MasterScope Virtual DataCenter Automation Standard Edition
Portal User Manual(Resource Management)
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Revision History

The revision history of the "MasterScope Virtual DataCenter Automation Standard Edition Portal User's Manual (Resource Management)" is described below:

<table>
<thead>
<tr>
<th>Number</th>
<th>Chapter/Section</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Edition</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

# Contents

Part 1. Overview

Chapter 1 What is MasterScope Virtual DataCenter Automation Standard Edition? 2
1.1 What you can do with the vDCA SE Portal 2
1.1.1 Server use application (request) management 3
1.1.2 Network use application (request) management 3
1.1.3 Checking the resource usage status 3
1.1.4 Server power control operations 3
1.1.5 Dashboard Function 3
1.1.6 User Administration / Tenant Administration 4
1.1.7 Request Management 4
1.1.8 Hybrid Cloud Management 4
1.1.9 Multi data center linkage function 5
1.1.10 Server general operation 5

Part 2. Using the Portal

Chapter 2 Operational Overview 7
2.1 Notes and restrictions on operating vDCA SE Portal 7
2.2 Overall flow when using the resource management function 7

Chapter 3 Operation Flow 10
3.1 Setting up the portal operation 10
3.2 Registering a tenant 11
3.3 Configuring a tenant management organization 13
3.4 Subscribing to a new service catalog 13
3.5 Updating a service catalog 14
3.6 Canceling a service catalog 15
3.7 Confirming a service catalog 16
3.8 Operating a service 16
3.9 Maintenance 17
3.10 Canceling a tenant 17

Part 3. Before Starting Operation

Chapter 4 Operation Configuration for a Redundant or Cluster Configuration 20
4.1 Managing the configuration files 20
4.2 Setting a Cluster Shared Disk 20

Chapter 5 Setting of Single Sign-on Linkage 22
5.1 About the single sign-on function 22
5.2 Preparation 22
5.3 Collecting parameters 22
5.4 Setting the acquired information 23
5.5 Setting of the Authentication server 24
5.6 Testing the single sign-on linkage operation 24
5.7 Using the unique authentication function of vDCA SE Portal during single sign-on linkage 24
5.8 Disabling the unique authentication function of vDCA SE Portal during single sign-on linkage 25
Chapter 31 Notice management (user) ................................................................. 250
  31.1 Notice list (user) ......................................................................................... 250
  31.2 Registering a notice (user) ........................................................................ 251
  31.3 Checking the details of a notice (user) ....................................................... 252
  31.4 Changing the contents of a notice (user) .................................................. 252
  31.5 Deleting a notice ....................................................................................... 253

Part 7. Maintenance Information ........................................................................... 254

Chapter 32 Backup and Restore ........................................................................ 255
  32.1 Backing up ............................................................................................... 255
  32.2 Restore ..................................................................................................... 255

Chapter 33 How to Check the Log ..................................................................... 257

Chapter 34 List of messages ................................................................................. 258

Chapter 35 Commands ....................................................................................... 261
  35.1 Resource information update command ................................................... 261
    35.1.1 Resource information file .................................................................... 262
35.1.2  Error list of the resource information update command .................................. 266
35.2  Request history output command ............................................................................. 268
   35.2.1  Request history file ........................................................................................ 270
   35.2.2  Error list of request history command............................................................. 275

Appendix A.  Customizing........................................................................................................ 276
   A.1  Displaying additional information in the template ......................................................... 276
   A.2  Displaying additional information for an imported server ................................................. 276
   A.3  Customizing the GUI Display ...................................................................................... 277

Appendix B.  Authority ........................................................................................................... 283
   B.1  Authority owned by built-in roles.................................................................................... 283
   B.2  Authority available for custom roles............................................................................... 292

Glossary...................................................................................................................................... 298
Part 1.
Overview

This chapter describes the overview of MasterScope Virtual DataCenter Automation Standard Edition Portal.
Chapter 1
What is MasterScope Virtual DataCenter Automation Standard Edition?

MasterScope Virtual DataCenter Automation Standard Edition (hereinafter vDCA SE Portal) is a Web-based GUI to use the functions of SigmaSystemCenter. The use of vDCA SE Portal is expected to bring the following benefits.

- The service users or tenants can apply for use, operate a virtual machine, and view the operation status (usage, etc.).
- This enables quicker resource assignment and reduces the load on the service provider.
- The service provider can easily grasp the status of the entire data center and the status of applications from users.

1.1 What you can do with the vDCA SE Portal

SigmaSystemCenter has many different functions. vDCA SE Portal provides a GUI SigmaSystemCenter that supports typical use cases, by using some of the functions provided by the RESTful API.

The use cases supported by the vDCA SE Portal are as below.

- Server use application (request) management
- Network use application (request) management
- Resource use status checking
- Server power control operations
- Notification from a service provider to tenants (dashboard function)
- Tenant/user management function
- Hybrid Cloud management
• Multi data center linkage function
The following use case is also supported by using JobCenter.
• Server general operation execution
Each function is described below.

1.1.1 Server use application (request) management
Applications for server creation, update, and deletion are managed as requests.
You can use the server creation, update, and deletion functions provided by SigmaSystemCenter. Specify and apply the required parameters from the screen. The applied processing will be executed after it is approved according to the predefined workflow.
The requests that have been applied are saved as a history and can be referred to.
For details, see "22.1 Request management (administrator) (page 104)".

1.1.2 Network use application (request) management
Applications for network creation and deletion are managed as requests.
You can use the network creation and deletion functions provided by SigmaSystemCenter. Specify and apply the required parameters from the screen. The applied processing will be executed after it is approved according to the predefined workflow.
The requests that have been applied are saved as a history and can be referred to.
For details, see "22.1 Request management (administrator) (page 104)".

1.1.3 Checking the resource usage status
The status of a created server and network and the status of a resource pool used for creation can be checked.
You can check the total amount and current usage value for a resource pool and the configuration information for a created server and network.
For details, see "Chapter 24 Resource management (page 130)".

1.1.4 Server power control operations
Power control operations and screenshot acquisition can be performed for a created server. For details about the available operations, see "24.3 Server Management (Administrator) (page 133)" and "30.4 Server Management(User) (page 230)".

1.1.5 Dashboard Function
A notice to a tenant from the administrator who was set by the business operator can be displayed when the tenant logs in.
Using this function enables to communicate from the business operator to the administrator effectively.
For details, see "Chapter 21 Dashboard (page 94)" and "Chapter 27 Dashboard (page 169)".
1.1.6 User Administration / Tenant Administration

The user administration can be performed for MasterScope Virtual DataCenter Automation Standard Edition Portal users by issuing ID and password.

Users possess the tenant attribute, so that they can allocate resources, check the status, and perform operation within the range of the tenant where users belong to. In addition, it is able to limit login for every single user.

For details, see "Chapter 23 Tenant Information(Administrator) (page 118)".

1.1.7 Request Management

Applications for the resource allocation, update and delete are managed as request. The administrator can check and approve the request before its execution after being applied for by the IaaS user / tenant.

In addition, request that was applied for in the past are saved as a history for which confirmation can be made later. For details, see "22.1 Request management (administrator) (page 104)".

1.1.8 Hybrid Cloud Management

Servers on a public cloud can be imported and managed centrally along with the resources on a private cloud.

It can cooperate with the following public clouds.

- NEC Cloud IaaS
- Amazon Elastic Compute Cloud

For details about public cloud support functions, see "Table 1-1 Server Management Function Correspondence Table (page 4)" below.

Table 1-1 Server Management Function Correspondence Table

<table>
<thead>
<tr>
<th>Function</th>
<th>Private</th>
<th>NEC Cloud IaaS</th>
<th>Amazon Elastic Compute Cloud</th>
</tr>
</thead>
<tbody>
<tr>
<td>Server creation</td>
<td>○</td>
<td>- *1</td>
<td>○</td>
</tr>
<tr>
<td>Server change</td>
<td>○</td>
<td>- *1</td>
<td>- *2</td>
</tr>
<tr>
<td>Server deletion</td>
<td>○</td>
<td>- *1</td>
<td>○</td>
</tr>
<tr>
<td>Server synchronization (Import)</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Server power control operations</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Server list display</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Server details display</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Resource pool acquisition</td>
<td>○</td>
<td>-</td>
<td>○</td>
</tr>
<tr>
<td>Operation work history display</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Resource status display</td>
<td>○</td>
<td>-</td>
<td>○</td>
</tr>
<tr>
<td>Topology display</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

*1 Servers on NEC Cloud IaaS must be created, changed, or deleted directly on NEC Cloud IaaS and synchronized with vDCA SE Portal to reflect the changes.

*2 Changes on Amazon Elastic Compute Cloud must be performed directly on the AWS management console and synchronized with vDCA SE Portal to reflect the changes.
1.1.9 Multi data center linkage function

The multi data center linkage function allows multiple data centers to be managed in an integrated manner by using the single sign-on linkage function.

The use of this function enables seamless movement among multiple portals.

For details of the multi data center linkage function, see "Chapter 6 Setting of Multi Data Center Linkage (page 26)".

1.1.10 Server general operation

You can give an instruction to execute a desired operation for a created server. For details about the setting procedure, see "Chapter 14 Setting the General Operation (page 61)". For details about the execution procedure, see "30.4.8 Executing the general operation for a server (page 240)".
Part 2.

Using the Portal

The flow for operating vDCA SE Portal is described below.
Chapter 2  
Operational Overview

Following describes the vDCA SE Portal operation flow.

2.1 Notes and restrictions on operating vDCA SE Portal

Cautions

For cloud operation using vDCA SE Portal, perform it via vDCA SE Portal in principle. Do not perform the following operations by using a function other than vDCA SE Portal:

- Deleting or renaming an operation group created by using vDCA SE Portal
- Changing or deleting a VM created by using vDCA SE Portal

To perform an operation by using a function other than vDCA SE Portal, make the settings such that the portal cannot be operated during a change, such as when using the maintenance function of vDCA SE Portal. Also, synchronize information with vDCA SE Portal as necessary. The following provides several examples:

- Changing a logical network or template that is being used by vDCA SE Portal
- Changing a resource pool or disk that is being used by vDCA SE Portal

Restrictions

- If the buttons in a dialog box are clicked several times, the dialog box may fail to register an operation. In this case, reload the window by using the browser function.
- If an excessively long character string is specified for an input item, the display may be corrupted. In this case, shorten the specified character string.
- If "[" and "]" are specified in the search conditions, the search operation cannot be performed normally. Therefore, do not specify these symbols.
- There is no function for checking whether entered regular expressions are grammatically correct. Users are therefore responsible for entering correct regular expressions.
- Do not use the following symbols or add a single-byte space to the end in a work group name. Also, do not use them when creating a group by directly operating SigmaSystemCenter.
  
  # \ / : ; * ? " < > |

- When the configuration of a VM with an extended disk is changed directly on the SSC, the change can be imported with the resource information update command, but a configuration change cannot be performed for the VM on the portal. If the configuration must be changed, delete the VM with the resource information update command and then import it again with the resource information update command.

2.2 Overall flow when using the resource management function

The following describes the operation flow when using the resource management function on vDCA SE Portal.

[Users who use vDCA SE Portal]
For details about user privileges, see "Chapter 17   User Authority (page 84)".

The overall flow is described below. For details about each procedure, see "Chapter 3   Operation Flow (page 10)".

- (1) Configuration prior to operating vDCA SE Portal
  Before operating vDCA SE Portal, the system administrator specifies the operation configuration of vDCA SE Portal according to the intended use.

- (2) Tenant management cycle
  To allow a tenant to use vDCA SE Portal, the system administrator registers that tenant. To stop a tenant using vDCA SE Portal, the system administrator cancels that tenant.

- (3) Tasks that must be performed immediately after a tenant is registered
  Perform the initial setup of the tenant organization for the registered tenant.

- (4) Service life cycle
The registered tenant can request and register a service catalog provided by the system administrator. The tenant can also update and cancel the registered catalog.

• (5) Operation

The tenant can use a service by registering its service catalog.

• (6) Operation

The system administrator checks the contract information of the service catalog, manages notice information, and performs platform maintenance during operation.
Chapter 3

Operation Flow

This chapter describes how to register the information on a subscribed tenant with vDCA SE Portal. The following operators can set the above items:

<table>
<thead>
<tr>
<th>Table 3-1 Operation flow</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Configuring operation setting for vDCA SE Portal</td>
</tr>
<tr>
<td>Registering a tenant</td>
</tr>
<tr>
<td>Setting a tenant management organization</td>
</tr>
<tr>
<td>Subscribing to a new service catalog</td>
</tr>
<tr>
<td>Updating a service catalog</td>
</tr>
<tr>
<td>Canceling a service catalog</td>
</tr>
<tr>
<td>Confirming a service catalog</td>
</tr>
<tr>
<td>Operating a service</td>
</tr>
<tr>
<td>Performing maintenance</td>
</tr>
<tr>
<td>Canceling a tenant</td>
</tr>
</tbody>
</table>

3.1 Setting up the portal operation

Before starting the operation of vDCA SE Portal, the service provider organization needs to set up vDCA SE Portal.

- Setting of single sign-on linkage
- Setting of multi data center linkage
- Settings immediately after login
- Setting of the SigmaSystemCenter
- Operation setting of a redundant or cluster configuration
- Setting of a server service catalog
- Setting of a network service catalog
- Operation Setting for Hybrid Cloud
- Setting of widget options
- Setting of easy site linkage
- Setting of general operation
- Setting of extension processing
- Setting of roles

For details about the setting procedure and method, see "Part 3. Before Starting Operation (page 19)".
3.2 Registering a tenant

- Tenant information
  - Tenant name
  - Tenant ID

- Tenant manager user information
  - User ID
  - Name
  - E-mail address
  - Login password

- Resource pool information (User contract information)
  - Logical network (tenant network) that can be used by the tenant
  - Dedicated resource amount

The flow of the tenant registration task is as follows.
For information about how to register a tenant, see "23.1.2 Adding a tenant (page 119)".

For information about how to register a tenant manager, see "23.2.2 Registering a user (administrator) (page 123)".

To assign tenant networks and resource pools to tenants, use SigmaSystemCenter. For details, see SigmaSystemCenter Configuration Guide.

Once the above registration task is complete, the tenant manager is notified of the vDCA SE Portal login URL, user ID, and login password.

The tenant user becomes able to use vDCA SE Portal.

**Note**
- An address pool needs to be set in advance for a logical network used by vDCA SE Portal. (If an address pool is not set, the logical network is not displayed in the connection LAN options when a server is created.)
- A created port group needs to be set in advance for a logical network used by vDCA SE Portal. (If a port group is not set, the logical network is not displayed in the connection LAN options when a server is created.)
- If a sub-resource pool is extracted for exclusive use and assigned to a tenant, the root resource pool of the
extracted resource pool cannot be used from vDCA SE Portal. When sharing the root resource pool, do not
extract a sub-resource pool for exclusive use.

3.3 Configuring a tenant management organization

After a tenant starts to be used, to use tenant services it is necessary to register users and configure
the workflow and email notification settings.

- Tenant user registration information
  - User role type
  - Request approval authority
  - User ID
  - Name
  - Mail address
  - Login password

- Workflow configuration
  - Use of the workflow
  - Order of authorizers
  - Email notification settings

For details about how to register a tenant user, refer to "23.2.2 Registering a user (administrator)
(page 123)".

For details about how to configure the workflow, refer to "22.2.1 Workflow approval patterns in the
workflow settings (page 114)".

For details about how to configure the email notification, refer to "26.1 Email notification (page
157)".

3.4 Subscribing to a new service catalog

A tenant user can order a service provided by a service provider from a service catalog.

The tenant user can use the service ordered from the service catalog.

The application flow is as follows:
For details about how to apply for service catalogs, refer to "28.1.2 Creating a request (page 180)".

### 3.5 Updating a service catalog

If a tenant user wants to change the content of a subscribed service, the tenant user needs to select the target service catalog and apply for its change.

The service is changed as the service change request is approved according to the workflow settings and provisioning is executed.

The update application flow is as follows.
3.6 Canceling a service catalog

If a tenant user wants to cancel a subscribed service, the tenant user needs to select the target service catalog and apply for its deletion.

The service is canceled as the service deletion request is approved according to the workflow settings and provisioning is executed.

The deletion application flow is as follows.
For the application method, see "28.1.2 Creating a request (page 180)".

3.7 Confirming a service catalog

After a service catalog has been applied for and the service is being used, you can check the contents of the service catalog.

For details about how to check a subscribed service catalog, refer to "28.1.1 Request list (page 179)".

3.8 Operating a service

After a service catalog has been applied for, the service can be used.

- Managing servers: Refer to "30.4 Server Management(User) (page 230)".
- Displaying the resource usage: Refer to "Chapter 30 Resource management (page 222)".
- Displaying the network topology: Refer to "30.3 Displaying a Topology (page 228)".
- Managing notice information: Refer to "Chapter 31 Notice management (user) (page 250)".
- Checking the request history (can only be performed by the system administrator): Refer to "35.2 Request history output command (page 268)".
3.9 Maintenance

In such cases as when maintenance is performed for SigmaSystemCenter while a tenant is used, a service provider can disable the operation of vDCA SE Portal by providing the tenant with the maintenance screen.

- Maintenance management: See "25.1 Maintenance Management (page 146)".
- Backup and restoration: See "Chapter 32 Backup and Restore (page 255)".

![Figure 3-5 How maintenance is used](image)

3.10 Canceling a tenant

The flow for a tenant to cancel a service contract is as follows.

![Figure 3-6 Canceling a tenant](image)

For information about how to disable a user, see "23.2.6 Deleting User (page 129)".
For information about how to operate a server, see "30.4.6 Performing a power control operation (page 239)".
To delete the resources of a tenant, the system administrator needs to cancel the service catalog by substituting for the tenant. For information about how to perform an operation by substituting for a tenant, see "20.4 Substituting for a tenant (system administrator only) (page 92)".

Before deleting a tenant, delete all the resources and users of the tenant. For information about how to delete a tenant, see "23.1.5 Deleting a tenant (page 122)".
Part 3.

Before Starting Operation

This section describes the settings that the system administrator must configure before starting operation of vDCA SE Portal.
Chapter 4  
Operation Configuration for a Redundant or Cluster Configuration

This chapter provides notes on the operation configuration in a redundant or cluster environment of vDCA SE Portal.

4.1 Managing the configuration files

When vDCA SE Portal is used in a redundant or cluster configuration, the following configuration files are managed on both the active and standby servers. Therefore, when changing the content of a configuration file, it is necessary to change it for both the active and standby servers. Some files can be managed by placing them in the cluster shared folder.

In the following description, the installation path is described as C:\Program Files (x86)\NEC\vDCA. Set up each file by changing the path to an appropriate path according to the setting upon installation.

<table>
<thead>
<tr>
<th>Configuration file</th>
<th>Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disk tag configuration file</td>
<td>C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\diskTags.json</td>
</tr>
<tr>
<td>Time zone configuration file</td>
<td>C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\timezones.json</td>
</tr>
<tr>
<td>User-defined CSS file</td>
<td>C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\userdefined.css</td>
</tr>
<tr>
<td>External link configuration file for customization (Optional) *See Appendix.</td>
<td>C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\extlinks.json</td>
</tr>
<tr>
<td>Icons for customization (Optional) *See Appendix.</td>
<td>C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\webapps\images***</td>
</tr>
<tr>
<td>Widget option file</td>
<td>C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\widgets.properties</td>
</tr>
<tr>
<td>Default widget configuration file</td>
<td>C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\default_widget.properties</td>
</tr>
<tr>
<td>Linkage region configuration file</td>
<td>C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\region.properties</td>
</tr>
</tbody>
</table>

4.2 Setting a Cluster Shared Disk

In the case of a redundant or cluster configuration, the disk that you have set in "Setting a shared disk and mirror disk" of the SigmaSystemCenter Cluster Construction needs to be added to the configuration file.

Open the configuration file (C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\webframework.properties). Add the disk as shown below.

```
product.cloudportal.file.save.path=<Path of a shared disk or mirror disk>
```

(Setting example)
The folder you set here is used for the following:

- Attached file registered by notice management (See "25.2.2 Registering a notice (page 152)".)

**Note**

Escape ":" and "\" by adding ":\".
Chapter 5
Setting of Single Sign-on Linkage

This chapter describes how to implement single sign-on linkage for vDCA SE Portal. These settings are not necessary when you do not use the single sign-on function.

5.1 About the single sign-on function

vDCA SE Portal supports SP-Initiated SSO Redirect/POST Bindings of SAML (Security Assertion Markup Language) V2.0 as the single sign-on authentication method.

Linking vDCA SE Portal as a SP (Service Provider) with an IdP (Identity Provider, hereinafter the Authentication server) that supports SAML V2.0 enables the use of single sign-on.

This manual describes how to associate the Authentication server and vDCA SE Portal.

On the assumption that the Authentication server is already installed, this manual describes only the settings related to linkage with vDCA SE Portal. For information about how to install and set up the Authentication server, see the reference of the Authentication server that you use.

5.2 Preparation

Before starting single sign-on linkage, you need to take the following preparatory steps.

1. To implement single sign-on requires that a user having the same ID be registered in advance both in the Authentication server and vDCA SE Portal.

2. If the Authentication server and vDCA SE Portal are set up on different servers, the time settings of both servers need to match.

   This is because the time authentication is performed by Authentication server is checked by vDCA SE Portal. If there is an excessively wide time gap, an error occurs.

   Take an appropriate action to ensure that the time settings of the two servers match, such as connecting them to an NTP server.

Note

For single sign-on authentication, the password set in the Authentication server is used. The password specified for creating a user in vDCA SE Portal is ignored. The password of the user to be registered does not need to be the same for the Authentication server and vDCA SE Portal.

5.3 Collecting parameters

To implement single sign-on linkage for vDCA SE Portal requires that the following parameters be examined and collected.

- URL where vDCA SE Portal runs
- Path of the meta data file downloaded from Authentication server
- Path of the key store file used for encrypted communication
- Password of the above key store file
- Default alias of the key store file
- Alias of the key pair of the private key in the key store file
- Password of the key pair of the private key in the key store file
The collection methods for these parameters are sequentially described below.

**URL where vDCA SE Portal runs**
Address and content name of the server on which vDCA SE Portal runs
Example: http://vdcaseportal.nec.co.jp:12080/portal

**Path of the meta data file downloaded from Authentication server**
Acquire the meta data file of the Authentication server exported when setting the Authentication server, and place it in an accessible location in the server on which vDCA SE Portal is running.
Take a note of its path.
Example: C:\tmp\saml-idp-metadata.xml

**Path of the key store file used for encrypted communication**
Acquire the key store file of the signature key used when setting the Authentication server, and place it in an accessible location in the server on which vDCA SE Portal is running.
Take a note of its path.
Example: C:\tmp\samlkeystore.jks

**Password and default alias of the key store file, and alias and password of the key pair of the private key**
Check with the person who created the key store file.

### 5.4 Setting the acquired information

Set the acquired information in webframework.properties. Do it as follows.

<table>
<thead>
<tr>
<th>Parameter name in webframework.properties</th>
<th>Details of the setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>sso.sp.baseurl</td>
<td>URL where vDCA SE Portal runs</td>
</tr>
<tr>
<td>sso.idp.metadata.filepath</td>
<td>Path of the meta data file downloaded from Authentication server</td>
</tr>
<tr>
<td>sso.idp.keystorefile.path</td>
<td>Path of the key store file used for encrypted communication</td>
</tr>
<tr>
<td>sso.idp.keystorefile.password</td>
<td>Password of the above key store file</td>
</tr>
<tr>
<td>sso.idp.keystorefile.default.alias</td>
<td>Default alias of the key store file</td>
</tr>
<tr>
<td>sso.idp.keystorefile.keypair.alias</td>
<td>Alias of the key pair of the private key in the key store file</td>
</tr>
<tr>
<td>sso.idp.keystorefile.keypair.password</td>
<td>Password of the key pair of the private key in the key store file</td>
</tr>
</tbody>
</table>

After completing the above settings, specify the authentication mechanism. The parameter is as follows.

<table>
<thead>
<tr>
<th>Parameter name in webframework.properties</th>
<th>Setting value</th>
</tr>
</thead>
<tbody>
<tr>
<td>portal.login.authentication.mechanism</td>
<td>sso</td>
</tr>
</tbody>
</table>

After specifying the above, save the file with UTF8 selected as its character code and then restart the application server (Tomcat). From the left-side panel of the server manager, select the local server, from Services, right-click [Apache Tomcat 8.5 ServiceGovernor], and select [Restart Service]. Make sure that Authentication server is running.
5.5 Setting of the Authentication server

The procedure for registering vDCA SE Portal in the Authentication server is described below.

**Note**

On the assumption that the Authentication server is already installed, this manual describes only the settings related to linkage with vDCA SE Portal. For information about how to install and set up the Authentication server, see the reference of the Authentication server that you use.

1. When vDCA SE Portal for which single sign-on setup is completed is running, access the following URL and download the SAML metadata of vDCA SE Portal.
   - http://host name of the global management server: port(12080 is set by default)/portal//saml/metadata
   - https://host name of the global management server: port(12443 is set by default)/portal//saml/metadata

2. Import the downloaded SAML metadata in the Authentication server in which single sign-on is to be implemented.

3. In Name ID Format, specify "username".

This concludes the setup of Authentication server.

5.6 Testing the single sign-on linkage operation

The procedure for testing the single sign-on linkage operation is described below.

**Note**

To implement single sign-on requires that a user having the same ID be registered in advance both in the Authentication server and vDCA SE Portal.

For single sign-on authentication, the password set in the Authentication server is used. The password specified for creating a user in vDCA SE Portal is ignored. The password of the user to be registered does not need to be the same for Authentication server and vDCA SE Portal.

1. When vDCA SE Portal for which single sign-on setup is completed is running, access the following URL.
   - http://host name of the global management server: port(12080 is set by default)/portal/
   - https://host name of the global management server: port(12443 is set by default)/portal/

2. The authentication screen of the Authentication server for which linkage has been set up is displayed.

3. Enter the user name and password registered in the Authentication server. If the authentication succeeds, vDCA SE Portal is displayed.

This completes the test of the single sign-on linkage operation.

5.7 Using the unique authentication function of vDCA SE Portal during single sign-on linkage

The procedure for using the unique authentication function of vDCA SE Portal (hereinafter form authentication) in an environment where vDCA SE Portal supports single sign-on linkage is described below.
1. When vDCA SE Portal for which single sign-on setup is completed is running, access the following URL.
   http://hostname of the global management server: port(12080 is set by default)/portal//login
   https://hostname of the global management server: port(12443 is set by default)/portal//login
2. The vDCA SE Portal login screen is displayed.
3. Log in by using the password specified when registering the user to vDCA SE Portal.

**Note**

Even during single sign-on linkage, the password specified for creating a user for vDCA SE Portal is used when form authentication is used. The password set for Authentication server is ignored. The password of the user to be registered does not need to be the same for Authentication server and vDCA SE Portal.

---

### 5.8 Disabling the unique authentication function of vDCA SE Portal during single sign-on linkage

The procedure for disabling the unique authentication function of vDCA SE Portal (hereinafter form authentication) in an environment where vDCA SE Portal supports single sign-on linkage is described below.

#### 5.8.1 Editing the user-defined CSS file

Open the user-defined CSS file (C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\userdefined.css). If the file does not exist, create the file.

Add the following to the user-defined CSS file, and save it in UTF8.

```css
#login_form {
    display:none;
}
```

#### 5.8.2 Editing the configuration file of the application server

Open the configuration file of the application server (C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\web.xml).

Add the following to the `<web-app>` element, and save it in UTF8.

```xml
<security-constraint>
    <web-resource-collection>
        <web-resource-name>portal local login</web-resource-name>
        <url-pattern>/resources/j_spring_security_check</url-pattern>
    </web-resource-collection>
    <auth-constraint>
    </auth-constraint>
</security-constraint>
```

Restart the application server (Tomcat). From the left-side panel of the server manager, select the local server, right-click [Apache Tomcat 8.5 ServiceGovernor] from services, and select [Restart Service].
Chapter 6
Setting of Multi Data Center Linkage

This chapter describes the settings related to multi data center linkage. These settings are not necessary when you do not use multiple data centers.

6.1 About multi data center linkage

The multi data center linkage function allows easy movement between vDCA SE Portals installed in multiple regions by using the single sign-on linkage function.

The use of the single sign-on linkage function enables seamless movement between vDCA SE Portals without the need to display the login screen.

6.2 Editing the linkage region configuration file

Create C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\region.properties.

region.properties is a property file and must be saved in UTF8.

The format of the linkage region configuration file is as follows.

<table>
<thead>
<tr>
<th>Property key</th>
<th>Required/Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Region-key].url</td>
<td>Required</td>
<td>Set the URL of the vDCA SE Portal in the region to be linked. The URL must be encoded.</td>
</tr>
<tr>
<td>[Region-key].name</td>
<td>Required</td>
<td>Set the display name of the region to be linked. If the language that matches the user's language setting is not found, this character string is used.</td>
</tr>
<tr>
<td>[Region-key].name. [Locale]</td>
<td>Optional</td>
<td>Set the display name of the region to be linked. In [Locale], the language locale is displayed. If the language that matches the user's setting is not found, the value of [Region-key].name is used.</td>
</tr>
</tbody>
</table>

In [Region-key], any desired character string can be specified. In the linkage region options, the linkage region names are displayed in the ascending order of [Region-key].

After making the settings, restart the application server (Tomcat).

Note

"[Region-key].url" and "[Region-key].name" whose [Region-key] match cannot be found, the linkage region settings are considered invalid.

If the [Region-key] is defined multiple times, either definition is ignored.
Chapter 7

Initial Setting

This section describes the setting after first login to vDCA SE Portal.

Set the items below:

1. Creating a System administrator user
2. Disabling the built-in user

The installation path is referred to as "C:\Program Files(x86)\NEC\vDCA\GM" in this document as described below: If performing installation in the directory other than that described above, replace terms in the text as appropriate.

Escape \(\backslash\) with \.

7.1 Creating a system administrator user

Log in as admin and create a system administrator user. For details about the creation method, refer to "23.2.2 Registering a user (administrator) (page 123)".

7.2 Disabling the built-in user

Log in as the user created in "7.1 Creating a system administrator user (page 27)" and disable "admin". For details about how to disable "admin", refer to "23.2.4 Changing the user information (page 127)".
Chapter 8  Setting of the SigmaSystemCenter

This chapter describes the settings related to SigmaSystemCenter.

8.1 Editing the configuration file

Open C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\webframework.properties.

1. Modify the following as necessary.

Setting example

```
# - createhost
product.cloudportal.provider.ssc.request.createhost.installmanually=false
product.cloudportal.provider.ssc.request.createhost.machineprofile.cpu
.share=normal
product.cloudportal.provider.ssc.request.createhost.machineprofile.cpu
.reservation=0
product.cloudportal.provider.ssc.request.createhost.machineprofile.cpu
.limit=0
product.cloudportal.provider.ssc.request.createhost.machineprofile.memory
.share=normal
product.cloudportal.provider.ssc.request.createhost.machineprofile.memory
.reservation=0
product.cloudportal.provider.ssc.request.createhost.machineprofile.memory
.limit=0
product.cloudportal.provider.ssc.request.createhost.machineprofile.disks.disktype=thin
product.cloudportal.provider.ssc.request.createhost.hostprofile.account=Administrator
product.cloudportal.provider.ssc.request.createhost.hostprofile.domain
.type=workgroup
product.cloudportal.provider.ssc.request.createhost.hostprofile.netdomain=workgroup
product.cloudportal.provider.ssc.request.createhost.hostprofile.domain
.account=Administrator
product.cloudportal.provider.ssc.request.createhost.hostprofile.license
emode=PerServer
product.cloudportal.provider.ssc.request.createhost.hostprofile.maxconnection=5
product.cloudportal.provider.ssc.request.createhost.hostprofile.domain
.suffix=example.local
# - reconfigurehost
product.cloudportal.provider.ssc.request.reconfigurehost.machineprofile
.cpu.share=normal
product.cloudportal.provider.ssc.request.reconfigurehost.machineprofile
.cpu.reservation=0
product.cloudportal.provider.ssc.request.reconfigurehost.machineprofile
.cpu.limit=0
product.cloudportal.provider.ssc.request.reconfigurehost.machineprofile
.memory.share=normal
product.cloudportal.provider.ssc.request.reconfigurehost.machineprofile
.memory.reservation=0
product.cloudportal.provider.ssc.request.reconfigurehost.machineprofile
.memory.limit=0
```
<table>
<thead>
<tr>
<th>Setting item</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>createhost</td>
<td>product.cloudportal.provider.ssc.request.createhost.installmanually Set true when installing the OS manually.</td>
</tr>
<tr>
<td>product.cloudportal.provider.ssc.request.createhost.machineprofile.cpu.share</td>
<td>Specify the CPU share. lowest: Lowest low: Low normal: Normal high: High highest: Highest</td>
</tr>
<tr>
<td>product.cloudportal.provider.ssc.request.createhost.machineprofile.cpu.reservation</td>
<td>Specify the CPU reservation. Valid value: 0 to 99999</td>
</tr>
<tr>
<td>product.cloudportal.provider.ssc.request.createhost.machineprofile.cpu.limit</td>
<td>Specify the CPU limit. Valid value: 0 to 99999 (0 means &quot;unlimited&quot;).</td>
</tr>
<tr>
<td>product.cloudportal.provider.ssc.request.createhost.machineprofile.memory.share</td>
<td>Specify the memory share. low: Low normal: Normal high: High</td>
</tr>
<tr>
<td>product.cloudportal.provider.ssc.request.createhost.machineprofile.memory.reservation</td>
<td>Specify the memory reservation. Valid value: 0 to 99999</td>
</tr>
<tr>
<td>product.cloudportal.provider.ssc.request.createhost.machineprofile.memory.limit</td>
<td>Specify the memory limit. Valid value: 0 to 99999 (0 means &quot;unlimited&quot;).</td>
</tr>
<tr>
<td>product.cloudportal.provider.ssc.request.createhost.machineprofile.disks.disktype</td>
<td>Specify the disk type. thin: Thin disk thick: Thick disk</td>
</tr>
<tr>
<td>product.cloudportal.provider.ssc.request.createhost.hostprofile.account</td>
<td>Specify an administrator account.</td>
</tr>
<tr>
<td>product.cloudportal.provider.ssc.request.createhost.hostprofile.domain</td>
<td>* Specify this item for WindowsClient or WindowsServer. Specify whether the setting is a workgroup or a domain. workgroup: Workgroup domain: Domain</td>
</tr>
<tr>
<td>product.cloudportal.provider.ssc.request.createhost.hostprofile.domainname</td>
<td>* Specify this item for WindowsClient or WindowsServer. Specify a work group name or domain name.</td>
</tr>
<tr>
<td>product.cloudportal.provider.ssc.request.createhost.hostprofile.domanaccount</td>
<td>* Specify this item for WindowsClient or WindowsServer. Specify the domain account.</td>
</tr>
</tbody>
</table>
### Setting

<table>
<thead>
<tr>
<th>Setting item</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>product.cloudportal.provider.ssc.request.createhost.hostprofile.license</td>
<td>* Specify this item for WindowsServer.</td>
</tr>
<tr>
<td>mode</td>
<td>Specify the license mode.</td>
</tr>
<tr>
<td></td>
<td>PerServer: Number of servers connected simultaneously</td>
</tr>
<tr>
<td></td>
<td>PerSeat: Connected clients</td>
</tr>
<tr>
<td>product.cloudportal.provider.ssc.request.createhost.hostprofile.maxconnection</td>
<td>* Specify this item for WindowsServer.</td>
</tr>
<tr>
<td></td>
<td>Specify the number of servers to be connected simultaneously.</td>
</tr>
<tr>
<td></td>
<td>Valid value: 1-99999</td>
</tr>
<tr>
<td></td>
<td>Only when LicenseMode is PerServer</td>
</tr>
<tr>
<td>product.cloudportal.provider.ssc.request.createhost.hostprofile.domainsuffix</td>
<td>* Specify this item for Linux.</td>
</tr>
<tr>
<td></td>
<td>Specify the domain suffix.</td>
</tr>
<tr>
<td>reconfigurehost</td>
<td></td>
</tr>
<tr>
<td>product.cloudportal.provider.ssc.request.reconfigurehost.machineprofile</td>
<td>Specify the CPU share.</td>
</tr>
<tr>
<td>cpu.share</td>
<td>lowest: Lowest</td>
</tr>
<tr>
<td></td>
<td>low: Low</td>
</tr>
<tr>
<td></td>
<td>normal: Normal</td>
</tr>
<tr>
<td></td>
<td>high: High</td>
</tr>
<tr>
<td></td>
<td>highest: Highest</td>
</tr>
<tr>
<td>product.cloudportal.provider.ssc.request.reconfigurehost.machineprofile</td>
<td>Specify the CPU reservation.</td>
</tr>
<tr>
<td>cpu.reservation</td>
<td>Valid value: 0 to 99999</td>
</tr>
<tr>
<td>product.cloudportal.provider.ssc.request.reconfigurehost.machineprofile</td>
<td>Specify the CPU limit.</td>
</tr>
<tr>
<td>cpu.limit</td>
<td>Valid value: 0 to 99999 (0 means &quot;unlimited&quot;.)</td>
</tr>
<tr>
<td>product.cloudportal.provider.ssc.request.reconfigurehost.machineprofile</td>
<td>Specify the memory share.</td>
</tr>
<tr>
<td>memory.share</td>
<td>low: Low</td>
</tr>
<tr>
<td></td>
<td>normal: Normal</td>
</tr>
<tr>
<td></td>
<td>high: High</td>
</tr>
<tr>
<td>product.cloudportal.provider.ssc.request.reconfigurehost.machineprofile</td>
<td>Specify the memory reservation.</td>
</tr>
<tr>
<td>memory.reservation</td>
<td>Valid value: 0 to 99999</td>
</tr>
<tr>
<td>product.cloudportal.provider.ssc.request.reconfigurehost.machineprofile</td>
<td>Specify the memory limit.</td>
</tr>
<tr>
<td>memory.limit</td>
<td>Valid value: 0 to 99999 (0 means &quot;unlimited&quot;.)</td>
</tr>
<tr>
<td>product.cloudportal.provider.ssc.request.reconfigurehost.machineprofile</td>
<td>Specify the disk type.</td>
</tr>
<tr>
<td>disks.disktype</td>
<td>thin: Thin disk</td>
</tr>
<tr>
<td></td>
<td>thick: Thick disk</td>
</tr>
<tr>
<td>deletehost</td>
<td>Specify whether to delete the virtual disk of the VM.</td>
</tr>
</tbody>
</table>

### Note

- Do not include a space at the end of any line in the configuration file (C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\webframework.properties).
After specifying the above, save the file with UTF8 selected as its character code and then restart the application server (Tomcat). From the left-side panel of the server manager, select the local server, from services, right-click [Apache Tomcat 8.5 ServiceGovernor], and select [Restart Service].

8.2 Setting a VM console proxy

To use the VM console display function, you need to make the settings for the connection from SigmaSystemCenter to ESXi where the browser and virtual machine reside. Follow the procedure below to make the settings.

1. Install the virtual machine console proxy.
   Install the virtual machine console proxy as instructed in the SigmaSystemCenter Installation Guide.

2. Set the proxy URL.
   Set the proxy URL of the VMware VM console as instructed in the SigmaSystemCenter Configuration Guide.

Tip
For information about the VM console function, see "30.4.3.6 [Console] (page 237)".
Chapter 9
Configuring the Server Service Catalog Settings

This chapter describes how to configure the catalog operation settings required for server usage registration (request).

The server service catalog settings differ between private clouds and public clouds.

For details about the private cloud server service catalog, see "9.1 Configuring a server service catalog for a private cloud (page 32)" and make necessary settings.

For details about the Amazon EC2 server service catalog, see "9.2 Configuring a server service catalog for Amazon EC2 (page 43)" and make necessary settings.

9.1 Configuring a server service catalog for a private cloud

This section describes how to configure a server service catalog for a private cloud.

vDCA SE Portal allows tenant users to use the virtual machine assignment service by selecting a catalog as well as the spec and disk tag set for the catalog. This section describes how to set a VM template, spec, and disk tag for the catalog to be provided to tenants as a service.

9.1.1 Setting catalog display names and specs

The display names and specs of VM templates that you set here are displayed as options in the VM request creation screen.

Open C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\webframework.properties.

1. Specify the display name of a VM template. Specify as many names as the number of VM templates.

```
product.cloudportal.template.display.Template name=Display name
```

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Template name</td>
<td>Name of the VM template registered in SigmaSystemCenter</td>
</tr>
<tr>
<td>Display name</td>
<td>Display name of the VM template in the vDCA SE Portal screen</td>
</tr>
</tbody>
</table>

Example:

```
```

* A slash "/" is converted to a line feed code.

2. Specify the option of the VM spec to be created from the VM template. Use one of the options specified in the spec definition described later.

```
product.cloudportal.template.spec.Template name=Spec name,Spec name,..
```

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Template name</td>
<td>Name of the VM template registered in SigmaSystemCenter</td>
</tr>
<tr>
<td>Item</td>
<td>Description</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>Spec name</td>
<td>List as many spec names as can be selected. Use a comma (,) as a delimiter.</td>
</tr>
</tbody>
</table>

Example:

```
product.cloudportal.template.spec.Template-WindowsServer2012R2STD=specName001,specName002,specName003,specName004
```

3. Define the spec of the VM to be created. You can create as many specs as you want in a wide variety.

```
product.cloudportal.template.spec.Spec name=number of CPU,Memory size(GB),System disk size(GB)
```

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spec name</td>
<td>Name of the spec that can be selected</td>
</tr>
<tr>
<td>number of CPU</td>
<td>Number of CPUs (number of sockets</td>
</tr>
<tr>
<td>Memory size(GB)</td>
<td>Memory size (GB)</td>
</tr>
<tr>
<td>System disk size(GB)</td>
<td>System disk size (GB)</td>
</tr>
</tbody>
</table>

Example:

```
product.cloudportal.template.spec.detail.specName001=1,1,100
product.cloudportal.template.spec.detail.specName002=1,2,100
product.cloudportal.template.spec.detail.specName003=2,3,100
product.cloudportal.template.spec.detail.specName004=2,4,100
```

4. Specify the spec for changing the configuration of the server imported by the synchronization function. Use one of the options specified in the spec definition.

Since the imported server does not have template information, the spec option defined in the following is displayed when the configuration is changed, not depending on any template.

```
product.cloudportal.template.spec.default.parameter=Spec name,Spec name,...
```

The above settings are treated as the default spec common to all tenants of vDCA SE Portal. To specify a tenant-specific spec option, instead of these default values, define the settings as follows.

```
product.cloudportal.template.spec.default.parameter.Tenant name=Spec name,Spec name,...
```

Example:

```
product.cloudportal.template.spec.default.parameter=specName001,specName002
product.cloudportal.template.spec.default.TenantA=specName003,specName004
```

**Tip**

When you do not change the spec of the synchronized server, leave the above values blank.
After specifying the above, save the file with UTF8 selected as its character code. The changes are applied without restarting the application server (Tomcat).

**Tip**

Additional information can be set for each template. For information about how to display additional information, see "A.1 Displaying additional information in the template (page 276)".

**Note**

- Check that the OS type and OS name are properly set in SigmaSystemCenter. (System resource > Software > Template > "Template name") If these settings are blank, vDCA SE Portal cannot recognize the template information properly.

- Do not specify a system disk size that is smaller than that set in the VM template on SigmaSystemCenter.

- Since the system disk size cannot be reduced, it is recommended that all the disk sizes that are set in a single VM template be identical.

- After the operation starts, do not change the spec definition that is set in the VM template. You can add a new definition.

- If you need to make changes to the VM template after the start of the operation (for such a purpose as to add a new OS), change the settings mentioned above and then reload the screen.

### 9.1.2 Specifying whether to make a catalog visible or not

You can specify whether the catalog you set here is to be made visible or not for each VM template.

Open C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\webframework.properties.

1. Specify whether to make a VM template visible or not. Specify as many names as the number of VM templates.

```properties
product.cloudportal.template.visible.Template name=Tenant ID
```

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Template name</td>
<td>Name of the VM template registered in SigmaSystemCenter</td>
</tr>
<tr>
<td>Template ID</td>
<td>Tenant ID of the VM template in the vDCA SE Portal screen</td>
</tr>
</tbody>
</table>

- Example:

```properties
product.cloudportal.template.visible.Template-VM template name=TenantA
```

In the "webframework.properties" configuration file, set "product.cloudportal.template.visible.VM template name" in the format shown below.

```properties
product.cloudportal.template.visible.Template name={{+}|-}Tenant D1,{{+}|-}Tenant ID2,...,{{+}|-}Tenant IDn
```

- "+" makes the template visible to the tenant. Can be omitted.
• "." makes the template invisible to the tenant. Required
• When specifying multiple tenants, delimit each of them by ",". The space after "," is ignored.
• "+", ",", and "," must be one-byte symbols. (Use of two-byte symbols is prohibited.)
• If you set product.cloudportal.template.display.(VM template) and do not set product.cloudportal.template.visible.(VM template name), the template is made visible to all tenants.

Setting examples are given below. Suppose that you have TenantA, TenantB, TenantC, and TenantD.

- Setting example 1

```plaintext
```

In this case, the template is made visible to TenantA and TenantB explicitly.

The template is made invisible to TenantC and TenantD implicitly.

- Setting example 2

```plaintext
product.cloudportal.template.visible.Template-WindowsServer2012R2STD = -TenantA,-TenantB
```

In this case, the template is made invisible to TenantA and TenantB explicitly.

The template is made visible to TenantC and TenantD implicitly.

- Setting example 3

```plaintext
```

In this case, the template is made invisible to TenantA and TenantB explicitly.

The template is made visible to TenantC and TenantD explicitly.

- Setting example 4

```plaintext
```

In this case, the template is made visible to TenantA, TenantB, and TenantC explicitly.

The template is made invisible to TenantD implicitly.

- Setting example 5
In this case, the template is made invisible to TenantA and TenantB explicitly.

The template is made visible to TenantC explicitly.

The template is made visible to TenantD implicitly.
* If there are tenants with the + symbol, tenants with the - symbol, and tenants without any symbol, the template is made visible to tenants that are not specified.

- Setting example 6

In this case, the template is made invisible to TenantA explicitly.

The template is made visible to TenantB and TenantC implicitly.

The template is made visible to TenantD implicitly.
* If there are tenants with the + symbol, tenants with the - symbol, and tenants without any symbol, the template is made visible to tenants that are not specified.

Note
- To specify whether to make a catalog visible or not, be sure to set product.cloudportal.template.display.Template name=Display name.

### 9.1.3 Setting a catalog sort

You can specify a sort order for each VM template for the catalog you set here.

1. Open C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC
   \webframework.properties.
2. Specify the sort order of a VM template. Specify as many orders as the number of VM templates.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Template name</td>
<td>Name of the VM template registered in SigmaSystemCenter</td>
</tr>
<tr>
<td>Sort Key</td>
<td>Catalog sort key&lt;br&gt;Optional&lt;br&gt;* If this item is omitted, the sort is done using the template display&lt;br&gt;name registered in SigmaSystemCenter.&lt;br&gt;Only one-byte symbols and alphanumeric characters can be used.</td>
</tr>
</tbody>
</table>
Tip
The sort is done in the order of alphabetical characters with the sort key setting, alphanumeric characters with the sort key setting, alphabetical characters without the sort key setting, and numeric characters without the sort key setting.
If identical catalogs exist, the sort is done in ascending order of template names. Also, missing values are ignored.

9.1.4 Disk tag settings
When a server is created on a private cloud, a disk tag is used to specify the combination of the disk type for provisioning and the SigmaSystemCenter-specified tag of the datastore in which the server is created. From the disk tags available in the specified catalog, the user selects an appropriate one.
If these parameters are not specified when the server is created, these settings are not necessary. The process is executed automatically using the default parameters shown below.

<table>
<thead>
<tr>
<th>Item</th>
<th>Default parameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display tag list</td>
<td>&quot;none&quot; only</td>
</tr>
<tr>
<td>Disk type</td>
<td>Value specified in &quot;product.cloudportal.provider.ssc.request.createhost.machinetype.disks.disktype&quot; of C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\webframework.properties. At the time of installation, &quot;thin&quot; is specified by default.</td>
</tr>
<tr>
<td>Data store tag</td>
<td>Not specified. All the datastores available to the tenant are applicable.</td>
</tr>
</tbody>
</table>

Caution
When a server is created on AWS, the disk tag function is not used and the items are not displayed in the Server Creation screen.
Also, when a server is created, "thin" is automatically specified as the disk type.

