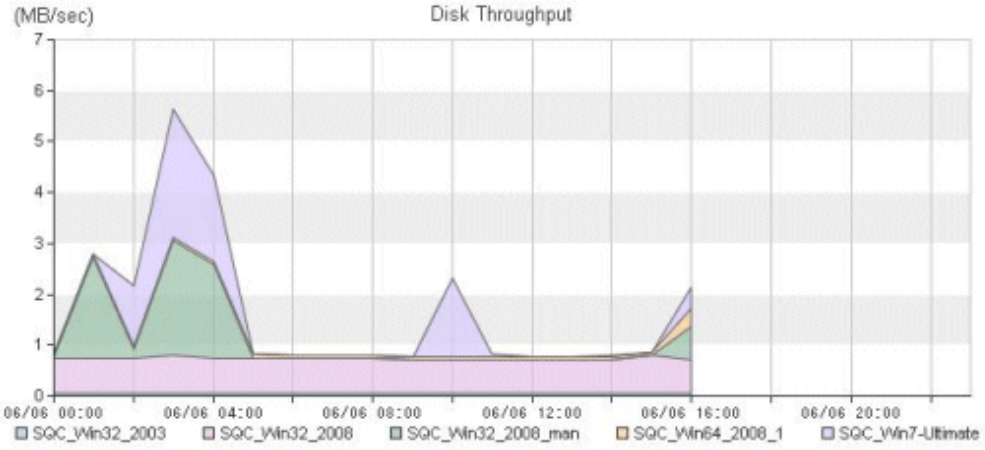
Save in CSV format

Disk



VMW_DISK

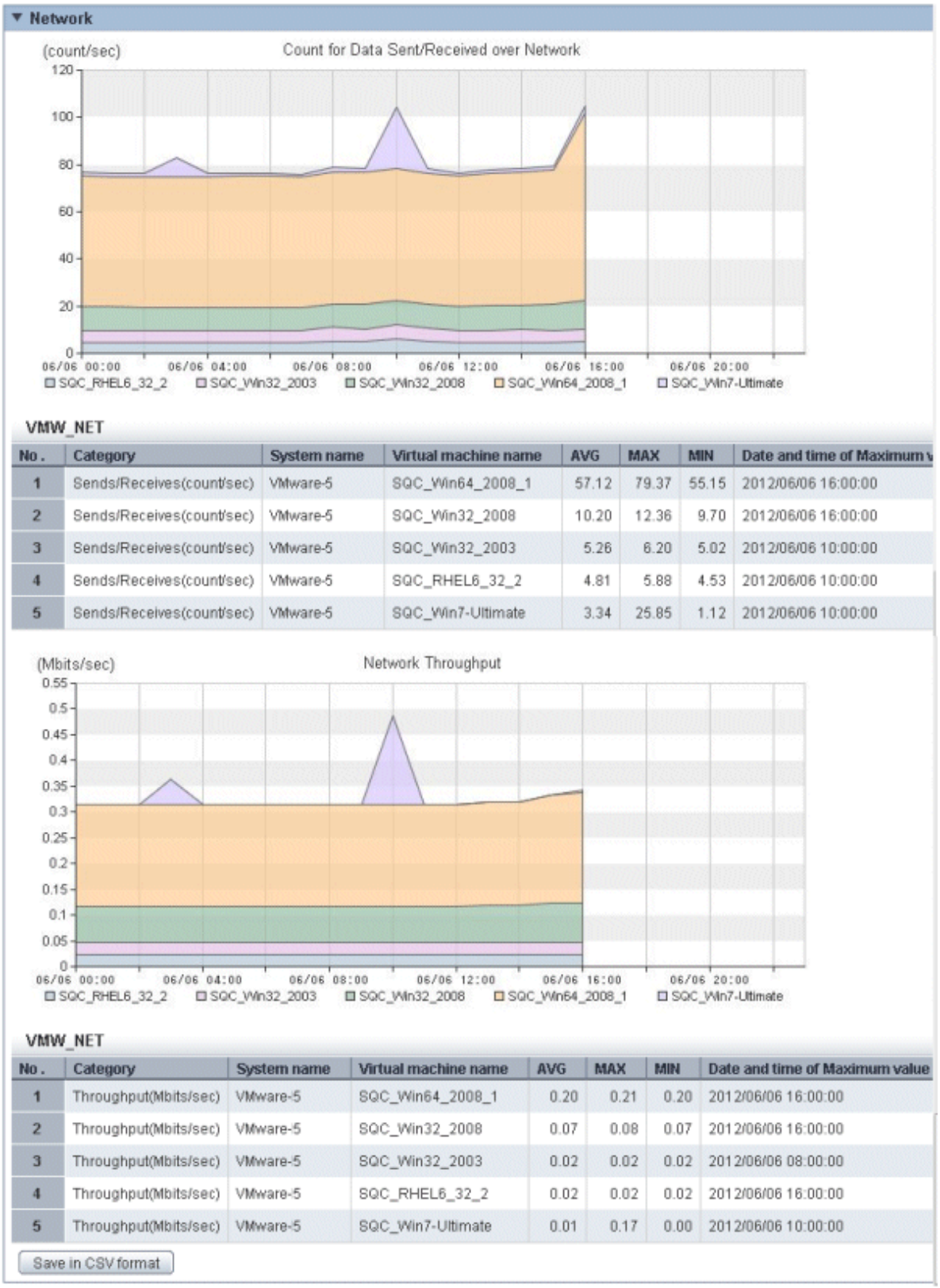
No.	Category	System name	Virtual machine name	AVG	MAX	MIN	Date and time of Maximum value
1	I/O(count/sec)	VMware-5	SQC_Win32_2008	37.66	48.68	29.63	2012/06/06 03:00:00
2	I/O(count/sec)	VMware-5	SQC_Win32_2008_man	21.91	133.98	0.08	2012/06/06 01:00:00
3	I/O(count/sec)	VMware-5	SQC_Win7-Ultimate	21.78	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



Resource use information on the virtual machine among virtual hosts is displayed in the piling graph.

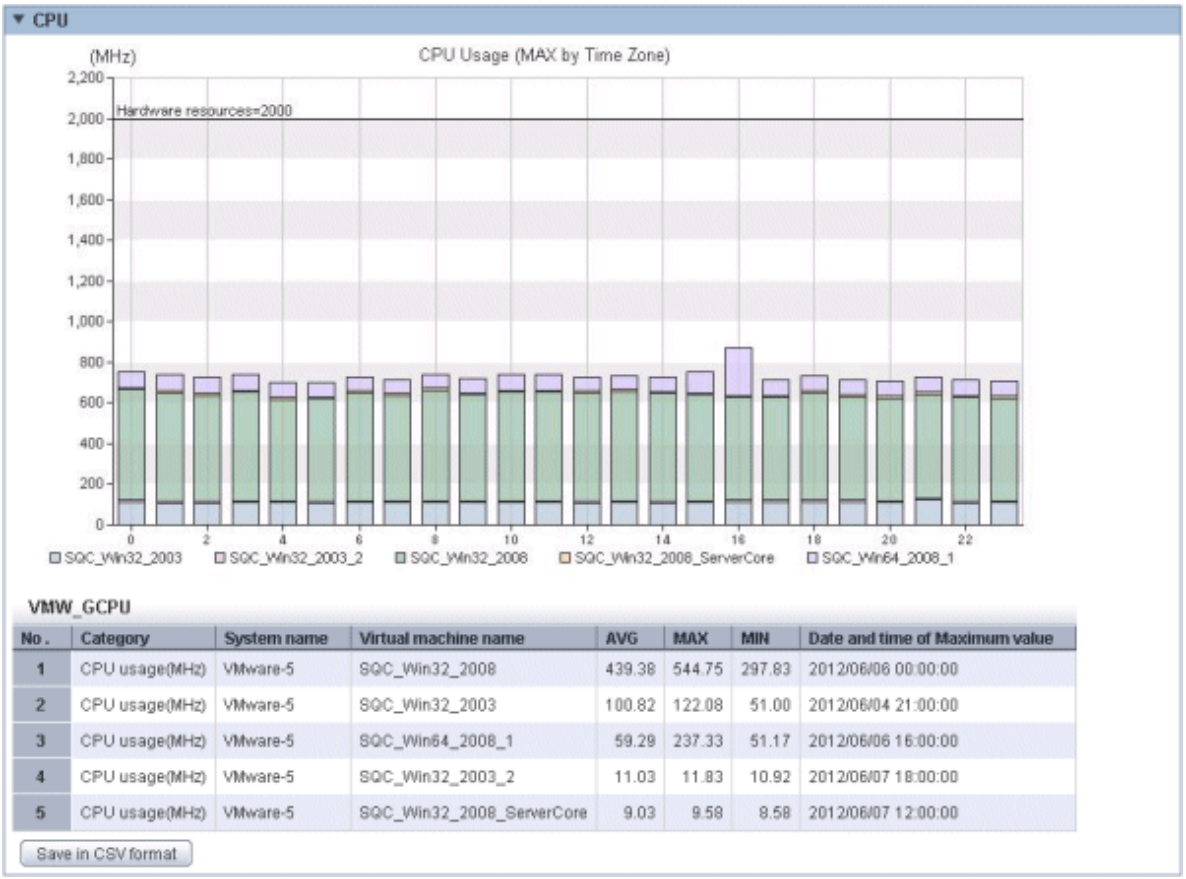
The amount of the resource use of each virtual machine is confirmed, and which virtual machine is moved to which moving destination candidate's host is examined.

Relocation simulation

1. The **VMware virtual machine relocation simulation** report of the **VMware virtual machine relocation** category is selected with **Analysis/Planning** window, and the analytical condition is set and simulated.

   Please refer to "4.3 How to Operate the Analysis/Planning Window" for the setting method of the analytical condition.

   Simulation method: Each time zone

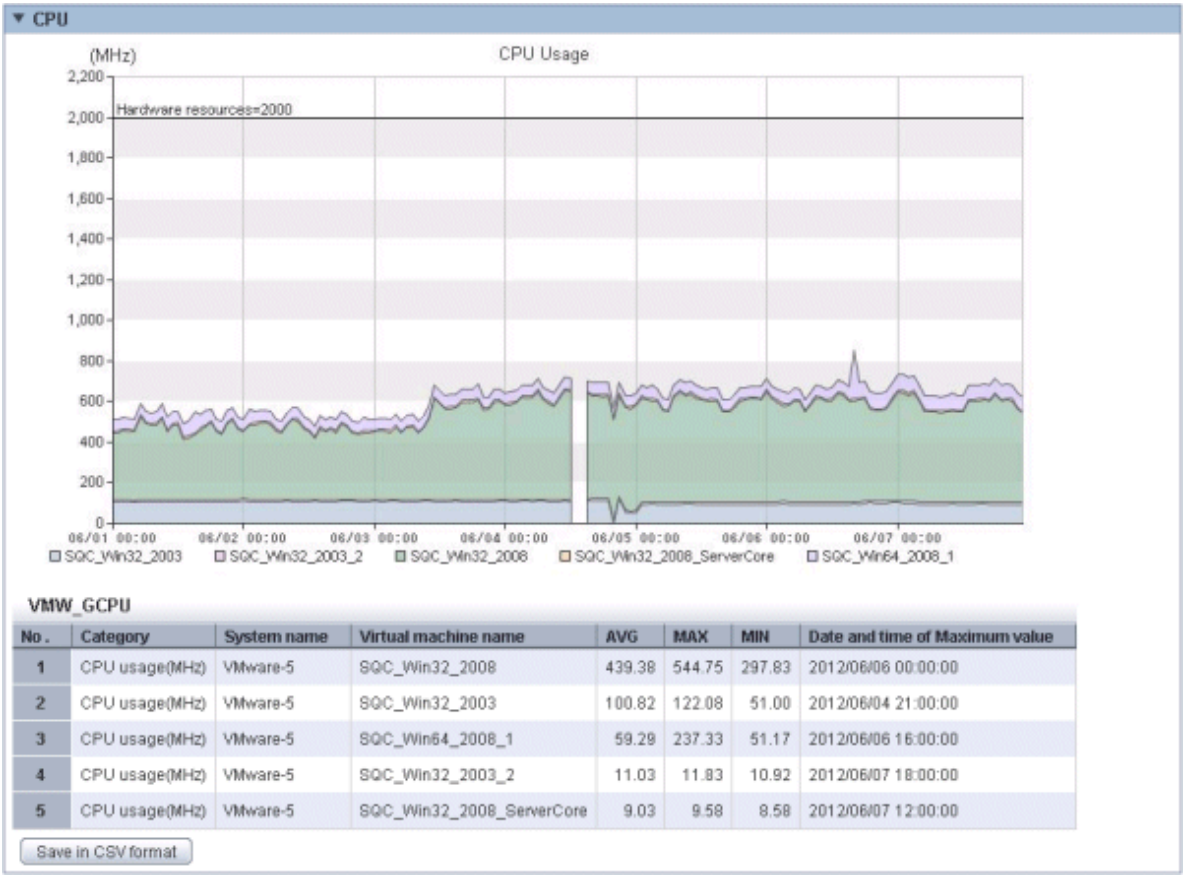


VMW_GCPU

No.	Category	System name	Virtual machine name	AVG	MAX	MIN	Date and time of Maximum value
1	CPU usage(MHz)	VMware-5	SQC_Win32_2008	439.38	544.75	297.83	2012/06/06 00:00:00
2	CPU usage(MHz)	VMware-5	SQC_Win32_2003	100.82	122.08	51.00	2012/06/04 21:00:00
3	CPU usage(MHz)	VMware-5	SQC_Win64_2008_1	59.29	237.33	51.17	2012/06/06 16:00:00
4	CPU usage(MHz)	VMware-5	SQC_Win32_2003_2	11.03	11.83	10.92	2012/06/07 18:00:00
5	CPU usage(MHz)	VMware-5	SQC_Win32_2008_ServerCore	9.03	9.58	8.58	2012/06/07 12:00:00

