

# **FUJITSU Software**

## **Cloud Services Management V1.1.0**

A decorative horizontal band with a red-to-dark-red gradient. It features abstract, glowing white and red lines that swirl and intersect, creating a sense of motion and technology.

# **User's Guide for Platform Provider**

Windows(64)

B1WS-1231-02ENZ0(00)  
August 2016

# Preface

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## Purpose of This Document

This manual explains the operation method (for platform providers) of the cloud management portal provided by Cloud Services Management (hereinafter this product).

## Intended Readers

This manual is written for the platform providers who use the Cloud Management Portal of Cloud Services Management to create platforms.

## Required Knowledge

It is assumed that readers have the following knowledge:

- Basic knowledge regarding the OSs that will be used
- General knowledge about clouds

## Structure of This Document

The structure of this manual is as follows.

### [Chapter 1 Cloud Management Portal](#)

Explains how to access the Cloud Management Portal of Cloud Services Management, and the [Home] window.

### [Chapter 2 Organization and User Management](#)

Explains the operations for adding and modifying the administrators and developers that are the users of platforms.

### [Chapter 3 Project Management](#)

Explains the operations for adding payers of the charges incurred by using clouds on platforms, and project member users.

### [Chapter 4 Platform Management](#)

Explains the operations for adding platforms that use clouds, and how to add and operate virtual machines, SLBs, and RDBs for platforms.

### [Chapter 5 Request Management](#)

Explains the methods for checking and operating requests for which applications have been submitted.

### [Chapter 6 Billing Management](#)

Explains the method for checking incurred usage charges.

## Positioning of This Document

Refer to the "FUJITSU Software Cloud Services Management Documentation Roadmap" for an overview of the Cloud Services Management manuals.

## Notational Conventions

For details about the names, abbreviations, and symbols used in this manual, refer to the "FUJITSU Software Cloud Services Management Documentation Roadmap" and the following table.

Proper Name	Abbreviation
FUJITSU Software Cloud Services Management	Cloud Services Management
FUJITSU Software ServerView Resource Orchestrator	ROR
FUJITSU Cloud Service A5 for Microsoft Azure	Azure
Amazon Web Services	AWS
FUJITSU Cloud Service K5	K5

Proper Name	Abbreviation
VMware vSphere	VMware
ServerView Operations Manager	SVOM

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# Contents

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Chapter 1 Cloud Management Portal.....	1
1.1 Accessing the Cloud Management Portal.....	1
1.2 Home Window.....	1
Chapter 2 Organization and User Management.....	5
2.1 Confirming Organizations and Users.....	5
2.2 User Management.....	6
2.2.1 Adding Users.....	6
2.2.2 Modifying Users.....	8
2.2.3 Deleting Users.....	9
2.2.4 The Approval Process.....	9
Chapter 3 Project Management.....	13
3.1 Project Roles.....	13
3.2 Limit Management.....	13
3.3 Adding, Modifying, Deleting, and Confirming Projects.....	15
3.3.1 Adding Projects.....	15
3.3.2 Modifying Projects.....	17
3.3.3 Deleting Projects.....	18
3.3.4 Confirming Added Projects.....	19
3.3.5 The Approval Process.....	21
3.3.5.1 Addition, Modification, and Deletion of Projects.....	21
3.3.5.2 Addition and Deletion of Project Members.....	24
Chapter 4 Platform Management.....	26
4.1 Adding, Modifying, Deleting, and Confirming Platforms.....	26
4.1.1 Adding Platforms.....	26
4.1.2 Modifying Platforms.....	29
4.1.3 Deleting Platforms.....	30
4.1.4 Confirming Added Platforms.....	30
4.1.5 Creating Key Pairs (for AWS and K5).....	32
4.1.6 The Approval Process.....	34
4.2 Service Management.....	38
4.2.1 Adding, Modifying, Deleting, and Confirming Services.....	38
4.2.1.1 Adding Services.....	38
4.2.1.2 Modifying Services.....	42
4.2.1.3 Deleting Services.....	43
4.2.1.4 Confirming Added Services.....	43
4.2.1.5 The Approval Process.....	44
4.2.2 Operating Services.....	48
4.2.2.1 Starting.....	48
4.2.2.2 Stopping.....	49
4.2.2.3 Snapshots.....	49
4.2.3 Completion Notification Email.....	51
Chapter 5 Request Management.....	52
5.1 Confirming Requests.....	53
5.2 Request Operations.....	54
5.2.1 Approving.....	55
5.2.2 Rejecting.....	55
5.2.3 Canceling.....	56
5.3 Responses to Requests and Approvals.....	56
5.4 Actions for Failed Requests.....	57
Chapter 6 Billing Management.....	60
6.1 Confirming Usage Charges by Organization.....	61



# Chapter 1 Cloud Management Portal

The Cloud Management Portal is a web interface used for the operation management of Cloud Services Management.

The Cloud Management Portal provides the following functions for platform providers.

- Project Management
- Platform Management
- Organization/User Management
- Request Management
- Billing Management

This manual explains the menu operations used by platform providers to access and utilize the above functions.