Tip
For information about datastore tags, see SigmaSystemCenter Reference Guide.

To use a disk tag when creating a server, specify the necessary settings by following the procedure described below.

9.1.4.1 Creating a disk tag configuration file
Copy C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\diskTags.json.sample under the same directory, and rename it to "diskTags.json".
This file contains a JSON format template in which tag definitions and examples of the settings related to the display for catalog selection are written. Edit them as appropriate for your operation.
For details of the individual setting items in the file, see "Table 9-2 Disk tag setting item list (page 38)" below.
### Table 9-2  Disk tag setting item list

<table>
<thead>
<tr>
<th>Item name</th>
<th>Input rule</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>tags</td>
<td>–</td>
<td>Array in which the tag information to be displayed in the input screen is set. If you omit the settings of default_tags and catalogs described later, all the tags defined in the array are displayed in all catalogs.</td>
</tr>
<tr>
<td>name</td>
<td>1 to 64 characters</td>
<td>Must be unique in a system. Multibyte characters can be used. Tag name to be displayed as the tag (indicating tag information)</td>
</tr>
<tr>
<td>diskType</td>
<td>Specify one of the following: - thin - thick</td>
<td>Specify a disk type that will be set for the tag.</td>
</tr>
<tr>
<td>datastoreTags</td>
<td>Data store tag that is set for SSC</td>
<td>Specify the datastore tag to be associated with the tag. If you specify multiple datastore tags, the datastores in which all the specified tags are set are selected (AND search).</td>
</tr>
<tr>
<td>default_tags</td>
<td>-</td>
<td>Array in which the common disk tags are set that are to be displayed in all catalogs by default</td>
</tr>
<tr>
<td>tags</td>
<td>1 to 64 characters</td>
<td>Specify the tag name defined in tags[].name. Multibyte characters can be used. Array of disk tags that can be used when selected for all catalogs in the Server Creation screen. If you do not specify any value, the same values shown in &quot;Table 9-1 Default parameters assumed when the disk tag function is not used (page 37)&quot; are used.</td>
</tr>
<tr>
<td>catalogs</td>
<td>-</td>
<td>Array in which individual disk tags are set that individually specify the disk tags to be displayed when a catalog is selected</td>
</tr>
<tr>
<td>name</td>
<td>Name of the VM template registered in SigmaSystemCenter</td>
<td>Template name of the target catalog that individually specifies the disk tags to be displayed</td>
</tr>
<tr>
<td>tags</td>
<td>1 to 64 characters</td>
<td>Specify the tag name defined in tags[].name. Multibyte characters can be used. Array of tags that can be used when the catalog specified in catalogs[].name is selected in the Server Creation screen. If you do not specify any value, the same values shown in &quot;Table 9-1 Default parameters assumed when the disk tag function is not used (page 37)&quot; are used. The target catalog is overwritten with the values specified in default_tags[].tags.</td>
</tr>
</tbody>
</table>
The configuration file has two types of items. One is intended to create disk tags and define parameters. The other defines the rules regarding which catalog should be selected to display the created disk tags.

When the disk tag function is used, disk tags must be created while the setting of the display rules is optional. The rules can be defined in the two ways described below. If you do not define the rules, all created disk tags are displayed in very catalog.

- **Common disk tags**
  Default disk tags that are displayed in all catalogs as common disk tags. If individual disk tags are set for the catalog, the settings are overwritten.

- **Individual disk tags**
  Disk tags that are displayed only in a specified catalog. The settings of the target catalog takes precedence over the settings of the common disk tags.

The order of priority of the disk tag display rules is as shown in "Figure 9-1 Disk tag application flowchart (page 39)" below.

![Figure 9-1 Disk tag application flowchart](image)

The procedure for defining disk tags is described below.

**Note**

To place or rename the diskTags.json file, add the following to C:\Program Files (x86)\NEC\wDCA\MoM\FW\Tomcat\conf\NEC\webframework.properties.

* Escape ":" and "\" by adding "\"."
9.1.4.2 Defining disk tag display

Edit the renamed "diskTags.json" to define the parameters and display rules of disk tags.

Creating disk tags

Define the disk tags to be used when a server is created. The disk tags you set here can be displayed in the disk tag selection box of all catalogs.

In the specification example below, three disk tags (TagA, TagB, and TagC) are defined and, for each of these tags, the disk type to be used at the time of server creation and the tag of the datastore in which the server is created are specified.

[Specification example]

```json
{
   "tags": [
      {
         "name": "TagA",
         "diskType": "thin",
         "datastoreTags": [
            "gold"
         ]
      },
      {
         "name": "TagB",
         "diskType": "thin",
         "datastoreTags": [
            "silver"
         ]
      },
      {
         "name": "TagC",
         "diskType": "thick",
         "datastoreTags": [
            "gold",
            "sla1"
         ]
      }
   ]
}
```

If you apply these settings, these three disk tags are displayed as the disk tag selection options in all the catalogs of vDCA SE Portal.

Defining common disk tags

Of the tags defined as disk tags, those that are displayed in all catalogs are called common disk tags.

In the specification example below, "TagA" and "TagB" among the three tags are specified as common disk tags.
If you apply these settings, only "TagA" and "TagB" are displayed as options in all catalogs while "TagC" is hidden.

**Defining individual disk tags**

Disk tags individually specified for a catalog are called individual disk tags. A catalog for which such individual disk tags are specified displays only those tags regardless of the common disk tag settings.

In the specification example below, "TagB" and "TagC" are specified as individual disk tags for CatalogA in addition to the common disk tag settings.

[Specification example]
If you apply these settings, "TagB" and "TagC" are displayed in CatalogA while "TagA" and "TagB" are displayed in other catalogs.

If you do not specify any value in catalog[].tags and default_tags[].tags, a server is created by using the same values shown in "Table 9-1 Default parameters assumed when the disk tag function is not used (page 37)".

In the specification example below, CatalogA is set to use the default parameters of the configuration file instead of the disk tags, in addition to the common disk tag settings.

[Specification example]
If you apply these settings, "none" is displayed in CatalogA while "TagA" and "TagB" are displayed in other catalogs.

After editing the file, save it with UTF-8 selected as its character code and then update the vDCA SE Portal screen.

**Note**

Do not delete the comment line at the beginning of the webframework.properties file.

### 9.2 Configuring a server service catalog for Amazon EC2

This section describes how to configure a server service catalog for Amazon EC2.

As the catalog settings for Amazon EC2, specify the following two definitions in the configuration file.

- Information about the Amazon Machine Image to be published to tenant users
- Instance type that can be specified for the Amazon Machine Image

The Amazon Machine Image and instance type you set in this section are displayed as options in the VM request creation screen.

The procedure is described below.
1. Open C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\webframework.properties.

2. Specify the display name, OS type, and OS name, and cloud type of the Amazon Machine Image. Specify these items as many times as the number of Amazon Machine Images.

```
product.cloudportal.template.display.Amazon Machine Image=Display name
product.cloudportal.template.ostype.Amazon Machine Image=OS type
product.cloudportal.template.osname.Amazon Machine Image=OS name
product.cloudportal.template.cloudtype.Amazon Machine Image=Cloud type
```

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amazon Machine Image</td>
<td>Amazon Machine Image ID</td>
</tr>
<tr>
<td>Display name</td>
<td>Display name of the Amazon Machine Image in the vDCA SE Portal screen. A slash &quot;/&quot; is converted to a line feed code.</td>
</tr>
<tr>
<td>OS type</td>
<td>Amazon Machine Image OS type From the following, select the appropriate one:</td>
</tr>
<tr>
<td></td>
<td>• WindowsServer</td>
</tr>
<tr>
<td></td>
<td>• WindowsClient</td>
</tr>
<tr>
<td></td>
<td>• Linux</td>
</tr>
<tr>
<td>OS name</td>
<td>Amazon Machine Image OS name Specify the OS name that can be selected as an OS name in the template settings of SigmaSystemCenter. For details, see the SigmaSystemCenter manual.</td>
</tr>
<tr>
<td>Cloud type</td>
<td>Amazon Machine Image cloud type Specify &quot;AWS&quot;.</td>
</tr>
</tbody>
</table>

**Example:**

```
product.cloudportal.template.display.ami-ceafcba8=Amazon Linux/AMI 2017.09.1 (HVM)/SSD Volume Type
product.cloudportal.template.ostype.ami-ceafcba8=Linux
product.cloudportal.template.osname.ami-ceafcba8=Red Hat Enterprise Linux 7 (64bit)
product.cloudportal.template.cloudtype.ami-ceafcba8=AWS
```

3. Specify the instance type option of the EC2 instance to be created from the Amazon Machine Image described in the previous step. Use one of the options specified in the instance type definition described later.

```
product.cloudportal.template.spec.Amazon Machine Image=Instance type, Instance type,...
```

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amazon Machine Image</td>
<td>Amazon Machine Image ID</td>
</tr>
<tr>
<td>Instance type</td>
<td>List as many instance type names as can be selected. Use a comma (,) as a delimiter.</td>
</tr>
</tbody>
</table>

**Example:**

```
product.cloudportal.template.spec.ami-ceafcba8=t2.micro,t2.small
```
4. Define the instance type of the EC2 instance to be created. You can create as many types as you want in a wide variety.

```
product.cloudportal.template.spec.Instance type=number of vCPU, Memory size(GB), Instance storage(GB)
```

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instance type</td>
<td>Name of the instance type that can be selected</td>
</tr>
<tr>
<td>number of vCPU</td>
<td>Number of virtual CPUs</td>
</tr>
<tr>
<td>Memory size(GB)</td>
<td>Memory size (GB)</td>
</tr>
<tr>
<td>Instance storage(GB)</td>
<td>Instance storage size (GB)</td>
</tr>
</tbody>
</table>

Example:

```
product.cloudportal.template.spec.detail.t2.micro=1,1,10
product.cloudportal.template.spec.detail.t2.small=1,2,30
```

**Tip**

Additional information can be set for each template. For information about how to display additional information, see "A.1  Displaying additional information in the template (page 276)".

**Note**

- Do not specify an instance storage size that is smaller than the size of the Amazon Machine Image.
Chapter 10

Setting a Network Service Catalog

This chapter describes the operation settings necessary to apply for the use of a network (request). vDCA SE Portal allows a tenant user to use the network assignment service while specifying the destination where the network is to be created. The setting described in this chapter is not required if you do not let the user create a network.

The setup procedure is as follows.

1. In vDCA SE Portal, make the settings so that you can apply for the use of a network and manage network resources. For the setup procedure, see "10.1 Network setting (page 46)".

2. Define the switch that can be selected when applying for the use of a network. For the setup procedure, see "10.2 Setting a switch (page 47)".

10.1 Network setting

Enable and set up the network management function of vDCA SE Portal. Follow the procedure below to make the network setting.

1. Open C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\webframework.properties.

2. The network use application and network resource management functions cannot be used by default. They become available when you enable their licenses. Set the following.

   license.cloudportal.networkprovisioning=true

3. If you create a network in SigmaSystemCenter, the port groups that comprises that network are automatically created. An 8-digit number is automatically set as a port group name.

   A character string (prefix) can be added at the beginning of the 8-digit number to judge whether the network has been created from vDCA SE Portal.

   To add a prefix to a port group name, set the following. If you do not add a prefix, omit this setting.

   product.cloudportal.network.portGroup.name=Prefix

   Specify the prefix by using no more than 55 characters.

4. When telling SigmaSystemCenter to create a network, specify whether to use a tag VLAN*1 to configure the network. If you do not use a tag VLAN, omit this setting. When using a tag VLAN, set the following.

   product.cloudportal.network.vlanEnabled=true

5. Save the configuration file with UTF8 selected as its character code. Restart the application server (Tomcat). From the left-side panel of the server manager, select the local server, from services, right-click [Apache Tomcat 8.5 ServiceGovernor], and select [Restart Service].

Tip

*1 The VLANID of a tag VLAN is assigned by SigmaSystemCenter. It cannot be specified in vDCA SE Portal.
### 10.2 Setting a switch

Define the switch that can be selected when applying for the use of a network. To specify these settings:

1. Open `C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\webframework.properties`.

2. Specify the following setting for as many switches as can be selected.

   ```
   product.cloudportal.network.switch.display.Switch name=Display name
   ```

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switch name</td>
<td>Virtual switch that resides in a virtual machine server managed by SigmaSystemCenter*2</td>
</tr>
<tr>
<td>Display name</td>
<td>Display name of the switch name in the vDCA SE Portal screen</td>
</tr>
<tr>
<td></td>
<td>Do not specify multiple-byte characters.</td>
</tr>
</tbody>
</table>

   Example:

   ```
   product.cloudportal.switch.display.vSwitch1=Business LAN
   ```

3. Set the tenants to which the specified switch is to be made visible. When you make the switch visible to all tenants, omit this setting. To specify whether to make the switch visible or not, specify the following.

   ```
   product.cloudportal.network.switch.visible.Switch name=Tenant ID, Tenant ID, ...
   ```

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switch name</td>
<td>Virtual switch that resides in a virtual machine server managed by SigmaSystemCenter</td>
</tr>
<tr>
<td>Tenant ID</td>
<td>List the IDs of the tenants to which to make the virtual switch visible. Delimit each tenant ID with a comma. You can also make the switch invisible only to specified tenants. The specification rules are the same as those for specifying whether to make a VM template visible or not. Therefore, make the settings, as instructed in &quot;9.1.2 Specifying whether to make a catalog visible or not (page 34)&quot;.</td>
</tr>
</tbody>
</table>

4. Set the additional information about the specified switch to be presented to tenants. If you do not assign additional information, omit this setting. To assign additional information, specify the following.

   ```
   product.cloudportal.network.switch.additionalInfo.Switch name=Additional information
   ```

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switch name</td>
<td>Virtual switch that resides in a virtual machine server managed by SigmaSystemCenter</td>
</tr>
<tr>
<td>Additional information</td>
<td>Set the additional information to be assigned to the virtual switch. The specification rules are the same as those for additional information of a VM template. Therefore, make the settings, as instructed in &quot;A. 1 Displaying additional information in the template (page 276)&quot;.</td>
</tr>
</tbody>
</table>
5. After specifying the above, save the file with UTF8 selected as its character code. The changes are applied without restarting the application server (Tomcat). *1

**Note**

*1 Do not include a space at the end of any line in the configuration file. Also, do not delete the comment line at the beginning of the webframework.properties file.

*2 Only a switch whose switch type is VirtualSwitch can be specified.
Chapter 11  
Operation Setting for Hybrid Cloud

This chapter describes the settings required to use public clouds in vDCA SE Portal. This setting is not necessary when not using a public cloud.

Before performing this procedure, register a subsystem for the target public cloud on SigmaSystemCenter.

The setting procedure is described below.

1. Import those servers and network resources that already exist in the public cloud to vDCA SE Portal. This procedure is required to select the connection destination network when creating a server for the public cloud using the request management on vDCA SE Portal.
   
   For the setup procedure, see "11.1 Settings required to import public cloud resources (page 49)".

   This procedure is not necessary when no servers or networks exist in the public cloud or they do not need to be managed on vDCA SE Portal even if they exist.

2. Configure the settings required to create or delete servers for the public cloud using the request management on vDCA SE Portal.
   
   For the setup procedure, see "11.2 Settings required to create or delete server resources on the public cloud (page 54)".

   This procedure can be omitted when it is not necessary to create or delete servers for the public cloud.

Once the settings have been made, restart the application server (Tomcat).

11.1 Settings required to import public cloud resources

The procedure is described below.

1. Place public resources under the management of SigmaSystemCenter.
   
   For the procedure, see "11.1.1 Registering public resources (page 49)".

2. Set the import destination for importing public resources placed under the management of SigmaSystemCenter to vDCA SE Portal.
   
   For the setup procedure, see "11.1.1 Registering public resources (page 49)".

3. Import the public resources placed under the management of SigmaSystemCenter to vDCA SE Portal.
   
   For the procedure, see the following.
   
   • "30.4.7 Synchronizing the Server List (page 240)"
   • "30.5.5 Synchronizing the network list (page 246)"

11.1.1 Registering public resources

This section describes the preliminary settings necessary for SigmaSystemCenter that links with vDCA SE Portal.

Before importing public resources to vDCA SE Portal, you need to put them under the management of SigmaSystemCenter.
There are two ways to put public resources under management as mentioned below. Use either of these methods according to the tenant settings and purposes.

- Automatic assignment
- Manual assignment

## Automatic assignment

Execute a command of SigmaSystemCenter to put the servers and networks of the public cloud under management. The servers and networks that are already under the management of SigmaSystemCenter are excluded.

Log in to the management server in which SigmaSystemCenter is installed, and execute the command shown below. Executing this command imports the configuration information of the servers, networks, and others of the public cloud to SigmaSystemCenter.

```
ssc assign external-resource -type [TypeName]
```

To use the command for NEC Cloud IaaS, execute it as follows.

[Execution example]
```
ssc assign external-resource -type necci
```

To use the command for Amazon Elastic Compute Cloud, execute it as follows.

[Execution example]
```
ssc assign external-resource -type aws
```

The imported servers are assigned to operation groups according to the configuration shown in "Figure 11-1 Configuration of operation groups and categories for hybrid management (page 51)".
Figure 11-1  Configuration of operation groups and categories for hybrid management

For details of the created operation categories and groups, see "Table 11-1  Details of the Operation Category and Group Settings (page 51)" below.

Table 11-1  Details of the Operation Category and Group Settings

<table>
<thead>
<tr>
<th></th>
<th>Name</th>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>_Public</td>
<td>Category</td>
<td>Category for Public Cloud</td>
</tr>
<tr>
<td>2</td>
<td>Location name</td>
<td>Category</td>
<td>Category indicating the public cloud location. This is used when specifying a public resource path in &quot;11.1.2  Setting a public resource path (page 53)&quot;.</td>
</tr>
<tr>
<td>3</td>
<td>Tenant ID</td>
<td>Category</td>
<td>Tenant name on the public cloud. When resources have been imported from NEC Cloud IaaS, it is set to the tenant name of the public cloud immediately after the command is executed. When resources have been imported from Amazon Elastic Compute Cloud, it is set to the address of the Amazon Web Services subsystem immediately after the command is executed.</td>
</tr>
<tr>
<td>4</td>
<td>_public</td>
<td>Group</td>
<td>Group name used to manage public resources for each tenant. By default, &quot;_public&quot; is created.</td>
</tr>
<tr>
<td>5</td>
<td>Host name</td>
<td>-</td>
<td>Host name of the imported server. This host name is displayed as [Server Name] in the [Server List] screen of vDCA SE Portal.</td>
</tr>
</tbody>
</table>
A server that can be imported by the synchronization function described later must be of the category of 3 that matches the tenant ID of the tenant managed by vDCA SE Portal. Therefore, change the name of the category of 3 to the same value as the tenant ID of the tenant managed by vDCA SE Portal.

Note

- * When a server is imported from NEC Cloud IaaS, the server ID of NEC Cloud IaaS is registered as the host name of SigmaSystemCenter. This server ID is automatically created and assigned when a server is created and can be checked from the server management screen of NEC Cloud IaaS.
- * When a server is imported from Amazon Elastic Compute Cloud, the instance ID of Amazon Elastic Compute Cloud is registered as the host name of SigmaSystemCenter. This instance ID is automatically created and assigned when a server is created and can be checked from the AWS management console.
- In the [List of Server] screen of vDCA SE Portal, this server ID is displayed in the Server name column.

A network that has been put under management can be checked from the logical network list.

**Figure 11-2  Setting example of a logical network put under management**

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  Name</td>
<td>When the network has been imported from Amazon Elastic Compute Cloud, the VPC ID of the VPC is set.</td>
</tr>
<tr>
<td>2  Public Scope</td>
<td>Public is set.</td>
</tr>
<tr>
<td>3  Applied Tenant</td>
<td>None.</td>
</tr>
<tr>
<td>4  Switch</td>
<td>When the network has been imported from Amazon Elastic Compute Cloud, the name of the VPC is set.</td>
</tr>
<tr>
<td>5  VLAN IPort group name)</td>
<td>When the network has been imported from Amazon Elastic Compute Cloud, the name of the subnet is set.</td>
</tr>
</tbody>
</table>

A network that can be imported by the synchronization function described later must be Applied Tenant in 3 that matches the tenant ID of the tenant managed by vDCA SE Portal. Therefore, change the value of 2 to private and the value of 3 to the same value as the tenant ID of the tenant managed by vDCA SE Portal.
**Manual assignment**

When the command of SigmaSystemCenter is not used, the system administrator needs to manually create operation categories and groups and assign them to servers. Register groups and servers based on the operation group configuration used for automatic assignment.

In automatic assignment, categories whose names are tenant IDs are created under the category for the public cloud and the category indicating the location of the private cloud. In manual assignment, it is also possible to create a group whose machine type is "public cloud" under a tenant whose name is the same as the tenant ID of the tenant managed by vDCA SE Portal and assign servers to this group.

![Setting example for manual assignment](image)

Manually create networks to be associated with servers as well, based on the settings for automatic assignment. It is recommended to make sure that each logical network name helps identify in which public cloud it can be used.

For details of the registration procedure, see the *SigmaSystemCenter Manual*.

### 11.1.2 Setting a public resource path

To import a server under the management of SigmaSystemCenter to vDCA SE Portal, set the import destination (public resource path). In the case of a network, it is not necessary to set an import destination.

This procedure is necessary only when a server is assigned automatically or a server is manually assigned to a category in the public cloud as described in "11.1.1 Registering public resources (page 49)". It is not necessary when a server is manually assigned to a tenant.

The procedure for setting a public resource path is described below.

1. Open C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\webframework.properties.
2. Set a public resource path. When specifying multiple public resource paths, separate them with commas.
As the path to the public resource, specify a path to a category expressing a location name by selecting it from the operation group paths that were created in "11.1.1 Registering public resources (page 49)". This allows the path to be recognized as the target of the server synchronization function.

Shown below is an example of setting three paths: "/_/Public/NECCI1", "/_/Public/NECCI2", and "/_/Public/AWS".

(Setting example)

11.2 Settings required to create or delete server resources on the public cloud

This section describes the settings required to create or delete servers for the public cloud using the request management on vDCA SE Portal.

11.2.1 Settings required to create or delete server resources on the Amazon Elastic Compute Cloud

The procedure is described below.

1. To create servers for the Amazon Elastic Compute Cloud, register a resource pool for the public cloud specified when making a request.

   Log in to a machine running SigmaSystemCenter and then register a public cloud resource pool from the command line. For details, see the manual of SigmaSystemCenter. On vDCA SE Portal, operation using a shared resource pool as a public cloud resource pool is not supported. Make it exclusive before assigning it to the tenant.

2. To create or delete servers for the Amazon Elastic Compute Cloud, describe the dummy template that is to be used by the requested tenant. Open C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\webframework.properties and then add the following setting to the file.

   product.cloudportal.template.aws.Tenant ID=Dummy template name

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenant ID</td>
<td>Tenant ID</td>
</tr>
<tr>
<td>Dummy template name</td>
<td>Name of the dummy template linked to the destination AWS subsystem</td>
</tr>
</tbody>
</table>

   Example:
   product.cloudportal.template.aws.TenantA=AWS=Template=52039472876

3. See "22.2.2 Configuring a system workflow (page 115)" and then enable the system approval. A resource cannot be created while an Amazon EC2 instance is being created or deleted. Therefore, enable the system workflow and check for any request being executed during the system approval.
Chapter 12  
Setting Widget Options

This chapter describes how to set the widget options that can be added to the dashboard of vDCA SE Portal.

12.1  Creating a widget option file

The creation method for a widget option file is described below.

A widget option file consists of the following two types of files.

<table>
<thead>
<tr>
<th>File name</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\widgets.properties</td>
<td>Main widget option setting file. Set the URL, authority, and the title in the default language.</td>
</tr>
<tr>
<td>C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\widgets_[Locale].properties</td>
<td>Widget option language file. In [Locale], the language locale is displayed. To support multiple languages, you can create multiple language files. In the case of Japanese, for example, the file will be widgets_ja.properties. If you want to toggle between American English and British English, you can set two separate files as widgets_en_US.properties and widgets_en_UK.properties.</td>
</tr>
</tbody>
</table>

12.1.1  Creating widgets.properties

The creation method for widgets.properties, which is the main widget option setting file, is described below. When editing the preinstalled widget option file, replace the file name accordingly.

widgets.properties is located at:

C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\widgets.properties

Open widgets.properties using a text editor, and add, edit, or delete the widget options. widgets.properties is a property file.

The format of a widget option is as follows.

<table>
<thead>
<tr>
<th>Property key</th>
<th>Default value</th>
<th>Required/Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Widget key].url</td>
<td>-</td>
<td>Required</td>
<td>Set the URL of the widget. The URL must be encoded. The URL replacement keyword can be used. For details, refer to &quot;12.1.3  About replacement parameters (page 57)&quot;.</td>
</tr>
<tr>
<td>[Widget key].title</td>
<td>-</td>
<td>Required</td>
<td>Set the character string to be displayed as the widget option. If the language that matches the user's setting is not found, this character string is used.</td>
</tr>
</tbody>
</table>
When a multiple-byte character is set, it must be written as a string that includes an ASCII or Unicode escape character.

In `[Widget key]`, any desired character string can be set. The [Add widget] dialog box of the dashboard displays the URLs of `[Widget keys]` sorted in ascending order.

**Note**

If 

```
[Widget key].url
```

and 

```
[Widget key].title
```

that match `[Widget key]` are not found, the widget setting is considered invalid.

If there are multiple settings having the identical `[Widget key]`, only one of the settings takes effect while the other settings are considered invalid.

The edited contents of `widgets.properties` are applied to the server immediately. They are applied to the browser display when the dashboard is reloaded.

If a widget option is deleted from `widgets.properties`, that widget is deleted the next time the user loads the dashboard. It is recommended to notify the user of the deletion of the widget in advance by using the "notice" function or other means.

If `[Widget key].url` of a widget option is changed from `widgets.properties`, the URL for loading that widget is changed the next time the user loads the dashboard. It is recommended to notify the user of the change of the widget setting in advance by using the "notice" function or other means.

### 12.1.2 Creating `widgets_[Locale].properties`

The creation method for `widgets_[Locale].properties`, which is the widget option language setting file, is described below. When editing the preinstalled widget option file, replace the file name accordingly.

`widgets_[Locale].properties` is located at:

```
C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC
```

Here, the method is described by using `widgets_ja.properties`, the Japanese setting file, as an example. When creating a setting file of another language, replace the text accordingly.

Open `widgets_ja.properties` using a text editor, and add, edit, or delete the widget option language settings. `widgets_ja.properties` is a property file.

The format of a widget option is as follows.

#### Table 12-3  Format of `widgets_ja.properties`

<table>
<thead>
<tr>
<th>Property key</th>
<th>Default value</th>
<th>Required/Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>[Widget key].title</code></td>
<td>-</td>
<td>Optional</td>
<td>Set character strings to be displayed as internationalized strings for the widget options. When a multiple-byte character is set, it must be written as a string that includes an ASCII</td>
</tr>
<tr>
<td>Property key</td>
<td>Default value</td>
<td>Required/Optional</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>---------------</td>
<td>-------------------</td>
<td>-------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>or Unicode escape character. In the case of &quot;UTF-8&quot;, use (no BOM). If you omit this setting, the value of [Widget key].title set in widgets.properties is used.</td>
</tr>
</tbody>
</table>

**Note**

If "[Widget key].url" that matches [Widget key] is not found in widgets.properties, the widget setting is considered invalid.

If there are multiple settings having the identical [Widget key], only one of the settings takes effect while the other settings are considered invalid.

The edited contents of widgets_ja.properties are applied to the server roughly at 10-seconds intervals. They are applied to the browser display when the dashboard is reloaded.

### 12.1.3 About replacement parameters

You can set a replacement parameter in the URL of a widget option.

A replacement parameter is one that is replaced by vDCA Portal.

The replacement parameters that can be used in widget option URL settings are as follows.

**Table 12-4 URL replacement keywords**

<table>
<thead>
<tr>
<th>URL replacement keyword</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>%TENANTID%</td>
<td>This is replaced with the tenant ID of the login user. When the user is logged in as the system administrator, it is replaced with a null string. When the system administrator substitutes for a tenant, it is replaced with a null string, not with the tenant ID of the tenant being substituted for.</td>
</tr>
<tr>
<td>%USERID%</td>
<td>This is replaced with the user ID of the login user.</td>
</tr>
</tbody>
</table>

### 12.2 Editing the widget definition file

You can customize default_widget.properties, which is the file that defines the widgets that are displayed by default, as appropriate for your operation.

default_widget.properties is located at:

C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\default_widget.properties

Open default_widget.properties using a text editor, and add, edit, or delete the widgets to be displayed. default_widget.properties is a property file.

The contents defined in default_widget.properties are as follows.

**Table 12-5 Contents defined in default_widget.properties**

<table>
<thead>
<tr>
<th>Name</th>
<th>Key</th>
<th>Widget identifier</th>
<th>Authority</th>
<th>Height</th>
<th>Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notice</td>
<td>widget_1</td>
<td><strong>KEY_NOTICE</strong></td>
<td>ROLE_DASHBOARD_NOTIFICATION_SHOW</td>
<td>700</td>
<td>95</td>
</tr>
<tr>
<td>Unapproved</td>
<td>widget_2</td>
<td><strong>KEY_APPROVAL</strong></td>
<td>ROLE_DASHBOARD_UNAPPROVED_REQUEST_SHOW</td>
<td>700</td>
<td>95</td>
</tr>
</tbody>
</table>
12.3 Editing the preset widget option files

You can customize the preset widget option files prepared for the product as appropriate for your operation.

The preset widget option files are located at:

C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC

The following types of preset files are prepared for the product:

<table>
<thead>
<tr>
<th>Main widget option setting file</th>
<th>Widget option language setting file</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>cloudportal.common.properties</td>
<td>cloudportal.common_ja.properties</td>
<td>This file defines the screens for tenant management and other basic functions as widget options.</td>
</tr>
<tr>
<td>cloudportal.vmprovisioning.properties</td>
<td>cloudportal.vmprovisioning_ja.properties</td>
<td>This file defines the screens for server management as widget options.</td>
</tr>
<tr>
<td>cloudportal.networkprovisioning.properties</td>
<td>cloudportal.networkprovisioning_ja.properties</td>
<td>This file defines the screens for network management as widget options.</td>
</tr>
</tbody>
</table>

The editing method for the main widget option setting file is the same as that for widgets.properties. For details, see "12.1.1 Creating widgets.properties (page 55)".

The editing method for the widget option language setting file is the same as that for widgets_[Locale].properties. For details, see "12.1.2 Creating widgets_[Locale].properties (page 56)".
Chapter 13
Setting Easy Site Linkage

This chapter describes how to implement easy site linkage for vDCA SE Portal. These settings are not necessary when you do not use the easy site linkage function.

13.1 About the easy site linkage function

Easy site linkage is a function that you use when you want to implement site linkage although it is difficult to develop a single sign-on site.

Use this function in such cases as when you want to have the pages of vDCA SE Portal displayed using an iframe in websites and other locations for which single sign-on linkage is not available.

Since the function assumes that you are unable to prepare a site supporting single sign-on linkage, it does not take effect when single sign-on is enabled.

13.2 Using easy site linkage

This section describes how to use easy site linkage.

1. Create a website in which vDCA SE Portal is to be displayed. Embed the portal in a part of the website by using an iframe.

   Example: `<iframe src="http://vdcaseportal.nec.co.jp:12080/portal/cloudportal/servers/serverList" width="1000" height="300"></iframe>`

2. Take a note of the URL of the created website, and specify it in simpleauth.timeout.loginurl of webframework.properties.


If you open the website in this condition, the page of vDCA SE Portal appears where it has been embedded using an iframe.

Note that, since you have not logged in yet, the following page appears.

Clicking [here] displays the login screen of vDCA SE Portal.

If you log in by entering a user name and password, you will be redirected to the page specified after `redirect=` in simpleauth.timeout.loginurl.

Once you are redirected, the page embedded using an iframe is displayed normally because you have already been authenticated.

13.3 Other option

If you access without logging in, the dialog box shown below appears. Clicking [here] displays the login screen, which appears in another window.
To change the display frame specification, change the parameter described below in webframework.properties.

<table>
<thead>
<tr>
<th>Value name</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>simpleauth.timeout.targetwindow</td>
<td>Specify the frame in which the login page is to be displayed.</td>
</tr>
</tbody>
</table>

This parameter is equivalent to the target attribute of the `<a>` tag in HTML. Specify it as appropriate for your browser.

**Note**

Do not specify a blank in simpleauth.timeout.targetwindow.
Chapter 14

Setting the General Operation

vDCA SE Portal supports a function that allows tenant users to execute any of the processes defined by the system administrator at an arbitrary timing for the server that the tenant owns. This manual refers to this as the general operation.

This chapter describes how to set the general operation. If you do not use the general operation, the settings described herein are not necessary.

The general operation is implemented by using JobCenter. Therefore, using this function requires that JobCenter be set up in advance. For the setup procedure, see the vDC Automation Standard Edition Setup Guide.

The setup procedure is as follows.

1. Make the settings for a connection between vDCA SE Portal and JobCenter. For the procedure, see "14.1 Settings for connecting to JobCenter (page 61)".
2. Define any desired process as a job network. For details, see the JobCenter Basic Operation Guide and JobCenter Operation and Configuration Guide.
3. Specify the job network to be made visible to tenant users in the configuration file. For the procedure, see "14.2 Creating a general operation definition file (page 62)".

After making the settings, restart the application server (Tomcat).

**Note**

* You cannot change the execution user for submitting a job network for each tenant user who executes the general operation. There can be only one execution user per system for submitting a job network to JobCenter.

14.1 Settings for connecting to JobCenter

1. Open C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\webframework.properties.
2. Specify the information about the connection with JobCenter in the configuration file.

   product.cloudportal.generic.operation.jobcenter.url=URL
   product.cloudportal.generic.operation.jobcenter.accesskey=Access Key

<table>
<thead>
<tr>
<th>Setting item</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>URL</td>
<td>URL of JobCenter CL/Web to be accessed</td>
</tr>
<tr>
<td>Access Key</td>
<td>Access key of JobCenter to be accessed</td>
</tr>
</tbody>
</table>

A setting example is shown below.

product.cloudportal.generic.operation.jobcenter.url=https://192.168.1.3:443
product.cloudportal.generic.operation.jobcenter.accesskey=a1db44b1034b4407ae5a747f51a56ec1
14.2 Creating a general operation definition file

1. Create an empty file named "GenericOperation.json" in a desired folder.

2. Open the "GenericOperation.json" file with a text editor, and define the general operation. Enter the settings in the JSON format.

In this manual, the JSON keys are concatenated with a period (.). For example, for setting items such as those below,

| Table 14-2   Example of a setting item of a general operation definition file |
|-----------------|-----------------|-----------------|-----------------|
| Setting item    | Type            | Required | Settings                      |
| GenericOperations[n].DisplayName | string   | ○       | Display name of the general operation Enter a unique display name. |

Check and change the settings by changing the position on the file as below.

```
{"GenericOperations": [
  {
    "DisplayName": "Backup",
    "Omitted"
  }
]}
```

The legend for the [Required] column of the table is shown below.
- ○: Required
- ×: Optional
- △: Required depending on conditions

<p>| Table 14-3   Setting items of a general operation definition file |
|-----------------|-----------------|-----------------|-----------------|
| Setting item    | Type            | Required | Settings                      |
| GenericOperations[n].DisplayName | string   | ○       | Display name of the general operation Enter a unique display name. |
| GenericOperations[n].WorkflowId | string   | ○       | Enter a job network name. |
| GenericOperations[n].KeyNameUUID | string   | N/A     | Key indicating the server UUID to be passed when the general operation is executed (the job network is submitted) If you omit this item, the key CMTargetUUID is used to pass the UUID of the server where the general operation is executed. |*1 |
| GenericOperations[n].KeyNameServerName | string   | N/A     | Key indicating the server name to be passed when the general operation is executed (the job network is submitted) If you omit this item, the key CMTargetNodeName is used to pass the name of the server where the general operation is executed. |*1 |</p>
<table>
<thead>
<tr>
<th>Setting item</th>
<th>Type</th>
<th>Required</th>
<th>Settings</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GenericOperations[n].KeyNameTenantID</td>
<td>string</td>
<td>N/A</td>
<td>Key indicating the ID of the tenant who owns the server to be passed when the general operation is executed (the job network is submitted)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>If you omit this item, the key CM TenantID is used to pass the ID of the tenant who owns the server where the general operation is executed.</td>
<td></td>
</tr>
<tr>
<td>GenericOperations[n].Parameters[m].key</td>
<td>string</td>
<td>△</td>
<td>Key indicating the parameter to be passed when the general operation is executed (the job network is submitted)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>* Required when there is any parameter to be passed to the job network.</td>
<td></td>
</tr>
<tr>
<td>GenericOperations[n].Parameters[m].DisplayKey</td>
<td>string</td>
<td>N/A</td>
<td>Display name of the parameter to be displayed in the general operation execution dialog box</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>If you omit this item, the value of GenericOperations[n].Parameters[m].key is displayed.</td>
<td></td>
</tr>
<tr>
<td>GenericOperations[n].Parameters[m].Value</td>
<td>string</td>
<td>N/A</td>
<td>Initial value of the parameter to be displayed in the general operation execution dialog box</td>
<td></td>
</tr>
<tr>
<td>GenericOperations[n].Parameters[m].isMasked</td>
<td>boolean</td>
<td>N/A</td>
<td>Whether the parameter to be displayed in the general operation execution dialog box is to be handled as a password item</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• If you want to handle it as a password item, set true.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• If you do not want to handle it as a password item, set false.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>If you omit this item, the parameter is not handled as a password item.</td>
<td></td>
</tr>
</tbody>
</table>

After entering the necessary items, save the file with UTF8 specified as its character code.

A setting example is shown below.

```json
{
  "GenericOperations": [
    {
      "DisplayName": "Backup",
      "WorkflowId": "11111",
      "KeyNameUUID": "UUID",
      "KeyNameServerName": "ServerName",
      "KeyNameTenantID": "TenantID",
      "Parameters": [
        {
          "Key": "Key 1",
          "DisplayKey": "User name 1",
          "Value": "Value 1"
        },
        {
          "Key": "Key 2",
          "DisplayKey": "User name 2",
          "Value": "Value 2"
        }
      ]
    },
    {
    }
  ]
}
```
3. Specify the file path of the created general operation definition file in the configuration file. Open C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\webframework.properties and specify the following setting.

```
product.cloudportal.generic.operation.json.path=File path
```

**Table 14-4 Setting the file path of the general operation definition file**

<table>
<thead>
<tr>
<th>Setting item</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>File path</td>
<td>File path of the general operation definition file</td>
</tr>
<tr>
<td></td>
<td>If the file path includes a backslash (), add an escape character () before the backslash ().</td>
</tr>
</tbody>
</table>

A setting example is shown below.

```
product.cloudportal.generic.operation.json.path=D:\\tmp\\GenericOperation.json
```

**Tip**

*1 To identify the execution target server, the IP address of the management network to which the server is connected (only the IP address of the first NIC) is also assigned by using a key named CMTargetAddress as an immediate submission parameter of the job network.

**Note**

*2 Even if you set this item, the parameter is not handled as a password item in JobCenter. To handle the parameter as a password item in JobCenter, you need to change the value of GenericOperations[n].Parameters[m].key to a character string that begins with NSJNW_HIDDENDATA. For details, see the JobCenter manual.
Chapter 15

Setting the Extension Processing

vDCA SE Portal supports a function that calls a system administrator-specified command at the following timing:

- Before or after a request is executed
- Before or after a tenant is registered or deleted

In this manual, these tasks are called the extension processing.

This chapter describes how to set the extension processing. When the extension processing does not need to be performed, the settings described herein are not necessary.

The settings you make in this chapter are applied without restarting the application server (Tomcat).

15.1 Setting the processing to be performed before or after request execution

This section describes how to set the extension processing to be performed before or after request execution and the points to note with regard to operation design.

Enabling the extension processing

The extension processing to be performed before or after request execution is enabled by defining a command line for the target "request type and execution timing" in the configuration file. The setting procedures are described below.

1. Open C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\webframework.properties.
2. See below, and add the description corresponding to the "request type and execution timing" that you want to set.

- When the extension processing is performed before a server creation request is executed

```
product.cloudportal.extension.point.vm.create.pre.command=Command line
```

- When the extension processing is performed after a server creation request is executed

```
product.cloudportal.extension.point.vm.create.post.command=Command line
```

- When the extension processing is performed before a server change request is executed

```
product.cloudportal.extension.point.vm.modify.pre.command=Command line
```

- When the extension processing is performed after a server change request is executed

```
product.cloudportal.extension.point.vm.modify.post.command=Command line
```

- When the extension processing is performed before a server deletion request is executed

```
product.cloudportal.extension.point.vm.delete.pre.command=Command line
```

- When the extension processing is performed after a server deletion request is executed

```
product.cloudportal.extension.point.vm.delete.post.command=Command line
```
product.cloudportal.extension.point.vm.delete.pre.command=Command line

• When the extension processing is performed after a server deletion request is executed

product.cloudportal.extension.point.vm.delete.post.command=Command line

• When the extension processing is performed before a network creation request is executed

product.cloudportal.extension.point.network.create.pre.command=Command line

• When the extension processing is performed after a network creation request is executed

product.cloudportal.extension.point.network.create.post.command=Command line

• When the extension processing is performed before a network deletion request is executed

product.cloudportal.extension.point.network.delete.post.command=Command line

• When the extension processing is performed after a network deletion request is executed

The format of the command line to be written in Command line is shown below.

Command options

Describe the following details.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Command</td>
<td>Describe the file path (full path) of the command you want to execute. If the command includes a backslash (), add an escape character () before the backslash (). Specify an executable file for which the execution user has the execution authority. Also, specify a command that returns an integer as the exit code. If the PATH environment variable of the execution user is set for the command, you do not need to specify a full path.</td>
</tr>
<tr>
<td>Parameters</td>
<td>Describe the argument you want to pass to the command. To specify multiple arguments, delimit each of them with a single-byte space delimiter. To specify a parameter that includes a single-byte space, enclose it in double quotation marks (&quot;). For vDCA SE Portal, you can also specify a replacement parameter that is expanded when the command line is executed. The specifiable replacement parameters differ depending on the execution timing. For details, see &quot;Replacement parameters (page 67)&quot;.</td>
</tr>
</tbody>
</table>

A description example is given below.
Tip

If the extension processing is to be performed before request execution, the extended parameters entered when the request was created are added at the end of the command to be executed. For details, see "Extended parameters (page 68)".

Caution

- The maximum number of characters that can be used for command execution is 8191. Make sure that the total number of characters used in the command, parameters, expanded replacement parameters, and expanded extended parameters does not exceed 8191.
- "The extension processing before request execution is performed as an extension of the browser operation. If a command takes long to execute, the response to a user operation may become slow.

Replacement parameters

A replacement parameter is a parameter that vDCA SE Portal expands when it executes a command. The supported replacement parameters are listed below.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>$UUID$</td>
<td>Parameter to be replaced with the &quot;UUID&quot; of a server*2</td>
</tr>
<tr>
<td>$SERVER_NAME$</td>
<td>Parameter to be replaced with the &quot;server name&quot; of a server*2</td>
</tr>
<tr>
<td>$RESOURCE_POOL_NAME$</td>
<td>Parameter to be replaced with the &quot;resource pool&quot; of a server*2</td>
</tr>
<tr>
<td>$CATEGORY_NAME$</td>
<td>Parameter to be replaced with the &quot;category name (operation group path)&quot; of</td>
</tr>
<tr>
<td></td>
<td>a server*2</td>
</tr>
<tr>
<td>$NETWORK_ID$</td>
<td>Parameter to be replaced with the &quot;resource ID&quot; of a network*3</td>
</tr>
<tr>
<td>$NETWORK_NAME$</td>
<td>Parameter to be replaced with the &quot;network name&quot; of a network*3</td>
</tr>
<tr>
<td>$TENANT_ID$</td>
<td>Parameter to be replaced with the &quot;tenant ID&quot; of the target tenant</td>
</tr>
<tr>
<td>$TENANT_NAME$</td>
<td>Parameter to be replaced with the &quot;tenant name&quot; of the target tenant</td>
</tr>
<tr>
<td>$EXTENSION_POINTS$</td>
<td>Parameter to be replaced with the type number of the resource subject to the</td>
</tr>
<tr>
<td></td>
<td>extension processing</td>
</tr>
<tr>
<td></td>
<td>• Server creation: 1</td>
</tr>
<tr>
<td></td>
<td>• Server change: 2</td>
</tr>
<tr>
<td></td>
<td>• Server change: 3</td>
</tr>
<tr>
<td></td>
<td>• Network creation: 101</td>
</tr>
<tr>
<td></td>
<td>• Network deletion: 103</td>
</tr>
<tr>
<td>$EXTENSION_TIMINGS$</td>
<td>Parameter to be replaced with the execution timing of the extension</td>
</tr>
<tr>
<td></td>
<td>processing</td>
</tr>
<tr>
<td></td>
<td>• Preprocessing: 1</td>
</tr>
<tr>
<td></td>
<td>• Postprocessing: 2</td>
</tr>
</tbody>
</table>

Note

*2 Specifiable only when the request type is "server".
Extended parameters

An extended parameter is a mechanism that allows the user to specify the parameter value to be passed to the extension processing when submitting a request. The setting procedures are described below.

1. Open C:\Program Files (x86)\NEC\wDCA\MoM\FW\Tomcat\conf\NEC \webframework.properties.
2. See below, and add the description corresponding to the "request type and execution timing" for which you want to use an extended parameter.

- When you want to use extended parameters before and after a server creation request is executed

```plaintext
product.cloudportal.provider.vdc.workflow.id.create.vm.extended.paramXX.name=Display name
product.cloudportal.provider.vdc.workflow.id.create.vm.extended.paramXX.key=Key name
```

- When you want to use extended parameters before and after a server change request is executed

```plaintext
product.cloudportal.provider.vdc.workflow.id.edit.vm.extended.paramXX.name=Display name
product.cloudportal.provider.vdc.workflow.id.edit.vm.extended.paramXX.key=Key name
```

- When you want to use extended parameters before and after a network creation request is executed

```plaintext
product.cloudportal.provider.vdc.workflow.id.create.network.extended.paramXX.name=Display name
product.cloudportal.provider.vdc.workflow.id.create.network.extended.paramXX.key=Key name
```

Each item is described below.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>XX</td>
<td>Specify the number of the extended parameter. The specifiable numbers are 01 to 99.</td>
</tr>
<tr>
<td>Display name</td>
<td>Specify the display name to be displayed as the parameter name on the screen. The extended parameter name (display name) that can be set is 64 characters long or shorter. If no display name is specified (including the case when only blanks are specified) or if a display name that is 65 characters long or longer, the specified parameter is not regarded as needing to be displayed as an extended parameter (ignored).</td>
</tr>
<tr>
<td>Key name</td>
<td>Specify the key name to be used when the value is passed to the extension processing as an option. The key name that can be set is 64 characters long or shorter.*4 If no key name is specified (including the case when only blanks are specified) or if a key name that is 65 characters long or longer, the...</td>
</tr>
</tbody>
</table>
The execution environment for the command line defined for the extension processing is as follows.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Execution user</td>
<td>Account specified for logon of the Apache Tomcat 8.5 ServiceGovernor service</td>
</tr>
<tr>
<td></td>
<td>The default is Local System (built-in account).</td>
</tr>
<tr>
<td>Execution directory</td>
<td>C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat</td>
</tr>
</tbody>
</table>

Success and failure judgment

The success or failure of the extension processing in vDCA SE Portal is judged as follows.

<table>
<thead>
<tr>
<th>Judgment</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Success</td>
<td>The exit code returned by the command is &quot;0&quot;.</td>
</tr>
<tr>
<td>Failed</td>
<td>Either of the following conditions is met:</td>
</tr>
<tr>
<td></td>
<td>• The exit code returned by the command is other than &quot;0&quot;.</td>
</tr>
<tr>
<td></td>
<td>• The command takes more than 300 seconds to execute (a timeout occurs).</td>
</tr>
</tbody>
</table>

The command exit code that indicates success and the timeout time for judging failure can be customized as appropriate for the command implementation. The setting procedures are described below.