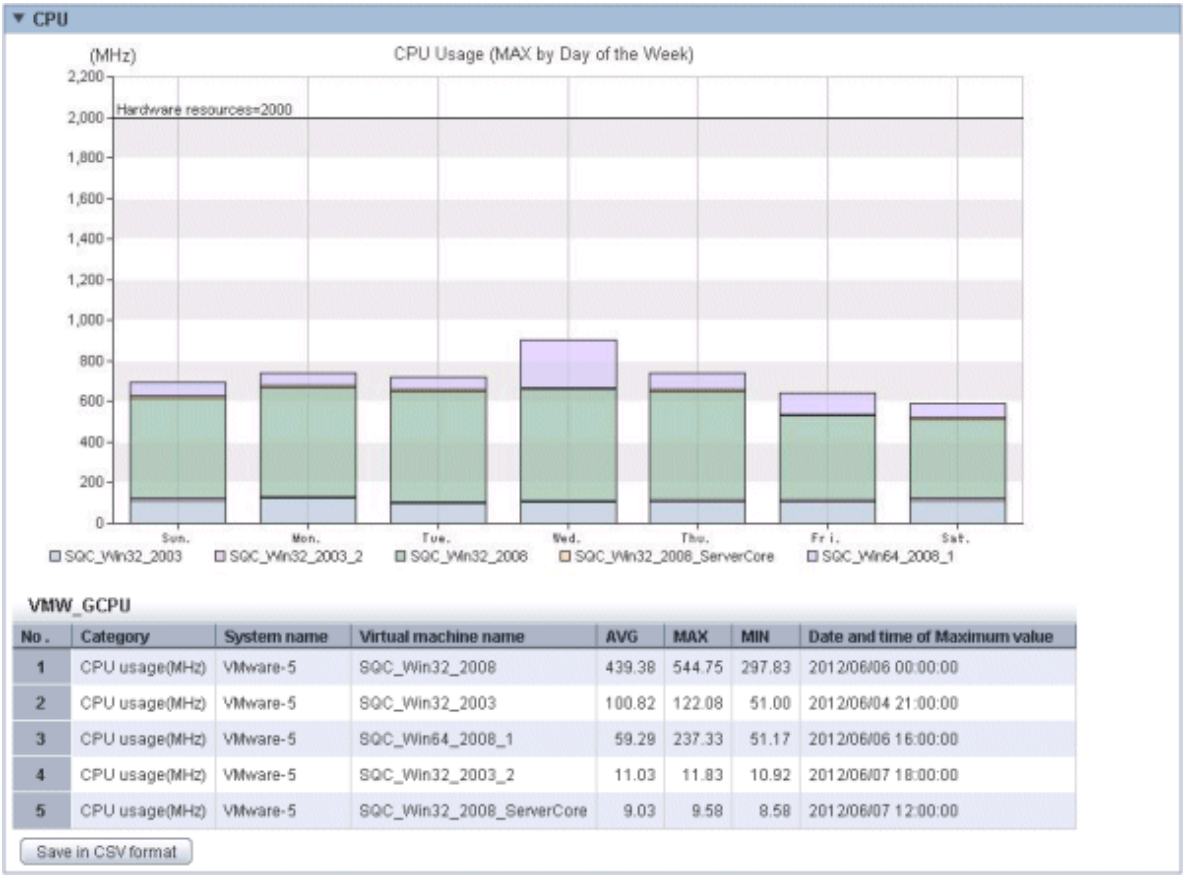
Save in CSV format

Simulation method: Time series



No.	Category	System name	Virtual machine name	AVG	MAX	MIN	Date and time of Maximum value
1	CPU usage(MHz)	VMware-5	SQC_Win32_2008	439.38	544.75	297.83	2012/06/06 00:00:00
2	CPU usage(MHz)	VMware-5	SQC_Win32_2003	100.82	122.08	51.00	2012/06/04 21:00:00
3	CPU usage(MHz)	VMware-5	SQC_Win64_2008_1	59.29	237.33	51.17	2012/06/06 16:00:00
4	CPU usage(MHz)	VMware-5	SQC_Win32_2003_2	11.03	11.83	10.92	2012/06/07 18:00:00
5	CPU usage(MHz)	VMware-5	SQC_Win32_2008_ServerCore	9.03	9.58	8.58	2012/06/07 12:00:00

Simulation method: Each day of the week



VMW_GCPU

No.	Category	System name	Virtual machine name	AVG	MAX	MIN	Date and time of Maximum value
1	CPU usage(MHz)	VMware-5	SQC_Win32_2008	439.38	544.75	297.83	2012/06/06 00:00:00
2	CPU usage(MHz)	VMware-5	SQC_Win32_2003	100.82	122.08	51.00	2012/06/04 21:00:00
3	CPU usage(MHz)	VMware-5	SQC_Win64_2008_1	59.29	237.33	51.17	2012/06/06 16:00:00
4	CPU usage(MHz)	VMware-5	SQC_Win32_2003_2	11.03	11.83	10.92	2012/06/07 18:00:00
5	CPU usage(MHz)	VMware-5	SQC_Win32_2008_ServerCore	9.03	9.58	8.58	2012/06/07 12:00:00

Save in CSV format

Information on consolidated virtual machine and all virtual machines among hosts consolidating ahead is displayed in the piling graph. The table is additionally displayed as the above-mentioned graph.

The combination of relocated virtual machines is examined when there is bias by the value too large, and time zone and day of the week, etc. about each resource through the period.

When the threshold is set, whether the value is greatly exceeded is confirmed.

4.5.3 Bottleneck analysis of virtual environment:[VMware tuning guidance]

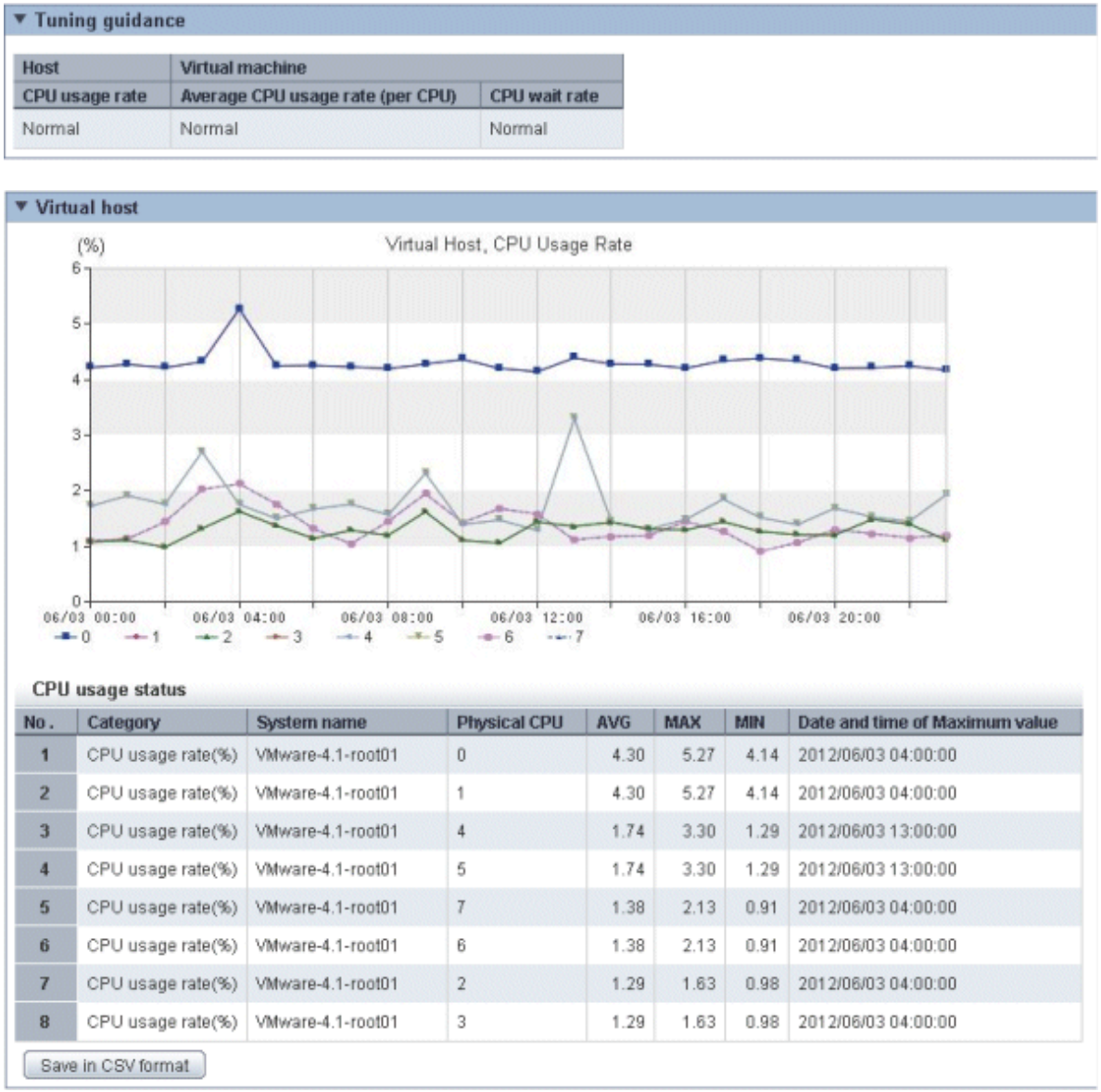
The detection of the bottleneck of virtual environment (VMware) is supported, and the corrective action is guided.

Here, the bottleneck is detected by using the scenario of the **VMware tuning guidance** category, and it explains the procedure that confirms the corrective action.

Analysis of bottleneck

1. The **VMware CPU tuning guidance** report of the **VMware tuning guidance** category is selected with **Analysis/ Planning** window, the analytical condition is set, and the report is displayed.

   Please refer to "4.3 How to Operate the Analysis/Planning Window" for the setting method of the analytical condition.



▼ Tuning guidance

Host	Virtual machine	
CPU usage rate	Average CPU usage rate (per CPU)	CPU wait rate
Normal	Normal	Normal

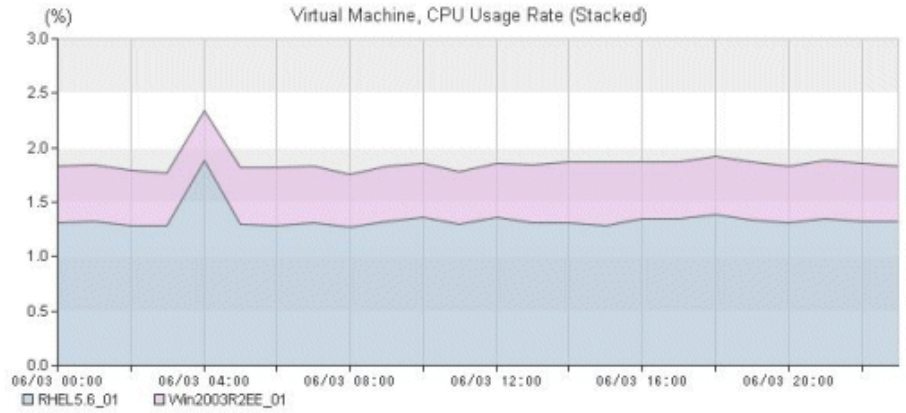
▼ Virtual host

CPU usage status

No.	Category	System name	Physical CPU	AVG	MAX	MIN	Date and time of Maximum value
1	CPU usage rate(%)	VMware-4.1-root01	0	4.30	5.27	4.14	2012/06/03 04:00:00
2	CPU usage rate(%)	VMware-4.1-root01	1	4.30	5.27	4.14	2012/06/03 04:00:00
3	CPU usage rate(%)	VMware-4.1-root01	4	1.74	3.30	1.29	2012/06/03 13:00:00
4	CPU usage rate(%)	VMware-4.1-root01	5	1.74	3.30	1.29	2012/06/03 13:00:00
5	CPU usage rate(%)	VMware-4.1-root01	7	1.38	2.13	0.91	2012/06/03 04:00:00
6	CPU usage rate(%)	VMware-4.1-root01	6	1.38	2.13	0.91	2012/06/03 04:00:00
7	CPU usage rate(%)	VMware-4.1-root01	2	1.29	1.63	0.98	2012/06/03 04:00:00
8	CPU usage rate(%)	VMware-4.1-root01	3	1.29	1.63	0.98	2012/06/03 04:00:00

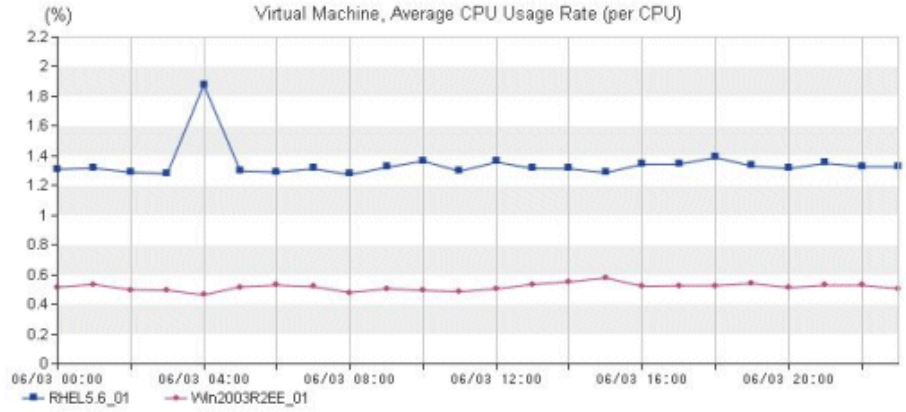
Save in CSV format

▼ Virtual machine



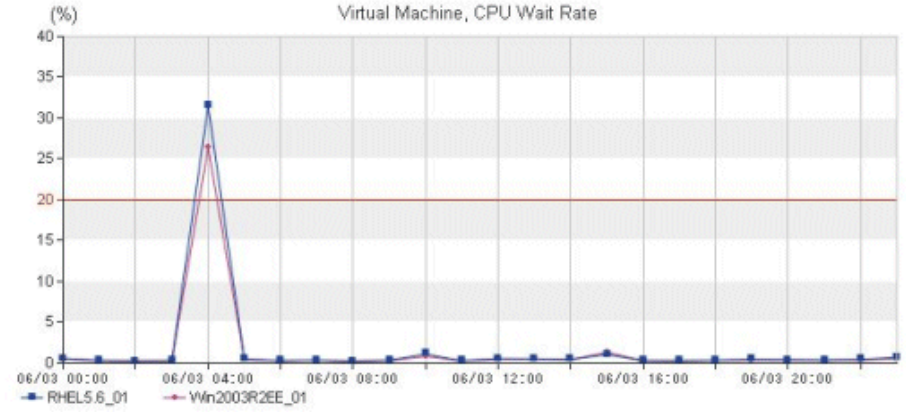
CPU usage rate status

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	2012/06/0
2	Average CPU usage rate (per CPU)(%)	VMware-4.1-root01	Win2003R2EE_01	0.52	0.58	0.46	2012/06/0



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

It is confirmed whether it is a displayed report, and there is problem in CPU use state of the virtual environment.

It is displayed in the tuning guidance when there is a possibility of the problem by a yellow background, "Attention". The corrective action is additionally displayed, and refer, please.

Please refer to "4.2.1.2.3 VMware tuning guidance" for the analysis of the report.

2. The following reports are displayed by the same procedure to 1, and it is confirmed whether there is problem in the memory, the disk, and the Network of the virtual environment.

   As for **VMware Memory(Host) tuning guidance** and **VMware Memory(Virtual machine) tuning guidance**, the display and "Attention" corrective action are displayed on the screen when there is a possibility of the problem as well as **VMware CPU tuning guidance**".

