

FUJITSU Software

ServerView Resource Orchestrator

Cloud Edition V3.1.2

A decorative horizontal band with a red-to-dark-red gradient, featuring abstract white and light red curved lines and glowing points of light.

User's Guide

for Tenant Users

Windows/Linux

J2X1-7615-06ENZ0(04)
November 2015

Preface

Purpose

This manual provides an outline of FUJITSU Software ServerView Resource Orchestrator Cloud Edition (hereinafter Resource Orchestrator) and the operations and settings required for setup.

Target Readers

This document is intended for Tenant user who use the resources of a tenant that they own.

Organization

This manual is composed as follows:

Chapter 1 Overview

Explains an overview of the ROR console

Chapter 2 Login and Logout

Explains how to log in and out of the ROR console.

Chapter 3 Home

Explains the ROR console Home window display.

Chapter 4 System Conditions

Explains how to monitor system conditions

Chapter 5 L-Platform

Explains how to use the L-Platform

Chapter 6 Request

Explains how to operate the application list

Chapter 7 Account

Explains how to perform account operations

Web Site URLs

URLs provided as reference sources within the main text are correct as of November 2015.

Please understand that they are subject to change without notice.

Document Conventions

The notation in this manual conforms to the following conventions.

- When there is different information for the different versions of Resource Orchestrator, it is indicated as follows:

[All Editions]	Sections relevant for all editions
[Cloud Edition]	Sections related to Cloud Edition
[Virtual Edition]	Sections related to Virtual Edition

- When using Resource Orchestrator and the functions necessary differ due to the necessary basic software (OS), it is indicated as follows:

[Windows Manager]	Sections related to Windows manager
-------------------	-------------------------------------

[Linux Manager]	Sections related to Linux manager
[Windows]	Sections related to Windows
[Linux]	Sections related to Linux
[Solaris]	Sections related to Solaris
[VMware]	Sections related to VMware
[Horizon View]	Sections related to VMware Horizon View
[Hyper-V]	Sections related to Hyper-V
[Xen]	Sections related to RHEL5-Xen
[KVM]	Sections related to RHEL-KVM
[Solaris Zones]	Sections related to Solaris zones
[OVM for x86 2.2]	Sections related to Oracle VM Server for x86 2.2
[OVM for x86 3.2]	Sections related to Oracle VM Server for x86 3.2
[OVM for SPARC]	Sections related to Oracle VM Server for SPARC
[Citrix Xen]	Sections related to Citrix XenServer
[Physical Servers]	Sections related to physical servers

- Unless specified otherwise, the blade servers mentioned in this manual refer to PRIMERGY BX servers.
- Oracle Solaris may also be indicated as Solaris, Solaris Operating System, or Solaris OS.
- Oracle Solaris Zones may also be indicated as Solaris Containers or Solaris Container.
- Oracle VM Server for x86 may also be indicated as Oracle VM.
- In Resource Orchestrator, the following servers are referred to as SPARC Enterprise.
 - SPARC Enterprise M3000/M4000/M5000/M8000/M9000
 - SPARC Enterprise T5120/T5140/T5220/T5240/T5440
- In Resource Orchestrator, the following servers are referred to as SPARC M10.
 - SPARC M10-1/M10-4/M10-4S
- Fujitsu M10 is the product name used for SPARC M10 when they are sold outside Japan.
- References and character strings or values requiring emphasis are indicated using double quotes (").
- Window names, dialog names, menu names, and tab names are shown enclosed by brackets ([]).
- Button names are shown enclosed by angle brackets (< >) or square brackets ([]).
- The order of selecting menus is indicated using []-[].
- Text to be entered by the user is indicated using bold text.
- Variables are indicated using italic text and underscores.
- The ellipses ("...") in menu names, indicating settings and operation window startup, are not shown.
- The ">" used in Windows is included in usage examples. When using Linux, read ">" as meaning "#".
- If using Windows 8 or Windows Server 2012, please note the following:
Operations descriptions in this manual use examples assuming operating systems up to Windows 7 and Windows Server 2008 - if using this product with Windows 8 or Windows Server 2012, read instructions regarding the [Start] menu as if they were instructions for the [Apps] page.
Display the [Apps] page by right-clicking in the [Start] screen, and then clicking on [All apps].
- When using Resource Orchestrator on Windows 8.1 and Windows Server 2012 R2, please note the following.
When OS operations are explained in this manual, the examples assume OSs up to Windows 7 and Windows Server 2008. When using Resource Orchestrator on Windows 8.1 or Windows Server 2012 R2, take explanations regarding the [Start] menu as indicating the

[Apps] screen.

The [Apps] screen can be displayed by swiping the [Start] screen from bottom to top, or clicking the downward facing arrow on the lower-left of the [Start] screen.

Menus in the ROR console

Operations on the ROR console can be performed using either the menu bar or pop-up menus.

By convention, procedures described in this manual only refer to pop-up menus.

Regarding Installation Folder Paths

The installation folder path may be given as C:\Fujitsu\ROR in this manual.

Replace it as shown below.

- When using Windows 64-bit (x64)
C:\Program Files (x86)\Resource Orchestrator
- When using Windows 32-bit (x86)
C:\Program Files\Resource Orchestrator

Command Examples

The paths used in command examples may be abbreviated. When using commands, execute them using the paths in the "Name" column in the "Reference Guide (Command) VE" and the "Reference Guide (Command/XML) CE".

Abbreviations

The following abbreviations are used in this manual:

Abbreviation	Products
Windows	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, Standard x64 Edition Microsoft(R) Windows Server(R) 2003 R2, Enterprise x64 Edition Microsoft(R) Windows Server(R) 2008 Standard Microsoft(R) Windows Server(R) 2008 Enterprise 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) 2012 Standard Microsoft(R) Windows Server(R) 2012 Datacenter Microsoft(R) Windows Server(R) 2012 R2 Standard Microsoft(R) Windows Server(R) 2012 R2 Datacenter Microsoft(R) Windows(R) XP Professional operating system Windows Vista(R) Business Windows Vista(R) Enterprise Windows Vista(R) Ultimate Windows(R) 7 Professional Windows(R) 7 Ultimate Windows(R) 8 Pro Windows(R) 8 Enterprise Windows(R) 8.1 Pro Windows(R) 8.1 Enterprise

Abbreviation	Products
Windows Server 2003	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, Standard x64 Edition Microsoft(R) Windows Server(R) 2003 R2, Enterprise x64 Edition
Windows 2003 x64 Edition	Microsoft(R) Windows Server(R) 2003 R2, Standard x64 Edition Microsoft(R) Windows Server(R) 2003 R2, Enterprise x64 Edition
Windows Server 2008	Microsoft(R) Windows Server(R) 2008 Standard Microsoft(R) Windows Server(R) 2008 Enterprise Microsoft(R) Windows Server(R) 2008 R2 Standard Microsoft(R) Windows Server(R) 2008 R2 Enterprise Microsoft(R) Windows Server(R) 2008 R2 Datacenter
Windows 2008 x86 Edition	Microsoft(R) Windows Server(R) 2008 Standard (x86) Microsoft(R) Windows Server(R) 2008 Enterprise (x86)
Windows 2008 x64 Edition	Microsoft(R) Windows Server(R) 2008 Standard (x64) Microsoft(R) Windows Server(R) 2008 Enterprise (x64)
Windows Server 2012	Microsoft(R) Windows Server(R) 2012 Standard Microsoft(R) Windows Server(R) 2012 Datacenter Microsoft(R) Windows Server(R) 2012 R2 Standard Microsoft(R) Windows Server(R) 2012 R2 Datacenter
Windows PE	Microsoft(R) Windows(R) Preinstallation Environment
Windows XP	Microsoft(R) Windows(R) XP Professional operating system
Windows Vista	Windows Vista(R) Business Windows Vista(R) Enterprise Windows Vista(R) Ultimate
Windows 7	Windows(R) 7 Professional Windows(R) 7 Ultimate
Windows 8	Windows(R) 8 Pro Windows(R) 8 Enterprise Windows(R) 8.1 Pro Windows(R) 8.1 Enterprise
Linux	Red Hat(R) Enterprise Linux(R) 5 (for x86) Red Hat(R) Enterprise Linux(R) 5 (for Intel64) Red Hat(R) Enterprise Linux(R) 5.1 (for x86) Red Hat(R) Enterprise Linux(R) 5.1 (for Intel64) Red Hat(R) Enterprise Linux(R) 5.2 (for x86) Red Hat(R) Enterprise Linux(R) 5.2 (for Intel64) Red Hat(R) Enterprise Linux(R) 5.3 (for x86) Red Hat(R) Enterprise Linux(R) 5.3 (for Intel64) Red Hat(R) Enterprise Linux(R) 5.4 (for x86) Red Hat(R) Enterprise Linux(R) 5.4 (for Intel64) Red Hat(R) Enterprise Linux(R) 5.5 (for x86) Red Hat(R) Enterprise Linux(R) 5.5 (for Intel64) Red Hat(R) Enterprise Linux(R) 5.6 (for x86) Red Hat(R) Enterprise Linux(R) 5.6 (for Intel64) Red Hat(R) Enterprise Linux(R) 5.7 (for x86) Red Hat(R) Enterprise Linux(R) 5.7 (for Intel64) Red Hat(R) Enterprise Linux(R) 5.8 (for x86) Red Hat(R) Enterprise Linux(R) 5.8 (for Intel64) Red Hat(R) Enterprise Linux(R) 5.9 (for x86) Red Hat(R) Enterprise Linux(R) 5.9 (for Intel64) Red Hat(R) Enterprise Linux(R) 5.10 (for x86)

Abbreviation	Products
	Red Hat(R) Enterprise Linux(R) 5.10 (for Intel64) Red Hat(R) Enterprise Linux(R) 5.11 (for x86) Red Hat(R) Enterprise Linux(R) 5.11 (for Intel64) Red Hat(R) Enterprise Linux(R) 6.2 (for x86) Red Hat(R) Enterprise Linux(R) 6.2 (for Intel64) Red Hat(R) Enterprise Linux(R) 6.3 (for x86) Red Hat(R) Enterprise Linux(R) 6.3 (for Intel64) Red Hat(R) Enterprise Linux(R) 6.4 (for x86) Red Hat(R) Enterprise Linux(R) 6.4 (for Intel64) Red Hat(R) Enterprise Linux(R) 6.5 (for x86) Red Hat(R) Enterprise Linux(R) 6.5 (for Intel64) SUSE(R) Linux Enterprise Server 11 for x86 SUSE(R) Linux Enterprise Server 11 for EM64T
Red Hat Enterprise Linux	Red Hat(R) Enterprise Linux(R) 5 (for x86) Red Hat(R) Enterprise Linux(R) 5 (for Intel64) Red Hat(R) Enterprise Linux(R) 5.1 (for x86) Red Hat(R) Enterprise Linux(R) 5.1 (for Intel64) Red Hat(R) Enterprise Linux(R) 5.2 (for x86) Red Hat(R) Enterprise Linux(R) 5.2 (for Intel64) Red Hat(R) Enterprise Linux(R) 5.3 (for x86) Red Hat(R) Enterprise Linux(R) 5.3 (for Intel64) Red Hat(R) Enterprise Linux(R) 5.4 (for x86) Red Hat(R) Enterprise Linux(R) 5.4 (for Intel64) Red Hat(R) Enterprise Linux(R) 5.5 (for x86) Red Hat(R) Enterprise Linux(R) 5.5 (for Intel64) Red Hat(R) Enterprise Linux(R) 5.6 (for x86) Red Hat(R) Enterprise Linux(R) 5.6 (for Intel64) Red Hat(R) Enterprise Linux(R) 5.7 (for x86) Red Hat(R) Enterprise Linux(R) 5.7 (for Intel64) Red Hat(R) Enterprise Linux(R) 5.8 (for x86) Red Hat(R) Enterprise Linux(R) 5.8 (for Intel64) Red Hat(R) Enterprise Linux(R) 5.9 (for x86) Red Hat(R) Enterprise Linux(R) 5.9 (for Intel64) Red Hat(R) Enterprise Linux(R) 5.10 (for x86) Red Hat(R) Enterprise Linux(R) 5.10 (for Intel64) Red Hat(R) Enterprise Linux(R) 5.11 (for x86) Red Hat(R) Enterprise Linux(R) 5.11 (for Intel64) Red Hat(R) Enterprise Linux(R) 6.2 (for x86) Red Hat(R) Enterprise Linux(R) 6.2 (for Intel64) Red Hat(R) Enterprise Linux(R) 6.3 (for x86) Red Hat(R) Enterprise Linux(R) 6.3 (for Intel64) Red Hat(R) Enterprise Linux(R) 6.4 (for x86) Red Hat(R) Enterprise Linux(R) 6.4 (for Intel64) Red Hat(R) Enterprise Linux(R) 6.5 (for x86) Red Hat(R) Enterprise Linux(R) 6.5 (for Intel64)
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Abbreviation	Products
	Red Hat(R) Enterprise Linux(R) 5.5 (for Intel64) Red Hat(R) Enterprise Linux(R) 5.6 (for x86) Red Hat(R) Enterprise Linux(R) 5.6 (for Intel64) Red Hat(R) Enterprise Linux(R) 5.7 (for x86) Red Hat(R) Enterprise Linux(R) 5.7 (for Intel64) Red Hat(R) Enterprise Linux(R) 5.8 (for x86) Red Hat(R) Enterprise Linux(R) 5.8 (for Intel64) Red Hat(R) Enterprise Linux(R) 5.9 (for x86) Red Hat(R) Enterprise Linux(R) 5.9 (for Intel64) Red Hat(R) Enterprise Linux(R) 5.10 (for x86) Red Hat(R) Enterprise Linux(R) 5.10 (for Intel64) Red Hat(R) Enterprise Linux(R) 5.11 (for x86) Red Hat(R) Enterprise Linux(R) 5.11 (for Intel64)
Red Hat Enterprise Linux 6	Red Hat(R) Enterprise Linux(R) 6.2 (for x86) Red Hat(R) Enterprise Linux(R) 6.2 (for Intel64) Red Hat(R) Enterprise Linux(R) 6.3 (for x86) Red Hat(R) Enterprise Linux(R) 6.3 (for Intel64) Red Hat(R) Enterprise Linux(R) 6.4 (for x86) Red Hat(R) Enterprise Linux(R) 6.4 (for Intel64) Red Hat(R) Enterprise Linux(R) 6.5 (for x86) Red Hat(R) Enterprise Linux(R) 6.5 (for Intel64)
RHEL5-Xen	Red Hat(R) Enterprise Linux(R) 5.4 (for x86) Linux Virtual Machine Function Red Hat(R) Enterprise Linux(R) 5.4 (for Intel64) Linux Virtual Machine Function
RHEL-KVM	Red Hat(R) Enterprise Linux(R) 6.2 (for x86) Virtual Machine Function Red Hat(R) Enterprise Linux(R) 6.2 (for Intel64) Virtual Machine Function Red Hat(R) Enterprise Linux(R) 6.3 (for x86) Virtual Machine Function Red Hat(R) Enterprise Linux(R) 6.3 (for Intel64) Virtual Machine Function Red Hat(R) Enterprise Linux(R) 6.4 (for x86) Virtual Machine Function Red Hat(R) Enterprise Linux(R) 6.4 (for Intel64) Virtual Machine Function Red Hat(R) Enterprise Linux(R) 6.5 (for x86) Virtual Machine Function Red Hat(R) Enterprise Linux(R) 6.5 (for Intel64) Virtual Machine Function
DOS	Microsoft(R) MS-DOS(R) operating system, DR DOS(R)
SUSE Linux Enterprise Server	SUSE(R) Linux Enterprise Server 11 for x86 SUSE(R) Linux Enterprise Server 11 for EM64T
OVM for x86 2.2	Oracle(R) VM Server for x86 2.2
OVM for x86 3.2	Oracle VM Server for x86 v3.2.1 Oracle VM Server for x86 v3.2.2 Oracle VM Server for x86 v3.2.3 Oracle VM Server for x86 v3.2.4 Oracle VM Server for x86 v3.2.6 Oracle VM Server for x86 v3.2.7
OVM for SPARC	Oracle(R) VM Server for SPARC
Oracle VM Manager	Oracle(R) VM Manager
Citrix XenServer	Citrix XenServer(R) 6.0 Citrix XenServer(R) 6.0.2 Citrix XenServer(R) 6.1.0
ESC	ETERNUS SF Storage Cruiser
GLS	PRIMECLUSTER GLS
Navisphere	EMC Navisphere Manager
Solutions Enabler	EMC Solutions Enabler

Abbreviation	Products
MSFC	Microsoft Failover Cluster
Solaris	Oracle Solaris10 05/09 (Update7) Media Pack Oracle Solaris11 11/11 Media Pack Oracle Solaris11.1 Media Pack
SCVMM	System Center Virtual Machine Manager 2008 R2 System Center 2012 Virtual Machine Manager System Center 2012 R2 Virtual Machine Manager
VMware	VMware vSphere(R) 4 VMware vSphere(R) 4.1 VMware vSphere(R) 5 VMware vSphere(R) 5.1 VMware vSphere(R) 5.5
VMware ESX	VMware(R) ESX(R)
VMware ESX 4	VMware(R) ESX(R) 4
VMware ESXi	VMware(R) ESXi(TM)
VMware ESXi 5.0	VMware(R) ESXi(TM) 5.0
VMware ESXi 5.1	VMware(R) ESXi(TM) 5.1
VMware ESXi 5.5	VMware(R) ESXi(TM) 5.5
VMware Tools	VMware(R) Tools
VMware vSphere 4.0	VMware vSphere(R) 4.0
VMware vSphere 4.1	VMware vSphere(R) 4.1
VMware vSphere 5	VMware vSphere(R) 5
VMware vSphere 5.1	VMware vSphere(R) 5.1
VMware vSphere 5.5	VMware vSphere(R) 5.5
VMware vSphere Client	VMware vSphere(R) Client
VMware vCenter Server	VMware(R) vCenter(TM) Server
VMware vClient	VMware(R) vClient(TM)
VMware FT	VMware(R) Fault Tolerance
VMware DRS	VMware(R) Distributed Resource Scheduler
VMware DPM	VMware(R) Distributed Power Management
VMware vDS	VMware(R) vNetwork Distributed Switch
VMware Storage VMotion	VMware(R) Storage VMotion
VMware Horizon View	VMware Horizon View 5.2.x VMware Horizon View 5.3.x VMware Horizon 6.0 (with View)
VIOM	ServerView Virtual-IO Manager
BladeLogic	BMC BladeLogic Server Automation
Internet Explorer	Windows(R) Internet Explorer(R) 8 Windows(R) Internet Explorer(R) 9 Windows(R) Internet Explorer(R) 10 Windows(R) Internet Explorer(R) 11
ServerView Agent	ServerView SNMP Agents for MS Windows (32bit-64bit) ServerView Agents Linux ServerView Agents VMware for VMware ESX Server

Abbreviation	Products
RCVE	ServerView Resource Coordinator VE
ROR	FUJITSU Software ServerView Resource Orchestrator
ROR VE	FUJITSU Software ServerView Resource Orchestrator Virtual Edition
ROR CE	FUJITSU Software ServerView Resource Orchestrator Cloud Edition
Resource Coordinator	Systemwalker Resource Coordinator Systemwalker Resource Coordinator Virtual server Edition
SVFAB	ServerView Fabric Manager

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Revision History

Month/Year Issued, Edition	Manual Code
November 2011, First Edition	J2X1-7615-01ENZ0(00)
December 2011, Edition 1.1	J2X1-7615-01ENZ0(01)
January 2012, Edition 1.2	J2X1-7615-01ENZ0(02)
February 2012, Edition 1.3	J2X1-7615-01ENZ0(03)
March 2012, Edition 1.4	J2X1-7615-01ENZ0(04)
April 2012, Edition 1.5	J2X1-7615-01ENZ0(05)
July 2012, Second Edition	J2X1-7615-02ENZ0(00)
October 2012, Third Edition	J2X1-7615-03ENZ0(00)
December 2012, Fourth Edition	J2X1-7615-04ENZ0(00)
January 2013, Fifth Edition	J2X1-7615-05ENZ0(00)
March 2013, Edition 5.1	J2X1-7615-05ENZ0(01)
June 2013, Edition 5.2	J2X1-7615-05ENZ0(02)
August 2013, Edition 5.3	J2X1-7615-05ENZ0(03)
December 2013, Sixth Edition	J2X1-7615-06ENZ0(00)
February 2014, Edition 6.1	J2X1-7615-06ENZ0(01)
April 2014, Edition 6.2	J2X1-7615-06ENZ0(02)
June 2014, Edition 6.3	J2X1-7615-06ENZ0(03)
November 2015, Edition 6.4	J2X1-7615-06ENZ0(04)

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Chapter 1 Overview

This chapter explains the ROR console.

1.1 Function List

This section explains the functions provided by ROR console.

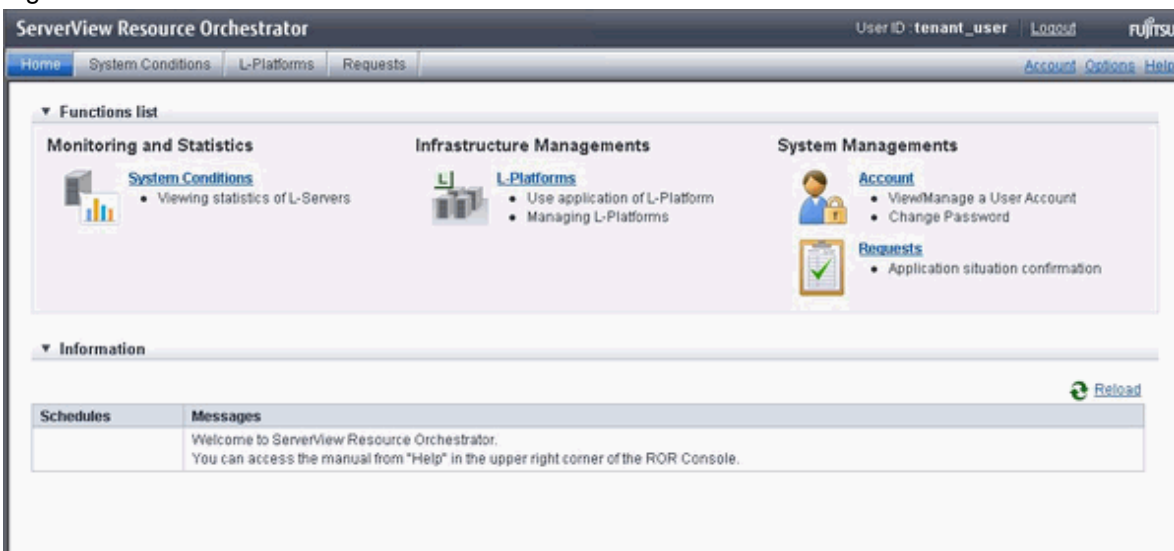
ROR console has two parts: "operation windows for tenant administrators and tenant users" and "operation windows for infrastructure administrators".

Windows intended for Tenant Administrators and tenant users are provided for L-Platform and user information operations. These windows are configured by Tenant Administrators themselves, and have been provided to reduce the Infrastructure Administrator workload.

Operation windows and dashboard windows intended for Infrastructure Administrators are also provided for L-Platform and user information operations. These windows are provided to enable Infrastructure Administrators to display and operate all L-Platform and tenant information and to access important information quickly.

The ROR console displays are customized for the user's role, to provide appropriate functions to each user. For example, tabs that the current user cannot operate are not displayed.

Figure 1.1 ROR console



The table below shows the functions provided by the ROR console.

These functions correspond to the tabs displayed at the top of the ROR console.

Function	Overview	Tenant user
Home	The window displayed immediately after login to the ROR console. A function list and notifications are displayed.	Yes
System Conditions	Displays L-Server performance information and configuration information	Yes
L-Platform	A window for managing L-Platform	Yes
Request	A window for assessing and approving L-Platform usage applications and other applications from tenant users	Yes
Account	A window for changing a logged in user's information and password	Yes
Option	Sets the [Home] Tab as the window displayed at login.	Yes
Help	Displays this product's manual	Yes

Yes: Displayed (However, some functions may not be displayed according to the user's access rights. For details on privileges, check with the infrastructure administrator.)

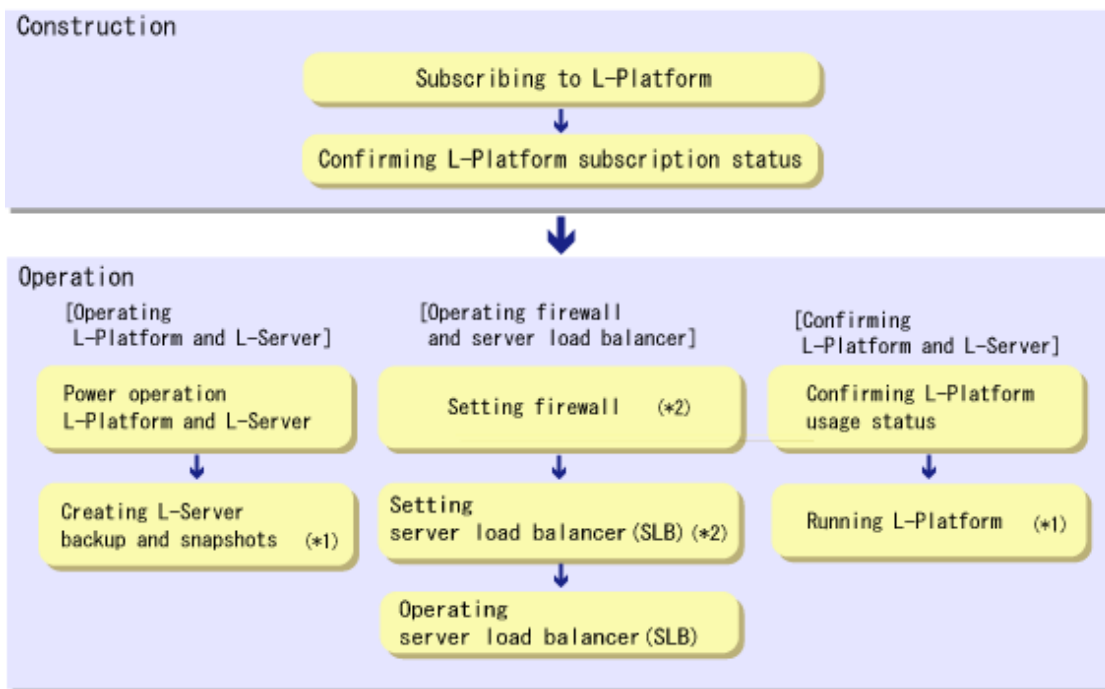
No: Not displayed

Refer to "Chapter 2 Home", and subsequent chapters for information on these functions.

1.2 Flow of Operations

This section explains the flow of operations using the ROR console, from construction to operation, maintenance, and monitoring.

Flow from Construction to Operation (Tenant User)



*1: This is not required. Perform if necessary.

*2: This is required if there is a firewall or server load balancer (SLB).

Construction

1. Subscribing to L-Platform
Subscribe to L-Platform usage.
Refer to "[5.2 Subscribe to an L-Platform](#)" for details.
2. Confirming L-Platform subscription status
Check the L-Platform subscription status.
Refer to "[5.3 L-Platform Management](#)" for details.

Operation

[Operating L-Platform and L-Server]

1. Power operation L-Platform and L-Server
Perform L-Platform and L-Server power and other operations.
Refer to "[5.3.4 Start and Stop the Server](#)" and "17.1 Power Operations" in the "User's Guide for Infrastructure Administrators (Resource Management) CE" for details.

2. Creating L-Server backup and snapshots
If required, create an L-Server backup snapshot.
Refer to "[5.3.6 Take and Restore Snapshot](#)" and "[5.3.7 Physical Server Backup and Restore](#)" for details.

[Operations on the Firewall/Server Load Balancer (SLB)]

1. Configuring the firewall
Configure the firewall if necessary.
Refer to "[5.3.8 Setup Firewall](#)" for details.
2. Configuring the server load balancer (SLB)
Configure the server load balancer (SLB) if necessary.
Refer to "[5.3.10 Server Load Balancer \(SLB\) Settings](#)" and "[5.7 Server Load Balancer \(SLB\) Operation Procedure](#)" for details.
3. Operating the server load balancer (SLB)
Operate the server load balancer (SLB) if necessary.
Refer to "[5.3.11 Server Load Balancer \(SLB\) Operations](#)" and "[5.7 Server Load Balancer \(SLB\) Operation Procedure](#)" for details.

[Confirming L-Platform and L-Server]

1. Confirming L-Platform usage status
Check the status of L-Platform disk usage and other usage.
Refer to "[Chapter 4 System Conditions](#)" for details.
2. Running L-Platform
If required, add servers and disks for the L-Platform.
Refer to "[5.3.13 L-Platform Reconfiguration](#)" for details.

1.3 First Steps Before Using the ROR Console

This section describes the first steps that need to be performed before using the ROR console.

1.3.1 New User Registration Tasks



Point

The following two methods are available for registering a tenant user:

- The tenant users perform user registration themselves using a virtual account that the Tenant Administrator has registered from the [Register User] window
- The Tenant Administrator registers a tenant user from the [Register User] window

The tenant user registration method is set by the system administrator.

This section explains the registration tasks that should be performed by a user who has applied via the Tenant Administrator for new registration. A registration instruction email is sent to such a user.

Follow the registration procedures given in the instruction email.

Note that the registration application becomes invalid if the registration procedure is not performed within 24 hours of receiving the instruction email.

Follow the procedure below to register a new user:

1. Click the URL in the user registration mail.
The [Register User] page will be displayed.

Item	Description
Temporary password	Specify the temporary password given in the tenant user registration mail.

2. Enter in the [Temporary password] field the temporary password given in the user registration mail. Review and agree with the license agreement, and click the [Advance to registration procedure] button.

The input window for the user information will be displayed.
 The window below is the sample of using OpenDS for the directory service.

Item	Description
E-Mail address	User's E-mail address registered at a temporary account is displayed. It is not possible to change.
User ID	[When using OpenDS for the directory service] Specify a registration user ID. Specify a character string of 1 to 32 characters consisting of single-byte lower-case alphabets and numerics, hyphens (-), underscores (_), and periods (.), and starting with lower case alphabet or numbers. This specification is mandatory. [When using Active Directory for the directory service] Specify a registration user ID. Specify a character string of 1 to 20 characters consisting of single-byte lower-case alphabets and numerics, hyphens (-), underscores (_), and periods (.), and starting with lower case alphabet or numbers. Period cannot be used as the last character. This specification is mandatory.
Description	Specify a description for the user ID of the user, using up to 256 characters.
Password	Specify the user password. Specify between 8 and 64 characters, using single-byte alphanumerics and symbols. The specification is case sensitive. This field cannot be omitted.
Password (confirm)	Re-enter a user password for confirmation. This field cannot be omitted.
Personal information	

	Name	Specify the first name and last name separately for the user. Use up to 15 characters for each name. Be sure to specify this item.
	Company name or organization name	Specify the company name or organization name, using up to 30 characters.
Emergency contact details		
	E-mail address	Specify an email address for receiving emergency contact notifications, using up to 64 characters.
	E-mail address (confirm)	Re-enter an email address for receiving emergency contact notifications.
	Telephone number	Specify an emergency contact phone number.

3. Enter the user information and click the [Next] button.
The confirmation window of the registration information will be displayed.
4. Confirm the registration information, and click the [Register] button.
The registration completion window will be displayed.
5. Click the **Close** button, processing is ended.

When user registration is completed, the registration content is sent to the registered user, the Tenant Administrator, and the tenant Email address.

1.3.2 Notification of User Password Setting

If the password is changed by tenant administrator, changed password will be sent to the user by E-mail with the title below. In this case, it is recommended to set a different password immediately.

Title of mail : [Important information]Setting of user password

Chapter 2 Login and Logout

This chapter describes how to open and close the ROR console.

Preparations

Before opening the ROR console, be sure to read the following instructions and restrictions.

- The ROR console uses the Web browser's standard fonts and is designed to be viewed in a window of 1024 by 768 pixels or larger. When using a monitor with a higher resolution than this, it is recommended to enlarge the screen size. If the Web browser is resized by a significant amount, the display quality may deteriorate.
- Surrogate pair characters cannot be used on the ROR Console.
- In environments where the admin server is Windows, and multiple IP addresses are used, when a login window with a different URL from the address bar's URL in which the IP address or host name (FQDN) is specified, the warning may not disappear. Also, the following may occur.
 - The login window is not displayed
 - A certificate error occurs even though the certificate is registered

Perform the following corrective action:

- Windows Server 2008

Set a higher priority for binding of the network adapter used on the admin LAN than for other network adapters.

Example

When changing the order of priority of network adapter binding in Microsoft(R) Windows Server(R) 2008 R2 Enterprise

1. Click <Start>, and then click [Control Panel].
2. When [Network and Internet] is displayed, click this item.
When [Network and Internet] is not displayed, proceed to the next step without clicking.
3. Click [Network and Sharing Center], and click [Change adapter settings] in the left side of the window.
4. Click [Advanced Settings] in the [Advanced] menu.
When the [Advanced] menu is not displayed, push the [Alt] key.
5. From the list of [Connections] in the [Adapters and Bindings] tab, click the target network adapter, and the "Up" or "Down" buttons to change the order of priority of connections.
6. Click <OK>.

- Windows Server 2012 or later

On the admin server, set the metric of the admin LAN interface that is smaller than other interface.
The metric value of interfaces can be checked using the "netstat -r" command.

Example

When modify the value of Interface metric in Microsoft(R) Windows Server(R) 2012 Standard

1. Press [Windows logo + R] key.
[Run] will be opened.
2. Type ncpa.cpl and click <OK>.
3. Right-click the LAN Icon that connects, and click [Properties].
4. Click [Internet Protocol Version4 (TCP/IPv4)] and click [Properties] button.

5. Click [Advanced] button.
6. Uncheck [Automatic metric] in the [IP Settings], and input the value in [Interface metric] field.