1. Open C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\webframework.properties.
2. See below, and add the description corresponding to the "request type and execution timing" that you want to set.
   • When customizing the items before a server creation request is executed
• When customizing the items after a server creation request is executed

```java
product.cloudportal.extension.point.vm.create.pre.command.exit.code.success=Success exit status
product.cloudportal.extension.point.vm.create.pre.command.timeout=Time out
```

• When customizing the items before a server change request is executed

```java
product.cloudportal.extension.point.vm.modify.pre.command.exit.code.success=Success exit status
product.cloudportal.extension.point.vm.modify.pre.command.timeout=Time out
```

• When customizing the items after a server change request is executed

```java
product.cloudportal.extension.point.vm.modify.post.command.exit.code.success=Success exit status
product.cloudportal.extension.point.vm.modify.post.command.timeout=Time out
```

• When customizing the items before a server deletion request is executed

```java
product.cloudportal.extension.point.vm.delete.pre.command.exit.code.success=Success exit status
product.cloudportal.extension.point.vm.delete.pre.command.timeout=Time out
```

• When customizing the items after a server deletion request is executed

```java
product.cloudportal.extension.point.vm.delete.post.command.exit.code.success=Success exit status
product.cloudportal.extension.point.vm.delete.post.command.timeout=Time out
```

• When customizing the items before a network creation request is executed

```java
product.cloudportal.extension.point.network.create.pre.command.exit.code.success=Success exit status
product.cloudportal.extension.point.network.create.pre.command.timeout=Time out
```

• When customizing the items after a network creation request is executed

```java
product.cloudportal.extension.point.network.create.post.command.exit.code.success=Success exit status
product.cloudportal.extension.point.network.create.post.command.timeout=Time out
```

• When customizing the items before a network deletion request is executed

```java
product.cloudportal.extension.point.network.delete.post.command.exit.code.success=Success exit status
```

Chapter 15   Setting the Extension Processing
**product.cloudportal.extension.point.network.delete.post.command.timeout=Time out**

- When customizing the items after a network deletion request is executed

**product.cloudportal.extension.point.network.delete.post.command.exit.code.success=Success exit status**  
**product.cloudportal.extension.point.network.delete.post.command.timeout=Time out**

The items to be customized are described in detail below.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Success exit status</td>
<td>Specify the exit code (integer) used to judge that the command has ended normally. To specify multiple exit codes, delimit each of them with a comma (,). If the returned value matches any of the exit codes, the command is judged to have ended normally. If this item is omitted, 0 is assumed.</td>
</tr>
<tr>
<td>Time out</td>
<td>Specify the timeout time (in seconds) for command execution. If this item is omitted, 300 is assumed.</td>
</tr>
</tbody>
</table>

A description example is given below.

**product.cloudportal.extension.point.vm.create.pre.command.exit.code.success=0,1,2**  
**product.cloudportal.extension.point.vm.create.pre.command.timeout=600**

**Caution**

*6 If a timeout occurs, the extension processing is judged to have failed. However, the execution of the command is not forced to end. Change the command implementation so that a timeout does not occur, or force the command to end manually if a timeout occurs.*

---

**Behavior upon failure**

What is done if the extension processing fails is described below. It depends on the execution timing. The following table describes what is done if the extension processing fails at each different execution timing.

<table>
<thead>
<tr>
<th>Timing of failure</th>
<th>Behavior upon failure</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Before a server creation request is executed</td>
<td>• The request status is changed to &quot;Error&quot;.</td>
</tr>
<tr>
<td>• Before a server change request is executed</td>
<td>• The error message of the request is set to &quot;Processing before request execution failed&quot;.</td>
</tr>
<tr>
<td>• Before a server deletion request is executed</td>
<td>• The execution error is reported by email.</td>
</tr>
<tr>
<td>• Before a network creation request is executed</td>
<td></td>
</tr>
<tr>
<td>• After a network creation request is executed</td>
<td></td>
</tr>
<tr>
<td>• After a server creation request is executed<em>7</em>8</td>
<td>• The request status is changed to &quot;Complete&quot;.</td>
</tr>
<tr>
<td>• After a server change request is executed<em>7</em>8</td>
<td></td>
</tr>
</tbody>
</table>

---

71
### Timing of failure

<table>
<thead>
<tr>
<th>Timing of failure</th>
<th>Behavior upon failure</th>
</tr>
</thead>
<tbody>
<tr>
<td>• After a server deletion request is executed(^7)</td>
<td></td>
</tr>
<tr>
<td>• After a network creation request is executed(^8)</td>
<td></td>
</tr>
<tr>
<td>• After a network creation request is executed(^6)</td>
<td></td>
</tr>
</tbody>
</table>

### Caution

- \(^7\) No execution error is reported if the extension processing after request execution fails. See the execution log of the extension processing to check whether the processing is successful or not, and take an action if necessary.
- \(^8\) Even if the extension processing after request execution fails, the created resource is published to tenants.

### Execution log of the extension processing

When the extension processing is executed, its execution log is output to the following file:

```
C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\logs\extention.log
```

Up to 5 generations of execution log data of the extension processing are stored. If the file size exceeds 10 MB, the file rotates while being compressed as "extension-1-5.log.zip".

The log output format is as follows. The log is output in 2 lines.

```
Date time I cloudportal Thread name : Command line
Date time I cloudportal Thread name : Resource Method Timing Exit code Result Standard output Standard error output
```

Details of each item are as follows.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date time</td>
<td>Date and time the command was executed. It is output in the yyyy-MM-dd'T'HH:mm:ss.SSSZ format.</td>
</tr>
<tr>
<td>Thread name</td>
<td>Name of the thread in which the command was executed.</td>
</tr>
<tr>
<td>Command line</td>
<td>Command line that was actually executed. It is output with the replacement parameter and extended parameter expanded.</td>
</tr>
<tr>
<td>Resource</td>
<td>Resource for which the extension processing was executed. One of the following is output:\n  • SERVER\n  • NETWORK</td>
</tr>
<tr>
<td>Method</td>
<td>Operation for which the extension processing was executed. One of the following is output: \n  • CREATE\n  • MODIFY\n  • DELETE</td>
</tr>
<tr>
<td>Timing</td>
<td>Timing at which the extension processing was executed. One of the following is output:</td>
</tr>
</tbody>
</table>
## Exit code
- Command exit code specified for the extension processing

## Result
- Execution result judged from the command exit code specified for the extension processing
  - One of the following is output:
    - OK
    - NG
    - TIMEOUT

## Standard output
- Command standard output specified for the extension processing
  - It is output in UTF-8.

## Standard error output
- Command standard error output specified for the extension processing
  - It is output in UTF-8.

An output example is shown below.

```
entation\notification.bat 3 0 TenantE Server01 422f38a2-8b94-262d-87e2-e437c7
3b5058
DELETE PRE 0 OK Output Test Error Out Test
```

You can customize the character code to be used when outputting the log to the command standard output and standard error output specified for the extension processing. The setting procedures are described below.

1. Open `C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC`\webframework.properties.

2. See below, and add the description corresponding to the "request type and execution timing" that you want to set.

   - When customizing the character code before a server creation request is executed
     
     ```
     product.cloudportal.extension.point.vm.create.pre.command.charset=Charset
     ```

   - When customizing the character code after a server creation request is executed
     
     ```
     product.cloudportal.extension.point.vm.create.post.command.charset=Charset
     ```

   - When customizing the character code before a server change request is executed
     
     ```
     product.cloudportal.extension.point.vm.modify.pre.command.charset=Charset
     ```

   - When customizing the character code after a server change request is executed
     
     ```
     product.cloudportal.extension.point.vm.modify.post.command.charset=Charset
     ```

   - When customizing the character code before a server deletion request is executed
     
     ```
     product.cloudportal.extension.point.vm.delete.pre.command.charset=Charset
     ```
Describe the following details.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CharSet</td>
<td>Describe the character code for the standard output and standard error output of the command you want to execute. Specify one of the character codes defined in the following: <a href="https://www.iana.org/assignments/character-sets/character-sets.xhtml">https://www.iana.org/assignments/character-sets/character-sets.xhtml</a></td>
</tr>
</tbody>
</table>

A description example is given below.

```java
product.cloudportal.extension.point.vm.create.pre.command.out.charset=Shift_JIS
```

### 15.2 Setting the extension processing to be performed before or after tenant registration or deletion

This section describes how to set the extension processing to be performed before or after tenant registration or deletion and the points to note with regard to operation design.

#### Enabling the extension processing

The extension processing to be performed before or after tenant registration or deletion is enabled by defining the command line corresponding to the execution timing in the configuration file. The setting procedures are described below.

1. Open C:\Program Files (x86)\NEC\wDCA\MoM\FW\Tomcat\conf\NEC\webframework.properties.

2. See below, and add the description corresponding to the execution timing you want to set.
• When the extension processing is performed before tenant registration is executed

\texttt{product.cloudportal.extension.point.tenant.create.pre.command=Command and line}

• When the extension processing is performed after tenant registration is executed

\texttt{product.cloudportal.extension.point.tenant.create.post.command=Command line}

• When the extension processing is performed before tenant deletion is executed

\texttt{product.cloudportal.extension.point.tenant.delete.pre.command=Command line}

• When the extension processing is performed after tenant deletion is executed

\texttt{product.cloudportal.extension.point.tenant.delete.post.command=Command line}

The format of the command line to be written in \textit{Command line} is shown below.

\textbf{Command options}

Describe the following details.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Command</td>
<td>Describe the file path (full path) of the command you want to execute.</td>
</tr>
<tr>
<td></td>
<td>If the command includes a backslash (), add an escape character () before</td>
</tr>
<tr>
<td></td>
<td>the backslash ().</td>
</tr>
<tr>
<td></td>
<td>Specify an executable file for which the execution user has the execution</td>
</tr>
<tr>
<td></td>
<td>authority. Also, specify a command that returns an integer as the exit code.</td>
</tr>
<tr>
<td></td>
<td>If the \texttt{PATH} environment variable of the execution user is set for</td>
</tr>
<tr>
<td></td>
<td>the command, you do not need to specify a full path.</td>
</tr>
<tr>
<td>Parameter</td>
<td>Describe the argument you want to pass to the command. To specify multiple</td>
</tr>
<tr>
<td></td>
<td>arguments, delimit each of them with a single-byte space delimiter.</td>
</tr>
<tr>
<td></td>
<td>To specify a parameter that includes a single-byte space, enclose it in</td>
</tr>
<tr>
<td></td>
<td>double quotation marks (&quot;).</td>
</tr>
<tr>
<td></td>
<td>For vDCA SE Portal, you can also specify a replacement parameter that is</td>
</tr>
<tr>
<td></td>
<td>expanded when the command line is executed. For details, see</td>
</tr>
<tr>
<td></td>
<td>\textit{&quot;Replacement parameters (page 76)&quot;}.</td>
</tr>
</tbody>
</table>

A description example is given below.

\texttt{product.cloudportal.extension.point.tenant.create.post.command=C:\\extension\\notification.bat $EXTENSION_POINT$ $EXTENSION_TIMING$ $TENANT_ID$ $TENANT_NAME$}

\textbf{Caution}

• The maximum number of characters that can be used for command execution is 8191. Make sure that the total number of characters used in the command, parameters, expanded replacement parameters, and expanded extended parameters does not exceed 8191.
• The extension processing is performed as an extension of the browser operation. If a command takes long to execute, the response to a user operation may become slow.

### Replacement parameters

A replacement parameter is a parameter that vDCA SE Portal expands when it executes a command. The supported replacement parameters are listed below.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>$TENANT_ID$</td>
<td>Parameter to be replaced with the &quot;tenant ID&quot; of the target tenant</td>
</tr>
<tr>
<td>$TENANT_NAME$</td>
<td>Parameter to be replaced with the &quot;tenant name&quot; of the target tenant</td>
</tr>
</tbody>
</table>
| $EXTENSION_POINTS$ | Parameter to be replaced with the type number of the resource subject to the extension processing  
  • Tenant registration: 201  
  • Tenant deletion: 203 |
| $EXTENSION_TIMINGS$| Parameter to be replaced with the execution timing of the extension processing  
  • Preprocessing: 1  
  • Postprocessing: 2 |

### Operating environment

See "Execution environment (page 69)".

### Success and failure judgment

The success or failure of the extension processing in vDCA SE Portal is judged as follows.

<table>
<thead>
<tr>
<th>Judgment</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Success</td>
<td>The exit code returned by the command is &quot;0&quot;.</td>
</tr>
</tbody>
</table>
| Failed     | Either of the following conditions is met:  
  • The exit code returned by the command is other than "0".  
  • The command takes more than 300 seconds to execute (a timeout occurs). |

The command exit code that indicates success and the timeout time for judging failure can be customized as appropriate for the command implementation. The setting procedures are described below.

1. Open C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\webframework.properties.

2. See below, and add the description corresponding to the execution timing you want to set.

   • When customizing the items before tenant registration is executed

   ```
   product.cloudportal.extension.point.tenant.create.pre.command.exit .code.success=Success exit status  
   product.cloudportal.extension.point.tenant.create.pre.command.time out=Time out
   ```

   • When customizing the items after tenant registration is executed
When customizing the items before tenant deletion is executed

When customizing the items after tenant deletion is executed

The items to be customized are described in detail below.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
</table>
| Success exit status   | Specify the exit code (integer) used to judge that the command has ended normally.  
                        | To specify multiple exit codes, delimit each of them with a comma (,). If the returned value matches any of the exit codes, the command is judged to have ended normally. If this item is omitted, 0 is assumed. |
| Time out              | Specify the timeout time (in seconds) for command execution. If this item is omitted, 300 is assumed. |

A description example is given below.

```
product.cloudportal.extension.point.tenant.create.pre.command.exit.code.success=0,1,2
product.cloudportal.extension.point.tenant.create.pre.command.timeout=600
```

**Caution**

*5 If a timeout occurs, the extension processing is judged to have failed. However, the execution of the command is not forced to end. Change the command implementation so that a timeout does not occur, or force the command to end manually if a timeout occurs.

**Behavior upon failure**

What is done if the extension processing fails is described below. It depends on the execution timing. The following table describes what is done if the extension processing fails at each different execution timing.

<table>
<thead>
<tr>
<th>Timing of failure</th>
<th>Behavior upon failure</th>
</tr>
</thead>
</table>
| Before tenant registration is executed | • The tenant registration process in vDCA SE Portal is suspended.  
                                          | • The tenant registration process for SigmaSystemCenter is suspended. |
| After tenant registration is executed | • The tenant registered in vDCA SE Portal is deleted (rolled back).*1 |
| Before tenant deletion is executed | • The tenant deletion process in vDCA SE Portal is suspended. |
Timing of failure | Behavior upon failure
---|---
After tenant registration is executed | • The tenant deletion process for SigmaSystemCenter is suspended.

<table>
<thead>
<tr>
<th>Caution</th>
</tr>
</thead>
<tbody>
<tr>
<td>• If the extension processing fails after tenant registration is executed, the target tenant remains registered in SigmaSystemCenter.</td>
</tr>
<tr>
<td>• If the extension processing fails after tenant deletion is executed, the target tenant remains deleted from SigmaSystemCenter.</td>
</tr>
</tbody>
</table>

### Execution log of the extension processing

When the extension processing is executed, its execution log is output to the following file:

```
C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\logs\extension.log
```

Up to 5 generations of execution log data of the extension processing are stored. If the file size exceeds 10 MB, the file rotates while being compressed as "extension-{I-5}.log.zip".

The log output format is as follows. The log is output in 2 lines.

```
Date time I cloudportal Thread name : Command line
Date time I cloudportal Thread name : Resource Method Timing Exit code Result
Standard output Standard error output
```

Details of each item are as follows.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date time</td>
<td>Date and time the command was executed&lt;br&gt;It is output in the yyyy-MM-dd'T'HH:mm:ss.SSSZ format.</td>
</tr>
<tr>
<td>Thread name</td>
<td>Name of the thread in which the command was executed</td>
</tr>
<tr>
<td>Command line</td>
<td>Command line that was actually executed&lt;br&gt;It is output with the replacement parameter and extended parameter expanded.</td>
</tr>
<tr>
<td>Resource</td>
<td>Resource for which the extension processing was executed&lt;br&gt;The tenant is output.</td>
</tr>
<tr>
<td>Method</td>
<td>Operation for which the extension processing was executed&lt;br&gt;One of the following is output:&lt;br&gt;• CREATE&lt;br&gt;• DELETE</td>
</tr>
<tr>
<td>Timing</td>
<td>Timing at which the extension processing was executed&lt;br&gt;One of the following is output:&lt;br&gt;• PRE&lt;br&gt;• POST</td>
</tr>
<tr>
<td>Exit code</td>
<td>Command exit code specified for the extension processing</td>
</tr>
<tr>
<td>Result</td>
<td>Execution result judged from the command exit code specified for the extension processing&lt;br&gt;One of the following is output:&lt;br&gt;• OK</td>
</tr>
</tbody>
</table>
### Item | Description
---|---
| • NG |  |  
| • TIMEOUT | Command standard output specified for the extension processing  
| | It is output in UTF-8. |  
| Standard output | Command standard error output specified for the extension processing  
| | It is output in UTF-8. |  
| Standard error output |  |  

You can customize the character code to be used when outputting the log to the command standard output and standard error output specified for the extension processing. The setting procedures are described below.

1. Open C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\webframework.properties.

2. See below, and add the description corresponding to the execution timing you want to set.

   - When customizing the character code before tenant registration is executed

   ```
   product.cloudportal.extension.point.tenant.create.pre.command.charset=Charset
   ```

   - When customizing the character code after tenant registration is executed

   ```
   product.cloudportal.extension.point.tenant.create.post.command.charset=Charset
   ```

   - When customizing the character code before tenant deletion is executed

   ```
   product.cloudportal.extension.point.tenant.delete.pre.command.charset=Charset
   ```

   - When customizing the character code after tenant deletion is executed

   ```
   product.cloudportal.extension.point.tenant.delete.post.command.charset=Charset
   ```

### Item | Description
---|---
| CharSet | Describe the character code for the standard output and standard error output of the command you want to execute. Specify one of the character codes defined in the following:  
| | https://www.iana.org/assignments/character-sets/character-sets.xhtml |  

A description example is given below.

```
product.cloudportal.extension.point.tenant.create.pre.command.charset=Shift_JIS
```
Chapter 16  Role Settings

vDCA SE Portal limits the functions that can be used by the user by assigning him/her a role. A role assigned to a user is called a "role". The following roles are incorporated in vDCA SE Portal.

- System administrator
- Tenant manager
- Tenant user
- Request approver

In this manual, these are collectively called "built-in roles".

A "role" is expressed as a group of multiple items of "authority". The functions available for a role are determined based on whether it has the authority.

For details about the mapping between the authority items owned by built-in roles and the available functions, see "B.1 Authority owned by built-in roles (page 283)".

In vDCA SE Portal, you can define a group of specific authority items as a role separately from a built-in role. In this manual, these are collectively called a "custom role". This chapter describes how to set a custom role. This setting is not necessary when not creating a custom role.

The setting procedure is described below.

1. Create an empty file named "application.json" in the C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\custom directory.
2. Open the "application.json" file in a text editor and then define a custom role. Enter data in JSON format.

In this manual, JSON keys are combined with periods (.). For example, for setting items such as those below,

<table>
<thead>
<tr>
<th>Setting item</th>
<th>Type</th>
<th>Required</th>
<th>Settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>roles.roles[n].name</td>
<td>string</td>
<td>○</td>
<td>Role name of the custom role</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>A role name must be unique within the file.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Available characters: Single-byte alphanumeric characters and &quot;_&quot; only</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Up to 100 characters</td>
</tr>
</tbody>
</table>

Check and change the settings by changing the position on the file as below.

```json
{
  roles [
    {
      name:"role1",
      Omitted
    },
    ]
}
```

The legend of the [Required] column in the table is as follows:

- ○: Required
• ☒: Optional

### Table 16-2 Setting items in the general operation definition file

<table>
<thead>
<tr>
<th>Setting item</th>
<th>Type</th>
<th>Required</th>
<th>Settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>roles.name</td>
<td>string</td>
<td>☒</td>
<td>Product name</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Enter &quot;CloudPortalExtension_CustomRole&quot;.</td>
</tr>
<tr>
<td>roles.version</td>
<td>string</td>
<td>☒</td>
<td>Version</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Enter &quot;1.0&quot;.</td>
</tr>
<tr>
<td>roles.description</td>
<td>string</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Enter &quot;CloudPortalExtension_CustomRoleDescription&quot;</td>
</tr>
<tr>
<td>roles.roles[n].name</td>
<td>string</td>
<td>☒</td>
<td>Role name of the custom role</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>A role name must be unique within the file.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Available characters: Single-byte alphanumeric characters and &quot;_&quot; only</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Up to 100 characters</td>
</tr>
<tr>
<td>roles.roles[n].authorities</td>
<td>string[]</td>
<td>N/A</td>
<td>Permitted authority list</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Enter permitted authority. To specify multiple authority items, separate them with commas (,). To set no value, enter an empty list ([]).*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>For details about authority items that can be entered, see &quot;B.1 Authority owned by built-in roles (page 283)&quot;</td>
</tr>
<tr>
<td>roles.roles[n].denies</td>
<td>string[]</td>
<td>N/A</td>
<td>Prohibited authority list</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Enter prohibited authority. To specify multiple authority items, separate them with commas (,). To set no value, enter an empty list ([]).*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>For details about authority items that can be entered, see &quot;B.1 Authority owned by built-in roles (page 283)&quot;</td>
</tr>
</tbody>
</table>

A setting example is shown below.

```json
{
  "name": "CloudPortalExtension_CustomRole",
  "version": "V1.0",
  "description": "",
  "roles": [ 
    {
      "name": "NOA_SERVER_POWER_OPERATION",
      "authorities": []
    },
    {
      "name": "ROLE_SERVER_STARTUP",
      "name": "ROLE_SERVER_SHUTDOWN",
      "name": "ROLE_SERVER_POWEROFF",
      "name": "ROLE_SERVER_REBOOT"
    }
  ]
}
```

3. Save the setting file character code in UTF8 format. Restart the application server (Tomcat). From the left-side panel of the server manager, select the local server, from services, right-click [Apache Tomcat 8.5 ServiceGovernor], and select [Restart Service].
Note

- "ROLE_SYSTEM_ADMIN", "ROLE_TENANT_ADMIN", "ROLE_TENANT_USER", and "ROLE_LOGINUSER_ACTFORTEANT" cannot be used for authority items in "authorities" and "denies". Even if they are used, they are ignored.

- Authority is applied in the order of "denies" and "authorities". Authority items set in both "denies" and "authorities" are assumed to be prohibited.
Part 4.

Basic Operations

This section describes the basic operations of this product.
Chapter 17  
User Authority

This chapter describes the user authority.

17.1 Roles by user type

This system limits the functions and screen displays depending on the user type.

See the table below when creating and managing users.

<table>
<thead>
<tr>
<th>Function</th>
<th>Operation</th>
<th>System administrator</th>
<th>Tenant manager</th>
<th>Tenant user</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dashboard</td>
<td>Dashboard (Notice) display</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Request management</td>
<td>Request list and details display</td>
<td>*1</td>
<td>*1</td>
<td>*1</td>
</tr>
<tr>
<td>Request management</td>
<td>Request creation</td>
<td>N/A</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td></td>
<td></td>
<td>○ by acting as a tenant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Request management</td>
<td>Request execution, cancel, and reapplication</td>
<td>N/A</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td></td>
<td></td>
<td>○ by acting as a tenant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Request management</td>
<td>Server creation, change, deletion, and quotation</td>
<td>N/A</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td></td>
<td></td>
<td>○ by acting as a tenant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Request management</td>
<td>Network creation, change, and deletion</td>
<td>N/A</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td></td>
<td></td>
<td>○ by acting as a tenant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Request management</td>
<td>Proxy request approval and rejection</td>
<td>N/A</td>
<td>○</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>○ by acting as a tenant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Request management</td>
<td>Logical network management, list, and details</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Request management</td>
<td>Logical network management synchronization</td>
<td>N/A</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td></td>
<td></td>
<td>○ by acting as a tenant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Request management</td>
<td>Request error status clear</td>
<td>○</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Tenant management</td>
<td>Tenant list and details display</td>
<td>○</td>
<td>○</td>
<td>N/A</td>
</tr>
<tr>
<td>Tenant management</td>
<td>Tenant registration</td>
<td>○</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Tenant management</td>
<td>Tenant change</td>
<td>○</td>
<td>○</td>
<td>N/A</td>
</tr>
<tr>
<td>Tenant management</td>
<td>Tenant deletion</td>
<td>○</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>User management</td>
<td>User list and details display</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>User management</td>
<td>User registration, change, and deletion</td>
<td>○</td>
<td>○</td>
<td>N/A</td>
</tr>
<tr>
<td>Resource status</td>
<td>Resource status display</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Work group management</td>
<td>Work group list and details</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Function</td>
<td>Operation</td>
<td>System administrator</td>
<td>Tenant manager</td>
<td>Tenant user</td>
</tr>
<tr>
<td>---------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>----------------------</td>
<td>----------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Work group management</td>
<td>Work group creation, edit, and deletion</td>
<td>N/A</td>
<td>○ by acting as a tenant</td>
<td>○</td>
</tr>
<tr>
<td>Server management</td>
<td>Server list and details display</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Server Management</td>
<td>Server creation, change, deletion, power control operation, synchronization, and other operations</td>
<td>N/A</td>
<td>○ by acting as a tenant</td>
<td>○</td>
</tr>
<tr>
<td>Operation work history</td>
<td>Operation work history list and details display</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Topology</td>
<td>Topology display</td>
<td>N/A</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Topology</td>
<td>Network display name change</td>
<td>N/A</td>
<td>○</td>
<td>N/A</td>
</tr>
<tr>
<td>Maintenance Management</td>
<td>Maintenance list and details display, registration, change, and deletion</td>
<td>○</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Notice management</td>
<td>Notice list and details display, registration, change, and deletion</td>
<td>○</td>
<td>○</td>
<td>N/A</td>
</tr>
<tr>
<td>Setting</td>
<td>Operation setting list display and setting change</td>
<td>○</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Login user operation</td>
<td>Login user details display and user information change</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Login user operation</td>
<td>Login user tenant proxy</td>
<td>○</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Workflow</td>
<td>Workflow list display and setting change</td>
<td>○</td>
<td>○</td>
<td>N/A</td>
</tr>
<tr>
<td>Mail notification</td>
<td>Email notification list display and setting change</td>
<td>N/A</td>
<td>○</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*1 The user authority of request list and details display is as shown below.

Table 17-2  User authority of request list and details display

<table>
<thead>
<tr>
<th>User type</th>
<th>Without approval authority</th>
<th>With approval authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenant user</td>
<td>Own requests</td>
<td>All requests in the organization tenant</td>
</tr>
<tr>
<td>Tenant manager</td>
<td>All requests in the organization tenant</td>
<td>All requests in the organization tenant</td>
</tr>
<tr>
<td>System administrator</td>
<td>All requests</td>
<td>All requests</td>
</tr>
<tr>
<td>System administrator</td>
<td>All requests in the proxy tenant</td>
<td>All requests in the proxy tenant</td>
</tr>
</tbody>
</table>

Operations below can be performed when the request approval is enabled upon user creation, regardless of the user types:

- Displaying an unapproved request on the dashboard
- Approving or rejecting a request
Chapter 18
Login

This chapter describes the method of logging in the GUI.

18.1 Connecting to the GUI

Access the following URLs from a browser.
http://hostname of the global management server: port(12080 is set by default)/portal/
https://hostname of the global management server: port(12443 is set by default)/portal/

18.2 Logging in to the GUI

This section describes how to log in to the GUI.

1. Start the GUI, enter the user name and password, and then click the [Login] button.
   
   Both the user name and password of the built-in user is "admin".

   **Note**
   
   After logging in for the first time, register a new system administrator and disable the built-in user (admin).
   
   For details about registering a user, see "23.2.2 Registering a user (administrator) (page 123)". For details about disabling the built-in user, see "23.2.4 Changing the user information (page 127)".

   ![Login dialog box](image)

   **Figure 18-1 Login dialog box**

2. The [Dashboard] screen is displayed.

   ![Dashboard screen](image)

   **Figure 18-2 [Dashboard] screen**

   **Note**

   - If you enter an incorrect password 10 times, the screen is locked and you cannot log in.
   - Until the 9th password input failure, the number of input failures is reset after 10 minutes.
The system administrator and the administrator of the tenant to which the login user belongs can clear this state by enabling the login user.

- If all administrator users are locked or disabled and cannot log in to the GUI

Run the following command to enable the admin user.

```bash
sqlcmd -E -S localhost\SSCCMDB -i "C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\portal\sql\enable_admin.sql"
```

* If the instance name (SSCCMDB) and installation path (C:\Program Files (x86)\NEC\vDCA) of the SQL server shown above are different from the actual ones, replace them accordingly.
Chapter 19

Screen Configuration

This chapter describes the screen configuration.

Figure 19-1  Screen Configuration

(1) Tenant name: Displays the tenant name of the user who has logged in.

(2) Login user name: Displays the name of the user who has logged in.

(3) Logout button: Logs out by clicking this button.

(4) Menu: The respective function menu trees Clicking the menu changes to the screen of the respective functions.
Chapter 20
Login User Operation

Clicking the login user name displays the Login User Operation dialog box.

Figure 20-1   Login User Operation dialog box

20.1 Checking the detailed login user information

1. Click [Detail] on the login user operation dialog box.

Figure 20-2   Login user operation dialog box

2. The [Log-in User Detail] screen is displayed.

Figure 20-3   [Log-in User Detail] screen

Table 20-1   Item List (Log-in User Detail)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>User ID</td>
<td>ID of the login user</td>
</tr>
<tr>
<td>Name</td>
<td>Name (User name)</td>
</tr>
</tbody>
</table>
### Table 20-2  Item List(Edit Log-in User Screen)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Input rules</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Up to 1024 characters</td>
<td>Entering a name(user name).</td>
</tr>
<tr>
<td>e-mail</td>
<td>e-mail format</td>
<td>Entering an e-mail address.</td>
</tr>
<tr>
<td>Notes</td>
<td>Up to 255 characters</td>
<td>Entering notes</td>
</tr>
</tbody>
</table>

#### 20.2 Changing Login User Information

The method of changing the login user information is described below:

1. Click the user name and then click [Edit].

![Login User Operation dialog box](image1.png)

Figure 20-4  Login User Operation dialog box

2. The Edit Log-in User(Form) screen is displayed. Refer to the table below, and click the [Next] button after editing the respective items.

![Edit Log-in User(Form) Screen](image2.png)

Figure 20-5  Edit Log-in User(Form) Screen

3. The Edit Log-in User(Confirmation) screen is displayed. Clicking the [Confirm] button reflects the change.
20.3 Changing the login password

This section describes how to change the login password.

1. On the dashboard screen, click a user name and click [Change Password].

2. The [Change Log-in Password(Form)] screen is displayed. Specify a password using 6 to 16 characters and click the [Next] button.

3. The [Change Log-in Password(Confirmation)] screen is displayed. Click the [Submit] button to apply the changes.
20.4 Substituting for a tenant (system administrator only)

The tenant substitution method is described below. This function is used when the system administrator acts on behalf of a tenant user in request creation, reapplication, etc.

1. Click a user name and then [Access as a tenant].

2. The [Access as a tenant(Form)] screen is displayed. Select the tenant you want to substitute for, and then click the [Next] button.

3. The [Access as a tenant(Confirmation)] screen is displayed. Clicking the [Confirm] button enables you to substitute for the target tenant.
Part 5.  

Administrator operation

This part describes the functions that a system administrator operates.

Note that the operations described in this part are available to a system administrator who possesses the authorities mentioned below.

Tenant substitution: Disabled
Approve request: Possible
Chapter 21
Dashboard

A user can arrange widgets on the [Dashboard] screen freely.

This chapter describes the widget operations such as viewing, arranging, and deleting widgets.

The widget types that can be arranged differ depending on the server setting and user authority.

21.1 Displaying the widget

By selecting [Dashboard] from the menu, the "Dashboard" window is displayed and widgets are displayed on the dashboard.

![Figure 21-1 Displaying the "Dashboard" window and widgets](image)

Widgets can be handled by using a mouse.

To return to the initial display of widgets after handling them, reload the page.

21.2 Adding a widget

This section describes how to add a widget to [Dashboard].

1. On the [Dashboard] screen, click [Customize].

   The [Dashboard] screen changes to customize mode and the customize menu is displayed.

![Figure 21-2 "Dashboard" window - Customize menu](image)

2. On the [Dashboard] screen, click [Add widget].

   The [Add widget] dialog box is displayed.
3. On the [Add widget] dialog box, enter the information of the widget that you want to add and click [OK].

<table>
<thead>
<tr>
<th>Item name</th>
<th>Input rule</th>
<th>Initial value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Widget title</td>
<td>0 to 64 characters</td>
<td>-</td>
<td>Specify the name to be displayed as the title of the widget. Make sure that the widget name makes it easy to understand what the widget does. If a widget name is omitted, &quot;(No name)&quot; is displayed. Multiple identical widget names can be registered.</td>
</tr>
<tr>
<td>URL</td>
<td>-</td>
<td>-</td>
<td>Select the item to be displayed as the widget. Multiple widgets having the same URL can be registered.</td>
</tr>
<tr>
<td>URL parameter</td>
<td>0 to 2048 characters</td>
<td>-</td>
<td>Use this field to specify an optional parameter for the URL of the widget. The format of the optional parameter is key=value. When specifying multiple parameters, separate them with &quot;;&quot;. The character string must have been encoded.</td>
</tr>
</tbody>
</table>

A new widget is displayed at the end of the displayed widgets on the dashboard.
After adding widgets, save the added widgets. For details about the procedure, see "21.5 Saving the widget settings (page 99)".

### 21.3 Deleting widgets

This section describes how to remove a widget from [Dashboard].

1. On the [Dashboard] screen, click [Customize].
   
The [Dashboard] screen changes to customize mode.

2. Click [×] displayed at the upper right of the widget that you want to remove.
Figure 21-6 Removing a widget from the dashboard

The [Confirmation - remove widget] dialog box is displayed.

Figure 21-7 The [Confirmation - remove widget] dialog box

3. Check the contents of the [Confirmation - remove widget] dialog box. If you want to remove the displayed widget, click [OK]. Otherwise, click [Cancel].

The [Confirmation - remove widget] dialog box is closed.

Click [OK] to delete the selected widget is removed.
After removing the widget, click [Save]. For details about the procedure, see "21.5 Saving the widget settings (page 99)".

21.4 Changing the widget display order and size

This section describes how to change the display order and size of the widget displayed on the dashboard.

2. To change the widget display order, drag and drop the desired widget with a mouse.
3. To change the widget size, drag the frame of the desired widget with a mouse.
   • To change the height of the widget, drag the bottom frame of the desired widget with a mouse.
   • To change the width of the widget, drag the right frame of the desired widget with a mouse.
   • To change the height and width of the widget, drag the bottom right corner of the desired widget with a mouse.

   The widget size is changed.

![Figure 21-11 Changing the widget size](image)

After changing the widget display order or size, click [Save]. For details about the procedure, see "21.5 Saving the widget settings (page 99)".

### 21.5 Saving the widget settings

This section describes how to save the settings of the widget on the dashboard.

It is assumed that the dashboard is already in customize mode and the widgets are being handled. For the operations for widgets, see the following:

• "21.2 Adding a widget (page 94)"
• "21.3 Deleting widgets (page 96)"
• "21.4 Changing the widget display order and size (page 97)"

1. On the [Dashboard] screen, click [Save].

   The [Confirmation - save widgets] dialog box is displayed.
2. Check the contents of the [Confirmation - save widgets] dialog box. If you want to save the displayed contents, click [OK].

![Figure 21-13](confirmation-save-widgets.png)

[Confirmation - save widgets] dialog box

Otherwise, click [Cancel].

The [Confirmation - save widgets] dialog box is closed.

Information of the added or remove widget and the widget display order and size are saved.

### 21.6 Discarding the widget settings

This section describes how to discard the settings of the widget on the dashboard.

It is assumed that the dashboard is already in customize mode and the widgets are being handled. For details about how to handle the widgets, see the following:

- "21.2  Adding a widget (page 94)"
- "21.3  Deleting widgets (page 96)"
- "21.4  Changing the widget display order and size (page 97)"

1. On the [Dashboard] screen, click [Cancel].
Figure 21-14  Discarding the widget settings

The [Confirmation - cancel] dialog box is displayed.

![Confirmation - cancel dialog box]

Figure 21-15  [Confirmation - cancel] dialog box

2. Check the contents of the [Confirmation - cancel] dialog box. If you want to discard the displayed contents, click [OK]. Otherwise, click [Cancel]. The [Confirmation - cancel] dialog box is closed.

The widget editing contents that have not been saved are discarded and the widget display returns to the last saved state.

21.7 Dashboard (Default)

The dashboard screen (default) allows you to check the following information.

- Posted notice list
- Unapproved request list

The unapproved request list is displayed only for a user who can approve requests.
21.7.1 Notice

Notices that were registered by the notice management function, are displayed.

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Release date</td>
<td>Release date</td>
</tr>
<tr>
<td>Title</td>
<td>Title of a notice</td>
</tr>
<tr>
<td>Contents</td>
<td>Contents of a notice. A link icon to a file is displayed at the end of the text when the file is attached.</td>
</tr>
</tbody>
</table>

21.7.2 Unapproved requests (administrator)

The requests of all the tenants whose next approver is the login user are displayed.

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenant name</td>
<td>Name of the request target tenant</td>
</tr>
<tr>
<td></td>
<td>* This is displayed only for a system administrator.</td>
</tr>
<tr>
<td>Request ID</td>
<td>Clicking this item produces a transition to the target request screen.</td>
</tr>
<tr>
<td>Request type</td>
<td>- Server creation</td>
</tr>
<tr>
<td></td>
<td>- Server change</td>
</tr>
</tbody>
</table>
### Item name | Description
--- | ---
- Server deletion  
- Logical network creation  
- Logical network deletion  
One of the above. |  
Server name | Name of the server to be created, or the target server for which request is changed or deleted  
Image | Name of the OS of the server to be created, changed, or deleted  
Requested At | Date and time the request was submitted  
Applicant | Applicant name
Chapter 22
Request(Administrator)

This section describes the [Request] menu.

22.1 Request management (administrator)

On the request management screen, you can view information on the created request.
In addition, a user who can approve the request can approve or reject the unapproved request.
The tenant manager has the proxy request approval privileges and can therefore approve or reject
unapproved requests in the tenant.
Note that a system administrator who acts as a tenant can create, change, and delete a request.
For details about the requesting method, see "28.1 Request management (user) (page 179)".

22.1.1 Request list

In the menu, click [Request] and then [Request List], and the [Request List] screen is displayed.

Note

The request list displays the requests submitted by the login user.
To display the requests submitted by users other than the login user, take an appropriate action when
conducting a search, such as deleting the login user name of [Applicant] from the search conditions.

Figure 22-1 [Request management] screen

Table 22-1 Item List ([Request management] screen)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of display items</td>
<td>Changes the number of items displayed in the list.</td>
</tr>
<tr>
<td>Request list</td>
<td>Displays a list of requests. If [Error] is shown in [Status] in the list, clicking the [Error] link displays the error message.</td>
</tr>
</tbody>
</table>

To search for a request, click [Search] in the [Request List] screen and conduct the search using the
items shown below. A string search is a partial match search.

Table 22-2 Item List ([Request List Search] screen)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenant name</td>
<td>Tenant name</td>
</tr>
<tr>
<td>Request ID</td>
<td>Request ID</td>
</tr>
<tr>
<td>Item name</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Request type               | - Server creation  
- Server change  
- Server deletion  
- Network creation  
- Network deletion  
Specify the above and conduct a search (multiple items can be selected). |
| Keyword                    | - Server name  
- Network name  
Specify the keyword by entering the above (partial specification is allowed). |
| Status                     | - Awaiting approval  
- Standby for execution  
- Rejected  
- Canceled  
- In progress  
- Completed  
- Failed  
Specify the above and conduct a search (multiple items can be selected). |
| Request submit date and time | Specify the request period.                                                  |
| Applicant                  | Enter and specify the applicant (partial specification is allowed).          |
| Clear                      | Return the input (specified) values to the initial values.                  |
| Search                     | Click the button to do the search.                                          |

### 22.1.2 Checking Request Detailed Information

Clicking a line of the request that you want to check in the request list displays the detailed information.

![Figure 22-2 Request detail Window](image-url)
<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
</table>
| Tenant name         | Name of the target tenant  
* This is displayed only for the system administrator. |
| Request ID          | Request ID                                                                  |
| Request type        | - Server creation  
- Server change  
- Server deletion  
- Network creation  
- Network deletion  
* One of the above. |
| Template name       | When a catalog for private clouds is selected, the name of the VM template used in that selected catalog  
When a catalog for Amazon EC2 is selected, the Amazon Machine Image ID used in that selected catalog |
| Catalog name        | Selected catalog name                                                                                                                     |
| Additional information | Displays additional information of the template set to the configuration file  
* If no additional information is set, this is not displayed. |
| Request execution type | Displays the request execution type set at request when applying the request.  
[Automatic] or [Manual] |
| Job ID              | Job ID of SigmaSystemCenter(Value to identify a processing such as VM creation)                                                          |
| Status              | - Awaiting approval  
- Standby for execution  
- Rejected  
- Canceled  
- In progress  
- Completed  
- Failed  
* Any of the above |
| Progress            | Displays the progress when the "Status" is "In progress" or "Completed".                                                                   |
| Server name         | Name of the server to be created, or the target server for which request is changed or deleted                                            |
| Switch name         | Displays the name of the switch to which the network to be created or the network for which a deletion request has been submitted belongs.  
* Displayed only for a network. |
| Resource pool       | Resource pool name                                                                                                                        |
| Network name        | Displays the name of the network to be created or the network for which a deletion request has been submitted.  
* Displayed only for a network. |
| Address pool        | Displays the address pool of the network to be created or the network for which a deletion request has been submitted.  
There are two tabs, [IPv4] and [IPv6].  
1. The [IPv4] tab displays the following information.  
   • Subnet mask |
<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item name</td>
<td>Displays the subnet mask information of the address pool.</td>
</tr>
<tr>
<td></td>
<td>• Default gateway</td>
</tr>
<tr>
<td></td>
<td>Displays the default gateway information of the address pool.</td>
</tr>
<tr>
<td></td>
<td>• IP range list</td>
</tr>
<tr>
<td></td>
<td>The IP range information of the address pool lists the following information.</td>
</tr>
<tr>
<td></td>
<td>• Name</td>
</tr>
<tr>
<td></td>
<td>Displays the range name.</td>
</tr>
<tr>
<td></td>
<td>• Range</td>
</tr>
<tr>
<td></td>
<td>Displays the IPv4 address range.</td>
</tr>
<tr>
<td></td>
<td>* Initial value: IPv4 address range &quot;Start address - End address&quot;</td>
</tr>
<tr>
<td></td>
<td>• Category</td>
</tr>
<tr>
<td></td>
<td>Displays the category of the IPv4 address range (assignment or exclusion).</td>
</tr>
<tr>
<td></td>
<td>* Displayed only for a network.</td>
</tr>
<tr>
<td>2. The [IPv6] tab displays the following information.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Subnet prefix length</td>
</tr>
<tr>
<td></td>
<td>Displays the subnet prefix length.</td>
</tr>
<tr>
<td></td>
<td>• Default gateway</td>
</tr>
<tr>
<td></td>
<td>Displays the default gateway.</td>
</tr>
<tr>
<td></td>
<td>• IP range list</td>
</tr>
<tr>
<td></td>
<td>The IP range information of the address pool lists the following information.</td>
</tr>
<tr>
<td></td>
<td>• Name</td>
</tr>
<tr>
<td></td>
<td>Displays the range name.</td>
</tr>
<tr>
<td></td>
<td>• Range</td>
</tr>
<tr>
<td></td>
<td>Displays the IPv6 address range.</td>
</tr>
<tr>
<td></td>
<td>* Initial value: IPv6 address range &quot;Start address - End address&quot;</td>
</tr>
<tr>
<td></td>
<td>• Category</td>
</tr>
<tr>
<td></td>
<td>Displays the category of the IPv4 address range (assignment or exclusion).</td>
</tr>
</tbody>
</table>

* Displayed only for a network.

<table>
<thead>
<tr>
<th>Resource status check</th>
<th>Button that displays a dialog box in which the resource pool selected for the request is initially selected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work group</td>
<td>Work group selected during application</td>
</tr>
<tr>
<td></td>
<td>If no work group is specified during application, &quot;Do not specify&quot; is displayed.</td>
</tr>
<tr>
<td>OS name</td>
<td>Name of the OS of the server to be created, changed, or deleted</td>
</tr>
<tr>
<td>Spec</td>
<td>Specification of the server to be created, changed, or deleted</td>
</tr>
<tr>
<td></td>
<td>When a catalog for Amazon EC2 is selected, the system disk tag is not displayed.</td>
</tr>
<tr>
<td>Disk</td>
<td>Data disk of the server to be created, changed, or deleted</td>
</tr>
<tr>
<td></td>
<td>When a catalog for Amazon EC2 is selected, the data disk tag is not displayed.</td>
</tr>
<tr>
<td>Network</td>
<td>Network of the server to be created, changed, or deleted</td>
</tr>
<tr>
<td></td>
<td>Click [Option] to display the option items set during application.</td>
</tr>
<tr>
<td>Other</td>
<td>The extended parameter is displayed in the table format.</td>
</tr>
<tr>
<td>Item name</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| • Display name of the extended parameter  
• Value of the extended parameter      | Displayed only when an extended parameter is set.                                                                                         |
| Time zone                             | Timezone set during application  
This item is displayed when a Windows OS catalog for private use is selected.  
It is not displayed when a Linux OS catalog for private use is selected.  
It is not displayed when a catalog for Amazon EC2 is selected.                                      |
| Administrator account                 | Administrator account name  
This item is displayed when a catalog for private use is selected.  
It is not displayed when a catalog for Amazon EC2 is selected.                                      |
| Administrator initial password        | Administrator initial password  
Click the icon to switch between showing or hiding the password.  
This item is displayed when a catalog for private use is selected.  
It is not displayed when a catalog for Amazon EC2 is selected.                                      |
| Product key                           | Displays the product key.  
This item is displayed when a Windows OS catalog for private use is selected.  
It is not displayed when a Linux OS catalog for private use is selected.  
It is not displayed when a catalog for Amazon EC2 is selected.                                      |
| Domain suffix                         | Domain suffix entered during application  
This item is not displayed when a Windows OS catalog for private use is selected.  
It is displayed when a Linux OS catalog for private use is selected.  
It is not displayed when a catalog for Amazon EC2 is selected.                                      |
| Workgroup name (domain name)          | Workgroup name or domain name  
This item is displayed when a Windows OS catalog for private use is selected.  
It is not displayed when a Linux OS catalog for private use is selected.  
It is not displayed when a catalog for Amazon EC2 is selected.                                      |
| Domain account                        | Specify a domain account.  
This item is displayed when a Windows OS catalog for private use is selected and the type is domain.  
It is not displayed when a Windows OS catalog for private use is selected and the type is work group.  
It is not displayed when a Linux OS catalog for private use is selected.  
It is not displayed when a catalog for Amazon EC2 is selected.                                      |
| Domain password                       | Displays a masked domain password.  
This item is displayed when a Windows OS catalog for private use is selected and the type is domain.  
It is not displayed when a Windows OS catalog for private use is selected and the type is work group.  
It is not displayed when a Linux OS catalog for private use is selected.  
It is not displayed when a catalog for Amazon EC2 is selected.                                      |
| Key pair                              | Displays the key pair.  
This item is not displayed when a catalog for private use is selected.                                                              |
<table>
<thead>
<tr>
<th><strong>Item name</strong></th>
<th><strong>Description</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Remark</strong></td>
<td>Remarks</td>
</tr>
<tr>
<td><strong>Request date</strong></td>
<td>Date when the request was submitted</td>
</tr>
<tr>
<td><strong>Applicant</strong></td>
<td>Applicant name of the request</td>
</tr>
<tr>
<td><strong>Comment on application</strong></td>
<td>Comment during application</td>
</tr>
</tbody>
</table>
| **Next approver** | Displays the next approver. If there is no next approver, this is not displayed. 
(*1) *This is updated in real time. 
*This is displayed only during request application. |
| **Approver (Tenant)** | An approver name is displayed only when the workflow is set to pattern 2 (*2). 
*This is updated in real time. |
| **Approval comment (Tenant)** | An approval comment is displayed only when the workflow is set to pattern 2 (*2). 
*This is updated in real time. |
| **Approval datetime(Tenant)** | Displays the approval date and time. |
| **Execution date** | Displays the execution date and time. |
| **Approval status (Tenant) list** | An approver status is displayed only when the workflow is set to pattern 3 (*2) (workflow for tenants). 
*This is updated in real time. |
| **Approval order** | Displays the approval order of the workflow. |
| **Approver** | Displays the approver name. If the status is "Not approved," the current user name is displayed. 
(*3) If the status is "Approved," the user name when the request was approved is displayed. |
| **E-mail address** | Displays the email address of the approver. (For details, see the above "Approver.") |
| **Status** | Displays the approval status of the approver. 
Any one of the following: 
waiting (Not approved/Pending) 
done (Approved) 
rejected (Rejected) 
- (Skipped) |
| **Comment** | Displays the comment by the approver. |
| **Approval datetime** | Displays the approval date and time. |
| **Approval status (System) list** | An approver status is displayed only when the workflow is set to pattern 3 (*2) (workflow for systems). 
*This is updated in real time. |
| **Approval order** | Displays the approval order of the workflow. |
| **Approver** | Displays the approver name. If the status is "Not approved," the current user name is displayed. 
(*3) If the status is "Approved," the user name when the request was approved is displayed. |
| **E-mail address** | Displays the email address of the approver. (For details, see the above "Approver.") |
| **Status** | Displays the approval status of the approver. 
Any one of the following: 
waiting (Not approved/Pending) 
done (Approved) |
<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>rejected (Rejected)</td>
<td>- (Skipped)</td>
</tr>
<tr>
<td>Comment</td>
<td>Displays the comment by the approver.</td>
</tr>
<tr>
<td>Approval datetime</td>
<td>Displays the approval date and time.</td>
</tr>
</tbody>
</table>
| Operation menu    | Approve request: Displays the request approval dialog box as a modal dialog box. * This is updated in real-time. * This is displayed only for an approver when the status is "Waiting Approval."  
|                   | Reject request: Displays the request reject dialog box as a modal dialog box. * This is updated in real-time. * This is displayed only for an approver when the status is "Waiting Approval."  
|                   | Reapplication: The current screen changes to any of the following windows:  
|                   | Server Creation(Form) window  
|                   | Server Change(Form) window  
|                   | Server Deletion(Confirmation) window  
|                   | *This is updated in real-time.  
|                   | *This is displayed only when the rejected or canceled request is selected. The system administrator (user not belonging to the tenant) is not displayed.  
|                   | Request execution: Displays the request execution dialog box modally.  
|                   | *This is updated in real-time.  
|                   | *This is displayed only when the status is "Waiting Execution."  
|                   | *This is displayed only for the approver or tenant manager.  
|                   | Cancel: Displays the cancel dialog box as a modal dialog box. *This is displayed only for the following statuses:  
|                   | Waiting Approval  
|                   | Approved  
|                   | Waiting Execution  
|                   | Failed  
|                   | *This is updated in real-time.  
|                   | *This is displayed only for the approver or tenant manager.  
|                   | Error status release: Displays the error status release dialog box modally.  
|                   | *This is updated in real-time.  
|                   | This is displayed only for a system administrator when the status is "Failed." |

*1 If no next approver is set in the workflow settings, a next approver is not displayed. If an approver is set but has been deleted or belongs to another tenant (including a provider), however, displays as below.