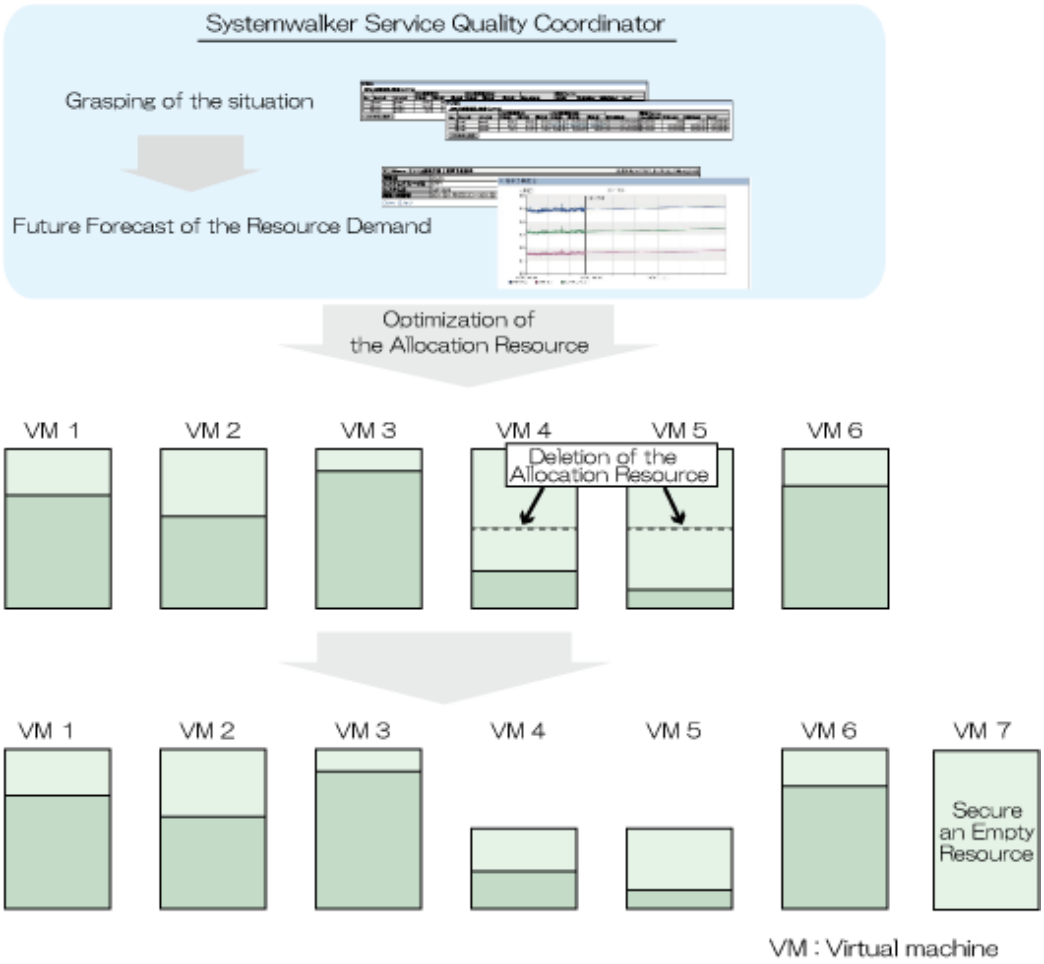
   - **VMware Memory(Host) tuning guidance**
   - **VMware Memory(Virtual machine) tuning guidance**
   - **VMware Physical Disk**
   - **VMware Virtual Disk**
   - **VMware Physical NIC**
   - **VMware Virtual NIC**

   Please refer to "4.2.1.2.3 VMware tuning guidance" for the analysis of the report.

Please deal referring to the Description of corrective action and "4.2.1.2.3 VMware tuning guidance" on the screen when the bottleneck is detected.

4.5.4 Optimise of allocation resource of virtual machine:[VMware resource allocation optimization]

The virtual machine with a low resource percentage utilisation is detected by using Systemwalker Service Quality Coordinator. The optimise of the resource can be attempted by reviewing the amount of the allocation resource based on the detection result, and securing an empty resource.

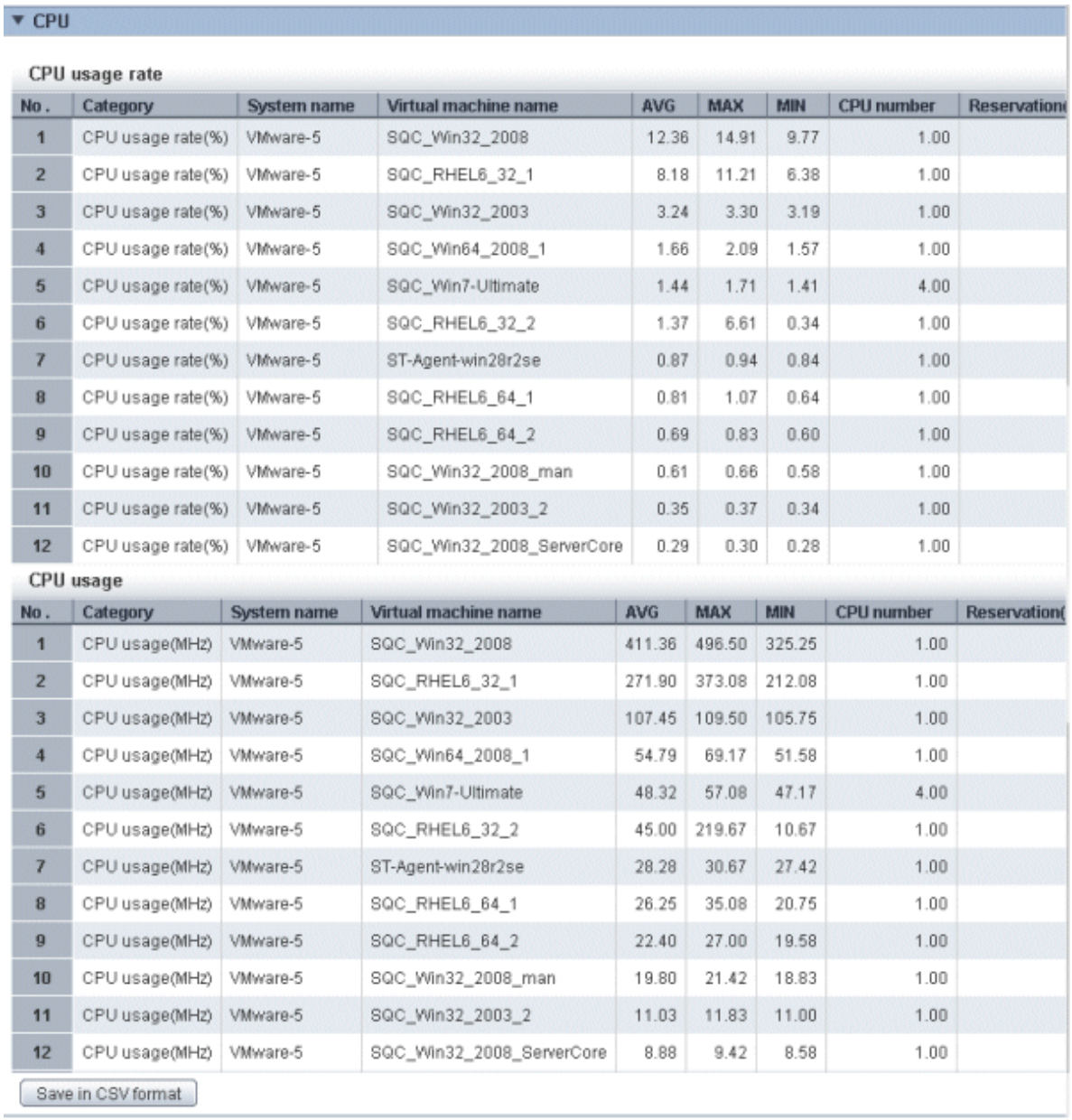


Here, it explains the procedure that attempts the optimise of the resource by using the scenario of **VMware resource allocation optimization**.

Grasp of current state

1. The **VMware rsc. usage cond.(List of virtual machine)** report of the **VMware resource allocation optimization** category is selected with **Analysis/Planning** window, the analytical condition is set, and the report is displayed.

   Please refer to "4.3 How to Operate the Analysis/Planning Window" for the setting method of the analytical condition.



▼ CPU

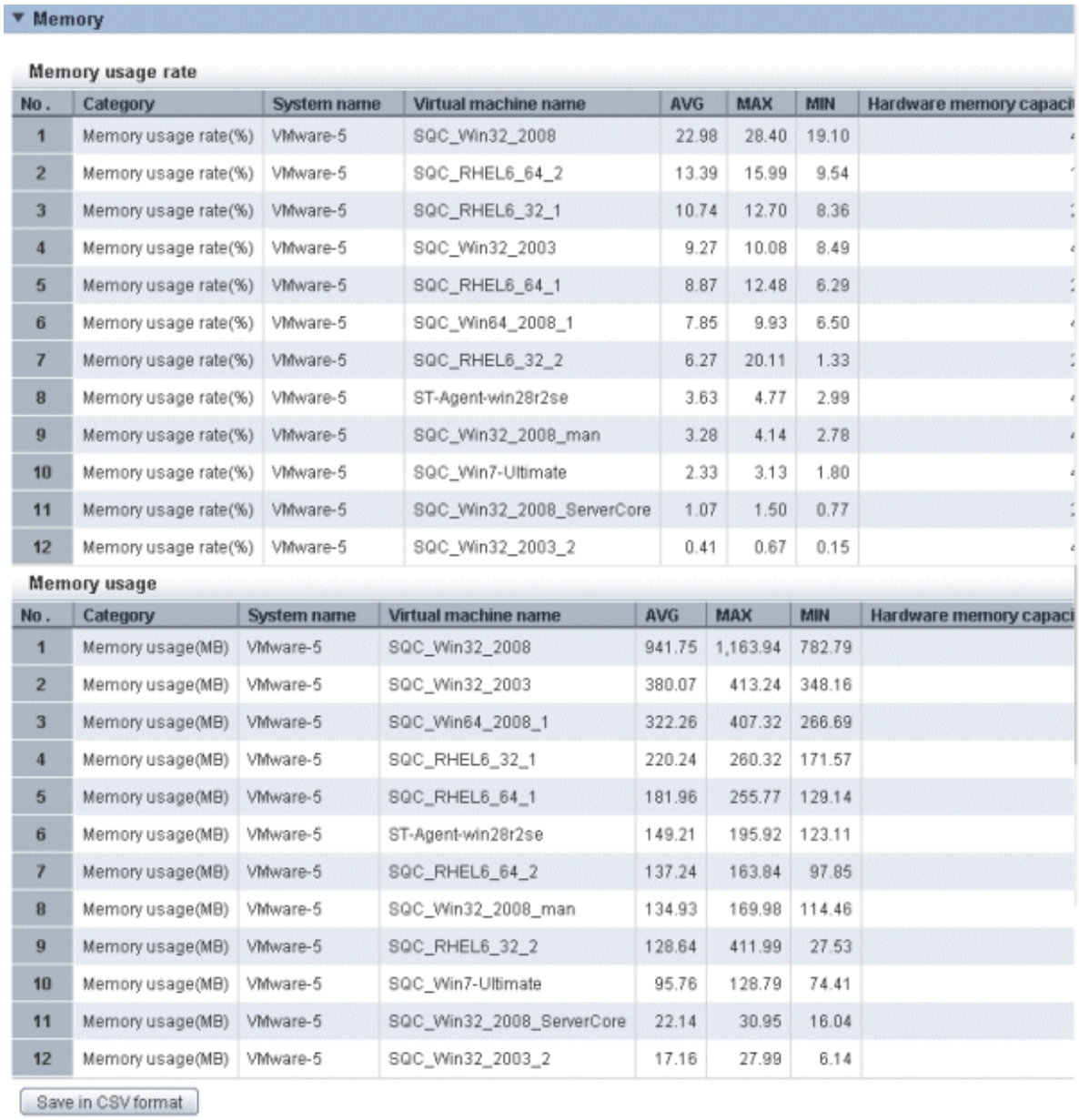
CPU usage rate

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 capaci
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 capaci
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

The virtual machine that there is becoming empty in the resource by sorting it with CPU usage rate and Memory usage rate is detected, and whether the resource allocation can be reduced is examined for the virtual machine with a low percentage utilisation.

4.5.5 Forecast in the future of resource demand:[ServerView Resource Orchestrator Resource Pool]

The demand forecasting of the resource pool can be done by using Systemwalker Service Quality Coordinator.

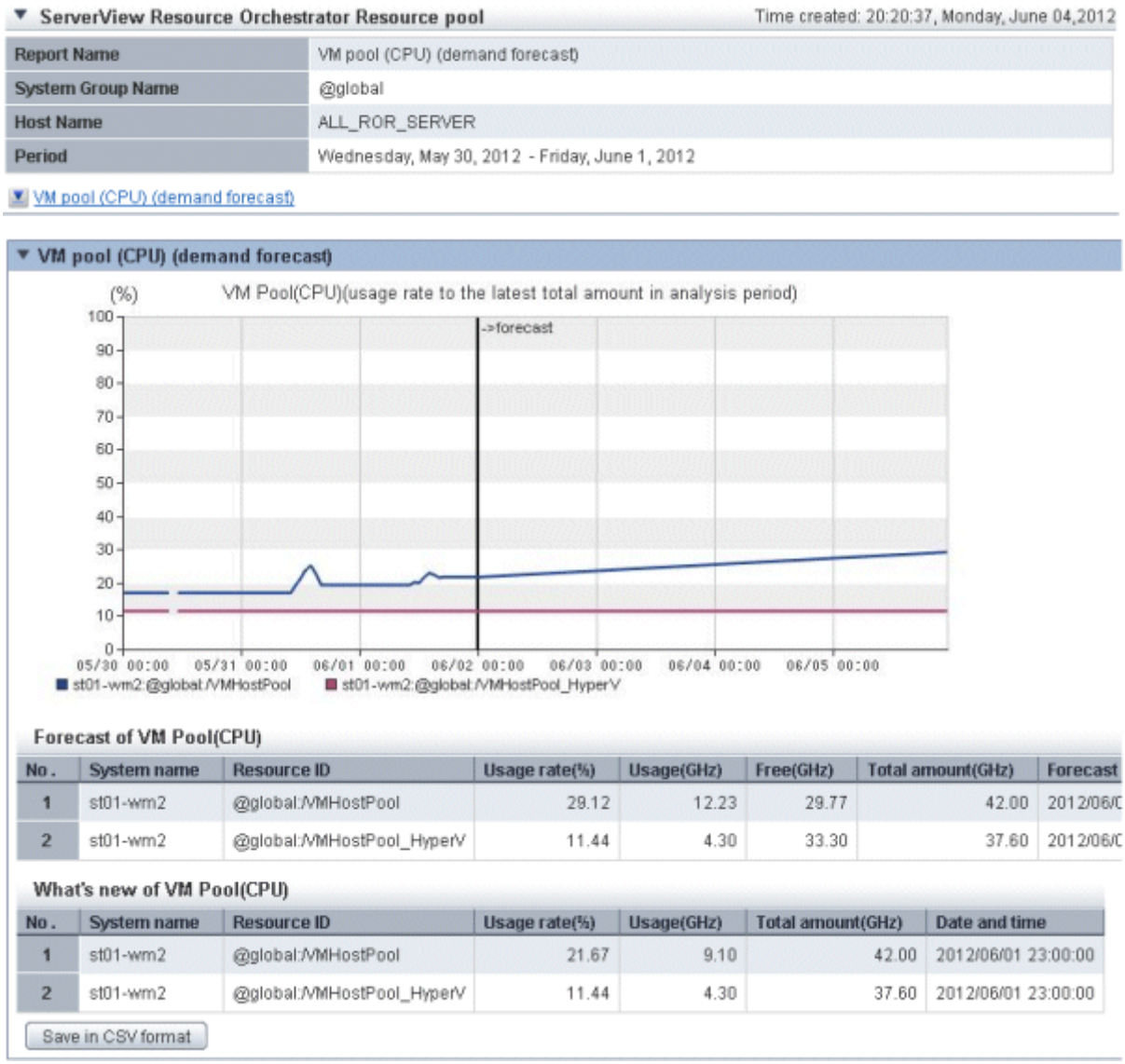
Because an amount of the resource insufficient in prior is predictable, the reinforcement plan of equipment with high accuracy can be set up.

Here, it explains the procedure that does the resource demand forecasting in the future by using the scenario of the **ServerView Resource Orchestrator Resource Pool** category.

Demand forecasting

1. The **VM Pool (CPU) (demand forecast)** report of the **ServerView Resource Orchestrator Resource Pool** category is selected with **Analysis/Planning** window, the analytical condition is set, and the report is displayed.

   Please refer to "4.3 How to Operate the Analysis/Planning Window" for the setting method of the analytical condition.