-
- When opening the ROR console with Internet Explorer, read the following additional instructions and restrictions.
 - When accessing the ROR console, be sure to enable the Compatibility View in Internet Explorer. Select [View]-[Encoding] in Internet Explorer, and check if [Auto-Select] is checked. If [Auto-Select] is not checked, select it.
 - When downloading files using the ROR console, it is necessary to disable [Do not save encrypted pages to disk] in the Advanced Settings of the browser.
 - The ROR console uses JavaScript, Active Script, Cookies, and IFRAMES. These must be enabled in the Web browser settings before using the ROR console. Use SSL 3.0 and TLS 1.0.
 - Specify either one of the following for the Web browser pop-up blocker:
 - Disable the pop-up blocker
 - Add the URL of the ROR Console to the **Address of web site to allow** setting. Check with the system administrator for the URL of the ROR Console.
 - When opening the ROR console right after launching a Web browser, a warning window concerning the site's security certificate will be displayed.
 The following message is displayed: "There is a problem with this web site's security certificate." This warns the user that Resource Orchestrator uses a self-signed certificate to encrypt its HTTPS (SSL) communication with the Web browser. Resource Orchestrator generates a unique, self-signed certificate for each admin server during manager installation. Within a firewall-protected intranet, a network where the risk of identity theft is low, or where all correspondents are trusted, there is no risk in using self-signature certificates for communications. Accept the warning to display the Resource Orchestrator login screen.
 The login screen can be displayed by selecting the following option: "Continue to this web site (not recommended)."
 - The background of the address bar will become red and the words "Certificate Error" will be displayed on the right side of the address bar of the login screen, the ROR console, and BladeViewer.
 Furthermore, the Phishing Filter may show a warning on the status bar. These warnings are referring to the same self-signed certificate issue discussed in the previous bullet. It is safe to continue with the current browser settings.
 - To stop displaying the security certificate warning screen and the certificate error icon, create a certificate associated with the IP address or hostname of the admin server and add it to the Web browser.
 Refer to "Appendix B HTTPS Communications" in the "Design Guide CE" for details.
 - Add the URL of the ROR console to the "Trusted sites" of the browser.
 - When opening the ROR console with Firefox, read the following additional instructions and restrictions.
 - Confirm that the "Allow pages to choose their own fonts, instead of my selections above" is checked in the Advanced setting in [Options]-[Content]-[Fonts & Colors]. If it is not checked, check it.
 - The ROR console uses JavaScript, Cookies, and IFRAMES. These must be enabled in the Web browser settings before using the ROR console. Use SSL 3.0 and TLS 1.0.
 - Specify either one of the following for the Web browser pop-up blocker:
 - Disable the pop-up blocker
 - Add the URL of the ROR Console to the **Address of web site to allow** setting. Check with the system administrator for the URL of the ROR Console.
 - Create a certificate associated with the IP address or hostname of the admin server and add it to the Web browser.
 Refer to "Appendix B HTTPS Communications" in the "Design Guide CE" for detail instructions to create and install certificate.

Opening the ROR Console

This section explains how to access the ROR console.

Start a Web browser from an admin client and specify the URL of the ROR console for connection.
If the port number was changed, specify the new port number.

When the ROR console is connected, the login window is displayed.

When Single Sign-On authentication has already been performed, the ROR console can be started without displaying the login window.

Refer to "Chapter 12 Installing and Defining Single Sign-On" in the "Design Guide CE" for details on Single Sign-On.

```
URL: https://Admin_server_FQDN:23461/
```

On a Windows admin server, the ROR console can also be opened by selecting [start]-[All Programs]-[Fujitsu]-[Resource Orchestrator]-[ROR console].

When modifying the URL of the start menu from localhost to the FQDN of an admin server, edit the following file:

- *System drive*\ProgramData\Microsoft\Windows\Start Menu\Programs\Fujitsu\Resource Orchestrator\ROR Console

- Before Editing

```
[InternetShortcut]  
URL=https://localhost:23461/
```

- After Editing

```
[InternetShortcut]  
URL=https://FQDN:23461/
```

Note

- If the login screen is not displayed, confirm the following.
 - URL entered in address bar of the Web browser.
 - The proxy settings of the Web browser are correct.
 - The firewall settings on the admin server are correct.
- If already logged in from another Web browser window, login may be performed automatically (without displaying the login screen).

Login

In the login screen, enter the following items, and click <Login>.
The ROR console or BladeViewer is displayed after a successful login.

- User ID
- Password

When logging in for the first time, the [Home] tab is displayed. When logging in for the second time and successive times, the tab that was displayed at the last logout is displayed.

It is also possible for each user to set whether the [Home] tab is to be displayed at login. To change the option, click "Options" in the upper right corner of the ROR Console. This option is not reflected on the backup site during switchover due to Disaster Recovery. Each user has to change the option individually after switchover.

Logout

To log out, select "Logout" in the global header, and click <OK> in the confirmation dialog.

 Note

- If the Web browser is closed without logging out first, user authentication may be skipped the next time Resource Orchestrator is accessed. In that case, users will be automatically logged in using the previously used session. It is advised that the users log out properly after using the ROR console or BladeViewer.
- If the ROR console or BladeViewer has been opened simultaneously in several Web browser windows, those login sessions may be terminated.

Chapter 3 Home

This chapter explains the ROR Console Home window.

When the ROR Console is started, the Home window is displayed. Refer to "[Chapter 2 Login and Logout](#)" for information on how to start the ROR Console.

The elements of the Home window are explained below.

- Functions list

The functions list displays the items that can be operated using ROR Console tabs.

Click the triangle icon next to the Function list to toggle Display/Hide.

- Information

Information from the System Administrator and Infrastructure Administrator is displayed.

Chapter 4 System Conditions

This chapter explains how to monitor system conditions.

The configuration information of L-Platforms and L-Servers and the performance information of L-Servers can be checked in the operational status.



The following message may be displayed during monitoring of system conditions:

The authority error occurred. Closing the browser.

This error occurs if, for example, the same user ID is used to log in from a different client. In this case, log in again correctly.

4.1 System Conditions Display Range

The system conditions can display the following information for L-Platforms used by a tenant user:

- CPU utilization
- Disk R/W usage
- Disk R/W count
- Memory usage
- Network usage

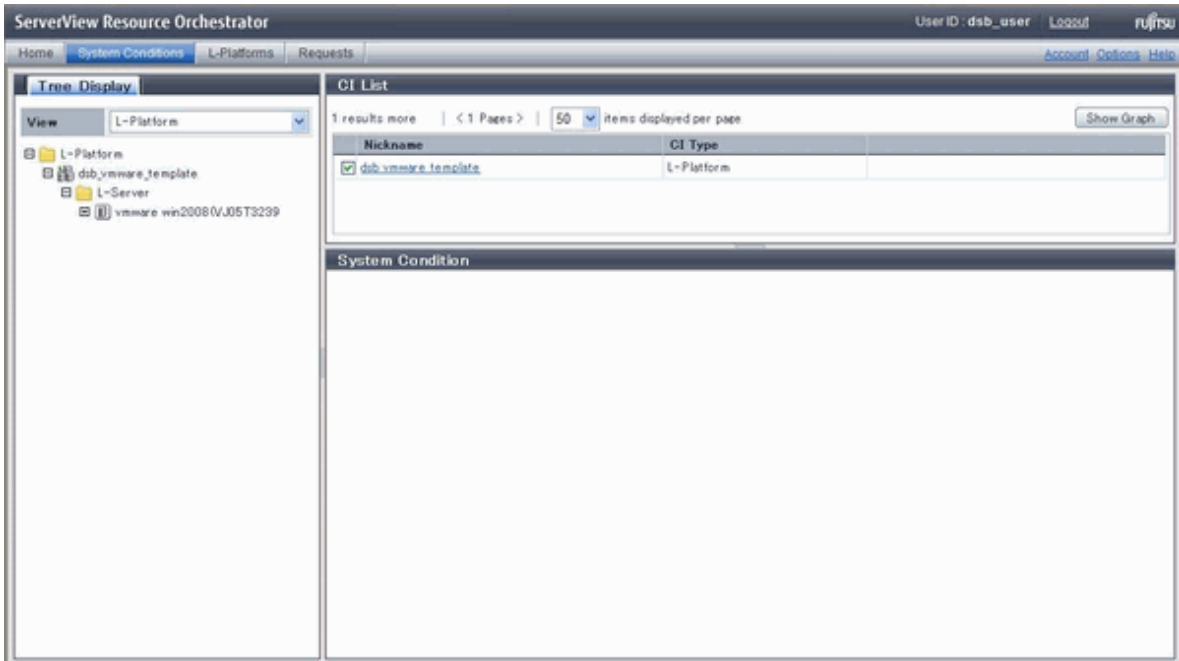
4.2 L-Platform System Conditions Display

Perform the following steps to display the L-Platform system conditions:

1. From the ROR console, select the [System Conditions] tab.
The [System Conditions] window is displayed.

- In the [System Conditions] window, select the [Tree Display] tab.

The configuration of L-Platforms used by tenant users is displayed in the tree at the left.



- From the tree at the left, select the L-Platform for which to display the system conditions.

The selected L-Platform is displayed in the CI list on the right.

If the "L-Platform" folder is selected in the tree, all L-Platforms under the folder are displayed in the CI list.

If an L-Server is selected in the tree, information about the selected server is displayed in the CI list.

The L-Platforms and L-Servers under each folder in the tree are displayed in descending order based on their update date and time.

- Select an L-Platform in the CI list, and then click the [Show Graph] button.

The system conditions is displayed in the lower part of the CI list. Refer to "[4.2.1 System Conditions Display](#)" for information on the displayed system conditions.

The table below explains the displayed items.

Item	Explanation
Nickname	<p>Displays the display name of the configuration item.</p> <p>If the CI list Nickname link is clicked, the configuration information of the target tenant, L-Platform or L-Server is displayed in a separate window. Refer to "4.2.2 Configuration Information Display" for the displayed configuration information.</p> <p>The following display names are displayed in accordance with the CI type:</p> <ul style="list-style-type: none"> - For the tenant CI type: The tenant name determined during tenant registration ("tenant name (tenant ID)") - For the L-Platform CI type: The L-Platform subscription name set during L-Platform subscription - For the L-Server CI type: The L-Server name set during L-Platform subscription or L-Platform reconfiguration ("server name (host name)")
CI Type	<p>This column displays the configuration item type.</p> <p>The CI type displayed depends on the element selected in the tree at the left.</p> <p>The CI types are as follows:</p> <ul style="list-style-type: none"> - Tenant: If a tenant is selected

Item	Explanation
	- L-Platform: If an L-Platform is selected
	- L-Server: If an L-Server is selected

Note

Clicking the CI list column headers to sort the columns is effective only for the range displayed in that page. The sorting specification is reset when the next or previous page is displayed. Sorting spanning multiple pages is not available.

4.2.1 System Conditions Display

The system conditions of the L-Platforms selected in the system conditions window CI list is displayed as a graph at [System Conditions] in the lower part of the window. Up to five L-Servers can be displayed at once in the graphs. If more than five L-Servers are selected, the first five are displayed.

The system conditions contents can be switched by clicking the [System Conditions] tabs.

The table below shows the contents under the [System Conditions] tabs.

Tab name	Display content (*1)	Graph type	Display interval	Display interval switching (*2)
Total	Totals for each status	Vertical bar graph	30 minutes, starting from the current time	Not possible
CPU	CPU utilization	Horizontal polyline graph	One hour/day/month/year from the current time	Possible
Disk	Disk R/W usage (*3)	Horizontal polyline graph	One hour/day/month/year from the current time	Possible
	Disk R/W count (*4)	Horizontal polyline graph	One hour/day/month/year from the current time	Possible
Memory	Memory usage (*5)	Horizontal polyline graph	One hour/day/month/year from the current time	Possible
Network	Network usage (*6)	Horizontal polyline graph	One hour/day/month/year from the current time	Possible
All	Overview of all the above statuses	Horizontal polyline graph	One hour/day/month/year from the current time	Possible

*1: Information is displayed using a different color for each L-Server.

*2: The display interval can be switched to a shorter interval by clicking the data plotting area of a horizontal polyline graph, or switched to a longer interval by clicking outside the data plotting area.

*3: Disk usage and network usage are not displayed if the server virtualization software is Hyper-V, RHEL5-Xen, Solaris Zones, and OVM for SPARC.

*4: The disk R/W count is not displayed if the server virtualization software is Hyper-V, RHEL-KVM, Solaris Zones, and OVM for SPARC.

*5: The memory usage is not displayed if the server virtualization software is Hyper-V, and OVM for SPARC. However, this is displayed if the setting for the dynamic memory in Hyper-V is enabled.

*6: The network usage is not displayed if the server virtualization software is Hyper-V, Solaris Zones, and OVM for SPARC. It is also not displayed if the physical L-Server is Linux/Solaris.

Note

- Information obtained from server virtualization software is displayed in the system conditions. Virtual Memory usage is not included.

- When the server virtualization software of managed servers is VMware, RHEL5-Xen, RHEL-KVM, or OVM for SPARC, the graph is not displayed when the manager is stopped because the data cannot be collected.
Also, when data cannot be collected temporarily due to restarting of the manager and so on, some of the data is not displayed.
- The system conditions data is not reflected in the display until collection at the fixed intervals shown below is completed.
Check the display after the fixed intervals shown below.

Note that, if the contents are empty after a fixed interval, the connection destination L-Platform may be stopped. Contact the Tenant Administrator.

Tab name	Display period (*)	Collection time required before displaying
Total	30 days	one whole day (from 0:00 to 23:59)
CPU Disk Memory Network	one hour	ten whole minutes (from 0 minutes to 9 minutes)
	one day	one whole hour (from 0 minutes to 59 minutes)
	one month/one year	one whole day (from 0:00 to 23:59)

* Note: The display period in each tab except for Total tab can be selected from one hour, one day, one month, or one year.

- System conditions data is not displayed if the power is off at the monitored L-Server.
- If the CPU utilization status continues at 100% at the monitored L-Server, data collection timing may be delayed and an error of about one second may occur. This may cause CPU utilization (average value for a specified unit of time) to exceed 100%.
Take into account the possibility of data errors when using this display.

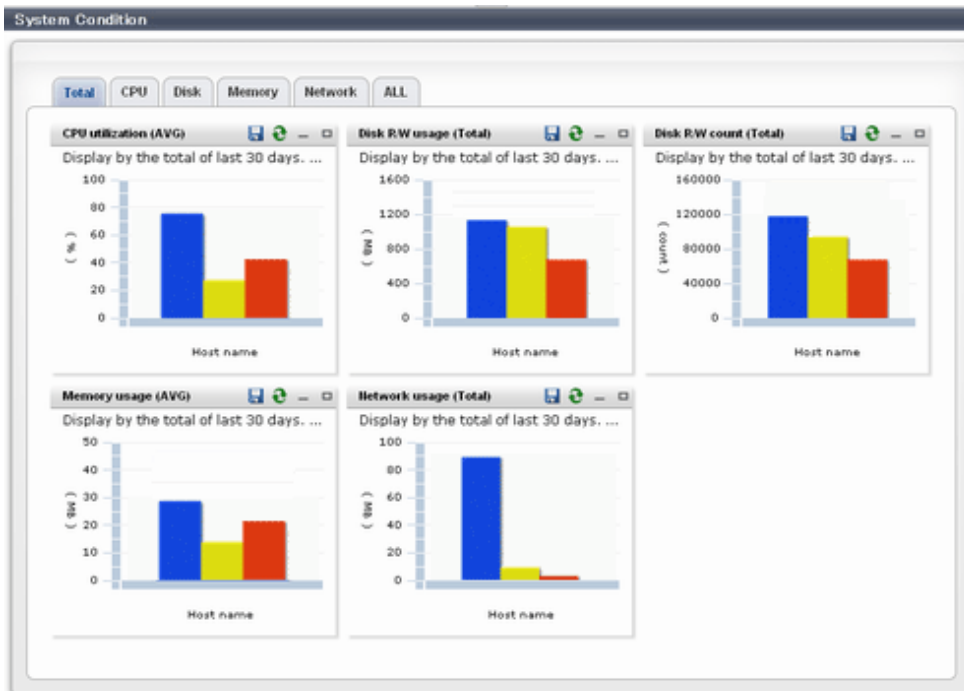
Example:

If a monitored L-Server has one CPU and is displayed in units of one hour, the value in the system conditions graphs and CSV file data may be displayed as 100.03% (60.02 minutes (near equal 3601 seconds)/60 minutes) even though the upper limit for CPU utilization is 100%.



Display examples for the [Total] tab and the [All] tab are shown below.

- [Total] tab



- [All] tab



At each tab, the following icons displayed in the title bar can be used:

Icon	Tool tip	Explanation
	Update	Updates the displayed contents
	Download CSV file	Downloads the graph data in CSV format
	Minimize	Minimizes the specified window
	Maximize	Maximizes the specified window
	Restore	Restores the maximized window

The table below shows the CSV file items if data is downloaded from each graph.

Note that the CSV file encoding is Shift-JIS.

Graph type	Column name	Explanation	Unit	Description
CPU utilization	sdattim	Collection start time (*)		yyyy-mm-dd HH:mm:ss
	resrcid	Resource ID		<ul style="list-style-type: none"> - in case of physical servers and Windows: "#" + CPU number or _Total - in case of physical servers and Linux/Solaris: CPU number or _Total - in case of Hyper-V: VM name + ":Hv VP" + virtual Processor number

Graph type	Column name	Explanation	Unit	Description
	recid	Record ID		Output any of the following - WIN_CPUBUSY - UX_CPUBUSY - VMW_GCPU - HV_VCPU - XEN_CPU - KVM_CPU - OVMSPARC_CPU
	consintl	Interval time	second	- in case of interval time is 10 minutes: 600 - in case of 1 hour: 3600 - in case of 24 hour: 86400
	coverage	Data coverage	(0 to 1)	
	cpupcent	CPU utilization	%	Output for physical servers Processor utilization
	vmgcused	CPU utilization	%	Output only for VMware Physical CPU utilization per virtual machine
	physres	Physical CPU information or virtual CPU information		Output only for VMware
	ptrtim	CPU utilization	%	Output only for Hyper-V Utilization of virtual processors allocated to a virtual machine and consumed by hypervisor code
	xenpcused	CPU utilization	%	Output only for RHEL5-Xen CPU utilization (total utilization of virtual CPUs set in the domain)
	xencpun	Number of virtual CPUs in the domain	number	Output only for RHEL5-Xen
	Nickname	VM name		
	kvmcpupcent	CPU utilization	%	Output only for RHEL-KVM CPU utilization (total utilization of virtual CPUs set in the domain)
	kvmcpus	Number of virtual CPUs in the domain		Output only for RHEL-KVM
	zonecpucappct	CPU utilization	%	Output for Solaris Zones CPU utilization (utilization of virtual CPUs set in the zone)
	ovmcpupcent	CPU utilization	%	Output for OVM for SPARC CPU utilization (utilization of virtual CPUs set in the domain)
Disk R/W usage	sdattim	Collection start time (*)		yyyy-mm-dd HH:mm:ss

Graph type	Column name	Explanation	Unit	Description
	resrcid	Resource ID		- in case of physical servers and Windows: drive name or _Total - in case of physical servers and Linux/Solaris: device name
	recid	Record ID		Output any of the following - WIN_PHYDISKBUSY - UX_DISKBUSY - VMW_DISK - KVM_DISK
	consintl	Interval time	second	- in case of interval time is 10 minutes: 600 - in case of 1 hour: 3600 - in case of 24 hour: 86400
	coverage	Data coverage	(0 to 1)	
	preadbyt	Disk read usage	bytes	Output only for Windows
	pwrityt	Disk write usage	bytes	Output only for Windows
	iokreads	Disk read usage	Kbytes	Output only for Linux/Solaris
	iokwrite	Disk write usage	Kbytes	Output only for Linux/Solaris
	vmdmbread	Disk read usage	Mbytes	Output only for VMware Disk read usage for virtual machine and storage device units
	vmdmbwrt	Disk write usage	Mbytes	Output only for VMware Disk write usage for virtual machine and storage device units
	Nickname	VM name		Output for VMware/RHEL5-KVM/ physical server
	kvmdiskblockrdby	Disk read usage	bytes	Output only for RHEL-KVM Disk read usage in the domain
	kvmdiskblockwrby	Disk write usage	bytes	Output only for RHEL-KVM Disk write usage in the domain
Disk R/W count	sdattim	Collection start time (*)		yyyy-mm-dd HH:mm:ss
	resrcid	Resource ID		- in case of physical servers and Windows: drive name or _Total - in case of physical servers and Linux/Solaris: device name
	recid	Record ID		Output any of the following - WIN_PHYDISKBUSY - UX_DISKBUSY - VMW_DISK
	consintl	Interval time	second	- in case of interval time is 10 minutes: 600 - in case of 1 hour: 3600

Graph type	Column name	Explanation	Unit	Description
				- in case of 24 hour: 86400
	coverage	Data coverage	(0 to 1)	
	preadsec	Disk read count		Output only for Windows Physical disk read operation count
	pwritesec	Disk write count		Output only for Windows Physical disk write operation count
	ioreads	Disk read count		Output only for Linux/Solaris read count
	iowrite	Disk write count		Output only for Linux/Solaris write count
	vmdreads	Disk read count		Output only for VMware Disk read count for virtual machine and storage device units
	vmdwrites	Disk write count		Output only for VMware Disk write count for virtual machine and storage device units
	vbdrd	Disk read count		Output only for RHEL5-Xen Virtual block device read count
	vbdwr	Disk write count		Output only for RHEL5-Xen Virtual block device write count
	Nickname	VM name		Output for VMware/RHEL5-Xen/physical server
Memory usage	sdattim	Collection start time (*)		yyyy-mm-dd HH:mm:ss
	resrcid	Resource ID		- in case of physical servers and Windows: MEMORY - in case of physical servers and Linux/ Solaris: FREEMEM
	recid	Record ID		Output any of the following - WIN_MEMORY - UX_MEMFREE - VMW_MEM - HV_DMEN_VM - XEN_MEM - KVM-MEM
	consintl	Interval time		- in case of interval time is 10 minutes: 600 - in case of 1 hour: 3600 - in case of 24 hour: 86400
	coverage	Data coverage	(0 to 1)	
	comtot	Memory usage	bytes	Output only for Windows Commit size
	freememp	Memory usage	bytes	Output only for Linux Memory size utilization for user processes

Graph type	Column name	Explanation	Unit	Description
	memuse	Memory usage	percent	Output only for Linux
	Vmgmtm	Memory usage	Mbytes	Output only for VMware Estimated working set size of resource pool and virtual machine units
	ppmemdmvm	Memory usage	Mbytes	Output only for Hyper-V Current memory capacity of virtual machine
	xenavm	Memory usage	Mbytes	Output only for RHEL5-Xen Memory capacity allocated to domain
	Nickname	VM name		
	kvmmemused	Memory usage	Mbytes	Output only for RHEL-KVM Memory capacity allocated to domain
	zonepmemused	Memory usage	Kbytes	Output for Solaris Zones Memory capacity allocated to zone
Network utilization	sdattim	Collection start time (*)		yyyy-mm-dd HH:mm:ss
	resrcid	Resource ID		Output only for Windows Network device name
	recid	Record ID		Output any of the following - WIN_NET_INTERFACE - VMW_NET - XEN_NET - KVM-NET
	consintl	Interval time		- in case of interval time is 10 minutes: 600 - in case of 1 hour: 3600 - in case of 24 hour: 86400
	coverage	Data coverage	(0 to 1)	
	ifbytin	Network usage (received)	bytes	Output only for Windows Amount of received data(byte)
	ifbytot	Network usage (sent)	bytes	Output only for Windows Amount of sent data(byte)
	vmnmpvtr	Network usage (sent)	Mbits	Output only for VMware Amount of data transferred by virtual network device port unit
	vmnmpbrecv	Network usage (received)	Mbits	Output only for VMware Amount of data received by virtual network device port unit
	xenkbtx	Network usage (sent)	Kbytes	Output only for RHEL5-Xen Amount of data sent by virtual network interface
xenkbrx	Network usage (received)	Kbytes	Output only for RHEL5-Xen Amount of data received by virtual network interface	

Graph type	Column name	Explanation	Unit	Description
	Nickname	VM name		Output for VMware/RHEL5-Xen/RHEL-KVM/and physical servers with Windows OS
	kvmnetrxby	Network usage (received)	bytes	Output only for RHEL-KVM Amount of data sent by virtual network interface
	kvmnettxby	Network usage (sent)	bytes	Output only for RHEL-KVM Amount of data received by virtual network interface

* Note: When the information from the virtual L-server where the live migration was performed is output to CSV, the following phenomena may occur:

- Information for a certain point of time is output twice
- Information for a certain point of time is not output

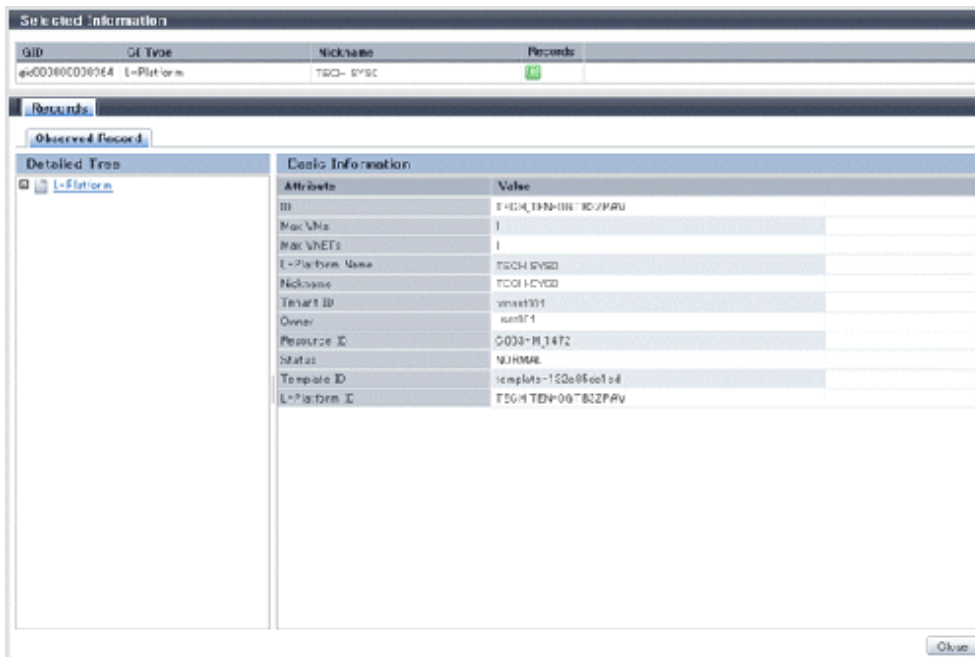
If there is a large difference in the time and date in the VM host where the live migration was performed, the above phenomena will be more likely to occur.

4.2.2 Configuration Information Display

The tenant, L-Platforms and L-Servers displayed in the CI list of the system conditions window are managed as configuration items (CIs).

When the Nickname link in the CI list of the system conditions window is clicked, the configuration information of the target tenant, L-Platform or L-Server is displayed in a separate window.

A display example is shown below.



The table below explains the displayed items.

	Item	Explanation
Selected Information	GID	Displays the identifier set by the system to identify the configuration item.
	CI Type	Displays the configuration item type. The CI types are as follows:

Item		Explanation	
		<ul style="list-style-type: none"> - Tenant: If a tenant is selected - L-Platform: If an L-Platform is selected - L-Server: If an L-Server is selected 	
	Nickname	<p>Displays the display name of the configuration item. The following display names are displayed in accordance with the CI type:</p> <ul style="list-style-type: none"> - For the tenant CI type: The tenant name determined during tenant registration ("tenant name (tenant ID)") - For the L-Platform CI type: The L-Platform subscription name set during L-Platform subscription - For the L-Server CI type: The L-Server name set during L-Platform subscription or L-Platform reconfiguration ("server name (host name)") 	
	Record	<p>Displays the type of records held by the configuration item. [0], indicating the actual information, is displayed.</p>	
Record	Detailed Tree	<p>This is a tree of the elements comprising the configuration item. The following elements are displayed in accordance with the CI type:</p> <ul style="list-style-type: none"> - For the tenant CI type: Tenants - For the L-Platform CI type: Instances - For the L-Server CI type: L-Server node information <p>When an element is selected, the element attribute values are displayed in the basic information. Values are displayed as attribute values, and differ depending on the element:</p> <ul style="list-style-type: none"> - If the element is a tenant: The value determined during tenant registration - If the element is an instance: The value set during L-Platform subscription - If the element is L-Server node information: The value set during L-Platform subscription or L-Platform reconfiguration 	
	Basic Information	Attribute	<p>Displays the attribute name. When the label in the upper part is clicked, items can be sorted by attribute name.</p>
		Value	<p>Displays the attribute value. When the label in the upper part is clicked, items can be sorted by attribute value.</p>
Close button		<p>When this button is clicked, the window closes.</p>	

Chapter 5 L-Platform

This chapter explains how to use the L-Platform.

5.1 Display L-Platform

This section explains how to display the L-Platform and describes the top page.

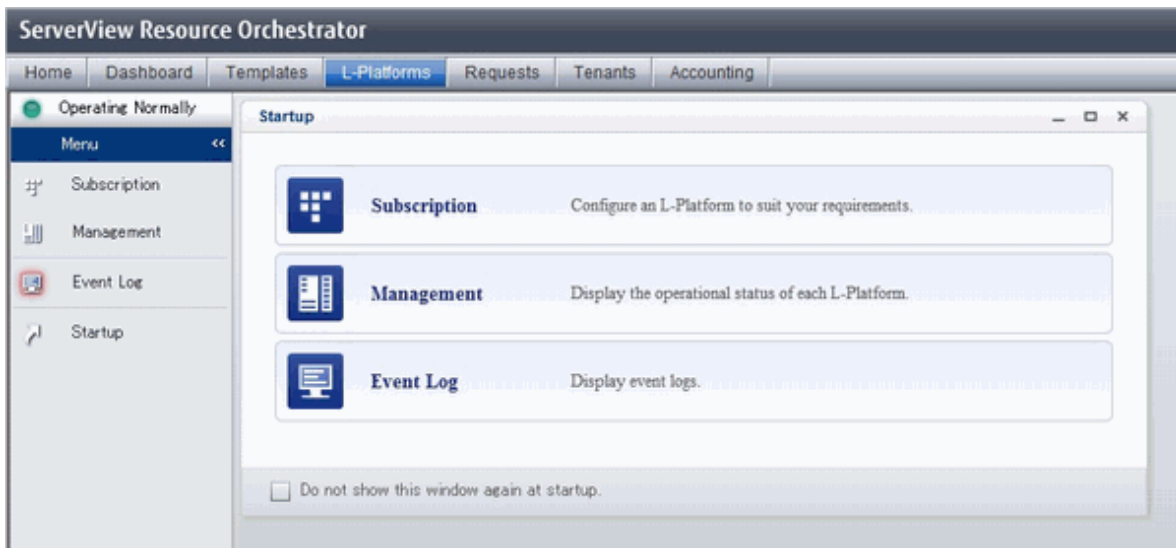
How to display the L-Platform

To display the L-Platform:

- On the ROR Console after login, select the [L-Platforms] tab.

L-Platform Top Page

An example of the L-Platform home page is shown below.



The following section explains the contents of the L-Platform operation menu:

- L-Platform Subscription
When [Subscription] is selected, the page used to subscribe to a service will be displayed.
Refer to "5.2 [Subscribe to an L-Platform](#)" for information on the L-Platform management method.
- L-Platform Management
When Management is selected, a list of created L-Platforms is displayed.
Refer to "5.3 [L-Platform Management](#)" for information on the L-Platform management method.
- Event logs
When Event Log is selected, logs of information about errors that have occurred while using the L-Platform functions will be displayed.
Refer to "5.4 [Display Event Logs](#)" for information on the event log display method.
- Startup
When Startup is selected, major functions of L-Platform and their overview will be displayed.

Point

The [Startup] page is displayed as the home page of L-Platform. To prevent the [Startup] page from being displayed as the home page, select the [Do not show this window again at startup] check box.

- [Close] link

When [Close] link is clicked, the confirmation window for closing the window will be displayed. Click [Yes] on the confirmation window to close the L-Platform window.

Note

- If it becomes impossible to connect by the admin server stop and etc. when L-Platform is being operated, the lamp in the menu becomes gray and the message "Not Operating" is displayed. In this case, contact the system administrator. According to the displayed window and the performed operation, an error message like the following may be displayed.
 - Failed to get system configuration.
 - Failed to get the access right.

5.2 Subscribe to an L-Platform

This section explains how to subscribe to an L-Platform

Point

- It may take several minutes for an L-Platform subscription request to be accepted according to the number and the configuration of servers that compose the L-Platform.
After the [Subscribe] button is clicked, operations such as closing the browser, clicking the [Back] button of the browser, or reloading the current page, before the subscription request is accepted, may cause the request to be cancelled. Do not perform any other operations until the request is accepted.
- Refer to Appendix A, Section A.1, "[A.1 Emails Sent when Subscribing to an L-Platform](#)" for information on the flow and content of email messages sent to the subscriber, tenant administrator, and infrastructure administrator when subscribing to an L-Platform.

5.2.1 Subscribe to a New L-Platform

On the [Subscription] page of L-Platform, the user can subscribe to an L-Platform on the basis of the specification that has been registered.

Two methods are available to subscribe to a new L-Platform. The method to be used is determined by the method of subscription that the Infrastructure administrator department has specified.

- L-Platform Template reconfiguration not possible
Changes to registered L-Platform Templates are not permitted.
- L-Platform Template reconfiguration possible
Changes to registered L-Platform Templates are permitted.

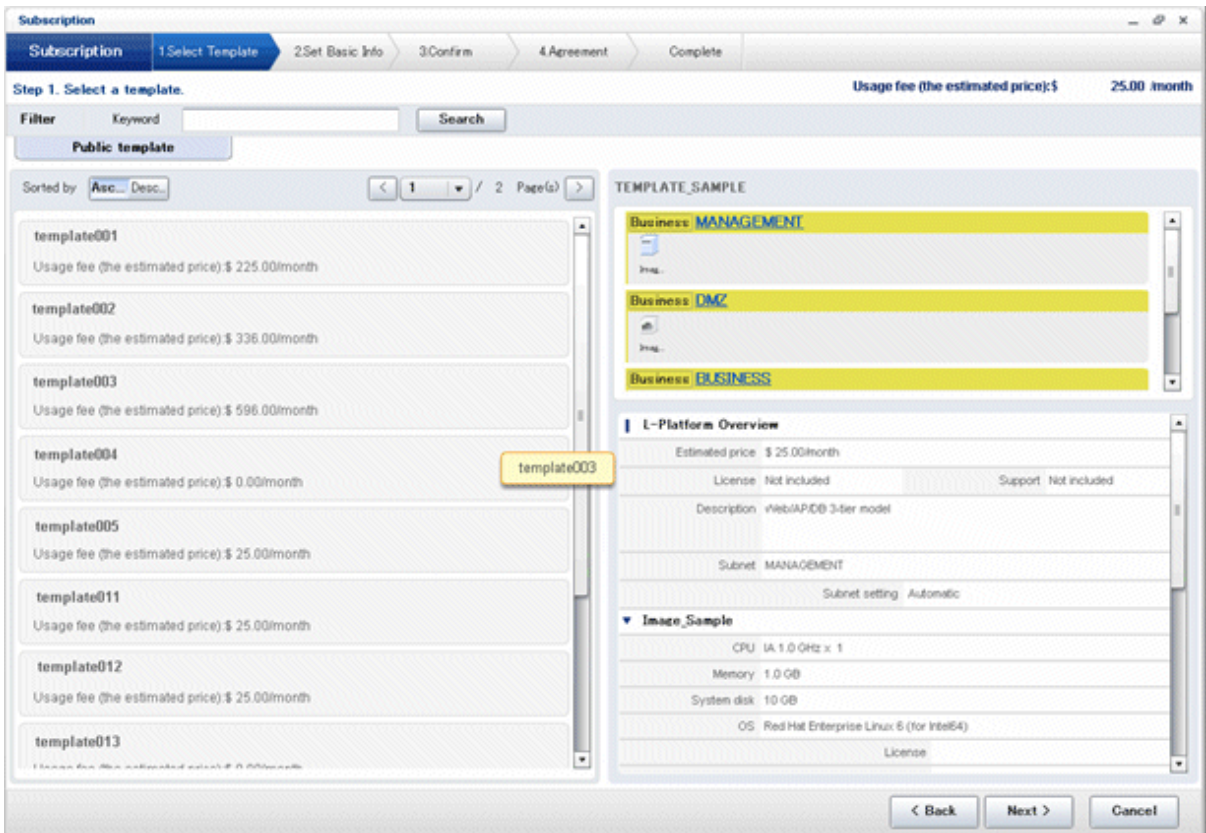
The procedure for each method is shown below.