- When the next approver is an approver in the workflow for tenants  
  (List) Tenant manager  
  (Details) This user does not exist. Ask the tenant manager for approval on behalf.
- When the next approver is an approver in the workflow for systems  
  (List) System administrator  
  (Details) This user does not exist. Ask the system administrator for approval on behalf.

*2 For the workflow patterns, see "22.2 Configuring a workflow (page 113)".
If the approver is deleted when the status is "Not Approved," or if the approver belongs to another tenant (including providers), [Nonexistent user] will be displayed.

**Note**

- After you log in as a system administrator and approve a request on behalf of a tenant, the [Create] link on the request list may not be displayed. In this case, redisplay the request management window.
- If you delete the user who approved the request, the approver field in the request details window may be hidden. In that case, open the request details window again.

### 22.1.3 Approving a Request

1. A user with the request approve right can approve requests by clicking [Approve] on the request details window.

![Figure 22-3  Request Details Window (Approve)](image)

2. Displays the request approval dialog box. Enter a comment for an approver and click the [Confirmation] button to approve the request.

![Figure 22-4  Approve Dialog Box](image)

**Note**

You cannot create a request while an Amazon EC2 instance is being created or deleted.

If a server creation request specifying another service catalog for Amazon EC2 enters the [Awaiting approval] status when a server creation request specifying a service catalog for Amazon EC2 or a server
deletion request of an EC2 instance is in the [In progress] status, make sure that the preceding request enters the [Completed] or [Failed] status before approving the request.

### 22.1.4 Rejecting Request

1. Click [Reject] on the Request detail screen.

![Figure 22-5 Request details(Reject) screen](image)

2. The Reject dialog box is displayed, Entering the comments optionally to the applicant and clicking the [Confirmation] button rejects the request.

![Figure 22-6 [Reject] dialog box](image)

### 22.1.5 Clearing a request error

If a request fails, the system administrator can clear its error state. A request whose error state is cleared enters the execution standby state.

1. Click [Clear the error] on the "Detail" window of the failed request.
2. The "Clear the error" dialog box is displayed. Click the [Confirmation] button to clear the error state of the request and make the request enter the execution standby state.

The canceled request can be applied for again from the "Request detail" window.

22.2 Configuring a workflow

Following describes how to configure a workflow.

It may be required to specify multiple approvers who can approve a request application in the absence of a specific approver or depending on the organizational structure.

This function is used to register multiple approvers to enable the approval procedure to be managed according to the situation.

Configuring a workflow implements a function to prompt an applicant and approver to approve a request by sending an email notification.

For details about the email notification, refer to "26.1 Email notification (page 157)".

There are two types of workflows: system workflows and tenant workflows.

- System workflows
  
  This function is available for users who have system administrator privileges.
  
  The system administrator uses this function to configure an approval request flow for the system.

- Tenant workflows
This function is available for users who have tenant manager privileges.

The tenant manager uses this function to configure an approval request flow for the tenant.

The system administrator can configure a workflow for a tenant by being made a proxy tenant.

For details about how to configure a system workflow, refer to "22.2.1 Workflow approval patterns in the workflow settings (page 114)". For a tenant workflow, refer to "28.2.1 Workflow patterns (user) (page 206)".

### 22.2.1 Workflow approval patterns in the workflow settings

Following describes the approval patterns to be configured for a workflow.

- **Approval Settings**
  
  Set whether request approval is required or not.
  
  If approval is set as not being required, a request is automatically executed immediately after application.

- **Approval Condition Settings**
  
  If approval is set as not being required, it is not necessary to set this condition.
  
  For the approval condition, set [All Users] or [one of the users] who have approval privileges.
  
  If [All Users] is selected, approval proceeds according to the registered order of approvers.
  
  * [one of the users] cannot be selected for a system workflow.

<table>
<thead>
<tr>
<th>No.</th>
<th>Approval</th>
<th>Approval condition</th>
<th>Approval operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not required</td>
<td>-</td>
<td>No approval required</td>
</tr>
<tr>
<td>2</td>
<td>Required</td>
<td>one of the users</td>
<td>A request is determined to have been approved when one of the users who have approval privileges approves the request. * This condition cannot be selected for a system workflow.</td>
</tr>
<tr>
<td>3</td>
<td>Required</td>
<td>All Users</td>
<td>A request is determined to have been approved if all approvers registered in the workflow approve the request.</td>
</tr>
</tbody>
</table>

- **Approval privileges and proxy approval privileges**

  An approval operation for a request (the operation to approve or reject a request) must be performed by a user who has approval privileges.

  However, tenant managers can perform approval operation for their own tenant as a proxy.

<table>
<thead>
<tr>
<th>User</th>
<th>Workflow configuration</th>
<th>Tenant workflow</th>
<th>System workflow</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Does not have approval privileges) Tenant user</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>(Has approval privileges) Tenant user</td>
<td>All Users</td>
<td>Possible</td>
<td>Possible</td>
</tr>
<tr>
<td>User</td>
<td>Workflow configuration</td>
<td>Tenant workflow</td>
<td>System workflow</td>
</tr>
<tr>
<td>------------------------------</td>
<td>------------------------</td>
<td>----------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Tenant user or tenant manager</td>
<td></td>
<td>Approve</td>
<td>Approve</td>
</tr>
<tr>
<td>(Has approval privileges)</td>
<td></td>
<td>Approve</td>
<td>Approve</td>
</tr>
<tr>
<td>Tenant user or tenant manager</td>
<td></td>
<td>Reject</td>
<td>Reject</td>
</tr>
<tr>
<td>(Does not have approval privileges)</td>
<td></td>
<td>Possible</td>
<td>Possible</td>
</tr>
<tr>
<td>System administrator</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>(Has approval privileges)</td>
<td>All Users</td>
<td>-</td>
<td>Possible</td>
</tr>
<tr>
<td>System administrator</td>
<td>-</td>
<td>By proxy</td>
<td>Possible</td>
</tr>
<tr>
<td>Tenant manager</td>
<td>-</td>
<td>By proxy</td>
<td>-</td>
</tr>
<tr>
<td>System administrator (Tenant proxy)</td>
<td>-</td>
<td>By proxy</td>
<td>-</td>
</tr>
</tbody>
</table>

**Note**

- If the workflow is changed while a request is under application, the configuration when the request application was made takes precedence.
- If an approver is deleted due to a personnel transfer or other reason, the request approval processing jumps to the next approver.
- If an approver user is invalid or locked, or the user's approval privileges have been withdrawn, the request is processed assuming that the user is valid. However, because the user cannot approve or reject the request, it is necessary to edit the user settings or have the request approved by proxy.

### 22.2.2 Configuring a system workflow

For a system workflow, set [Approval Settings] and [Approval Condition Settings]. Up to five approvers can be set.

1. Select [Request]-[Approval flow settings] from the menu to display the "Approval flow settings" window.

   Select the tenant to be edited by referring to the following table and click the [Edit] button.

   ![System's Approval flow settings Window](image)

   **Figure 22-9  System's Approval flow settings Window**
Table 22-6 System's Approval flow settings Window

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenant</td>
<td>Select the tenant to be edited from the pull-down menu.</td>
</tr>
<tr>
<td>Approval</td>
<td>Currently set approval necessity</td>
</tr>
<tr>
<td>Approval completion condition * This item is displayed when [Approval] is [Required].</td>
<td>Currently set approval completion condition</td>
</tr>
<tr>
<td>Approver</td>
<td>User names and mail addresses of the approvers whose approval is required (displayed in the defined approval order)</td>
</tr>
<tr>
<td>Edit</td>
<td>Displays the &quot;Configure approval flow(Form)&quot; window.</td>
</tr>
</tbody>
</table>

2. The "Configure approval flow(Form)" window is displayed. Set each item by referring to the following table, and then click the [Commit] button to apply the edited contents.

Figure 22-10 Configure approval flow(Form) Window

Table 22-7 Configure approval flow(Form) Window

<table>
<thead>
<tr>
<th>Item name</th>
<th>Input rule</th>
<th>Initial value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenant</td>
<td>-</td>
<td>-</td>
<td>Name of the tenant to be edited</td>
</tr>
<tr>
<td>Approval</td>
<td>&quot;Required&quot; or &quot;Not required&quot;</td>
<td>Current setting</td>
<td>Select whether approval is required or not.</td>
</tr>
<tr>
<td>Approval completion condition * This item is displayed when [Approval] is [Required].</td>
<td>-</td>
<td>-</td>
<td>* For a system workflow, this is fixed to [Approval by all the approvers on the approval flow].</td>
</tr>
<tr>
<td>Choose approver</td>
<td>-</td>
<td>-</td>
<td>Displays the &quot;Choose approver&quot; dialog box. Select an approver by referring to &quot;Table 22-7 Configure approval flow(Form) Window (page 116)&quot;.</td>
</tr>
<tr>
<td>Back</td>
<td>-</td>
<td>-</td>
<td>Discards the current contents and transits to the &quot;Approval flow settings&quot; window.</td>
</tr>
</tbody>
</table>
Up to five approvers can be specified. Select an approver from the [Choose from] area and click the [Add] button. The selected approver is added to the [Selected] area. After selecting all the desired approvers, click [Selected].

<table>
<thead>
<tr>
<th>Item name</th>
<th>Input rule</th>
<th>Initial value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commit</td>
<td>-</td>
<td>-</td>
<td>Updates the workflow configuration.</td>
</tr>
</tbody>
</table>

Figure 22-11  Choose approver Dialog Box

Table 22-8  Choose approver Dialog Box

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose from</td>
<td>Lists the names of users who can be set as approvers.</td>
</tr>
<tr>
<td>Selected</td>
<td>List names of users added as approvers</td>
</tr>
<tr>
<td>[Add] button</td>
<td>Adds the user selected in the [Choose from] area to the [Selected] area.</td>
</tr>
<tr>
<td>[Delete] button</td>
<td>Returns the user selected in the the [Selected] area to the [Choose from] area.</td>
</tr>
<tr>
<td>Cancel</td>
<td>Discards the current contents and transits to the &quot;Approval flow settings&quot; window.</td>
</tr>
<tr>
<td>Commit</td>
<td>Sets the selected users as approvers.</td>
</tr>
</tbody>
</table>
Chapter 23
Tenant Information (Administrator)

This section describes the Tenant Management menu.

In the tenant information menu, the functions below are provided.

- Tenant administration: To register a new tenant, to check, edit, and delete the registered tenant
- User administration: To register a new user, to check and edit the registered users, to change and delete password

23.1 Tenant Administration (Administrator)

This section describes the tenant administration menu.

23.1.1 Tenant List (Administrator)

Clicking [Tenants] and [Tenant Management] from the menu displays the Tenant List screen.

![Figure 23-1 Tenant Management Screen](image)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of display items</td>
<td>Changes the number of display items in the list.</td>
</tr>
<tr>
<td>add</td>
<td>Displays the Create a tenant(Form) screen.</td>
</tr>
<tr>
<td>Tenant list</td>
<td>Displays the tenant list.</td>
</tr>
<tr>
<td></td>
<td>(The [Tenant name] line is not displayed in the case of the tenant administrator or the tenant user.)</td>
</tr>
</tbody>
</table>

Click [Search] on the Tenant List screen to search for the tenant from the items described below. The search with a character string allows the partial match.

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenant ID</td>
<td>Tenant ID</td>
</tr>
<tr>
<td>name</td>
<td>Tenant name</td>
</tr>
<tr>
<td>Status</td>
<td>- Active</td>
</tr>
<tr>
<td></td>
<td>- Inactive</td>
</tr>
<tr>
<td></td>
<td>Any of the above</td>
</tr>
<tr>
<td>Registration period</td>
<td>Specify the period of the registered date.</td>
</tr>
<tr>
<td>Comment</td>
<td>Comment</td>
</tr>
</tbody>
</table>
23.1.2 Adding a tenant

This section describes how to add a tenant.


![Figure 23-2] [Tenant Management] screen

2. The [Create a tenant(Form)] screen is displayed. Edit the items by referring to the following table and then click the [Next] button.

![Figure 23-3] [Create a tenant(Form)] screen

<table>
<thead>
<tr>
<th>Item name</th>
<th>Input rule</th>
<th>Initial value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenant ID</td>
<td>1 to 15 characters Only one-byte</td>
<td>–</td>
<td>Tenant ID</td>
</tr>
<tr>
<td></td>
<td>alphanumeric characters can be used.</td>
<td></td>
<td>* The tenant ID be unique.</td>
</tr>
<tr>
<td></td>
<td>* The character string “root” cannot be used.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tenant name</td>
<td>Up to 100 characters The following</td>
<td>-</td>
<td>Tenant name</td>
</tr>
<tr>
<td></td>
<td>symbols cannot be used.</td>
<td></td>
<td>* The same tenant name can be specified twice or more.</td>
</tr>
<tr>
<td></td>
<td>/:.;*?&quot;&lt;&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Status</td>
<td>-</td>
<td>Enabled</td>
<td>Enables or disables a tenant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Disabled</td>
<td></td>
</tr>
<tr>
<td>Comment</td>
<td>-</td>
<td>-</td>
<td>Comment</td>
</tr>
</tbody>
</table>
3. A confirmation dialog box is displayed. Click the [Confirm] button to add the tenant.

![Figure 23-4 Create a tenant(Confirmation) screen](image)

When assigning an exclusive resource pool, do it with SigmaSystemCenter after registering a tenant and before creating a request. For information about how to assign a resource pool, see the SigmaSystemCenter manual.

### 23.1.3 Checking Details of Tenant Information

Clicking a line of the tenant that you want to check in the tenant list displays the detailed information on the tenant.

![Figure 23-5 Tenant detail Screen](image)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenant ID name</td>
<td>Tenant ID</td>
</tr>
<tr>
<td>Status</td>
<td>Any one of the following statuses:</td>
</tr>
<tr>
<td></td>
<td>- Active</td>
</tr>
<tr>
<td></td>
<td>- Inactive</td>
</tr>
<tr>
<td>Number of registered users</td>
<td>The number of the users that are registered in the applicable tenant.</td>
</tr>
<tr>
<td>Registered</td>
<td>Registered date and time</td>
</tr>
<tr>
<td>Comment</td>
<td>Comment</td>
</tr>
<tr>
<td>Administrator</td>
<td>The name of the administrator of the applicable tenant</td>
</tr>
<tr>
<td>Edit tenant</td>
<td>Displays the Modify a tenant(Form) screen.</td>
</tr>
<tr>
<td>Delete Tenant</td>
<td>Displays the Delete a tenant(Confirmation) screen.</td>
</tr>
</tbody>
</table>

### 23.1.4 Editing a tenant

This section describes how to edit a tenant.

1. On the [Details of Tenant] screen click [Edit tenant].
2. The [Modify a tenant(Form)] screen is displayed. Edit each item by referring to "Table 23-3 Item List[Create a tenant(Form)] (page 119)" of "23.1.2 Adding a tenant (page 119)" and click the [Next] button.

3. The [Modify a tenant(Confirmation)] screen is displayed. Click the [Confirm] button to apply the changes.
23.1.5 Deleting a tenant

This section describes how to delete a tenant.

Note

Before deleting a tenant, delete the following items related to the tenant to be deleted.

- Server
- Notice
- User
- Maintenance

1. On the [Tenant detail] screen click [Delete Tenant].

![Figure 23-10 Tenant detail screen (Deletion)](image)

2. The [Delete a tenant(Confirmation)] dialog box is displayed. Click the [OK] to delete the tenant.

Note that the resource pool that is registered in SigmaSystemCenter is not deleted. Delete it manually when it is unnecessary.

![Figure 23-11 Delete a tenant(Confirmation)](image)

23.2 User Administration

This section describes the user administration menu.

23.2.1 List of users (administrator)

The [List of users] screen is displayed by selecting [Tenants] and then [User Management] from the menu.
23.2.2 Registering a user (administrator)

This section describes how to add a user.

1. On the [User Management] screen, click [Create User].
2. The [Create User(Form)] screen is displayed. Edit the items by referring to the following table and then click the [Next] button.

![Figure 23-13  [User Management] screen](image1)

![Figure 23-14  [Create User(Form)] screen](image2)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Input rule</th>
<th>Initial value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role type</td>
<td>--</td>
<td>Tenant user</td>
<td>Select the role to be given to the user.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- System administrator</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Tenant manager</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Tenant user</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Enable request approval.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>If you select a tenant user with a custom role specified, you can select the role to add by clicking the [Customize] button and displaying the [Customize] dialog box.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>See the figure below for the [Customize] dialog box.</td>
</tr>
<tr>
<td>Tenant</td>
<td>-</td>
<td>-</td>
<td>Select which tenant the user belongs to.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>* This is not displayed when [System administrator] is selected for [Role types].</td>
</tr>
<tr>
<td>User ID</td>
<td>3 to 16 characters One-byte alphanumeric characters, underscores (_), and hyphens (-) can be used.</td>
<td>-</td>
<td>Enter the user ID.</td>
</tr>
<tr>
<td>Name</td>
<td>Up to 1024 characters</td>
<td>-</td>
<td>Enter the name (user name).</td>
</tr>
<tr>
<td>e-mail</td>
<td>E-mail format</td>
<td>-</td>
<td>Enter the email address.</td>
</tr>
<tr>
<td>Item name</td>
<td>Input rule</td>
<td>Initial value</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Password</td>
<td>6 to 16 characters&lt;br&gt;One-byte alphanumeric characters and the following symbols are available: !&quot;#$%&amp;'()_*+,./:;&lt;=&gt;?@[]^`{</td>
<td>}~ -</td>
<td>-</td>
</tr>
<tr>
<td>Password(Confirmation)</td>
<td>Enter the same character string that you entered in [Password].</td>
<td>-</td>
<td>Enter the user password (for confirmation).</td>
</tr>
<tr>
<td>Status</td>
<td>-</td>
<td>Enable</td>
<td>Select any of the following user states: &lt;br&gt;- Enabled &lt;br&gt;- Disabled</td>
</tr>
<tr>
<td>Remark</td>
<td>Up to 255 characters</td>
<td>-</td>
<td>Remark</td>
</tr>
</tbody>
</table>

[Customize]
If you select [Tenant user] for [Role type], you can add a custom role. For details of the custom roles, see "Chapter 16  Role Settings (page 80)".
Select the role to add in the [Choose from] field, and click the [Add] button. After selecting all the roles you want to add, click the [Select] button.
If you want to add all the roles, click the [Add all] button, which adds all the roles.

![Figure 23-15  [Customize] dialog box](image)

3. The [Create User(Confirmation)] screen is displayed. Click the [Confirm] button to add the user.
23.2.3 Checking the detailed user information (administrator)

Clicking the line of the user whose contents you want to check displays its detailed information.

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenant</td>
<td>Tenant name</td>
</tr>
<tr>
<td></td>
<td>* This is displayed only for a system administrator.</td>
</tr>
<tr>
<td>User ID</td>
<td>User ID</td>
</tr>
<tr>
<td>Name</td>
<td>Name (User name)</td>
</tr>
<tr>
<td>Role</td>
<td>User type and whether the user can approve requests</td>
</tr>
<tr>
<td>added roles</td>
<td>Custom role</td>
</tr>
<tr>
<td></td>
<td>Displayed only when the type is Tenant user.</td>
</tr>
<tr>
<td></td>
<td>When there are multiple custom roles, each of them is delimited by a comma.</td>
</tr>
<tr>
<td>Status</td>
<td>- Active</td>
</tr>
<tr>
<td></td>
<td>- Inactive</td>
</tr>
<tr>
<td></td>
<td>- Locked</td>
</tr>
<tr>
<td></td>
<td>One of the above:</td>
</tr>
<tr>
<td>e-mail</td>
<td>Email address of the user</td>
</tr>
<tr>
<td>Note</td>
<td>Note</td>
</tr>
<tr>
<td>Edit User</td>
<td>Displays the [Edit User] screen.</td>
</tr>
<tr>
<td></td>
<td>* This is not displayed for a built-in user and tenant user.</td>
</tr>
</tbody>
</table>
### 23.2.4 Changing the user information

This section describes how to change the user information.


![User detail screen](image)

2. The [Modify User(Form)] screen is displayed. Edit each item by referring to "Table 23-7 Item List[Create User(Form)] screen (page 124)" of "23.2.2 Registering a user (administrator) (page 123)" and click the [Next] button.

![Modify User(Form)] screen

[Customize]

If you select [Tenant user] for [Role type], you can change a custom role.

Select the role to add in the [Choose from] field, and click the [Add] button. If you want to add all the roles, click the [Add all] button, which adds all the roles. Select the role to delete in the [Selected] field, and click the [Remove] button. If you want to delete all the roles, click the [Remove all] button, which deletes all the roles. After selecting all the roles you want to add or delete, click the [Select] button.

![Customize dialog box](image)

**Note**

User information of a built-in user can be handled only by a system administrator. Only the status can be changed.

---

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changing password</td>
<td>Displays the [Changing password] screen. * This is not displayed for a built-in user and tenant user.</td>
</tr>
<tr>
<td>Delete User</td>
<td>Displays the [Delete User] screen. * This is not displayed for a built-in user and tenant user.</td>
</tr>
</tbody>
</table>
3. The [Change User(Confirmation)] screen is displayed. Click the [Confirm] button to apply the changes.

**Figure 23-21  [Change User(Confirmation)] screen**

**Note**

A change to the user name is not applied to the registrant information of the previously registered requests, maintenance, notices, or operation work history.

### 23.2.5 Changing the password

The method of changing a password is described below.

1. Click [Change Password] on the User detail window.

**Figure 23-22  User detail Window**

2. The [Changing password(Form)] screen is displayed. Change the password by referring to the password input rule described in "23.2.2  Registering a user (administrator) (page 123)" and click the [Next] button.

**Figure 23-23  [Changing password(Form)] screen**

3. The [Changing password(Confirmation)] screen is displayed. Click the [Submit] button to apply the changes.

**Figure 23-24  [Changing password(Confirmation)] screen**

**Note**

To return from the [Changing password(Confirmation)] screen to the [Changing password(Form)] screen, click the [Back] button. You cannot return from the breadcrumb list.
23.2.6 Deleting User

The method of deleting a user is described below:

1. Click [Delete User] on the User detail screen.

2. Displays the Delete User(Confirmation) screen. Clicking the [Confirm] button deletes the user.
Chapter 24

Resource management

This chapter describes the resource management menu.

The resource management menu provides the following function:

- Resource Information: Displays a usage status graph for each resource pool. For details, see "24.1 Resource Information (Administrator) (page 130)".

- Work Group Management: Creates, edits, or deletes a work group, or a server management unit. For details, see "24.2 Work Group Management (Administrator) (page 131)".

- Server Management: Displays server information or performs server power control and other operations. For details, see "24.3 Server Management (Administrator) (page 133)".

- Network Management: Displays network information, deletes a network, and so forth. For details, see "24.4 Network Management (Administrator) (page 139)".

- Operation work history: Displays the server operation execution history. For details, see "24.5 Operation Log (Administrator) (page 142)".

24.1 Resource Information (Administrator)

Displays the status of the resource pool of all the tenants.

In addition, information on the resource consumed that is possessed by the respective resource pools can be checked.

Note

Resource pools on the public cloud are not displayed.

24.1.1 Checking Resource Information (Administrator)

Clicking [Resources] and [Resource Information] from the menu displays the Resource Information screen.

Clicking the resource pool in the resource pool tree displays the resource pool details on the right pane.

Note the resource pool of the agent tenant is displayed when the system administrator acts as a tenant while all of the resource pool statuses are displayed when the system administrator does not act as a tenant.
### Table 24-1  Item list(Resource status)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource pool tree</td>
<td>Resource Pool&lt;br&gt; Selects and displays information on the resource consumed by clicking it.</td>
</tr>
<tr>
<td>Resource slider</td>
<td>Displays the respective resources by using sliders.</td>
</tr>
<tr>
<td>Resource name</td>
<td>Resource name</td>
</tr>
<tr>
<td>Usage value of the resource</td>
<td>The usage value of the resource is displayed in the formats below:&lt;br&gt; Usage value/Total amount</td>
</tr>
<tr>
<td>Resource unit</td>
<td>Resource unit</td>
</tr>
<tr>
<td>Usage range of the resource(pie graph)</td>
<td>Displays the usage rage of the resource in the pie graph.</td>
</tr>
</tbody>
</table>

### 24.2 Work Group Management (Administrator)

This section describes the work group and its management menu.

A work group is a function that groups servers by role into services and applications in the task system and which uses a group as a management unit. It is assigned by specifying a work group to which a server belongs when creating one. Once a work group to which a server belongs is specified, it cannot be changed in vDCA SE Portal. It must be changed in SigmaSystemCenter.

An example of using a work group is described in "Figure 24-2  Work group configuration example (page 132)".
For example, if task system SystemA consists of a Web server, AP server, and DB server, create "SystemA" as a category and "Web", "AP", and "DB" as groups. Configuring a work group by role like this allows you to group the servers by task and role.

The work group management menu for system administrators allows you to check the situation of all the work groups.

When a system administrator is acting as a substitute for a tenant, the work groups corresponding to the tenant are displayed, allowing the system administrator to create, edit, or delete a work group(s).

For how to create a work group, see "30.2.3 Adding a work group (page 226)".

### 24.2.1 Work Group List (Administrator)

Select [Resources]-[Work Group Management] from the menu to display the work group management window.

When a system administrator is acting as a substitute for a tenant, the work groups corresponding to the tenant are displayed. When a system administrator is not substituting for a tenant, the situation of all the work groups is displayed.
### 24.2.2 Work Group Details

Clicking the name of a work group in the work group tree displays its details.

![Figure 24-4 Work Group Details Window](image)

#### Table 24-3 Item List (Work Group Details)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenant name</td>
<td>Tenant name set to the work group</td>
</tr>
</tbody>
</table>
| Type              | Work Group types  
- Category  
- Group  
Any of the above |
| Work Group        | Path to the selected work group  
Click the display button. Then, the full path to the SSC on which the VM is actually deployed is displayed. |
| Machine type      | Machine type of the selected work group  
One of the following types is displayed:  
- VM  
- VM Server  
- Physical  
- Public Cloud  
Displayed only when the type of the selected work group is [Group]. |
| Default catalog name | Converts the default template set for the work group into a catalog name and displays it.  
Displayed only when the type of the selected work group is [Group]. |
| Number of VMs     | Number of virtual machines in the selected work group  
When a category is selected, displays the total number of VMs belonging to the groups under the category. |

### 24.3 Server Management (Administrator)

This section describes the [Server Management] menu.

The system administrator can check the registered server list and details.

Note that the system administrator who acts as a tenant can create, change, delete, and synchronize the server, and can perform the power control operation.

For details, see "30.4 Server Management(User) (page 230)".
24.3.1 Server list

In the menu, click [Resources] and then [Server Management], and the [List of Server] screen is displayed.

![List of Server screen](image)

Table 24-4 Item List ([List of Server] screen)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>number of items displayed</td>
<td>Changes the number of items displayed in the list.</td>
</tr>
<tr>
<td>Server list</td>
<td>Displays a list of servers.</td>
</tr>
</tbody>
</table>

To search for a server, click [Search] in the [List of Server] screen and conduct the search using the items shown below. A string search is a partial match search.

Table 24-5 Item List ([List of Server search] screen)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenant name</td>
<td>Tenant name</td>
</tr>
<tr>
<td>Server ID</td>
<td>Server ID</td>
</tr>
<tr>
<td>Server name</td>
<td>Server name</td>
</tr>
<tr>
<td>Work group</td>
<td>Work group name</td>
</tr>
<tr>
<td>Location</td>
<td>Location of the target server</td>
</tr>
<tr>
<td>Status</td>
<td>- Started</td>
</tr>
<tr>
<td></td>
<td>- Off</td>
</tr>
<tr>
<td></td>
<td>- Powered off</td>
</tr>
<tr>
<td></td>
<td>- Restarting</td>
</tr>
<tr>
<td></td>
<td>- Suspended</td>
</tr>
<tr>
<td></td>
<td>- Shelved</td>
</tr>
<tr>
<td></td>
<td>- Other</td>
</tr>
<tr>
<td></td>
<td>- Delted</td>
</tr>
<tr>
<td></td>
<td>- Error</td>
</tr>
<tr>
<td></td>
<td>Select one of the above.</td>
</tr>
<tr>
<td>OS</td>
<td>OS</td>
</tr>
<tr>
<td>Resource pool</td>
<td>Resource pool name of the target server*</td>
</tr>
<tr>
<td>Remark</td>
<td>Remarks</td>
</tr>
<tr>
<td>Clear</td>
<td>Return the input (specified) values to the initial values.</td>
</tr>
<tr>
<td>Search</td>
<td>Click the button to do the search.</td>
</tr>
</tbody>
</table>
24.3.2 Checking Details of Server Information

Clicking a line of the server that you want to check in the server list displays the detailed information.

![Figure 24-6 Detail of Server Screen](image)

Note that selecting the server that has been already deleted on SigmaSystemCenter displays [Deleted] in [Status].

The detailed information provides the following.

- System
- Network
- Disk
- Screenshot
- Additional information
- Console

For servers imported not by a server creation request but by using the [Synchronize] button and servers on the public cloud, the functions of the server details screen are restricted. For details, see "Table 24-6 Supported Functions on the Server Details Screen (page 135)" below.

<table>
<thead>
<tr>
<th>Function</th>
<th>Private</th>
<th>Public</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display of server details (system, network, disk)</td>
<td>Supported</td>
<td>Supported</td>
</tr>
<tr>
<td>Screenshot</td>
<td>Supported</td>
<td>-</td>
</tr>
<tr>
<td>Additional information</td>
<td>Supported</td>
<td>Supported</td>
</tr>
<tr>
<td>Console</td>
<td>Supported *</td>
<td>-</td>
</tr>
</tbody>
</table>

* This can be displayed only for servers on the corresponding hypervisor.

24.3.2.1 [System]

While the initial window on which a server is selected from a list or the details window is being displayed, click the [System] tab to display the system information.
Table 24-7  Item List (System)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Server name</td>
</tr>
<tr>
<td>Location</td>
<td>Location of the target server</td>
</tr>
<tr>
<td>Status</td>
<td>Any one of the following:</td>
</tr>
<tr>
<td></td>
<td>Started</td>
</tr>
<tr>
<td></td>
<td>Off</td>
</tr>
<tr>
<td></td>
<td>Powered off</td>
</tr>
<tr>
<td></td>
<td>Restarting</td>
</tr>
<tr>
<td></td>
<td>Suspended</td>
</tr>
<tr>
<td></td>
<td>Shelved</td>
</tr>
<tr>
<td></td>
<td>Deleted</td>
</tr>
<tr>
<td>Progress</td>
<td>Progress of the above status</td>
</tr>
<tr>
<td>OS name</td>
<td>OS name</td>
</tr>
<tr>
<td>CPU Count</td>
<td>Number of CPUs&lt;sup&gt;*&lt;/sup&gt;&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td>Memory(MB)</td>
<td>Displays the memory size in MB&lt;sup&gt;*&lt;/sup&gt;&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td>Resource pool</td>
<td>Resource pool name of the target server&lt;sup&gt;*&lt;/sup&gt;&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>Work group</td>
<td>Work group name</td>
</tr>
<tr>
<td>UUID</td>
<td>UUID of the server</td>
</tr>
<tr>
<td>Comment</td>
<td>Comment</td>
</tr>
</tbody>
</table>

Note

<sup>*</sup><sup>1</sup> A server resource pool on a public cloud imported by synchronization or the resource information update command is not displayed.

<sup>*</sup><sup>2</sup> If the changes are imported by synchronization after the configuration is changed directly in SigmaSystemCenter or the public cloud, a gap may arise from the information used when a request was executed.

24.3.2.2  [Network]

If you click the [Network] tab while the [Detail] screen is displayed, the network information is displayed.
Table 24-8  Item List (Network)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interface name</td>
<td>Interface name</td>
</tr>
<tr>
<td>IP address</td>
<td>IP address</td>
</tr>
<tr>
<td>MAC address</td>
<td>MAC address</td>
</tr>
</tbody>
</table>

**Note**

If the changes are imported by synchronization after the configuration is changed directly in SigmaSystemCenter or the public cloud, a gap may arise from the information used when a request was executed.

### 24.3.2.3 [Disk]

If you click the [Disk] tab while the [Detail] screen is displayed, the disk information is displayed.

Table 24-9  Item List (Disk)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slot</td>
<td>Disk position</td>
</tr>
</tbody>
</table>
| Type          | - Disk type  
               - System disk  
               - Extended disk |
| Disk type     | Disk type  
               - Thin disk 
               - Thick disk 
               - RDM (physical)  
               - RDM (virtual) |
| Disk file name | LUN name or disk file name |
| Total (KB)    | Displays the total size in KB. |
Note
If the changes are imported by synchronization after the configuration is changed directly in SigmaSystemCenter or the public cloud, a gap may arise from the information used when a request was executed.

24.3.2.4 [Screenshot]
Displays the screenshot of the server by clicking the [Screenshot] tab while the Detail screen is displayed after clicking the server from the list.

![Screenshot Screen](image)

**Figure 24-10 Screenshot Screen**

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screenshot</td>
<td>Displays the screenshot that is acquired when the [Screenshot] tab is clicked or when the [Retake] button is clicked. Viewing larger display by clicking the image</td>
</tr>
<tr>
<td>Zoom</td>
<td>Viewing the screenshot in the larger display Close the dialog box by using the [Close] button after viewing the larger display.</td>
</tr>
<tr>
<td>Retake</td>
<td>Acquiring and displaying the screenshot again</td>
</tr>
</tbody>
</table>

**Table 24-10 Item List (Screenshot)**

Note:
To display a screenshot, settings need to be made on SigmaSystemCenter. For details, see the SigmaSystemCenter manuals.

Note:
For servers on the public cloud, the [Screenshot] tab is not displayed.

24.3.2.5 [Additional information]
If you click a server in the list and then click the [Miscellaneous information] tab while the [Detail] screen is displayed, the additional information of that server is displayed.

For the additional information to be displayed, see "A.1 Displaying additional information in the template (page 276)".
24.4 Network management (Administrator)

This section describes the logical network management menu.
The system administrator can list the registered logical networks and check their details.
Also, when substituting for a tenant, the system administrator can create and delete logical networks.
For details, see "30.5 NetNetwork management (User) (page 242)".

24.4.1 Network list (Administrator)

In the menu, click [Resources] and then [Network Management], and the [List of Network] screen is displayed.

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>number of items displayed</td>
<td>Changes the number of items displayed in the list.</td>
</tr>
<tr>
<td>Network list</td>
<td>Displays a list of networks.</td>
</tr>
</tbody>
</table>

Figure 24-12 [List of Network] screen
To search for a network, click [Search] in the [List of Network] screen and conduct the search using the items shown below. A string search is a partial match search.

### Table 24-13 Item List ([List of Network search] screen)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenant name</td>
<td>Tenant name</td>
</tr>
<tr>
<td>Network ID</td>
<td>Network ID</td>
</tr>
<tr>
<td>Type</td>
<td>- Tenant management VLAN</td>
</tr>
<tr>
<td></td>
<td>- Public LAN</td>
</tr>
<tr>
<td></td>
<td>Select one of the above.</td>
</tr>
<tr>
<td>Public Scope</td>
<td>- Public</td>
</tr>
<tr>
<td></td>
<td>- Private</td>
</tr>
<tr>
<td></td>
<td>Select one of the above.</td>
</tr>
<tr>
<td>Remark</td>
<td>Remarks</td>
</tr>
<tr>
<td>Clear</td>
<td>Return the input (specified) values to the initial values.</td>
</tr>
<tr>
<td>Search</td>
<td>Click the button to do the search.</td>
</tr>
</tbody>
</table>

#### 24.4.2 Checking detailed information of a network (administrator)

Clicking the network column in the network list that you want to check displays detailed information.

![Figure 24-13: [Detail of Network] screen](image)

The detailed information provides the following.
- [Information] tab
- [Address Pool] tab
  - IPv4
  - IPv6

#### 24.4.2.1 [Information]

While the initial window on which a network is selected from a list or the details window is being displayed, click the [Information] tab to display the detailed information.
Table 24-14  Item List (Information)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenant name</td>
<td>Name of the tenant that owns the network</td>
</tr>
<tr>
<td>Network ID</td>
<td>Network ID</td>
</tr>
<tr>
<td>Network name</td>
<td>Network name</td>
</tr>
<tr>
<td>Resource name</td>
<td>Logical network name on SigmaSystemCenter</td>
</tr>
<tr>
<td>Type</td>
<td>Network type</td>
</tr>
<tr>
<td></td>
<td>Any one of the following:</td>
</tr>
<tr>
<td></td>
<td>- Tenant management VLAN</td>
</tr>
<tr>
<td></td>
<td>- Public LAN</td>
</tr>
<tr>
<td>Public Scope</td>
<td>Disclosure scope of the network</td>
</tr>
<tr>
<td></td>
<td>Any one of the following:</td>
</tr>
<tr>
<td></td>
<td>Public</td>
</tr>
<tr>
<td></td>
<td>Private</td>
</tr>
<tr>
<td>Note</td>
<td>Note</td>
</tr>
</tbody>
</table>

### 24.4.2.2  [Address pool (IPv4)]

While the initial window on which a network is selected from a list or the details window is being displayed, click the [Address Pool] tab to display the address pool information.


Table 24-15  Item List (Address Pool)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subnet mask</td>
<td>Subnet mask of the IPv4 segment</td>
</tr>
<tr>
<td>Default gateway</td>
<td>Default gateway of the IPv4 segment</td>
</tr>
<tr>
<td>IP range</td>
<td>IP range of the IPv4 segment</td>
</tr>
</tbody>
</table>
### 24.4.2.3 Address pool (IPv6)

While the initial window on which a network is selected from a list or the details window is being displayed, click the [Address Pool] tab to display the address pool information.


![Figure 24-16 Address Pool screen (IPv6)](image)

#### Table 24-16 Item List (Address Pool)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subnet prefix length</td>
<td>Subnet prefix length of the IPv6 segment</td>
</tr>
<tr>
<td>Default gateway</td>
<td>Default gateway of the IPv6 segment</td>
</tr>
<tr>
<td>IP range</td>
<td>IP range of IPv6</td>
</tr>
<tr>
<td></td>
<td>The following information is listed.</td>
</tr>
<tr>
<td></td>
<td>• IPv6Name</td>
</tr>
<tr>
<td></td>
<td>• Range</td>
</tr>
<tr>
<td></td>
<td>• IPv6 address range</td>
</tr>
<tr>
<td></td>
<td>• Category</td>
</tr>
<tr>
<td></td>
<td>Category of the IPv6 address range</td>
</tr>
<tr>
<td></td>
<td>Any one of the following:</td>
</tr>
<tr>
<td></td>
<td>- Allocation</td>
</tr>
<tr>
<td></td>
<td>- Exclusion</td>
</tr>
</tbody>
</table>

### 24.5 Operation Log(Administrator)

The work history of the respective servers can be viewed in the operation work history.
• History of server power control operations
• History of the addition and update of servers by using the [Synchronize] button
• History of operations of servers whose status is [Deleted]

24.5.1 Operation work history list (administrator)

In the menu, click [Resources] and then [Operation Log], and the [Operation Log] screen is displayed.

![Operation Log screen](image)

Table 24-17 Item list (operation work history)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of display items</td>
<td>Changes the number of items displayed in the list.</td>
</tr>
<tr>
<td>Operation work history</td>
<td>Displays the operation work history list.</td>
</tr>
</tbody>
</table>

To search through the operation work history, click [Search] in the [Operation Log] screen and conduct the search using the items shown below. A string search is a partial match search.

Table 24-18 Item list ([Operation Log Search] screen)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenant name</td>
<td>Tenant name</td>
</tr>
<tr>
<td>Operation ID</td>
<td>Operation work ID</td>
</tr>
<tr>
<td></td>
<td>* When an operation is performed for multiple servers, the same operation work ID is used.</td>
</tr>
<tr>
<td>Duration</td>
<td>Operation work period</td>
</tr>
<tr>
<td>Server name</td>
<td>Server name</td>
</tr>
<tr>
<td>Resource pool</td>
<td>Resource pool name of the target server*</td>
</tr>
<tr>
<td>Location</td>
<td>Location of the target server</td>
</tr>
<tr>
<td>Operation</td>
<td>Select one of the following as the content of the executed operation.</td>
</tr>
<tr>
<td></td>
<td>• Start</td>
</tr>
<tr>
<td></td>
<td>• Shutdown</td>
</tr>
<tr>
<td></td>
<td>• Power off</td>
</tr>
<tr>
<td></td>
<td>• Restart</td>
</tr>
<tr>
<td></td>
<td>• Synchronize (Add)</td>
</tr>
<tr>
<td></td>
<td>• Synchronize (Update)</td>
</tr>
<tr>
<td></td>
<td>• Synchronize (Delete)</td>
</tr>
<tr>
<td></td>
<td>• Other operations</td>
</tr>
<tr>
<td>Execution result</td>
<td>Select the execution result.</td>
</tr>
</tbody>
</table>
### 24.5.2 Checking detailed information of the operation work history (administrator)

Clicking the work history column in the operation work history list that you want to check displays detailed information.

![Operation Work History Details screen](image)

**Table 24-19  Item list (Operation Work History Details)**

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenant</td>
<td>Tenant name</td>
</tr>
<tr>
<td></td>
<td>* This is displayed only for the system administrator.</td>
</tr>
<tr>
<td>Operation ID</td>
<td>Operation work ID</td>
</tr>
<tr>
<td>Start time</td>
<td>Start date and time</td>
</tr>
<tr>
<td>End time</td>
<td>End date and time</td>
</tr>
<tr>
<td></td>
<td>When &quot;Start&quot; is shown as the execution result, the end date is not displayed as the operation is not complete.</td>
</tr>
<tr>
<td>Server name</td>
<td>Server name</td>
</tr>
<tr>
<td>Resource pool</td>
<td>Resource pool name of the target server&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>Location</td>
<td>Location of the target server</td>
</tr>
<tr>
<td>Execution item</td>
<td>One of the following is displayed as the content of the executed operation.</td>
</tr>
<tr>
<td></td>
<td>• Start</td>
</tr>
<tr>
<td></td>
<td>• Shutdown</td>
</tr>
<tr>
<td></td>
<td>• Power off</td>
</tr>
<tr>
<td></td>
<td>• Restart</td>
</tr>
<tr>
<td></td>
<td>• Display name of the configuration file in the case of the general operation</td>
</tr>
<tr>
<td>Execution result</td>
<td>One of the following is displayed as the execution result.</td>
</tr>
<tr>
<td></td>
<td>• Success</td>
</tr>
</tbody>
</table>
### Item name

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Result detail</td>
<td>Details of the execution result*2</td>
</tr>
<tr>
<td>Operator</td>
<td>Execution user</td>
</tr>
</tbody>
</table>

### Note

*1 A server resource pool on a public cloud imported by synchronization or the resource information update command is not displayed.

### Tip

*2 If the execution of the general operation fails, the following error is displayed. Based on the displayed tracker ID, identify the cause at JobCenter.

Another operation ended abnormally. Contact the system administrator.
tracker_id : XXX
Chapter 25
Service Management

This section describes the [Service Management] menu.

In the [Service Management] menu, the functions below are provided.

- Maintenance Management
- Notice Management

25.1 Maintenance Management

This section describes the maintenance management function.

25.1.1 Maintenance List

Clicking [Service Management] and [Maintenance] from the menu displays the Maintenance Management screen.

![Figure 25-1 Maintenance Management Screen](image)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of display items</td>
<td>Changes the number of display items in the list.</td>
</tr>
<tr>
<td>Submit a new entry</td>
<td>Displays the Submit maintenance information(Form) screen.</td>
</tr>
<tr>
<td>Maintenance list</td>
<td>Displays the maintenance list</td>
</tr>
</tbody>
</table>

Click [Search] on the Maintenance Management screen to search for a maintenance from the items described below: The search with a character string allows the partial match.

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance target</td>
<td>Maintenance target</td>
</tr>
<tr>
<td>Maintenance name</td>
<td>Maintenance name</td>
</tr>
<tr>
<td>Maintenance period</td>
<td>Maintenance period</td>
</tr>
<tr>
<td>Submitter</td>
<td>Person who registered the maintenance</td>
</tr>
<tr>
<td>Submit Date and Time From - To</td>
<td>Maintenance registration period</td>
</tr>
<tr>
<td>Clear</td>
<td>Returns the entered(specified) value to the initial value.</td>
</tr>
<tr>
<td>Search</td>
<td>Performs search by clicking the button.</td>
</tr>
</tbody>
</table>
25.1.2 Registering maintenance

This section describes how to add a maintenance.


![Figure 25-2  [Maintenance Management] screen](image)

2. The [Submit maintenance information(Form)] screen is displayed. Edit the items by referring to the following table and then click the [Next] button.

![Figure 25-3  [Submit maintenance information(Form)] screen](image)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Input rule</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance target</td>
<td>–</td>
<td>Click the [tenant Selection] button to display the [Select tenant for maintenance] dialog box, and select the tenant to be maintained. See the figure below.</td>
</tr>
<tr>
<td>All tenants</td>
<td>-</td>
<td>If you check this box, all the tenants are selected.</td>
</tr>
<tr>
<td>Maintenance name</td>
<td>64 characters</td>
<td>Enter the maintenance name.</td>
</tr>
<tr>
<td>Display name</td>
<td>-</td>
<td>Enter the message to be displayed.</td>
</tr>
<tr>
<td>Start date</td>
<td>1970/01/01/ 00:00 to 2999/12/31 23:59 (UTC)</td>
<td>Enter the start date and time.</td>
</tr>
<tr>
<td>End date</td>
<td>1970/01/01/ 00:00 to 2999/12/31 23:59 (UTC)</td>
<td>Enter the end date and time.</td>
</tr>
</tbody>
</table>
| Administrator operation during maintenance | -          | - Enabled  
- Disabled  
One of the above.  
[When administrator operations during maintenance are disabled]  
When the maintenance target is all tenants: The administrator cannot log in.  
When the maintenance target is a specified tenant: The administrator cannot substitute for this tenant. |
[Selection of the maintenance target]
Select a maintenance target tenant in the [Choose from] field, and click the [Add] button. After selecting all target tenants, click the [Select] button.