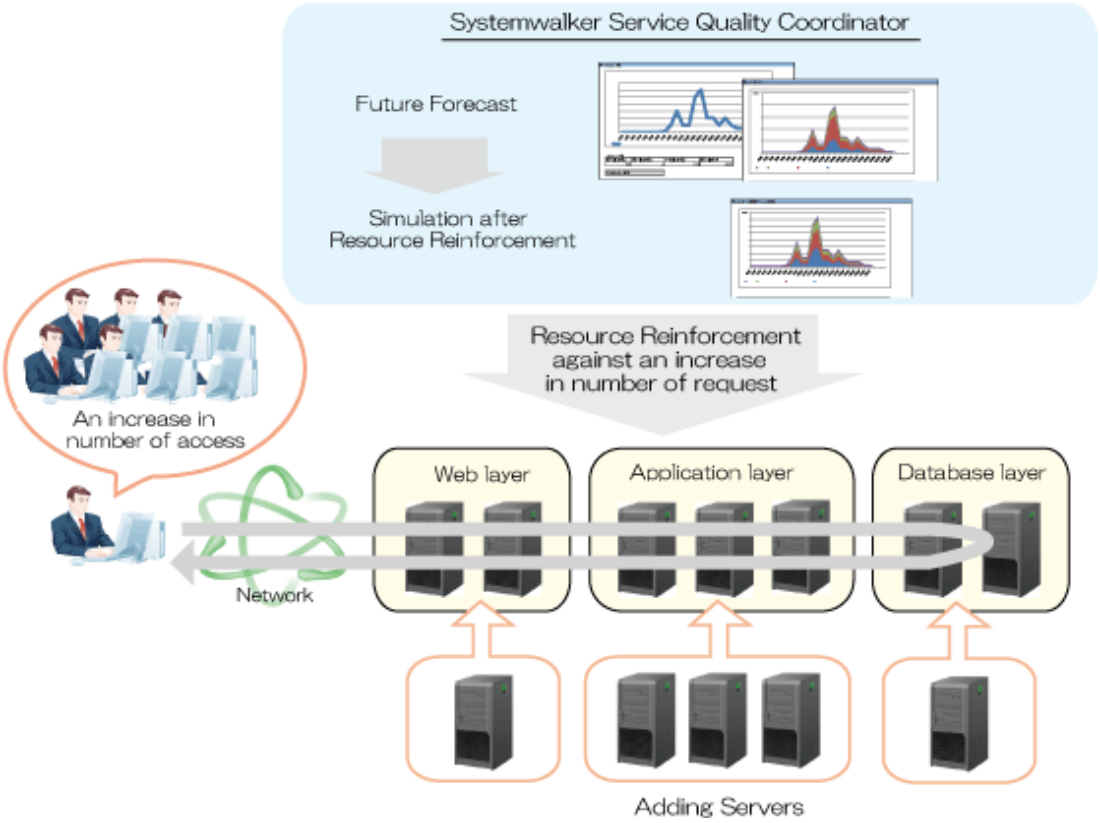


   The regression analysis is done from a past use performance of VM Pool(CPU), and how many resources is used is forecast.

   The report of the as needed and others is displayed, and the demand forecasting of the resource pool is done.

4.5.6 Simulation of resource reinforcement with which it provides an increase in number of requests:[Response simulation]

In Systemwalker Service Quality Coordinator, the simulation analysis of the response in each layer where the forecast and the system will be composed in the futures of the number of requests is done, and the increase of the resource is scheduled. Moreover, the potentiating effect can be simulated beforehand.

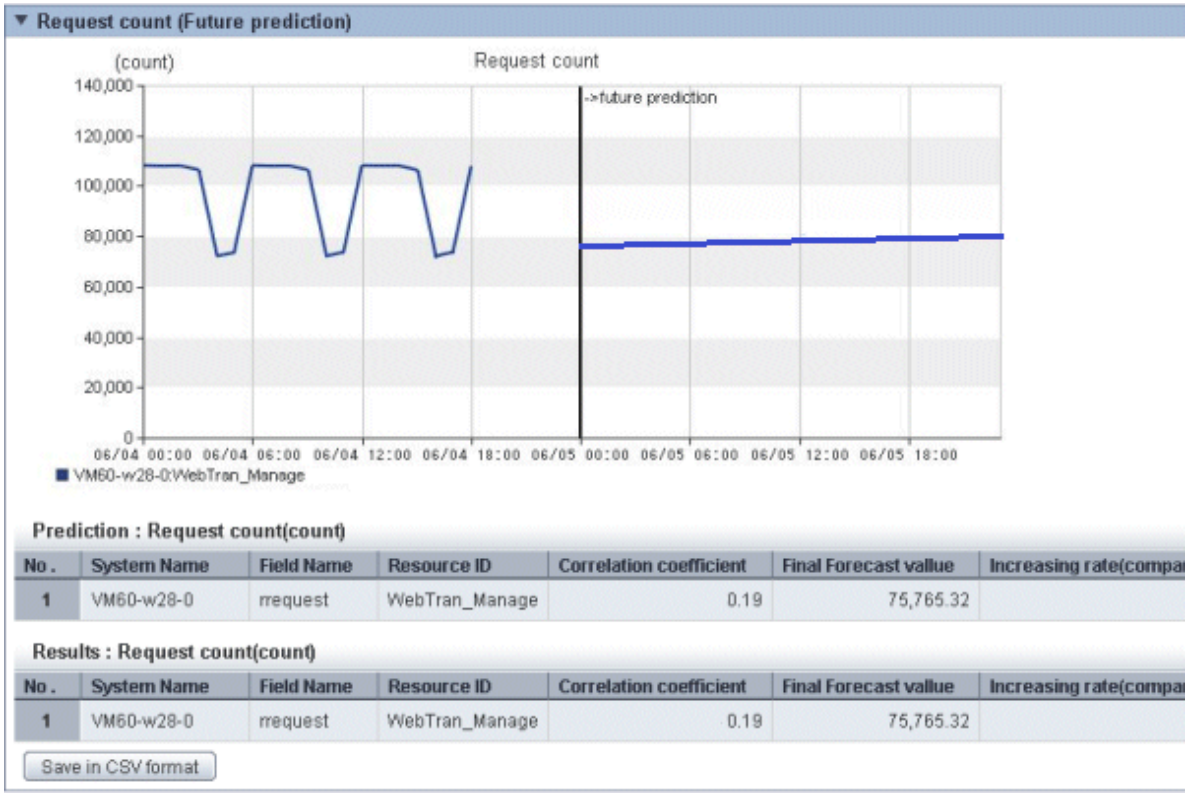


Here, it explains the procedure of the simulation that uses the scenario of the **Response simulation** category.

Forecast in the futures of number of requests

1. The **Request count (Future prediction)** report of the **Response simulation** category is selected with **Analysis/ Planning** window, the analytical condition is set, and the report is displayed.

   Please refer to "4.3 How to Operate the Analysis/Planning Window" for the setting method of the analytical condition.



   The prediction result will be displayed in the future of each service.

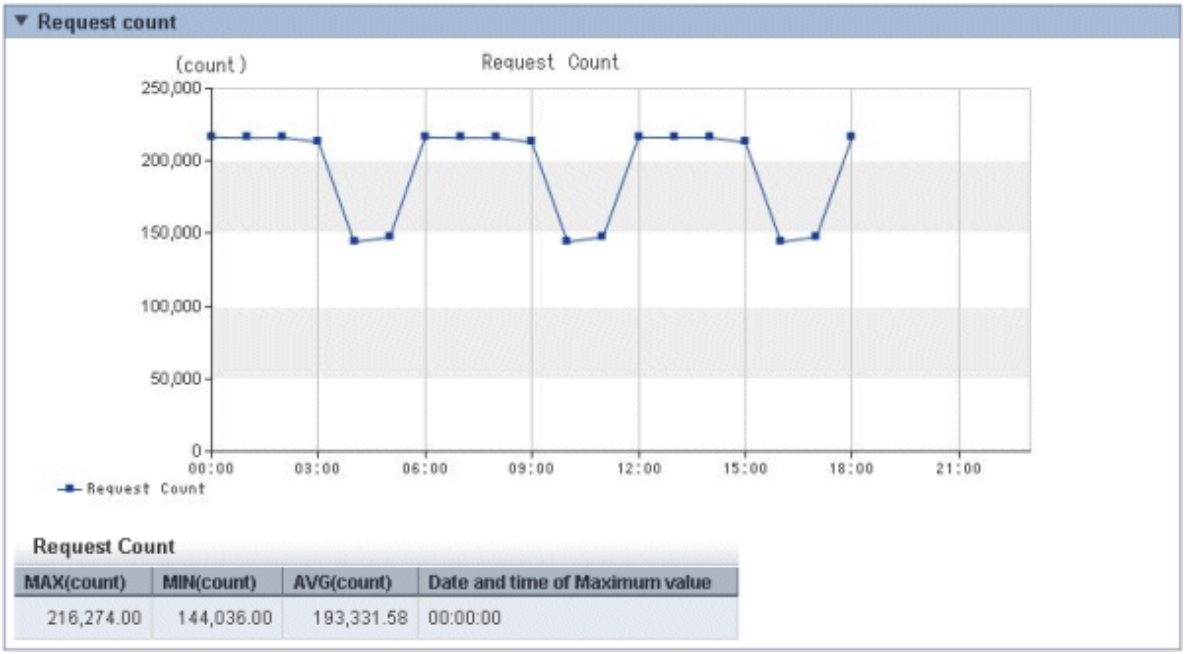
   The increasing rate is confirmed. how much number of requests in the future increases compared with present

   The increasing rate is used as a request coefficient of the **Response simulation (Request count)** report.

Forecast in the future of response

1. The **Response simulation (Request count)** report of the **Response simulation** category is selected with Analysis/ Planning window, the analytical condition is set, and the report is displayed.

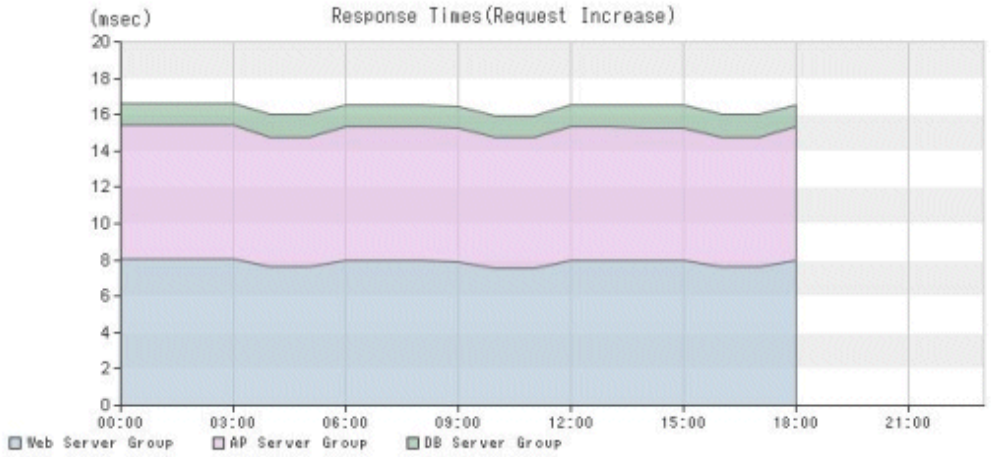
   Please refer to "4.3 How to Operate the Analysis/Planning Window" for the setting method of the analytical condition.



Request Count

MAX(count)	MIN(count)	AVG(count)	Date and time of Maximum value
216,274.00	144,036.00	193,331.58	00:00:00

▼ Response(request increase)



Response Times(Request Increase)

Time	Web Server Group(msec)	AP Server Group(msec)	DB Server Group(msec)	All System(msec)
00:00:00	8.04(High)	7.35(High)	1.25(High)	16.64
01:00:00	8.04(High)	7.35(High)	1.25(High)	16.64
02:00:00	8.04(High)	7.35(High)	1.25(High)	16.64
03:00:00	8.04(High)	7.35(High)	1.25(High)	16.64
04:00:00	7.61(High)	7.14(High)	1.25(High)	16.00
05:00:00	7.61(High)	7.14(High)	1.25(High)	16.00
06:00:00	7.97(High)	7.35(High)	1.25(High)	16.57
07:00:00	7.97(High)	7.35(High)	1.25(High)	16.57
08:00:00	7.97(High)	7.35(High)	1.25(High)	16.57
09:00:00	7.90(High)	7.32(High)	1.25(High)	16.47
10:00:00	7.56(High)	7.14(High)	1.25(High)	15.95
11:00:00	7.56(High)	7.14(High)	1.25(High)	15.95
12:00:00	7.97(High)	7.35(High)	1.25(High)	16.57
13:00:00	7.97(High)	7.35(High)	1.25(High)	16.57
14:00:00	7.97(High)	7.32(High)	1.25(High)	16.53
15:00:00	7.97(High)	7.32(High)	1.25(High)	16.53
16:00:00	7.61(High)	7.14(High)	1.25(High)	16.00
17:00:00	7.61(High)	7.14(High)	1.25(High)	16.00
18:00:00	7.97(High)	7.35(High)	1.25(High)	16.57
19:00:00	N/A	N/A	N/A	N/A
20:00:00	N/A	N/A	N/A	N/A
21:00:00	N/A	N/A	N/A	N/A
22:00:00	N/A	N/A	N/A	N/A
23:00:00	N/A	N/A	N/A	N/A

Save in CSV format [TLA_REQ]

Save in CSV format [OSRESOURCE_PROCESSOR]

In graph/table of the number of requests, the Confirmation of the change in the number of requests during a day when the number of requests increases can be done.

Moreover, the Confirmation of the response time of the entire system when the number of requests increases and the response time of each each level can be done in graph/table of the response time.

The number of the server added to the layer where the response time is long is examined when whether the response time exceeds the reference value is confirmed, and there is an exceeded part. The examined number of the server is used as an analytical condition in the **Response simulation (Adding servers)** report.

Point

The response simulation analyzes the relationship with performance information (OS) on a past number of service requests and each server, simulates the response time, and the accuracy of the simulation improves if the time zone that becomes a noise without the request processing and the direct relationship like the batch processing etc. at nighttime is not included.

The accuracy of the simulation can be confirmed by the reliability of "High", "Medium", and "Low" displayed after the time of the response of the table.

It is shown for "High" to be able to simulate the noise few, and to be able to simulate it by high accuracy.

Moreover, it is not possible to simulate when performance information does not exist and the correlation with performance information on number of requests and OS is hardly obtained, and 'N/A' is displayed in the table.

Reliability can be improved by lengthening the analysis period by setting the analytical condition, and setting to exclude the time zone that becomes a noise like the batch processing etc. at nighttime from the analysis Element.