L-Platform Template Reconfiguration not Possible

Follow the steps below to subscribe to a new L-Platform:

1. Select [Subscription] on the operation menu of [New L-Platform] page.
The [Subscription] page will be displayed.
2. Confirm the procedures on the [Subscription] page, and click the [Subscribe a new L-Platform] button.
3. Confirm the contents of the L-Platform template on the [Select Template] page, and select L-Platform template to be used.
All the L-Platform templates that are registered in the L-Platform and enabled are displayed on the [Select Template] page.
For each L-Platform template, the corresponding usage fees will also be displayed.

Estimated charges for the L-Platform template will only be displayed when the usage fees display is set to enabled.



L-Platform templates are displayed by the L-Platform template name in ascending order. The sequence in the specification display can be switched by clicking [Sorted by] followed by the [Ascending order] or [Descending order] button.

To search an L-Platform template using the keyword search function, enter [Keyword] and then click the [Search] button. Specify a character string in [Keyword] that is the keyword for the L-Platform template the user wants to use. Case is not distinguished for the strings you specify. When a keyword is specified, a search takes place based on the keywords that the Infrastructure administrator set in the specifications. The keyword search function cannot be used if the Infrastructure administrator did not set keywords. For example, to search a specification where Red Hat Linux 5.1 is installed as the operating system, specify "Linux 5.1".

4. Select the L-Platform template to be used and click the [Next] button.

The [Set Basic Info] page will be displayed.

The [L-Platform Name] is displayed by the L-Platform template name.

To change to an arbitrary name, the new name must be no more than 85 characters long, be unique within the organization and not include the following characters:

<, >, &, ', " and control characters

However, the strings and the number of characters that can be specified may vary depending on the L-Platform settings. It is recommended that the name be specified using no more than 23 of the following characters.

Alphanumeric characters, underscores ("_") and hyphens ("-")

5. Enter the basic information and click the [Next] button.

The [Confirm] page will be displayed.

Point

CSV output

When the [Save as CSV] button located at the bottom left of the window is clicked, the [Select the destination to save] window is displayed where the L-Platform Template configuration can be saved as a CSV file.

The default CSV file name format is shown below. This file name can be modified as necessary.

```
SystemConfiguration (+ <L-Platform name >+)_ <date> + .csv
```

Save configuration

By clicking the [Save Configuration] button, the L-Platform configuration is saved, and the display returns to the [Subscription] page. The saved L-Platform template can be subscribed by clicking the [Create from saved L-Platforms] button on the [Subscription] page.

6. Check the displayed contents of the L-Platform configuration, and click the [Next] button.
When the [Next] button is clicked, the [Agreement] page will be displayed.
7. Check the license agreement displayed. Select the [Agree the license] check box, then, click the [Subscribe] button.

Point

When the application process is enabled, clicking of the [Subscribe] button on the [Agreement] page displays the [Forward screen] window. Refer to "[5.5 Select Forward Destination of Application Process](#)" for details.

The [Complete] page will be displayed when the subscription to the L-Platform is accepted.

- When the application process is disabled

The following message will be displayed:

"A request to subscribe the L-Platform has been completed. The deployment may take some time to complete."

- When the application process is enabled

The following message will be displayed:

"The request to subscribe the L-Platform has been completed. The L-Platform will be deployed after approval and/or judgment procedures."

8. Click the [Close] button. The display returns to the [Subscription] page.

Point

- When a subscribed L-Platform is deployed, a subscription completion notification email is sent to the subscriber. This email contains the information necessary to access the L-Platform. If deployment of the subscribed L-Platform fails, a subscription failure notification email is sent to the subscriber and the Infrastructure Administrator. In this case, check with the Infrastructure Administrator, and then subscribe again.
 - When a subscribed L-Platform includes server load balancer (SLB), refer to "[5.3.10 Server Load Balancer \(SLB\) Settings](#)" and setup the server load balancer after deploying the L-Platform and before operating the server load balancers.
-

L-Platform Template Reconfiguration Possible

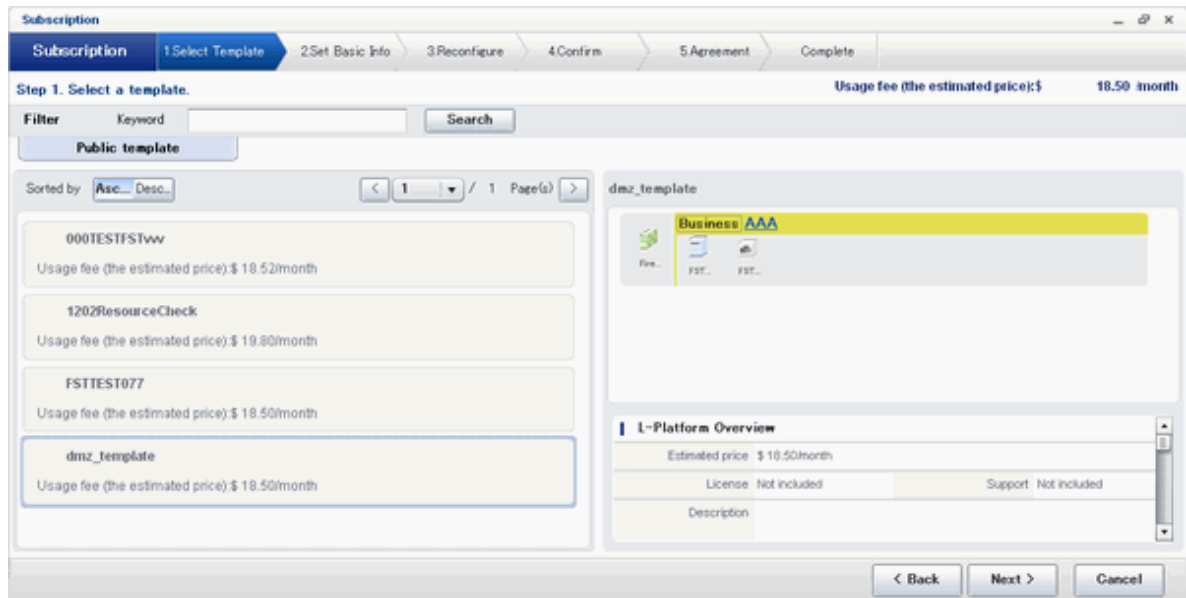
Follow the steps below to subscribe to a new L-Platform:

1. Select [Subscription] on the operation menu of the [Subscription] page.
The [Subscription] page will be displayed.
2. Confirm the procedures on the [Subscription] page, and click the [Subscribe a new L-Platform] button.

3. Confirm the contents of the L-Platform templates on the [Select Template] page, and select the L-Platform template to be used. All the L-Platform templates that are registered in the L-Platform and enabled are displayed on the [Select Template] page. For each L-Platform template, the corresponding usage fees will also be displayed.

Point

Estimated charges for the L-Platform template will only be displayed when the usage fees display is set to enabled.



L-Platform templates are displayed by the L-Platform template name in ascending order. The sequence in the specification display can be switched by clicking [Sorted by] followed by the [Ascending order] or [Descending order] button.

To search a specification using the keyword search function, enter [Keyword] and then click the [Search] button. Specify a character string in [Keyword] that is the keyword for the L-Platform template the user wants to use. Case is not distinguished for the strings you specify. When a keyword is specified, a search takes place based on the keywords that the infrastructure administrator set in the specifications. The keyword search function cannot be used if the infrastructure administrator did not set keywords.

For example, to search an L-Platform template where Red Hat Linux 5.1 is installed as the operating system, specify "Linux 5.1".

4. Select the L-Platform template to be used and click the [Next] button. The [Set Basic Info] page will be displayed.

- L-Platform Name

The [L-Platform Name] displays the L-Platform template name.

To change to an arbitrary name, the new name must be no more than 85 characters long, be unique within the organization and not include the following characters:

< > & ' " and control characters

However, the strings and the number of characters that can be specified may vary depending on the L-Platform settings. It is recommended that the name be specified using no more than 23 of the following characters:

Alphanumeric characters, underscores ("_") and hyphens ("-")

- Connection destination

When a connection destination has been specified using the L-Platform template to be used, you can specify whether to connect. Only the connection destinations specified using the L-Platform template are displayed as candidates.

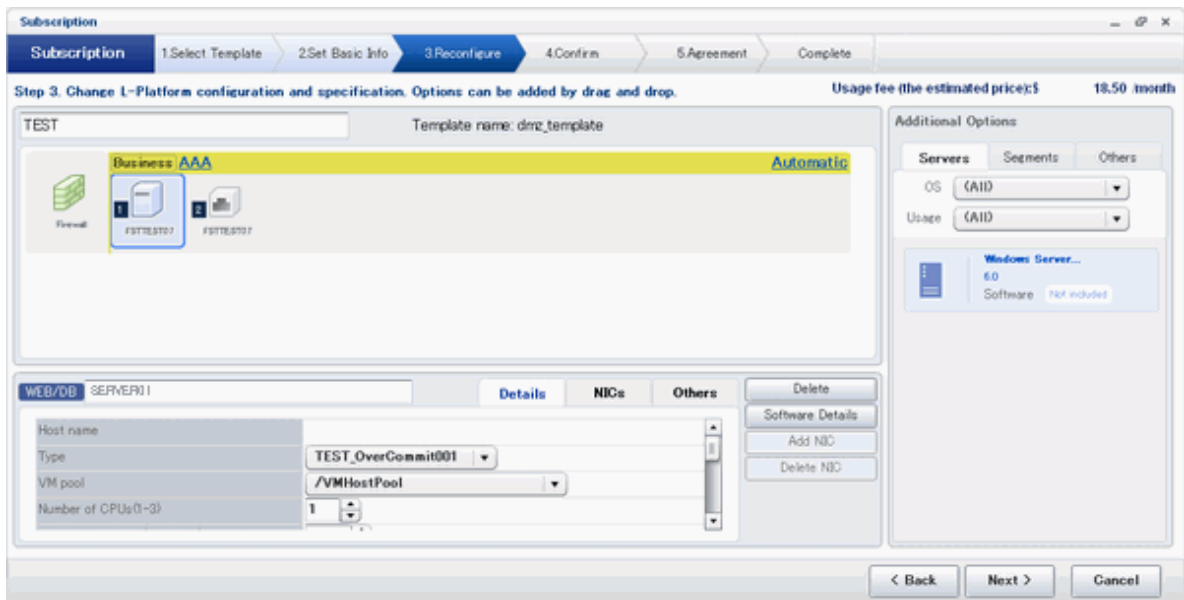
If you do not want to connect to a connection destination specified using the L-Platform template, clear the check box for the L-Platform to be deployed.

- Public IP address

If you have specified [Internet] as the connection destination, you can specify the IP address to be published. Click the [Add] button, and then in the [Addition of public IP address] window displayed, add the IP address to be published. For [Added IP address], enter the IP address to be used by the L-Platform and click the [Add] button. To delete a specified IP address, select the IP address from the list and click the [Delete] button.

Consult the tenant administrator regarding the IP addresses that can be used.

5. Enter a name to [L-Platform Name], and click the [Next] button. The [Reconfigure] page will be displayed.



6. This will display the configuration of the L-Platform template selected on the [Reconfigure] page. Change the configuration as required. For the items that can be changed on the [Reconfigure] page, refer to "5.3.15 Reconfiguration Page".
7. When modification of the L-Platform template has completed, click the [Next] button. The [Confirm] page will be displayed.

Item	Display format
Item changed	The values of changed items are displayed in red. The value before the change is displayed as "changed from <i>the old value</i> ".
Item added	"* added" is displayed after added elements. The values of added items are displayed in red. The background of added items is also displayed in red.
Item deleted	"* deleted" is displayed after deleted items. The background of deleted items is displayed in grey.

Point

CSV output

When the [Save as CSV] button located at the bottom left of the window is clicked, the [Select the destination to save] window is displayed where the L-Platform Template configuration can be saved as a CSV file.

The default CSV file name format is shown below. This file name can be modified as necessary.

```
SystemConfiguration (+ <L-Platform name> +)_ <date> + .csv
```

Save configuration

By clicking the [Save Configuration] button, the L-Platform configuration is saved, and the display returns to the [Subscription] page. The saved L-Platform template can be subscribed by clicking the [Create from saved L-Platforms] button on the [Subscription] page.

8. Check the displayed contents of the L-Platform, and click the [Next] button.
When the [Next] button is clicked, the [Agreement] page will be displayed.
9. Review and agree with the license agreement displayed. Select the [Agree the license] check box, then click the [Subscribe] button.

Point

When the application process is enabled, clicking of the [Subscribe] button on the [Agreement] page displays the [Forward screen] window. Refer to "[5.5 Select Forward Destination of Application Process](#)" for details.

The [Complete] page will be displayed when the subscription to the L-Platform is accepted.

- When the application process is disabled

The following message will be displayed:

"A request to subscribe the L-Platform has been completed. The deployment may take some time to complete."

- When the application process is enabled

The following message will be displayed:

"The request to subscribe the L-Platform has been completed. The L-Platform will be deployed after approval and/or judgement procedures."

10. Click the [Close] button. The display returns to the [Subscription] page.

Point

- When a subscribed L-Platform is deployed, a subscription completion notification email is sent to the subscriber. This email contains the information necessary to access the L-Platform. If deployment of the subscribed L-Platform fails, a subscription failure notification email is sent to the subscriber and the Infrastructure Administrator.
- When a subscribed L-Platform includes server load balancer (SLB), refer to "[5.3.10 Server Load Balancer \(SLB\) Settings](#)" and setup the server load balancer after deploying the L-Platform and before operating the server load balancers.
- If the server virtualization software is RHEL-KVM or the subscribed L-Platform includes a Windows server other than Windows Server 2008 R2, after deployment the L-Platform will be available only after the infrastructure administrator configures the IP address, default gateway, and host name. Request the tenant administrator to configure the server after deployment.
- If the server virtualization software is OVM for x86, the L-Platform will be available only after the infrastructure administrator configures the IP address, default gateway, and host name following deployment. Request the tenant administrator to configure the server after deployment.
- If the server virtualization software is Citrix XenServer, then depending on the cloning image, the L-Platform will be available only after the infrastructure administrator configures the IP address, default gateway, and host name after deployment. Request the tenant administrator to configure the server after deployment. Check with the tenant administrator whether the cloning image requires configuration (IP address, etc.) after deployment.
- When the server virtualization software is OVM for SPARC, IP addresses are set only **to the NICs that are connected to admin LAN** when you deploy a server whose guest OS is Solaris 11. It is therefore recommended that you connect the NIC to the admin LAN. If a deployed server is not connected to admin LAN, the tenant administrator needs to set IP addresses and default gateway to the server before use. You also need to set IP addresses on guest OS to the NICs that are connected to business LAN, by confirming deployed IP addresses on the [L-Platform management] page.
- If the server virtualization software is OVM for SPARC or Solaris zone, after your deployment the tenant administrator needs to configure deployed servers to enable direct root ssh login.

- If the server virtualization software is RHEL-KVM, contact the infrastructure administrator for information on how to subscribe to servers other than Windows or Linux servers.

5.2.2 L-Platform Subscription after Saving Configuration

An L-Platform subscription can be submitted on the basis of an L-Platform Template for which the configuration is currently being saved.

Perform the following steps to submit an L-Platform subscription from this type of L-Platform Template:

1. Select [Subscription] on the operation menu of the [Subscription] page.
This will display the procedures required to subscribe to an L-Platform.
2. After confirming the procedure, select [Subscribe from saved data].
The [Select Template] page will be displayed.

The time limit for estimating is displayed in each L-Platform templates.

When an L-Platform Template is selected from the L-Platform Template list, detailed information about the usage fees and L-Platform Template at the time when the L-Platform Template was saved is displayed.

When the application process is enabled, the following status will be displayed before the L-Platform template names in the list of L-Platform templates:

- **SAVED:** Specification being saved
The [Next] button will become available after selecting this item.
- **UNAPPROVAL:** Not approved
The [Next] button will not become available even after selecting this item.
- **REJECTION:** Subscription rejected
The [Next] button will not become available even after selecting this item.

Note

In the application process, the L-Platform templates waiting for approve or to assess become the UNAPPROVAL state.

If you want to delete the L-Platform templates which state is UNAPPROVAL, cancel the corresponding application from application list of L-Platform. After canceling, it is deleted automatically.

When you delete the L-Platform templates which state is UNAPPROVAL on L-Platform template, an error occurs because there is no L-Platform template in processing the application process.

The L-Platform template which is rejected or dismissed at application process becomes REJECTION state.

Delete it from L-Platform after the confirmation if necessary.

Point

Usage fees and quotation expiry dates for the L-Platform template will only be displayed when the usage fees display is set to enabled. Note also that the usage fees will display the price at the time the L-Platform template was saved. In particular, please be aware that this display will not change even if the price of the L-Platform is modified.

Furthermore, the displayed quotation expiry date is based on the validity period of estimated charges for the L-Platform template, and indicates the 30th day after the L-Platform template was saved.

3. Select the L-Platform template to be used and click the [Next] button.
The [Confirm] page will be displayed.

Point

CSV output

When the [Save as CSV] button located at the bottom left of the window is clicked, the [Select the destination to save] window is displayed where the L-Platform template can be saved as a CSV file.

The default CSV file name format is shown below. This file name can be modified as necessary.

```
SystemConfiguration (+ <L-Platform name> +)_ <date> + .csv
```

4. Check the displayed contents of the L-Platform configuration, and click the [Next] button.
When the [Next] button is clicked, the [Agreement] page will be displayed.
5. Review and agree with the license agreement displayed. Select the [Agree the license] check box, then click the [Subscribe] button.

Point

- When the application process is enabled, clicking of the [Subscribe] button on the [Agreement] page displays the [Forward screen] window. Refer to "[5.5 Select Forward Destination of Application Process](#)" for details.
- The saved specification will be removed if the [Subscribe] button on the [Agreement] page is clicked. To keep the specification, click the [Cancel] button.

The [Complete] page will be displayed when the subscription to the L-Platform is accepted.

- When the application process is disabled
The following message will be displayed.
"A request to subscribe the L-Platform has been completed. The deployment may take some time to complete."
- When the application process is enabled
The following message will be displayed.
"The request to subscribe the L-Platform has been completed. The L-Platform will be deployed after approval and/or judgement procedures."

6. Click the [Close] button. The display returns to the [Subscription] page.

Point

- When a subscribed L-Platform is deployed, a subscription completion notification email is sent to the subscriber. This email contains the information necessary to access the L-Platform. If deployment of the subscribed L-Platform fails, a subscription failure notification email is sent to the subscriber and the Infrastructure Administrator. In this case, check with the Infrastructure Administrator, and then subscribe again.
- When a subscribed L-Platform includes server load balancer (SLB), refer to "[5.3.10 Server Load Balancer \(SLB\) Settings](#)" and setup the server load balancer after deploying the L-Platform and before operating the server load balancers.
- If the server virtualization software is RHEL-KVM or the subscribed L-Platform includes a Windows server other than Windows Server 2008 R2, after deployment the L-Platform will be available only after the infrastructure administrator configures the IP address, default gateway, and host name. Request the tenant administrator to configure the server after deployment.
- If the server virtualization software is OVM for x86, the L-Platform will be available only after the infrastructure administrator configures the IP address, default gateway, and host name following deployment. Request the tenant administrator to configure the server after deployment.
- If the server virtualization software is Citrix XenServer, then depending on the cloning image, the L-Platform will be available only after the infrastructure administrator configures the IP address, default gateway, and host name after deployment. Request the tenant administrator to configure the server after deployment. Check with the tenant administrator whether the cloning image requires configuration (IP address, etc.) after deployment.
- When the server virtualization software is OVM for SPARC, IP addresses are set only **to the NICs that are connected to admin LAN** when you deploy a server whose guest OS is Solaris 11. It is therefore recommended that you connect the NIC to the admin LAN. If a deployed server is not connected to admin LAN, the tenant administrator needs to set IP addresses and default gateway to the server before use. You also need to set IP addresses on guest OS to the NICs that are connected to business LAN, by confirming deployed IP addresses on the L-Platform management page.

- If the server virtualization software is OVM for SPARC or Solaris zone, after your deployment the tenant administrator needs to configure deployed servers to enable direct root ssh login.
- If the server virtualization software is RHEL-KVM, contact the infrastructure administrator for information on how to subscribe to servers other than Windows or Linux servers.

5.3 L-Platform Management

This section explains how to use the [Management] page to manage L-Platforms that are in use.

The L-Platforms targeted by L-Platform management vary in accordance with the user, as follows:

- Infrastructure Administrator
All L-Platforms.
- Tenant Administrator
All L-Platforms being used by owned tenants.
- Tenant users
Only L-Platforms in use by the user.

The [Management] page can be used to display a list of the L-Platforms currently being used.

The following L-Platform operations can also be performed:

- L-Platform detailed information display
- Disk detailed information display
- Server start and stop
- L-Platform reconfiguration
- Taking snapshots of and restoring virtual servers
- Physical server backup and restore
- L-Platform cancellation



Note

When using a firewall:

You can choose whether to apply a ruleset, depending on the L-Platform template used for deployment. Check with the tenant administrator for details.

5.3.1 L-Platform Management Display Page

This section explains how to display the L-Platform management page and explains the display format.

L-Platform Management Page Display Method

From the operation menu on the [L-Platforms] page, select [Management].



L-Platform Management Page Display Format

The L-Platform management page has the following three types of display format.

Display format	Description
L-Platform Management	Displays the L-Platform configuration images in a list
L-Platform Management (list)	Displays the L-Platform list


Display format	Description
Server List	The list displays virtual servers. It can display all servers or inactive servers.

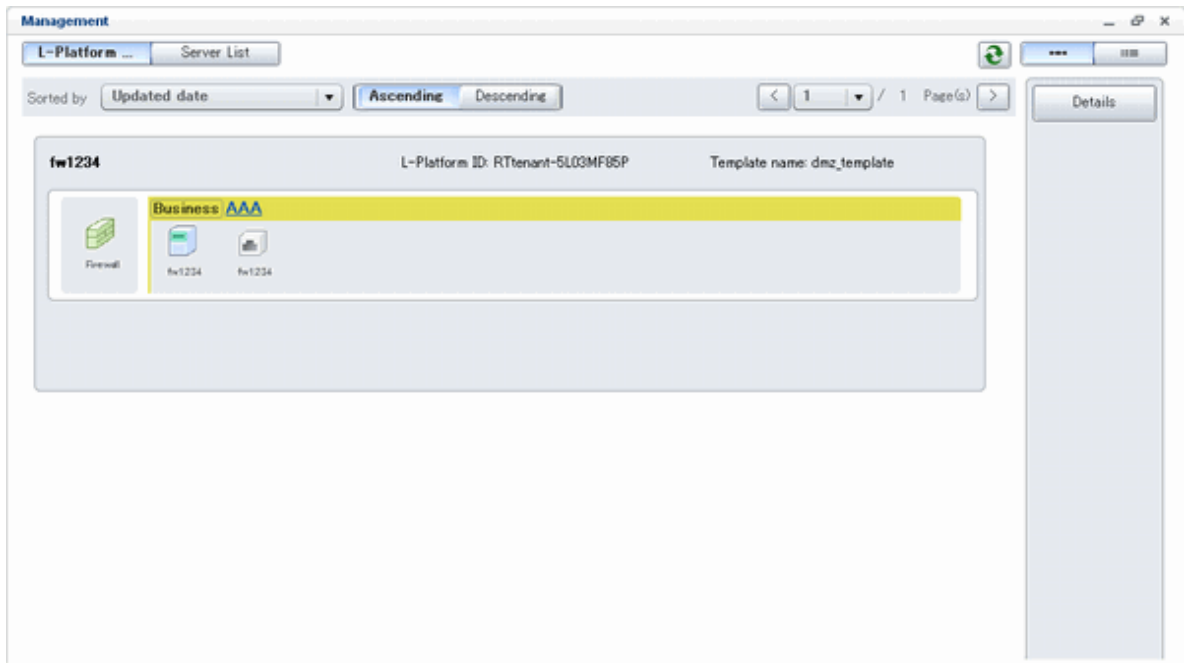
The buttons in the upper-left section of the page can be used to switch between the "L-Platform Management" and "Server List" display formats.

The display can be switched between the "configuration" format and the "list" format using the button located on the top right hand side of the page ( ).

Examples of each display format are shown below:

- L-Platform Management

Click the [Management] button on the top left hand side of the page and then click the button () on the top right hand side of the page to display an L-Platform list in a configuration image.



The following information can be checked on the [Management] page:

The following information can be checked using the [Management] page:

- L-Platform name: The L-Platform name set during L-Platform subscription
- L-Platform ID: The ID that identifies the L-Platform
- L-Platform Template name: The name of the L-Platform Template
- L-Platform configuration: The L-Platform configuration image

The sequence of the L-Platforms displayed can be switched by clicking [Sorted by] followed by the [Ascending order] or [Descending order] button for the following items:

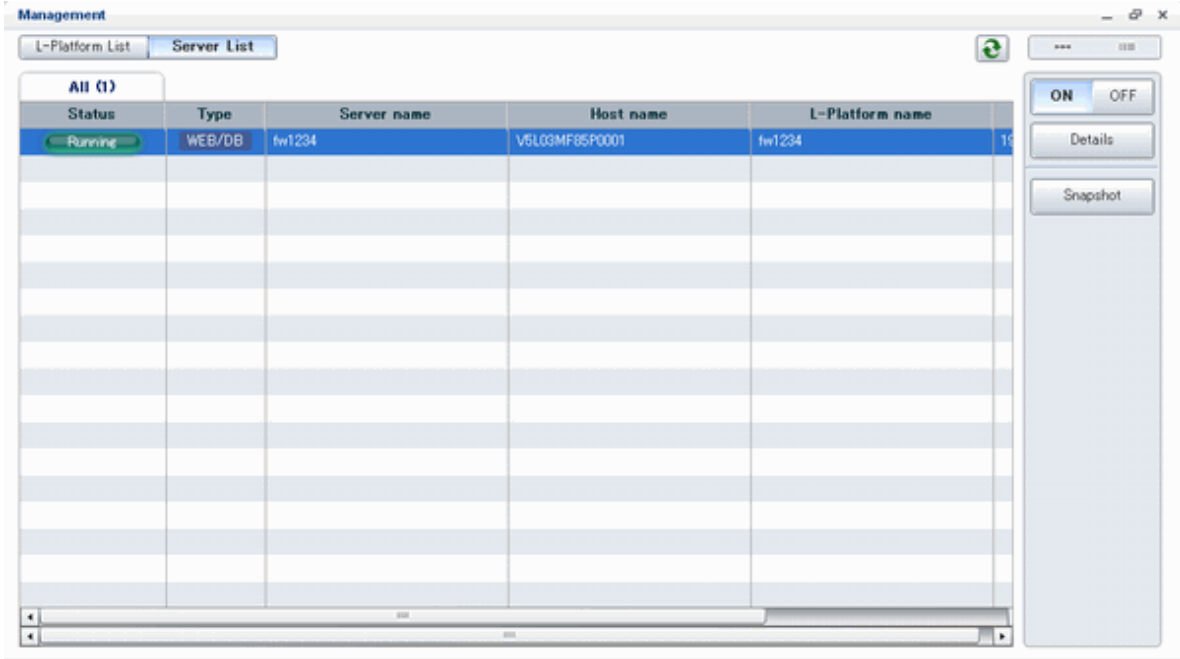
- Update date
- L-Platform name
- L-Platform ID



Using the [Details] button, details of the L-Platform can be displayed on the [Management] page. Refer to "[5.3.2 L-Platform Detailed Information Display](#)" for information on displaying the L-Platform details.

- Server List

Click the [Server List] button on the top left hand side of the page to display a list of information on servers included in an L-Platform. The following shows an example of all servers being displayed. To display inactive servers, click the [Stopped] tab.



The following information can be checked on the [Server List] page.

- Status: Server status (Running, Stopped)
- Type: Server type
- Server name: Server name
- Host name: The server host name. However, this is not displayed for a physical server
- L-Platform name: The L-Platform name set during L-Platform subscription
- IP address: IP address of the server
- Backup/Snapshot: Status of taking and restoring the backup and snapshots
- Generation: Number of snapshots or backup stored
- Number of snapshots: Number of snapshots or number of executed backups

The sequence of the servers displayed can be switched between ascending order and descending order by clicking the column headers (status, type, etc).

 Point

The following buttons can be used to operate on the [Server List] page.

- [ON] button: Start the server.
Refer to "5.3.4 Start and Stop the Server" for information on starting the server.
- [OFF] button: Stop the server.
Refer to "5.3.4 Start and Stop the Server" for information on stopping the server.
- [Details] button: Display details on an L-Platform or a disk.
Refer to "5.3.2 L-Platform Detailed Information Display" for information on displaying L-Platform details. Refer to "5.3.3 Display Details on a Disk" for information on displaying details on a disk.

- [Snapshot] button: Take and restore snapshots.
This button is displayed for virtual servers.
But this button is not displayed when the target server satisfies either of the following conditions:
 - Servers whose virtualization software is Solaris Zone, OVM for x86, or OVM for SPARC.
 - Servers whose virtualization software is RHEL-KVM that satisfy either of the following conditions:
 - The image location type of the cloning image is "Raw Disk"
 - The image location type of the cloning image is "Virtual Disk", and one or more existing disks are connected

Refer to "[5.3.6 Take and Restore Snapshot](#)" for information on taking and restoring snapshots.

- [Backup] button: Backup and restore.
This button is displayed for physical servers.
But this button is not displayed if the OS is Solaris.
Refer to "[5.3.7 Physical Server Backup and Restore](#)" for information on backup and restore.


 **Note**

The [Running] icon for a server indicates that the power has been turned on.
Even if the [Running] icon is displayed, login to the L-Platform may fail if logged in immediately after deployment or starting the virtual server. In this case, allow a few minutes before trying to log in again.


5.3.2 L-Platform Detailed Information Display

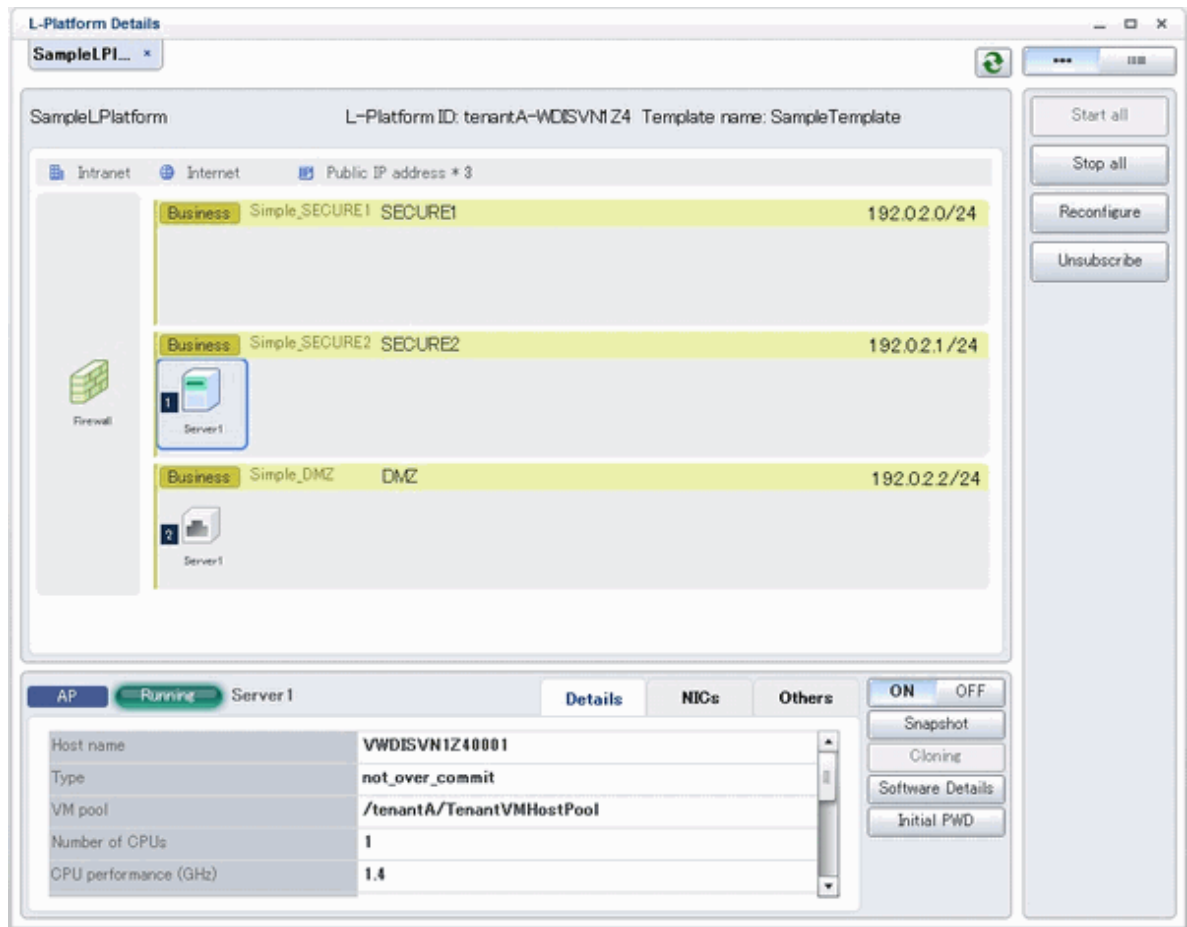
Follow the steps below to display the details of L-Platform:

1. Display the [L-Platform Management], [L-Platform Management (list)], or [Server List] page.
Refer to "[5.3.1 L-Platform Management Display Page](#)" for information on how to display the page.
2. Click the [Details] button after selecting the L-Platform or the server required.
The [L-Platform Details] page will be displayed.