![Select tenant for maintenance](image)

**Figure 25-4** [Select tenant for maintenance] screen

3. The [Submit maintenance information(Confirmation)] screen is displayed. Clicking the [Submit] button registers the maintenance.

![Submit maintenance information](image)

**Figure 25-5** [Submit maintenance information(Confirmation)] screen

**Note**
- The character strings specified in [Description] of the maintenance are embedded as HTML code in the [During maintenance] screen. Therefore, to insert a line break in a message on the [During maintenance] screen, you need to use an HTML tag such as `<br>` or `<p>`. Also, make sure that special characters in HTML code are properly escaped.
- An error of up to 5 minutes may arise for the start and end times of the maintenance.
- If the login by the administrator is disabled by mistake

Execute the following command to change [Administrator operation during maintenance] to [Enabled] for all maintenance work.

```sql
> sqlcmd -E -S localhost\SSCCMDB -i "C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\portal\sql\login_during_maintenance.sql"
```

* If the instance name (SSCCMDB) and installation path (C:\Program Files (x86)\NEC\vDCA) of the SQL server shown above are different from the actual ones, replace them accordingly.
25.1.3 Behavior during maintenance

If you log in during the maintenance period, the message that was set at maintenance registration appears.

In addition, if the maintenance period begins while you are logged into the system, the maintenance screen will appear when you transition to the next screen.

![Maintenance screen](image)

If the administrator operation is enabled during maintenance, only the system administrator can perform these operations.

If the system administrator deletes the target maintenance during the maintenance period, the maintenance period ends and the system returns to ordinary operation.

**Note**

If the maintenance period expires while the maintenance window is displayed, any attempt to reload the window will cause a preset message indicating that maintenance is being performed ("No service is available because the server is being maintained.") is displayed. If this message is displayed, log in to the system again, or click the logo image in the title to move to the top page.

25.1.4 Checking detailed information of maintenance

Clicking the maintenance column in the maintenance list that you want to check displays detailed information.

![Detail of Maintenance](image)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance target</td>
<td>Maintenance target</td>
</tr>
<tr>
<td>Maintenance name</td>
<td>Maintenance name</td>
</tr>
<tr>
<td>Start date</td>
<td>Start date and time of the maintenance</td>
</tr>
<tr>
<td>End date</td>
<td>End date and time of the maintenance</td>
</tr>
<tr>
<td>Submitter</td>
<td>Person who registered the maintenance</td>
</tr>
<tr>
<td>submitted time</td>
<td>Date and time the maintenance was registered</td>
</tr>
<tr>
<td>Description</td>
<td>Message to be displayed in the during maintenance screen</td>
</tr>
<tr>
<td>Administrator operation during maintenance</td>
<td>Whether the system administrator can perform operations during the maintenance</td>
</tr>
<tr>
<td></td>
<td>- Enabled</td>
</tr>
</tbody>
</table>
### 25.1.5 Changing maintenance

The maintenance change method is described below.


![Figure 25-8  [Detail of Maintenance] screen](image)

2. The [Edit maintenance information] screen is displayed. Edit each item by referring to "Table 25-3 Item List (Submit maintenance information(Form) screen) (page 147)" of "25.1.2 Registering maintenance (page 147)" and click the [Next] button.

![Figure 25-9  [Edit maintenance information] screen](image)

3. The [Edit maintenance information(Confirmation)] screen is displayed. Click the [Submit] button to apply the changes.

![Figure 25-10  [Edit maintenance information(Confirmation)] screen](image)

### 25.1.6 Deleting Maintenance

The method of deleting a maintenance is described below:

1. Click [Delete this information] on the Maintenance Details screen.
2. The Deleting maintenance information (Confirmation) screen is displayed. Clicking the [Submit] button deletes the maintenance.

25.2 Notice Management

This section describes the notice management function.

Notices that is notified to the target users can be managed on the dashboard.

The system administrator can specify the tenant of the publication target. The tenant administrator can manage only the tenants of its own.

25.2.1 Notice List

Clicking [Service Management] and [Notice management] displays the Notice management screen.

Click [Search] on the Notice List screen to search for a notice from the items described below: The search with a character string allows the partial match.

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of display items</td>
<td>Changes the number of display items in the list.</td>
</tr>
<tr>
<td>Registration of a notice</td>
<td>Displays the Submit a new notice screen.</td>
</tr>
<tr>
<td>Notice List</td>
<td>Displaying the notice list.</td>
</tr>
</tbody>
</table>
### Table 25-6  Item list(Notice Search Screen)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scope of disclosure</td>
<td>Scope of disclosure</td>
</tr>
<tr>
<td>Release period</td>
<td>Release period</td>
</tr>
<tr>
<td>State</td>
<td>Any one of the statuses - Expired</td>
</tr>
<tr>
<td></td>
<td>- Released</td>
</tr>
<tr>
<td></td>
<td>- Not released</td>
</tr>
<tr>
<td>Title</td>
<td>Title</td>
</tr>
<tr>
<td>Contents</td>
<td>Contents of a notice</td>
</tr>
<tr>
<td>Attachment</td>
<td>Attached file - Yes - No</td>
</tr>
<tr>
<td>Clear</td>
<td>Returns the entered(specified) value to the initial value.</td>
</tr>
<tr>
<td>Search</td>
<td>Performs search by clicking the button.</td>
</tr>
</tbody>
</table>

### 25.2.2 Registering a notice

This section describes how to add a notice.

1. On the [List of Notice] screen, click [Submit a new notice].

2. The [Submit a new notice(Form)] screen is displayed. Enter the items by referring to the following table and then click the [Confirm] button.

#### Table 25-7  Item List (Submit a new notice)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Input rule</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scope of disclosure</td>
<td>–</td>
<td>Click the [Select tenant(s)] button to display the [Select scope of disclosure] dialog box and select the target tenant to which to report a notice. See the [Select scope of disclosure] dialog box below.</td>
</tr>
</tbody>
</table>
If you select the [Select All tenants] check box, all tenants are selected.

Start date
1970/01/01/ 00:00 to 2999/12/31 23:59 (UTC)
Enter the start date and time.

End date
1970/01/01/ 00:00 to 2999/12/31 23:59 (UTC)
Enter the end date and time.

Title
64 characters
Enter the title.

Contents
255 characters
Enter the contents of the notice.

Attached file
- The name of the attached file is displayed.

Choose File
- Displays the dialog box to select a file to be attached. The maximum file size to be attached is 10 MB. * Note that a file whose size is 0 bytes cannot be attached. For information about the location to which to register the attached file, see "4.2  Setting a Cluster Shared Disk (page 20)".

Note
- If a huge file is specified as a file to be attached to a notice, it takes so long to upload the specified file. If a file exceeding 10 MB is uploaded, registration fails. Therefore, do not specify a file exceeding 10 MB.
- If there is notices that have been created by users with the exact same name, which user created which notice is determined by the notice content. Therefore, be sure to create a notice so that the notice can be distinguished by its content.

[Target tenant selection]
Select a tenant to which to report a notice from [Choose from] and click [Add]. After selecting all target tenants, click the [Select] button.

If you want to select all tenants as a target, click the [Add all] button.

Figure 25-16  [Select scope of disclosure] dialog box
3. A notice is registered and the [Submit a new notice(Confirmation)] screen is displayed. Click the [Confirmation] button.

![Submit a new notice(Confirmation)]

**Figure 25-17  [Submit a new notice(Confirmation)] screen**

**Note**

- If the [Select All tenants] check box is selected on the [Submit a new notice] screen and some tenants are selected on the [Select All tenants] dialog box, it is assumed that all tenants are selected as a target regardless of the tenants selected on the [Select scope of disclosure] dialog box. Therefore, do not select [Select All tenants] and perform tenant selection together.

- If you specify a tenant for [Select scope of disclosure] in the [Submit a new notice] or [Edit notice] screen, the notices that were not disclosed at the time of registration are disclosed to the tenant manager of the specified tenant. To keep the notices undisclosed, register them in release schedule date.

### 25.2.3 Checking Details of Notice Information

Clicking a line of the notice that you want to check in the notice list displays the detailed information.

![detailed notice information Screen]

**Figure 25-18  detailed notice information Screen**

**Table 25-8  Item List(Notice Details)**

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
</table>
| Scope of disclosure  | Tenant of the publication target *

* This is displayed only in the case of the system administrator. |
| Start date           | Start date and time                                                         |
| End date             | End date and time                                                            |
| state                | - Expired

- Released

- Not released

Any of them above |
| Title                | Title                                                                        |
| Contents             | Contents of a notice                                                         |
| Attachment file(s)   | The link to an attached file name and the attached file                      |
| Submitter            | Submitter                                                                   |
| Time stamp of submission | Registration date/time                                                       |
25.2.4 Changing the Contents of a Notice

This section describes how to change the notice.

1. Click [Edit notice] on the detailed notice information screen.

![Figure 25-19 Detailed notice information screen](image)

2. The [Edit notice(Form)] screen is displayed. Edit each item by referring to "Table 25-7 Item List (Submit a new notice) (page 152)" of "25.2.2 Registering a notice (page 152)". Click the [Confirm] button to apply the changes.

To delete the attached file, select the [Delete attachment file(s)] check box.

**Note**

If the [Delete attachment file(s)] check box is selected, file selection is disabled. Even if you select a file, it is assumed that the file is not selected.

![Figure 25-20 [Edit notice(Form)] Screen](image)

3. The [Edit notice(Confirmation)] screen is displayed. Click the [Confirm] button.

![Figure 25-21 [Edit notice(Confirmation)] Screen](image)

25.2.5 Deleting a Notice

The method of deleting a notice is described below:

1. Click [Delete notice] on the detailed notice information screen.
2. The Delete notice(Confirmation) screen is displayed. Clicking the [Confirmation] button deletes the notice.
Chapter 26
Setting

This chapter describes the operation settings.

26.1 Email notification

The email notification function sends a notification prompting a certain person to take the next action when a request state changes (a request was approved or rejected).

The settings below must be configured for this function.

- The following must be performed by the system administrator:
  - Setting the parameters to be used by the email notification function in the configuration file
    For how to configure these settings, refer to "26.1.3 Editing email notification setting items (page 163)".
  - Enabling this function from the operation settings and configuring the mail server and other settings
    For how to configure these settings, refer to "26.2.2 Editing Operation Setting (page 166)".

- The tenant manager must specify the email contents according to the notification timing from the email notification settings
  For how to configure these settings, refer to "26.1.1 Replacement character strings that can be used for email notifications (page 157)" "26.1.2 Preset email contents (email template) (page 158)".

26.1.1 Replacement character strings that can be used for email notifications

A replacement character string can be set for the email subject and text when specifying the email notification contents.

The following table shows the replacement character strings that can be used.

<table>
<thead>
<tr>
<th>Replacement character string</th>
<th>Replacement contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>$REQUEST_KINDS</td>
<td>Character string indicating the request type (in English)</td>
</tr>
<tr>
<td></td>
<td>This is replaced with either of the following, which triggers an email notification.</td>
</tr>
<tr>
<td></td>
<td>- Server</td>
</tr>
<tr>
<td></td>
<td>- Network</td>
</tr>
<tr>
<td>$OPERATION_KINDS</td>
<td>Character string indicating the operation type (in English)</td>
</tr>
<tr>
<td></td>
<td>This is replaced with one of the following, which triggers an email notification.</td>
</tr>
<tr>
<td></td>
<td>- Create</td>
</tr>
<tr>
<td></td>
<td>- Modify</td>
</tr>
<tr>
<td></td>
<td>- Delete</td>
</tr>
<tr>
<td>$PRODUCT_NAME</td>
<td>Character string indicating the product name</td>
</tr>
</tbody>
</table>
For the replacement product names, refer to "26.1.3 Editing email notification setting items (page 163)".

$NOTICE_DATE$  Character string indicating the current date when the email notification was sent  
YYYY/MM/DD HH:MM:SS

$APPLICANT$  Character string indicating the applicant

$APPROVER$  Character string indicating the approver
If there are multiple approvers, this is replaced with the final approver.

$REQUEST_SUMMARY$  Character string indicating an overview of the request (in English)

■ Other than Execution Completed
- Request Date : YYYY/MM/DD HH:MM:SS
- Request Type : Server or Network
- Operation Type : Create, Modify, Delete

■ Execution Completed
"Table 26-2 Items Displayed in $REQUEST_SUMMARY$ at Execution Completion (page 158)"

$REQUEST_DETAILS$  Character string indicating the URL from which the details of the request reported by the email notification can be referenced.

$TENANT_NAME$  Name of tenant which the user belongs

$TENANT_ID$  Id of tenant which the user belongs

$USER_NAME$  Name of the user

$USER_ID$  Id of the user

$LOGIN_URL$  URL for login to portal

### Table 26-2 Items Displayed in $REQUEST_SUMMARY$ at Execution Completion

<table>
<thead>
<tr>
<th>Displayed item</th>
<th>Server</th>
<th>Network</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Create</td>
<td>Change</td>
</tr>
<tr>
<td>Request date</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Request type</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Operation type</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Server name</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Login information</td>
<td>×</td>
<td>×</td>
</tr>
<tr>
<td>Network name</td>
<td>×</td>
<td>×</td>
</tr>
</tbody>
</table>

**Note**

If an error occurs during conversion (character string replacement) of the email notification contents, the replacement character string is displayed as is in the email text.

### 26.1.2 Preset email contents (email template)

1. The subject and text of an email can be set in advance as appropriate for the notification timing. When using replacement character strings, see "26.1.1 Replacement character strings that can be used for email notifications (page 157)".
Table 26-3 Contents of an email notification

<table>
<thead>
<tr>
<th>Notification timing</th>
<th>Receiver</th>
<th>Email type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awaiting Approval</td>
<td>Approver</td>
<td>A</td>
</tr>
<tr>
<td>Approval</td>
<td>Applicant</td>
<td>B</td>
</tr>
<tr>
<td>Rejected</td>
<td>Applicant</td>
<td>C</td>
</tr>
<tr>
<td>Canceled</td>
<td>Approver</td>
<td>D</td>
</tr>
<tr>
<td>Execution Completed</td>
<td>Applicant</td>
<td>E</td>
</tr>
<tr>
<td>Execution error</td>
<td>Applicant</td>
<td>F</td>
</tr>
<tr>
<td>Tenant Administrator Selected</td>
<td>Tenant manager</td>
<td>G</td>
</tr>
<tr>
<td>Tenant User Selected</td>
<td>Tenant user</td>
<td>H</td>
</tr>
</tbody>
</table>

**Note**

The subject and text of an email that is sent at the following timing are the same for both the tenant approver and the provider approver.
- Awaiting approval
- Cancel

2. Configure the contents of the email notification as follows in an external file when creating a tenant.

Table 26-4 Preset email contents (email template)

<table>
<thead>
<tr>
<th>Notification timing</th>
<th>Contents</th>
<th>File name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waiting Approval</td>
<td>Subject</td>
<td>approval-waiting-subject.txt</td>
</tr>
<tr>
<td></td>
<td>Text</td>
<td>approval-waiting-body.txt</td>
</tr>
<tr>
<td>Approval</td>
<td>Subject</td>
<td>approval-completion-subject.txt</td>
</tr>
<tr>
<td></td>
<td>Text</td>
<td>approval-completion-body.txt</td>
</tr>
<tr>
<td>Rejected</td>
<td>Subject</td>
<td>reject-subject.txt</td>
</tr>
<tr>
<td></td>
<td>Text</td>
<td>reject-body.txt</td>
</tr>
<tr>
<td>Canceled</td>
<td>Subject</td>
<td>cancel-subject.txt</td>
</tr>
<tr>
<td></td>
<td>Text</td>
<td>cancel-body.txt</td>
</tr>
<tr>
<td>Execution Completed</td>
<td>Subject</td>
<td>execution-completion-subject.txt</td>
</tr>
<tr>
<td></td>
<td>Text</td>
<td>execution-completion-body.txt</td>
</tr>
<tr>
<td>Execution error</td>
<td>Subject</td>
<td>execution-error-subject.txt</td>
</tr>
<tr>
<td></td>
<td>Text</td>
<td>execution-error-body.txt</td>
</tr>
<tr>
<td>Tenant Administrator Selected</td>
<td>Subject</td>
<td>tenant-admin-created-subject.txt</td>
</tr>
<tr>
<td></td>
<td>Text</td>
<td>tenant-admin-created-body.txt</td>
</tr>
</tbody>
</table>
3. The contents of the email template are as follows.

- **Email template (Email type: A)**

  An email notification sent to an approver when the notification timing is Awaiting approval

  **Subject**
  
  \[
  \text{[$\text{REQUEST\_KIND}$\$\text{OPERATION\_KIND}$ mail notification]}
  \]

  **Text**

  It is automatically transmitted from $\text{PRODUCT\_NAME}$.  
  Approval request from $\text{APPLICANT}$ arrived on $\text{NOTICE\_DATE}$.  
  Request summary is as follows.  
  $\text{REQUEST\_SUMMARY}$  
  Access the URL to approve the request.  
  $\text{REQUEST\_DETAIL\_URL}$

- **Email template (Email type: B)**

  An email notification sent to an applicant when the notification timing is Approval

  **Subject**

  \[
  \text{[$\text{REQUEST\_KIND}$\$\text{OPERATION\_KIND}$ mail notification]}
  \]

  **Text**

  It is automatically transmitted from $\text{PRODUCT\_NAME}$.  
  Request from $\text{APPLICANT}$ was approved on $\text{NOTICE\_DATE}$.  
  Request summary is as follows.  
  $\text{REQUEST\_SUMMARY}$  
  Access the URL to check the request details or execute the request.  
  $\text{REQUEST\_DETAIL\_URL}$

- **Email template (Email type: C)**

  An email notification sent to an applicant when the notification timing is Rejected

  **Subject**

  \[
  \text{[$\text{REQUEST\_KIND}$\$\text{OPERATION\_KIND}$ mail notification]}
  \]
<table>
<thead>
<tr>
<th>REQUEST_KIND</th>
<th>OPERATION_KIND</th>
<th>Email template (Email type: C)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>An email notification sent to an applicant when the notification timing is Rejected</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Subject</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>[$REQUEST_KIND$$OPERATION_KIND$ mail notification]</td>
</tr>
<tr>
<td>Text</td>
<td></td>
<td>It is automatically transmitted from $PRODUCT_NAME$.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Request was rejected by $APPROVER$ on $NOTICE_DATE$.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Request summary is as follows.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$REQUEST_SUMMARY$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Access the URL to check the request details.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$REQUEST_DETAIL_URL$</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Subject</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>[$REQUEST_KIND$$OPERATION_KIND$ mail notification]</td>
</tr>
<tr>
<td>Text</td>
<td></td>
<td>It is automatically transmitted from $PRODUCT_NAME$.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Request was rejected by $APPROVER$ on $NOTICE_DATE$.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Request summary is as follows.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$REQUEST_SUMMARY$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Access the URL to check the request details.</td>
</tr>
</tbody>
</table>

- **Email template (Email type: D)**

  An email notification sent to an approver when the notification timing is Canceled

  **Subject**

  [$REQUEST_KIND$$OPERATION_KIND$ mail notification]

  **Text**

  It is automatically transmitted from $PRODUCT_NAME$.  
  Request was canceled by $APPLICANT$ on $NOTICE_DATE$.  
  Request summary is as follows.  
  $REQUEST_SUMMARY$  
  Access the URL to check the request details.
• Email template (Email type: E)
   An email notification sent to an applicant when the notification timing is Completed
   Subject
   
   [$REQUEST_KIND$ OPERATION_KIND$ mail notification]

   Text
   
   It is automatically transmitted from $PRODUCT_NAME$.
   Request from $APPLICANT$ was completed on $NOTICE_DATE$.
   Request summary is as follows.
   $REQUEST_SUMMARY$
   Access the URL to check the request details.
   $REQUEST_DETAIL_URL$

• Email template (Email type: F)
   An email notification sent to an applicant when the notification timing is Execution Error
   Subject
   
   [$REQUEST_KIND$ OPERATION_KIND$ mail notification]

   Text
   
   It is automatically transmitted from $PRODUCT_NAME$.
   Execution error occurred for request from $APPLICANT$ on $NOTICE_DATE$.
   Request summary is as follows.
   $REQUEST_SUMMARY$
   Access the URL to check the request details.
   $REQUEST_DETAIL_URL$

• Email template (Email type: G)
   An email notification sent to a tenant manager when the notification timing is Tenant Manager Selected
   Subject
   
   [$REQUEST_KIND$ OPERATION_KIND$ mail notification]
It is automatically transmitted from $PRODUCT_NAME$.

Selected as tenant manager.

Tenant name: $TENANT_NAME$
Tenant ID: $TENANT_ID$

Log in from the following URL.
$LOGIN_URL$

• **Email template (Email type: H)**

An email notification sent to a tenant user when the notification timing is Tenant User Selected

Subject

[$REQUEST_KIND$+$OPERATION_KIND$ mail notification]

Text

It is automatically transmitted from $PRODUCT_NAME$.

Tenant user was created in tenant "$TENANT_NAME$(TENANT_ID)".

User name: $USER_NAME$
User ID: $USER_ID$

Log in from the following URL.
$LOGIN_URL$

**Note**

The path to the email template can be specified in the configuration file. For details of the setting items and values, see "26.1.3 Editing email notification setting items (page 163)".

### 26.1.3 Editing email notification setting items

To use the email notification function, open C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\webframework.properties and set the items shown below.

<table>
<thead>
<tr>
<th>Setting item</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>product.cloudportal.base.url=Base-URL-to-generate-access-URL-of-email-notification</strong></td>
<td>Set an externally accessible URL. [Required]</td>
</tr>
<tr>
<td><strong>product.cloudportal.mail.notice.product.name=Product-name-to-be-replaced-with-$PRODUCT_NAME$-in-email-notification-template</strong></td>
<td>See &quot;26.1.2 Preset email contents (email template) (page 158)&quot;. [Required]</td>
</tr>
</tbody>
</table>
### Setting item

<table>
<thead>
<tr>
<th>Setting item</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>product.cloudportal.mail.notice.template.path=Template-file-path</code></td>
<td>Set the path to the email notification template file. If this item is not set, the default template file is used.</td>
</tr>
<tr>
<td><code>product.cloudportal.operationoptions.secretkeyfile=Path-to-encryption-key-file-to-be-used-to-save-SMTP-authentication-password-in-database</code></td>
<td>Set the path to the encryption key file to be used to save the SMTP authentication password that was set in the operation settings in a database*1. If this item is not set, an encryption key file is automatically generated in <code>conf/NEC/secretkey.txt</code>.</td>
</tr>
</tbody>
</table>

*1 In the cluster configuration, a common key file needs to be used.

[Specification example]

```plaintext
# Base URL
product.cloudportal.base.url=http://example.com/portal/

# Email notification product name
product.cloudportal.mail.notice.product.name=[MasterScope]

# Email notification settings
product.cloudportal.mail.notice.template.path=C:\\Tmp
product.cloudportal.operationoptions.secretkeyfile=C:\\Tmp\\secretkey.txt
```

After specifying the above, save the file with UTF8 selected as its character code and then restart the application server (Tomcat). From the left-side panel of the server manager, select the local server, from services, right-click [Apache Tomcat 8.5 ServiceGovernor], and select [Restart Service].

### 26.2 Operation Setting

This section describes the operation setting.

In the operation setting procedure, the template list or logical network list can be acquired.

#### 26.2.1 Checking the information in the operation settings

Click [Configuration] and [Operation Settings] from the menu to display the [Operation Settings] screen.

![Figure 26-1   [Operation Settings Screen] screen](image-url)
### Table 26-6 Item List (Operation setting)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job acquisition period(second)</td>
<td>Set the interval at which the progress of the job is inquired.</td>
</tr>
<tr>
<td>* Shortening the interval improves the information accuracy. Be careful, however, in that greater accuracy imposes a higher load.</td>
<td></td>
</tr>
<tr>
<td>Template list acquisition time</td>
<td>The time at which the template list is usually acquired</td>
</tr>
<tr>
<td>[Update immediately] button(Template list acquisition)</td>
<td>Clicking this button updates the template list.</td>
</tr>
<tr>
<td>Logical network acquisition time</td>
<td>The time at which the logical network list is usually acquired</td>
</tr>
<tr>
<td>[Update immediately] button(Logical network list acquisition)</td>
<td>Clicking this button updates the logical network.*1</td>
</tr>
<tr>
<td>Operation Log retention period(day)</td>
<td>Period that the operation work history is retained</td>
</tr>
<tr>
<td>Operation Log deletion time</td>
<td>Checks the work history at the time specified for this item in order to delete that history for which the retention period has elapsed.</td>
</tr>
<tr>
<td>Mail notification</td>
<td>Whether to notify by email.</td>
</tr>
<tr>
<td>If this is not selected, the following mail notification setting items are not displayed.</td>
<td></td>
</tr>
<tr>
<td>Mail notification test send</td>
<td>Sends a test mail to check whether the server setting is valid.</td>
</tr>
<tr>
<td>Mail server host name</td>
<td>Host name of the mail server to be used for mail notification</td>
</tr>
<tr>
<td>Mail server port number</td>
<td>Port number of the mail server to be used for mail notification</td>
</tr>
<tr>
<td>Sender mail address</td>
<td>Sender mail address to be used for mail notification</td>
</tr>
<tr>
<td>Mail forward at sending error</td>
<td>Whether to forward a mail if an error occurs while sending the mail</td>
</tr>
<tr>
<td>If this check box is not selected, the [Forwarding destination mail address] is not displayed.</td>
<td></td>
</tr>
<tr>
<td>Forwarding destination mail address</td>
<td>Mail address to which to forward a mail if an error occurs while sending the mail</td>
</tr>
<tr>
<td>This item is not displayed when the [Mail forward at sending error] check box is not selected.</td>
<td></td>
</tr>
<tr>
<td>Use of SMTP authentication</td>
<td>Whether to use SMTP authentication when sending a mail</td>
</tr>
<tr>
<td>If this check box is not selected, the [Forwarding destination mail address] is not displayed.</td>
<td></td>
</tr>
<tr>
<td>Authentication method</td>
<td>Authentication method for SMTP authentication</td>
</tr>
<tr>
<td>This item is not displayed when [Use of SMTP authentication] is not selected.</td>
<td></td>
</tr>
<tr>
<td>User name</td>
<td>User name to be used for SMTP authentication</td>
</tr>
<tr>
<td>Password</td>
<td>Password to be used for SMTP authentication (On the screen, the password displayed as ●●●.)</td>
</tr>
<tr>
<td>Update Password</td>
<td>If this is selected, the entered password is checked. If this is not selected, the entered password is not checked and it is assumed that the password has not been changed.</td>
</tr>
<tr>
<td>Edit</td>
<td>Clicking this button displays the [Configure operation options(Form)] screen.</td>
</tr>
</tbody>
</table>

**Note**

*1 If a registered network is synchronized after being changed on SigmaSystemCenter, the information may differ from that existing when network creation was requested.
26.2.2 Editing Operation Setting

The method of editing the operation setting is described below:


   ![Figure 26-2 Operation Settings Screen](image)

2. The Configure operation options(Form) screen is displayed. Refer to the table below, and click the [Next] button after editing the respective items.

   ![Figure 26-3 Configure operation options(Form) Screen](image)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Input rules</th>
<th>Initial value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job acquisition period (seconds)</td>
<td>1 to 3600</td>
<td>30</td>
<td>Job acquisition period(second)</td>
</tr>
<tr>
<td>Template list collection time</td>
<td>-</td>
<td>02:00:00</td>
<td>Enter a time in the HH:MM:SS format.</td>
</tr>
<tr>
<td>Logical network collection time</td>
<td>-</td>
<td>02:00:00</td>
<td>Enter a time in the HH:MM:SS format.</td>
</tr>
<tr>
<td>Operation Log retention period (days)</td>
<td>1 to 365</td>
<td>30</td>
<td>Operation Log retention period (number of days)</td>
</tr>
<tr>
<td>Operation Log deletion time</td>
<td>-</td>
<td>02:00:00</td>
<td>Enter a time in the HH:MM:SS format.</td>
</tr>
<tr>
<td>Mail notification</td>
<td>-</td>
<td>Not selected</td>
<td>Specify whether to notify by email.</td>
</tr>
<tr>
<td>Mail server host name</td>
<td>1 to 64 characters Comply with RFC 952.</td>
<td>-</td>
<td>Enter the host name of the mail server to be used for mail notification.</td>
</tr>
<tr>
<td>Item name</td>
<td>Input rules</td>
<td>Initial value</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>---------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Mail server port number</td>
<td>0 to 65535</td>
<td>25</td>
<td>Enter the port number of the mail server to be used for mail notification.</td>
</tr>
<tr>
<td>Sender mail address</td>
<td>3 to 255 characters E-mail format (complying with RFC 952)</td>
<td>-</td>
<td>Enter the sender mail address to be used for mail notification.</td>
</tr>
<tr>
<td>Mail forward at sending error</td>
<td>-</td>
<td>Not selected</td>
<td>Specify whether to forward a mail if an error occurs while sending the mail.</td>
</tr>
<tr>
<td>Forwarding destination mail address</td>
<td>3 to 255 characters E-mail format (complying with RFC 952)</td>
<td>-</td>
<td>Enter a mail address to which to forward a mail if an error occurs while sending the mail. * This item is not displayed when the [Mail forward at sending error] check box is not selected.</td>
</tr>
<tr>
<td>Use of SMTP authentication</td>
<td>-</td>
<td>Not selected</td>
<td>Specify whether to use SMTP authentication when sending a mail. * If this check box is not selected, the [Forwarding destination mail address] is not displayed.</td>
</tr>
<tr>
<td>Authentication method</td>
<td>- CRAM-MD5 - PLAIN</td>
<td>CRAM-MD5</td>
<td>Specify the authentication method for SMTP authentication. * This item is not displayed when [Use of SMTP authentication] is not selected.</td>
</tr>
<tr>
<td>User name</td>
<td>1 to 32 characters</td>
<td>-</td>
<td>Enter the user name to be used for SMTP authentication.</td>
</tr>
<tr>
<td>Password</td>
<td>1 to 32 characters</td>
<td>-</td>
<td>Enter the password to be used for SMTP authentication. (On the screen, the password displayed as ●●●.)</td>
</tr>
</tbody>
</table>
Part 6.

User Operation

This document describes the function that is operated by the user (the tenant administrator or the tenant user).
Chapter 27
Dashboard

A user can arrange widgets on the [Dashboard] screen freely.
This chapter describes the widget operations such as viewing, arranging, and deleting widgets.
The widget types that can be arranged differ depending on the server setting and user authority.

27.1 Displaying the widget

By selecting [Dashboard] from the menu, the "Dashboard" window is displayed and widgets are displayed on the dashboard.

![Figure 27-1   Displaying the "Dashboard" window and widgets](image)

Widgets can be handled by using a mouse.
To return to the initial display of widgets after handling them, reload the page.

27.2 Adding a widget

This section describes how to add a widget to [Dashboard].

1. On the [Dashboard] screen, click [Customize].

   The [Dashboard] screen changes to customize mode and the customize menu is displayed.
2. On the [Dashboard] screen, click [Add widget].

The [Add widget] dialog box is displayed.

![Add widget dialog box](image)

3. On the [Add widget] dialog box, enter the information of the widget that you want to add and click [OK].

<table>
<thead>
<tr>
<th>Item name</th>
<th>Input rule</th>
<th>Initial value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Widget title</td>
<td>0 to 64 characters</td>
<td>-</td>
<td>Specify the name to be displayed as the title of the widget. Make sure that the widget name makes it easy to understand what the widget does. If a widget name is omitted, &quot;(No name)&quot; is displayed. Multiple identical widget names can be registered.</td>
</tr>
<tr>
<td>URL</td>
<td>-</td>
<td>-</td>
<td>Select the item to be displayed as the widget. Multiple widgets having the same URL can be registered.</td>
</tr>
<tr>
<td>Item name</td>
<td>Input rule</td>
<td>Initial value</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------</td>
<td>------------------</td>
<td>---------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>URL parameter</td>
<td>0 to 2048</td>
<td>-</td>
<td>Use this field to specify an optional parameter for the URL of the widget. The format of the optional parameter is \textit{key}=\textit{value}. When specifying multiple parameters, separate them with \textit{&amp;}. The character string must have been encoded.</td>
</tr>
</tbody>
</table>

A new widget is displayed at the end of the displayed widgets on the dashboard.

![Figure 27-4 Displaying the "Dashboard" window and new widgets](image)

After adding widgets, save the added widgets. For details about the procedure, see "27.5 Saving the widget settings (page 174)".

### 27.3 Deleting widgets

This section describes how to remove a widget from [Dashboard].

1. On the [Dashboard] screen, click [Customize].

   The [Dashboard] screen changes to customize mode.

![Figure 27-5 "Dashboard" window - Customize](image)

2. Click [×] displayed at the upper right of the widget that you want to remove.
Figure 27-6   Removing a widget from the dashboard

The [Widget Deletion Confirmation] dialog box is displayed.

![Widget Deletion Confirmation](image)

Figure 27-7   The [Widget Deletion Confirmation] dialog box

3. Check the contents of the [Widget Deletion Confirmation] dialog box. If you want to remove the displayed widget, click [OK]. Otherwise, click [Cancel].

   The [Widget Deletion Confirmation] dialog box is closed.

   Click [OK] to delete the selected widget is removed.

   After removing the widget, click [Save]. For details about the procedure, see "27.5   Saving the widget settings (page 174)".

### 27.4 Changing the widget display order and size

This section describes how to change the display order and size of the widget displayed on the dashboard.

1. On the [Dashboard] screen, click [Customize].

   The [Dashboard] screen changes to customize mode.
2. To change the widget display order, drag and drop the desired widget with a mouse.

The widget display order is changed.

3. To change the widget size, drag the frame of the desired widget with a mouse.
• To change the height of the widget, drag the bottom frame of the desired widget with a mouse.
• To change the width of the widget, drag the right frame of the desired widget with a mouse.
• To change the height and width of the widget, drag the bottom right corner of the desired widget with a mouse.

The widget size is changed.

Figure 27-11  Changing the widget size

After changing the widget display order or size, click [Save]. For details about the procedure, see "27.5  Saving the widget settings (page 174)".

27.5 Saving the widget settings

This section describes how to save the settings of the widget on the dashboard.

It is assumed that the dashboard is already in customize mode and the widgets are being handled. For the operations for widgets, see the following:

• "27.2  Adding a widget (page 169)"
• "27.3  Deleting widgets (page 171)"
• "27.4  Changing the widget display order and size (page 172)"

1. On the [Dashboard] screen, click [Save].
   The [Widget Settings Save Confirmation] dialog box is displayed.
2. Check the contents of the [Widget Settings Save Confirmation] dialog box. If you want to save the displayed contents, click [OK].

![Figure 27-12 Saving the widget settings](image)

Figure 27-12 Saving the widget settings

Otherwise, click [Cancel].

The [Widget Settings Save Confirmation] dialog box is closed.

Information of the added or remove widget and the widget display order and size are saved.

### 27.6 Discarding the widget settings

This section describes how to discard the settings of the widget on the dashboard.

It is assumed that the dashboard is already in customize mode and the widgets are being handled. For details about how to handle the widgets, see the following:

- "27.2 Adding a widget (page 169)"
- "27.3 Deleting widgets (page 171)"
- "27.4 Changing the widget display order and size (page 172)"

1. On the [Dashboard] screen, click [Cancel].
Figure 27-14  Discarding the widget settings

The [Cancel Confirmation] dialog box is displayed.

![Dialog Box](image)

Figure 27-15  [Cancel Confirmation] dialog box

2. Check the contents of the [Cancel Confirmation] dialog box. If you want to discard the displayed contents, click [OK]. Otherwise, click [Cancel].

   The [Cancel Confirmation] dialog box is closed.

The widget editing contents that have not been saved are discarded and the widget display returns to the last saved state.

27.7 Dashboard (Default)

The dashboard screen (default) allows you to check the following information.

- Posted notice list
- Unapproved request list

The unapproved request list is displayed only for a user who can approve requests.
27.7.1 Notice

Notices that were registered by the notice management function, are displayed.

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Release date</td>
<td>Release date</td>
</tr>
<tr>
<td>Title</td>
<td>Title of a notice</td>
</tr>
<tr>
<td>Contents</td>
<td>Contents of a notice. A link icon to a file is displayed at the end of the text when the file is attached.</td>
</tr>
</tbody>
</table>

27.7.2 Unapproved requests (user)

The requests to be displayed differ depending on the approval completion condition specified in the workflow.

- When the specified condition requires that the request be approved by one of the users who have the approval authority
  
  The requests in the same tenant whose request status is "Waiting Approval" are displayed (excluding those whose next approver is the system administrator).

- When the specified condition requires that the request be approved by all the approvers set in the workflow
  
  The requests whose next approver is the login user are displayed.
<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Request ID</td>
<td>Clicking this item produces a transition to the target request screen.</td>
</tr>
<tr>
<td>Request type</td>
<td>- Server creation</td>
</tr>
<tr>
<td></td>
<td>- Server change</td>
</tr>
<tr>
<td></td>
<td>- Server deletion</td>
</tr>
<tr>
<td></td>
<td>- Logical network creation</td>
</tr>
<tr>
<td></td>
<td>- Logical network deletion</td>
</tr>
<tr>
<td></td>
<td>One of the above.</td>
</tr>
<tr>
<td>Server name</td>
<td>Name of the server to be created, or the target server for which request is</td>
</tr>
<tr>
<td></td>
<td>changed or deleted</td>
</tr>
<tr>
<td>Image</td>
<td>Name of the OS of the server to be created, changed, or deleted</td>
</tr>
<tr>
<td>Request date</td>
<td>Date when the request was submitted</td>
</tr>
<tr>
<td>Applicant</td>
<td>Applicant name</td>
</tr>
</tbody>
</table>
Chapter 28
Request(User)

This section describes the Request menu.

28.1 Request management (user)

The request management function is used to manage server requests.

This section describes the operations performed by the tenant manager and tenant users who are authorized to approve the requests.

28.1.1 Request list

In the menu, click [Request] and then [Request List], and the [Request List] screen is displayed.

Note

The request list displays the requests submitted by the login user.

To display the requests submitted by users other than the login user, take an appropriate action when conducting a search, such as deleting the login user name of [Applicant] from the search conditions.

If you are a tenant user without the request approval authority, requests other than those submitted by you are not displayed.

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>number of items displayed</td>
<td>Changes the number of items displayed in the list.</td>
</tr>
<tr>
<td>Create</td>
<td>Invokes the [Request create] screen.</td>
</tr>
<tr>
<td>Request list</td>
<td>Displays a list of requests. If [Failed] is shown in Status in the list, clicking the [Failed] link displays the error message.</td>
</tr>
</tbody>
</table>

![Request management screen]

To search for a request, click [Search] in the [Request List] screen and conduct the search using the items shown below. A string search is a partial match search.

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Request ID</td>
<td>Request ID</td>
</tr>
</tbody>
</table>
| Request type | - Server creation  
- Server change  
- Server deletion |
### Item name

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
</table>
| - Network creation  
- Network deletion  
Specify the above and conduct a search (multiple items can be selected). |

#### Keyword

- Server name  
- Network name  
Specify the keyword by entering the above (partial specification is allowed).

#### Status

- Awaiting approval  
- Standby for execution  
- Rejected  
- Canceled  
- In progress  
- Completed  
- Failed  
Specify the above and conduct a search (multiple items can be selected).

#### Request submit date and time

Specify the request period.

#### Applicant

Enter and specify the applicant (partial specification is allowed).

#### Clear

Return the input (specified) values to the initial values.

#### Search

Click the button to do the search.

### 28.1.2 Creating a request

The following describes how to create a request.

1. On the request list window, click [Create].

   ![Figure 28-2 Request list window](image)

2. The request creation dialog box is displayed.

   ![Figure 28-3 Request creation dialog box](image)
3. Click the type of the request to create.

![Figure 28-4  Selecting a request type (when [Create server] is selected)](image)

Register a request according to the following procedures.

- **Server creation**
  "28.1.2.1 Server Creation Request (page 181)"
- **Server change**
  "28.1.2.2 Server Change Request (page 190)"
- **Server deletion**
  "28.1.2.3 Server Deletion Request (page 192)"
- **Network creation**
  "28.1.2.4 Logical network creation request (page 193)"
- **Network deletion**
  "28.1.2.5 Network deletion request (page 196)"

**Note**

The functions of the [Detail of Server] screen are limited for servers on the public cloud. For details, see "Table 28-3 Supported request creation functions (page 181)" below.

<table>
<thead>
<tr>
<th>Function</th>
<th>Private</th>
<th>Public</th>
</tr>
</thead>
<tbody>
<tr>
<td>Server creation</td>
<td>○</td>
<td>-</td>
</tr>
<tr>
<td>Server change</td>
<td>○</td>
<td>-</td>
</tr>
<tr>
<td>Server deletion</td>
<td>○</td>
<td>- *</td>
</tr>
</tbody>
</table>

* If a server is deleted from SigmaSystemCenter, its data remains in the database of vDCA SE Portal. Create a deletion request for the server.

## 28.1.2.1 Server Creation Request

Register a server creation request according to the following procedures.

- **When creating a server**
  1. After filling in the fields according to the following table, click the [Next] button.
### Table 28-4  Item List (Server Creation Screen)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Input rule</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copy a request</td>
<td>–</td>
<td>Click this to display the list of previous server creation requests.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Select the request you want to quote. Then the selected request is displayed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>in the input window.</td>
</tr>
<tr>
<td>OS image select</td>
<td>-</td>
<td>Select the OS image of a server to be created.</td>
</tr>
<tr>
<td>Information Panel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional information</td>
<td>Additional information of the template set to the configuration file</td>
<td></td>
</tr>
<tr>
<td></td>
<td>* If no additional information is set, this is not displayed.</td>
<td></td>
</tr>
<tr>
<td>Server name</td>
<td>Alphanumeric characters, hyphen (-), and period (.) are available.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Linux: Up to 24 characters</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enter a server name (host name).</td>
<td></td>
</tr>
<tr>
<td>Item name</td>
<td>Input rule</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------</td>
<td>------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Windows</strong></td>
<td>Up to 15 characters</td>
<td>Note that the first character must be an alphabetic character.</td>
</tr>
<tr>
<td><strong>Resource pool</strong></td>
<td>-</td>
<td>Click the [Select Resource Pool] button to display the resource group selection window. Select a resource pool to which to assign a server and click the [Select] button. The selected resource pool is displayed on the creation window. &quot;Figure 28-6 Resource Pool Selection Window (page 187)&quot;</td>
</tr>
</tbody>
</table>
| **Work group**      | -          | Select whether to specify a work group or not. Select [Specify] and click the [select work group] button to display the work group selection window. Select a resource pool to which to assign a server and click the [Select] button. The selected resource pool is displayed on the creation window. "Figure 28-7 Work Group Selection Window (page 188)"
| A selected work group cannot be changed after the server is created. *2 This item is disabled when a shared resource group is selected as the location in which to create a virtual machine. Required when a catalog for Amazon EC2 is selected. |
| **select work group** | -         | Opens the Work Group Selection dialog box. * This is enabled only when the [Specify] option button is selected for [Work group]. |
| **Remarks**         | Up to 255 characters | Enter a remark.                                                                                                                                |
| **Hardware**        |            | Select a combination of CPU, memory, and system disk and select a tag for a system disk. When a catalog for Amazon EC2 is selected, the system disk tag is not displayed. |
| **Spec**            | -          | Select a combination of CPU, memory, and system disk and select a tag for a system disk. When a catalog for Amazon EC2 is selected, the system disk tag is not displayed. |
| **Disk**            | 0.01 to 97656.249 (GB) | Up to 3 decimal places can be entered. When a catalog for Amazon EC2 is selected, digits after the decimal point can be entered but are rounded up. Adds or deletes a disk. The Data Disk Addition dialog box is displayed by clicking the addition icon (1). "Figure 28-8 Add a data disk Dialog Box (page 188)" |
When a catalog for Amazon EC2 is selected, the data disk tag is not displayed.

The Data Disk Editing dialog box is displayed by clicking the editing icon (2). "Figure 28-9  Modify a data disk Dialog Box (page 188)"

A disk can be deleted by select the check box and click the deletion icon (3).

When a catalog for Amazon EC2 is selected, the data disk tag is not displayed.