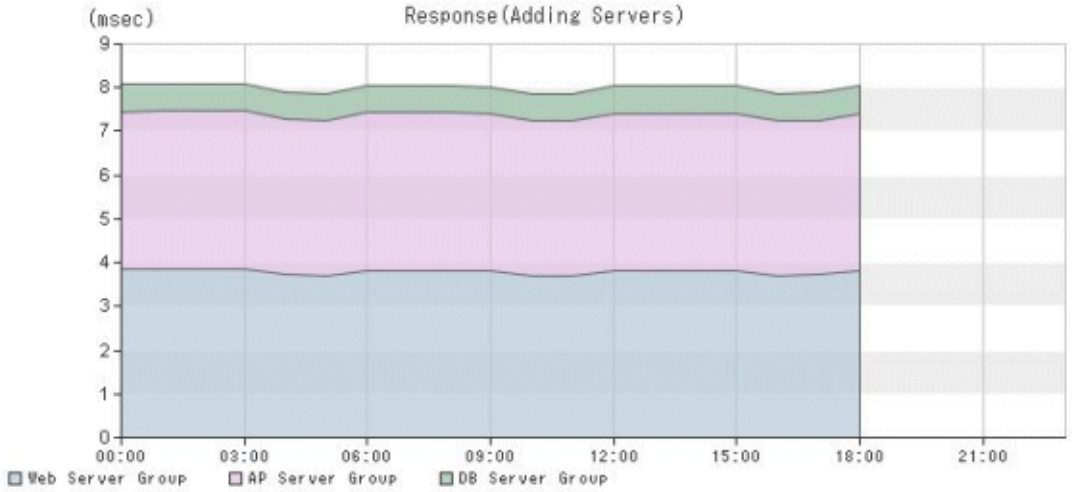
Please refer to "4.3 How to Operate the Analysis/Planning Window" for the setting method of the analytical condition.

Simulation after resource is reinforced

1. The Response simulation (Adding servers) report of the Response simulation category is selected with Analysis/ Planning window, the analytical condition is set, and the report is displayed.

   Please refer to "4.3 How to Operate the Analysis/Planning Window" for the setting method of the analytical condition.

▼ undefined



Response(Adding Servers)

Time	Web Server Group(msec)	AP Server Group(msec)	DB Server Group(msec)	All System(msec)
00:00:00	3.86(High)	3.58(High)	0.62(High)	8.07
01:00:00	3.86(High)	3.60(High)	0.62(High)	8.08
02:00:00	3.86(High)	3.60(High)	0.62(High)	8.08
03:00:00	3.86(High)	3.60(High)	0.62(High)	8.08
04:00:00	3.73(High)	3.54(High)	0.62(High)	7.90
05:00:00	3.71(High)	3.54(High)	0.62(High)	7.87
06:00:00	3.83(High)	3.60(High)	0.62(High)	8.05
07:00:00	3.83(High)	3.60(High)	0.62(High)	8.05
08:00:00	3.83(High)	3.60(High)	0.62(High)	8.05
09:00:00	3.81(High)	3.58(High)	0.62(High)	8.01
10:00:00	3.71(High)	3.53(High)	0.62(High)	7.86
11:00:00	3.71(High)	3.54(High)	0.62(High)	7.87
12:00:00	3.83(High)	3.58(High)	0.62(High)	8.04
13:00:00	3.83(High)	3.58(High)	0.62(High)	8.04
14:00:00	3.83(High)	3.58(High)	0.62(High)	8.04
15:00:00	3.83(High)	3.58(High)	0.62(High)	8.04
16:00:00	3.71(High)	3.53(High)	0.62(High)	7.86
17:00:00	3.73(High)	3.53(High)	0.62(High)	7.89
18:00:00	3.83(High)	3.58(High)	0.62(High)	8.04
19:00:00	N/A	N/A	N/A	N/A
20:00:00	N/A	N/A	N/A	N/A
21:00:00	N/A	N/A	N/A	N/A
22:00:00	N/A	N/A	N/A	N/A
23:00:00	N/A	N/A	N/A	N/A

Save in CSV format [TLA_REQ]

Save in CSV format [OSRESOURCE_PROCESSOR]

The response time after the server is added is displayed. It is confirmed whether there is part where the part and the threshold with long response time are greatly exceeded still.

When the threshold is greatly exceeded, the layer where the response time is long is confirmed, the number of the server is increased, and it simulates it 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 Rreport 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).

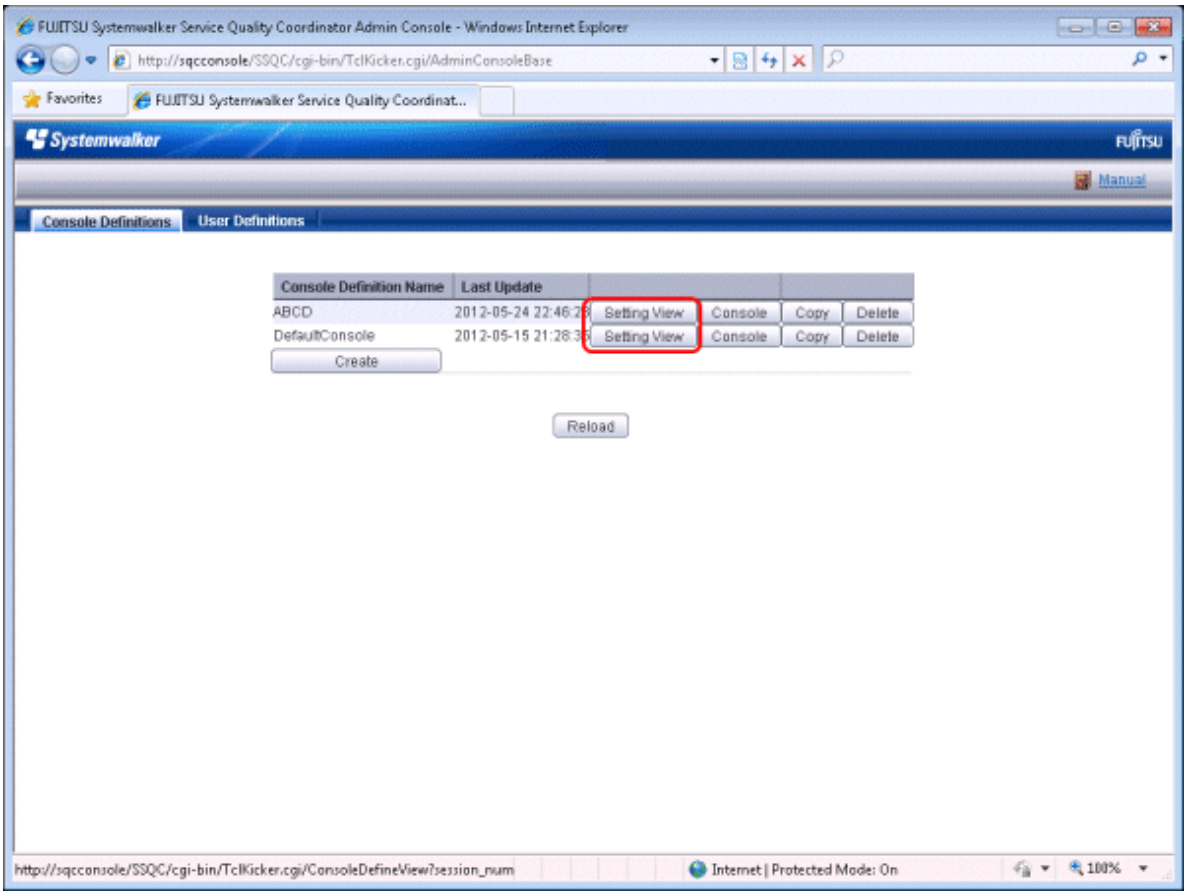
- The operation terminates with error code 1572864.
- "Chart is unavailable" is displayed instead of the graph image.
- The graph image may be left out (only graphs are not displayed).
- The following error message may be displayed.

> "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."

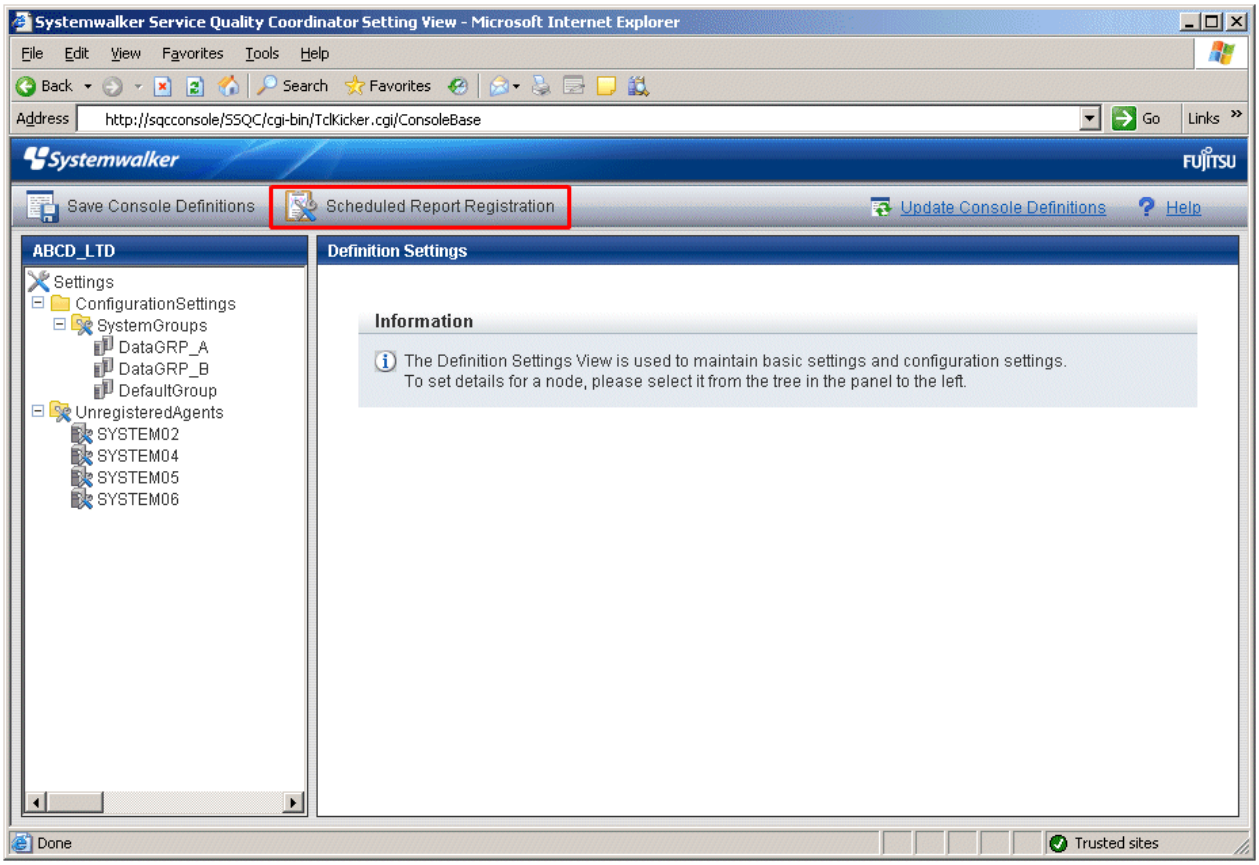
These problems may be due to insufficient space in the desktop heap for the operation management client. Increase the size of the desktop heap by referring to "6.1 Content Display Errors"

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.

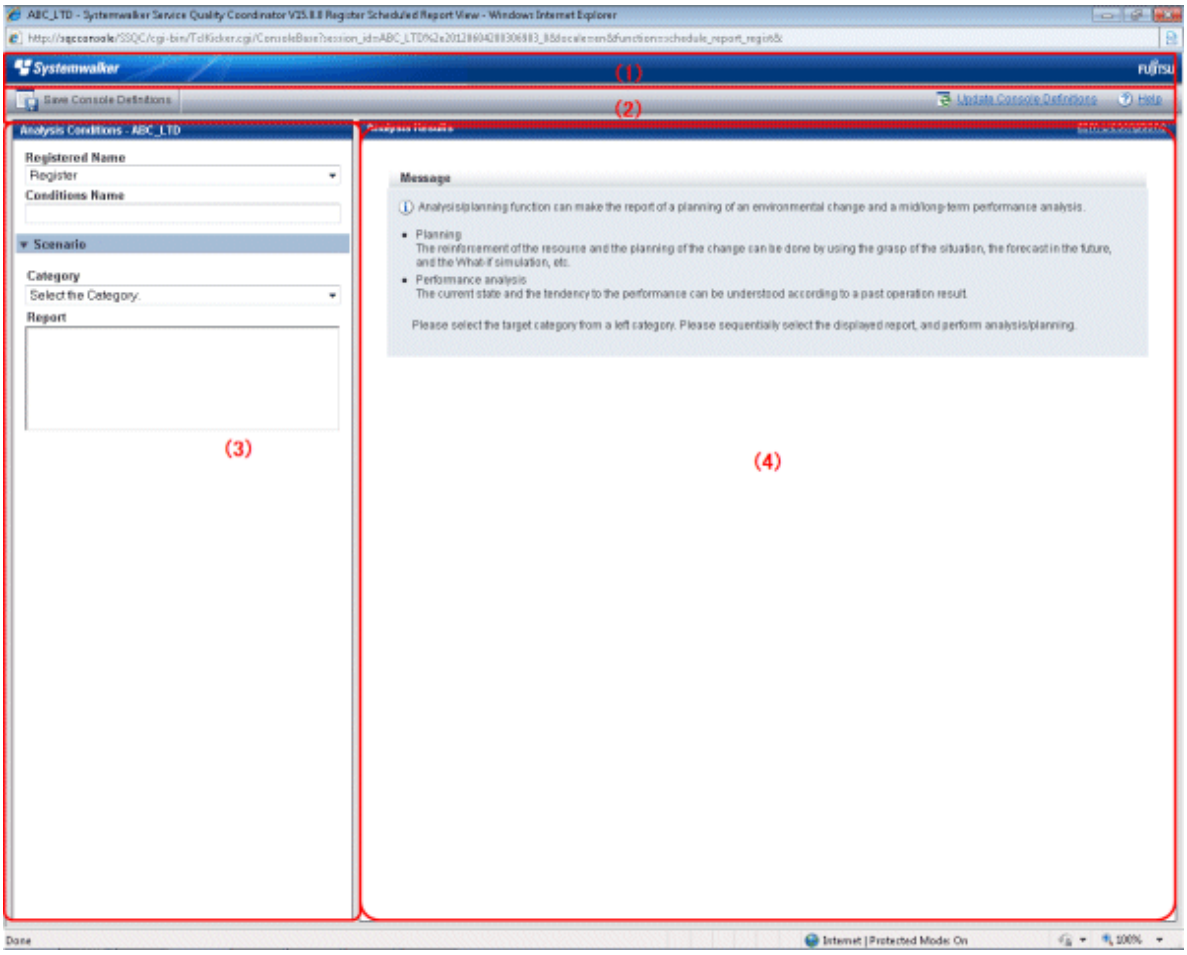


Note

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: - 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.