There are two types of display format for the [L-Platform Details] page below. The display format can be switched using the button  located on the top right hand side of the page.

- L-Platform configuration image


By clicking the button () located on the top right hand side of the page, the L-Platform configuration is displayed as an image.

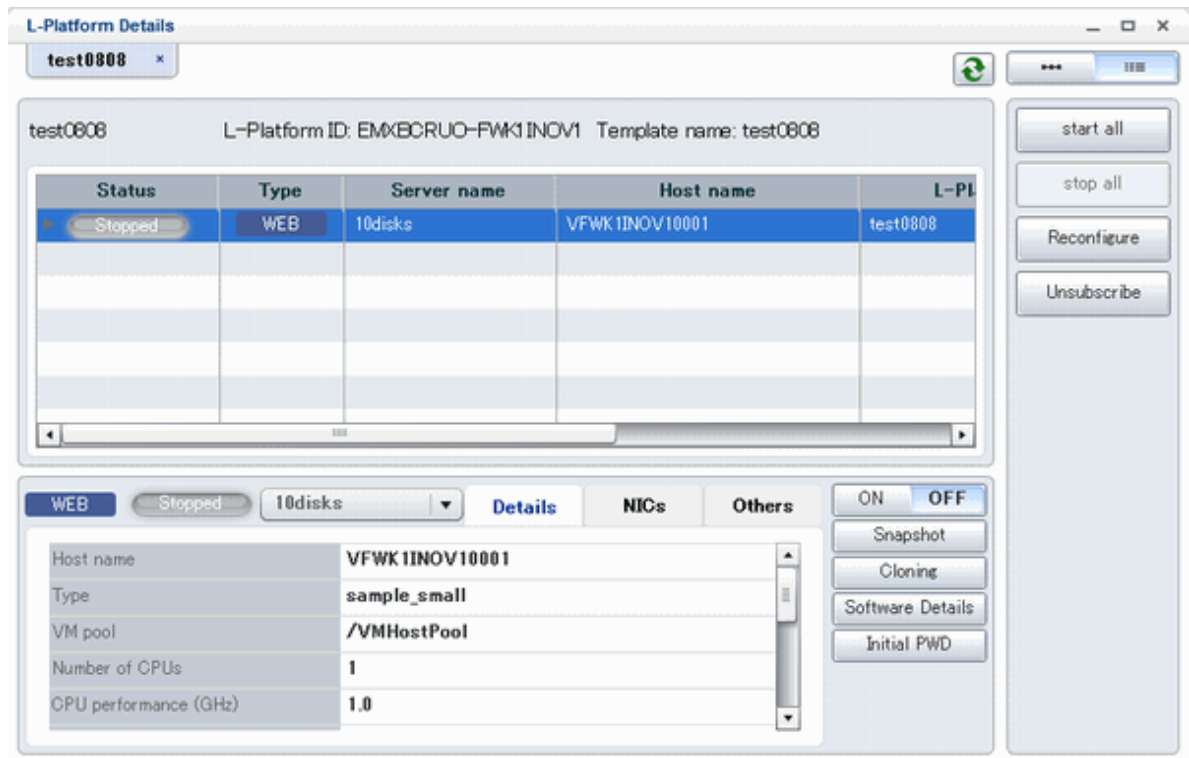


The screenshot displays the 'L-Platform Details' window for 'SampleLPI...'. The main area shows network configurations for 'SampleLPlatform' with L-Platform ID 'tenantA-WDISVN1Z4' and Template name 'SampleTemplate'. It lists three network segments: 'Simple_SECURE1 SECURE1' (192.0.2.0/24), 'Simple_SECURE2 SECURE2' (192.0.2.1/24), and 'Simple_DMZ DMZ' (192.0.2.2/24). A 'Server1' icon is associated with the second and third segments. On the right, there are control buttons: 'Start all', 'Stop all', 'Reconfigure', and 'Unsubscribe'. Below the network details, a 'Server 1' tab is active, showing details for 'VWDISVN1Z40001'. The server is running and has 1 CPU at 1.4 GHz. Other details include 'Type: not_over_commit' and 'VM pool: /tenantA/TenantVMHostPool'. On the far right, there are additional controls: 'ON/OFF' toggle, 'Snapshot', 'Cloning', 'Software Details', and 'Initial PWD' buttons.

Category	Item	Value
Host name		VWDISVN1Z40001
Type		not_over_commit
VM pool		/tenantA/TenantVMHostPool
Number of CPUs		1
CPU performance (GHz)		1.4

- Server List

By clicking the button () located on the top right hand side of the page, a list of all virtual servers included in the L-Platform is displayed. The server List also displays the extended disks included in the virtual servers.



 Point

The following buttons can be used on the [L-Platform Details] page:

- [Start all] button: Turns the power on for all servers in the L-Platform as a group.
- [Stop all] button: Turns the power off for all servers in the L-Platform as a group.
- [Reconfigure] button: Changes the L-Platform.
Refer to "5.3.13 L-Platform Reconfiguration" for information on changing L-Platforms.
This button cannot be used if the target L-Platform has the following servers:
 - Solaris Zone servers not managed by BladeLogic
- [Unsubscribe] button: Cancels the L-Platform.
Refer to "5.3.14 Cancel an L-Platform" for information on cancelling L-Platforms.
This button cannot be used if the target L-Platform has the following servers:
 - Servers whose server virtualization software is OVM for SPARC and to which a shared disk is connected.
 - Solaris Zone servers not managed by BladeLogic
- [ON] button: Start the server.
Refer to "5.3.4 Start and Stop the Server" for information on starting the server.
- [OFF] button: Stop the server.
Refer to "5.3.4 Start and Stop the Server" for information on stopping the virtual server.
- [Snapshot] button: Take and restore snapshots.
This button is displayed for virtual servers.
But this button is not displayed when the target server satisfies either of the following conditions:
 - Servers whose virtualization software is Solaris Zone, OVM for x86, or OVM for SPARC.

- Servers whose virtualization software is RHEL-KVM that satisfy either of the following conditions:
 - The image location type of the cloning image is "Raw Disk"
 - The image location type of the cloning image is "Virtual Disk", and one or more existing disks are connected

Refer to ["5.3.6 Take and Restore Snapshot"](#) for information on taking and restoring snapshots.

- [Backup] button: Backup and restore.
This button is displayed for physical servers.
But this button is not displayed if the OS is Solaris.
Refer to ["5.3.7 Physical Server Backup and Restore"](#) for information on backup and restore.
- [Setting] button: Setup firewall.
This button is displayed for firewalls.
Refer to ["5.3.8 Setup Firewall"](#) for information on setup firewall.
- [Log viewing] button: References the firewall log.
This button is displayed for firewalls deployed without using a ruleset.
Refer to ["5.3.9 Referencing the Firewall Log"](#) for information on referencing the firewall log.
- [Operation] button: Operate server load balancer (SLB).
This is displayed for server load balancers.
Refer to ["5.3.11 Server Load Balancer \(SLB\) Operations"](#) for information on operating server load balancers.
- [Operation log] button: Server load balancer (SLB) operation log.
This is displayed for server load balancers.
Refer to ["5.3.12 Server Load Balancer \(SLB\) Operation Logs"](#) for information on server load balancer operation logs.
- [SLB settings] button: Server load balancer (SLB) settings.
This is displayed for server load balancers.
Refer to ["5.3.10 Server Load Balancer \(SLB\) Settings"](#) for information on server load balancer settings.
- [Software Details] button: Display software information.
- [Initial PWD] button: Confirm the initial password.
Depending on the L-Platform settings, the "Initial password" is " ". Sometimes it is displayed as ".
The initial password is set after L-Platform deployment.
- [Add Patch Information] button: Register the patch information.
Refer to ["5.3.5 Manage Patch Information"](#) for information on registering patch information.
- [Delete Patch Information] button: Delete the patch information.
Refer to ["5.3.5 Manage Patch Information"](#) for information on deleting the patch information.

 **Note**

- If 'Start all' or 'Stop all' button is clicked while another user is reconfiguring the L-Platform, the start or stop operation fails with the error code VSYS10051.
If this error occurs when no user is reconfiguring the L-Platform, perform the following operation before starting or stopping all servers.
 1. Click the [Reconfigure] button on the [L-Platform Details] page.
 2. After the following message is displayed, click the 'Obtain the lock on a mandatory basis' button, and then cancel the reconfiguration.

The L-Platform is locked by another user.
After obtaining the lock on a mandatory basis, the operation can be continued.

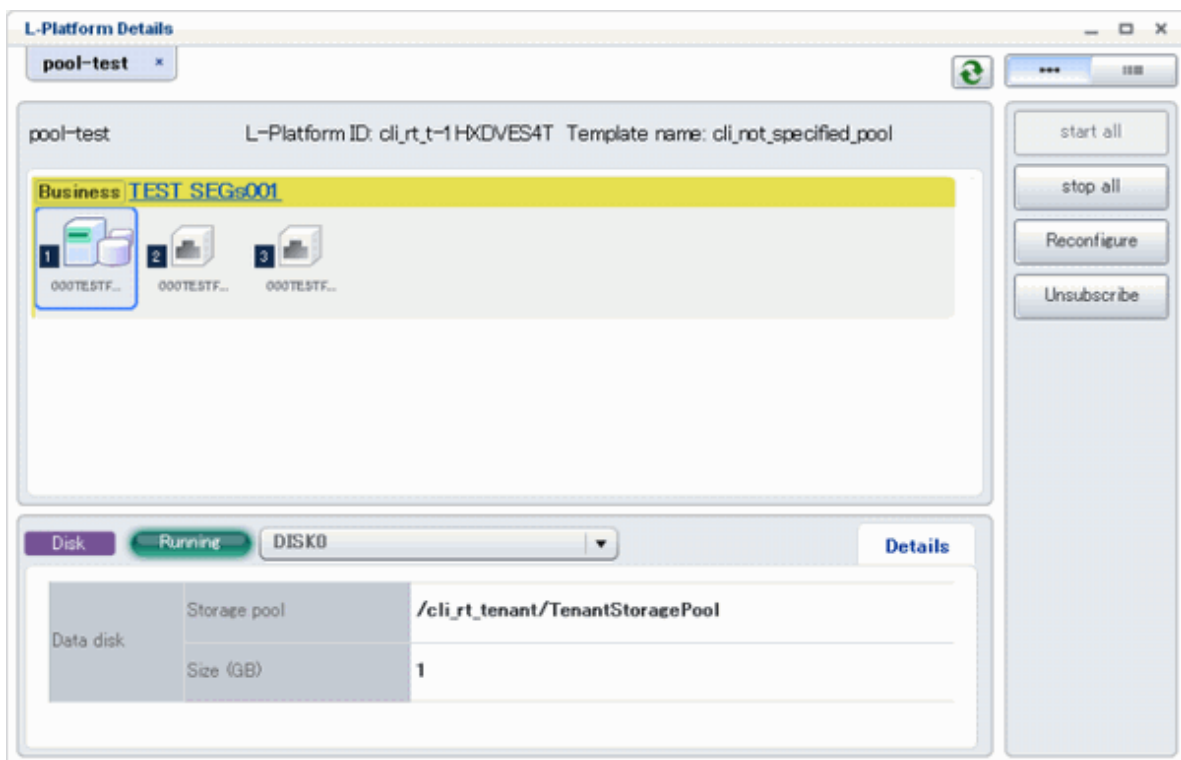
- If a virtual server managed by OVM for SPARC is stopped using the [Stop all] or [OFF] button, the OVM for SPARC must support shutdown operations. If shutdown operations are not supported by the OVM for SPARC, the virtual server cannot be stopped.
In this case, operate the virtual server directly or click the [Forced stop] button depending on the server status.

- If a server is imported to the L-Platform and no pool name is specified by the administrator, the "-" character is displayed for the VM pool, the server pool name, and the storage pool of the server.
- For physical servers, the number of CPUs, operating frequency, and memory size displayed are those specified by the user during the L-Platform subscription or when adding a server as part of an L-Platform reconfiguration.
For physical servers added to the L-Platform, the values in effect during registration are displayed.
For this reason, even if the number of CPUs, operating frequency, and memory size are changed, the displayed values will not change.

5.3.3 Display Details on a Disk

Follow the steps below to display the details of a disk located on the virtual server:

1. Display the [L-Platform Details] page.
Refer to "5.3.2 L-Platform Detailed Information Display" for information on how to display the page.
2. After selecting the virtual server to which the disk is added, select the target disk from the menu.
The details of the disk will be displayed on the [L-Platform Details] page.



5.3.4 Start and Stop the Server

Follow the steps below to start or stop a server:

1. Display the [Server List] page.
Refer to "5.3.1 L-Platform Management Display Page" for information on how to display the page.
Alternatively, display the [L-Platform Details] page.
Refer to "5.3.2 L-Platform Detailed Information Display" for information on how to display the page.
2. After selecting a required server, click the [ON] button to start it or the [OFF] button to stop it.

Note

- Even if the server is stopped using the [OFF] button, sometimes the server may not stop, due to a problem with the server. In this case, the [ON] button and [OFF] button act as [Forced stop] buttons. When a [Forced stop] button is clicked, the server will stop forcibly. The [Forced stop] button is designed to shut down the power to the server.

Therefore, the recommendations for virtual servers is to use remote desktop connection to connect to the virtual server, and then to shut down the operating system.

- If a virtual server managed by OVM for SPARC is to be stopped and shutdown operations are not supported by the OVM for SPARC, it cannot be stopped.

In this case, operate the virtual server directly or click the [Forced stop] button depending on the server status.

- To stop a server for VDI coordination, log in to the guest OS, and perform a shutdown.

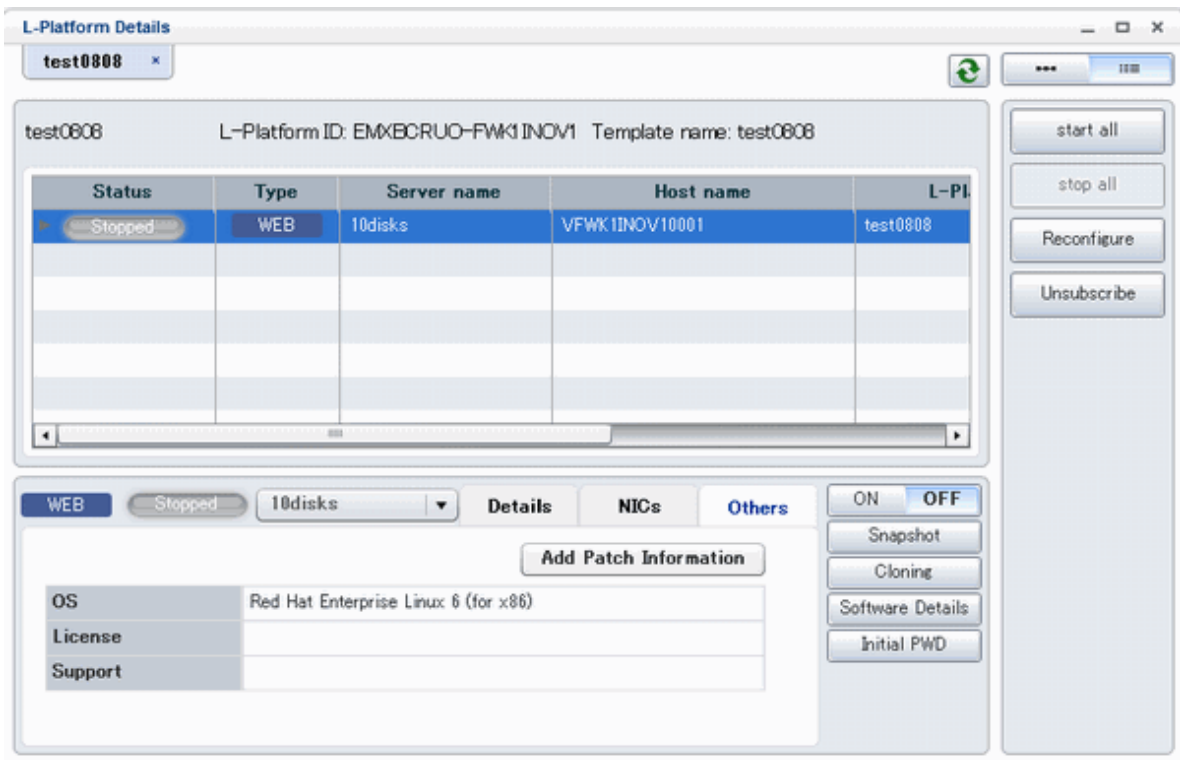
5.3.5 Manage Patch Information

Patch information can be managed after it is applied to or deleted from a server that has been deployed.

Register Patch Information

Follow the steps below to register patch information:

1. Display the [L-Platform Details] page.
Refer to "5.3.2 L-Platform Detailed Information Display" for information on how to display the page.
2. After selecting the required server, select the [Others] tab.
The following page will be displayed if the patch information has not been registered.



3. Click the [Add Patch Information] button.
The [Add Patch Information] page will be displayed.

Item	Description
Patch ID	Specify the patch ID that has been applied. The patch ID must be no more than 32 bytes of alpha-numeric one-byte characters.
Component name	Specify the name of the component where the patch is to be applied. The name must be no more than 85 characters long and not include the following characters: <, >, &, ', " and control characters

Item	Description
Description	Specify the description related to the patch information that has been applied. The description must be no more than 85 characters long and not include the following characters: <p style="text-align: center;"><, >, &, ', " and control characters</p>

4. Enter the required fields and click the [OK] button.

Delete Patch Information

Follow the steps below to delete patch information that has been registered:

1. After selecting the required server on the [L-Platform Details] page, select the [Others] tab.
2. Click the [Delete Patch Information] button of the patch information to be deleted.
A message confirming the deletion will be displayed. Click the [OK] button.

5.3.6 Take and Restore Snapshot

Using the [Snapshot] page, snapshots can be taken and restored for the virtual server.

These are supported if the server virtualization software is VMware, Hyper-V, or Citrix XenServer.

If the server virtualization software is Citrix XenServer, the corresponding virtual server must be stopped when taking a snapshot.

To take the restore them, the target virtual server must be inactive.

Snapshot is managed by the generation. Snapshots of older generations will be deleted if snapshots that are older than three generations are to be taken.

Contact the system administrator if it is necessary to take snapshots over 4 or more generations.

Note

- The server will enter an error state if an error occurs while taking or restoring snapshots.
When this occurs, a character string "Error" and [x] button will be displayed on the [Snapshot] column of the relevant row on the [Server List] page. To clear the error state, click the [x] button.
- The backup products that support the virtual server backup operations located on the server virtualization software must be used to back up the virtual server to a disk or tape device that is not the disk device the virtual server is running on.
- NICs cannot be added to or deleted from a server that has snapshots. When adding or deleting NICs, delete all snapshots of the server beforehand.
- Even if a created snapshot is not deleted, contact the System Administrator if it is not displayed in the Snapshot window.

Take Snapshots

Follow the steps below to take snapshots:

1. Display the [Server List] page.
Refer to "[5.3.1 L-Platform Management Display Page](#)" for information on how to display the page.
Alternatively, display the [L-Platform Details] page.
Refer to "[5.3.2 L-Platform Detailed Information Display](#)" for information on how to display the page.
2. After selecting a required server, click the [Snapshot] button.
The [Snapshot] page will be displayed.
3. Click the Start to [Take Snapshot] button.
4. A pop-up window will be displayed. Enter a comment of less than 128 characters.
This will display the comment entered on the snapshot list.
5. Click the [Take Snapshot] button to start taking the snapshot.

Restore Snapshots

Follow the steps below to restore the taken snapshots:

1. Select the required snapshot from the snapshot list on the [Snapshot] page.
2. When the [Restore] button is clicked, the restore processing of the snapshot will start.

Point

- To delete the snapshots taken, select the snapshot to be deleted from the snapshot list, and click the [Delete] button.
- The disk size and estimated charges when taking a snapshot will only be displayed when the estimated fees display is enabled.

5.3.7 Physical Server Backup and Restore

The [Backup] page can be used to back up and restore a physical server.

The target physical server must be running before performing backup and restore.

Backup is managed by the generation. Backups of older generations will be deleted if snapshots that are older than three generations are to be taken.

Contact the system administrator if it is necessary to take backups over 4 or more generations.

Note

- If an error occurs during backup or restores processing, an error state occurs for the server. At this time, the character string "Error" and an [X] button are displayed in the Backup column of the relevant row of the [Server List] page. The error status can be cancelled by clicking this [X] button.
- If a server is reconfigured after backup, when the server is restored it may revert to the configuration prior to the reconfiguration. It is recommended to make a new backup after reconfiguration.

Backup

Follow the steps below to backup:

1. Display the [Server List] page.
Refer to "[5.3.1 L-Platform Management Display Page](#)" for information on how to display the page.
Alternatively, display the [L-Platform Details] page.
Refer to "[5.3.2 L-Platform Detailed Information Display](#)" for information on how to display the page.
2. After selecting a required server, click the [Backup] button.
The [Backup] page will be displayed.
3. Click the [Take Backup] button.
4. A pop-up window will be displayed. Enter a comment of less than 128 characters.
This will display the comment entered on the backup list.
5. Click the [Take Backup] button to start backup.

Restore

Perform the following operations to restore a backed up server:

1. In the backup list in the [Backup] page, select the target backup.
2. Click the [Restore] button to start the restore.

5.3.8 Setup Firewall

Change the firewall settings.

The operation for setting up a firewall differs depending on whether a ruleset is used when an L-Platform that uses a firewall is deployed.

When an L-Platform that uses a firewall is deployed without the use of a ruleset

Click the [Setting] button to display the [Firewall setting] window.

Public IP address	Target server

Public IP address	Target server
None	

FROM	TO	ID	Source	Source port	Destination	Destination...	Protocol	Action	Log

This window enables you to set "DNAT setting" and "SNAPT setting" and to add, edit, and delete firewall rules. These settings operate the network device when the [Submit] button is clicked at the bottom right of the window.

When the firewall is to connect to the outside, first set the DNAT and SNAPT for public IP addresses. DNAT and SNAPT must be defined before you make Internet settings in the firewall rule settings. There is no need to set DNAT or SNAPT when there is not going to be a connection with the Internet.

The rules for accepting connection are defined in the firewall rule settings. The rule " FROM and TO:not specified, ID:59900, Source, Source port, Destination, Destination port and Protocol:not specified, Action:Drop and Log:On" is the regular definition, so if no rules are defined, the firewall blocks all connections. When there are multiple firewall rules, the rules are applied in ascending order according ID value, so make the settings with this prioritization in mind.

The following describes the settings in detail:

- DNAT setting

You can set DNAT at the top left of the [Firewall setting] window.

The list shows IP addresses to be published. These are the IP addresses used by the L-Platform. From the list, select an IP address to be published and click the [Set] button. In the [DNAT setting] window that is displayed, specify the target. You can clear the setting at this point by selecting [It does not set it] or by selecting the IP address to be published in [Firewall setting] window and clicking the [Clear] button.

- SNAPT setting

You can set SNAPT at the top right of the [Firewall setting] window.

The drop-down menu to the left of the list stores the IP addresses to be published. These are the IP addresses used with the L-Platform. Click the [Add target] button. In the [Add SNAPT targets] window that is displayed, specify the target server for the IP address to be published that you selected in the drop-down menu. You can delete this setting by selecting the target in [Firewall setting] window and clicking the [Clear] button.

- Firewall rules

You can set firewall rules at the bottom of the [Firewall setting] window.

Click the [Add] button to start the [Add Firewall rule] wizard, and add firewall rules.

- [Add Firewall rule] window

- [Select direction] page

Specify the direction of the firewall rules. The drop-down menu lists the segment types in the segments on the L-Platform and the connection destinations of the L-Platform. Specify the direction of the firewall rules and click [Next] to display [Rule setting] page.

- [Rule setting] page

Set the details of the rule.

The table below explains the items.

Item	Explanation
ID	ID of the rule The rules are applied in ascending order according ID value. Specify a two-digit number. You cannot specify the same number for firewall rules that have the same direction within a single L-Platform. The smallest value of the numbers that can be specified by default will be entered.
Source	Specify the source. Enter a value or select one from the drop-down menu, depending on the direction of the firewall rules. When a textbox is valid, it is possible to specify in ranges (for example, 192.0.2.1-192.0.2.5) or to specify the network mask (for example, 192.0.2.0/24), as well as being able to specify them individually.
Source port	The source port number for all rules will always be [any].
Destination	Specify the destination. Enter a value or select one from the drop-down menu,, depending on the direction of the firewall rules. When a textbox is valid, it is possible to specify in ranges (for example, 192.0.2.1-192.0.2.5) or to specify the network mask (for example, 192.0.2.0/24), as well as being able to specify them individually.
Destination port	Specify the destination port number. Enter a value or select one from the drop-down menu. When directly entering values and multiples are specified, it is possible to specify in ranges (for example, 12000-13000), as well as being able to specify them individually.
Protocol	Specify a protocol. Select one from the drop-down menu.
Action	Specify the method for processing connections that satisfy the rule conditions. Select one from the drop-down menu.
Log	Specify whether to collect a log of connections that satisfy the rule conditions. Select one from the drop-down menu.

After specifying the items, click the [Next] button to display the [Confirmation] page.

- [Confirmation] page

Confirm the rule settings. The [OK] button adds the rule, but the settings are not sent to the network device until the [Submit] button is clicked in the [Firewall setting] window.

- [Firewall rule edit] button

Select a rule from the list of firewall rules at the bottom of the [Firewall setting] window, and then click the [Edit] button. You can then edit the firewall rule. However, you cannot change the direction of the firewall rules during the editing process.

- Firewall rule delete

Select a rule from the list of firewall rules at the bottom of the [Firewall setting] window and click the [Delete] button to delete the firewall rule.



Note

.....
If the number of Firewall rule is zero, the [Submit] button of the [Firewall setting] window is unavailable.
.....

When an L-Platform that uses a firewall is deployed with the use of a ruleset

The firewall ruleset parameter values can be changed in the firewall settings.

Perform the following steps to change the firewall settings:

1. Display the [L-Platform Details] page.

Refer to "[5.3.2 L-Platform Detailed Information Display](#)" for information on the display method.

2. Select the firewall, and then click the [Setting] button.

3. [Firewall] page is displayed.

- Selected ruleset: Displays the ruleset names.
- Description: Displays the ruleset descriptions.
- Segment/Server: The names of the segments or servers where the parameters are enabled are displayed. "-" is displayed for parameters are unrelated to the segment or server.
- Parameter: Displays the parameter names.
- Description: Displays an explanation of the parameter
- Value: Enter the value to be set for the parameter

- Description of the selected parameter: The description of the parameter in the row being pointed at is displayed.

Firewall

Firewall Firewall

Set parameters for the firewall.

Selected rule set FW_of_3Tier_sys_inc_SLB-IPCOM1

Description 3 Tier firewall and SLB system (scope is within 3 tier)

Segment/Server	Parameter	Description	Value
-			
-			
DMZ			
Server1			
	SrcNapt-Global-IPv4	Type the NAT ip address ...	
	Server1-DMZ-IPv4	Type the IPv4 address of...	

Description of the selected parameter

Update Cancel

4. When the [Update] button is clicked, a confirmation message is displayed. Click the [OK] button to save and apply the firewall settings.

Point

Firewall settings cannot be set by L-Platform subscription or L-Platform reconfiguration.

After an L-Platform is deployed, check the IP addresses of the servers included in the L-Platform and the port numbers used by the installed middleware. Then, set the allowed IP addresses and port numbers in the relevant ruleset parameters in the firewall settings.

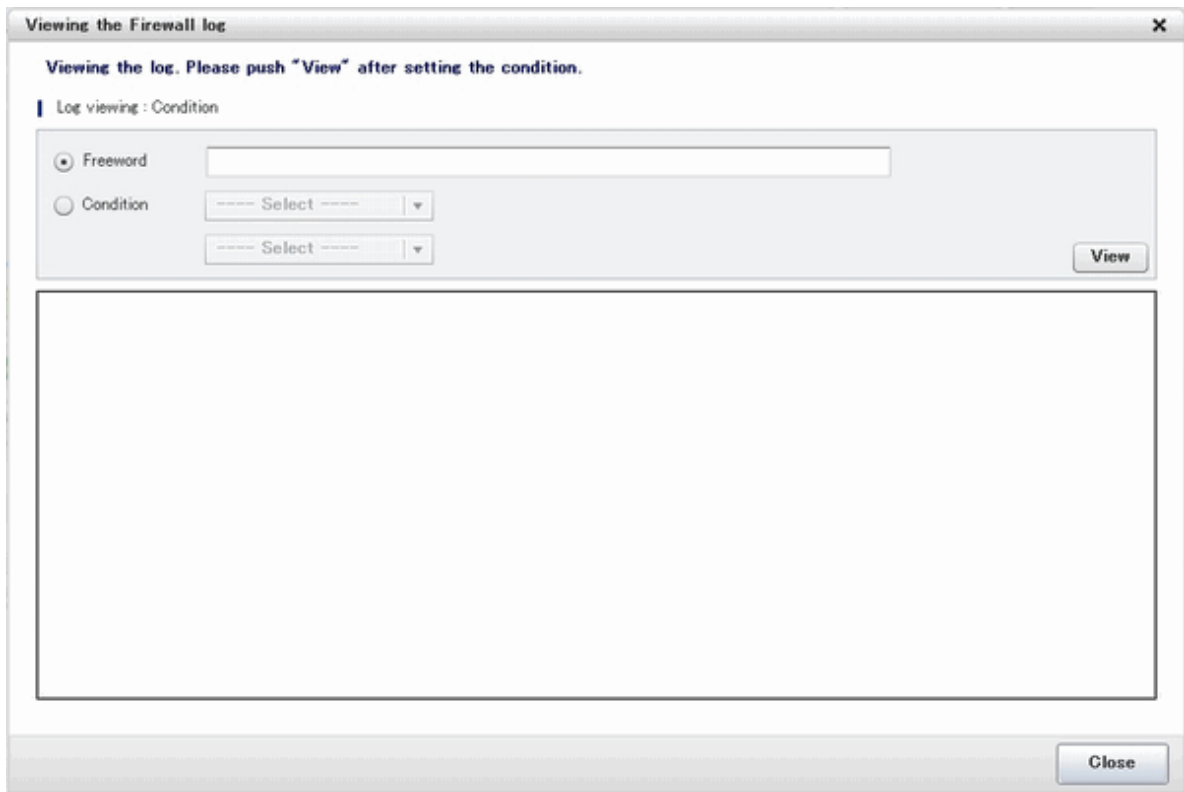
5.3.9 Referencing the Firewall Log

You can reference the firewall log by using the [Viewing the Firewall log] page. It can be used only when you have not used a ruleset when deploying an L-Platform that uses a firewall.

Perform the following steps to reference the firewall log:

1. Display the [L-Platform Details] page.
Refer to "5.3.2 L-Platform Detailed Information Display" for information on how to display this page.
2. Select a firewall and click the [Log viewing] button.

3. The [Viewing the Firewall log] page is displayed.



The [View] button displays up to 1,000 firewall logs, starting with the most recent one.

You can filter the logs to be displayed by specifying log reference conditions.

The specifiable log reference conditions are [Freeword] and [Condition]. Specify either value and then click [View].

The following explains the procedures for specifying [Freeword] and [Condition].

- [Freeword]: Only logs corresponding to the string that you directly entered will be referenced.
Select the [Freeword] option button, and then enter a string in the textbox.
Specify up to 40 characters. Allowed characters are: A-Z, a-z, 0-9, symbols (=, ., : - / () []) and space (ASCII code: 0x20).
- [Condition]: The items specified for the firewall rules are used as display conditions to filter the contents of the logs to be displayed.

Select the [Condition] option button, and then select the condition you want to specify from the drop-down menu. When you select a condition specification from the drop-down menu, a textbox or another drop-down menu is displayed next to it - you must specify an option by that as well.

You can select up to two condition specifications.

The table below describes the items you can specify in the condition specification.

Condition specification item	Description
ID	Enter the five-digit number representing the ID of the firewall rule to be used as the log filtering condition.
Source Address	Enter the IPv4 address representing the source IP address of the firewall rule to be used as the log filtering condition.
Source Port	Enter a number containing 1 to 5 digits and representing the source port number of the firewall rule to be used as the log filtering condition.
Destination Address	Enter the IPv4 address representing the destination IP address of the firewall rule to be used as the log filtering condition.

Condition specification item	Description
Destination Port	Enter a number containing 1 to 5 digits and representing the destination port number of the firewall rule to be used as the log filtering condition.
Protocol	Select the protocol of the firewall rule to be used as the log filtering condition. Select from [TCP], [UDP], [TCP-UDP], and [ICMP].
Action	Specify the firewall rule action to be used as the log filtering condition. Select from [Accept] and [Drop].
Direction	Specify [FROM] and [TO] indicating the direction of the firewall rule to be used as the log filtering condition. Select from [Internet], [Intranet], [DMZ], [SECURE1], and [SECURE2] as the [FROM] and [TO] points.

5.3.10 Server Load Balancer (SLB) Settings

This section describes the settings for the server load balancer (SLB).

The parameter values of server load balancer rulesets can be changed in the server load balancer settings.

Server load balancer settings are changed as follows:

1. Display the [L-Platform Details] page.

Refer to "[5.3.2 L-Platform Detailed Information Display](#)" for information on the display method.

2. After selecting a server load balancer (SLB), click [SLB settings].

3. [SLB settings] page is displayed.

- Selected ruleset: Displays the ruleset names.
- Description: Displays the ruleset descriptions.
- [SLB] tab: Parameters that are unrelated to the server are displayed. The following items are displayed:
 - Parameter: Displays the parameter labels.
 - Description: Displays the parameter descriptions.
 - Value: Enter the value to be set for the parameter.

- Description of the selected parameter: The description of the parameter in the row being pointed at is displayed.