<table>
<thead>
<tr>
<th>Item name</th>
<th>Input rule</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item name</td>
<td>Input rule</td>
<td>Description</td>
</tr>
<tr>
<td>Network Panel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Check box to enable the network</td>
<td>-</td>
<td>Select this check box to enable the network. *If multiple management LANs are displayed, the LAN displayed at the top is used as the management LAN&gt;</td>
</tr>
<tr>
<td>IP version</td>
<td>-</td>
<td>Select the IP version of an IP address to be set.</td>
</tr>
<tr>
<td>Network address</td>
<td>-</td>
<td>Network address calculated from the IP address pool of a logical network If no IP address pool is set to the target logical disk, this field is blank.</td>
</tr>
<tr>
<td>Default gateway</td>
<td>-</td>
<td>Default gateway set to the IP address pool of a logical network If no IP address pool is set to the target logical disk, this field is blank.</td>
</tr>
<tr>
<td>IP address/CIDR</td>
<td>-</td>
<td>If no IP address pool is set, enter the value in &quot;IP address/CIDR&quot; format.</td>
</tr>
<tr>
<td>IP address</td>
<td>-</td>
<td>Enter an IP address if the assigned IP address is fixed. * It is not allowed to enter multiple IP addresses. This item cannot be entered when a catalog for Amazon EC2 is selected.</td>
</tr>
<tr>
<td>Options</td>
<td></td>
<td>Click this to display option items. This item is displayed when a catalog for private clouds is selected. It is not displayed when a catalog for Amazon EC2 is selected.</td>
</tr>
<tr>
<td>Primary DNS</td>
<td>Minimum: 0 characters Maximum: 64 characters IP address format (Both IPv4 and IPv6 are available.</td>
<td>Specify a primary DNS.</td>
</tr>
<tr>
<td>Secondary DNS</td>
<td>Minimum: 0 characters Maximum: 64 characters IP address format (Both IPv4 and IPv6 are available.</td>
<td>Specify a secondary DNS.</td>
</tr>
<tr>
<td>Item name</td>
<td>Input rule</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------</td>
<td>------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Tertiary DNS</td>
<td>Minimum: 0 characters</td>
<td>Specify a tertiary DNS. This is displayed only when a Linux OS catalog is selected.</td>
</tr>
<tr>
<td></td>
<td>Maximum: 64 characters</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IP address format</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Both IPv4 and IPv6 are available.)</td>
<td></td>
</tr>
<tr>
<td>Primary WINS</td>
<td>Minimum: 0 characters</td>
<td>Specify a primary WINS. This is displayed only when a Windows OS catalog is selected.</td>
</tr>
<tr>
<td></td>
<td>Maximum: 64 characters</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IP address format</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Both IPv4 and IPv6 are available.)</td>
<td></td>
</tr>
<tr>
<td>Secondary WINS</td>
<td>Minimum: 0 characters</td>
<td>Specify a secondary WINS. This is displayed only when a Windows OS catalog is selected.</td>
</tr>
<tr>
<td></td>
<td>Maximum: 64 characters</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IP address format</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Both IPv4 and IPv6 are available.)</td>
<td></td>
</tr>
<tr>
<td>OS Setting Panel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time zone</td>
<td>Time zone specified in the configuration file</td>
<td>This item is displayed when a Windows OS catalog for private clouds is selected.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>This item is not displayed when a Linux OS catalog for private clouds is selected.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>It is not displayed when a catalog for Amazon EC2 is selected.</td>
</tr>
<tr>
<td>Administrator</td>
<td>Minimum: 1 character</td>
<td>Specify the default administrator account of the OS.*</td>
</tr>
<tr>
<td>account</td>
<td>Maximum: 128 characters</td>
<td></td>
</tr>
<tr>
<td></td>
<td>One-byte alphanumeric characters and symbols</td>
<td></td>
</tr>
<tr>
<td>Administrator</td>
<td>Minimum: One character</td>
<td>Specify an initial password of an administrator.</td>
</tr>
<tr>
<td>initial password</td>
<td>Maximum: 256 characters</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ASCII characters (excluding 0x20 to 0x7E and the following symbols: &quot;,&quot;)</td>
<td></td>
</tr>
<tr>
<td>Confirm administrator initial password</td>
<td>Minimum: One character</td>
<td>Specify an initial password of an administrator for confirmation.</td>
</tr>
<tr>
<td></td>
<td>Maximum: 256 characters</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ASCII characters (excluding 0x20 to 0x7E and the following symbols: &quot;,&quot;)</td>
<td></td>
</tr>
<tr>
<td>Product key</td>
<td>Minimum: 0 characters</td>
<td>This item is displayed when a Windows OS catalog for private clouds is selected.</td>
</tr>
<tr>
<td></td>
<td>Maximum: 128 characters</td>
<td>This item is not displayed when a Linux OS catalog for private clouds is selected.</td>
</tr>
<tr>
<td></td>
<td>One-byte alphanumeric characters and symbols</td>
<td>It is not displayed when a catalog for Amazon EC2 is selected.</td>
</tr>
<tr>
<td>Item name</td>
<td>Input rule</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------</td>
<td>----------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Domain suffix</td>
<td>String</td>
<td>This item is displayed when a Linux OS catalog for private clouds is selected. It is not displayed when a Windows OS catalog for private clouds is selected. It is not displayed when a catalog for Amazon EC2 is selected.</td>
</tr>
<tr>
<td></td>
<td>Minimum: 0 characters</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Maximum: 63 characters</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ASCII characters (excluding 0x20 to 0x7E and the following symbols: &quot;#$&amp;()&lt;&gt;?|)</td>
<td></td>
</tr>
<tr>
<td>Type</td>
<td>- Workgroup</td>
<td>Select the workgroup type. This item is displayed when a Windows OS catalog for private clouds is selected. This item is not displayed when a Linux OS catalog for private clouds is selected. It is not displayed when a catalog for Amazon EC2 is selected.</td>
</tr>
<tr>
<td></td>
<td>- Domain</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Specify a workgroup name or domain name. Select the [Work group] or [Domain name] option button to switch the label. This item is displayed when a Windows OS catalog for private clouds is selected. This item is not displayed when a Linux OS catalog for private clouds is selected. It is not displayed when a catalog for Amazon EC2 is selected.</td>
</tr>
<tr>
<td>Workgroup name</td>
<td>For a workgroup</td>
<td>Specify a workgroup name or domain name. Select the [Work group] or [Domain name] option button to switch the label. This item is displayed when a Windows OS catalog for private clouds is selected. This item is not displayed when a Linux OS catalog for private clouds is selected. It is not displayed when a catalog for Amazon EC2 is selected.</td>
</tr>
<tr>
<td>(domain name)</td>
<td>Minimum: 1 character</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Maximum: 15 characters</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ASCII characters (excluding 0x20 to 0x7E and the following symbols: &quot;#$&amp;()&lt;&gt;?|)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>For a domain</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Minimum: 1 character</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Maximum: 155 characters</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ASCII characters (excluding 0x20 to 0x7E, one-byte blank, and the following symbols: &quot;#$&amp;()&lt;&gt;?|)</td>
<td></td>
</tr>
<tr>
<td>Domain account</td>
<td>Minimum: 1 character</td>
<td>Specify a domain account. This item is displayed when a Windows OS catalog for private clouds is selected and the type is domain. This item is not displayed when a Windows OS catalog for private clouds is selected and the type is work group. This item is not displayed when a Linux OS catalog for private clouds is selected. It is not displayed when a catalog for Amazon EC2 is selected.</td>
</tr>
<tr>
<td></td>
<td>Maximum: 255 characters</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ASCII characters (excluding 0x20 to 0x7E and the following symbols: &quot;#$&amp;()&lt;&gt;?|)</td>
<td></td>
</tr>
<tr>
<td>Domain password</td>
<td>Minimum: 1 character</td>
<td>Specify a domain password. This item is displayed when a Windows OS catalog for private clouds is selected and the type is domain. This item is not displayed when a Windows OS catalog for private clouds is selected and the type is work group. This item is not displayed when a Linux OS catalog for private clouds is selected.</td>
</tr>
<tr>
<td></td>
<td>Maximum: 256 characters</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ASCII characters (excluding 0x20 to 0x7E and the following symbols: &quot;#$&amp;()&lt;&gt;?|)</td>
<td></td>
</tr>
<tr>
<td>Item name</td>
<td>Input rule</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Key pair</td>
<td>Minimum: 1 character Maximum: 255 characters ASCII characters (^[x20-x7E]+$)</td>
<td>Specify a key pair. This item is not displayed when a catalog for private clouds is selected. It is displayed when a catalog for Amazon EC2 is selected.</td>
</tr>
<tr>
<td>Other panel</td>
<td>Extended parameter (not displayed when no extended parameter is set)</td>
<td>The name of the extended parameter set in the configuration file is displayed. Enter a value in the box in which the extended parameter name is displayed. If you omit entering a value, the parameter is passed to the extension processing without a value.</td>
</tr>
</tbody>
</table>

**Caution**

* Do not change the default account name (administrator or root). Even if you change it, the default account name of the OS is set.
*2 If a change is necessary, you need to contact the system administrator.

[Resource Pool Selection]
Select a resource pool to which to assign a server and click the [Select] button.

![Figure 28-6 Resource Pool Selection Window](image)

[Work Group Selection]
Select a work group and click the [Select] button.
[Add a data disk]
Select a capacity and tag, and then click the [Add] button.

[Modify a data disk]
Select a capacity and tag, and then click the [Confirmation] button.

[Extended parameter]
Enter the value of an extended parameter (if one is set).
2. A confirmation dialog box is displayed. Set [Comment on application] and [Request execution options] and click the [Confirm] to register a request.

![Server Creation (Confirmation) Window](image)

**Table 28-5  Server Creation (Confirmation) Window**

<table>
<thead>
<tr>
<th>Item name</th>
<th>Input rule</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comment on application</td>
<td>0 to 255 characters</td>
<td>Enter a comment for an approver or a not at application.</td>
</tr>
<tr>
<td>Request execution options</td>
<td>Automatic / Manual</td>
<td>Select the request execution method to use when the submitted request enters the executable status.</td>
</tr>
</tbody>
</table>

**Note**

When submitting a server creation request, note the following.

- You cannot create a quote request with a suspended server selected. To quote, restore the server from the suspended status.
- When a server creation or change request is submitted, the number of specifiable extended disks depends on the VM host. Specifying an extremely large number may cause an error.
- If you create a VM by using a template with an extended disk, you cannot delete or resize that extended disk. If a change is necessary, add an extended disk by using the VM creation option.
- When deleting a network (clearing the check box) by a server change request, do not make any modification to other networks (addition of a network, a modification to an IP address, etc.).
After a server configuration change request is rejected, an error occurs if you attempt to add an IP address when reapplying the request. To add an IP address, create a new request.

If you add a management network during an operation, it becomes impossible to delete the networks you have created until that time.

To change the IP address of a server, log in directly to the VM.

You cannot set more than one "automatic" IP address for a single network.

You cannot add an "automatic" IP address when a "static" IP address is already set for a network.

**Note**

You cannot create a server on NEC Cloud IaaS.

### 28.1.2.2 Server Change Request

Register a server creation request according to the following procedures.

- **When changing the server configuration**
  1. Select the server whose configuration to be changed from the list and click the [Select] button.

![Select a server to change window](image)

**Figure 28-12 Select a Server to Change Window**

2. The server change (form) window is displayed. After editing the fields by referring to "Table 28-4 Item List (Server Creation Screen) (page 182)", click the [Next] button.
3. The server change (confirmation) window is displayed. Set [Comment on application] and [Request execution options] by referring to "Table 28-4 Item List (Server Creation Screen) (page 182)". Click the [Confirm] to register a request.

![Figure 28-14  Server Change (Confirmation) Window](image)

**Note**

When submitting a server change request, note the following.

- You cannot create a quote request with a suspended server selected. To quote, restore the server from the suspended status.
- When a server creation or change request is submitted, the number of specifiable extended disks depends on the VM host. Specifying an extremely large number may cause an error.
• If you create a VM by using a template with an extended disk, you cannot delete or resize that extended disk. If a change is necessary, add an extended disk by using the VM creation option.

• When deleting a network (clearing the check box) by a server change request, do not make any modification to other networks (addition of a network, a modification to an IP address, etc.).

• After a server configuration change request is rejected, an error occurs if you attempt to add an IP address when reapplying the request. To add an IP address, create a new request.

• If you add a management network during an operation, it becomes impossible to delete the networks you have created until that time.

• To change the IP address of a server, log in directly to the VM.

• You cannot set more than one "automatic" IP address for a single network.

• You cannot add an "automatic" IP address when a "static" IP address is already set for a network.

• When "adding" or "deleting" IP addresses, you need to add or delete them sequentially, starting with the lowest IP address (do not operate multiple IP addresses at the same time).

• When you create a change request for a synchronized server, [Spec] in the [Modify a server(Form)] screen displays the values defined in the configuration file. For details, see "9.1.1 Setting catalog display names and specs (page 32)".

### 28.1.2.3 Server Deletion Request

Register a server deletion request according to the following procedures.

• When deleting a server

  1. Select the check box of the server to be deleted and click the [Select] button.

  ![Select a Network to Delete Screen](image)

    **Figure 28-15 Select a Network to Delete Screen**

  2. The server deletion (confirmation) window is displayed. Set [Comment on application] and [Request execution options] by referring to "Table 28-4 Item List (Server Creation Screen) (page 182)". Click the [Confirm] to register a request.
28.1.2.4 Logical network creation request

Register a logical network creation request according to the following procedures.

- When creating a logical network
  1. After filling in the fields according to the following table, click the [Next] button.

Table 28-6 Item List (Creating a logical network(Form) screen)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Input rule</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Panel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item name</td>
<td>Input rule</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>--------------------</td>
<td>-------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Item name</strong></td>
<td><strong>Input rule</strong></td>
<td><strong>Description</strong></td>
</tr>
<tr>
<td><strong>Select a resource pool to which</strong></td>
<td><strong>Input rule</strong></td>
<td><strong>Description</strong></td>
</tr>
<tr>
<td><strong>Select a resource pool to which</strong></td>
<td><strong>Input rule</strong></td>
<td><strong>Description</strong></td>
</tr>
<tr>
<td><strong>Switch name</strong></td>
<td>-</td>
<td>Specify the switch to which to assign the logical network.</td>
</tr>
<tr>
<td><strong>Remark</strong></td>
<td>Up to 255 characters</td>
<td>Enter a remark.</td>
</tr>
<tr>
<td><strong>Address pool</strong></td>
<td>-</td>
<td>Enter a remark.</td>
</tr>
<tr>
<td><strong>Subnet mask (IPv4)</strong></td>
<td>IPv4 address format</td>
<td>Subnet mask set in the IPv4 address pool of the logical network. This field is blank if the IPv4 address pool of the logical network is not set.</td>
</tr>
<tr>
<td><strong>Default gateway (IPv4)</strong></td>
<td>IPv4 address format</td>
<td>Default gateway set to the IPv4 address pool of a logical network. If no IPv4 address pool is set to the target logical disk, this field is blank.</td>
</tr>
<tr>
<td><strong>Start address (IPv4)</strong></td>
<td>IPv4 address format</td>
<td>Enter the start address of the IPv4 range.</td>
</tr>
<tr>
<td><strong>End address (IPv4)</strong></td>
<td>IPv4 address format</td>
<td>Enter the end address of the IPv4 range.</td>
</tr>
<tr>
<td><strong>Subnet prefix length (IPv6)</strong></td>
<td>Minimum: 1 character Maximum: 128 characters Only single-byte numbers</td>
<td>Enter the subnet prefix length.</td>
</tr>
<tr>
<td><strong>Default gateway (IPv6)</strong></td>
<td>IPv6 address format</td>
<td>Default gateway set to the IPv6 address pool of a logical network. If no IPv6 address pool is set to the target logical disk, this field is blank.</td>
</tr>
<tr>
<td><strong>Start address (IPv6)</strong></td>
<td>IPv6 address format</td>
<td>Enter the start address of the IPv6 range.</td>
</tr>
<tr>
<td><strong>End address (IPv6)</strong></td>
<td>IPv6 address format</td>
<td>Enter the end address of the IPv6 range.</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>-</td>
<td>The name of the extended parameter set in the configuration file is displayed.</td>
</tr>
<tr>
<td><strong>Extended parameter (not</strong></td>
<td>Up to 1024 characters</td>
<td>The name of the extended parameter set in the configuration file is displayed.</td>
</tr>
<tr>
<td>Item name</td>
<td>Input rule</td>
<td>Description</td>
</tr>
<tr>
<td>-----------</td>
<td>------------</td>
<td>-------------</td>
</tr>
<tr>
<td>displayed when no extended parameter is set</td>
<td>Enter a value in the box in which the extended parameter name is displayed. If you omit entering a value, the parameter is passed to the extension processing without a value.</td>
<td></td>
</tr>
</tbody>
</table>

**Note**

- *1* The name of a logical network created on SSC is automatically determined according to the naming rule of *Tenant ID* *Network Request ID*. It cannot be specified by a tenant user.
- *2* The specified IP address range is regarded as the range of IP addresses to be assigned. A range of IP addresses to be excluded cannot be specified.
- When creating a logical network, add only one IP range. Add the IP range only for [Assign].
- Before creating a logical network, you need to set `product.cloudportal.network.switch.display.Switch-name` in the configuration file.

[Resource Pool Selection]
Select a resource pool to which to assign a server and click the [Select] button.

![Resource Pool Selection Window](image)

**Figure 28-18  Resource Pool Selection Window**

**Note**
You cannot select a shared resource pool.

2. A confirmation dialog box is displayed. Set [Application comment] and [Request execution type] and click the [Confirm] to register a request.

![Creating a logical network(Confirmation)](image)

**Figure 28-19  [Creating a logical network(Confirmation)] screen**
### Table 28-7  [Creating a logical network(Confirmation)] screen

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comment on application</td>
<td>Enter a comment for an approver or a not at application.</td>
</tr>
<tr>
<td>Request execution type</td>
<td>Select the request execution method to use when the submitted request enters the executable status.</td>
</tr>
<tr>
<td>Cancel</td>
<td>Discards the request and returns you to the [Creating a logical network(Form)] screen.</td>
</tr>
<tr>
<td>Confirm</td>
<td>Submits the request.</td>
</tr>
</tbody>
</table>

#### 28.1.2.5 Network deletion request

Register a network deletion request according to the following procedures.

- Logical network deletion
  1. Select the network to be deleted by clicking it, and then click the [Select] button.

![Select a network to delete] screen

2. The [Deleting the network(Confirmation)] screen is displayed. Set [Application comment] and [Request execution type] by referring to "Table 28-7  [Creating a logical network(Confirmation)] screen (page 196)". Click the [Confirm] to register a request.

![Deleting the network(Confirmation)] screen

**Note**

- Even if you delete a network imported using the operation setting, synchronization, or the resource information update command, the port groups belonging to that network are not deleted.
- A logical network that matches any of the conditions mentioned below is not displayed in the network deletion request targets. To delete such a network, use the operation setting, synchronization, or the resource information update command.
  - The scope of disclosure is public.
  - The type is tenant administration VLAN.
The switch type is other than VirtualSwitch.

### 28.1.3 Checking Request Detailed Information

Clicking a line of the request that you want to check in the request list displays the detailed information.

#### Table 28-8 Item List (Request)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Request ID</td>
<td>Request ID</td>
</tr>
<tr>
<td>Request type</td>
<td>- Server creation&lt;br&gt;- Server change&lt;br&gt;- Server deletion&lt;br&gt;- Network creation&lt;br&gt;- Network deletion&lt;br&gt;One of the above.</td>
</tr>
<tr>
<td>Catalog name</td>
<td>Selected catalog name</td>
</tr>
<tr>
<td>Additional information</td>
<td>Displays additional information of the template set to the configuration file&lt;br&gt;* If no additional information is set, this is not displayed.</td>
</tr>
<tr>
<td>Request execution type</td>
<td>Displays the request execution type set at request when applying the request.&lt;br&gt;[Automatic] or [Manual]</td>
</tr>
<tr>
<td>Job ID</td>
<td>Job ID of SigmaSystemCenter(Value to identify a processing such as VM creation)</td>
</tr>
<tr>
<td>Status</td>
<td>- Awaiting approval&lt;br&gt;- Standby for execution&lt;br&gt;- Rejected&lt;br&gt;- Canceled&lt;br&gt;- In progress&lt;br&gt;- Completed&lt;br&gt;- Failed</td>
</tr>
<tr>
<td><strong>Item name</strong></td>
<td><strong>Description</strong></td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Any of the above</td>
<td></td>
</tr>
<tr>
<td>Progress</td>
<td>Displays the progress when the &quot;Status&quot; is &quot;In progress&quot; or &quot;Completed&quot;.</td>
</tr>
<tr>
<td>Server name</td>
<td>Name of the server to be created, or the target server for which request is changed or deleted.</td>
</tr>
<tr>
<td>Switch name</td>
<td>Displays the name of the switch to which the network to be created or the network for which a deletion request has been submitted belongs. * Displayed only for a network.</td>
</tr>
<tr>
<td>Resource pool</td>
<td>Resource pool name</td>
</tr>
<tr>
<td>Network name</td>
<td>Displays the name of the network to be created or the network for which a deletion request has been submitted. * Displayed only for a network.</td>
</tr>
<tr>
<td>Address pool</td>
<td>Displays the address pool of the network to be created or the network for which a deletion request has been submitted.</td>
</tr>
<tr>
<td></td>
<td>There are two tabs, [IPv4] and [IPv6].</td>
</tr>
<tr>
<td></td>
<td>1. The [IPv4] tab displays the following information.</td>
</tr>
<tr>
<td></td>
<td>• Subnet mask</td>
</tr>
<tr>
<td></td>
<td>Displays the subnet mask information of the address pool.</td>
</tr>
<tr>
<td></td>
<td>• Default gateway</td>
</tr>
<tr>
<td></td>
<td>Displays the default gateway information of the address pool.</td>
</tr>
<tr>
<td></td>
<td>• IP range list</td>
</tr>
<tr>
<td></td>
<td>The IP range information of the address pool lists the following information.</td>
</tr>
<tr>
<td></td>
<td>• Name</td>
</tr>
<tr>
<td></td>
<td>Displays the range name.</td>
</tr>
<tr>
<td></td>
<td>• Range</td>
</tr>
<tr>
<td></td>
<td>Displays the IPv4 address range.</td>
</tr>
<tr>
<td></td>
<td>* Initial value: IPv4 address range &quot;Start address - End address&quot;</td>
</tr>
<tr>
<td></td>
<td>• Category</td>
</tr>
<tr>
<td></td>
<td>Displays the category of the IPv4 address range (assignment or exclusion).</td>
</tr>
<tr>
<td></td>
<td>2. The [IPv6] tab displays the following information.</td>
</tr>
<tr>
<td></td>
<td>• Subnet prefix length</td>
</tr>
<tr>
<td></td>
<td>Displays the subnet prefix length.</td>
</tr>
<tr>
<td></td>
<td>• Default gateway</td>
</tr>
<tr>
<td></td>
<td>Displays the default gateway.</td>
</tr>
<tr>
<td></td>
<td>• IP range list</td>
</tr>
<tr>
<td></td>
<td>The IP range information of the address pool lists the following information.</td>
</tr>
<tr>
<td></td>
<td>• Name</td>
</tr>
<tr>
<td></td>
<td>Displays the range name.</td>
</tr>
<tr>
<td></td>
<td>• Range</td>
</tr>
<tr>
<td></td>
<td>Displays the IPv6 address range.</td>
</tr>
<tr>
<td></td>
<td>* Initial value: IPv6 address range &quot;Start address - End address&quot;</td>
</tr>
<tr>
<td></td>
<td>• Category</td>
</tr>
<tr>
<td></td>
<td>Displays the category of the IPv4 address range (assignment or exclusion).</td>
</tr>
<tr>
<td>Item name</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>* Displayed only for a network.</td>
<td></td>
</tr>
<tr>
<td>Resource status check</td>
<td>A dialog box is displayed with initially selected the resource group that was selected for the request.</td>
</tr>
<tr>
<td>Work group</td>
<td>Work group name</td>
</tr>
<tr>
<td>OS name</td>
<td>Name of the OS of the server to be created, changed, or deleted</td>
</tr>
<tr>
<td>Spec</td>
<td>Specification of the server to be created, changed, or deleted</td>
</tr>
<tr>
<td>Disk</td>
<td>Data disk of the server to be created, changed, or deleted</td>
</tr>
<tr>
<td>Network</td>
<td>Network of the server to be created, changed, or deleted</td>
</tr>
<tr>
<td>Click [Option]</td>
<td>to display the option items set during application.</td>
</tr>
<tr>
<td>Other</td>
<td>The extended parameter is displayed in the table format.</td>
</tr>
<tr>
<td>Time zone</td>
<td>Timezone set during application</td>
</tr>
<tr>
<td>Administrator account</td>
<td>Administrator account name</td>
</tr>
<tr>
<td>Administrator initial password</td>
<td>Administrator initial password Click the icon to switch between showing or hiding the password.</td>
</tr>
<tr>
<td>Product key</td>
<td>Displays the product key. This is displayed only for a Windows OS.</td>
</tr>
<tr>
<td>Domain suffix</td>
<td>Domain suffix entered during application. This is displayed only for a Linux OS.</td>
</tr>
<tr>
<td>Work group name(Domain name)</td>
<td>Workgroup name or domain name This is displayed only for a Windows OS.</td>
</tr>
<tr>
<td>Domain account</td>
<td>Specify a domain account. This is displayed only when the workgroup type on a Windows OS is a domain.</td>
</tr>
<tr>
<td>Domain password</td>
<td>Displays a masked domain password. This is displayed only when the workgroup type on a Windows OS is a domain.</td>
</tr>
<tr>
<td>Remarks</td>
<td>Remarks</td>
</tr>
<tr>
<td>Request date</td>
<td>Date when the request was submitted</td>
</tr>
<tr>
<td>Applicant</td>
<td>Applicant name of the request</td>
</tr>
<tr>
<td>Comment on application</td>
<td>Comment during application</td>
</tr>
<tr>
<td>Next approver</td>
<td>Displays the next approver If there is no next approver, this is not displayed. (*1) *This is updated in real time. *This is displayed only during request application.</td>
</tr>
<tr>
<td>Approver (Tenant)</td>
<td>An approver name is displayed only when the workflow is set to pattern 2 (*2). *This is updated in real time.</td>
</tr>
<tr>
<td>Approval comment (Tenant)</td>
<td>An approval comment is displayed only when the workflow is set to pattern 2 (*2). *This is updated in real time.</td>
</tr>
<tr>
<td>Execution date</td>
<td>Displays the execution date and time.</td>
</tr>
<tr>
<td>Approval status (Tenant) list</td>
<td></td>
</tr>
</tbody>
</table>

199
<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>An approver status is displayed only when the workflow is set to pattern 3 (*2) (workflow for tenants). *This is updated in real time.</td>
<td></td>
</tr>
<tr>
<td>Approval order</td>
<td>Displays the approval order of the workflow.</td>
</tr>
<tr>
<td>Approver</td>
<td>Displays the approver name. If the status is &quot;Not approved,&quot; the current user name is displayed. (*3) If the status is &quot;Approved,&quot; the user name when the request was approved is displayed.</td>
</tr>
<tr>
<td>E-mail address</td>
<td>Displays the email address of the approver. (For details, see the above &quot;Approver.&quot;)</td>
</tr>
<tr>
<td>Status</td>
<td>Displays the approval status of the approver.</td>
</tr>
<tr>
<td>Comment</td>
<td>Displays the comment by the approver.</td>
</tr>
<tr>
<td>Approval datetime</td>
<td>Displays the approval date and time.</td>
</tr>
<tr>
<td>Approval status (System) list</td>
<td>An approver status is displayed only when the workflow is set to pattern 3 (*2) (workflow for systems). *This is updated in real time.</td>
</tr>
<tr>
<td>Operation menu</td>
<td></td>
</tr>
<tr>
<td>Approve request</td>
<td>Displays the request approval dialog box as a modal dialog box. * This is updated in real-time. * This is displayed only for an approver when the status is &quot;Waiting Approval.&quot;</td>
</tr>
<tr>
<td>Reject request</td>
<td>Displays the request reject dialog box as a modal dialog box. * This is updated in real-time. * This is displayed only for an approver when the status is &quot;Waiting Approval.&quot;</td>
</tr>
</tbody>
</table>
| Reapplication                | The current screen changes to any of the following windows: Server Creation(Form) window  
|                              | Server Change(Form) window  
|                              | Server Deletion(Confirmation) window  
|                              | *This is updated in real-time.                                                                                                                                                                       |
### Item name | Description
--- | ---
*This is displayed only when the rejected or canceled request is selected. The system administrator (user not belonging to the tenant) is not displayed.
Request execution | Displays the request execution dialog box modally. *This is updated in real-time. *This is displayed only when the status is "Waiting Execution."
*This is displayed only for the approver or tenant manager.
Cancel | Displays the cancel dialog box as a modal dialog box. *This is displayed only for the following statuses: Waiting Approval Approved Waiting Execution Failed
*This is updated in real-time. *This is displayed only for the approver or tenant manager.
Error status release | Displays the error status release dialog box modally. *This is updated in real-time. This is displayed only for a system administrator when the status is "Failed."

*1 If no next approver is set in the workflow settings, a next approver is not displayed. If an approver is set but has been deleted or belongs to another tenant (including a provider), however, displays as below.

- When the next approver is an approver in the workflow for tenants
  (List) Tenant manager
  (Details) This user does not exist. Ask the tenant manager for approval on behalf.
- When the next approver is an approver in the workflow for systems
  (List) System administrator
  (Details) This user does not exist. Ask the system administrator for approval on behalf.

*2 For the workflow patterns, see "22.2 Configuring a workflow (page 113)."

*3 If the approver is deleted when the status is "Not Approved," or if the approver belongs to another tenant (including providers), Nonexistent user will be displayed.

### Note
- After you log in as a system administrator and approve a request on behalf of a tenant, the [Create] link on the request list may not be displayed. In this case, redisplay the request management window.
- If you delete the user who approved the request, the approver field in the request details window may be hidden. In that case, open the request details window again.

### 28.1.4 Approving a Request

1. A user with the request approve right can approve requests by clicking [Approve] on the request details window.
2. Displays the request approval dialog box. Enter a comment for an approver and click the [Confirmation] button to approve the request.

![Request Details Window (Approve)](image)

**Figure 28-23 Request Details Window (Approve)**

**Note**

A resource cannot be created while an Amazon EC2 instance is being created or deleted.

When the status of a server creation request with an Amazon EC2 server service catalog specified, or that of a server deletion request for an EC2 instance, is "In progress", and if the status of a server creation request with another Amazon EC2 server service catalog specified becomes "Awaiting approval", wait for the status of the first request to become "Completed" or "Failed" before attempting the approval.

---

### 28.1.5 Rejecting a Request

1. A user with the request approve right can reject requests by clicking [Reject] on the request details window.
2. The Request Reject dialog box is displayed. Enter a comment for an approver and click the [Confirmation] button to reject the request.

28.1.6 Executing a request

When a request is standing by for execution, the request is executed by executing the request execution processing. The request applicant and tenant manager can execute this processing. The following requests require this processing:

- Request whose execution option is set to [Manual]
- Request whose error state was cleared by the system administrator

1. Click [Execute the request] on the "Request detail" window of the execution standby request.
2. The "Execute the request" dialog box is displayed. Click the [Confirmation] button to execute the request.

![Figure 28-27 Request detail Window (Execute the request)](image1)

**Figure 28-27 Request detail Window (Execute the request)**

28.1.7 Canceling a request

The request applicant and tenant manager can cancel a request application when the request status is any of the following:

- Waiting for approval
- Approved
- Execution standby
- Error

1. Click [Cancel the Request] on the "Request detail" window.

![Figure 28-28 Execute the request Dialog Box](image2)

**Figure 28-28 Execute the request Dialog Box**
2. The "Cancel the Request" dialog box is displayed. Click the [Confirmation] button to cancel the request.

The canceled request can be applied for again from the "Request detail" window.

![Figure 28-29  Request detail Window (Cancel)](image)

28.1.8 Reapplying Request

Clicking the [Reapply] on the Request detail screen displays the Create screen again when reapplying for the request that was rejected once.

Correct and check the request as needed for reapplication.

* The reapplication icon is displayed only for the rejected requests.
28.2 Configuring a workflow (user)

Following describes how to configure a tenant workflow.

28.2.1 Workflow patterns (user)

The tenant manager can use this function.

Up to five approvers can be registered in a "workflow for tenants".

- Setting of whether approval is required or not
  
  Set whether request approval is required or not.
  
  If approval is set as not being required, a request is automatically executed immediately after application.

- Approval condition setting
  
  If approval is set as "not being required", this operation is not necessary (the item is not displayed).
  
  As the approval condition, specify [All Users] or [one of the users] who have the request approval authority.
  
  If [All Users] is selected, the approval process proceeds according to the registration order of approvers.

<table>
<thead>
<tr>
<th>Item number</th>
<th>Approval</th>
<th>Approval Condition</th>
<th>Approval operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not required</td>
<td>-</td>
<td>No approval required</td>
</tr>
<tr>
<td>2</td>
<td>Required</td>
<td>one of the users</td>
<td>A request is deemed to have been approved when it is approved by one of the users who have the approval authority.</td>
</tr>
<tr>
<td>3</td>
<td>Required</td>
<td>All Users</td>
<td>A request is deemed to have been approved when it is approved by all the approvers set in the workflow.</td>
</tr>
</tbody>
</table>
• Approval authority and proxy approval authority

An approval operation for a request (approval or rejection) is in principle performed by the user who has the "approval authority".

Note, however, that the tenant manager can perform an approval operation for its own tenant by proxy.

### Table 28-10 Approval authorities

<table>
<thead>
<tr>
<th>User</th>
<th>Workflow configuration</th>
<th>Tenant workflow</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Without approval authority)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tenant user</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(With approval authority)</td>
<td>All Users</td>
<td>Possible</td>
</tr>
<tr>
<td>Tenant user or tenant manager</td>
<td></td>
<td>Possible</td>
</tr>
<tr>
<td>(With approval authority)</td>
<td>one of the users</td>
<td>Possible</td>
</tr>
<tr>
<td>Tenant user or tenant manager</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Without approval authority)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>System administrator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(With approval authority)</td>
<td>All Users</td>
<td></td>
</tr>
<tr>
<td>System administrator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tenant manager</td>
<td></td>
<td>By proxy</td>
</tr>
<tr>
<td>System administrator</td>
<td></td>
<td>By proxy</td>
</tr>
<tr>
<td>(Tenant substitution)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note**

- When the workflow is changed while a request is being applied, the settings present when the request was applied take precedence.
- If an approver is deleted due to a personnel transfer or for some other reason, the request approval process skips that approver and jumps to the next one.
- If an approver user is invalid or locked or if the user's approval authority has been withdrawn, the request is processed in the same way as when the user is valid. Note, however, that since the user cannot approve or reject the request, it is necessary to edit the user settings or have the request approved by proxy.

### 28.2.2 Approval flow settings window

1. Select [Request]-[Approval flow settings] from the menu to display the "Approval flow settings" window.

   Select the tenant to be edited by referring to the following table and click the [Edit] button.
Figure 28-32  Approval flow settings Window

Table 28-11  Approval flow settings Window

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approval</td>
<td>Currently set approval necessity</td>
</tr>
<tr>
<td>Approval completion</td>
<td>Currently set approval completion condition</td>
</tr>
<tr>
<td>completion condition</td>
<td>* This item is displayed when [Approval] is [Required].</td>
</tr>
<tr>
<td></td>
<td>User names and mail addresses of the approvers whose approval is required</td>
</tr>
<tr>
<td></td>
<td>(displayed in the defined approval order)</td>
</tr>
<tr>
<td>Approver</td>
<td>* This item is displayed when [Approval] is [Required].</td>
</tr>
<tr>
<td></td>
<td>Displays the &quot;Configure approval flow(Form)&quot; window.</td>
</tr>
</tbody>
</table>

2. The "Configure approval flow(Form)" window is displayed. Set each item by referring to the following table, and then click the [Commit] button to apply the edited contents.

Figure 28-33  Configure approval flow(Form) Window

Table 28-12  Configure approval flow(Form) Window

<table>
<thead>
<tr>
<th>Item name</th>
<th>Input rule</th>
<th>Initial value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approval</td>
<td>&quot;Required&quot; or &quot;Not required&quot;</td>
<td>Current setting</td>
<td>Select whether approval is required or not.</td>
</tr>
<tr>
<td>Approval completion</td>
<td></td>
<td></td>
<td>&quot;Approval by one of the users with the approval privilege&quot;</td>
</tr>
<tr>
<td>completion condition</td>
<td>* This item is displayed when [Approval] is [Required].</td>
<td>-</td>
<td>&quot;Approval by all the approvers on the approval flow&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Select one of the above.</td>
</tr>
<tr>
<td>Choose approver</td>
<td>-</td>
<td>-</td>
<td>Displays the &quot;Choose approver&quot; dialog box. Select an approver by referring to &quot;Table 28-13 Choose approver Dialog Box (page 209)&quot;.</td>
</tr>
</tbody>
</table>
### Item name | Input rule | Initial value | Description
--- | --- | --- | ---
Back | - | - | Discards the current contents and transits to the "Approval flow settings" window.
Commit | - | - | Updates the workflow configuration.

Up to five approvers can be specified. Select an approver from the [Choose from] area and click the [Add] button. The selected approver is added to the [Selected] area. After selecting all the desired approvers, click [Add].

**Figure 28-34  Choose approver Dialog Box**

**Table 28-13  Choose approver Dialog Box**

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose from</td>
<td>Lists the names of users who can be set as approvers.</td>
</tr>
<tr>
<td>Selected</td>
<td>List names of users added as approvers</td>
</tr>
<tr>
<td>[Add] button</td>
<td>Adds the user selected in the [Choose from] area to the [Selected] area.</td>
</tr>
<tr>
<td>[Delete] button</td>
<td>Returns the user selected in the the [Selected] area to the [Choose from] area.</td>
</tr>
<tr>
<td>Cancel</td>
<td>Discards the current contents and transits to the &quot;Choose approver&quot; window.</td>
</tr>
<tr>
<td>Commit</td>
<td>Sets the selected users as approvers.</td>
</tr>
</tbody>
</table>

### 28.3 Email notification configuration

The email notification function sends a notification prompting a certain person to take the next action when a request state changes (a request was approved or rejected).

This function can be used when the system administrator has enabled it.
28.3.1 Setting email notification

Check the content of an email notification.

The user who has the tenant manager authority can use this function.

The system administrator can check the information of a tenant for whom he or she substitutes by using the tenant substitution function.

In the menu, click [Request] and then [E-mail notification options], and the [E-mail notification options] screen is displayed.

![Figure 28-35  [E-mail notification options] screen](image)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notification event</td>
<td>One of the following:</td>
</tr>
<tr>
<td></td>
<td>- Awaiting Approval</td>
</tr>
<tr>
<td></td>
<td>- Approval</td>
</tr>
<tr>
<td></td>
<td>- Rejected</td>
</tr>
<tr>
<td></td>
<td>- Canceled</td>
</tr>
<tr>
<td></td>
<td>- Execution Completed</td>
</tr>
<tr>
<td></td>
<td>- Execution Error</td>
</tr>
<tr>
<td></td>
<td>- Tenant Administrator Selected</td>
</tr>
<tr>
<td></td>
<td>- Tenant User Selected</td>
</tr>
<tr>
<td>To:</td>
<td>Waiting Approval</td>
</tr>
<tr>
<td></td>
<td>Approver in the workflow</td>
</tr>
<tr>
<td></td>
<td>Approval</td>
</tr>
<tr>
<td></td>
<td>Applicant</td>
</tr>
<tr>
<td></td>
<td>Rejected</td>
</tr>
<tr>
<td></td>
<td>Applicant, or approver in the workflow who has approved the request</td>
</tr>
<tr>
<td></td>
<td>Canceled</td>
</tr>
<tr>
<td></td>
<td>Approver in the workflow who has approved the request</td>
</tr>
<tr>
<td></td>
<td>Execution Completed</td>
</tr>
<tr>
<td></td>
<td>Applicant</td>
</tr>
<tr>
<td></td>
<td>&gt;Execution Error</td>
</tr>
<tr>
<td></td>
<td>Applicant, tenant manager, and system administrator</td>
</tr>
<tr>
<td>Tenant Administrator</td>
<td>Tenant manager</td>
</tr>
<tr>
<td>Selected</td>
<td>Tenant manager</td>
</tr>
<tr>
<td>Tenant User Selected</td>
<td>Tenant user</td>
</tr>
<tr>
<td>Cc:</td>
<td>Email address of Cc: set in the email notification</td>
</tr>
<tr>
<td>Bcc:</td>
<td>Email address of Bcc: set in the email notification</td>
</tr>
<tr>
<td>Subject</td>
<td>Subject set in the email notification</td>
</tr>
<tr>
<td>Text</td>
<td>Text set in the email notification</td>
</tr>
</tbody>
</table>
[Edit] button | Displays the [E-mail notification option modification (Form)] screen to edit the content of the email notification.

Note
When the workflow requires that a request be approved by one of the users who have the approval authority, the email notification is sent to all the users in the tenant who have the approval authority. If there is no approver in the tenant, the email notification is sent to the tenant manager.

### 28.3.2 Changing email notification settings (form)

This function is used to edit the content of an email notification.

The user who has the tenant manager authority can use this function.

The system administrator can edit the information of a tenant for whom he or she substitutes by using the tenant substitution function.

Clicking [Edit] in the [E-mail notification options] screen displays the [E-mail notification option modification (Form)] screen.

![Figure 28-36](image)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Required</th>
<th>Input rule</th>
<th>Initial value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>To:</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Recipient</td>
</tr>
<tr>
<td>Cc:</td>
<td>N/A</td>
<td>E-mail format</td>
<td>Blank</td>
<td>Enter the email address to be set in Cc:. * Only one email address can be set.</td>
</tr>
<tr>
<td>Bcc:</td>
<td>N/A</td>
<td>E-mail format</td>
<td>Blank</td>
<td>Enter the email address to be set in Bcc:. * Only one email address can be set.</td>
</tr>
<tr>
<td>Subject</td>
<td>○</td>
<td>1 to 128 characters</td>
<td>Subject that is currently set</td>
<td>Enter the content to be set as the subject.</td>
</tr>
<tr>
<td>Text</td>
<td>○</td>
<td>1 to 2048 characters</td>
<td>Text that is currently set</td>
<td>Enter the content to be set as the subject.</td>
</tr>
<tr>
<td>Item name</td>
<td>Required</td>
<td>Input rule</td>
<td>Initial value</td>
<td>Description</td>
</tr>
<tr>
<td>-----------</td>
<td>----------</td>
<td>------------</td>
<td>---------------</td>
<td>-------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* The number of characters includes single-byte, double-byte, and control characters.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[Back] button</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Discards the current data in the fields and returns you to the [E-mail notification options] screen.</td>
</tr>
<tr>
<td>[Commit] button</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Updates the email notification settings with the current data in the fields and returns you to the [E-mail notification options] screen. * If there is any input mistake, an error is displayed in the corresponding field.</td>
</tr>
</tbody>
</table>

If you click the [Commit] button after entering data in all the necessary fields, the content of the email notification is changed.

**Tip**

The replacement character strings shown in "26.1.1 Replacement character strings that can be used for email notifications (page 157)" can be used.
Chapter 29
Tenant Information(User)

This section describes the operation of the tenant information menu for the tenant administrators and tenant users.

In the tenant information menu, the functions below are provided.

- Tenant administration(tenant users cannot use): To check and edit the details of the tenant
- User administration(Tenant administrator) : To register a new user, to check and edit the registered users, to change and delete password
- User administration(Tenant users): To check the registered users

29.1   Tenant Administration(User)

This section describes the tenant administration menu.

29.1.1   Tenant List(User)

Clicking [Tenants] and [Tenant Management] from the menu displays the Tenant Management screen.

![Tenant Management Screen]

**Table 29-1  Item list(Tenant Management Screen)**

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenant list</td>
<td>Displays information on the tenant of its own.</td>
</tr>
</tbody>
</table>

29.1.2   Checking Details of Tenant Information(User)

Clicking a line of the tenant that you want to check in the tenant list displays the detailed information.

![Tenant detail Screen]
Table 29-2  Item list(Tenant details)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenant ID</td>
<td>Tenant ID</td>
</tr>
<tr>
<td>name</td>
<td>Tenant name</td>
</tr>
<tr>
<td>Status</td>
<td>Any one of the following statuses:</td>
</tr>
<tr>
<td></td>
<td>- Active</td>
</tr>
<tr>
<td>Number of the registered users</td>
<td>The number of the users that are registered in the applicable tenant.</td>
</tr>
<tr>
<td>Registered</td>
<td>Registered date and time</td>
</tr>
<tr>
<td>Comment</td>
<td>Comment</td>
</tr>
<tr>
<td>Administrator</td>
<td>The name of the administrator of the applicable tenant</td>
</tr>
<tr>
<td>Tenant edit</td>
<td>Displays the Modify a tenant(Form) screen.</td>
</tr>
</tbody>
</table>

29.1.3 Editing Tenant(User)

The method of editing a tenant is described below:


   ![Figure 29-3  Tenant detail Screen](image)

2. The Edit tenant screen is displayed. Click the [Next] button after editing the respective items.

   ![Figure 29-4  Edit tenant screen](image)

   The tenant administrator can be specified on the Edit tenant screen. Specify the user of the tenant administration that was created in advance.
29.2 User Administration

This section describes the user administration menu.

29.2.1 List of users (user)

The [List of user] screen is displayed by selecting [Tenants] and then [User Management] from the menu.

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of display items</td>
<td>Changes the number of items displayed in the list.</td>
</tr>
<tr>
<td>Create User</td>
<td>Displays the [Create User] screen. * This is not displayed for a tenant user.</td>
</tr>
</tbody>
</table>

Figure 29-5  Choose a tenant administrator Screen

3. The Modify a tenant(Confirmation) Screen is displayed. Clicking the [Confirm] button reflects the change.

Figure 29-6  Modify a tenant(Confirmation) Screen

Figure 29-7  [User Management] screen
To search for a user, click [Search] on the [List of user] screen and search it by the following items. A string search is a partial match search.

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>List of user</td>
<td>Displays a list of users.</td>
</tr>
</tbody>
</table>

Table 29-4   Item List (List of user search screen)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Name</td>
</tr>
<tr>
<td>User ID</td>
<td>User ID</td>
</tr>
<tr>
<td>Role</td>
<td>Select any of the following:</td>
</tr>
<tr>
<td></td>
<td>- System administrator</td>
</tr>
<tr>
<td></td>
<td>- Tenant manager</td>
</tr>
<tr>
<td></td>
<td>- Tenant user</td>
</tr>
<tr>
<td></td>
<td>- Approve request: Possible</td>
</tr>
<tr>
<td></td>
<td>- Disable approving a request</td>
</tr>
<tr>
<td>added roles</td>
<td>Select a custom role.</td>
</tr>
<tr>
<td></td>
<td>Valid only when [Tenant user] is selected for [Role]</td>
</tr>
<tr>
<td></td>
<td>To use a user to whom no custom role is assigned as a condition, select [Not Set].</td>
</tr>
<tr>
<td>Status</td>
<td>Select any of the following:</td>
</tr>
<tr>
<td></td>
<td>- Active</td>
</tr>
<tr>
<td></td>
<td>- Inactive</td>
</tr>
<tr>
<td></td>
<td>- Locked</td>
</tr>
<tr>
<td>Clear</td>
<td>Return the input (specified) values to the initial values.</td>
</tr>
<tr>
<td>Search</td>
<td>Click the button to do the search.</td>
</tr>
</tbody>
</table>

29.2.2   Registering a user (user)

This section describes how to add a user.

1. On the [List of User] screen, click [Create User].

2. The [Create User(Form)] screen is displayed. Edit the items by referring to the following table and then click the [Next] button.
### Table 29-5 Item List (Create User(Form) screen)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Input rule</th>
<th>Initial value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role type</td>
<td>–</td>
<td>Tenant user</td>
<td>Select the role to be given to the user.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Tenant manager</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Tenant user</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Enable request approval.</td>
</tr>
<tr>
<td>User ID</td>
<td>3 to 16 characters One-byte alphanumeric characters, underscores (_), and hyphens (-) can be used.</td>
<td>-</td>
<td>Enter the user ID.</td>
</tr>
<tr>
<td>Name</td>
<td>Up to 1024 characters</td>
<td>-</td>
<td>Enter the name (user name).</td>
</tr>
<tr>
<td>e-mail</td>
<td>E-mail format</td>
<td>-</td>
<td>Enter the email address.</td>
</tr>
</tbody>
</table>
| Password        | 6 to 16 characters One-byte alphanumeric characters and the following symbols are available: !"#$%
|                 |                                     |               | Enter the user password.                                                   |
|                 |                                     |               | @/[\]^_`{|}~ -.                                                            |
| Password(Confirmation) | Enter the same character string that you entered in [Password]. | -             | Enter the user password (for confirmation).                                |
| Status          | -                                   | Enable        | Select any of the following user states:                                  |
|                 |                                     |               | - Enabled                                                                   |
|                 |                                     |               | - Disabled                                                                  |
| Remark          | Up to 255 characters                | -             | Remark                                                                     |

[Customize]
If you select [Tenant user] for [Role type], you can add a custom role. For details of the custom roles, see "Chapter 16   Role Settings (page 80)".

Select the role to add in the [Choose from] field, and click the [Add] button. After selecting all the roles you want to add, click the [Select] button.

If you want to add all the roles, click the [Add all] button, which adds all the roles.

![Figure 29-10   [Customize] dialog box](image)

3. The [Create User(Confirmation)] screen is displayed. Click the [Confirm] button to add the user.

![Figure 29-11   [Create User(Confirmation)] screen](image)

### 29.2.3 Checking the detailed user information (user)

Clicking the line of the user whose contents you want to check displays its detailed information.

![Figure 29-12   [User detail] screen](image)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>User ID</td>
<td>User ID</td>
</tr>
<tr>
<td>Name</td>
<td>Name (User name)</td>
</tr>
<tr>
<td>Role</td>
<td>User type and whether the user can approve requests</td>
</tr>
</tbody>
</table>
| [added roles] | Custom role  
Displayed only when the type is Tenant user.  
When there are multiple custom roles, each of them is delimited by a comma. |
| Status    | - Active  
- Inactive  
- Locked  
One of the above: |
| e-mail    | Email address of the user |
### 29.2.4 Changing the user information (user)

This section describes how to change the user information.


![Image: Figure 29-13  [User detail] screen]

2. The [Modify User(Form)] screen is displayed. Edit each item by referring to "Table 23-7 Item List[Create User(Form)] screen (page 124)" of "23.2.2 Registering a user (administrator) (page 123)" and click the [Next] button.

![Image: Figure 29-14  [Modify User(Form)] screen]

**[Customize]**

If you select [Tenant user] for [Role type], you can change a custom role.

Select the role to add in the [Choose from] field, and click the [Add] button. If you want to add all the roles, click the [Add all] button, which adds all the roles. Select the role to delete in the [Selected] field, and click the [Remove] button. If you want to delete all the roles, click the [Remove all] button, which deletes all the roles. After selecting all the roles you want to add or delete, click the [Select] button.

![Image: Figure 29-15  [Customize] dialog box]

---

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remark</td>
<td>Remarks</td>
</tr>
<tr>
<td>Edit User</td>
<td>Displays the [Edit User] screen.</td>
</tr>
<tr>
<td></td>
<td>* This is not displayed for a tenant user.</td>
</tr>
<tr>
<td>Change Password</td>
<td>Displays the [Change Password] screen.</td>
</tr>
<tr>
<td></td>
<td>* This is not displayed for a tenant user.</td>
</tr>
<tr>
<td>Delete User</td>
<td>Displays the [Delete User] screen.</td>
</tr>
<tr>
<td></td>
<td>* This is not displayed for a tenant user.</td>
</tr>
</tbody>
</table>
3. The [Change User(Confirmation)] screen is displayed. Click the [Confirm] button to apply the changes.

![Figure 29-16 [Change User(Confirmation)] screen](image)

### 29.2.5 Changing the password

The method of changing a password is described below.

1. Click [Change Password] on the User detail window.

![Figure 29-17 User detail Window](image)

2. The [Changing password(Form)] screen is displayed. Change the password by referring to the password input rule described in "23.2.2 Registering a user (administrator) (page 123)" and click the [Next] button.