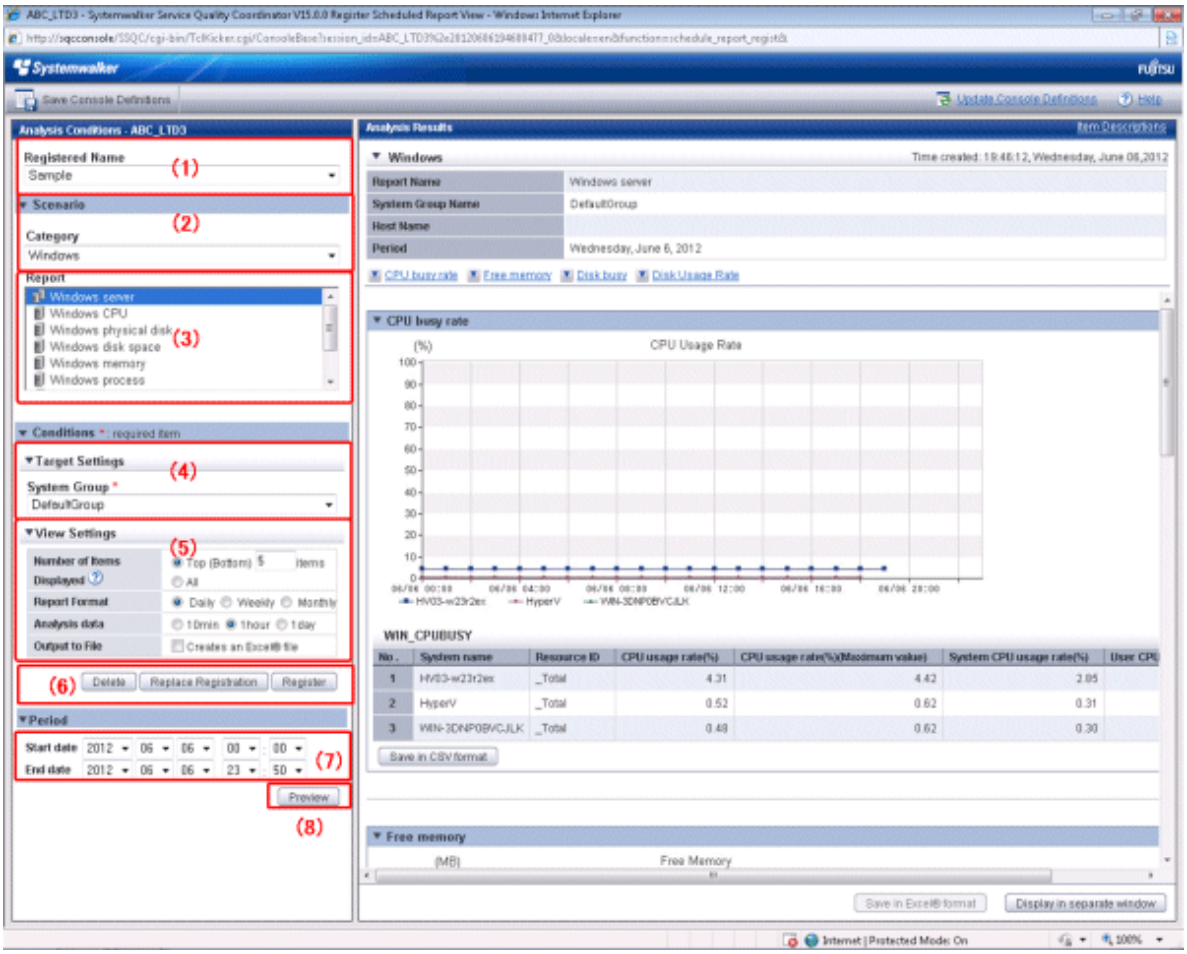
Operation	Description
Register report conditions	Registers any report conditions. Select **Register** in Registered Report Name and enter a condition name in **Category**. Enter the required report conditions, then items other than the dates for starting and finishing reports are registered when the **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 operation of Analysis/Planning Window".

Point

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



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	Specify a display name to identify the analysis conditions. This name is used in the history display and in the scheduled report list. When **Register** is selected in **Registered Report Name**, a **Category** input field appears. After registration, this appears as **Registered Report Name**. The following characters can be used for condition names: - Alphanumeric characters - Symbols (except for $ " ' [ ] < > / ? | ; : * \ & , . =) Platform dependent characters can not be used. The registered report name can be no longer than 36 characters.

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 useed 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 setting".