SLB settings ✕

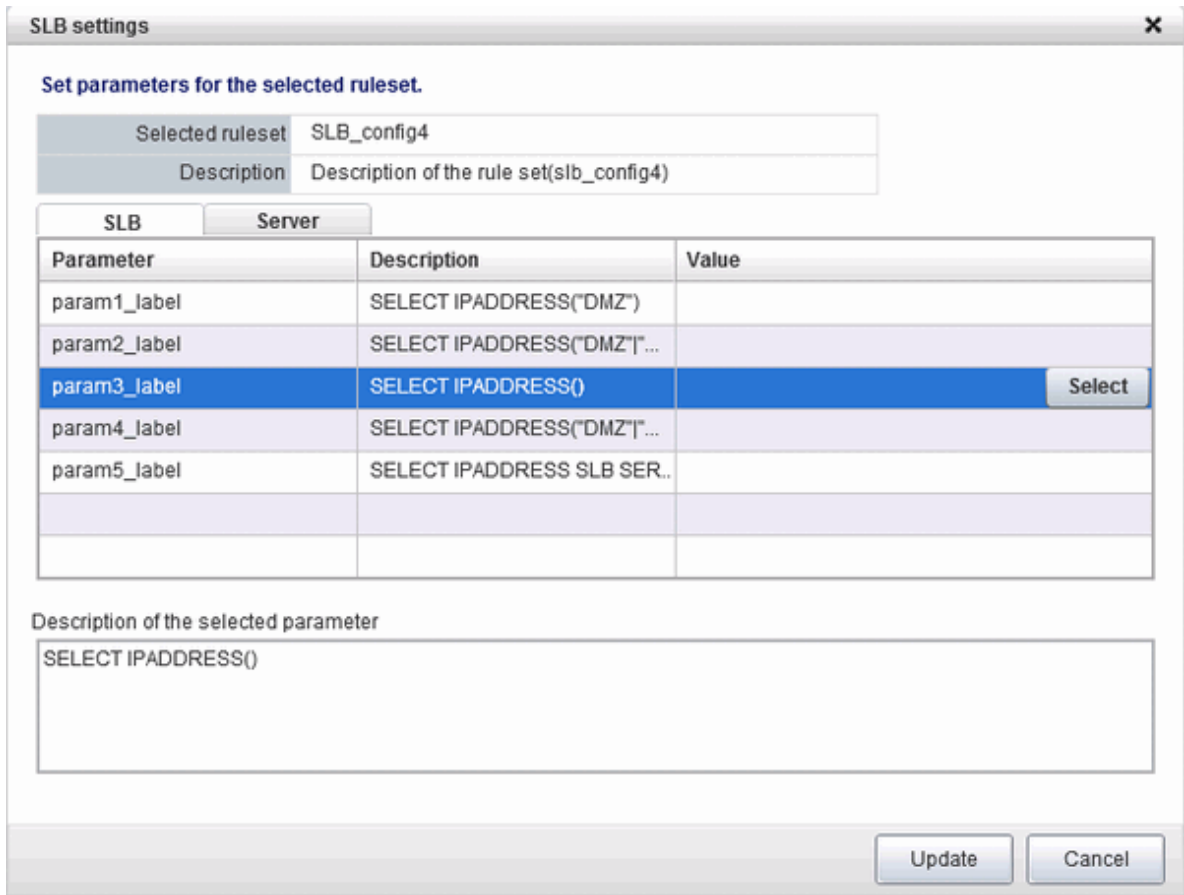
Set parameters for the selected rule set.

Selected rule set	SLB_without_SSL-ACC-IPCOM1
Description	Server Load Balancer without SSL accelerator for hosting syst

SLB	Server	
Parameter	Description	Value
Address	Type the IPv4 address of...	
Service_Port	Select the port of the v...	80
ConnectionLimit	Type the maximum number ...	
DistributionMethod	Specify the distribution...	round-robin
L4_persistence	Specify the L4 persisten...	node

Description of the selected parameter

If the parameter row type is the IP address, the [Select] button will be displayed when the corresponding row is selected - click [Select] to display the [Parameter Setting] window.

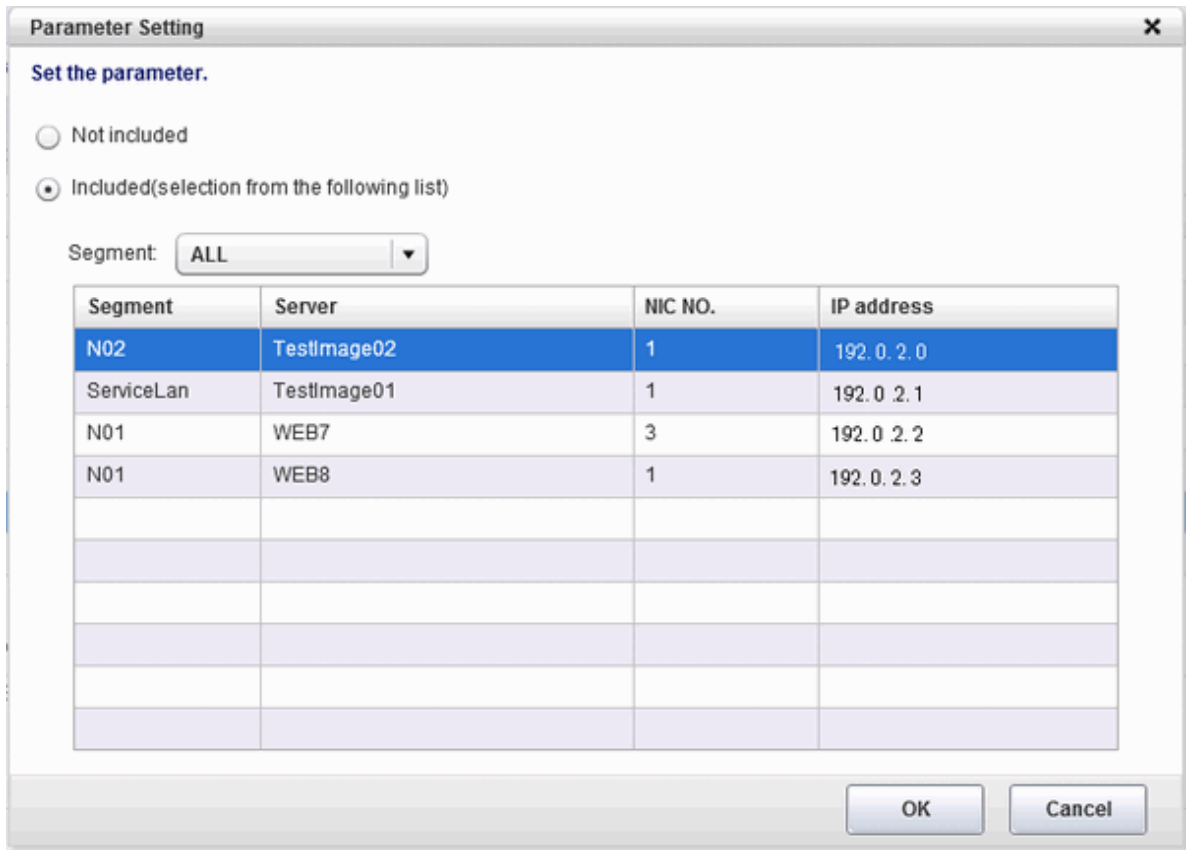


[Parameter Setting] window

This section explains the [Parameter Setting] window.

When a parameter with a configured IP address is selected, or when Included is selected

[Included] is specified in the initial state, as shown below, and the list displays the servers (NICs) that will not be load-balanced.



Select a row and click [OK] to select a server for distribution.

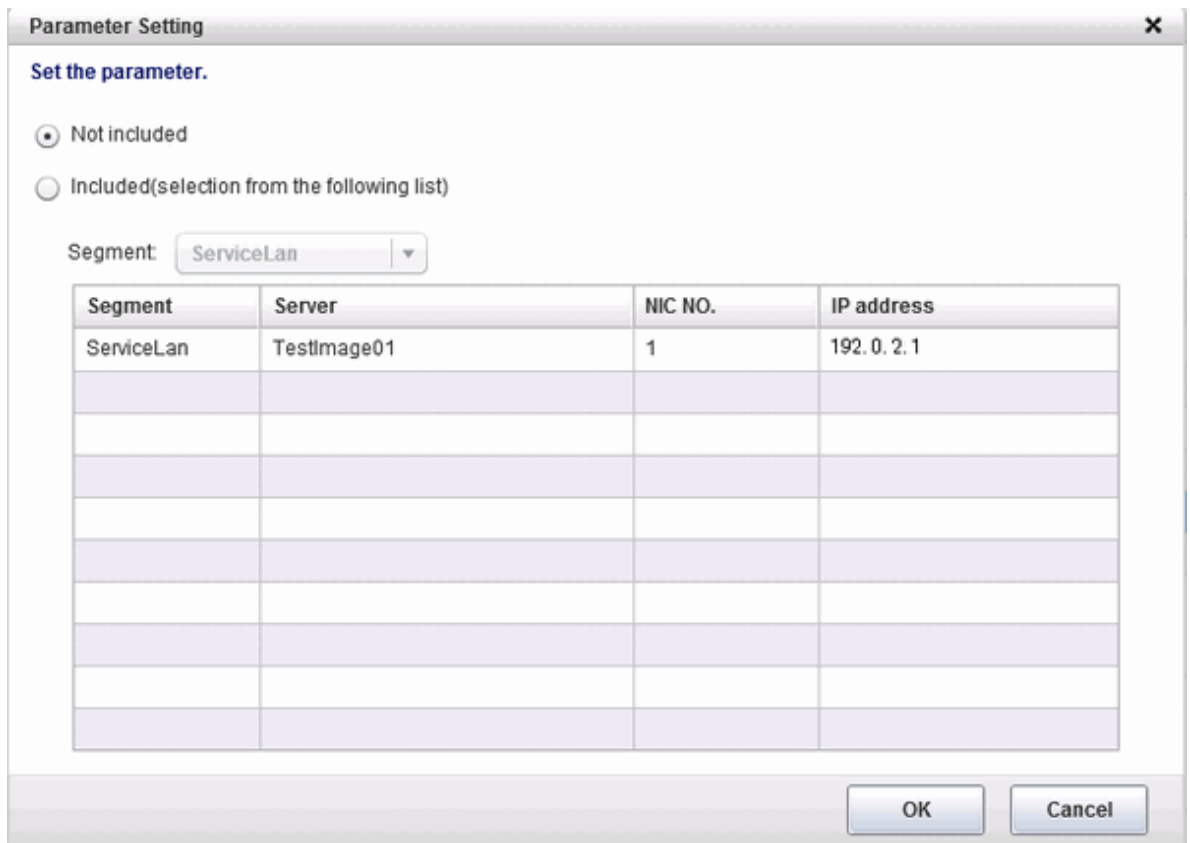
Select a segment to display only the server connected to it - if [All] is selected, all servers on the L-Platform will be displayed.

Select [Not included] to disable the segment and the list, as shown in "[When a parameter with no configured IP address is selected, or when Not included is selected](#)" (display only).

When changing from [Not included] to [Included], the default value of the segment selection is the segment connected to the SLB.

When a parameter with no configured IP address is selected, or when Not included is selected

[Not included] is specified in the initial state, as shown below, and the list displays the servers (NICs) that will not be load-balanced. Note that this window only displays the default value - it does not enable a selection to be made.



The default value of the segment selection is the segment connected to the SLB. Note that this window only displays the default value - it does not enable a selection to be made.

Refer to "[When a parameter with a configured IP address is selected, or when Included is selected](#)" to change the selection from [Not included] to [Included].

- [Server] tab: Parameters that are related to the server are displayed. The following items are displayed:
 - Server: The names of the servers where the parameters are enabled are displayed. "-" is displayed for parameters unrelated to the server.
 - Parameter: Displays the parameter labels.
 - Description: Displays the parameter descriptions.
 - Setting value: Enter the value to be set for the parameter.

- Parameter descriptions: The description of the parameter in the row being pointed at is displayed.

SLB settings

Set parameters for the selected rule set.

Selected rule set	SLB_without_SSL-ACC-IPCOM1		
Description	Server Load Balancer without SSL accelerator for hosting syst		

Server	Parameter	Description	Value
▼ Server1	Server1_Address	Type the IPv4 address of...	
	Server1_Service_P	Type the port of Server1...	
▼ Server2	Server2_Address	Type the IPv4 address of...	
	Server2_Service_P	Type the port of Server2...	
▼ Server3	Server3_Address	Type the IPv4 address of...	

Description of the selected parameter

4. When [Update] button is clicked, a confirmation message is displayed.
Click [Yes] to start the server load balancer settings.

Point

- Server load balancer settings cannot be changed in L-Platform subscriptions or when modifying the L-Platform configuration.
- Specify the server load balancer settings after deploying the L-Platform and before operating the server load balancer.
- Specify the IP address advised by the tenant administrator for the virtual IP address used when setting the server load balancer. Also check with the tenant administrator if you do not know any of the other values to be specified.

Note

The parameters and operations available depend on the device and rulesets.

5.3.11 Server Load Balancer (SLB) Operations

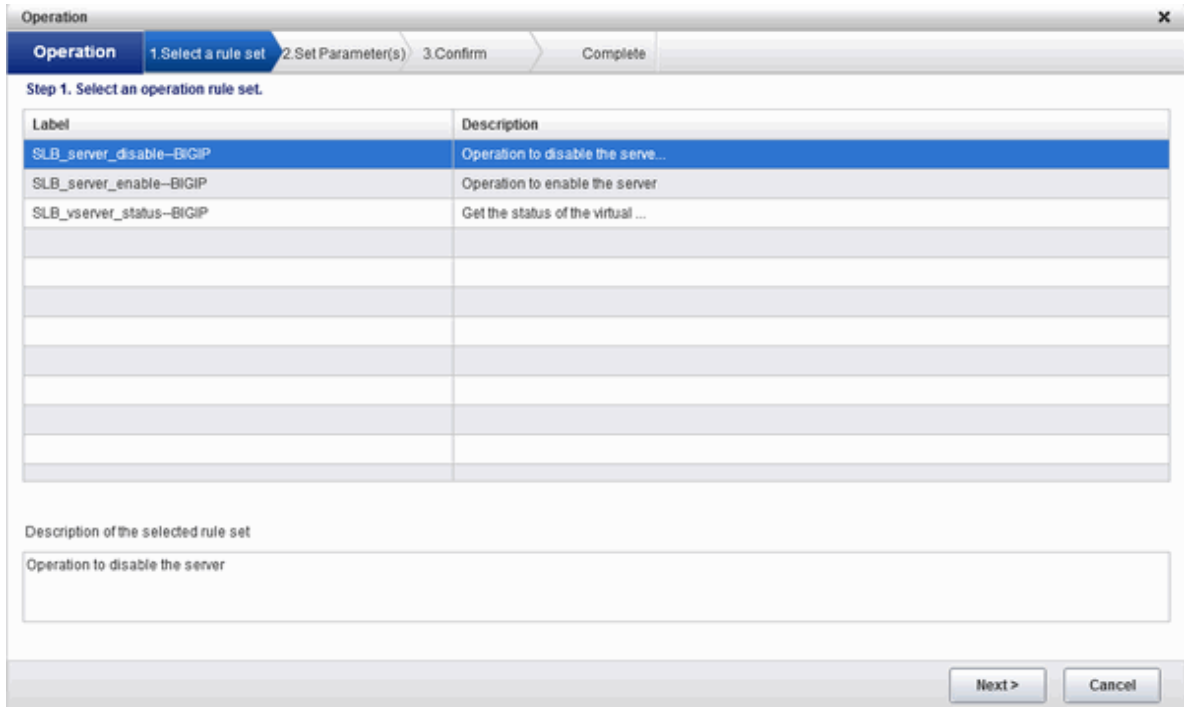
This section describes server load balancer operations.

Operations on server load balancers, such as including a server in an L-Platform as a target of load balancing, or removing it as a target, are performed by specifying rulesets and parameters prepared for operations.

Operate the server load balancer as follows:

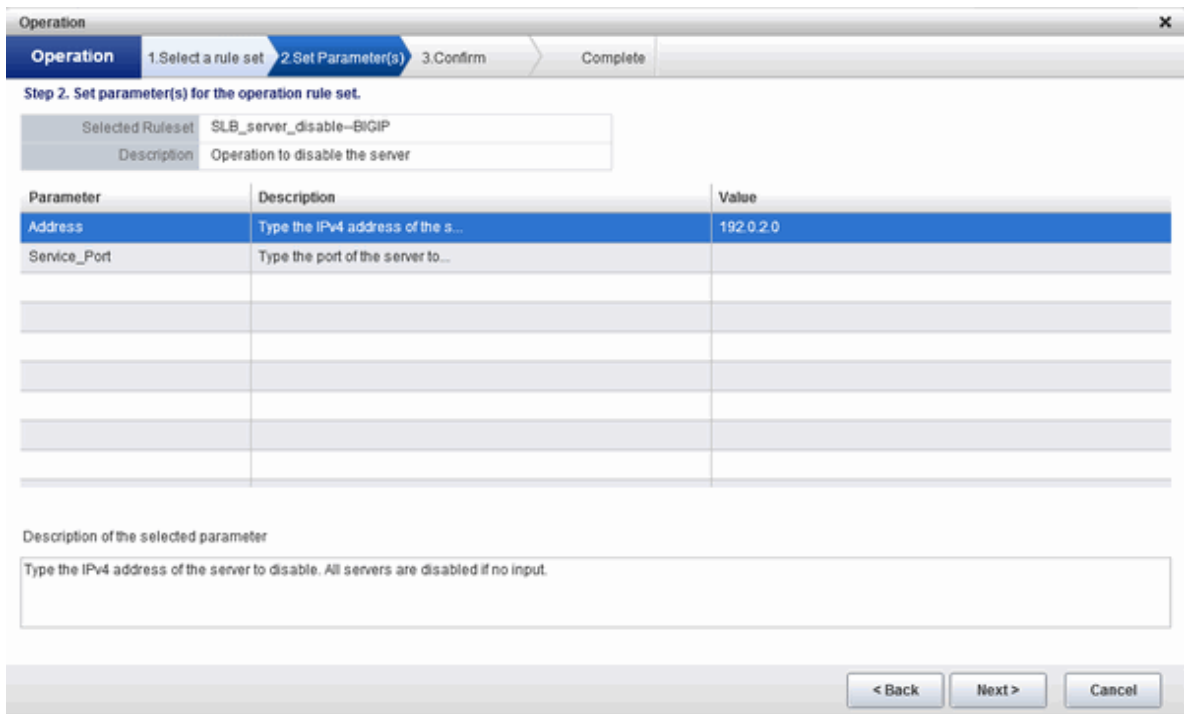
1. Display the [L-Platform Details] page.
Refer to "5.3.2 L-Platform Detailed Information Display" for information on the display method.

2. After selecting a server load balancer (SLB), click [Operation] [Select a ruleset] page in [Operation] window is displayed.
3. Select the ruleset used in the operation in the [Select a ruleset] page. The rulesets for operating the target server load balancer are displayed in the [Select a ruleset] page. In the ruleset description section in the lower part of the window, the description of the ruleset in the row being pointed at is displayed.

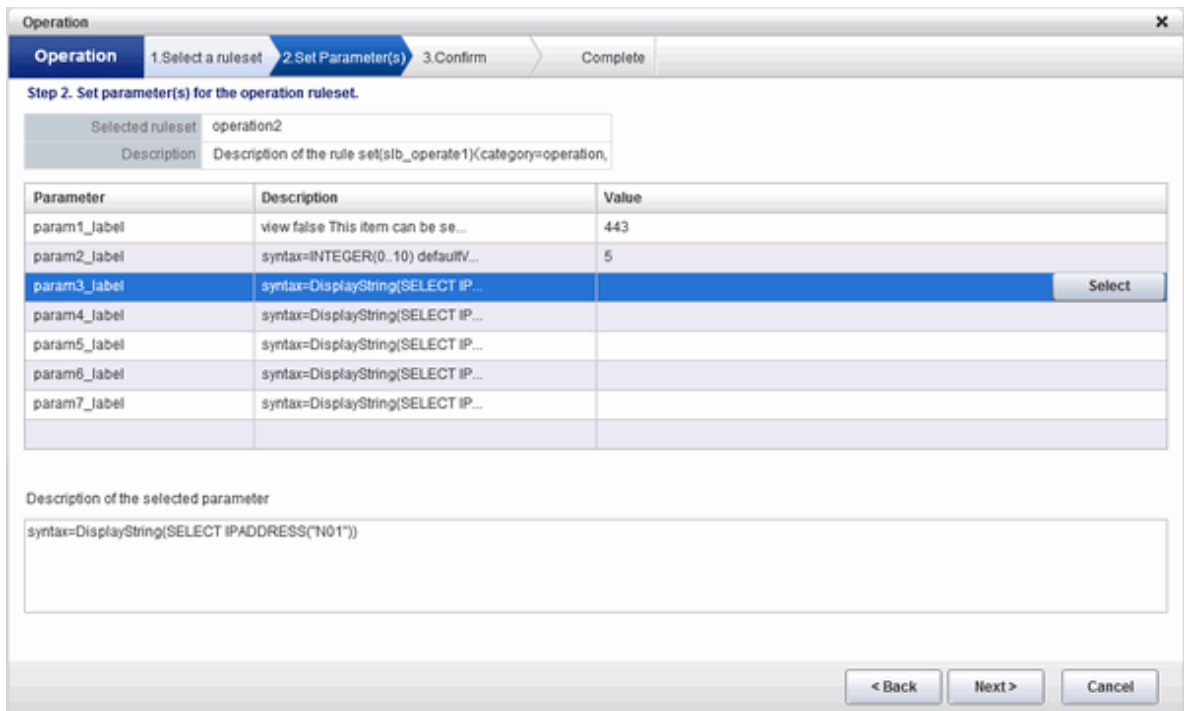


4. Select the ruleset to be used and click the [Next] button. The [Set Parameter(s)] page is displayed. Specify the parameters for operation corresponding to the ruleset in the [Set Parameter(s)] page. No information for parameters is displayed if there are no parameters.
 - Selected ruleset: The name of the ruleset selected in the [Select a ruleset] page is displayed.
 - Description: Displays a description of the selected ruleset.
 - Parameters
 - Parameter: The labels of the parameters for operation are displayed.
 - Description: Displays the parameter descriptions.
 - Value: Enter the value to be set for the parameter.

- Description of the selected parameter: The description of the parameter in the row being pointed at is displayed.



If the parameter row type is the IP address, [Select] will be displayed when the corresponding row is selected. Click [Select] to display the [Parameter Setting] window.



Refer to "[Parameter Setting] window" for information on information on this window.

- Once the parameter settings are complete, click the [Next] button. The [Confirm] page will be displayed. The values of the changed items are displayed in red. The value before the change is displayed as "changed from *the old value*".

In the parameter description section in the lower part of the window, the description of the parameter in the row being pointed at is displayed.

Operation

1. Select a rule set 2. Set Parameter(s) 3. Confirm Complete

Step 3. Confirm operation.

Selected Ruleset: SLB_server_disable-BIGIP
Description: Operation to disable the server

Parameter	Description	Value
Address	Type the IPv4 address of the s...	192.0.2.0 [↑] changed from
Service_Port	Type the port of the server to...	

Description of the selected parameter

Type the IPv4 address of the server to disable. All servers are disabled if no input.

< Back Execute Cancel

6. Confirm the values of the parameters displayed and click [Execute] button.
The [Complete] page is displayed.
7. To confirm the results of the operation, click [Open Operation log], or if you want to check the log later, click [Close] button.

Point

Also check with the tenant administrator if you do not understand the rulesets used when operating server load balancers, or do not know the values to be specified in the ruleset parameters.

Note

- Refer to "5.3.10 Server Load Balancer (SLB) Settings" and setup the server load balance after the L-Platform is deployed. Operation will fail if you try to operate the L-Platform without setting the server load balancer.
- [Operation] cannot be performed on a server load balancer when a server load balancer operation is executing.
- Confirm the results of server load balancer operations in the 5.3.12 Server Load Balancer (SLB) Operation Logs. If you do not check the operation logs after executing server load balancer operations, the results of previous operations will no longer be available when you next execute an operation.
- The parameters and operations available depend on the device and rulesets.

5.3.12 Server Load Balancer (SLB) Operation Logs

This section describes server load balancer operation logs.

The results of server load balancer operations can be checked by displaying the server load balancer operation logs.

Display the operation logs for the server load balancer as follows:

1. Display the [L-Platform Details] page.

Refer to "5.3.2 L-Platform Detailed Information Display" for information on the display method.

2. After selecting a server load balancer (SLB), click [Operation log] button.

The [Operation log] page is displayed.

This will be empty if there are no operation logs.

The message "Obtaining the operation log" is displayed when an operation is not yet complete.

The [Reload] button is enabled when a new operation is performed after displaying the operation log. Click [Reload] button to display the latest operation log.

3. When you have finished checking the results of the operation, click [Close] to close the [Operation log] page.



Point

Check with the tenant administrator if you do not understand the content of the operation logs.

5.3.13 L-Platform Reconfiguration

The system configuration that configures the L-Platform in use can be modified on the [Reconfigure] page.



Note

- [Reconfigure] page allows the configuration of the L-Platform to be modified. However, this may only be used when modifications to the configuration of the L-Platform template have been allowed by the infrastructure administrator.
- When reconfiguring a deployed server, the items that can be changed depend on the type and the power status of the server.

[Virtual server]

- The server is not running

Items other than the following can be changed:

- Storage pool
- VM pool
- Storage pool of the system disk
- Storage pool of the deployed data disk

- The server is running

The following items can be changed:

- Change the system name
- Change the server name
- Change the disk name
- Add a server
- Add a disk
- Setting the startup priority level
- Change the segment name
- IP address

Along with these, there are items that can be modified depending on the type of server virtualization software. Details are shown below. However, refer to "NIC Add and Delete" for information on adding and deleting NICs.

Item name	Change type	Server virtualization software						
		VMware	Hyper-V	RHEL-KVM	Solaris Zones	Citrix XenServer	OVN for X86	OVN for SPARC
Number of CPUs	Add	Y	N	N	Y	N	N	Y
	Reduce	N	N	N	Y	N	N	Y
CPU Performance	Add	Y	Y	Y	Y	N	Y	-
	Reduce	Y	Y	Y	Y	N	Y	-
CPU Reserved	Add	Y	Y	-	-	-	-	-
	Reduce	Y	Y	-	-	-	-	-
[VMware] CPU Shares [Hyper-V] [Citrix Xen] CPU Weight	Add	Y	Y	-	-	N	-	-
	Reduce	Y	Y	-	-	N	-	-
Memory Size	Add	Y	N	O	Y	N	N	Y
	Reduce	N	N	O	Y	N	N	Y
[VMware] [Citrix Xen] Memory Reserved [Hyper-V] Memory RAM	Add	Y	N	-	-	N	-	-
	Reduce	Y	N	-	-	N	-	-
[VMware] Memory Shares [Hyper-V] Memory Weight	Add	Y	Y	-	-	-	-	-
	Reduce	Y	Y	-	-	-	-	-
Server Type	Modify	Y	Y	Y	Y	Y	Y	Y
System Disk Size	Extend	Y	N	-	-	-	-	-
Host Name	Modify	Y	O	O	O	O	O	O

Y: Can be changed when the server is running

O: Depending on the system configuration, cannot be changed during server startup.

N: Cannot be changed when the server is running

- : No item or cannot be specified

[Physical server]

Regardless of the power status, only the following items can be changed.

- Server name
- Server type
- Boot priority
- Segment name
- Regardless of whether or not an L-Platform reconfiguration completion notification email is received, check with the Infrastructure Administrator if an L-Platform is not changed. In this case, the change processing may have failed at the virtual server.
- Note the following points for Solaris Zones management servers:
 - It may not be possible to get server CPU performance, the number of CPUs, and memory size. "-" is displayed if this is the case.

- The following operations are not possible:
 - Changes to NIC configuration
 - Addition of disks
 - Disk size changes
- If the resource pool where the server is operating is not being managed by this product, it is not possible to change the number of CPUs, CPU performance, memory size, server name, or boot priority when changing configuration after deployment.
- If the resource pool where the server is operating is not being managed by this product, redundancy and automatic server release will not be changed even if the server type is changed.

The number of CPUs and CPU performance may be different to the values allocated when the subscription was made. In this case, the number of CPUs and the CPU performance are adjusted so that the number of CPUs times the CPU performance becomes the same value.

- If Server Type is changed, the following items are changed at the same time.
 - Number of CPUs
 - CPU Performance
 - CPU Reserved
 - CPU Shares/ CPU Weight
 - Memory Size
 - Memory Reserved/Memory RAM
 - Memory Shares/ Memory Weight
 - Heartbeat
 - Redundancy
 - Automatic server release

When changing only Redundancy, Heartbeat, or Automatic server release, set the CPU and memory items back to their previous values after changing Server Type.

- Server load balancers (SLB) cannot be added or deleted by changing the L-Platform configuration.
- If the number of NICs is increased, IP addresses will not be automatically set on the guest OS. After increasing the number of NICs, log into the guest OS and manually set the IP address displayed in the [L-Platform management] window. After setting the IP address, check that the added NIC can communicate properly with other devices. If two or more NICs are being added, it is recommended to add one by one. If two or more NICs have been added at the same time, correctly set the IP address of each added NIC by setting the IP address and checking the communication for one NIC at a time.
- If a NIC being deleted has been configured on the guest OS, the deletion on the [L-Platforms] tab does not delete the configuration from the guest OS. Delete the configuration of the NIC from the guest OS beforehand.
- When the NIC used to connect to the guest OS is deleted, it will no longer be possible to connect to the guest OS. When deleting the NIC used to connect to the guest OS, first add an NIC to take over the connection to the guest OS and confirm the connection, then delete the NIC.
- NICs cannot be added to or deleted from a server that has snapshots. When adding or deleting NICs, delete all snapshots of the server beforehand.
- The CPU performance, the CPU reserved, the CPU shares/CPU weight, number of CPUs, the memory size, memory reserved/memory RAM, and the memory shares/memory weight cannot be changed for servers with the VM pool name set to "-".
- If the server's VM pool name set is deleted, changed or moved, then CPU performance, number of CPUs and memory size cannot be changed.
- The disk size cannot be changed for system disks whose storage pool is deleted, renamed, or moved.

- Depending on the guest OS type, system disks which capacity are expanded may not be recognized or used by the OS. Refer to server virtualization software manuals and technical information to ensure that the expanded disk can be used.
A separate operation is required to make the expanded disk recognizable on the guest OS. Refer to manuals and technical information for each OS for information on the required operations.
- When an IP address is changed, it is not automatically configured as the IP address on the guest OS. After changing an IP address, log in to the guest OS and manually configure the changed IP address.
- When a host name is changed, it is not automatically configured as the host name on the guest OS. After changing a host name, log in to the guest OS and manually configure the changed host name.
- The IP addresses of NICs that are the distribution targets of server load balancers (SLB) cannot be changed.
- When addition of a server and changing of a server name or host name are performed at the same time, or multiple server names or host names are changed at the same time, system settings may cause names to overlap making change impossible.
This applies in cases like the following.
 - When a name used for a server or host before the change is specified for the server name of a server being added
 - When the server names or host names of multiple servers have been switched
 If names overlap, perform the configuration changes in several steps.
- If the method for setting L-Server names is set to use host names, servers of server virtualization software other than VMware cannot get their host names changed while in the running state.

Follow the steps below to modify the system configuration that configures the L-Platform in use:

1. Display the [L-Platform Details] page.
Refer to "5.3.2 L-Platform Detailed Information Display" for information on how to display the page.
2. Click the [Reconfigure] button and display the [Reconfigure] page.
3. Modify the system configuration as required on the [Reconfigure] page.
Usage fees corresponding to the system reconfiguration will be displayed in the top-right of the window.

 **Point**

Estimated charges for the L-Platform will only be displayed when the usage fees display is set to enabled.
The displayed usage fees will be calculated according to current prices, and not according to prices at the time of deployment.

 **Note**

The pool cannot be changed for system disks and extended disks that have already been deployed. If a cloning image associated with the image information includes a data disk, changes to the number of disks cannot be made until deployment is complete.

4. When the L-Platform is modified, click the [Next] button.
The [Confirm] page will be displayed.
The difference between the old L-Platform and the new L-Platform is displayed as follows:

Item	Display format
Item changed	The values of the changed items are displayed in red. The old value is displayed as "Changed from <i>the old value</i> ".
Item added	"*Added" is displayed after items that have been added. The values of the added items are displayed in red. The background of the added item is displayed in red.
Item deleted	"*Deleted" is displayed after items that have been deleted. The background of the deleted item is displayed in gray.

Point

CSV output

When the [Save as CSV] button located at the bottom left of the window is clicked, the [Select the destination to save] window is displayed where the L-Platform template can be saved as a CSV file.

The default CSV file name format is shown below. This file name can be modified as necessary.

```
SystemConfiguration (+ <L-Platform name> +)_ <date> + .csv
```

Save specification

Click the [Save Configuration] button to save the L-Platform configuration, and the display returns to the [Management] page.

When the L-Platform template is saved, an icon () will be displayed after the L-Platform template name.

5. Check the displayed contents of the L-Platform configuration, and click the [Next] button.
The [Agreement] page will be displayed.
6. Check the license agreement displayed. Select the [Agree the license] check box, and then, click the [Reconfigure] button.

Point

When the application process is enabled, clicking of the [Reconfigure] button on the [Agreement] page displays the [Forward screen] window. Refer to "[5.5 Select Forward Destination of Application Process](#)" for details.

The [Complete] page will be displayed when an application for modification of an L-Platform is accepted.

- When the application process is disabled

The following message will be displayed:

"The request to reconfigure the L-Platform has been completed. The reconfiguration takes some time to complete."

- When the application process is enabled

The following message will be displayed:

"The request to reconfigure the L-Platform has been completed. The L-Platform will be reconfigured after approval and/or judgement procedures."

Point

- When an L-Platform is changed, an L-Platform reconfiguration completion notification email is sent to the subscriber.
If an L-Platform change fails, an L-Platform reconfiguration failure notification email is sent to the subscriber and the Infrastructure Administrator. In this case, check with the Infrastructure Administrator about the action required.
Refer to "[A.2 Emails Sent when Reconfiguring an L-Platform](#)" for information on the flow and content of email messages sent to the subscriber, tenant administrator, and infrastructure administrator when reconfiguring an L-Platform.
- If the server virtualization software is RHEL-KVM or the subscribed L-Platform includes a Windows server other than Windows Server 2008 R2, after deployment the L-Platform will be available only after the infrastructure administrator configures the IP address, default gateway, and host name. Request the tenant administrator to configure the server after deployment.
- If the server virtualization software is OVM for x86, the L-Platform will be available only after the infrastructure administrator configures the IP address, default gateway, and host name following deployment. Request the tenant administrator to configure the server after deployment.
- If the server virtualization software is Citrix XenServer, then depending on the cloning image, the L-Platform will be available only after the infrastructure administrator configures the IP address, default gateway, and host name after deployment. Request the tenant administrator to configure the server after deployment. Check with the tenant administrator whether the cloning image requires configuration (IP address, etc.) after deployment.
- When the server virtualization software is OVM for SPARC, IP addresses are set only **to the NICs that are connected to admin LAN** when you deploy a server whose guest OS is Solaris 11. It is therefore recommended that you connect the NIC to the admin LAN.

If a deployed server is not connected to admin LAN, the tenant administrator needs to set IP addresses and default gateways to the server before use. You also need to set IP addresses on guest OS to the NICs that are connected to business LAN, by confirming deployed IP addresses on the [L-Platform Management] page.