![Figure 29-18 [Changing password(Form)] screen](image)

3. The [Changing password(Confirmation)] screen is displayed. Click the [Confirm] button to apply the changes.

![Figure 29-19 [Changing password(Confirmation)] screen](image)

**Note**

To return from the [Changing password(Confirmation)] screen to the [Changing password(Form)] screen, click the [Back] button. You cannot return from the breadcrumb list.

### 29.2.6 Deleting a User

The method of deleting a user is described below.

1. Click [Delete User] on the User detail window.
2. The Delete User(Confirmation) window is displayed. Click the [Confirm] to delete the user.
Chapter 30
Resource management

This chapter describes the resource management menu. The resource management menu provides the following function:

- Resource status: Displays a utilization graph for each resource pool. For details, see "30.1 Resource Status (User) (page 222)".
- Work group management: Lets you create, change, and delete work groups, which are the server management units. For details, see "30.2 Work Group Management (User) (page 223)".
- Topology: Displays the configuration diagram of networks and servers and lets you change dedicated network names. For details, see "30.3 Displaying a Topology (page 228)".
- Server management: Displays server information and lets you perform power control and other operations. For details, see "30.4 Server Management (User) (page 230)".
- Network management: Displays network information and lets you perform deletion and other operations. For details, see "30.5 NetNetwork management (User) (page 242)".
- Operation work history: Displays the history of operations executed for servers. For details, see "30.6 Operation Work History (User) (page 246)".

30.1 Resource Status (User)

Displays the status of the resource pool that can be used by the tenant of its own. In addition, information on the resource consumed that is possessed by the respective resource pools can be checked.

Note

Resource pools on the public cloud are not displayed.

30.1.1 Checking the resource status (user)

In the menu, click [Resources] and then [Resource Information], and the [Resource Information] screen is displayed.

Clicking a resource pool in the resource pool tree displays resource pool details in the right pane. The resource pool tree lists the resource pools of your tenant, and resource pool details show the usage and remaining amount of the resource pool selected in the tree.
### Table 30-1  Item List (Resource Information)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
</table>
| Resource pool tree         | Resource pool list  
Select a resource pool by clicking its name, and the resource consumption information is displayed. |
| Resource slider            | Use the slider to show resources. |
| Resource name              | Resource name  
* A resource that has a flag symbol next to its name is an exclusive one. |
| Resource utilization       | Indicates the resource utilization in the following format:  
Usage value/Total amount  
When the total amount is 0, the utilization is indicated in the following format:  
Usage range/- |
| Resource unit              | Resource unit |
| Usage range of the resource(pie graph) | Displays a circle graph showing the usage ratio of the resource.  
When the total amount is 0, no circle graph is displayed. |

### 30.2 Work Group Management (User)

This section describes work groups and the management menu.

Work groups represent a function that organizes servers into groups according to their roles, such as the services and applications in a business system, and uses these groups as management units. You can assign a work group to a server by specifying the group when creating the server. Once you specify a work group to which a server belongs, you cannot change it later. If a change is necessary, you need to contact the system administrator.

The work group management menu lets you create desired work groups. You can assign a server to a work group by selecting an existing group when creating the server.

* Only servers for which an exclusive resource pool is selected can be grouped.

"Figure 30-2  Work group configuration example (page 224)" shows an example of how task groups can be used.
For example, when the roles that make up the business system, SystemA, are Web servers, AP servers, and DB servers, create "SystemA" as a category and "Web", "AP", and "DB" as groups. Configuring work groups according to the roles in a business system, as mentioned above, allows servers to be grouped by task or role.

**Note**
Make sure that the number of work groups and the number of VMs in a work group do not exceed the upper limit of the DPM machine groups. For the upper limit of the DPM machine groups, see "Adding a Machine Group" in the *MasterScope DeploymentManager Operation Guide*.

### 30.2.1 Work Group List

Select [Resources]-[Work Group Management] from the menu to display the work group list window.

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work group tree</td>
<td>Lists work groups. Click a work group to display its detailed information.</td>
</tr>
<tr>
<td>Add Work Group</td>
<td>Opens the [Work Group Addition] dialog box.</td>
</tr>
<tr>
<td>Edit Work Group</td>
<td>Opens the [Work Group Change] dialog box.</td>
</tr>
</tbody>
</table>
### 30.2.2 Work Group Details

Clicking the name of a work group in the work group tree displays its details.

![Work Group Details Window](image)

#### Table 30-3 Item List (Work Group Details)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Work Group types&lt;br&gt;- Category&lt;br&gt;- Group&lt;br&gt;Any of the above</td>
</tr>
<tr>
<td>Work Group</td>
<td>Path to the selected work group&lt;br&gt;Click the display button. Then, the full path on SSC in which the VM is actually deployed is displayed.</td>
</tr>
<tr>
<td>Machine type</td>
<td>Machine type of the selected work group&lt;br&gt;One of the following types is displayed:&lt;br&gt;• VM&lt;br&gt;• VM Server&lt;br&gt;• Physical&lt;br&gt;• Public Cloud&lt;br&gt;Displayed only when the type of the selected work group is [Group].</td>
</tr>
<tr>
<td>Default catalog name</td>
<td>Converts the default template set for the work group into a catalog name and displays it.&lt;br&gt;Displayed only when the type of the selected work group is [Group].</td>
</tr>
<tr>
<td>Number of VMs</td>
<td>Number of virtual machines in the selected work group&lt;br&gt;When a category is selected, displays the total number of VMs belonging to the groups under the category.</td>
</tr>
<tr>
<td>Server creation</td>
<td>Opens the [Create a Server (Form)] screen that uses the selected category or group.</td>
</tr>
<tr>
<td>Create Automatic Monitoring Rule</td>
<td>Opens the [Create Automatic Monitoring Rule] window with the selected category or group set as a condition.&lt;br&gt;For details about the automatic monitoring rules, see the manual for monitoring.&lt;br&gt;Displayed only when the monitoring license is enabled.&lt;br&gt;Displayed only the selected work group is one of the following:&lt;br&gt;• The type is [Category].&lt;br&gt;• The type is [Group], and the machine type is one of the following:&lt;br&gt;  - VM&lt;br&gt;  - VM Server&lt;br&gt;  - Physical</td>
</tr>
</tbody>
</table>
30.2.3 Adding a work group

1. Selecting [Root] or a parent group category in the work group list window and then clicking [Add work group] displays the [Add work group] dialog box.

   **Note**
   
   A group cannot be created under another group.

![Figure 30-5 Work Group List Window](image)

2. After filling in the fields according to the following table, click the [Add] button.

![Figure 30-6 Work Group Addition Dialog Box](image)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Input rule</th>
<th>Initial value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>–</td>
<td>Category</td>
<td>Select the type of a work group to be added.</td>
</tr>
<tr>
<td>Work group name</td>
<td>1 to 20 characters consisting of alphanumeric characters, _, and/or -</td>
<td>-</td>
<td>Enter the name of a work group to be created. * &quot; &quot; (underscore) cannot be used as the first character. Only when [Group] is selected as type</td>
</tr>
<tr>
<td>Machine type</td>
<td>-</td>
<td>VM</td>
<td>Select one of the following: • VM • Public Cloud</td>
</tr>
</tbody>
</table>
### 30.2.4 Editing the Work Group

1. Select a target work group on the work group list window and click [Edit work group]. Then, the [Edit work group] dialog box is displayed.

![Figure 30-7  Work Group List Window](image)

2. Select [template name] and click [Edit] button to update.

![Figure 30-8  Work Group Deletion Dialog Box](image)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Input rule</th>
<th>Initial value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default catalog name</td>
<td>-</td>
<td>Do not select</td>
<td>Select a default template when creating a server in the work group details window. When not using a default template, select [Is not specified]. Only when [Group] is selected as type</td>
</tr>
<tr>
<td>Cancel</td>
<td>-</td>
<td>-</td>
<td>Discards the contents without adding the work group and closes the dialog box.</td>
</tr>
<tr>
<td>Add</td>
<td>-</td>
<td>-</td>
<td>Adds the work group and closes the dialog box.</td>
</tr>
</tbody>
</table>
30.2.5 Deleting a Work Group

1. Selecting a target work group in the work group list window and then clicking [Delete work group] displays the [Delete work group] dialog box.

2. Click the [Confirmation] button to delete the work group.

30.3 Displaying a Topology

This function graphically displays networks (the tenant management LAN (management LAN) and logical networks) and server locations to enable users to easily understand the topology.

Clicking [Resources] - [Topology] in the menu displays the topology of the own tenant (substitute tenant for system administrators) on a location-by-location basis.
### Table 30-5   Topology

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Update</td>
<td>Reloads the topology diagram.</td>
</tr>
<tr>
<td>Select Location</td>
<td>Select a location for which topology will be displayed.</td>
</tr>
<tr>
<td>(1) Network</td>
<td>Displays the network display name, network address, and network mask.</td>
</tr>
<tr>
<td></td>
<td>Clicking this displays the following in the tool tip.</td>
</tr>
<tr>
<td></td>
<td>For a dedicated network, the display name can be changed from [Edit name]</td>
</tr>
<tr>
<td></td>
<td>(refer to &quot;30.3.1   Changing the Network Display Name (page 229)&quot;).</td>
</tr>
<tr>
<td></td>
<td>- Network name</td>
</tr>
<tr>
<td></td>
<td>- Network ID</td>
</tr>
<tr>
<td></td>
<td>- Type</td>
</tr>
<tr>
<td></td>
<td>- Remarks</td>
</tr>
<tr>
<td></td>
<td>- Edit name</td>
</tr>
<tr>
<td>(2) Server</td>
<td>Displays the server name and power state.</td>
</tr>
<tr>
<td></td>
<td>Clicking this displays the following in the tool tip.</td>
</tr>
<tr>
<td></td>
<td>- Server name: Clicking the name displays the &quot;Server Management&quot; window.</td>
</tr>
<tr>
<td></td>
<td>- Type</td>
</tr>
<tr>
<td></td>
<td>- OS name</td>
</tr>
<tr>
<td></td>
<td>- Resource Pool</td>
</tr>
<tr>
<td></td>
<td>- State*1</td>
</tr>
<tr>
<td></td>
<td>- Number of CPUs</td>
</tr>
<tr>
<td></td>
<td>- Memory</td>
</tr>
<tr>
<td></td>
<td>- Disk</td>
</tr>
<tr>
<td></td>
<td>- Work Group</td>
</tr>
<tr>
<td></td>
<td>- Remarks</td>
</tr>
<tr>
<td>(3) Connection between networks and servers</td>
<td>Displays the networks in different colors according to the type of the connected network and also displays the IP addresses.*2</td>
</tr>
<tr>
<td>(4) Zoom in ( + )</td>
<td>Button to zoom in on the topology diagram*3</td>
</tr>
<tr>
<td>(5) Zoom out ( - )</td>
<td>Button to zoom out of the topology diagram*3</td>
</tr>
</tbody>
</table>

*1 For details about the states, refer to "Status" in "Table 30-8   Item List (List of Server search screen) (page 231)".

*2 For the server IP address on the connection, only the part that differs from the network address is displayed.

*3 When zooming in on or out of the topology diagram, unintended blank spaces might be displayed due to web browser issues. In this case, display the topology diagram at 100% again.

If [Status] of the server is [Others] in the server list, [Unknown] is displayed on the topology diagram.

### 30.3.1   Changing the Network Display Name

The tenant manager can change the name of the occupied network to any name. Following describes how to change the name.
1. Select [Resource]-[Topology] from the menu and then click the occupied network whose display name is to be changed.

   Click [Edit network name].

   ![Figure 30-12 Topology](image)

2. Displays the [Edit network name] dialog box. Enter the display name and click the [Submit] button. The network display name will change.

   ![Figure 30-13 Edit network name Window](image)

   **Table 30-6 Edit network name Window**

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network name</td>
<td>Up to 32 characters can be set. A control character cannot be set. If a blank is set, the display name is deleted and the default logical network name is displayed.</td>
</tr>
<tr>
<td>Cancel</td>
<td>Discards the changes and returns to the &quot;Topology&quot; window. Clicking this button displays the following in the tool tip.</td>
</tr>
<tr>
<td>Submit</td>
<td>Commits the changed network name and returns to the &quot;Topology&quot; window.</td>
</tr>
</tbody>
</table>

### 30.4 Server Management(User)

This section describes the Server Management menu.
In the Server Management menu, the registered server can be checked and managed.

### 30.4.1 Server list

In the menu, click [Resources] and then [Server Management], and the [List of Server] screen is displayed.

![Figure 30-14  [List of Server] screen](image)

#### Table 30-7  Item List ([List of Server] screen)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>number of items displayed</td>
<td>Changes the number of items displayed in the list.</td>
</tr>
<tr>
<td>Create</td>
<td>Displays the [Create a Server(Form)] screen. * Not available when multiple servers are selected.</td>
</tr>
<tr>
<td>Modify</td>
<td>Displays the [Modify a server(Form)] screen. * Not available when multiple servers are selected.</td>
</tr>
<tr>
<td>Delete</td>
<td>Displays the [Delete a server(Confirmation)] screen. * Available when multiple servers are selected.</td>
</tr>
<tr>
<td>Power control operations</td>
<td>The following power control operations are possible. Selecting an operation displays the corresponding dialog box.</td>
</tr>
<tr>
<td></td>
<td>* Start</td>
</tr>
<tr>
<td></td>
<td>* Shutdown</td>
</tr>
<tr>
<td></td>
<td>* Power off</td>
</tr>
<tr>
<td></td>
<td>* Restart</td>
</tr>
<tr>
<td>Synchronization</td>
<td>Synchronizes the information of the server list.</td>
</tr>
<tr>
<td>Generic operations</td>
<td>Backing up</td>
</tr>
<tr>
<td></td>
<td>Other operation A</td>
</tr>
<tr>
<td></td>
<td>Other operation B</td>
</tr>
<tr>
<td>Server list</td>
<td>Displays a list of servers.</td>
</tr>
</tbody>
</table>

To search for a server, click [Search] in the [List of Server] screen and conduct the search using the items shown below. A string search is a partial match search.

#### Table 30-8  Item List (List of Server search screen)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Server ID</td>
<td>Server ID</td>
</tr>
<tr>
<td>Server name</td>
<td>Server name</td>
</tr>
<tr>
<td>Work group</td>
<td>Work group name</td>
</tr>
<tr>
<td>Item name</td>
<td>Description</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------</td>
</tr>
<tr>
<td>Location</td>
<td>Location of the target server</td>
</tr>
</tbody>
</table>
| Status    | - Started  
- Off  
- Powered off  
- Restarting  
- Suspended  
- Shelved  
- Other  
- Delted  
- Error  
Select one of the above. |
| OS        | OS |
| Resource pool | Resource pool name of the target server* |
| Remark    | Remarks |
| Clear     | Return the input (specified) values to the initial values. |
| Search    | Click the button to do the search. |

**Note**

* A server on a public cloud imported by synchronization or the resource information update command cannot be searched using a resource pool.

### 30.4.2 Creating a Server

Clicking [Create] on the Server Management screen displays the Create a Server(Form) screen.

![Create a Server(Form)screen](image)

For details about the creation procedure, see Create a Server of "28.1.2 Creating a request (page 180)".

### 30.4.3 Checking Details of Server Information

Clicking a line of the server that you want to check in the server list displays the detailed information.
Note that selecting the server that has been already deleted on SigmaSystemCenter displays [Deleted] in [Status].

The detailed information provides the following.

- System
- Network
- Disk
- Screenshot
- Additional information
- Console

For servers imported not by a server creation request but by using the [Synchronize] button and servers on the public cloud, the functions of the server details screen are restricted. For details, see “Table 24-6 Supported Functions on the Server Details Screen (page 233)” below.

<table>
<thead>
<tr>
<th>Function</th>
<th>Private</th>
<th>Public</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display of server details (system, network, disk)</td>
<td>Supported</td>
<td>Supported</td>
</tr>
<tr>
<td>Screenshot</td>
<td>Supported</td>
<td>-</td>
</tr>
<tr>
<td>Additional information</td>
<td>Supported</td>
<td>Supported</td>
</tr>
<tr>
<td>Console</td>
<td>Supported *</td>
<td>-</td>
</tr>
</tbody>
</table>

* This can be displayed only for servers on the corresponding hypervisor.

**30.4.3.1 [System]**

While the initial window on which a server is selected from a list or the details window is being displayed, click the [System] tab to display the system information.
Table 30-10 Item List (System)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Server name</td>
</tr>
<tr>
<td>Location</td>
<td>Location of the target server</td>
</tr>
<tr>
<td>Status</td>
<td>Any one of the following:</td>
</tr>
<tr>
<td></td>
<td>Started</td>
</tr>
<tr>
<td></td>
<td>Off</td>
</tr>
<tr>
<td></td>
<td>Powered off</td>
</tr>
<tr>
<td></td>
<td>Restarting</td>
</tr>
<tr>
<td></td>
<td>Suspended</td>
</tr>
<tr>
<td></td>
<td>Shelved</td>
</tr>
<tr>
<td></td>
<td>Deleted</td>
</tr>
<tr>
<td>Progress</td>
<td>Progress of the above status</td>
</tr>
<tr>
<td>OS name</td>
<td>OS name</td>
</tr>
<tr>
<td>CPU Count</td>
<td>Number of CPUs *2</td>
</tr>
<tr>
<td>Memory(MB)</td>
<td>Displays the memory size in MB *2</td>
</tr>
<tr>
<td>Resource pool</td>
<td>Resource pool name of the target server *1</td>
</tr>
<tr>
<td>Work group</td>
<td>Work group name</td>
</tr>
<tr>
<td>UUID</td>
<td>UUID of the server</td>
</tr>
<tr>
<td>Comment</td>
<td>Comment</td>
</tr>
</tbody>
</table>

**Note**

*1 A server resource pool on a public cloud imported by synchronization or the resource information update command is not displayed.

*2 If the changes are imported by synchronization after the configuration is changed directly in SigmaSystemCenter or the public cloud, a gap may arise from the information used when a request was executed.

### 30.4.3.2 [Network]

If you click the [Network] tab while the [Detail] screen is displayed, the network information is displayed.
Table 30-11  Item List (Network)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interface name</td>
<td>Interface name</td>
</tr>
<tr>
<td>IP address</td>
<td>IP address</td>
</tr>
<tr>
<td>MAC address</td>
<td>MAC address</td>
</tr>
</tbody>
</table>

**Note**

If the changes are imported by synchronization after the configuration is changed directly in SigmaSystemCenter or the public cloud, a gap may arise from the information used when a request was executed.

### 30.4.3.3  [Disk]

If you click the [Disk] tab while the [Detail] screen is displayed, the disk information is displayed.

Table 30-12  Item List (Disk)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slot</td>
<td>Disk position</td>
</tr>
<tr>
<td>Type</td>
<td>- Disk type</td>
</tr>
<tr>
<td></td>
<td>- System disk</td>
</tr>
<tr>
<td></td>
<td>- Extended disk</td>
</tr>
<tr>
<td>Disk type</td>
<td>Disk type</td>
</tr>
<tr>
<td></td>
<td>- Thin disk</td>
</tr>
<tr>
<td></td>
<td>- Thick disk</td>
</tr>
<tr>
<td></td>
<td>- RDM (physical)</td>
</tr>
<tr>
<td></td>
<td>- RDM (virtual)</td>
</tr>
<tr>
<td>Disk file name</td>
<td>LUN name or disk file name</td>
</tr>
<tr>
<td>Total (KB)</td>
<td>Displays the total size in KB.</td>
</tr>
</tbody>
</table>
Note
If the changes are imported by synchronization after the configuration is changed directly in SigmaSystemCenter or the public cloud, a gap may arise from the information used when a request was executed.

30.4.3.4 [Screenshot]

Displays the screenshot of the server by clicking the [Screenshot] tab while the Detail screen is displayed after clicking the server from the list.

![Screenshot Screen](image)

Figure 30-20 Screenshot Screen

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screenshot</td>
<td>Displays the screenshot that is acquired when the [Screenshot] tab is clicked or when the [Retake] button is clicked. Viewing larger display by clicking the image</td>
</tr>
<tr>
<td>Zoom</td>
<td>Viewing the screenshot in the larger display Close the dialog box by using the [Close] button after viewing the larger display.</td>
</tr>
<tr>
<td>Retake</td>
<td>Acquiring and displaying the screenshot again</td>
</tr>
</tbody>
</table>

Note
To display a screenshot, settings need to be made on SigmaSystemCenter. For details, see the SigmaSystemCenter manuals.

Note
For servers on the public cloud, the [Screenshot] tab is not displayed.

30.4.3.5 [Additional information]

If you click a server in the list and then click the [Miscellaneous information] tab while the [Detil] screen is displayed, the additional information of that server is displayed.

For the additional information to be displayed, see "A.1 Displaying additional information in the template (page 276)".
**Figure 30-21** [Miscellaneous information] screen

**Table 30-14** Item List (Miscellaneous information)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Server update time</td>
<td>Request completion date and time</td>
</tr>
<tr>
<td>Template name</td>
<td>Display name of the template set to the configuration file</td>
</tr>
<tr>
<td>Additional information</td>
<td>Displays additional information of the template set to the configuration file</td>
</tr>
<tr>
<td></td>
<td>* For a server imported by the synchronization function, the information is displayed as follows.</td>
</tr>
<tr>
<td></td>
<td>• Template name: &quot;-&quot; (Fixed value)</td>
</tr>
<tr>
<td></td>
<td>• Additional information: Additional information of a synchronized server set in the configuration file</td>
</tr>
</tbody>
</table>

30.4.3.6 **[Console]**

While the details window is being displayed, click the [Console] tab*1 to display the VM console.

**Figure 30-22** Server Information Details Window (Console)

**Table 30-15** Item List (Console)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operation by Guest</td>
<td>- Sending Ctrl+Alt+Del</td>
</tr>
<tr>
<td></td>
<td>- Switching to full screen view*2</td>
</tr>
<tr>
<td>Keyboard Layout</td>
<td>Switches between Japanese and English.</td>
</tr>
<tr>
<td></td>
<td>This can be added from the setting item list.</td>
</tr>
<tr>
<td>Open the Console</td>
<td>Displays the console in a separate window.</td>
</tr>
</tbody>
</table>
Note

When entering Japanese characters within the console, switch between zenkaku and hankaku with IME operation.

Click the [Open the Console] button to display the VM console in a separate window.

![Console Window](image)

**Figure 30-23  Console Window**

**Table 30-16  Item List (Console Window)**

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power control operations</td>
<td>Select from the following operations:</td>
</tr>
<tr>
<td></td>
<td>• Start</td>
</tr>
<tr>
<td></td>
<td>• Shutdown</td>
</tr>
<tr>
<td></td>
<td>• Power off</td>
</tr>
<tr>
<td></td>
<td>• Restart</td>
</tr>
<tr>
<td>Operation by Guest</td>
<td>- Sending Ctrl+Alt+Del</td>
</tr>
<tr>
<td></td>
<td>- Switching to full screen view*2</td>
</tr>
<tr>
<td>Keyboard Layout</td>
<td>Switches between Japanese and English.</td>
</tr>
<tr>
<td></td>
<td>This can be added from the setting item list.</td>
</tr>
</tbody>
</table>

**Note**

- *1 The [Console] tab is not displayed for servers on a public cloud.
- *2 Switching to full screen view in the widget does not actually switch to full screen view.

**Tip**

If the [Console] tab is not displayed on a server that supports the VM console, the VM console proxy settings must be configured. See "8.2 Setting a VM console proxy (page 31)".

### 30.4.4 Changing the server configuration

If you select a target server in the [List of Server] screen and then click [Modify], the [Modify a server(Form)] screen is displayed.

A server can be changed when its status is [Off]. For information about operating the power supply, see "30.4.6 Performing a power control operation (page 239)".

![List of Server](image)

**Figure 30-24  [List of Server] screen (Change)**
For the change procedure, see "When changing a server" in "28.1.2 Creating a request (page 180)".

**Note**

The configuration of a server on the public cloud cannot be changed.

### 30.4.5 Deleting a Server

If you select a target server in the [List of Server] screen and then click [Delete], the [Delete a server(Confirmation)] screen is displayed (you can select multiple servers).

A server can be deleted when its status is [Off] or [Delted]. For information about operating the power supply, see "30.4.6 Performing a power control operation (page 239)".

**Figure 30-25** [List of Server] screen (Delete)

For information about the deletion procedure, see "During server deletion" in "28.1.2 Creating a request (page 180)".

### 30.4.6 Performing a power control operation

The power control method is described below.

1. Select a target server in the list, and click [Power operation].

**Figure 30-26** [List of Server] screen

2. The [Power operation] dialog box is displayed. Selecting an operation displays the confirmation dialog box.

**Figure 30-27** [Power operation] dialog box (when starting)

3. Clicking the [OK] button executes the selected operation. You can check the progress of the executed operation in the [System] tab of the [Detail of Server] screen.
30.4.7 Synchronizing the Server List

By clicking [Synchronize], you can import the information of the servers created from somewhere other than the portal to the server list.

Also, even if a gap arises in the configuration information of a server in the list because an operation has been performed from somewhere other than the portal, you can update that information as well.

Note

- When hybrid cloud management is in place, preliminary settings are necessary to synchronize a server on the public cloud. See "Chapter 11 Operation Setting for Hybrid Cloud (page 49)".
- The [Synchronize] button does not update the power status of a server.

30.4.8 Executing the general operation for a server

If you set the general operation in "Chapter 14 Setting the General Operation (page 61)", you can execute the general operation for a server. This section describes the procedure for executing the general operation.

1. Select a target server in the list, and click [Generic operations]*1. The general operation list is displayed. Click the general operation you want to execute.

2. The general operation execution dialog box is displayed.
In [Parameter], the parameters specified in the configuration file are displayed.

In the case of a masked parameter, its value is masked.

* For information about how to mask a parameter, see "14.2 Creating a general operation definition file (page 62)".

3. You can edit the parameter values. After editing, click the [Confirmation] button.

In the case of a masked parameter, its value is masked.

* For information about how to mask a parameter, see "14.2 Creating a general operation definition file (page 62)".
4. Clicking the [OK] button executes the selected general operation. You can check whether the execution of the operation has succeeded or failed, as described in "30.6 Operation Work History (User) (page 246)".

**Tip**

- *1

The general operation can be executed only for a server whose location is private. It cannot be executed when multiple servers are selected.

### 30.5 NetNetwork management (User)

This section describes the logical network management menu. The network management menu lets you check and manage registered networks.

#### 30.5.1 Network list (User)

In the menu, click [Resources] and then [Network Management], and the [List of Network] screen is displayed.

---

**Figure 30-34** [List of Network] screen

**Table 30-17** Item List ([List of Network] screen)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>number of items displayed</td>
<td>Changes the number of items displayed in the list.</td>
</tr>
<tr>
<td>Network creation</td>
<td>Displays the [Creating a logical network] screen. * See &quot;When creating a logical network&quot; in &quot;28.1.2.4 Logical network creation request (page 193)&quot;.</td>
</tr>
<tr>
<td>Network deletion</td>
<td>Displays the [Deleting network] dialog box. * See &quot;When deleting a logical network&quot; in &quot;28.1.2.5 Network deletion request (page 196)&quot;.</td>
</tr>
<tr>
<td></td>
<td>* This item is enabled after the network to be deleted is selected from the network list. Note that you cannot delete a network whose type is &quot;tenant management VLAN&quot; or whose disclosure scope is &quot;public&quot;. Selecting such a network does not enable [Network deletion].</td>
</tr>
<tr>
<td>Synchronization</td>
<td>Acquires the logical network information from SSC and applies the acquired information to the portal.</td>
</tr>
<tr>
<td>Network list</td>
<td>Displays a list of networks.</td>
</tr>
</tbody>
</table>

To search for a network, click [Search] in the [List of Network] screen and conduct the search using the items shown below. A string search is a partial match search.
Table 30-18  Item List (List of Network search screen)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network ID</td>
<td>Network ID</td>
</tr>
<tr>
<td>Network name</td>
<td>Network name</td>
</tr>
<tr>
<td>Type (Multiple choices can be selected.)</td>
<td>- Tenant management VLAN</td>
</tr>
<tr>
<td></td>
<td>- Public LAN</td>
</tr>
<tr>
<td></td>
<td>- Select one of the above.</td>
</tr>
<tr>
<td>Disclosure scope (Multiple choices can be selected.)</td>
<td>- Public</td>
</tr>
<tr>
<td></td>
<td>- Private</td>
</tr>
<tr>
<td></td>
<td>- Select one of the above.</td>
</tr>
<tr>
<td>Remark</td>
<td>Remarks</td>
</tr>
<tr>
<td>Clear</td>
<td>Return the input (specified) values to the initial values.</td>
</tr>
<tr>
<td>Search</td>
<td>Click the button to do the search.</td>
</tr>
</tbody>
</table>

30.5.2  Checking detailed information of a network (user)

Clicking the network column in the network list that you want to check displays detailed information.

![Figure 30-35   [Detail of Network] screen](image)

The detailed information provides the following.

- [Information] tab
- [Address Pool] tab
  - IPv4
  - IPv6

30.5.2.1  [Information]

While the initial window on which a network is selected from a list or the details window is being displayed, click the [Information] tab to display the detailed information.

![Figure 30-36   [Detail of Network] screen (Information)](image)
Table 30-19  Item List (Information)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network ID</td>
<td>Network ID</td>
</tr>
<tr>
<td>Network name</td>
<td>Network name</td>
</tr>
<tr>
<td>Resource name</td>
<td>Logical network name on SigmaSystemCenter</td>
</tr>
<tr>
<td>Type</td>
<td>Network type&lt;br&gt;Any one of the following:&lt;br&gt;- Tenant management VLAN&lt;br&gt;- Public LAN</td>
</tr>
<tr>
<td>Public Scope</td>
<td>Disclosure scope of the network&lt;br&gt;Any one of the following:&lt;br&gt;- Public&lt;br&gt;- Private</td>
</tr>
<tr>
<td>Note</td>
<td>Note</td>
</tr>
</tbody>
</table>

30.5.2.2  [Address pool (IPv4)]

While the initial window on which a network is selected from a list or the details window is being displayed, click the [Address Pool] tab to display the address pool information.


![Address Pool screen (IPv4)](image)

Figure 30-37  [Address Pool] screen (IPv4)

Table 30-20  Item List (Information)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subnet mask</td>
<td>Subnet mask of the IPv4 segment</td>
</tr>
<tr>
<td>Default gateway</td>
<td>Default gateway of the IPv4 segment</td>
</tr>
<tr>
<td>IP range</td>
<td>IP range of the IPv4 segment&lt;br&gt;The following information is listed.&lt;br&gt;- Name&lt;br&gt;- Range&lt;br&gt;- IPv4 address range&lt;br&gt;- Category Category of the IPv4 address range&lt;br&gt;Any one of the following:&lt;br&gt;- Allocation&lt;br&gt;- Exclusion</td>
</tr>
</tbody>
</table>
30.5.2.3  [Address pool (IPv6)]

While the initial window on which a network is selected from a list or the details window is being displayed, click the [Address Pool] tab to display the address pool information.


![Figure 30-38  [Address Pool] screen (IPv6)](image)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subnet prefix length</td>
<td>Subnet prefix length of the IPv6 segment</td>
</tr>
<tr>
<td>Default gateway</td>
<td>Default gateway of the IPv6 segment</td>
</tr>
</tbody>
</table>
| IP range           | IP range of IPv6<br>The following information is listed.<br>• Name<br>  
                     | Range name<br>• Range<br>IPv6 address range<br>• Category<br>Category of the IPv6 address range<br>Any one of the following:<br>- IPv6Allocation<br>- Exclusion |

30.5.3  Creating a network

Clicking [Create] in the [List of Network] screen displays the [Creating a logical network(Form)] screen.

![Figure 30-39  [List of Network] screen (Creation)](image)

For the creation procedure, see "When creating a network" in "28.1.2  Creating a request (page 180)".

245
30.5.4 Deleting a network

If you select a target network in the [List of Network] screen and then click [Delete], the [Deleting the network(Confirmation)] screen is displayed.

Figure 30-40   [List of Network] screen (Delete)

For information about the deletion procedure, see "During network deletion" in "28.1.2 Creating a request (page 180)".

Note
A logical network that matches any of the conditions mentioned below is not displayed in the network deletion request targets. To delete such a network, use the operation setting, synchronization, or the resource information update command.

- The scope of disclosure is public.
- The type is tenant administration LAN.
- The switch type is other than VirtualSwitch.

30.5.5 Synchronizing the network list

By clicking [Synchronize], you can import the information of the networks created from somewhere other than the portal to the network list.

Also, even if a gap arises in the configuration information of a network in the list because an operation has been performed from somewhere other than the portal, you can update that information as well.

Figure 30-41   [Synchronize] button

Note
If synchronization is performed after a registered network is changed at SigmaSystemCenter, a gap may arise from the information used when a network creation request was executed.

30.6 Operation Work History (User)

The work history of the respective servers can be viewed in the operation work history.

- History of server power control operations
- History of the addition and update of servers by using the [Synchronize] button
- History of operations of servers whose status is [Deleted]
30.6.1 Operation work history list (user)

In the menu, click [Resources] and then [Operation Log], and the [Operation Log] screen is displayed.

![Operation Log screen](image)

Table 30-22 Item list (operation work history)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of display items</td>
<td>Changes the number of items displayed in the list.</td>
</tr>
<tr>
<td>Operation work history</td>
<td>Displays the operation work history list.</td>
</tr>
</tbody>
</table>

To search through the operation work history, click [Search] in the [Operation Log] screen and conduct the search using the items shown below. A string search is a partial match search.

Table 30-23 Item list ([Operation Log] screen)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operation work ID</td>
<td>Operation work ID</td>
</tr>
<tr>
<td></td>
<td>* When an operation is performed for multiple servers, the same operation</td>
</tr>
<tr>
<td></td>
<td>work ID is used.</td>
</tr>
<tr>
<td>Operation work period</td>
<td>Operation work period</td>
</tr>
<tr>
<td>Server name</td>
<td>Server name</td>
</tr>
<tr>
<td>Resource pool</td>
<td>Resource pool name of the target server*</td>
</tr>
<tr>
<td>Location</td>
<td>Location of the target server</td>
</tr>
<tr>
<td>Execution item</td>
<td>Select one of the following as the content of the executed operation.</td>
</tr>
<tr>
<td></td>
<td>• Start</td>
</tr>
<tr>
<td></td>
<td>• Shutdown</td>
</tr>
<tr>
<td></td>
<td>• Power off</td>
</tr>
<tr>
<td></td>
<td>• Restart</td>
</tr>
<tr>
<td></td>
<td>• Other operations</td>
</tr>
<tr>
<td>Execution result</td>
<td>Select the execution result.</td>
</tr>
<tr>
<td></td>
<td>• Success</td>
</tr>
<tr>
<td></td>
<td>• Failed</td>
</tr>
<tr>
<td></td>
<td>• Start</td>
</tr>
<tr>
<td>Operator</td>
<td>Execution user</td>
</tr>
<tr>
<td>Clear</td>
<td>Return the input (specified) values to the initial values.</td>
</tr>
<tr>
<td>Search</td>
<td>Click the button to do the search.</td>
</tr>
</tbody>
</table>
### 30.6.2 Checking detailed information of the operation work history (user)

Clicking the work history column in the operation work history list that you want to check displays detailed information.

![Figure 30-43 Operation Work History Details screen](image)

#### Table 30-24 Item list (Operation Work History Details)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operation work ID</td>
<td>Operation work ID</td>
</tr>
<tr>
<td>Start date</td>
<td>Start date</td>
</tr>
<tr>
<td>End date</td>
<td>End date</td>
</tr>
<tr>
<td></td>
<td>When &quot;Start&quot; is shown as the execution result, the end date is not displayed as the operation is not complete.</td>
</tr>
<tr>
<td>Server name</td>
<td>Server name</td>
</tr>
<tr>
<td>Resource pool</td>
<td>Resource pool name of the target server *1</td>
</tr>
<tr>
<td>Location</td>
<td>Location of the target server</td>
</tr>
<tr>
<td>Operation</td>
<td>One of the following is displayed as the content of the executed operation.</td>
</tr>
<tr>
<td></td>
<td>• Start</td>
</tr>
<tr>
<td></td>
<td>• Shutdown</td>
</tr>
<tr>
<td></td>
<td>• Power off</td>
</tr>
<tr>
<td></td>
<td>• Restart</td>
</tr>
<tr>
<td></td>
<td>• Display name of the configuration file in the case of the general operation</td>
</tr>
<tr>
<td>Execution result</td>
<td>One of the following is displayed as the execution result.</td>
</tr>
<tr>
<td></td>
<td>• Success</td>
</tr>
<tr>
<td></td>
<td>• Failed</td>
</tr>
<tr>
<td></td>
<td>• Start</td>
</tr>
<tr>
<td>Result detail</td>
<td>Details of the execution result *2</td>
</tr>
<tr>
<td>Operator</td>
<td>Execution user</td>
</tr>
</tbody>
</table>

### Note

* A server resource pool on a public cloud imported by synchronization or the resource information update command is not displayed.
Tip

*2 If the execution of the general operation fails, the following error is displayed. Based on the displayed tracker ID, identify the cause at JobCenter.

Another operation ended abnormally. Contact the system administrator.
tracker_id : XXX
Chapter 31  
Notice management (user)

This section describes the notice management function.

Notices to be reported to tenant users can be managed by using the dashboard.

Only a tenant manager can manage the notices. Tenant users can only view the notices.

31.1 Notice list (user)

Select [Service Management]-[Notice management] from the menu to display the "Notice list" window.

![Figure 31-1 Notice management Window](image)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Items</td>
<td>Changes the number of notices to be displayed in the list.</td>
</tr>
<tr>
<td>Submit a new notice</td>
<td>Displays the &quot;Submit a new notice&quot; window.</td>
</tr>
<tr>
<td>Notice list</td>
<td>Displays the notice list.</td>
</tr>
</tbody>
</table>

To search for a notice, click [Search] on the "Notice list" window and search by specifying the following items: A partial match search can be used to search for a character string.

![Table 31-2 Item List (Notice list search window)](image)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Release period</td>
<td>Displays the posting period.</td>
</tr>
<tr>
<td>State</td>
<td>Displays one of the following:</td>
</tr>
<tr>
<td></td>
<td>Expired</td>
</tr>
<tr>
<td></td>
<td>Released</td>
</tr>
<tr>
<td></td>
<td>Not released</td>
</tr>
<tr>
<td>Title</td>
<td>Title</td>
</tr>
<tr>
<td>Contents</td>
<td>Notice contents</td>
</tr>
<tr>
<td>Attachment</td>
<td>Displays whether a file is attached or not</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Clear</td>
<td>Resets the input (specified) values to their initial values.</td>
</tr>
<tr>
<td>Submit</td>
<td>Starts searching.</td>
</tr>
</tbody>
</table>
31.2 Registering a notice (user)

This section describes how to add a notice.


![Figure 31-2  [Notice list] Screen](image)

2. The [Submit a new notice(Form)] screen is displayed. Specify each item by referring to the following table and click the [Confirm] button.

![Figure 31-3  [Submit a new notice(Form)] screen](image)

<table>
<thead>
<tr>
<th>Item name</th>
<th>Input rule</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start date</td>
<td>1970/01/01/ 00:00 (UTC) to 2999/12/31 23:59 (UTC)</td>
<td>Enter the start date.</td>
</tr>
<tr>
<td>End date</td>
<td>1970/01/01/ 00:00 to 2999/12/31 23:59 (UTC)</td>
<td>Enter the end date.</td>
</tr>
<tr>
<td>Title</td>
<td>64 characters</td>
<td>Enter a title.</td>
</tr>
<tr>
<td>Contents</td>
<td>255 characters</td>
<td>Enter the contents of the notice.</td>
</tr>
<tr>
<td>Attachment file(s)</td>
<td>–</td>
<td>Displays the attachment file name.</td>
</tr>
<tr>
<td>Choose File</td>
<td>–</td>
<td>Displays the dialog box in which to select an attachment file. A file of up to 10 MB can be attached. * Note that a file of 0 bytes cannot be attached.</td>
</tr>
</tbody>
</table>

**Note**

- If an extremely large file is specified to be attached to the notice, it may take a very long time to upload the file. If a file of 10 MB or more is uploaded, registration will fail. Therefore, do not specify a file of 10 MB or more.

- If there is notices that have been created by users with the exact same name, which user created which notice is determined by the notice content. Therefore, be sure to create a notice so that the notice can be distinguished by its content.

3. The notice is registered and the [Submit a new notice(Confirmation)] screen is displayed. Click the [Confirmation] button.
31.3 Checking the details of a notice (user)

The details of a notice can be displayed by clicking the notice in the notice list.

<table>
<thead>
<tr>
<th>Item name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start date</td>
<td>Starting date and time</td>
</tr>
<tr>
<td>End date</td>
<td>Ending date and time</td>
</tr>
<tr>
<td>State</td>
<td>Expired</td>
</tr>
<tr>
<td></td>
<td>Released</td>
</tr>
<tr>
<td></td>
<td>Not released</td>
</tr>
<tr>
<td></td>
<td>One of the above is displayed.</td>
</tr>
<tr>
<td>Title</td>
<td>Title</td>
</tr>
<tr>
<td>Contents</td>
<td>Notice contents</td>
</tr>
<tr>
<td>Attachment file(s)</td>
<td>Attachment file name and link to the attachment file</td>
</tr>
<tr>
<td>Submitter</td>
<td>Registrant</td>
</tr>
<tr>
<td>Time stamp of submission</td>
<td>Registration date</td>
</tr>
<tr>
<td>Edit notice</td>
<td>Displays the &quot;Edit notice&quot; window.</td>
</tr>
<tr>
<td>Delete notice</td>
<td>Displays the &quot;Delete notice&quot; window.</td>
</tr>
</tbody>
</table>

31.4 Changing the contents of a notice (user)

Following describes how to change the contents of a notice.

1. Click [Edit notice] on the "detailed notice information" window.
2. The "Edit notice(Form)" window is displayed. Edit the items by referring to "Table 31-3 Item List (Submit a new notice) (page 251)" in "31.2 Registering a notice (user) (page 251)". Click the [Confirm] button to apply the changes.

To deleted an attachment file, select the [Delete attached file(s)] check box.

**Note**

File selection is disabled by selecting [Delete attached file(s)], and the selected file becomes unselected.

3. The "Edit notice(Confirmation)" window is displayed. Click the [Confirmation] button.

### 31.5 Deleting a notice

Following describes how to delete a notice.

1. Click [Delete notice] on the "detailed notice information" window.

2. The "Delete notice(Confirmation)" window is displayed. Click the [Confirmation] button to delete the notice.
Part 7.

Maintenance Information

This part provides information related to maintenance.
Chapter 32  
Backup and Restore

This chapter describes the backup and restore operations.

32.1 Backing up

The backup method is described below.

[Backing up the database]

Execute the following commands on the command prompt. Shown here is an example of creating a backup file named backup.dat in \temp in the C drive.

```
> sqlcmd -E -S (local)\SSCCMDB
1> backup database cloudportal to disk = 'C:\temp\backup.dat' with init
2> go
```

Note

- If an instance name is changed from the default value (SSCCMDB), change "(local)\SSCCMDB" of the above command to "(local)\Instance name".
- The backup fails if you specify a folder directly under the C drive or a folder for which you do not have the write authority as the backup file output destination folder. Specify a folder for which you have the write authority.
- To execute the backup, log in to the management server in which SigmaSystemCenter is installed as either of the following users:
  - User who installed the SSCCMDB instance in the management server
  - User who has the authority to back up the cloudportal database

[Saving the folder]

Copy the following folders and save them in a desired location.

- C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf
- C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\webapps\images
- Folder specified in the following parameter of C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\webframework.properties
  
  product.cloudportal.file.save.path=<Path of a shared disk or mirror disk>

32.2 Restore

The restoration method is described below.

[Restoring the database]

Execute the following commands on the command prompt. Shown here is an example of restoring the database from a backup file named backup.dat to \temp in the C drive.

```
> sqlcmd -E -S (local)\SSCCMDB
1> restore database cloudportal from disk = 'C:\temp\backup.dat' with replace
2> go
```
To restore the backup file of SigmaSystemCenter 3.3 that uses an earlier version than SQL Server 2012 to SigmaSystemCenter 3.3 that uses SQL Server 2012, execute the following command.

1> restore database cloudportal from disk = 'C:\temp\backup.dat' with file = 1, move 'cloudportal' to 'C:\Program Files\Microsoft SQL Server\MSSQL11.SSCMDB\MSSQL\DATA\cloudportal.mdf', move 'cloudportal_2' to 'C:\Program Files\Microsoft SQL Server\MSSQL11.SSCMDB\MSSQL\DATA\cloudportal_2.ndf', move 'cloudportal_log' to 'C:\Program Files\Microsoft SQL Server\MSSQL11.SSCMDB\MSSQL\DATA\cloudportal_log.LDF', replace
2> go

Note
If an instance name is changed from the default value (SSCCMDB), change "(local)\SSCCMDB" of the above command to "(local)\Instance name".

[Overwriting the folder]
1. Overwrite the following saved folders to their original folders.
   - C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf
   - C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\webapps\images
   - Folder specified in the following parameter of C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\webframework.properties
     product.cloudportal.file.save.path=<Path of a shared disk or mirror disk>
2. Restart the application server (Tomcat).
   From the left-side panel of the server manager, select the local server, in the services, right-click [Apache Tomcat 8.5 ServiceGovernor], and select [Restart Service].
Chapter 33
How to Check the Log

The log is output under the folder shown below.