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

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

Note

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 Vista(R)/Windows(R) 7/Windows(R) 2008 environment, execute with the administrator privilege. Select [Start] button of Windows, [All Programs], [Accessories], [Command prompt], and select [Run as administrator] of the right click menu, and then execute this command.
- To execute this command by registering it with Task Scheduler for the Windows Vista(R)/Windows(R) 7/Windows(R) 2008 environment, 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
```

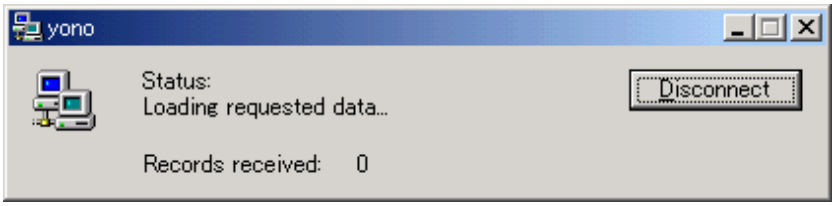
Usage example 2

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.

Note

- To execute this command under Windows Vista(R)/Windows(R) 7/Windows(R) 2008 environment, execute with the administrator privilege. Select [Start] button of Windows, [All Programs], [Accessories], [Command prompt], and select [Run as administrator] of the right click menu, and then execute this command.
- To execute this command by registering it with Task Scheduler for the Windows Vista(R)/Windows(R) 7/Windows(R) 2008 environment, 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.

Point

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

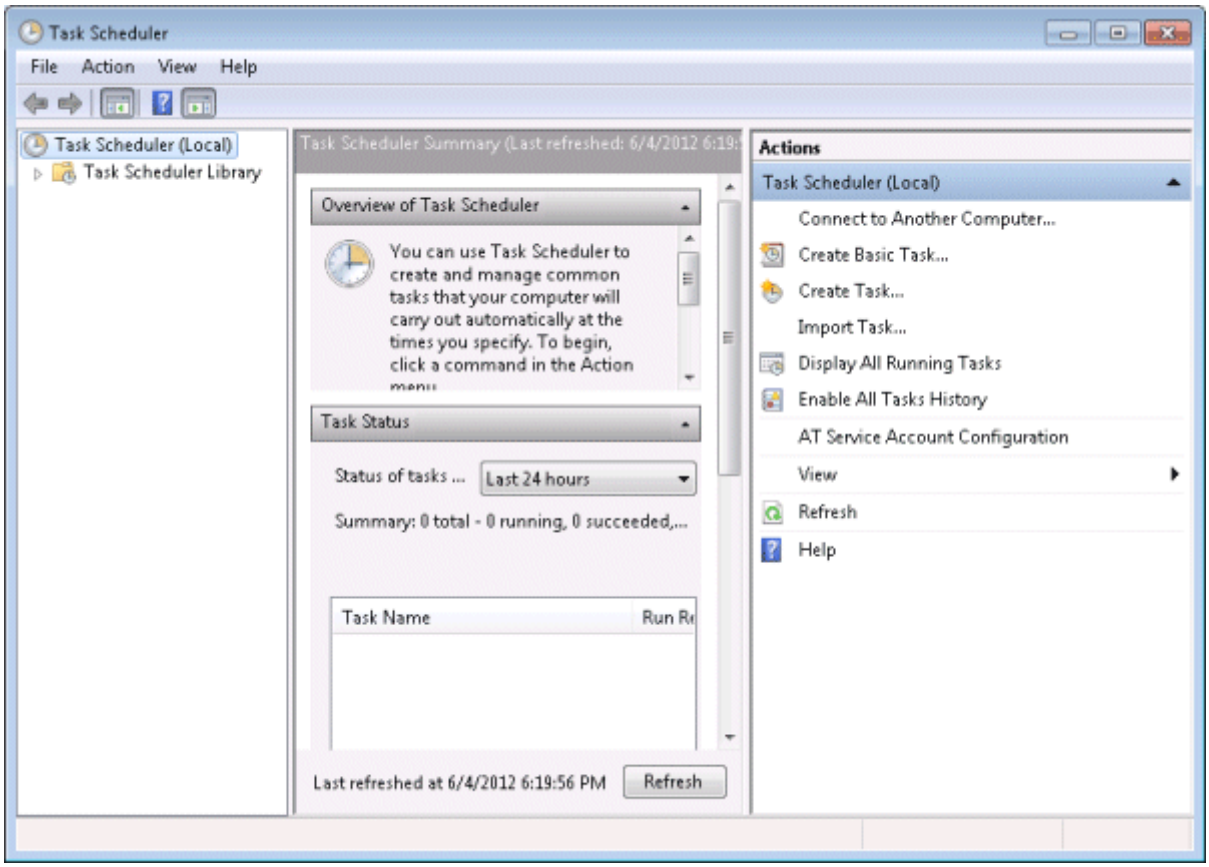
The following example shows the options used to specify a daily report storage period of 10 days, a weekly report storage period of 60 days and a monthly report storage period of 365 days.

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

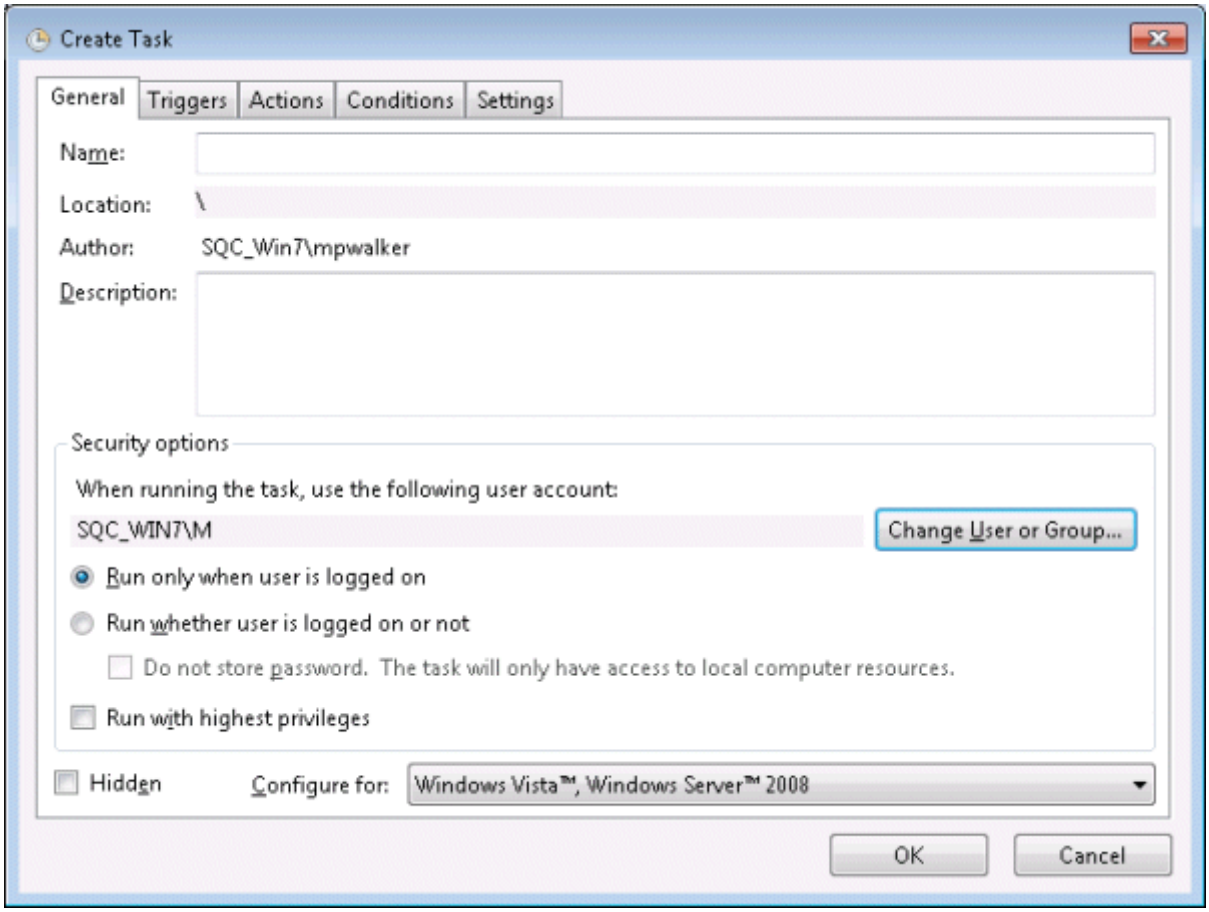
5.3.3 Example of registration with scheduler

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.

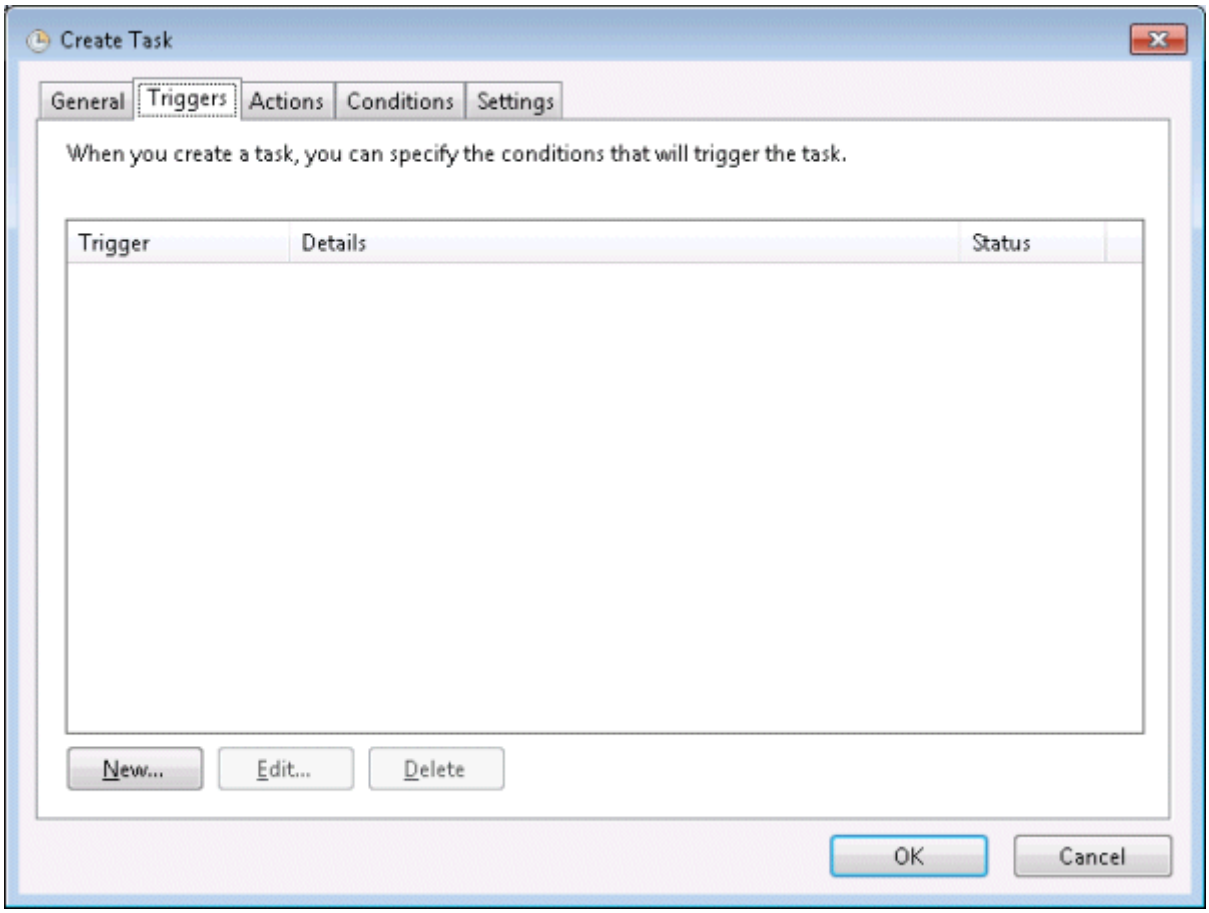


[Name] and [Security options] are properly set.

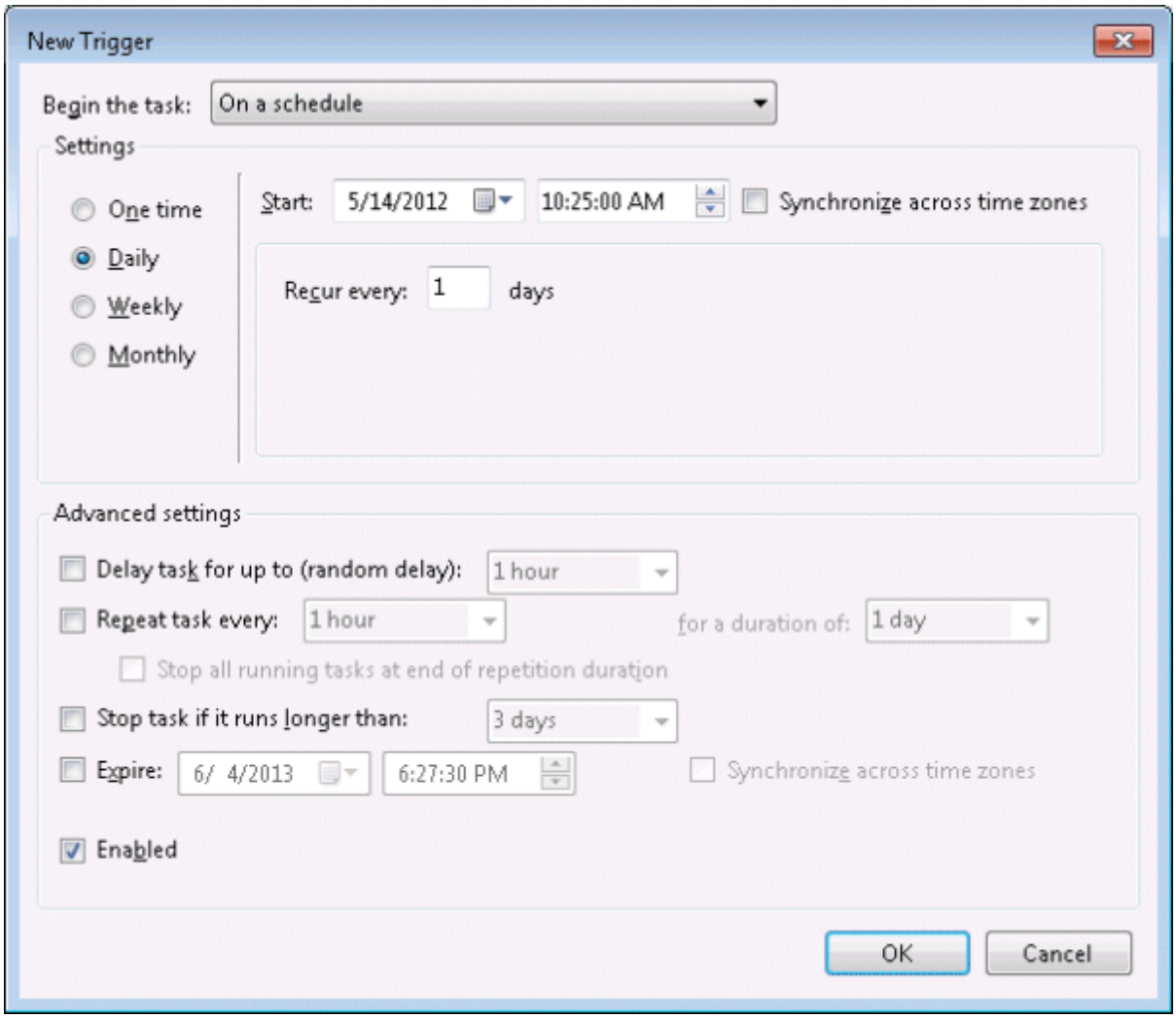
Point

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.

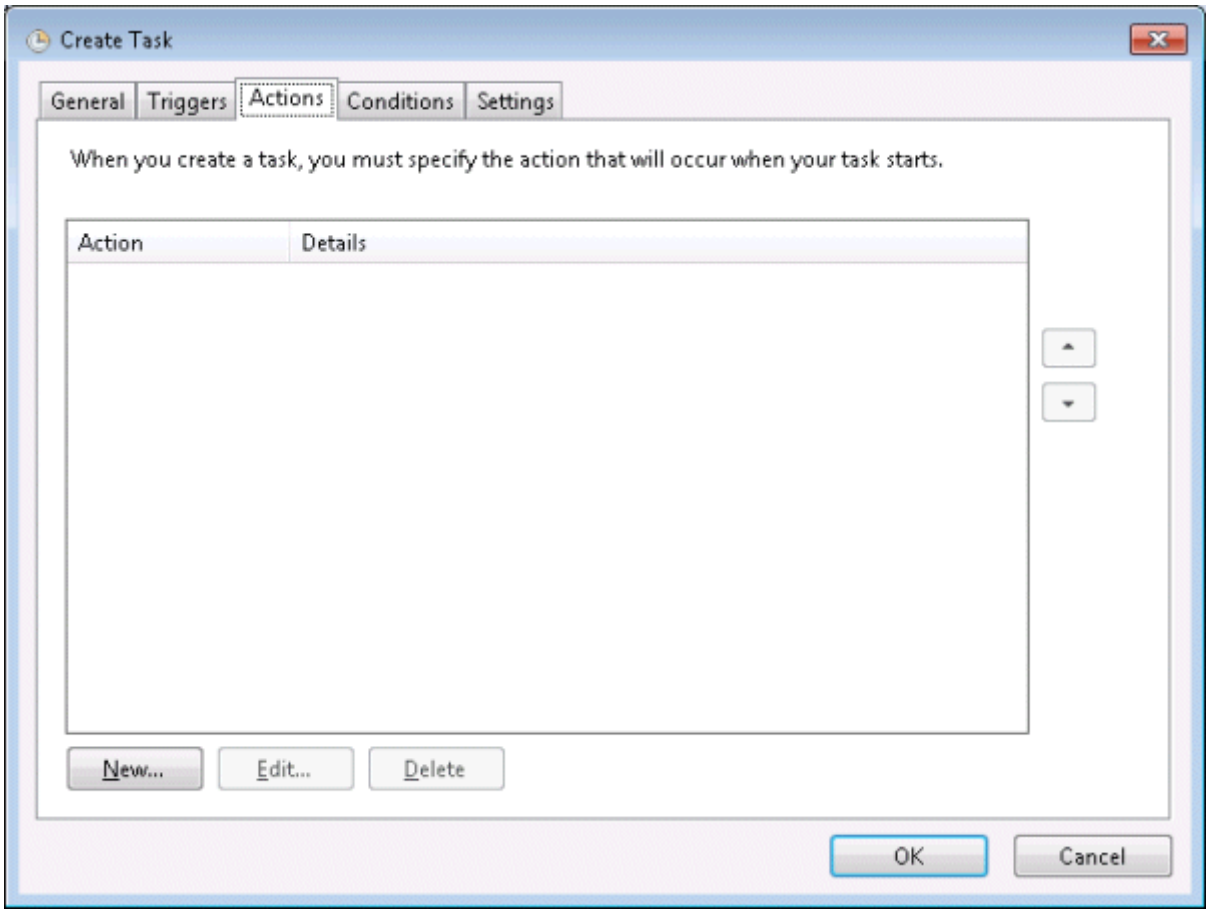


The trigger condition of the task in the scheduled report is properly set to [Settings] and [Advanced settings] and [OK] clicks on a button.

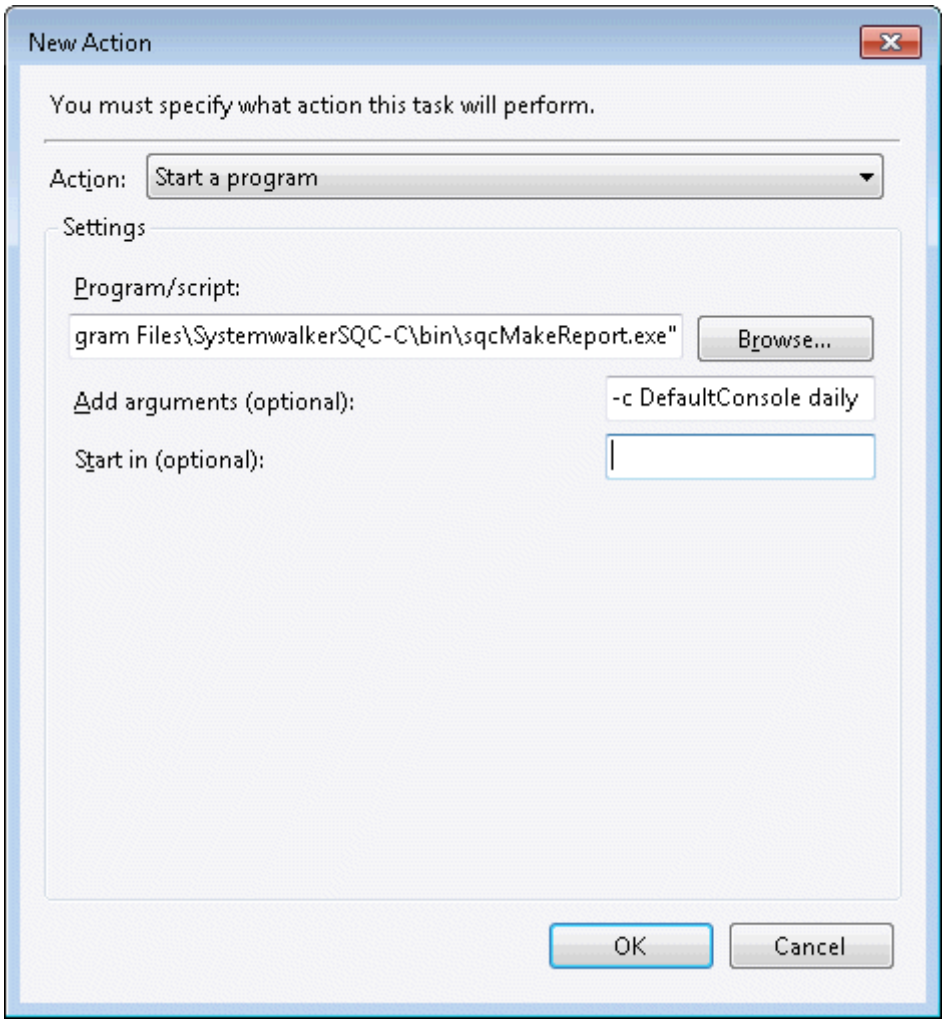
Point

[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

Note

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.

Note

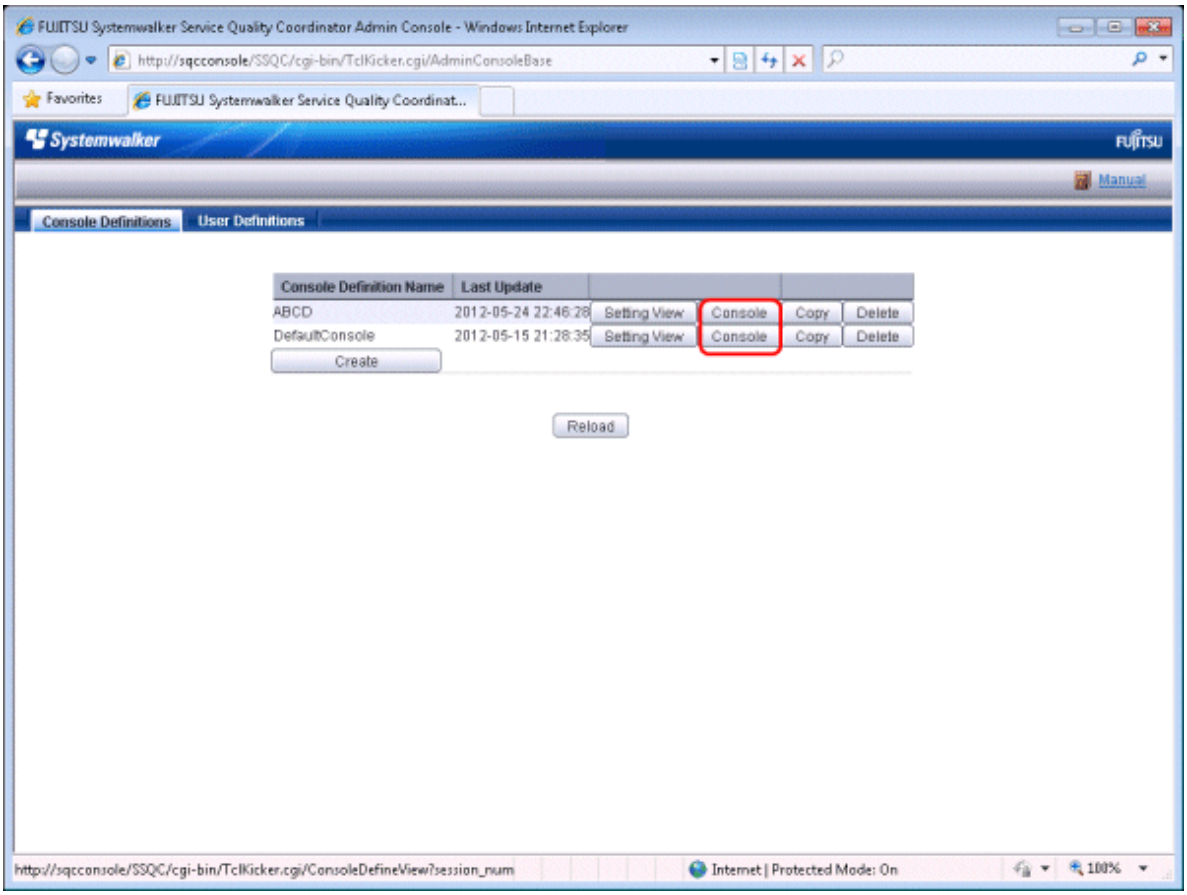
- Only copy directories, and do not move them. To delete a directory from its original location, use the "5.3.2 sqcDeleteReport(Scheduled Report Deletion Command)".
- Even if a report that has been deleted with the Scheduled Report Deletion Command is restored to its original location, it will not appear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

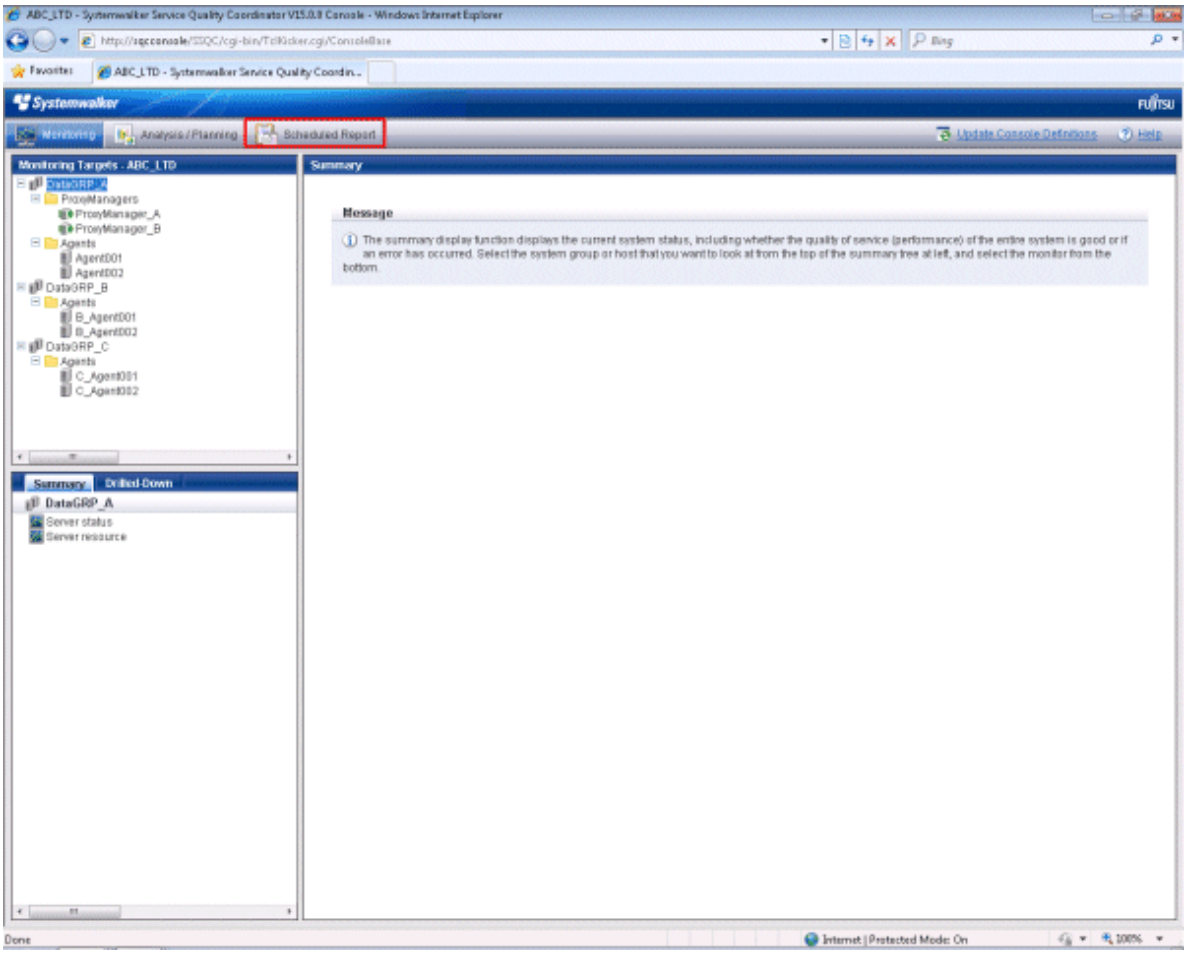
This section explains how to use the **Scheduled Report View**.

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.

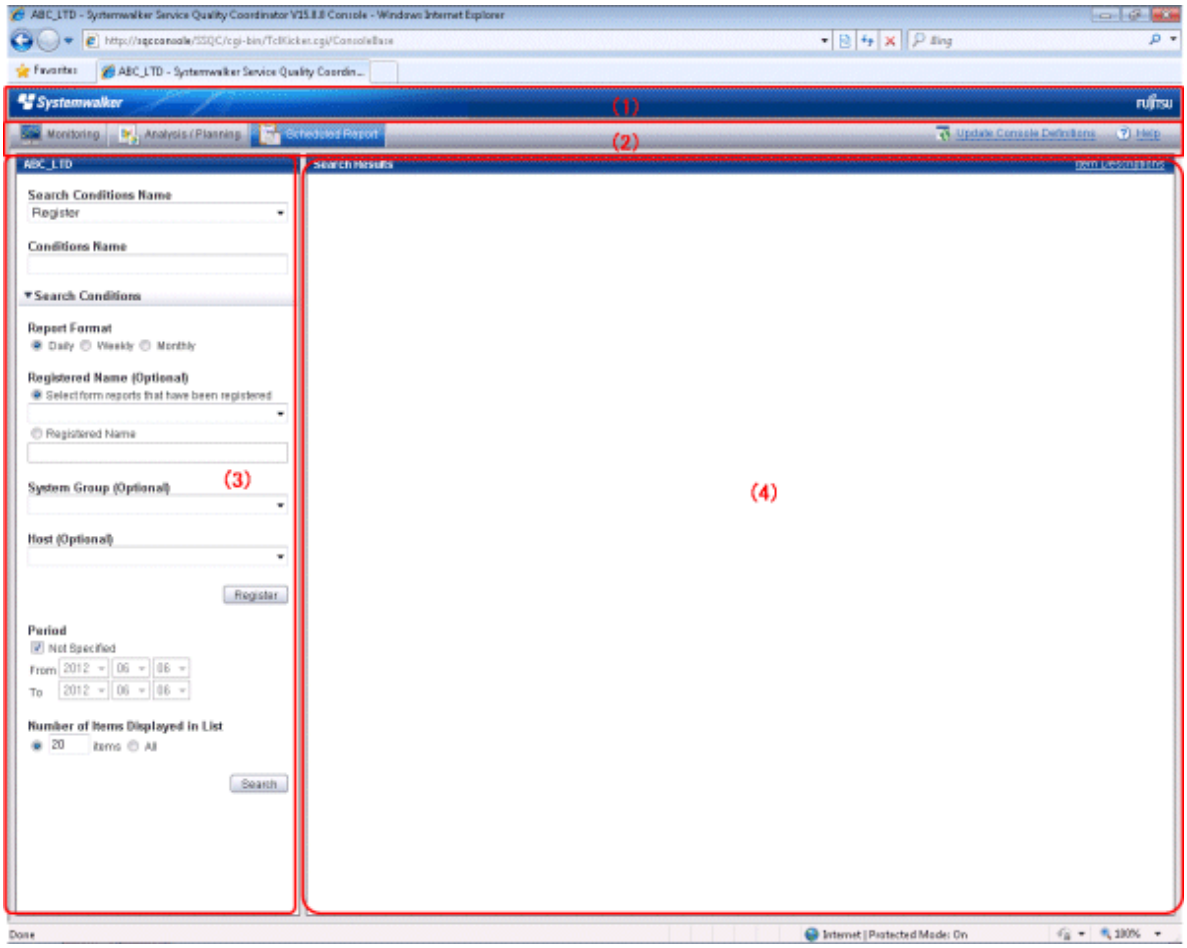


Note

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	The menus are as follows: - **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 *User's Guide (Console Edition)*.
(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).

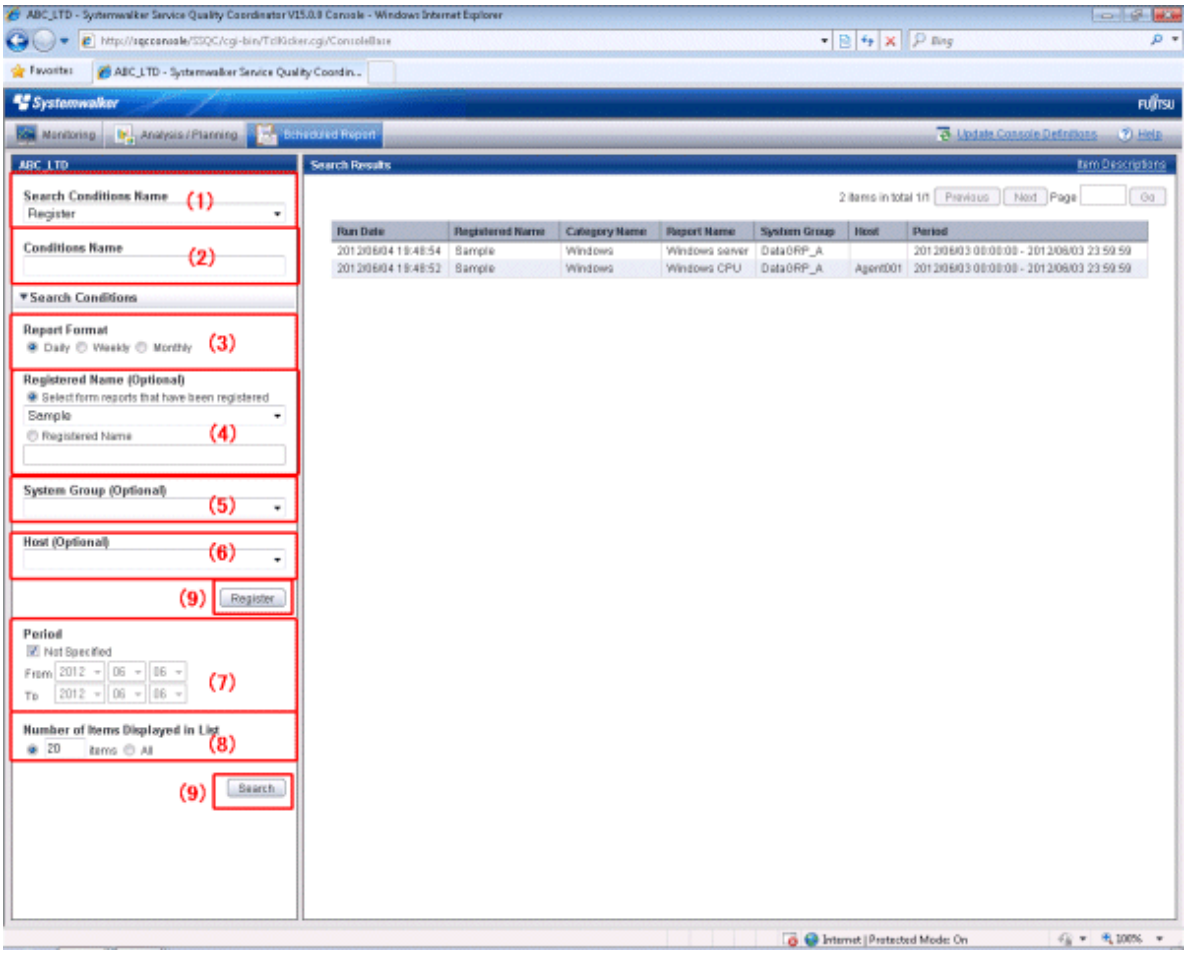
Basic operation of the Scheduled Report view

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

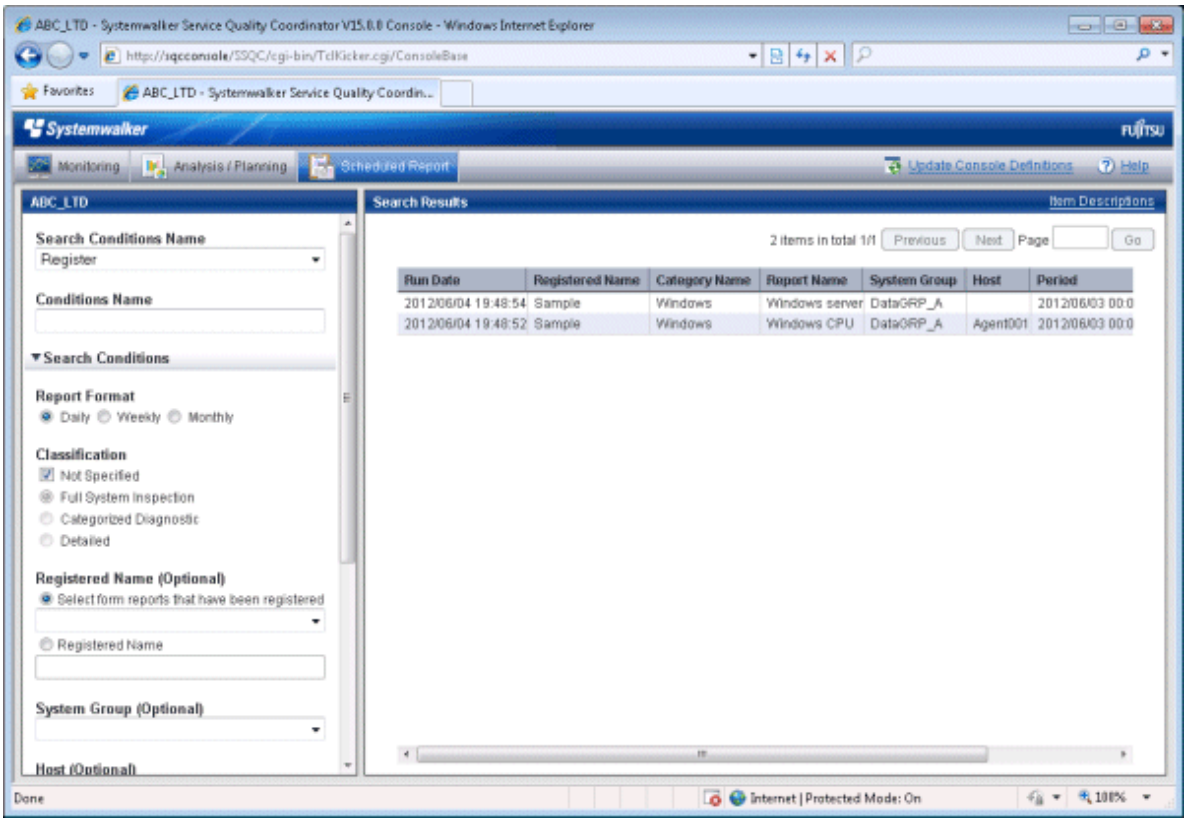
Item No.	Component	Description
(1)	Search condition name	Identifier for registered search conditions.

Item No.	Component	Description
		Currently registered search conditions can be selected from a drop-down list box. Select **Register** to register new conditions. Searches are possible even without registering conditions.
(2)	Condition name	Displayed when **Register** is selected in Search Conditions Name. The following characters can be used for search condition names: - Alphanumeric characters - Symbols (except for $ " ' [ ] < > / ? | ; : * \ & , . =) Platform dependent characters can not be used. The registered report name can be no longer than 36 characters.