- If the server virtualization software is OVM for SPARC or Solaris zone, after your deployment the tenant administrator needs to configure deployed servers to enable direct root ssh login.
- Note the following points if the server virtualization software is OVM for SPARC:
 - If an increase or decrease of the number of NICs is required after deployment, contact the tenant administrator.
 - With servers not managed by BladeLogic, it is not possible to change the number of CPUs, the size of the memory, and boot priority when you reconfigure after deployment. It is also not possible to delete servers and disks.
- If the server virtualization software is RHEL-KVM, contact the infrastructure administrator for information on how to subscribe to servers other than Windows or Linux servers.

5.3.14 Cancel an L-Platform

Follow the steps below to cancel an L-Platform:

1. Display the [L-Platform Details] page.
Refer to "5.3.2 L-Platform Detailed Information Display" for information on how to display the page.
2. Stop all the servers of the system that configures the L-Platform to be canceled.
Refer to "5.3.4 Start and Stop the Server" for information on how to stop a server.
3. Click the [Unsubscribe] button.
The [Confirm] page will be displayed.
4. Confirm that the correct L-Platform is being canceled, and click the [Next] button.
The [Agreement] page will be displayed.
5. Select the [Agree the license] check box to cancel the subscription, and click the [Unsubscribe] button.

Point

When the application process is enabled, clicking of the [Unsubscribe] button on the [Unsubscribe] page displays the [Forward screen] window. Refer to "5.5 Select Forward Destination of Application Process" for details.

The [Complete] page will be displayed when the L-Platform is canceled.

- When the application process is disabled
The following message will be displayed.
"The L-Platform has been unsubscribed."
- When the application process is enabled
The following message will be displayed.
"The L-Platform to unsubscribe the L-Platform has been completed. The L-Platform will undeploy after approval and/or judgment procedures."

Note

When the following events occur, cancellation application may become impossible.

Notify the Infrastructure Administrator of the content displayed on the window.

- The pop-up blocker has been enabled and the 'Forward screen' window is not displayed.
- An error message is displayed on the 'Forward screen' window.

When an L-Platform is cancelled, a cancellation completion notification email is sent to the subscriber.

If an L-Platform cancellation fails, a cancellation failure notification email is sent to the subscriber and the Infrastructure Administrator. In this case, check with the Infrastructure Administrator about the action required.

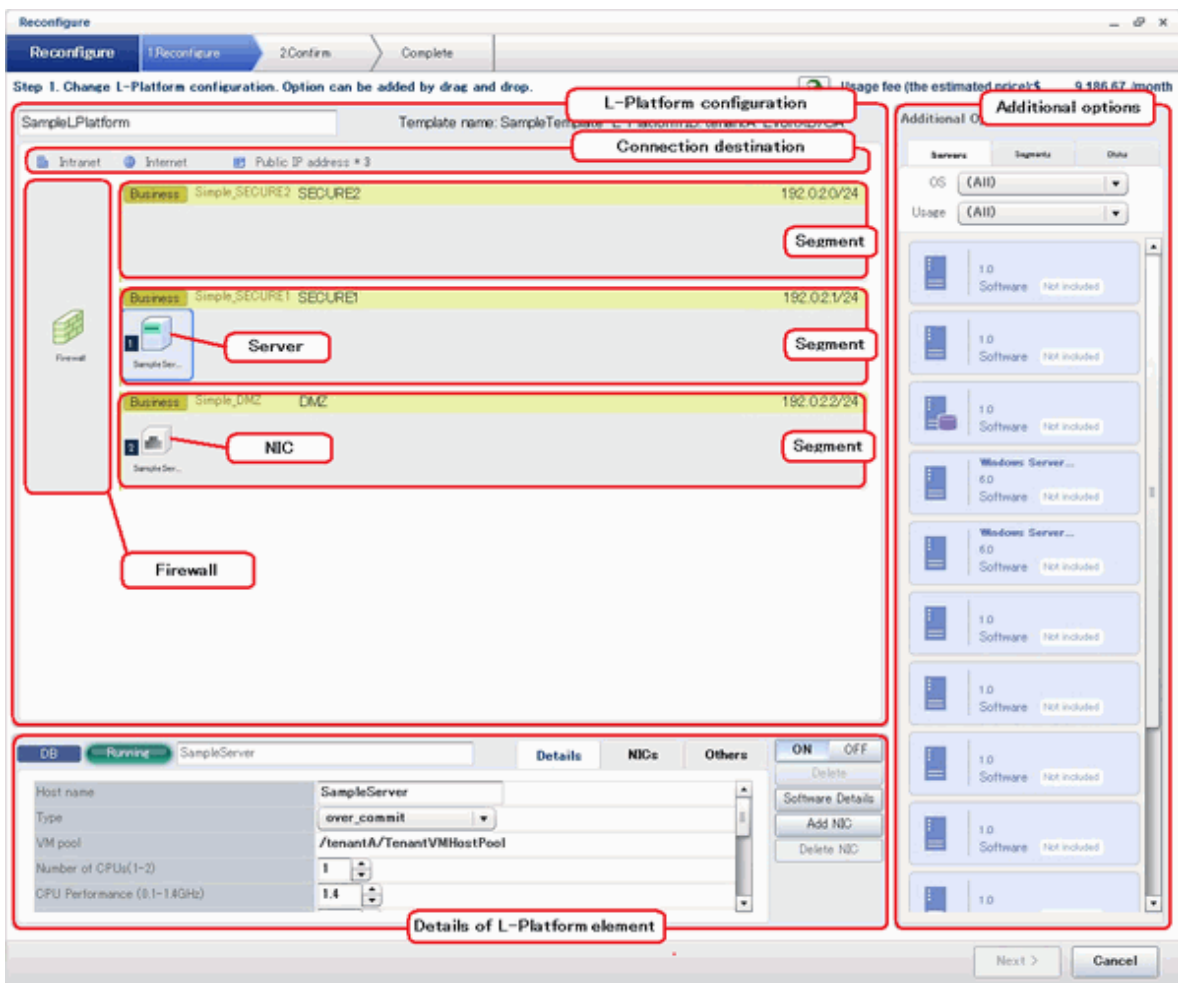
Refer to "[A.3 Emails Sent when Canceling an L-Platform](#)" for information on the flow and content of email messages sent to the subscriber, tenant administrator, and infrastructure administrator when canceling an L-Platform.

5.3.15 Reconfiguration Page

The following configuration can be defined on the [Reconfigure] page.

- Connection destination: Represents a connection destination external to the L-Platform, and the IP addresses to be published.
- Segment: Represents a network segment located on the L-Platform
- Virtual server: Represents a server on the L-Platform
- Physical server: Represents a physical server.
- Disk: Represents an extended disk that is not a system disk but can be added to the virtual server or physical server.

An example of the [Reconfigure] page display is shown below.



The configuration of the [Reconfigure] page is shown below:

Pane name	Description
L-Platform configuration	Displays the L-Platform configuration. The displayed elements are connection destinations, firewalls, segments, server load balancers, virtual servers, physical servers, and disks. Selected elements are displayed in the [Details of L-Platform element] pane.
Additional Options	Displays a list of elements (virtual server, physical server, segment, and disk) that can be added to the [L-Platform configuration]. The listed elements can be added to the L-Platform configuration by dragging and dropping them to the [L-Platform configuration] pane. To add a disk to the virtual server or physical server, drag and drop it there from the list displayed in the [Others] tab.
Details of L-Platform element	Displays details about the elements selected in the [L-Platform configuration] pane and allows their content to be edited. By clicking the [Delete] button, the elements such as a virtual server or physical server or a disk can be deleted from [L-Platform configuration] Software information can be checked in a new window by clicking the [Software Details] button. Click the [Add NIC] button to add NICs. The [Add NIC] button is enabled only if NICs can be added. Click the [Delete NIC] button to delete selected NICs.



Icons displayed in the [L-Platform configuration] area are as follows.

Icon	Explanation	Icon	Explanation
	Connect to an intranet		Connect to the Internet
	Number of IP addresses to be published		Virtual server without data disks
	Virtual server with a single data disk		Virtual server with multiple data disks
	Physical server without data disks		Physical server with a single data disk
	Physical server with multiple data disks		NIC of a Virtual server
	NIC of a Physical server		Grouped NICs
	Firewall		Server Load Balancer(SLB)

Icons displayed in the [L-Platform configuration] area to indicate server statuses are shown below.



These are example icons for a virtual server without disks. There are corresponding icons also for a physical server and for a server with no data disk, a single data disk, and multiple data disks.

Icon	Explanation	Icon	Explanation
	Stopped		Running









Icon	Explanation	Icon	Explanation
	Starting, stopping, being deployed, or in a failover		Failed to start or stop

The icons to indicate NICs or servers that are targets for server load balancer (SLB) distribution when the SLB displayed on the [L-Platform Configuration] pane is selected are as shown below.

The following examples show a virtual server NIC and a virtual server with a single data disk. There are similar icons for various other NICs and servers.

Icon	Explanation	Icon	Explanation
	Virtual server NIC for SLB distribution		Virtual server, with a single data disk, for SLB distribution

Icons displayed in the [Additional Options] area are as follows.

Icon	Explanation	Icon	Explanation
	Virtual image information without data disks		Physical image information without data disks
	Virtual image information with data disks		Management segment
	Business segment		Management segment with admin LAN allocated
	Disconnected disk		Connected disk

Information

Hover the mouse pointer over the icons displayed in [Additional Options] to check details about the image information, such as the name, OS, segment name, disk name, label, and comments.

Edit the L-Platform

The L-Platform can be edited on the [Reconfigure] page.

The L-Platform name entered on the [Basic info] page can be modified.

The types of disks that can be added are new disks and existing disks.

New disks can be added to virtual servers and physical servers. Existing disks are displayed if an Infrastructure Administrator has registered them to a storage pool that can reference already created disk resources, and can be added to physical servers.

Note

If the server includes disks not managed by Resource Orchestrator, disks cannot be added or deleted.

Connection destination

When you select a connection destination, you can set up connection with a destination external to the L-Platform.

- Intranet

This option is displayed only when you specify an intranet as the connection destination in the L-Platform template used for deployment. Select this option to connect to an intranet.

- Internet

This option is displayed only when you specify the Internet as the connection destination in the L-Platform template used for deployment. Select this option to connect to the Internet.

- Public IP address

This option is displayed when [Internet] is displayed.

If you have specified [Internet] as the connection destination, you can specify the IP address to be published.

Click the [Add] button. In the [Addition of public IP address] window that is displayed, add the IP address to be published. For Added IP address, enter the IP address to be used by the L-Platform and click the [Add] button.

To delete a specified IP address, select the IP address from the list and click the [Delete] button.

Consult the tenant administrator regarding the IP addresses that can be used.

Firewall

When you select a firewall, you can check its settings.

You cannot delete a firewall from an L-Platform.

The [Details of L-Platform element] that is displayed when you select a firewall differs depending on whether you set up the firewall to use the ruleset.

- Firewall that does not use the ruleset

You can select a firewall only when reconfiguring after deployment of the L-Platform.

- [Public IP address] tab

This tab displays the IP address to be published that was assigned to the L-Platform. If DNAT or SNAPT is set as the IP address to be published, a check mark indicating that DNAT or SNAPT is being set into the corresponding IP address line is displayed.

- [DNAT] tab

The DNAT setting is displayed. The server name and IP address of the server are displayed for an IP address to be published.

- [SNAPT] tab

The SNAPT setting is displayed. The server name and IP address of the server are displayed for an IP address to be published.

- Firewall that uses the ruleset

- [Firewall] tab

Part	Description
ruleset	Displays the name of the 'ruleset' set for the firewall. The ruleset name cannot be changed.

Click [Setting] button to check the parameter values in the ruleset. The values set as the default are the values specified in the L-Platform template.



Note

- The firewall for a server added by a new L-Platform subscription or L-Platform reconfiguration is set after the L-Platform is deployed. Refer to "5.3.8 Setup Firewall" for details.

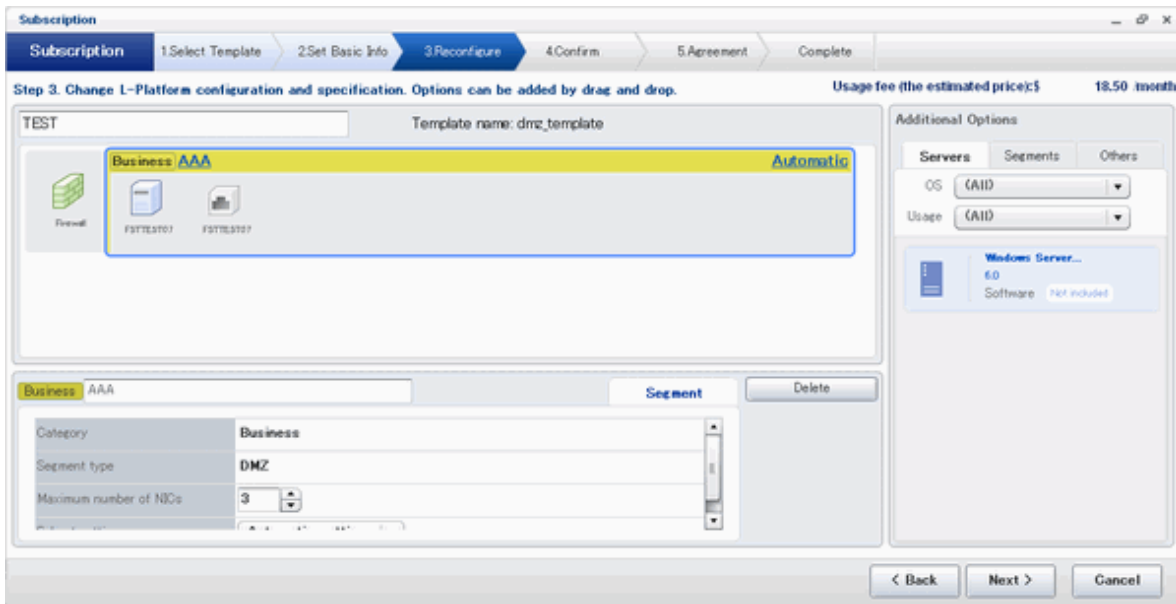
Edit a Segment

A segment can be edited by selecting the segment to be edited.

It is possible to select whether a subnet allocated to the segment can be set automatically or manually in the segment editing. Note, however, that subnets cannot be modified in the L-Platform configuration after the system has been deployed.

If the network to be connected to is specified in the L-Platform template, the specified network remains selected.

The following window displays an example of the [Reconfigure] page when a segment name is clicked. The following window shows the [Reconfigure] page used to subscribe to an L-Platform.



Details of configuration element [Segment] tab

Part	Description
Category	Specify the category when an automatically selected segment is added. The default is "Business segment". <ul style="list-style-type: none"> - Business segment: A segment where business servers are deployed - Management segment: A segment where servers that monitor business or similar are deployed
Segment type	Specify the segment identification information used if segments are selected automatically when additions are made by segment extension.
Maximum number of NICs	Specify the maximum number of servers that can be deployed in a segment.
Subnet setting	Specify whether to configure subnet manually or automatically. <ul style="list-style-type: none"> - Automatic: Configure automatically from available network resources. - Manual: Select the target network resource from the available values.
Subnet addresses	If the subnet setting is set to Manual, select an item from the list of subnet addresses or network resources. The setting item (whether to select from subnet addresses or network resources) depends on system settings.

Additional Options [Segment] tab

Part	Description
Segment	Extend a segment.



Note

Segment extension and reduction

- You cannot extend or reduce segments if you use a firewall without using a ruleset.
- A network can be extended to the maximum number of segments for an L-Platform Template.
- Since at least one segment is required, it is not possible to delete all segments.

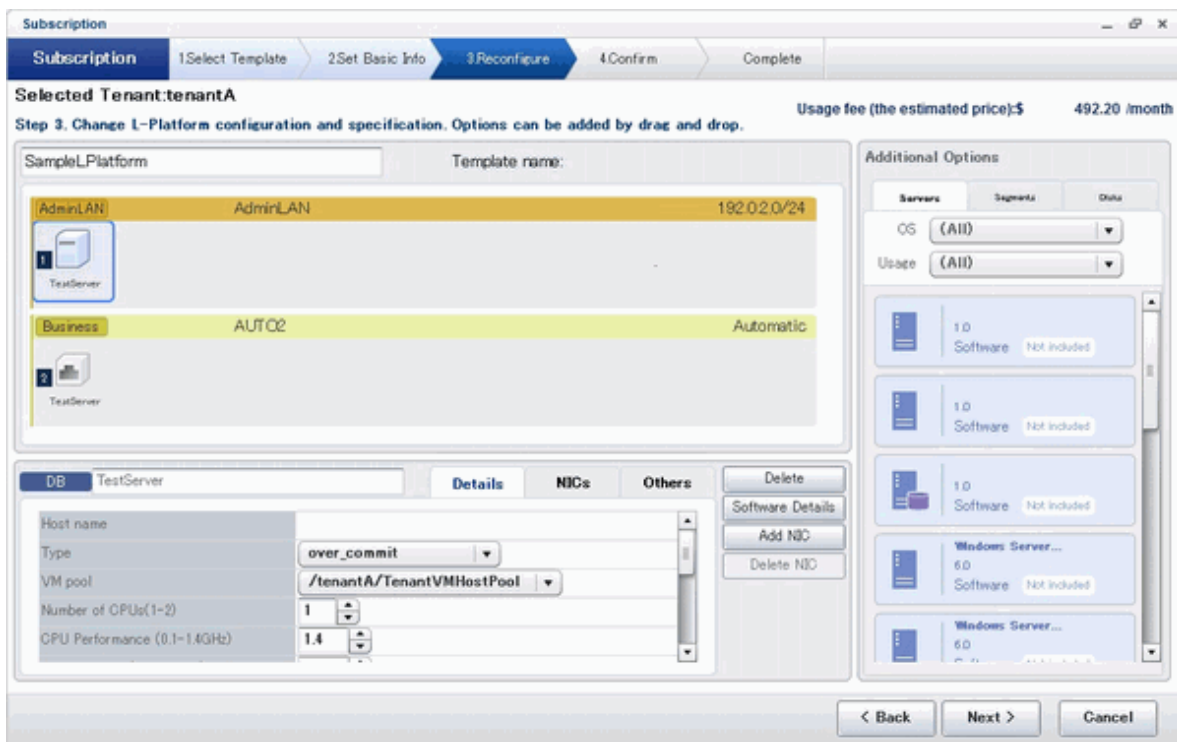
- When a segment is deleted, the connected servers and NICs are also deleted. To delete a segment and NICs but not the servers, delete the NICs first and then delete the segment.
- A segment where there is a server load balancer cannot be deleted.
- The number of segments under firewall control cannot be changed.
- Reduction is not possible while a server is operating.
- In estimated charges, the unit price for NICs deployed in segments where [Subnet Settings] is "Auto-configure" is treated as being 0 Japanese Yen.

Edit a Virtual Server

By clicking a virtual server, the virtual server can be edited by selecting the tabs displayed.

[Details] tab

An example of the [Details] tab display is shown below.



Part	Description
Host name	<p>Sets the virtual server name specified in the L-Platform template. "usage + (no. of servers + 1)" is set automatically for the virtual server that has been added as an option.</p> <p>To rename, the name must be no more than 85 characters long and not include the following characters:</p> <p style="text-align: center;"><, >, &, ', " and control characters</p> <p>However, the strings and the number of characters that can be specified may vary depending on the system settings. When the OS of the managed server is Windows, specification using up to 15 of the characters below is recommended. For other OSs, specification using up to 63 characters is recommended. The value specified for this item cannot consist of only numbers. Hyphens cannot be used for the first character.</p> <p style="text-align: center;">Alphanumeric characters, underscores ("_") and hyphens ("-")</p>

Part		Description
		A pre-existing name cannot be specified.
Type		<p>From the drop-down menu, select the type (specifications) of the registered server. "---- Select ----" is displayed if the type specified before reconfiguration does not exist. The CPU, memory size, and System Disk will be set according to the type of the server selected.</p> <p>The settings for the following L-Server features are also made:</p> <ul style="list-style-type: none"> - Heartbeat - Redundancy - Automatic server release
VM pool		<p>From the drop-down menu, select the resource name of the VM pool that is the server deployment destination. "---- Select ----" is displayed if the type specified before reconfiguration does not exist. Contact the infrastructure administrator in the event that an error message is displayed indicating that no existing pool can be selected as the server deployment destination.</p>
CPU	Number of CPUs	<p>Set the number of CPUs of the virtual server.</p> <p>Specify the lesser of the two values: Enter either the maximum value entered for image information or enter the maximum value of the VM pool, number of cores of VM hosts with the most numbers of cores.</p> <p>A value outside the range cannot be set.</p>
	Performance	<p>Specify CPU performance of the virtual server in GHz.</p> <p>Specify the lesser of the two values: Enter either the maximum value entered for image information or enter the maximum value of the VM pool, value of operational frequency of VM hosts with the most value of operational frequency.</p> <p>A value outside the range cannot be set.</p> <p>This cannot be specified if the server virtualization software is OVM for SPARC.</p>
	Reserved	<p>Specify the reserved CPU performance for the virtual server, in GHz.</p> <p>The minimum value for the reserved clock speed that is guaranteed to be allocated to the virtual server can be specified. It is not possible to specify a value that is greater than the operating clock speed.</p> <p>Any value outside the allowable range cannot be specified.</p> <p>When using Resource Orchestrator and server virtualization software, if the recognized physical CPU performance values are different, specify a value less than the smaller of the two.</p> <p>This is not displayed and cannot be specified if the server virtualization software is RHEL-KVM.</p>
	[VMware] Shares [Hyper-V] [Citrix Xen] Weight	<p>Specify the relative allotment ratio for determining the allotment of memory size when multiple virtual machines are competing for memory resources.</p> <p>[VMware] Specify an integer up to 1,000,000.</p> <p>[Hyper-V] If the reconfiguration simplification function is disabled and the easy selection method is set, set values are as follows:</p> <ul style="list-style-type: none"> - Low (500) - Standard (1,000) - High (2,000) <p>[Citrix Xen] Specify an integer up to 65,535.</p>

Part		Description
		This is not displayed and cannot be specified if the server virtualization software is RHEL-KVM.
Memory	Size	Specify the memory size of the virtual server in GB. Specify the lesser of the two values: Enter either the maximum value entered for image information or enter the maximum value of the VM pool, free memory size of VM hosts with the most free memory size. [OVM for x86 3.2] The minimum value is 0.3. [KVM] The maximum value is 256. A value outside the range cannot be set.
	[VMware] [Citrix Xen] Reserved [Hyper-V] RAM	Specify the reserved memory size for the virtual server, in GB. The minimum value for the reserved memory size that is guaranteed to be allocated to the virtual server can be specified. It is not possible to specify a value that is greater than the memory size. [Citrix Xen] The minimum value is 0.2. Any value outside the allowable range cannot be specified. This is not displayed and cannot be specified if the server virtualization software is RHEL-KVM.
	[VMware] Shares [Hyper-V] Weight	Specify the relative allotment ratio for determining the allotment of memory size when multiple virtual machines are competing for memory resources. [VMware] Specify an integer up to 1,000,000. [Hyper-V] If the reconfiguration simplification function is disabled and the easy selection method is set, set values are as follows: - Low (500) - Standard (1,000) - High (2,000) This is not displayed and cannot be specified if the server virtualization software is RHEL-KVM.
System Disk	Storage pool	From the drop-down menu, select the storage pool to be used. "---- Select ----" is displayed if the type specified before reconfiguration does not exist. If the server virtualization software is OVM for x86, only [Automatic] can be selected. If the server virtualization software is OVM for SPARC, or if the server virtualization software is RHEL-KVM and the image location type of the cloning image specified for the image information is "Raw Disk", then the value set in the [Disk resource specification] window will be displayed. To change the settings, click the [Change] button to open the [Disk resource specification] window.
	Size	Specify the disk capacity of the virtual server in GB. When reconfiguring during subscription The minimum allowed value is the system disk size of image information. The maximum allowed value is the lesser of the maximum system disk capacity of image information or the maximum disk capacity of storage pool. If the server virtualization software is OVM for SPARC, or if the server virtualization software is RHEL-KVM and the image location type of the cloning image specified for

Part	Description
	<p>the image information is "Raw Disk", then the value set in the [Disk resource specification] window will be displayed. To change the settings, click the [Change] button to open the [Disk resource specification] window.</p> <p>When reconfiguring after deployment The minimum allowed value is the current disk capacity. The maximum allowed value is the lesser of the maximum system disk capacity of image information or the maximum disk capacity of storage pool.</p> <p>When reconfiguring after deployment, the value can be changed only if the server virtualization software is VMware or Hyper-V.</p>
Disk resource specification	<p>Specify this item if the server virtualization software is OVM for SPARC, or if the server virtualization software is RHEL-KVM and the image location type of the cloning image specified for the image information is "Raw Disk".</p> <p>The disk resource can be automatically selected according to the size of the system disk, or the disk resource can be directly selected. To make the settings, click the [Change] button to open the [Disk resource specification] window.</p> <ul style="list-style-type: none"> - When you specify a disk resource according to the size of the system disk: A disk resource with a size larger than the size of the system disk is selected automatically. Select the [Specify by the size of the disk] option button, then specify a storage pool and a disk size. A disk resource is selected from amongst those on the selected storage pool. If the storage pool value is Automatic, then a disk resource is selected from amongst the available storage pools. - If specifying a disk resource directly: Directly specify the disk resource to be used. After selecting the [Specify by the resource name] option button, select the disk resource from the list.
Boot priority	<p>Sets the priority order when performing batched power supply operations in either the L-Platform or the tenant. The smaller the value, the higher the priority orders.</p> <p>Set to 0 when power supply operations are not carried out in a single batch. Note however that this value cannot be set to 0 at the time of new deployment.</p>

Point

The icons displayed in front of the virtual server names correspond to the usage of the virtual servers described in the specification.

- WEB: Web server
- AP: Application server
- DB: Database server

When a virtual server has multiple usages, an icon showing each usage separated by "/" will be displayed.

Example: WEB/AP, AP/WEB/DB etc.

Note

- The server type cannot be changed with some types of server virtualization software.
- When the 0 or no valid value is specified for CPU frequency, CPU reserve clock rate, memory size, or memory reserve size, it is treated as if the value 0.1 were specified. This modification is included in the changed items.
- Depending on the guest OS type, system disks which capacity is expanded may not be recognized or used by the OS. Refer to server virtualization software manuals and technical information to ensure that the expanded disk can be used.

A separate operation is required to make the expanded disk recognizable on the guest OS. Refer to manuals and technical information for each OS for information on the required operations.

- If [Automatic] is selected for the system disk storage pool, estimated charges will be calculated based on a system disk unit price of 0 Japanese Yen.

Note that estimated charges may differ to the actual charges because usage charges are calculated according to the unit price of the storage pool that creates the system disk after subscription or reconfiguration is complete.

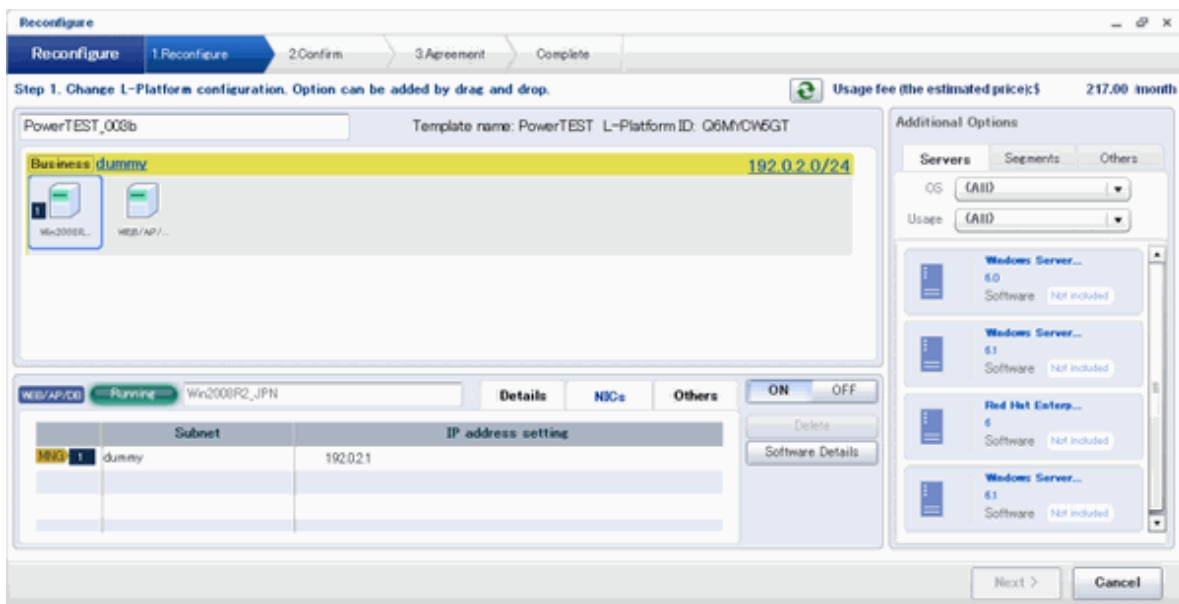


[NICs] tab

An IP address to be allocated to NIC can be set using the [NICs] tab.

An IP address can be set only when "manual setting" was specified when the segment was edited for a subnet. Note, however, that a subnet cannot be modified when modifying the configuration of a system that has been deployed, and so the IP address cannot be modified either.

The following example displays the [NICs] tab. The following window shows the [Reconfigure] page used to subscribe to an L-Platform.

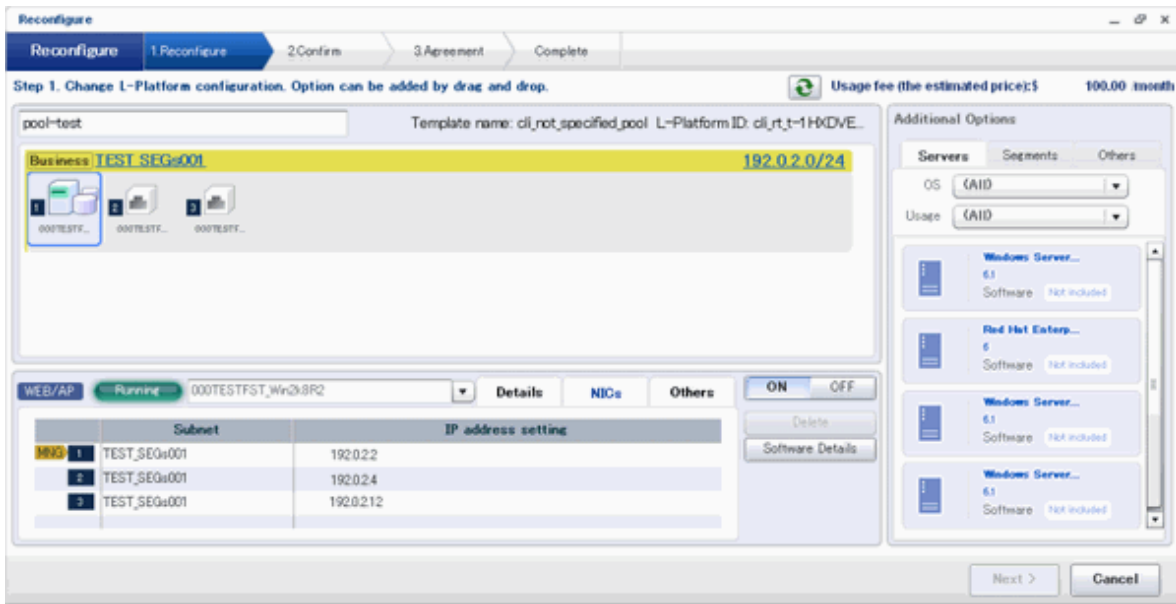


There are two ways of specifying an IP address as follows:

- Automatic
Sets an IP address automatically from a subnet.
- Manual
Enters an IP address directly.
When there is a conflict between the specified IP address and network resources, an error message will be displayed.

An [MNG] icon is displayed for the control NIC.

The following window displays an example of an L-Platform where multiple NICs exist. The following window shows the [Reconfigure] page used to subscribe to an L-Platform.



Each NIC is represented by one server. When a server is selected, the same server in each segment is selected. When a server is selected an icon is displayed showing a number at its lower left hand corner. The number represents an NIC number. Dark-colored servers are the NICs for administration, and light-colored servers are NICs for business.

When a server is dragged from the [Additional Options] and dropped on a segment, as many servers as the number of NICs specified for the segment in the image information are displayed.

NIC Add and Delete

This section explains NIC add and delete.

Click the [Add NIC] button to add a business NIC to the same segment as the control NIC.

Click the [Delete NIC] button deletes an NIC.



Note

- Whether NICs can be added or deleted depends on the type of server, the type of server virtualization software (for a virtual server), and the power status. Details are shown below:

Operation	Server status	VMware	Hyper-V	RHEL-KVM	Solaris Zones	Citrix XenServer	OVM for X86	OVM for SPARC	Physical server
Add	Stop	Y	Y	Y	N	N	N	N	N
	Operation	Y	N	N	N	N	N	N	N
Delete	Stop	Y	Y	Y	N	N	N	N	N
	Operation	Y	N	N	N	N	N	N	N

Y: Can add or delete

N: Cannot add or delete

- A maximum of eight NICs can be added with Solaris Zones management servers.
- NICs cannot be added if they would exceed the maximum number of connections for the segment.
- Since at least one NIC is required, it is not possible to delete all NICs.
- When add or delete NICs for a physical server, configure the number of NICs after settings are made to match the number of NICs of the physical server being used.

- If the server virtualization software is OVM for SPARC, request the tenant administrator to add a NIC to or delete a NIC from a deployed server.

[Others] tab

The [Others] tab can be used to check the operating system installed at a virtual server, the middleware and other software, and information on the patches applied to the software.

When a virtual server has image information for VDI coordination, it is possible to check the VDI user name, the name of the VDI pool the virtual server will belong to after deployment, and the connection information of the VDI admin server.