* When the installation path of vDCA SE Portal is C:\Program Files (x86)\NEC\vDCA
  C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\logs
# Chapter 34

## List of messages

<table>
<thead>
<tr>
<th>Function</th>
<th>Message</th>
<th>Expected action (cause)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common</td>
<td>You have no privilege.</td>
<td>A user who does not possess the authority that is set on the respective screens (functions) may have performed the operation. See &quot;Chapter 17 User Authority (page 84)&quot; to confirm the authority corresponding to the performed operation.</td>
</tr>
<tr>
<td>Common</td>
<td>A system error occurred.</td>
<td>An unexpected error may have occurred. Collect a log file and contact the product support center.</td>
</tr>
<tr>
<td>Notice management</td>
<td>Deleting the attached file failed.</td>
<td>Deletion of the attached file failed upon deleting the notice. Delete the attached file directly from the directory of the storage destination.</td>
</tr>
<tr>
<td>Notice management</td>
<td>Failed to upload the file.</td>
<td>Uploading of the attached file failed upon registering the notice. Add the attached file to the target notice in &quot;Edit notice&quot;.</td>
</tr>
<tr>
<td>Notice management</td>
<td>Failed to download a file.</td>
<td>An error may have occurred on the server side. Contact the product support center.</td>
</tr>
<tr>
<td>Notice management</td>
<td>Failed to get information of the tenant where the log-in user belongs.</td>
<td>The acquisition of information on the tenant to which the user belongs failed. Log out and then log in again. If no improvement is made, contact the product support center.</td>
</tr>
<tr>
<td>Notice management and dashboard</td>
<td>The notice cannot be viewed.</td>
<td>The notice that is not published for the tenant to which the login user belongs is selected upon the details display, change, deletion, or downloading of the attached file. Log in again as a user who belongs to the target tenant.</td>
</tr>
<tr>
<td>Server Management</td>
<td>Failed to get information of the tenant where the log-in user belongs.</td>
<td>The acquisition of information on the tenant to which the user belongs failed. Log out and then log in again. If no improvement is made, contact the product support center.</td>
</tr>
<tr>
<td>Dashboard</td>
<td>The file cannot be found.</td>
<td>The target file does not exist when downloading the attached file of the notice. Check the storage destination of the attached file.</td>
</tr>
<tr>
<td>Dashboard</td>
<td>Failed to get information of the tenant where the log-in user belongs.</td>
<td>The acquisition of information on the tenant to which the user belongs failed. Log out and then log in again. If no improvement is made, contact the product support center.</td>
</tr>
<tr>
<td>Tenant Administration</td>
<td>Failed to get information of the tenant.</td>
<td>The acquisition of information on the tenant to which the user belongs failed. Log out and then log in again. If no improvement is made, contact the product support center.</td>
</tr>
<tr>
<td>Tenant Administration</td>
<td>Failed to update the tenant.</td>
<td>Contact the product support center.</td>
</tr>
<tr>
<td>Tenant Administration</td>
<td>Failed to delete the tenant.</td>
<td>Contact the product support center.</td>
</tr>
<tr>
<td>Tenant Administration</td>
<td>Failed to create the tenant.</td>
<td>Contact the product support center.</td>
</tr>
<tr>
<td>Tenant Administration</td>
<td>Failed to get information of the tenant where the log-in user belongs.</td>
<td>The acquisition of information on the tenant to which the user belongs failed. Log out and then log in again. If no improvement is made, contact the product support center.</td>
</tr>
<tr>
<td>User management</td>
<td>Failed to get information of the tenant.</td>
<td>The acquisition of information on the tenant to which the user belongs failed. Log out and then log in again. If no improvement is made, contact the product support center.</td>
</tr>
<tr>
<td>Function</td>
<td>Message</td>
<td>Expected action (cause)</td>
</tr>
<tr>
<td>---------------------------</td>
<td>---------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>User management</td>
<td>The user is not found.</td>
<td>The target user may have been deleted when the user of the target for user details display, change, deletion, and password change could not be found. Check the user list.</td>
</tr>
<tr>
<td>User management</td>
<td>Failed to update the user record.</td>
<td>Contact the product support center.</td>
</tr>
<tr>
<td>User management</td>
<td>Failed to delete a user.</td>
<td>Contact the product support center.</td>
</tr>
<tr>
<td>User management</td>
<td>Failed to create a user.</td>
<td>Contact the product support center.</td>
</tr>
<tr>
<td>User management</td>
<td>Failed to get information of the tenant where the log-in user belongs.</td>
<td>The acquisition of information on the tenant to which the user belongs failed. Log out and then log in again. If no improvement is made, contact the product support center.</td>
</tr>
<tr>
<td>Request management</td>
<td>Failed to acquire specification information.</td>
<td>Click the [Update immediately] button next to [Template list acquisition time] on the [Setting] screen (for details about the operation, see &quot;26.2.1 Checking the information in the operation settings (page 164)&quot;). If this error continues to occur, the template setting may be incorrect. See &quot;Chapter 7 Initial Setting (page 27)&quot; and check if the setting is correct.</td>
</tr>
<tr>
<td>Request management</td>
<td>Failed to acquire template information.</td>
<td>Acquire the template list by selecting [Configuration] and [Operation Settings] on the menu (the [Update immediately] button). If no improvement is made, contact the product support center.</td>
</tr>
<tr>
<td>Request management</td>
<td>Failed to acquire network information.</td>
<td>Contact the product support center.</td>
</tr>
<tr>
<td>Request management</td>
<td>Failed to get information of the tenant where the log-in user belongs.</td>
<td>The acquisition of information on the tenant to which the user belongs failed. Log out and then log in again. If no improvement is made, contact the product support center.</td>
</tr>
<tr>
<td>Request management</td>
<td>Invalid request parameter.</td>
<td>OSType may not possibly be specified in the template setting of SigmaSystemCenter. If no improvement is made by checking OSType, contact the product support center.</td>
</tr>
<tr>
<td>Resource Status</td>
<td>Failed to obtain a resource.</td>
<td>A communication error or SigmaSystemCenter error is occurring. Wait for a while and then retry. If no improvement is made, contact the product support center.</td>
</tr>
<tr>
<td>Resource Status</td>
<td>Failed to get the list.</td>
<td>A communication error or SigmaSystemCenter error is occurring. Wait for a while and then retry. If no improvement is made, contact the product support center.</td>
</tr>
<tr>
<td>Login user operation</td>
<td>Failed to acquire the information of a tenant to be substituted for.</td>
<td>The acquisition of information on the tenant to which the user belongs failed. Log out and then log in again. If no improvement is made, contact the product support center.</td>
</tr>
<tr>
<td>Login user operation</td>
<td>Acquiring information on the tenant failed.</td>
<td>The acquisition of information on the tenant that was selected as a destination acting as a substitution failed. Log out and then log in again. If no improvement is made, contact the product support center.</td>
</tr>
<tr>
<td>Login user operation</td>
<td>Failed to acquire the information of the substitute for a tenant.</td>
<td>The acquisition of information on the tenant substitution failed. Log out and then log in again. If no improvement is made, contact the product support center.</td>
</tr>
<tr>
<td>Function</td>
<td>Message</td>
<td>Expected action (cause)</td>
</tr>
<tr>
<td>-------------------</td>
<td>--------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Login user operation</td>
<td>Releasing the tenant substitution failed.</td>
<td>The substitution tenant is released by logging in again. Contact the product support center if this message is frequently displayed after logging in again.</td>
</tr>
<tr>
<td>Login user operation</td>
<td>The user is not found.</td>
<td>Information on the user of the update target could not be acquired. Log out and then log in again. If no improvement is made, contact the product support center.</td>
</tr>
<tr>
<td>Login user operation</td>
<td>Failed to update the login user password.</td>
<td>Information on the user of the update target could not be acquired. Log out and then log in again. If no improvement is made, contact the product support center.</td>
</tr>
<tr>
<td>Login user operation</td>
<td>Failed to update the login user record.</td>
<td>Information on the user of the update target could not be acquired. Log out and then log in again. If no improvement is made, contact the product support center.</td>
</tr>
</tbody>
</table>
Chapter 35  
Commands

This chapter describes the functions executed by using commands.

35.1 Resource information update command

This command provides a function that updates a server managed by a provisioning provider so that it can be managed using vDCA SE Portal. Only the system administrator can use it.

After executing the resource information update command, click the [Update immediately] button (Logical network list acquisition) in Operation Settings. For information about the [Update immediately] button (Logical network list acquisition), see "26.2 Operation Setting (page 164)".

The resource information update command is described below.

- **Storage folder**
  
  C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\portal\bin\UpdateResource.bat

- **Command to be executed**

  UpdateResource.bat -f <file-name>
  
  * A file name is required. Specify the CSV file name of the resource information file by using the relative path from the command or the absolute path.

  For information about how to create the resource information file, see "35.1.1 Resource information file (page 262)".

  [Example]

  UpdateResource.bat -f "C:\Users\xxxx\Desktop\xxxxx.csv"

- **Output results**

<table>
<thead>
<tr>
<th>Return values</th>
<th>Message</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Command success.</td>
<td>Normal end</td>
</tr>
<tr>
<td>1</td>
<td>Command abnormal exits.</td>
<td>Abnormal end</td>
</tr>
<tr>
<td>2</td>
<td>Parameter error.</td>
<td>Incorrect input parameter</td>
</tr>
</tbody>
</table>

  For details of the abnormal end and incorrect input parameter errors, see "35.1.2 Error list of the resource information update command (page 266)".

**Tip**

To specify the character code of the file to be read for the resource information update, make the setting shown below. For the character code, a JAVA character code can be specified. If none is set, UTF-8 (no BOM) is set.

Open C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\webframework.properties, and set the following.

```
product.cloudportal.file.resourceinfo.charset=Character-code
```

[Specification example]
After specifying the above, save the file with UTF8 selected as its character code and then restart the application server (Tomcat). From the left-side panel of the server manager, select the local server, in the services, right-click [Apache Tomcat 8.5 ServiceGovernor], and select [Restart Service].

Note
Before executing the resource information update command, you need to make several settings according to circumstances.

- The provision provider has created or changed a template or logical network.
  The resource information update command uses template information and logical network information. Before executing the resource information update command, make sure that your vDCA SE Portal information is synchronized with that of the provisioning provider. For details, see "26.2.1 Checking the information in the operation settings (page 164)".

- An HTTP port other than the default (12080) was specified when vDCA SE Portal was installed.
  The executable file needs to be edited.
  Open C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\portal\bin\UpdateResource.bat, and edit the file so that "12080" is specified for the HTTP port as follows.

```
SET BASEURL=http://localhost:12080/portal
```

- If you will execute the resource information update command for a server imported by the synchronization function, you need to have a synchronization request registered in advance.
  Follow the procedure below to register a request.
  2. Select the target server, and set its status to "Shutdown".
  3. Select the target server, and click the [Modify] button.
  4. When the [Server change (form)] screen appears, click [Cancel].

35.1.1 Resource information file
The file format used by the resource information update command is as follows.
File format: CSV (Comma-delimited)
Character code: In C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\webframework.properties, set the following.* The default value assumed if none is set is "UTF-8 (no BOM)".

```
product.cloudportal.file.resourceinfo.charset=Shift_JIS
[Example] product.cloudportal.file.resourceinfo.charset=Shift_JIS
```

Line feed code: CRLF

Tip
To include double quotation marks and commas in the value, you need to take the following steps.
1. Enclose the target value in double quotation marks.
2. For double quotation marks, perform the step above and write the target value twice.
* When you edit an Excel file, these steps are not necessary, because the marks and commas are automatically processed. The steps are necessary only when you edit a text file.

Example: ABC"DEF, GHIJKL
<File example>

Tenant ID, Request date, Request type, UUID, Resource pool name, Template name, Spec name, Remark
* If the resource pool is a sub resource pool, enter the parent resource pool name as well.
Example:
TenantA,2015-11-10 09:10:00,1,************************************,RP1/SubRP2,TemplateA,Spec1,Importing VMs brought in. \ n Person in charge: Taro Nic hiden

<table>
<thead>
<tr>
<th>Item number</th>
<th>Items to be imported</th>
<th>Description</th>
</tr>
</thead>
</table>
| 1           | • Tenant ID
• [Required] | Tenant ID of the request |
| 2           | • Request date
• [Required] | Application date and time and completion date and time of the request
Specify one in the range of [1970-01-01 00:00 (UTC) to 2999-12-31 23:59 (UTC)].
Make sure that the specified request date is between [the request completion date and time and the current date and time] of the last request for the target resource.
* Specify the date and time as the server time.
Specification format: yyyy-MM-dd hh:mm:ss |
| 3           | • Request type
• [Required] | Request type
Specify one of the request types shown in "Table 35-3  Update target list (page 265)".
To update a resource that exists in the provisioning provider but not in the portal, specify the request type of "creation".
To update a resource that exists both in the provisioning provider and in the portal, specify the request type of "change".
To update a resource that exists in the portal but not in the provisioning provider, specify the request type of "deletion".
If a resource exists both in the portal and in the provisioning provider and you want to delete it only from the portal, specify the request type of "deletion" too. |

4 When the request type is "server"
• UUID
• [Required] When the request type is "network"
• Logical network name
• [Required] When the request type is "server"
• UUID of the server
• How to check the UUID of a server whose location is private:
  1. Open the SigmaSystemCenter web console.
  2. Choose [Resource] and, in the left pane, select the name of the machine to be checked from [Machine]. Then, check the value of [UUID] in [Base Information] on the [General] tab.
• How to check the UUID of a server whose location is AWS:
  1. Open the SigmaSystemCenter web console.
  2. From the [Operation] tree, select the group to which the target server belongs.
  3. In [Host List], click the target server.
<table>
<thead>
<tr>
<th>Item number</th>
<th>Items to be imported</th>
<th>Description</th>
</tr>
</thead>
</table>
| 4.          | Check the value of [UUID] in [Base Information] on the [Revision] tab. When the request type is "network":
  - Network name
  - How to check the network name:
    1. Open the SigmaSystemCenter web console.
    2. Choose [Resource] and then [Network], and check the name of the target. |

| 5. When the request type is "server" | Resource pool name<br>(Required) When the request type is "network" Not required | When the request type is "server" Name of the resource pool used by the server How to check the name of the resource pool used by a server whose location is private:
1. Open the SigmaSystemCenter web console.
2. Choose [Portal] and then [category group of own tenant] in the left pane. Next, choose the [General] tab and [Machine List], and then select the VM name of the machine to be checked.
3. On the "machine detail" window, choose [Operating Information] and [Resource Pool], and then check the displayed value.
   - In the case of a server whose location is AWS, the name is that of the dummy resource pool assigned to the tenant. |

| 6. When the request type is "server" | Template name<br>(Required) When the request type is "network" Not required | When the request type is "server" Name of the template used by the server How to check the template name:
1. Open the SigmaSystemCenter web console.
2. Choose [Portal] and then [category group of own tenant] in the left pane. Next, choose the [General] tab and [Machine List], and then select the VM name of the machine to be checked.
3. On the "machine detail" window, choose [Base Information] and [Source Image], and then check the displayed value.
   - In the case of a server whose location is AWS, the name is the ID of Amazon Machine Image. |

| 7. When the request type is "server" | Spec name<br>(Optional) When the request type is "network" Not required | When the request type is "server" Name of the spec used by the server See the configuration file (C:\Program Files (x86)\NEC\wDCA\MoM\FW\Tomcat\conf\NEC\webframework.properties), specify a spec name that is available for the template name.
   - For details, see "9.1.1 Setting catalog display names and specs (page 32)". |

| 8.          | Remark<br>(Optional) | Remark on the resource information update
This corresponds to the [Comment on application] field entered when the request is submitted.
Specify a line feed code as "\n".
The maximum number of characters is 255 (including single-byte, double-byte, and control characters). |
If the maximum number of characters is exceeded, the first 255 characters are assumed to be the value.

[Update target list]

<table>
<thead>
<tr>
<th>Item number</th>
<th>Items to be imported</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>• If the maximum number of characters is exceeded, the first 255 characters are assumed to be the value.</td>
</tr>
</tbody>
</table>

### Table 35-3 Update target list

<table>
<thead>
<tr>
<th>Item number</th>
<th>Request type name</th>
<th>Request type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Server creation</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Server change</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Server deletion</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Network creation</td>
<td>101</td>
</tr>
<tr>
<td>5</td>
<td>Network deletion</td>
<td>103</td>
</tr>
</tbody>
</table>

**Note**

*1 When the request type is "server", a check is made to see whether the resource pool name and template name are managed by vDCA SE Portal. However, this does not include checking whether these names match those that were set when the server was actually created by the provisioning provider. Even if the names do not match, they are registered in vDCA SE Portal. In this case, however, submitting a change request or quote creation request may result in unexpected behavior.

Therefore, if an incorrect resource pool name or template name is registered, delete the server from the management target of vDCA SE Portal temporarily by following the procedure below.

1. Remove the server from the operation group of the provisioning provider temporarily.
   a. Open the SigmaSystemCenterweb console.
   b. Choose [Operations], and select the category group of the target server in the left pane. Choose the [General] tab and [Host List], and then click the host name of the server to be checked.
   c. Choose [Configuration] and [Properties] in the right pane, and take a note of the property settings (networks, host profiles, machine profiles, etc.).
   d. Go back to the category group of the target server. Choose [Host List], and select the host name of the server to be checked. In Actions, click [Release Resource].
2. Delete a server from vDCA SE Portal.
   b. For details, see "24.3.2 Checking Details of Server Information (page 135)".
3. Return the server to the operation group of the provisioning provider.
   a. Open the SigmaSystemCenterweb console.
   b. Choose [Operations], and select the category group of the target server in the left pane. Choose the [General] tab and [Host List], and then click [Add Host].
   c. In the [Add Host] dialog box, specify the host name and network (set the management IP address).
   d. Select the added host, and click [Register Master].
   e. Choose [Select a machine from shared pool], and click [Next].
   f. Select the resource pool for the VM to be managed and then the VM. Then, click [Next] and then [Finish].
g. Selected the added host again, and click [Edit]. Then, apply the property settings you wrote down in 1.

4. Correct the incorrect resource information file, and execute the resource information update command again.

- **2**

A logical network cannot be registered or deleted if it meets any of the following conditions.
- The scope of disclosure is public.
- The type is tenant administration VLAN.

### 35.1.2 Error list of the resource information update command

#### Table 35-4 Error list

<table>
<thead>
<tr>
<th>Item number</th>
<th>Error</th>
<th>Error description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A parameter format is invalid.</td>
<td>An argument specified in the resource information update command is invalid. Specify the argument according to the usage.</td>
</tr>
<tr>
<td>2</td>
<td>A resource information file is not found.</td>
<td>The resource information file is not found. Check the path of the resource information file.</td>
</tr>
<tr>
<td>3</td>
<td>A resource information file is empty.</td>
<td>The resource information file is empty. Specify an appropriate resource information file.</td>
</tr>
<tr>
<td>4</td>
<td>A required parameter is not found.</td>
<td>A required argument of the resource information update command is not specified. Specify the argument according to the usage.</td>
</tr>
<tr>
<td>5</td>
<td>Authentication failure.</td>
<td>Not correct access. Check whether access has been made from the resource information update command.</td>
</tr>
<tr>
<td>6</td>
<td>Failed in resource information update.</td>
<td>The resource information update failed. Check the content of the resource information file. Details of the error are output for each line of the file. For details of the error, see &quot;Table 35-5 List of error details (page 266)&quot;.</td>
</tr>
<tr>
<td>7</td>
<td>Failed to obtain a lock for the resource information update.</td>
<td>The lock operation failed. Try again.</td>
</tr>
</tbody>
</table>

#### Table 35-5 List of error details

<table>
<thead>
<tr>
<th>Item number</th>
<th>Error details</th>
<th>Error description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Required fields cannot be left blank.</td>
<td>One or more required fields are blank in the resource information file.</td>
</tr>
<tr>
<td>2</td>
<td>A numeric field cannot include a non-numeric character.</td>
<td>A non-numeric character is specified in a numeric field of the resource information file.</td>
</tr>
<tr>
<td>3</td>
<td>Invalid request type.</td>
<td>A nonexistent request type is specified for the resource information file.</td>
</tr>
<tr>
<td>4</td>
<td>The file must not include duplicated updates to a resource.</td>
<td>The same UUID is specified multiple times in the resource information file. The operation cannot be performed multiple times for the same UUID (server).</td>
</tr>
<tr>
<td>Item number</td>
<td>Error details</td>
<td>Error description</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------</td>
<td>------------------</td>
</tr>
</tbody>
</table>
| 5           | Failed to get resource information from a provisioning provider. | Resource information failed to be obtained from a provisioning provider. Check the following:  
- Whether the provisioning provider is running and appropriately set  
- Whether the UUID specified in the resource information file is appropriate  
- Whether the logical network name specified in the resource information file exists |
| 6           | Error(s) in a check on the configured values in the resource information file. | One or more values specified in the resource information file are invalid. Check the values specified in the resource information file. |
| 7           | Invalid format in the request date or time. | The format of the request date or time in the resource information file is invalid. Check whether it is specified in the valid format (yyyy-MM-dd hh:mm:ss). |
| 8           | The request date or time is out of range. | The specified range of the request date or time in the resource information file is invalid. Check whether it is specified in the valid range ([1970-01-01 00:00 (UTC) to 2999-12-31 23:59 (UTC)]). |
| 9           | Nonexistent tenant ID | The tenant ID of the resource information file does not exist. |
| 10          | Template name configuration not found. | The template name of the resource information file does not exist. Check the following:  
- Whether the template name specified in the resource information file exists in the configuration file (C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\webframework.properties)  
- Whether the template name specified in the resource information file exists in the provisioning provider |
| 11          | Failed to set the data. | The data failed to be set. Unintended data may have been obtained from the provisioning provider. Check whether the settings in the provisioning provider are valid. |
| 12          | Failed to set the data. | The data failed to be registered in vDCA SE Portal. Check the settings, and try again. |
| 13          | The portal already has the server information of the targeted resource. The same server cannot be created. | Server information having the specified UUID exists in vDCA SE Portal. Check the following:  
- Whether the UUID specified in the resource information file is appropriate  
- Whether the operation (request type) for the server of the UUID specified in the resource information file is appropriate |
<p>| 14          | The portal has no network information of the VLAN. | Network information of the VLAN to be connected does not exist in vDCA SE Portal. If the target network is not recognized in vDCA SE Portal, execute Logical network list acquisition in Operation Settings. |</p>
<table>
<thead>
<tr>
<th>Item number</th>
<th>Error details</th>
<th>Error description</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>The request date or time is later than the current date and time.</td>
<td>The specified request date or time in the resource information file is later than the current date and time.</td>
</tr>
<tr>
<td>16</td>
<td>An error occured by data of the targeted line. Please revise the configurations related to the file and SSC.</td>
<td>An error occurred on the target line. Change the settings of the resource information file and provisioning provider as necessary.</td>
</tr>
<tr>
<td>17</td>
<td>Failed to get the designated resource pool from the provisioning provider.</td>
<td>The resource pool name of the resource information file does not exist in the provisioning provider. Check the following:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Whether the resource pool name of the resource information file is appropriate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Whether the resource pool name of the resource information file exists in the provisioning provider</td>
</tr>
<tr>
<td>18</td>
<td>Register of target resource is not supported.</td>
<td>The registration of the resource specified in the resource information file is not supported.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>In the case of a network resource, check the following:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Whether the disclosure scope of the network is private and assigned to tenants</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Whether the network type is not tenant administration VLAN</td>
</tr>
<tr>
<td>19</td>
<td>Update of target resource is not supported.</td>
<td>The update of the resource specified in the resource information file is not supported.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>In the case of a server resource, check the following:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Whether the server location is private</td>
</tr>
<tr>
<td>20</td>
<td>The portal already has the network information of the targeted resource.</td>
<td>Logical network information having the specified logical network name exists in vDCA SE Portal.</td>
</tr>
<tr>
<td></td>
<td>The same network cannot be created.</td>
<td>Check the following:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Whether the logical network name specified in the resource information file is appropriate</td>
</tr>
<tr>
<td>21</td>
<td>The portal has no resource information (network) to be updated.</td>
<td>The logical network information to be deleted does not exist in vDCA SE Portal.</td>
</tr>
<tr>
<td>22</td>
<td>Other</td>
<td>If the resource information cannot be updated because of the request status in vDCA SE Portal, an error other than the above is output.  Take an action appropriate for the error.</td>
</tr>
</tbody>
</table>

### 35.2 Request history output command

This command provides a function to output request history information to be used as a billing base for each tenant to a CSV file by specifying the request period.

Only the system administrator can use this command. Information is output in ascending order of "tenant ID, UUID, request completion date".

To the CSV file, requests of the following request types and in the following request status are output.
### Table 35-6   List of Requests to Be Output

<table>
<thead>
<tr>
<th>Request type</th>
<th>Request type name</th>
<th>Request status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Server creation</td>
<td>Complete</td>
</tr>
<tr>
<td>2</td>
<td>Server change</td>
<td>Complete</td>
</tr>
<tr>
<td>3</td>
<td>Server deletion</td>
<td>Complete</td>
</tr>
<tr>
<td>101</td>
<td>Logical network creation</td>
<td>Complete</td>
</tr>
<tr>
<td>103</td>
<td>Logical network deletion</td>
<td>Completed</td>
</tr>
</tbody>
</table>

**Tip**

To specify a character code to be used to output request history, configure the following. Java character codes can be used. If the following is omitted, UTF-8 (no BOM) is used.

Open C:\Program Files (x86)\\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\webframework.properties and set the following:

```java
product.cloudportal.file.requesthistory.charset=character code
```

[Specification example]

```java
product.cloudportal.file.requesthistory.charset=UTF-8
```

After specifying the above, save the file by selecting UTF8 (no BOM) for the character code, and then restart the application server (Tomcat). Select a local server from the left panel of the server manager, right-click [Apache Tomcat 8.5 ServiceGovernor] in [Services], and select [Restart Service].

Following describes the request history output command.

- **Storage folder**
  
  C:\Program Files (x86)\\NEC\vDCA\MoM\FW\Tomcat\portal\bin\RequestHistory.bat

- **Command to be executed**

  `RequestHistory.bat [-tid TenantID] [-sdate "Start date"] [-edate "End date"] [-o Output path]`

- **Arguments**

  **Table 35-7   Arguments of the Request History Output Command**

<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenant ID (optional)</td>
<td>Specify the tenant ID of the output target tenant. By default, history information of all tenants will be output.</td>
</tr>
</tbody>
</table>
| Start date (optional) | Request history of the resources that are valid after the specified start date is output.  
The specifiable range is 1970-01-01 00:00 (UTC) to 2999-12-31 23:59 (UTC).  
Specify the date as the server time.  
If a date later than the end date is specified, it is assumed to be an error.  
The specification format is as follows:  
`yyyy-MM-dd hh:mm`  
* Be sure to describe the date in double quotation marks. |
Argument | Description
--- | ---
By default, history information of all days in the specifiable range will be output. (If the end date is specified, history information of days till the specified end date will be output.)

End date (optional) | Request history of the resources that are valid after the specified end date is output.
The specifiable range is 1970-01-01 00:00 (UTC) to 2999-12-31 23:59 (UTC).
Specify the date as the server time.
If a date earlier than the start date is specified, it is assumed to be an error.
The specification format is as follows:
yyyy-MM-dd hh:mm
* Be sure to describe the date in double quotation marks.
By default, history information of all days in the specifiable range will be output. (If the start date is specified, history information of days after the specified start date will be output.)

Output path (optional) | Specify a relative or absolute path, including the output CSV file name, from the command.
If the folder specified for the output path does not exist, it is assumed to be an error.
If the file specified for the output path already exists, the file is overwritten.
By default, the request history result will be output to the standard output.

### Table 35-8 Request History Command Output Results

<table>
<thead>
<tr>
<th>Return value</th>
<th>Message</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Command success.</td>
<td>Normal end</td>
</tr>
<tr>
<td>1</td>
<td>Command abnormal exits.</td>
<td>Abnormal end</td>
</tr>
<tr>
<td>2</td>
<td>Parameter error.</td>
<td>The input parameter is invalid.</td>
</tr>
</tbody>
</table>

**Note**

If you specify an HTTP port other than the specified value (12080) during installation of the vDCA SE Portal, you must edit the executable file.

Open C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\portal\bin\StackRequestHistory.bat, and edit "12080" below to the specified HTTP port.

```bash
SET BASEURL=http://localhost:12080/portal
```

### 35.2.1 Request history file

The file format used with the request history output command is as below.

File format: CSV (comma separated, enclosed in double quotation marks)

Character code: In C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC \webframework.properties, set the following.* The default value assumed if none is set is "UTF-8 (no BOM)".
Line feed code: CRLF

**Tip**

To include double quotation marks and commas as characters in the value, output as follows:

1. Enclose the target value in double quotation marks.
2. For double quotation marks, perform the step above and write the target value twice.

[Example] ""ABC""DEF"

"ABC""DEF"

To include commas in a connection VLAN (logical network name), write two consecutive commas to distinguish the comma from the delimiter of the connection VLAN.

[Examples] "VLAN,A""VLAN,B"

"VLAN,,A,VLAN,,B"

### <File example>

"Tenant ID", "UUID", "Resource name", "Request type", "Request application date and time", "Request completion date and time", "Request validity period date and time", "Resource pool name", "Server name", "Template name", "Spec name", "CPU", "Mem", "Disk size", "Expanded disk size", "Connection VLAN ", "Remark", "Resource information update flag", "Request ID at resource start", "Applicant and application date and time at resource start", "Tenant approver and approval date and time at resource start", "System approver and approval date and time at resource start", "Execution date and time at resource start", "Request ID at resource end", "Applicant and application date and time at resource end", "Tenant approver at resource end", "System approver at resource end", "Execution date and time at resource end"

Example:


#### Table 35-9  List of file output items (Server)

<table>
<thead>
<tr>
<th>Item number</th>
<th>Output item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tenant ID</td>
<td>Requested tenant ID</td>
</tr>
<tr>
<td>2</td>
<td>UUID</td>
<td>UUID of the server</td>
</tr>
</tbody>
</table>

* Output only for a server request.
<table>
<thead>
<tr>
<th>Item number</th>
<th>Output item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Resource name</td>
<td>Not output</td>
</tr>
<tr>
<td>4</td>
<td>Request type</td>
<td>Request type</td>
</tr>
<tr>
<td></td>
<td></td>
<td>For information about output targets, see the request types in</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&quot;Table 35-6   List of Requests to Be Output (page 269)&quot;.</td>
</tr>
<tr>
<td>5</td>
<td>Request application date and time</td>
<td>Date and time the request was submitted</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* The output date and time must be a server time.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Output format: yyyy-MM-dd hh:mm:ss</td>
</tr>
<tr>
<td>6</td>
<td>Request completion date and time</td>
<td>Date and time the request status became completed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* The output date and time must be a server time.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Output format: yyyy-MM-dd hh:mm:ss</td>
</tr>
<tr>
<td>7</td>
<td>Request validity period date and time</td>
<td>Validity period of the request</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Request completion date and time of the request executed after</td>
</tr>
<tr>
<td></td>
<td></td>
<td>the target request.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If it is not executed, a blank is set.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* The output date and time must be a server time.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Output format: yyyy-MM-dd hh:mm:ss</td>
</tr>
<tr>
<td>8</td>
<td>Resource pool</td>
<td>Resource pool name</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* For the vDCA portal, it is output including the resource pool</td>
</tr>
<tr>
<td></td>
<td></td>
<td>identifier.</td>
</tr>
<tr>
<td>9</td>
<td>Resource group</td>
<td>Not output</td>
</tr>
<tr>
<td>10</td>
<td>Server name</td>
<td>Server name</td>
</tr>
<tr>
<td>11</td>
<td>Template name</td>
<td>Template name used for server creation</td>
</tr>
<tr>
<td>12</td>
<td>Spec name</td>
<td>Spec name used for server creation</td>
</tr>
<tr>
<td>13</td>
<td>CPU</td>
<td>CPUs used for server creation (number of CPUs)</td>
</tr>
<tr>
<td>14</td>
<td>Mem</td>
<td>Memory (GB) used for server creation</td>
</tr>
<tr>
<td>15</td>
<td>Disk size</td>
<td>Disk size (GB) used for server creation</td>
</tr>
<tr>
<td>16</td>
<td>Expanded disk size</td>
<td>Expanded disk size (GB) used for server creation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If multiple ones exist, they are output, delimited by commas and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>enclosed in double quotation marks.</td>
</tr>
<tr>
<td>17</td>
<td>Connection VLAN</td>
<td>Not output</td>
</tr>
<tr>
<td>18</td>
<td>Remark</td>
<td>The remark in the [application comment] field entered when the</td>
</tr>
<tr>
<td></td>
<td></td>
<td>request was submitted or the remark made when the resource</td>
</tr>
<tr>
<td></td>
<td></td>
<td>information was updated is output.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A line feed code is output as &quot;\n&quot;.</td>
</tr>
<tr>
<td>19</td>
<td>Resource information update flag</td>
<td>Flag to determine whether the request is an update request of the</td>
</tr>
<tr>
<td></td>
<td></td>
<td>resource information update function or not.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Normal request: 0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Resource information update: 1</td>
</tr>
<tr>
<td>20</td>
<td>Request ID at resource start</td>
<td>Request ID for creating or updating a server or logical network</td>
</tr>
<tr>
<td>21</td>
<td>Applicant and application date and</td>
<td>Output in the format of &quot;User ID: Date and time (output format:</td>
</tr>
<tr>
<td></td>
<td>time at resource start</td>
<td>yyyy-MM-dd hh:mm:ss&quot;.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* The output date and time must be a server time.</td>
</tr>
<tr>
<td>Item number</td>
<td>Output item</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>22</td>
<td>Tenant workflow approver and approval date and time at resource start</td>
<td>The approver and date and time of the tenant workflow are output in the format of &quot;Approver name: Date and time&quot;. * The output date and time must be a server time. (When multiple approvers exist, this item is displayed as in &quot;Approver name 1: Date and time, Approver name 2: Date and time&quot;).</td>
</tr>
<tr>
<td>23</td>
<td>System workflow approver and approval date and time at resource start</td>
<td>The approver and date and time of the system workflow are output in the format of &quot;Approver name: Date and time (output format: yyyy-MM-dd hh:mm:ss)&quot;. * The output date and time must be a server time. (When multiple approvers exist, this item is displayed as in &quot;Approver name 1: Date and time, Approver name 2: Date and time&quot;).</td>
</tr>
<tr>
<td>24</td>
<td>Execution date and time at resource start</td>
<td>Date and time the request was executed (output format: yyyy-MM-dd hh:mm:ss). * The output date and time must be a server time.</td>
</tr>
<tr>
<td>25</td>
<td>Request ID at resource end</td>
<td>Request ID for updating or ending a server or logical network</td>
</tr>
<tr>
<td>26</td>
<td>Applicant and application date and time at resource end</td>
<td>Output in the format of &quot;User ID: Date and time (output format: yyyy-MM-dd hh:mm:ss)&quot;. * The output date and time must be a server time.</td>
</tr>
<tr>
<td>27</td>
<td>Tenant workflow approver and approval date and time at resource end</td>
<td>The approver and date and time of the tenant workflow are output in the format of &quot;Approver name: Date and time (output format: yyyy-MM-dd hh:mm:ss)&quot;. * The output date and time must be a server time. (When multiple approvers exist, this item is displayed as in &quot;Approver name 1: Date and time, Approver name 2: Date and time&quot;).</td>
</tr>
<tr>
<td>28</td>
<td>System workflow approver and approval date and time at resource end</td>
<td>The approver and date and time of the system workflow are output in the format of &quot;Approver name: Date and time (output format: yyyy-MM-dd hh:mm:ss)&quot;. * The output date and time must be a server time. (When multiple approvers exist, this item is displayed as in &quot;Approver name 1: Date and time, Approver name 2: Date and time&quot;).</td>
</tr>
<tr>
<td>29</td>
<td>Execution date and time at resource end</td>
<td>Date and time the request was executed (output format: yyyy-MM-dd hh:mm:ss). * The output date and time must be a server time.</td>
</tr>
<tr>
<td>30</td>
<td>Location</td>
<td>Server location * Output only for a server request.</td>
</tr>
</tbody>
</table>

**Table 35-10 List of file output items (Network)**

<table>
<thead>
<tr>
<th>Item number</th>
<th>Output item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tenant ID</td>
<td>Requested tenant ID</td>
</tr>
<tr>
<td>2</td>
<td>Logical network resource name</td>
<td>Logical network resource name</td>
</tr>
<tr>
<td>3</td>
<td>Logical network display name</td>
<td>Logical network display name of the portal</td>
</tr>
<tr>
<td>4</td>
<td>Request type</td>
<td>Request type For information about output targets, see the request types in &quot;Table 35-6 List of Requests to Be Output (page 269)&quot;.</td>
</tr>
<tr>
<td>Item number</td>
<td>Output item</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| 5           | Request application date and time               | Date and time the request was submitted  
* The output date and time must be a server time.  
Output format: yyyy-MM-dd hh:mm:ss |
| 6           | Request completion date and time                | Date and time the request status became completed  
* The output date and time must be a server time.  
Output format: yyyy-MM-dd hh:mm:ss |
| 7           | Request validity period date and time           | Validity period of the request  
Request completion date and time of the request executed after the target request.  
If it is not executed, a blank is set.  
* The output date and time must be a server time.  
Output format: yyyy-MM-dd hh:mm:ss |
| 8           | Remark                                          | The remark in the [Comment on application] field entered when the request was submitted or the remark made when the resource information was updated is output.  
A line feed code is output as "\n". |
| 9           | Resource information update flag                | Resource information update function  
Normal request: 0  
Resource information update: 1 |
| 10          | Request ID at resource start                    | Request ID for creating or updating a server or logical network |
| 11          | Applicant and application date and time at resource start | Output in the format of "User ID: Date and time (output format: yyyy-MM-dd hh:mm:ss)".  
* The output date and time must be a server time. |
| 12          | Tenant workflow approver and approval date and time at resource start | The approver and date and time of the tenant workflow are output in the format of "User ID: Date and time".  
* The output date and time must be a server time.  
(When multiple approvers exist, this item is displayed as in "User ID 1: Date and time, User ID 2: Date and time"). |
| 13          | System workflow approver and approval date and time at resource start | The approver and date and time of the system workflow are output in the format of "User ID: Date and time (output format: yyyy-MM-dd hh:mm:ss)".  
* The output date and time must be a server time.  
(When multiple approvers exist, this item is displayed as in "User ID 1: Date and time, User ID 2: Date and time"). |
| 14          | Execution date and time at resource start       | Date and time the request was executed (output format: yyyy-MM-dd hh:mm:ss).  
* The output date and time must be a server time. |
| 15          | Request ID at resource end                      | Request ID for updating or ending a server or logical network |
| 16          | Applicant and application date and time at resource end | Output in the format of "User ID: Date and time (output format: yyyy-MM-dd hh:mm:ss)".  
* The output date and time must be a server time. |
| 17          | Tenant workflow approver and approval date and time at resource end | The approver and date and time of the tenant workflow are output in the format of "User ID: Date and time (output format: yyyy-MM-dd hh:mm:ss)".  
* The output date and time must be a server time. |
### 35.2.2 Error list of request history command

**Table 35-11 Error List**

<table>
<thead>
<tr>
<th>No.</th>
<th>Error</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A parameter format is invalid.</td>
<td>An argument specified for the request history output command is not correct. Specify the argument according to the usage.</td>
</tr>
<tr>
<td>2</td>
<td>The output path does not exist.</td>
<td>The output path folder cannot be found. Specify a correct output path.</td>
</tr>
<tr>
<td>3</td>
<td>Failed to write on the output path.</td>
<td>It was not possible to write on the output path. Specify a correct output path.</td>
</tr>
<tr>
<td>4</td>
<td>Authentication failure.</td>
<td>Not correct access. Check to see if it is executed from the request history output command.</td>
</tr>
<tr>
<td>5</td>
<td>Please input [Start/End] date and time at the reach of 2999-12-31 23:59(UTC) from 1970-01-01 00:00(UTC).</td>
<td>Check to see if the argument [sdate/edate] is specified in the appropriate range ([1970-01-01 00:00 (UTC) to 2999-12-31 23:59 (UTC)]).</td>
</tr>
<tr>
<td>6</td>
<td>Please enter [Start/End] date and time as yyyy-MM-dd HH:mm.</td>
<td>Check to see if the argument [sdate/edate] is specified in the appropriate format (yyyy-MM-dd HH:mm).</td>
</tr>
<tr>
<td>7</td>
<td>The Start date and time must be before the End date and time.</td>
<td>The date specified for the argument [edate] is earlier than that specified for the argument [sdate]. For the argument [edate], specify a date later than the specified for the argument [sdate].</td>
</tr>
</tbody>
</table>
Appendix A. Customizing

This appendix describes how to customize:

- Display of additional information in a template
- Display of additional information for an imported server
- GUI display

A.1 Displaying additional information in the template

Additional information can be set to each template. The set additional information is displayed on the [Miscellaneous information] tab of the "Request" or "Server Detail" windows.

Following describes the setting method.

Open C:\Program Files(x86)\NEC\vDCA\Tomcat\conf\NEC\webframework.properties and set the following:

```
product.cloudportal.template.additionalInfo.templateName=Additional information
```

One additional information item can be set to each template.

The input rule is described below:

1. Up to 255 characters (consisting of single-byte, double-byte, and control characters) can be input.
2. The line feed code must be \n. To use "\n" as a character string, add a backslash before the slash (it looks like "\").

[Specification example]

```
product.cloudportal.template.additionalInfo.Template-A =$10/month\nSpecial price
product.cloudportal.template.additionalInfo.Template-B =$1/day
```

After describing the above, save the file by selecting UTF8 for the character code, and then restart the application server (Tomcat). Select a local server from the left panel of the server manager, right-click "Apache Tomcat 8.5 ServiceGovernor" in the service list, and then select [Restart the services].

A.2 Displaying additional information for an imported server

You can set desired additional information for a server imported through synchronization on a tenant-by-tenant basis. The addition information you set is displayed in the [Additional information] tab of the request screen or server details screen.

A setting method is shown below.

Open C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\webframework.properties, and set the following.
Define the default value of the additional information common to the tenants registered in vDCA SE Portal as follows.

```
product.cloudportal.template.additionalInfo.default.parameter=Additional-information
```

To specify additional information individually for each tenant, define it as follows.

```
product.cloudportal.template.additionalInfo.default.parameter.Tenant name=Additional-information
```

The additional information for an imported server must be unique in each tenant.

The input rules are as follows.

1. The maximum number of characters is 255 (including single-byte, double-byte, and control characters).
2. Specify a line feed code as \n. "\n" can be set as a character string by repeating \ ("\" instead of "\n").

[Specification example]

```
product.cloudportal.template.additionalInfo.default.parameter=* Imported server
product.cloudportal.template.additionalInfo.default.parameter.TenantA=* Server imported to TenantA
```

After specifying the above, save the file with UTF8 selected as its character code. When you reload the screen, the changes are applied without restarting the application server (Tomcat).

### A.3 Customizing the GUI Display

The GUI display can be customized by editing or creating the configuration file.

**Note**

- Save the file in UTF-8.
- Escape \ (backslash) in an absolute path with \\

The display items that can be changed are listed below:

- Icon
- Logo
- Title
- Copyright
- Menu
- Image used as template icon
- Topology

The method of creating the respective setting files is shown below

The vDCA SE Portal installation path is referred to as "C:\Program Files (x86)\NEC\vDCA" in this document. When other than the directory described above is used for the installation, replace the terms in the text accordingly.
Figure A-1 Locations where Customizing Is Enabled

- When an icon or logo is changed

  Describe an absolute path to the image file in the configuration file (C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\webframework.properties).

  1. Icon

     portal.favicon = C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\images\favicon.ico (.ico format only)

  2. Left logo

     portal.header.logo.left = C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\images\title.PNG (.PNG format only)

  3. Right logo

     portal.header.logo.right = C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\images\logo.PNG (.PNG format only)

  4. Footer logo

     portal.footer.logo = C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\images\logo.PNG (.PNG format only)

- When a title or copyright is changed

  Correct the configuration file (C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\webframework.properties) as shown below:

  5. Title

     portal.title = MaserScope Portal

  6. Copyright

     portal.footer.copyright = Copyright © NEC Corporation 2015. All rights reserved.

  **Note**

  - When too long copyright or too big logo is specified, it may extend outside the window. In such a case, adjust the display with the user-defined CSS file described later.
  - Do not specify read-only files as icons or logo images.
When a new menu is added to the menu (7) (in the case of the external link)

Create information on the link destination by following the method described below, and store the information as the extlinks.json file under the C:\Program Files (x86)\NEC\vDCA\MoM FW\Tomcat\conf\NEC\ directory.

```
[
    {
        "name" : "menuName",  // Display name
        "url" : "url",        // Link destination
        "index" : "index",   // Insertion position
        "icon" : "icon",     // Class name
        "roles" : ["roleName"]  // Role that can be displayed
    }
]
```

[Example]

```
[
    {
        "name" : "External link",
        "index" : "6",
        "roles" : ["ROLE_SYSTEM_ADMIN", "ROLE_TENANT_ADMIN", "ROLE_TENANT_USER"]
    },
    {
        "name" : "link1",
        "url" : "http://link1.aaa.co.jp/index",
        "icon" : "link1-icon",
        "parent" : "External link",
        "roles" : ["ROLE_SYSTEM_ADMIN"]
    },
    {
        "name" : "link2",
        "url" : "http://link2.com/webgui",
        "icon" : "link2-icon",
        "parent" : "External link",
        "roles" : ["ROLE_SYSTEM_ADMIN", "ROLE_TENANT_ADMIN", "ROLE_TENANT_USER"]
    }
]
```

- The value specified in "icon" is set as the class of the HTML element. The class named external-link is set by default when icon is omitted.

Store the icon file in the folder described below:
C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\webapps\images\
- external-link.PNG
- link1.ico
- link2.ico

The icon is displayed in the menu by specifying it in the user-defined CSS file (C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\userdefined.css) as follows:

```
/* Default external link icon. This will be displayed when icon is not specified*/
```
The menu is displayed without icons when they are not specified in the user-defined CSS file.

- "index" is used to specify the position of insertion for the external link. Specify the position with the position under the dashboard set as "1". For example, specify "3.1" when the external link is inserted under the tenant management of the tenant information.

In addition, specify the same index when multiple external links are inserted in parallel under the same menu. External links are displayed in the order in which they are described in this file.

- "parent" is used to specify the external link name for the parent element when the external link is configured as a hierarchical structure. The external link with the child elements (external links specified by using "parent") is treated as a menu group, so that the external links of the child elements are rolled out by clicking a menu group. Therefore, there is no need to specify "url".

* "parent" cannot be specified when "index" is specified (the specification of "parent" is prioritized when both of them are specified.) External links are ignored when neither "index" nor "parent" exists. The specification of "url" is required for an external link that does not possess child elements.

- Describe the specified character string that indicates the user type in "roles". Multiple types can be specified in [○, ○, ...] format. An external link is displayed only for a user with the specified role.

The roles described below can be specified:

ROLE_SYSTEM_ADMIN
→ System administrator

ROLE_TENANT_ADMIN
→ Tenant manager

ROLE_TENANT_USER
→ Tenant user
• Specifying an image file for template icon

Store the image file in the folder described below:
C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\webapps\images\

Write the path to the image file in the user-defined CSS file (C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\userdefined.css) as follows:

```
.templateName
  *1 {
    background-image:url(/images/os_icon.PNG);
  }
```

The specified image is applied to the following screen.
- Icon used for the unapproved request list on the dashboard
- Icon used for detailed information in request management (Request List screen)
- Icon used for image selection for server creation, change, and deletion in request management, icon used for title bar, icon used for server list in server selection dialog box, icon used for server detailed information in server selection dialog box
- Icon used for server list of Server Management (server list screen)
- Icon used for additional information of Server Management (server list screen)
- Icon used for server tool tip of topology

The user-defined CSS file describes the CSS selector, which shows the display positions of the above icons, and the predetermined style of each icon. Changing these style settings adjusts the icon size and other preferences.

**Note**

- To reflect these settings, restart the Tomcat service from the service list when customization other than the style change was performed by using the CSS.
- If the CSS class name to which vDCA SE Portal refers and the template name overlap, an unexpected background image will be replaced. In such a case, create CSS selector with the template name and specify a background image for each CSS selector for the template icon specified in the user-defined CSS file, instead of using only the template name as the CSS selector.

• When the topology is changed

The following styles can be changed for topology.
- Highlight color and line weight when a server is selected
- Highlight color and line weight when a network is selected
- Default network color
- Color of each network (color of nth network from the left in the network type)

---

*1

For the private cloud catalog, this is the VM template name registered in SigmaSy stemCenter. (For example: Template-WindowsServer2012R2STD)

For the Amazon EC2 catalog, this is the Amazon Machine Image ID.
The topology style can be configured in the user-defined CSS file (C:\Program Files (x86)\NEC\vDCA\MoM\FW\Tomcat\conf\NEC\userdefined.css) as follows:

/* Highlight color and line weight when a server is selected */
svg#topology_canvas .plain_node_normal .frameline.active {
    fill: none;
    stroke: #f00;
    stroke-width: 4;
}

/* Highlight color and line weight when a network is selected */
svg#topology_canvas .network-rect.active {
    stroke: yellow;
    stroke-width: 4;
}

/* Default network color */
svg#topology_canvas .tenant_lan-rect .network-rect {
    fill: #e67e22;
}

svg#topology_canvas .tenant_lan-line .port_line {
    stroke: #e67e22;
}

svg#topology_canvas .business_vlan-rect .network-rect {
    fill: #2980b9;
}

svg#topology_canvas .business_vlan-line .port_line {
    stroke: #2980b9;
}

/* Each network color. Assign a number from 0 at the leftmost. */
svg#topology_canvas .tenant_lan-rect-0 .network-rect {
    fill: pink;
}

svg#topology_canvas .tenant_lan-line-0 .port_line {
    stroke: pink;
}

svg#topology_canvas .business_vlan-rect-0 .network-rect {
    fill: cyan;
}

svg#topology_canvas .business_vlan-line-0 .port_line {
    stroke: cyan;
}
Appendix B. Authority

This appendix describes the following authorities used in vDCA SE Portal.
- Authority owned by built-in roles
- Authority available for custom roles

### B.1 Authority owned by built-in roles

The following table lists the authority items owned by built-in roles.

<table>
<thead>
<tr>
<th>Large category</th>
<th>Small category</th>
<th>Right name</th>
<th>Available function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dashboard</td>
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*3: Available only for certain systems or configurations.
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<td>User change</td>
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<td>ROLE_USER_DELETE</td>
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<td>Resource management menu display</td>
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<td>Work group management submenu display</td>
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Table B-3 Authority items owned by tenant users

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### Table B-4  Authority items owned by request approvers

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#### Tip
- *1 This is available only when the topology template orchestrator option license is enabled.
- *2 This is available only when the monitoring license is enabled.
- *3 This is available only when the network provisioning license is enabled.

### B.2  Authority available for custom roles

The following table lists the authority items available for custom roles.

### Table B-5  Authority items

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**Tip**

- *1 This is available only when the topology template orchestrator option license is enabled.
• *2 This is available only when the monitoring license is enabled.
• *3 This is available only when the network provisioning license is enabled.
Glossary

English

■ I

■ IaaS user
A person or institution utilizing the IaaS service. Administrators, users, and operators of the provided virtual computer are included.

■ ID management server
Server which integrates the management of login account of IaaS manager and login account of network devices created for tenants.

■ R

■ RESTful API
API achieved stateless interaction with web servers by identifying resources with URLs and URIs.

■ S

■ SigmaSystemCenter
Abbreviation of MasterScope SigmaSystemCenter.
One of the external provisioning providers for operating virtual machines.

■ V

■ VM template
A virtual machine template that a tenant can use from a server service catalog.