(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	Report periods can be specified. Ensure the period that includes the scheduled reports you want to retrieve is specified. 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.
(8)	Number of reports to display	Specify the number of reports to display in scheduled reports list display area. Either specify all reports or a number of reports. - Report number specification A value between 1 and 1000 can be entered. The specified number of reports will be displayed on one page. - All items specification All scheduled reports are displayed on one page.
(9)	Operation buttons display area	- **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
		- **Delete** Displayed when a registered condition name other than **Register** is selected in Search Conditions Name. Use when deleting a condition. - **Search** Searches for scheduled reports under the specified conditions. The retrieved scheduled reports are displayed in scheduled reports list display area at the right.

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, **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

Note

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 256 or 512 to somewhere between 1024 and 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 *Installation Guide*.
	Has the target data been collected?	If not even one item of the target data has been collected, make settings so that the data is collected.
1074003968	Is the Manager service running?	Start the Manager service if it is not running already.
	Can the name of the Manager be resolved from the operation management client?	If the name cannot be resolved, add the name and IP address of the Manager to the hosts file on the operation management client.
1074266112	Has the power to the Manager been turned off?	Turn the power to the Manager on if it has been turned off.
	Has the IP address of the Manager been set up incorrectly on the operation management client?	The IP address/host name of the Manager is specified in the following registry key. Check if the content of this key is correct.

Error code	Check item	Action
		\\HKEY_LOCAL_MACHINE\SOFTWARE\Fujitsu\SQC-C\CurrentVersion\Settings\ManagerIP-Address If the 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 *Installation Guide*.
1342308384	If the Operation Management Client's operating system is Windows Server 2008, Windows Vista, or Windows 7, has the folder described in "4.3.2.2 Display setting" been created?	If the Operation Management Client's operating system is Windows Server 2008, Windows Vista, or Windows 7, check that the folder described in "4.3.2.2 Display setting" has been created.

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".

See

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

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

This problem may occur because the desktop heap on the Manager or Agent is not large enough. In this case, increase the size of the desktop heap using the method explained in "6.1.1 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 appears 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.

Point

- The system must be restarted after settings are made using the diskperf command.
- The diskperf command must be executed before the Systemwalker Service Quality Coordinator DCM service starts (before performance information starts being collected).

Format

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 thttpd service or 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/S99ssqcsch start
```

To stop the processes:

```
/etc/rc0.d/K00ssqcsch 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 thttpd service or 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 thttpd service or 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 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
```