Point

When an infrastructure administrator permits setting of VDI user names, the VDI user can be specified when applying to use an L-Platform. Specify the VDI user name in the following format.

```
NetBIOS domain_name\user_name
```

Note

The following message may be displayed if connecting to the Active Directory is not possible or the VDI setting is wrong. If the following message is displayed even if the VDI user is correctly specified, contact the infrastructure administrator.

```
The specified VDI user is invalid. Check the VDI user setting.
```

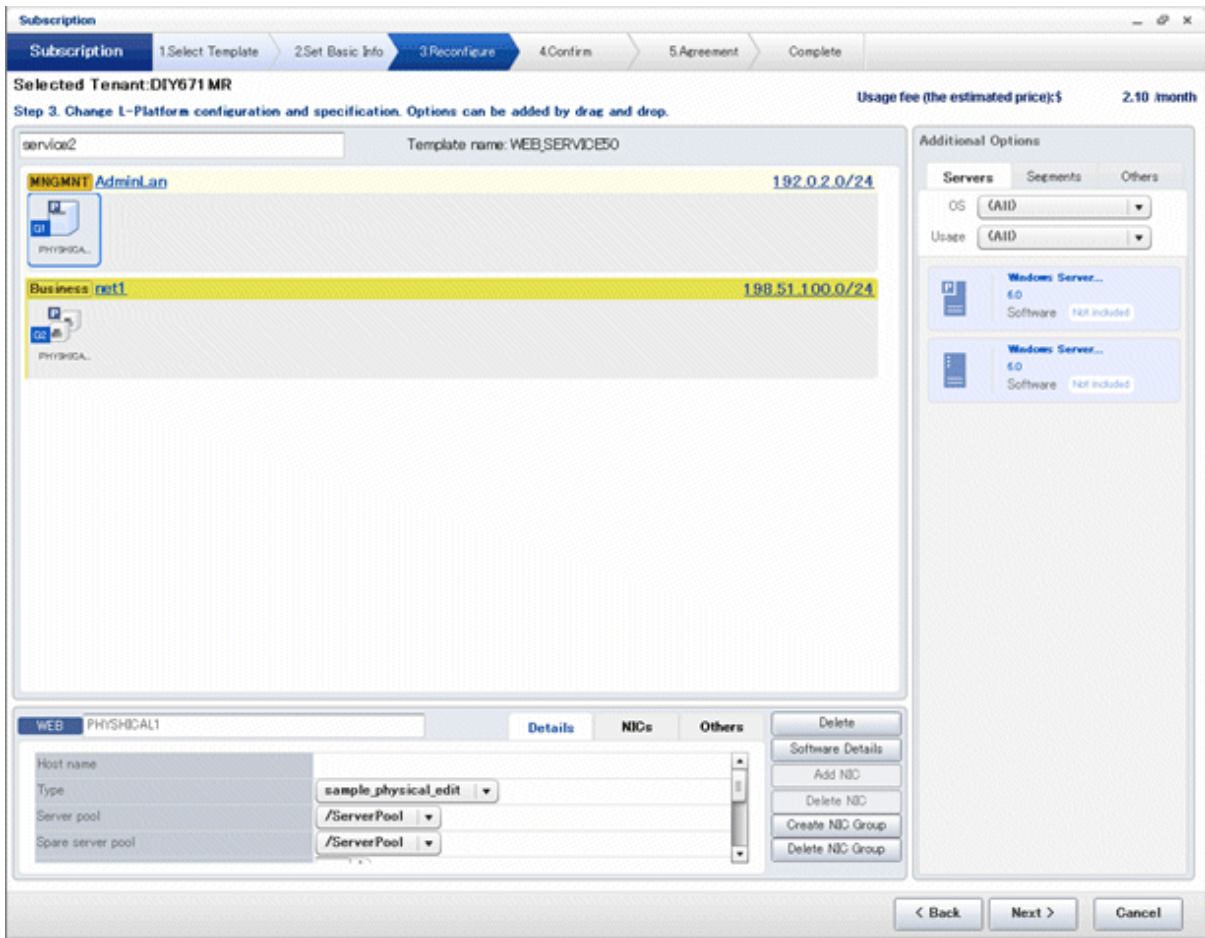
Editing a Physical Server

When a physical server is selected, the allowed physical server depends on the displayed tab.

For a deployed physical server, only the server name, the server type, and the boot priority can be changed.

[Details] tab

A display example of the [Details] tab is shown below.



Part	Description
Host name	<p>Sets the name of a physical server that is in the L-Platform Template. "usage + (no. of servers + 1)" is set automatically for the physical server that has been added as an option.</p> <p>To rename, the name must be no more than 85 characters long and not include the following characters:</p> <p style="text-align: center;"><, >, &, ', " and control characters</p> <p>However, the strings and the number of characters that can be specified may vary depending on the system settings. When the OS of the managed server is Windows, specification using up to 15 of the characters below is recommended. For other OSs, specification using up to 63 characters is recommended. The value specified for this item cannot consist of only numbers. Hyphens cannot be used for the first character.</p> <p style="text-align: center;">Alphanumeric characters, underscores ("_") and hyphens ("-")</p> <p>A pre-existing name cannot be specified.</p>
Type	<p>From the drop-down menu, select the type (specifications) of the registered server. "---- Select ----" is displayed if the type specified before reconfiguration does not exist. The CPU, memory size, and System Disk are set according to the selected server type. The settings for the following L-Server features are also made:</p> <ul style="list-style-type: none"> - Heartbeat - Redundancy - Automatic server release

Part		Description
Server pool		From the drop-down menu, select the resource name of the server pool that is the server deployment destination. "---- Select ----" is displayed if the type specified before reconfiguration does not exist. Contact the infrastructure administrator in the event that an error message is displayed indicating that no existing pool can be selected as the server deployment destination.
Reserve server pool		From the drop-down menu, select the resource name of the reserve server pool. "---- Select ----" is displayed if the type specified before reconfiguration does not exist. Contact the infrastructure administrator in the event that an error message is displayed indicating that no existing pool can be selected as the server deployment destination.
CPU	Number of CPUs	Set the number of CPUs in the physical server. If the upper limit value recorded in the image information differs from the VM pool upper limit value (the number of cores in the VM host with the most cores), a value up to the smaller value can be set. Values outside that range cannot be set.
	performance	Specify the CPU performance of the physical server in GHz units. If the upper limit value recorded in the image information differs from the VM pool upper limit value (the frequency of the VM host with the highest frequency), a value up to the smaller value can be set. Values outside that range cannot be set.
Memory	Size	Specify the memory size of the physical server in GB units. If the upper limit value recorded in the image information differs from the VM pool upper limit value (the free size of the VM host with the largest free memory size), a value up to the smaller value can be set. Values outside that range cannot be set.
System Disk	Storage pool	From the drop-down menu, select the storage pool to be used. "---- Select ----" is displayed if the type specified before reconfiguration does not exist.
	Size	Specify the disk capacity of the physical server in GB. When reconfiguring during subscription The minimum allowed value is the system disk size of image information. The maximum allowed value is the lesser of the maximum system disk capacity of image information or the maximum disk capacity of storage pool. When reconfiguring after deployment The minimum allowed value is the current disk capacity. The maximum allowed value is the lesser of the maximum system disk capacity of image information or the maximum disk capacity of storage pool.
Boot priority		Sets the priority order when performing batched power supply operations in either the L-Platform or the tenant. Range: 1-256. The smaller the value, the higher the priority order. Set to 0 when power supply operations are not carried out in a single batch. Note however that this value cannot be set to 0 at the time of new deployment.

Note

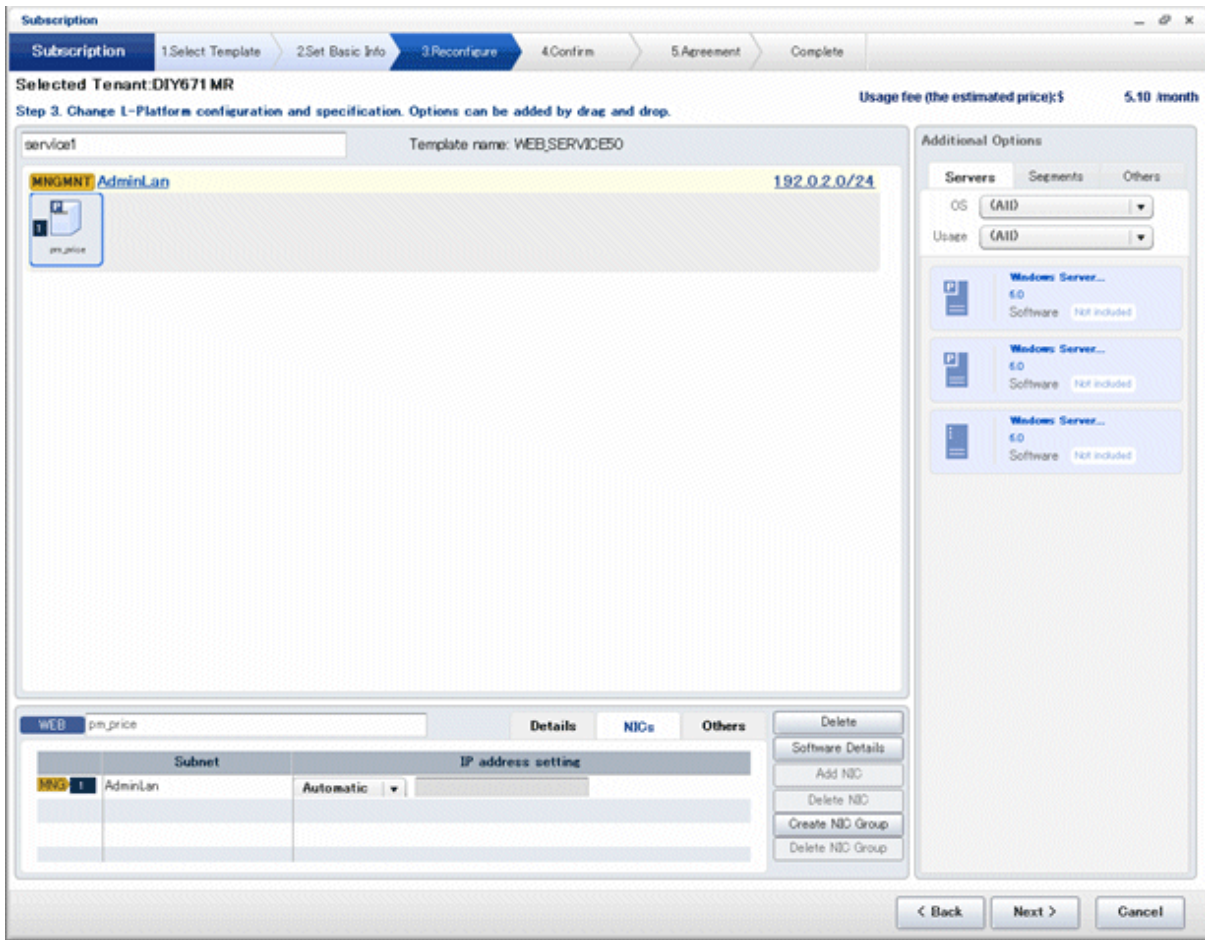
The server pool physical server with details closest to the specified CPU and memory information is allocated.
If you are deploying a physical server, the estimated and actual charges are calculated based on the values entered for CPU performance and memory size in this step.

[NICs] tab

Use the [NICs] tab to set the IP address allocated to an NIC.

Note that the IP address can be set only if "manual setting" is specified for the subnet during segment editing. However, since the subnet cannot be changed by reconfiguration after a system is deployed, IP address changes are also not possible.

A display example of the [NICs] tab is shown below. Note that the window shown below is the L-Platform subscription [Reconfigure] page.

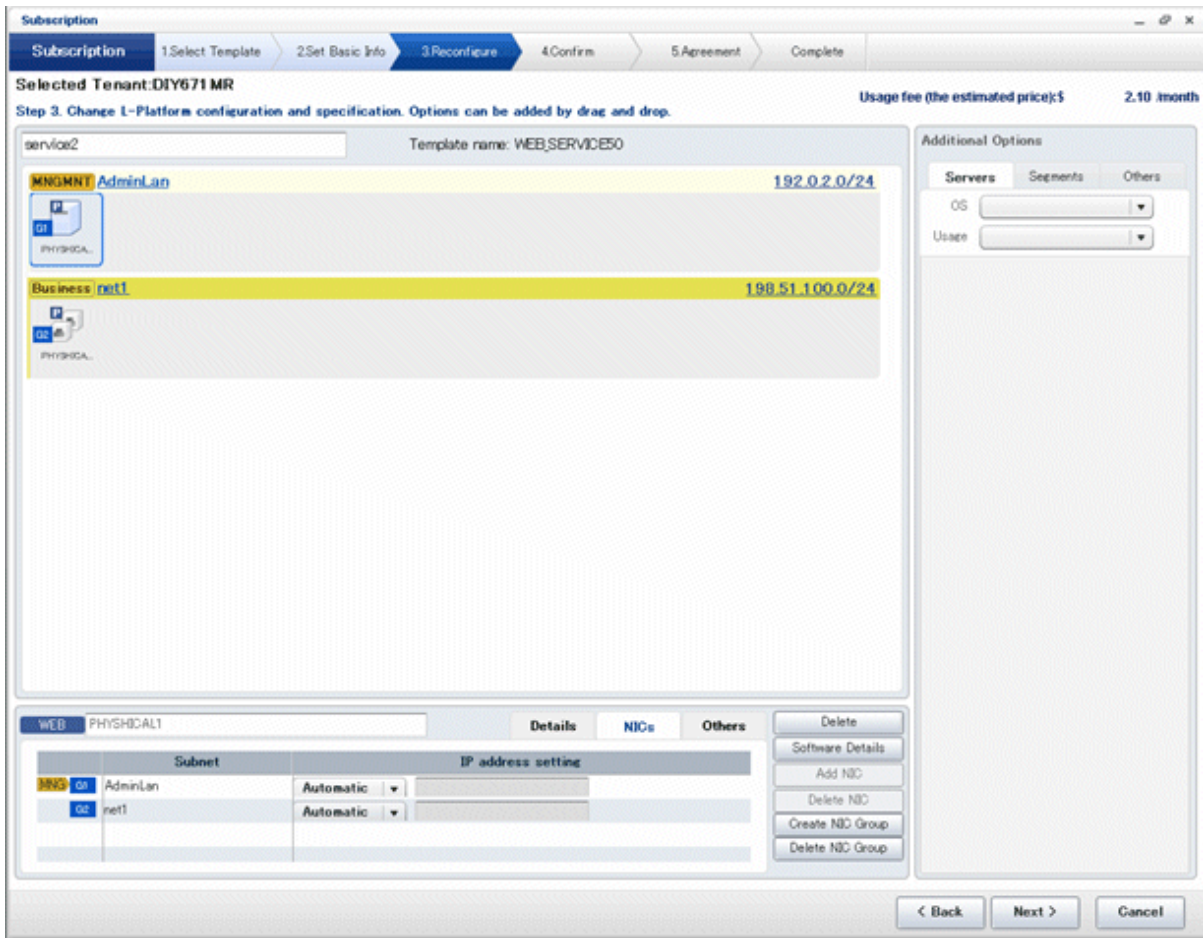


The following two methods are available for specifying an IP address:

- Automatic
The IP address is set automatically from the subnet.
- Manual
Enter the IP address directly.
An error message is displayed if the specified IP address is inconsistent with the network resources.

The [MNG] icon is displayed for the control NIC.

The window below is an example of the display when there are multiple NICs. Note that the window shown below is the L-Platform subscription [Reconfigure] page.



NIC1 is represented by one physical server. When a server is selected, the selected state occurs for all the same servers. A numeric icon is displayed to the bottom left of selected servers. It indicates the NIC number.

Dark-colored servers indicate management NICs, and light-colored servers indicate business NICs.

If a segment is dragged and dropped from the addition option, the number of servers displayed matches the number of NICs specified in the image information of the segment.

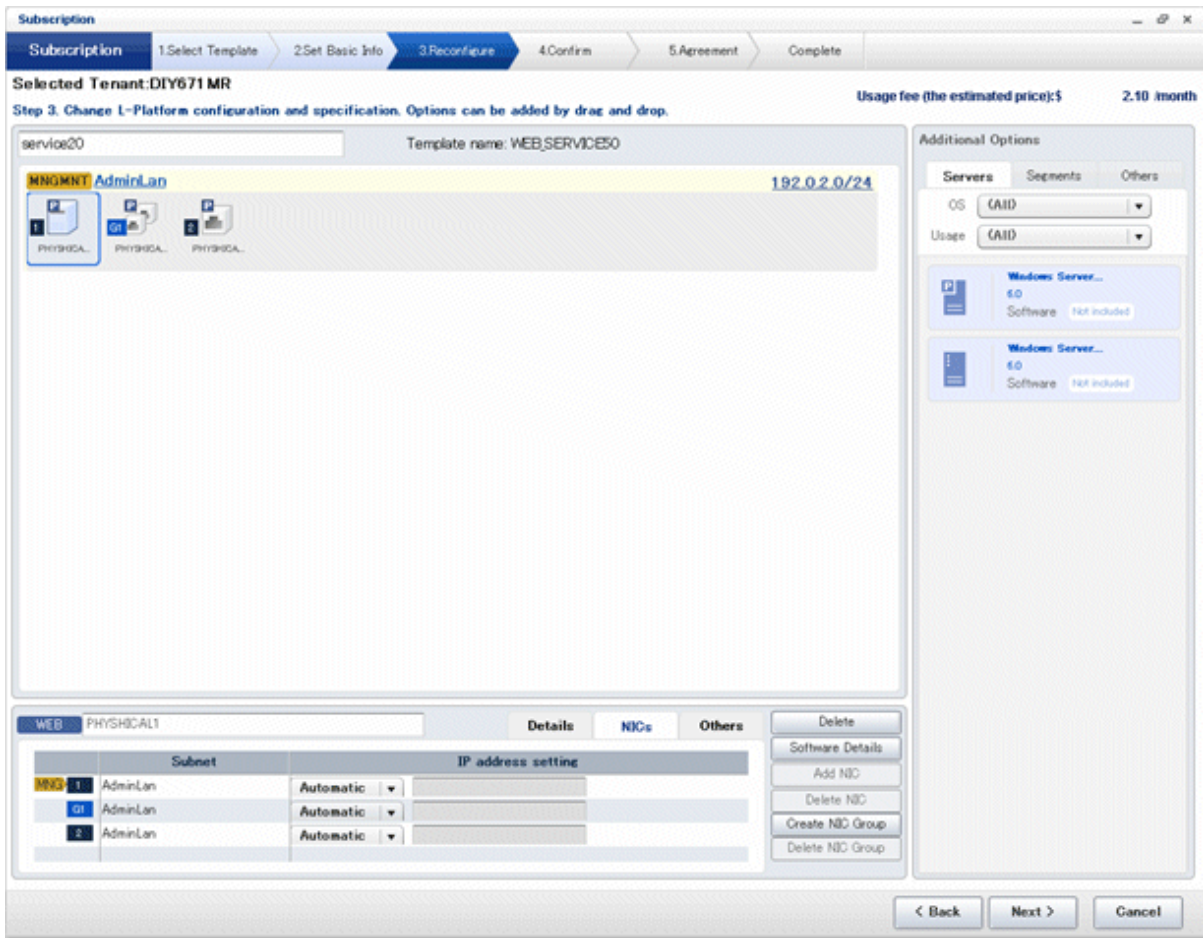
Point

The NIC setting will be an untagged VLAN.

NIC Grouping

This function is available with physical servers only.

This section explains NIC grouping.



- Making a group

Select multiple checkboxes, and then click the [Create NIC Group] button. However, Multidata input NIC cannot be grouped. Groups can include control NIC.

- Cancelling a grouping

Select multiple checkboxes, and then click the [Delete NIC Group] button.


 Note

- This is possible only during L-Platform subscription. NIC groups cannot be made or cancelled after deployment.
- Two NICs can be grouped. Three or more NICs cannot be grouped.
- In estimated charges, grouped NICs are handled as if each NIC in the group exists.

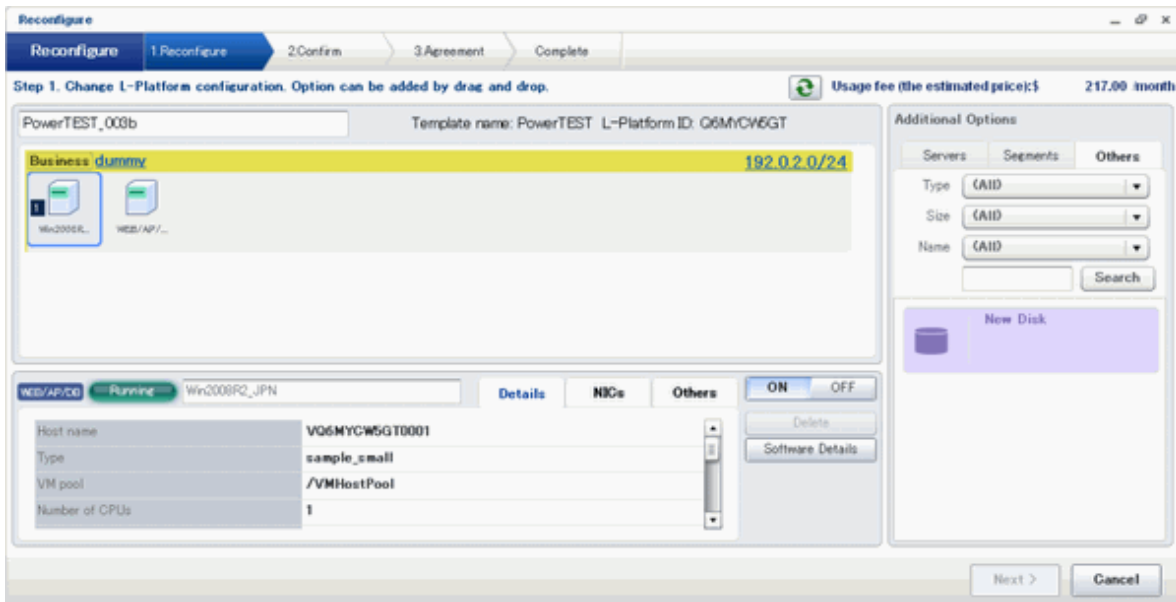
[Others] tab

The [Others] tab can be used to check the operating system installed at a physical server, the middleware and other software, and information on the patches applied to the software.

Edit a Disk (for a Virtual Server)

A virtual server to which a disk has been added can be selected. By clicking the button () located to the right of the virtual server name, a selection list of virtual servers and disks is displayed. Select a disk on the list.

The following example displays the [Reconfigure] page when a disk is selected. The following window shows the [Reconfigure] page used to subscribe to an L-Platform.



Part	Description
Disk name	<p>"disk + serial number" is set automatically as the disk name. The serial number is allocated according to the following rules.</p> <ul style="list-style-type: none"> - Allocation of serial number starts from 0 for the disks registered in the L-Platform template. - "Number of disks + 1" is allocated to a disk added using [Additional Options]. <p>To rename a disk, the new name must be no more than 85 characters long and not include the following characters:</p> <p style="text-align: center;"><, >, &, ', " and control characters</p> <p>A pre-existing name cannot be specified.</p>
Storage pool	From the drop-down menu, select the deployment destination resource pool.
Size	<p>Specify the disk capacity of the virtual server in GB.</p> <ul style="list-style-type: none"> - For data disks that have not been deployed. The maximum disk size of a storage pool or the maximum data disk size of image information, whichever is the smaller, can be specified. - For data disks that have been deployed. The capacity of a data disk that has been deployed cannot be changed.


Note

- If the server virtualization software is Hyper-V, the maximum number of disks after addition is four, including the system disk.
- Existing disks cannot be added or deleted if the server virtualization software is Citrix XenServer or OVM for x86.
- If the server virtualization software is OVM for SPARC, only existing disks can be added or deleted, but it is not possible to add to a server existing disks already attached to another server.
- Disks cannot be added to or deleted from images that include data disks.
- Disks cannot be added to or deleted with Solaris Zones management servers.
- The disk capacity cannot be expanded if the image has snapshots.
- If [Automatic] is selected for the storage pool, estimated charges will be calculated based on a disk unit price of 0 Japanese Yen.
Note that estimated charges may differ to the actual charges because usage charges are calculated according to the unit price of the storage pool that creates the disk after subscription or reconfiguration is complete.

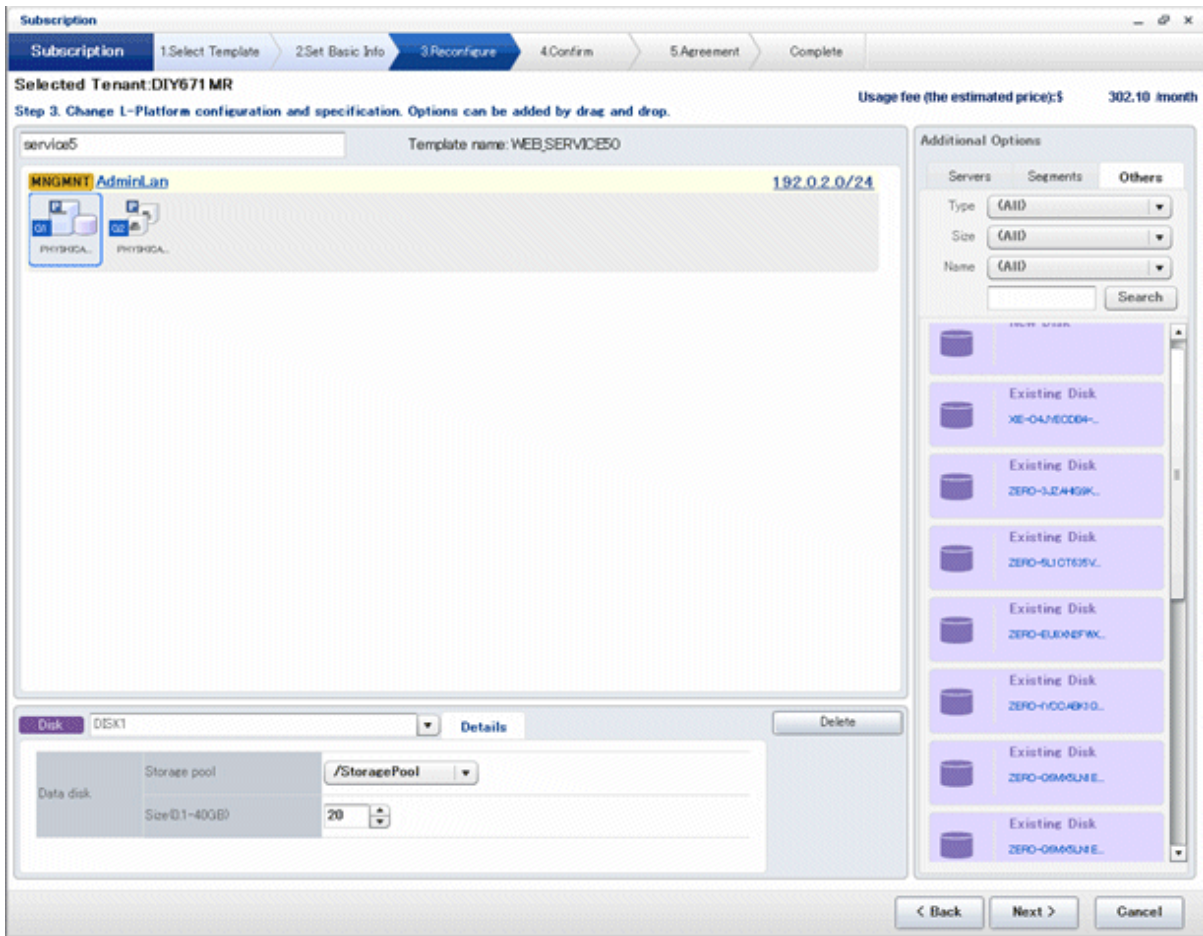
Edit a disk (for a physical server)



Disks can be added to servers that have already been deployed only by stopping the server first.

A physical server to which a disk has been added can be selected. By clicking the button () located to the right of the physical server name, a selection list of physical server and disks is displayed. Select a disk on the list.

The following example displays the [Reconfigure] page when a disk is selected. The following window shows the [Reconfigure] page used to subscribe to a service.



Part	Description
Disk name	<p>"disk + serial number" is set automatically as the disk name. The serial number is allocated according to the following rules.</p> <ul style="list-style-type: none"> - Allocation of serial number starts from 0 for the disks registered in the L-Platform template. - "Number of disks + 1" is allocated to a disk added using [Additional Options]. <p>To rename a disk, the new name must be no more than 85 characters long and not include the following characters:</p> <p style="text-align: center;"><, >, &, ', " and control characters</p> <p>A pre-existing name cannot be specified.</p>
Storage pool	From the drop-down menu, select the deployment destination resource pool. If an existing disk is selected, modification is not possible.

Part	Description
Size	Specify the disk capacity of the virtual server in GB. Specify the lesser of the two values: Enter either the maximum value entered for image information or enter the maximum value of the storage pool, free space size of storages with the most free space size. A value outside the range cannot be set.

[Server] tab

"Physical server" and "Virtual server" can be selected from [Type], enabling only servers of the selected type to be displayed.

Server load balancer

The parameters and rulesets set in the server load balancer are displayed when a server load balancer is selected.

[SLB] tab

Part	Description
Deployment ruleset	The names of the ruleset set in the server load balancer are displayed. The ruleset names cannot be modified.
Description	Descriptions of the ruleset for deploying server load balancer are displayed.

Click [Parameter details] button to confirm the values of the parameters set in rulesets.

If a server load balancer is defined in an L-Platform template, the default rulesets and parameter values are those specified in the L-Platform template.

[Parameter details] page

A list of parameters defined in the ruleset is displayed in the [Parameter details] page.

Click [Parameter details] button to display the [Parameter details] page.

Part	Description
Selected ruleset	The names of the ruleset for deploying server load balancer are displayed.
Description	Descriptions of the ruleset for deploying server load balancer are displayed.

- [SLB] tab

Parameters that are unrelated to the server are displayed:

Part	Description
Parameter	Displays the parameter labels.
Description	Displays the parameter descriptions.
Value	The value to be set for the parameter is displayed.
Description of the selected parameter	The description of the parameter in the row being pointed at is displayed.

- [Server] tab

Parameters that are related to the server are displayed:

Part	Description
Server	The names of the servers where the parameters are enabled are displayed. "-" is displayed for parameters unrelated to the server.
Parameter	Displays the parameter labels.
Description	Displays the parameter descriptions.
Value	The value to be set for the parameter is displayed.

Part	Description
Description of the selected parameter	The description of the parameter in the row being pointed at is displayed.

5.4 Display Event Logs

Event logs of the errors that occurred while using the L-Platform functions can be displayed on the [Event Log] page.

Follow the steps below to display event logs:

1. Select [Event Log] from the operation menu of the [L-Platform] page.
A list of event logs will be displayed.

Up to 100 recent event log(s), starting from the most recent event, are displayed on the [Event Log] page until the same date of the next month. If the corresponding date does not exist in the next month, the event log(s) will be displayed until the end of the next month.

Refer to "Chapter 19 Messages Starting with VSYS" in "Messages" for information on the messages displayed in the event log.

Point

Right-click on the [Event Log] page to display the [Copy the event log] menu. Select this menu to save a converted string to the clipboard in CSV file format, according to the following conditions:

- Enclose each "date and time", "log type", and "log message" of the event log in double quotation marks.
- Separate each "date and time", "log type", and "log message" using commas.
- Double quotation marks in messages must be prefixed by a double quotation mark.

Example

Before changing: 2013/03/04 14:12 Warning : VSYSxxxx:"Error message" is converted.

After changing: "2013/03/04 14:12","Warning","VSYSxxxx:""Error message"" is converted."

5.5 Select Forward Destination of Application Process

When the application process is enabled, the forward destination of the application process must be selected to use the following functions:

- L-Platform subscription
- L-Platform reconfiguration
- Cancel L-Platform

Point

The application process is set by the infrastructure administrator.

Note

If the pop-up blocker is enabled and the URL of the ROR Console is not registered with the 'Address of web site to allow' list, the 'Forward screen' window will not be displayed.

Follow the steps below to select the forward destination of the application process:

1. The [Forward screen] window is displayed when an L-Platform usage application is made, an L-Platform configuration is modified, or an L-Platform is released.

Item	Description
Forward destination	Select an approver who is the forward destination of the application process. If the process has been set to require no approval, the forward destination will not be displayed.
Reason for application	Specify the reason for application using 100 or less characters.

2. Specify the item and click the [Forward] button.
A message notifying the forward result will be displayed.
When forwarding is successful, the subscriber will receive an application acceptance email.
3. Confirm the message, click the [Close] button, and close the [Forward screen] window.

Note

If an error message is displayed on the [Forward screen], notify the infrastructure administrator of the contents displayed on the window. After closing the [Forward screen], close the L-Platform window also.
If an error message is displayed on the forward screen when a service is subscribed to or modified, that subscription will be saved.

Point

Approving the application process

When an application process is forwarded, an email requesting an approval will be sent to the approver at the forward destination. An approval for the application must be obtained from the approver.
Refer to "[Chapter 6 Request](#)" for information on how to approve an application process.
If the process has not been approved, an email requesting an assessment will be sent to the infrastructure administrator.

Action when the mail is not sent

When the email is not sent to the subscriber or the approver, confirm whether the email address registered in the ROR Console is correct. If it is correct, contact the system administrator to report the user ID and the process instance name for subscription.
When the assessment request email is not sent to the infrastructure administrator, contact the system administrator to report the user ID and the process instance name.

Check the application process status

The subscriber and the approver can check the status of application process.
Refer to "[Chapter 6 Request](#)" for information on how to check the status of application process.

5.6 How to Use the L-Platform

This section explains how to use the L-Platform after it is deployed.

Based on the information below, a deployed L-Platform can be accessed using the remote desktop function.

Item	Value
IP address	<ol style="list-style-type: none"> 1. The IP address can be confirmed using the following procedures. 2. Select [Server List] on the [Management] page of [L-Platform management]. 3. Check IP address of the target server from the list displayed.
User ID	[Windows] Administrator [Linux] Root
Password	The initial password can be confirmed using the following procedures:

Item	Value
	1. Select [Server List] on the [Management] page of [L-Platform management]. 2. Select the target L-Platform and click the [Details] button. 3. Select the target virtual server from the list displayed and click the [Initial PWD] button.

 **Note**

The initial password is already set up after the L-Platform is deployed. Be sure to change the password when the L-Platform starts to operate.

5.7 Server Load Balancer (SLB) Operation Procedure

This section describes the procedure for using an L-Platform template that includes a server load balancer (SLB).

1. Check the following two points before subscribing to an L-Platform template that includes a server load balancer. Check with the tenant administrator if there are points that need to be clarified.
 - Preparations to set the server load balancer are complete
 SLB settings are required to use the server load balancer. Check the following:
 - a. You understand the meaning of the parameters set when configuring the server load balancer
 - b. You know the values such as the IP address that need to be set in (a)
 - Proper preparations have been made for server load balancer operations
 Server load balancer operations are performed by configuring rulesets and the parameters in the rulesets. Check the following:
 - a. You understand the rulesets for the operation of the server load balancer
 - b. You understand the meaning of the parameters set in (a)
 - c. You know the values that need to be set in (b)
2. "[Subscribe to an L-Platform](#)" including a server load balancer.
3. Refer to "[Server Load Balancer \(SLB\) Settings](#)" and setup the server load balancer after the L-Platform is deployed
4. Refer to "[L-Platform Reconfiguration](#)" and perform the procedures described to change the configuration of an L-Platform.
5. If necessary, use the information obtained in 1 to perform "[Server Load Balancer \(SLB\) Operations](#)". After executing the operation, check the "[Server Load Balancer \(SLB\) Operation Logs](#)"
6. Refer to "[Cancel an L-Platform](#)" and perform the procedures described to cancel an L-Platform when it becomes unnecessary.

Chapter 6 Request

This chapter explains how to operate the application list.



Note

- Application processes are determined by the Infrastructure Administrator and set by the System Administrator. The application list can be used only if an application process is set.
- If Internet Explorer enhanced security (IE ESC) is enabled, the [X] button on popup windows does not operate correctly. Refer to the following website for information on how to disable Internet Explorer enhanced security:
<http://www.microsoft.com>

6.1 Checking an Application Status

The application status and past application results can be checked for the following applications:

- Subscribe L-Platform
- L-Platform reconfiguration
- Cancel L-Platform

Perform the following steps to check the status of an application process:

1. Select [Requests] tab from the ROR console.
2. Select either [My Tasks] or [My Completed Tasks] from the [Task Filters] drop-down list on the My Task window.

- To check the status of applications in progress

Select [My Tasks] from the [Task Filters] drop-down list on the My Task window. A list of tasks with the status **Active** will be displayed.

- To check past application results

Select [My Completed Tasks] from the [Task Filters] drop-down list on the My Task window. A list of tasks with the status **Completed** will be displayed.

The priority level of a task can be specified on the [Summary] tab under [My Tasks] using numerals from 0 to 2147483647. The default value is 8.

The higher the number of a task, the higher its priority level. Setting the priority level of tasks also enables them to be sorted in order of priority in task lists.

3. Select the process instance task to be checked and click on the [Details] tab.

Select the tasks with the following activity names:

- When checking the status of applications in progress
 - Cancel
- When checking past application results
 - Apply or cancel

4. Select the [Status] tab on the [Form] panel.

A list of either application statuses or past application results will be displayed in chronological order.

Application results are displayed as shown in the image below. It indicates that approval was given to an application which was then dismissed upon assessment.

The screenshot shows a web interface for a task titled "Task: Application [L-PlatformSubscriptio...". It has tabs for "Summary" and "Details", and a "Jump To" dropdown menu. Below the tabs is a "Form" section with sub-tabs for "Application" and "Status". The "Status" tab is active, displaying a table with the following data:

Activity Name	Status	Date	Responsible	Comment
Application	Accepted	2011-12-18 21:18:02	taro fujitsu	Please approve the L-Platform01
Approve	Approved	2011-12-18 22:08:01	hanako fujitsu	Please assess the L-Platform01
Assess	Dismissed	2011-12-18 22:25:59	manage01	refused the L-Platform01
Pending	--			
Cancel	--			

Item	Description	
Activity Name	The task activities will be displayed. Application, Approve, Assess, Pending or Cancel will be displayed. Approve will only be displayed when the application process is set to 'ApproverOnly', while Assess will only be displayed when the application process is set to 'JudgeOnly'.	
Status	Application	Accepted
	Approve	One of the following responses will be displayed: <ul style="list-style-type: none"> - Approval waiting - Approved - Approved (Error) - Rejected - _ (*1)
	Assess	One of the following responses will be displayed: <ul style="list-style-type: none"> - Approval waiting - Accepted - Accepted (Error) - Dismissed - _ (*1) - Blank (*2)
	Pending	One of the following responses will be displayed: <ul style="list-style-type: none"> - Pending - Cancel - _ (*1) - Blank (*2)
	Cancel	One of the following responses will be displayed: <ul style="list-style-type: none"> - Cancel

Item	Description
	- _ (*1) - Blank (*2)
Date	The date and time of execution will be output in the following format: YYYY-MM-DD HH:MM:SS
Responsible	Displays the executor.
Comment	Displays any comments that were input at the time of Application, Approve, Assess or Pending.

*1: Displayed when the process was not executed.

*2: Displayed when the process has not been executed.

The following illustrates an example of the application status confirmation window:

- When the application process is set to ' ApproverOnly' and 'JudgeOnly'

Indicates that the application has been accepted and the task is complete.

Activity Name	Status	Date	Responsible	Comment
Application	Accepted	2011-12-19 02:41:59	taro fujitsu	Please approve the L-Platform05
Approve	Approved	2011-12-19 02:44:17	hanako fujitsu	Approved the L-Platform05. Please assess this.
Assess	Accepted	2011-12-19 02:45:47	manage01	Assessed the L-Platform05.
Pending	-			
Cancel	-			

- When the application process is set to 'ApproverOnly'

Indicates that the application is awaiting approval.

Activity Name	Status	Date	Responsible	Comment
Application	Accepted	2011-12-19 02:13:46	taro fujitsu	Please approve the L-Platform04
Approve	Approval waiting			
Pending				
Cancel				

- When the application process is set to 'JudgeOnly'

Indicates that an error has occurred with the application during acceptance of the assessment and the task has been reserved.

Activity Name	Status	Date	Responsible	Comment
Application	Accepted	2011-12-19 02:29:31	taro fujitsu	Please assess the L-Platform05
Assess	Accepted (Error)	2011-12-19 02:34:28	manage01	
Pending	Pending			
Cancel				

6.2 Cancelling an Application

Subscribers can cancel an application that they have issued.

A subscriber is a user who issued any of the following applications:

- Subscribe use L-Platform
- L-Platform reconfiguration
- Cancel L-Platform



.....
Refer to "[Appendix A Emails Sent during L-Platform Operations](#)" for information on the email sent when an application is canceled.
.....

Perform the following steps to cancel an application process:

1. From the ROR Console, select [Requests] tab.
2. In the Task Filters drop-down list on the My Tasks window, select [My Tasks].
A list of tasks with the status Active is displayed.
In the [Priority] field in [My Tasks] under the [Summary] tab, give the tasks a priority using a number between 0 and 2147483647.
The default value is 8.
The higher the number of a task, the higher its priority level. Setting the priority level of tasks also enables them to be sorted in order of priority in task lists.
3. Select the task with the activity name "Cancel" on the process instance that you want to cancel, and then click the [Details] tab.

4. Select the [Application] tab on the [Form] panel.
Check the content of the application.

Task: Cancel [L-PlatformSubscription_73...]

Summary Details Jump To: -Select One-

Form

Application Status

Application type: L-PlatformSubscription
L-Platform name: L-Platform02

Details: **Tenant name: tenant01**

L-Platform Overview

Estimated price	\$ 105.50/month	* changed from \$ 108.50/month
License	Not included	
Support	Not included	
Description	TEMPLATE_2008	
Template name	TEMPLATE_2008	

▼ **Firewall**

Rule set	bonding	
Description	Ruleset Description Data	

▼ **AAA**

Segment type	DMZ	
Maximum number of NICs	1	

Subscriber name: taro fujitsu
Reason for application: Please approve the L-Platform02
Forward destination: hanako fujitsu

Back to top

Attachments

Add Attachment

There are no attachments in this task.

Back to top

Comments

Comment

Add Comment

Back to top

Make Choice

[0:Cancel]

Back to top

5. Click the [0: Cancel] button on the Make Choice panel.
The selected application process is cancelled.

Note

- If the [0: Cancel] button on the Make Choice panel is clicked without the [Details] tab being selected or without the [Status] tab on the [Details] tab being selected, the following message is displayed:

All the forms are not accessed in Details Tab. Do you want to continue?

To continue processing without checking the form, click the [OK] button. To check the form, take one of the following actions:

- Click the [Cancel] button, and then select the [Details] tab.
- Select the [Status] tab on the [Details] tab.

- When canceling applications and [Failed] is displayed as the result in the [Result Summary] window, contact the tenant administrator with the process instance name that failed and the error details and have them investigate the error and take action as necessary.

Details about the errors are displayed by clicking [Details] in the comments in the [Result Summary] window.

Chapter 7 Account

This chapter explains account operations.

7.1 Referencing User Information

The [Account] window can be used to display the user information of logged in users. Perform the following operations to view user information.

1. Select the [Account] link on the ROR Console.
The [Account] window is displayed in a new window.

To modify your account, click [Modify account] button.
To change your password, click [Change password] button.

User ID	tenant_user01
Description	
Role	tenant_user

Personal Information

E-mail address	tenant_user01@example.com
Name	John N Smith
Company name or organization name	

Emergency Contact Information

E-mail address	
Telephone number	

Item	Explanation
User ID	Displays the user ID of the user
Description	Displays an explanation of the user
Role	Displays the user's role
Personal Information	
E-mail address	Displays the user's email address
Name	Displays the user's name
Company name or organization name	Displays the company name or organization name
Emergency Contact Information	
E-mail address	Displays the email address that receives emergency notifications
Telephone number	Displays the phone number for emergency contact
[Modify account] button	When clicked, displays the Modify account window used to change user information
[Change password] button	When clicked, displays the Change password window used to change a password



Note

With some directory services operation settings, the [Modify account] and [Change password] buttons may not be displayed. Directory services operation settings are set by the System Administrator.

2. Click the [Close] button to close the [Account] window.

7.2 Changing User Information

The [Modify account] window can be used to change the user information of a logged in user. Perform the following operations to change the user information:

1. Click the [Modify account] button on the [Account] window.
The [Modify account] window is displayed.
2. On the [Modify account] window, edit the values of the items to be changed.

Item	Explanation
User ID	Displays the user ID of the user. This cannot be changed.
Description	Enter an explanation of the user in up to 256 characters.
Role	Displays the user's role. This cannot be changed.
Personal Information	
E-mail address	Specify the user's email address in up to 64 characters. This specification is mandatory.
Name	Specify the user's name (first name, middle name and last name) using a maximum of 15 characters for each name. This specification is mandatory, but the middle name can be omitted.
Company name or organization name	Specify the company name or organization name in up to 30 characters.
Emergency Contact Information	
E-mail address	Specify the email address that receives emergency notifications, using up to 64 characters.
Telephone number	Specify the phone number to be used for emergency contact.

3. Click the [Confirm] button.
4. The window for confirming changed content is displayed. Check the values, and then click the [Modify] button.
To change the values again, click the [Back] button to return to the [Modify account] window.
5. Once the [Modify] button is clicked, the user information is updated and the modification completion window is displayed.
6. Click the [Back to Account] button to return to the [Account] window.

7.3 Changing Passwords

The [Change password] window can be used to change the password of a logged in user. Perform the following operations to change a password:

1. Click the [Change password] button on the [Account] window.
The [Change password] window is displayed.

Item	Explanation
Current password	Enter the current password. This specification is mandatory.

Item	Explanation
New password	Enter the new password. Specify between 8 and 64 characters using single-byte alphanumerics and symbols. The password is case-sensitive. This specification is mandatory.
New password (confirm)	Re-enter the new password for confirmation purposes. This input is mandatory.

2. Enter the current password and the new password, and then click the **Change** button. The password is changed and the modification completion window is displayed.
3. Click the [Back to Account] button to return to the [Account] window.

Appendix A Emails Sent during L-Platform Operations

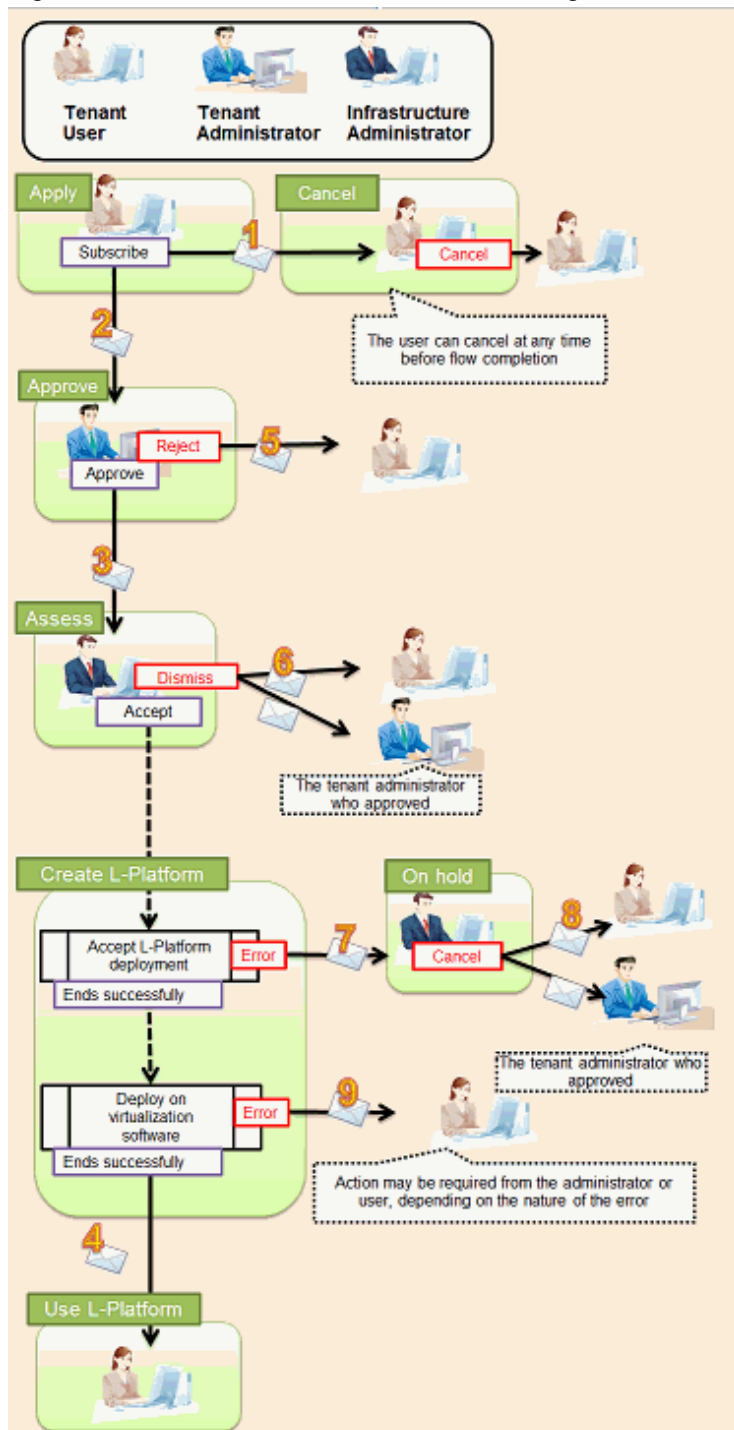
This appendix describes the flow and content of emails sent during L-Platform operations.

A.1 Emails Sent when Subscribing to an L-Platform

This section explains the flow and content of emails sent when subscribing to an L-Platform.

The following diagram shows the flow of emails sent when a subscription is made to use an L-Platform - the example shows the use of VMware as the virtualization software.

Figure A.1 Flow of emails sent when subscribing to an L-Platform



Below is the description of the content of emails sent and the action to take - the numbers refer to the email numbers in the diagram above.

1. Notification of application acceptance

This email is sent to the subscriber when the application to subscribe to the L-Platform is made.

Item	Description
Recipient	Subscriber
Timing	Sent when application to subscribe is made
Purpose	Notifies acceptance of subscription application
Email content	Process instance name, subscriber name, application type (L-Platform subscription), L-Platform name, reason for application, forward destination. Note that the forward destination is sent when configured to approve subscription applications.
Action	None After this notification is received, the subscription can be canceled.

2. Notification of approval request

This email is sent to the approver (tenant administrator) when the application to subscribe to the L-Platform is made.

Item	Description
Recipient	Approver (tenant administrator)
Timing	Sent when application is made Sent when configured to approve subscriptions at the time the application is made
Purpose	Request for approval of subscription
Email content	Process instance name, subscriber name, application type (L-Platform subscription), L-Platform name, reason for application, forward destination, approval URL
Action	Select [Requests] using the approval URL in the email or the ROR console, and approve or reject the subscription.

3. Notification of assessment request

This email is sent to the assessor (infrastructure administrator) when the application to subscribe to the L-Platform is made.

Item	Description
Recipient	Assessor (infrastructure administrator)
Timing	Sent when application is made or when approval is given Sent when configured to assess applications at the time they are submitted
Purpose	Request for assessment of subscription
Email content	Process instance name, subscriber name, application type (L-Platform subscription), L-Platform name, reason for application, approver name, approval comment, assessment URL Note that the approver name and approval comments are sent when configured to approve applications at the time they are submitted
Action	Select [Requests] using the approval URL in the email or the ROR console, and accept or dismiss the subscription.

4. Notification of completed creation

This email is sent to the subscriber when creation of the L-Platform is complete.

Item	Description
Recipient	Subscriber
Timing	Sent when L-Platform creation is complete

Item	Description
Purpose	Notifies that creation of L-Platform is complete
Email content	L-Platform name, L-Platform ID, server name, IP address, default password
Action	None

5. Notification of application rejection

This email is sent to the subscriber when a request for approval is rejected.

Item	Description
Recipient	Subscriber
Timing	Sent when the request for approval of the subscription is rejected
Purpose	Notifies of rejection of subscription
Email content	Process instance name, subscriber name, application type (L-Platform subscription), L-Platform name, reason for application, forward destination, approver name, approval comment
Action	None

6. Notification of application dismissal

This email is sent to the subscriber when an assessment is dismissed.

Item	Description
Recipient	Subscriber and approver (tenant administrator)
Timing	Sent when the subscription assessment is dismissed
Purpose	Notifies dismissal of subscription assessment
Email content	Process instance name, subscriber name, application type (L-Platform subscription), L-Platform name, reason for application, forward destination, approver name, approval comment, assessor name, assessor comment Note that the approver name and approval comments are sent when configured to approve applications at the time they are submitted
Action	None

7. Notification of application reservation

This email is sent to the infrastructure administrator when an error occurs during accepting L-Platform deployment.

Item	Description
Recipient	Infrastructure administrator
Timing	Sent when an error occurs during accepting L-Platform deployment
Purpose	Error notification
Email content	Process instance name, subscriber name, application type (L-Platform subscription), L-Platform name, reason for application, reservation URL
Action	Select [Requests] using the reservation URL in the email or the ROR console. Check the details of the error and cancel.

8. Notification of application cancellation

This email is sent to the subscriber and approver (tenant administrator) if the subscription is canceled at Step 7.

Item	Description
Recipient	Subscriber and approver (tenant administrator)
Timing	Sent when canceled due to the subscription being reserved

Item	Description
Purpose	Notifies cancellation of the subscription
Email content	Process instance name, subscriber name, application type (L-Platform subscription), L-Platform name, reason for application, cancellation comment
Action	Subscribe again if required.

9. Error notification

This email is sent to the subscriber if an error occurs with deployment on virtualization software.

Item	Description
Recipient	Subscriber
Timing	Sent when an error occurs with deployment on virtualization software
Purpose	Notifies of errors
Email content	L-Platform name, L-Platform ID
Action	Request the infrastructure administrator to investigate.

The following example illustrates an actual email that is sent.

This is the content of the actual notification that is sent when an application is accepted. Other emails are also sent in the same format.



Example

```

Subject: [Important announcement] Notification of application acceptance

Dear Mr. Fujitsu,

The following application was accepted:

-----
[Content of application ]

Process instance name: L-Platform subscription (Task 1)
Subscriber name: Taro Fujitsu
Application type: L-Platform subscription
L-Platform name: L-Platform-20130701-01
Reason for application: For new system development
Forward destination: All administrators

Please refer to the above-mentioned process instance name from the application list of ROR console.
-----

This E-mail is for information only.
Even if you send reply to this E-mail, you will not receive any reply.

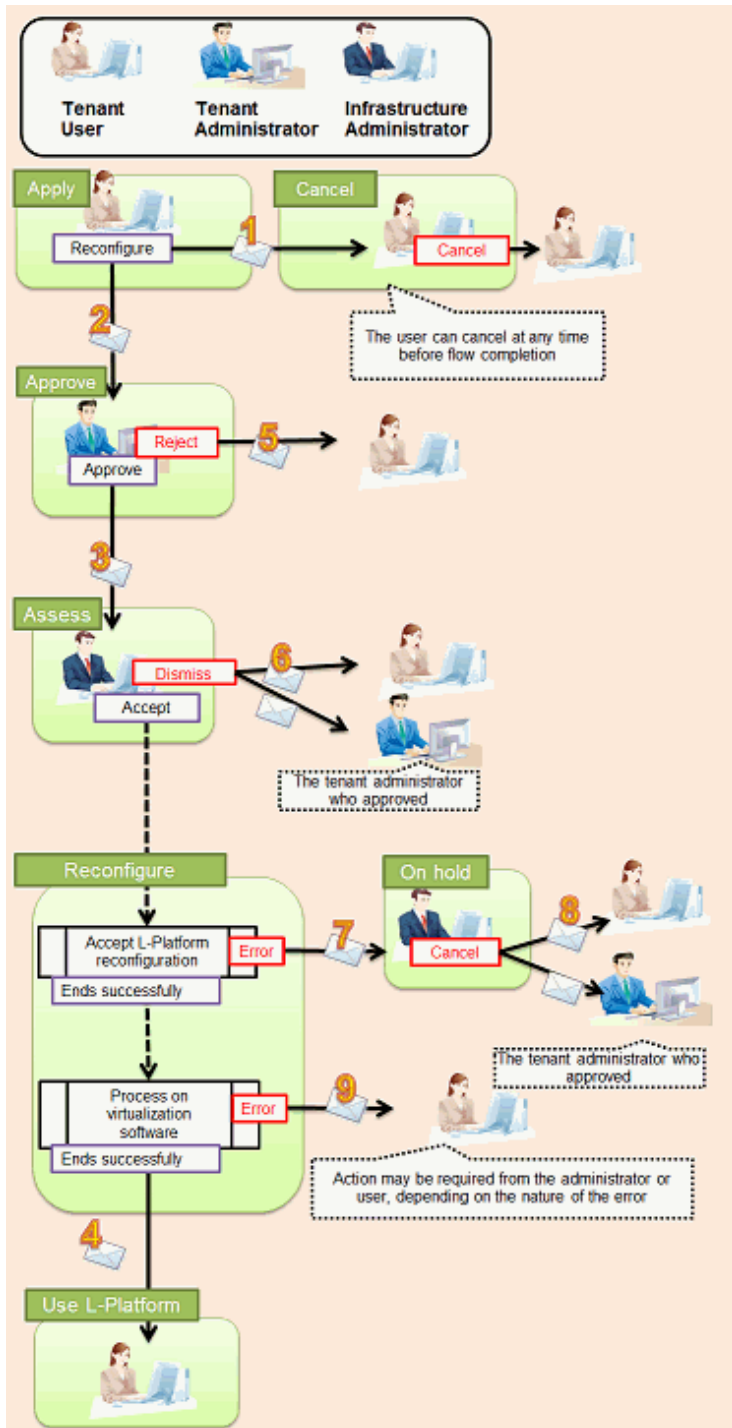
```

A.2 Emails Sent when Reconfiguring an L-Platform

This section explains the flow and content of email messages sent when reconfiguring an L-Platform.

The following diagram shows the flow of emails sent when reconfiguring an L-Platform - the example shows the use of VMware as the virtualization software.

Figure A.2 Flow of emails sent when reconfiguring an L-Platform



Below is the description of the content of emails sent and the action to take - the numbers refer to the email numbers in the reconfiguration flow diagram.

1. Notification of application acceptance

This email is sent to the subscriber when applying to reconfigure an L-Platform.

Item	Description
Recipient	Subscriber
Timing	Sent when application to reconfigure is made
Purpose	Notification of reconfiguration application acceptance

Item	Description
Email content	Process instance name, subscriber name, application type (L-Platform reconfiguration), L-Platform name, reason for application, forward destination Note that the forward destination is sent when configured to approve reconfiguration applications.
Action	None After this notification is received, the reconfiguration can be canceled

2. Notification of approval request

This email is sent to the approver (tenant administrator) when the application to reconfigure the L-Platform is made.

Item	Description
Recipient	Approver (tenant administrator)
Timing	Sent when reconfiguration application is made Sent when configured to approve reconfiguration applications
Purpose	Request for approval of reconfiguration
Email content	Process instance name, subscriber name, application type (L-Platform reconfiguration), L-Platform name, reason for application, forward destination, approval URL
Action	Select [Requests] using the approval URL in the email or the ROR console, and approve or reject the reconfiguration.

3. Notification of assessment request

This email is sent to the assessor (infrastructure administrator) when the application to reconfigure the L-Platform is made.

Item	Description
Recipient	Assessor (infrastructure administrator)
Timing	Sent when reconfiguration application is made Sent when configured to assess reconfiguration at the time the application is made
Purpose	Request for assessment of reconfiguration
Email content	Process instance name, subscriber name, application type (L-Platform reconfiguration), L-Platform name, reason for application, approver name, approval comment, assessment URL Note that the approver name and approval comments are sent when configured to approve reconfiguration applications
Action	Select [Requests] using the assessment URL in the email or the ROR console, and accept or dismiss the reconfiguration.

4. Notification of completed reconfiguration

This email is sent to the subscriber when reconfiguration of the L-Platform is complete.

Item	Description
Recipient	Subscriber
Timing	Sent when reconfiguration of the L-Platform is complete
Purpose	Notifies that reconfiguration of the L-Platform is complete
Email content	L-Platform name, L-Platform ID
Action	None

5. Notification of application rejection

This email is sent to the subscriber when a request for approval is rejected.

Item	Description
Recipient	Subscriber
Timing	Sent when the request for approval of the reconfiguration is rejected
Purpose	Notification of reconfiguration application rejection
Email content	Process instance name, subscriber name, application type (L-Platform reconfiguration), L-Platform name, reason for application, forward destination, approver name, approval comment
Action	None

6. Notification of application dismissal

This email is sent to the subscriber when an assessment is dismissed.

Item	Description
Recipient	Subscriber and approver (tenant administrator)
Timing	Sent when the reconfiguration assessment is dismissed
Purpose	Notifies dismissal of reconfiguration application
Email content	Process instance name, subscriber name, application type (L-Platform reconfiguration), L-Platform name, reason for application, forward destination, approver name, approval comment, assessor name, assessor comment Note that the approver name and approval comments are sent when configured to approve reconfiguration applications
Action	None

7. Notification of application reservation

This email is sent to the infrastructure administrator when an error occurs during accepting L-Platform update.

Item	Description
Recipient	Infrastructure administrator
Timing	Sent when an error occurs during accepting L-Platform update
Purpose	Error notification
Email content	Process instance name, subscriber name, application type (L-Platform reconfiguration), L-Platform name, reason for application, reservation URL.
Action	Select [Requests] using the reservation URL in the email or the ROR console. Check the details of the error and cancel the application.

8. Notification of application cancellation

This email is sent to the subscriber and approver (tenant administrator) if the reconfiguration application is canceled at Step 7.

Item	Description
Recipient	Subscriber and approver (tenant administrator)
Timing	Sent when canceled due to the reconfiguration being reserved
Purpose	Notifies cancellation of the reconfiguration
Email content	Process instance name, subscriber name, application type (L-Platform reconfiguration), L-Platform name, reason for application, cancellation comment
Action	Reconfigure again if required.

9. Error notification

This email is sent to the subscriber if an error occurs with processing on virtualization software.

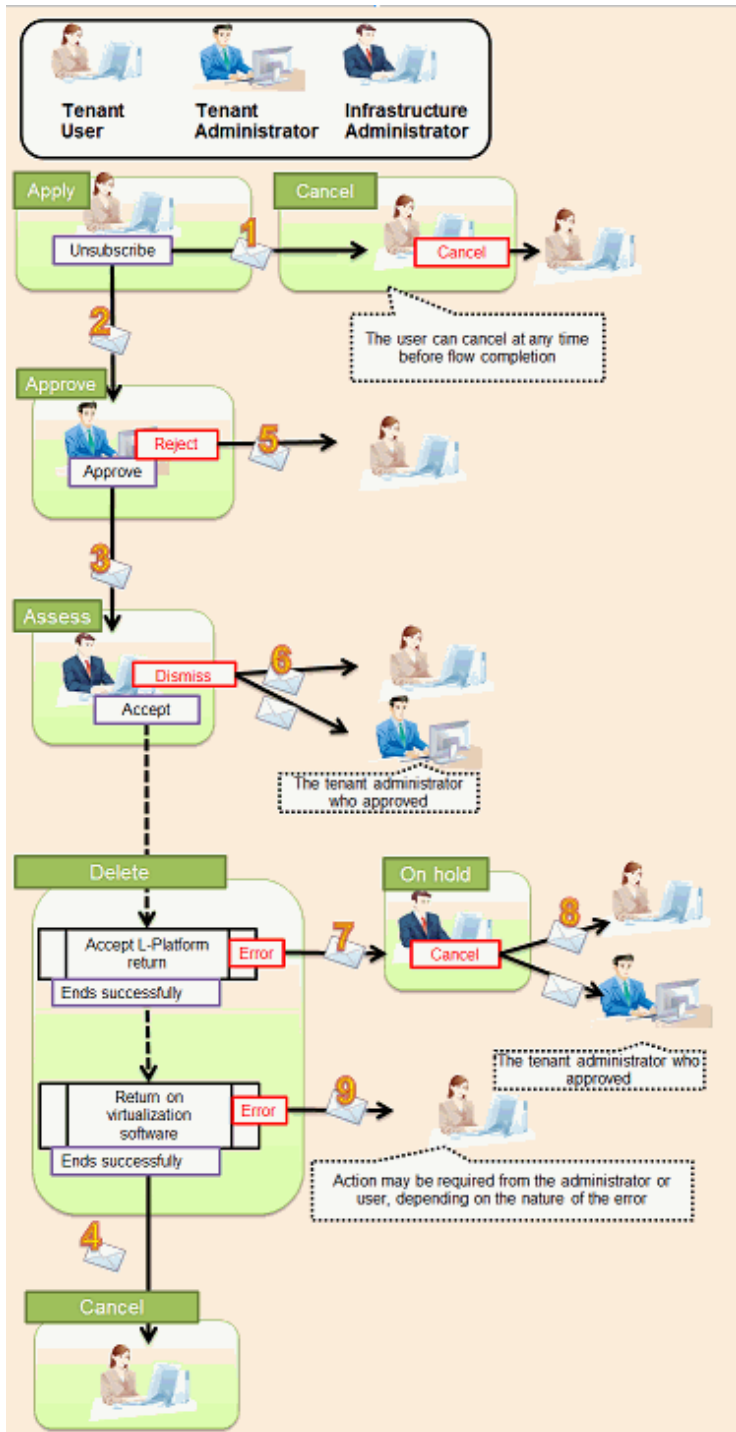
Item	Description
Recipient	Subscriber
Timing	Sent when an error occurs with processing on virtualization software
Purpose	Notifies of errors
Email content	L-Platform name, L-Platform ID
Action	Request the infrastructure administrator to investigate.

A.3 Emails Sent when Canceling an L-Platform

This section describes the flow and content of email messages sent when canceling an L-Platform.

The following diagram shows the flow of emails sent when canceling an L-Platform - the example shows the use of VMware as the virtualization software.

Figure A.3 Flow of emails sent when canceling an L-Platform



Below is the description of the content of emails sent and the action to take - the numbers refer to the email numbers in the diagram above.

1. Notification of application acceptance

This email is sent to the subscriber when applying to cancel an L-Platform.

Item	Description
Recipient	Subscriber
Timing	Sent when canceling
Purpose	Notification of cancellation application acceptance

Item	Description
Email content	Process instance name, subscriber name, application type (L-Platform cancellation), L-Platform name, reason for application, forward destination Note that the forward destination is sent when configured to approve cancellation applications.
Action	None After this notification is received, the cancellation can be canceled

2. Notification of approval request

This email is sent to the approver (tenant administrator) when the application to cancel the L-Platform is made.

Item	Description
Recipient	Approver (tenant administrator)
Timing	Sent when cancellation application is made Sent when configured to approve cancellation at the time the cancellation application is made
Purpose	Request for approval of cancellation
Email content	Process instance name, subscriber name, application type (L-Platform cancellation), L-Platform name, reason for application, forward destination, approval URL
Action	Select Request using the approval URL in the email or the ROR console, and approve or reject the cancellation.

3. Notification of assessment request

This email is sent to the assessor (infrastructure administrator) when the application to cancel the L-Platform is made.

Item	Description
Recipient	Assessor (infrastructure administrator)
Timing	Sent when cancellation application is made Sent when configured to assess cancellation at the time the application is made
Purpose	Request for approval of cancellation
Email content	Process instance name, subscriber name, application type (L-Platform cancellation), L-Platform name, reason for application, forward destination, approval URL Note that the approver name and approval comments are sent when configured to approve cancellation applications.
Action	Select [Requests] using the approval URL in the email or the ROR console, and approve or reject the cancellation.

4. Notification of completed cancellation

This email is sent to the subscriber when cancellation of the L-Platform is complete.

Item	Description
Recipient	Subscriber
Timing	Sent when L-Platform cancellation is complete
Purpose	Notifies that cancellation of L-Platform is complete
Email content	L-Platform name, L-Platform ID
Action	None

5. Notification of application rejection

This email is sent to the subscriber when a request for approval is rejected.

Item	Description
Recipient	Subscriber
Timing	Sent when the request for approval of the cancellation is rejected
Purpose	Notifies of rejection of cancellation
Email content	Process instance name, subscriber name, application type (L-Platform cancellation), L-Platform name, reason for application, forward destination, approver name, approval comment
Action	None

6. Notification of application dismissal

This email is sent to the subscriber when an assessment is dismissed.

Item	Description
Recipient	Subscriber and approver (tenant administrator)
Timing	Sent when the cancellation assessment is dismissed
Purpose	Notifies dismissal of cancellation assessment
Email content	Process instance name, subscriber name, application type (L-Platform cancellation), L-Platform name, reason for application, forward destination, approver name, approval comment, assessor name, assessor comment Note that the approver name and approval comments are sent when configured to approve cancellation applications.
Action	None

7. Notification of application reservation

This email is sent to the infrastructure administrator when an error occurs during accepting L-Platform return.

Item	Description
Recipient	Infrastructure administrator
Timing	Sent when an error occurs during accepting L-Platform return
Purpose	Error notification
Email content	Process instance name, subscriber name, application type (L-Platform cancel), L-Platform name, reason for application, reservation URL.
Action	Select [Requests] using the reservation URL in the email or the ROR console. Check the details of the error and cancel the application.

8. Notification of application cancellation

This email is sent to the subscriber and approver (tenant administrator) if the cancellation application is canceled at Step 7.

Item	Description
Recipient	Subscriber and approver (tenant administrator)
Timing	Sent when canceled due to the cancellation application being reserved
Purpose	Notifies cancellation of the cancellation application
Email content	Process instance name, subscriber name, application type (L-Platform cancel), L-Platform name, reason for application, cancellation comment
Action	Apply the cancellation again if required.

9. Error notification

This email is sent to the subscriber if an error occurs while returning an L-Platform on virtualization software.

Item	Description
Recipient	Subscriber
Timing	Sent when an error occurs while returning an L-Platform on virtualization software
Purpose	Notifies of errors
Email content	L-Platform name, L-Platform ID
Action	Request the infrastructure administrator to investigate.