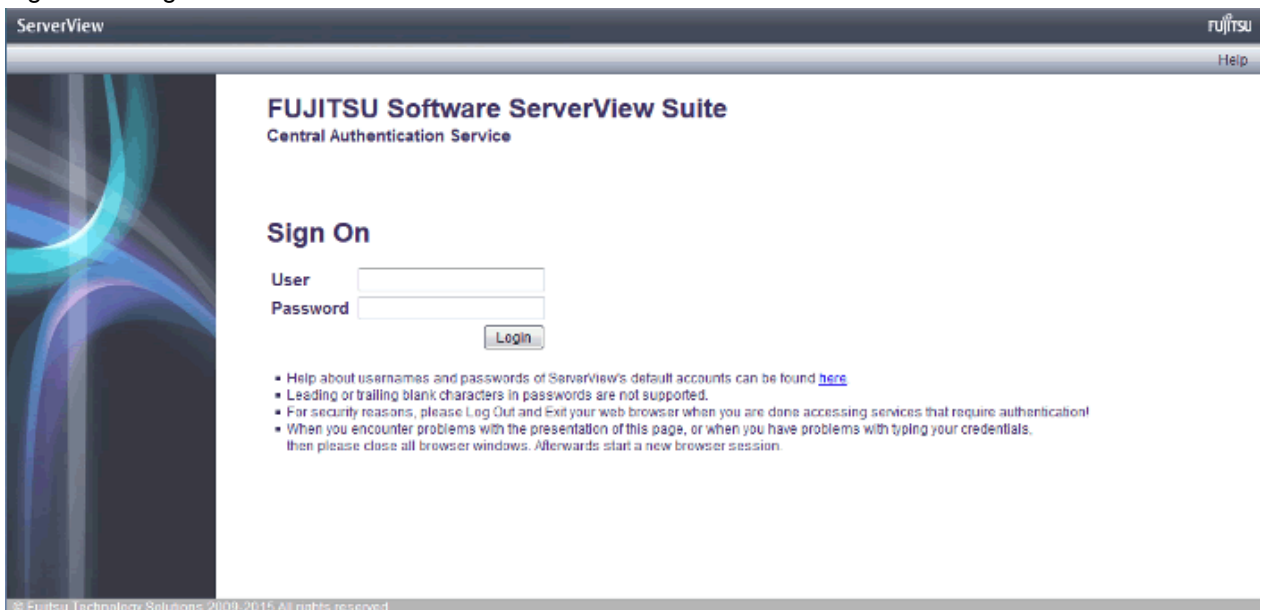
## 1.1 Accessing the Cloud Management Portal

This section explains the procedure for accessing the Cloud Management Portal.

### Login

Click the link contained in an email or another system, or enter the URL notified in a browser address bar, and the following [Login] window is displayed.

Figure 1.1 Login Window



In the [Login] window, enter the user ID and password provided through email in the corresponding fields, and then click the [Login] button.

## 1.2 Home Window

The [Home] window displayed after login displays available operations depending on the user role.

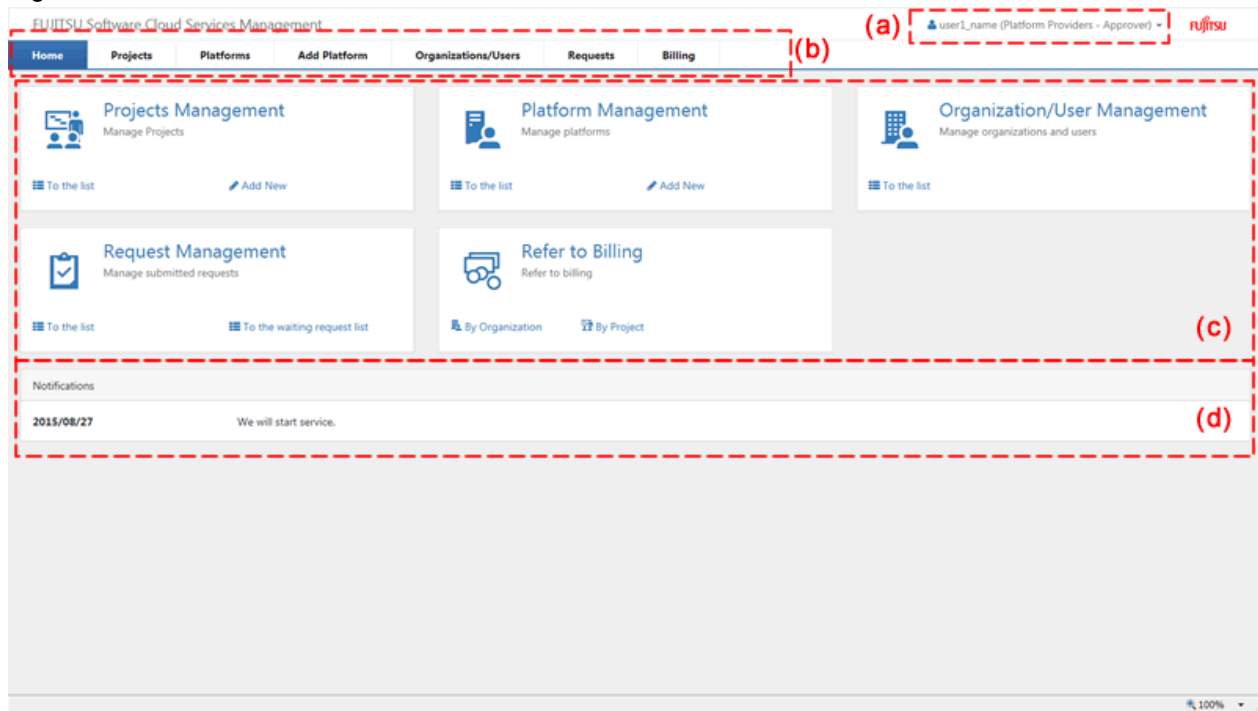


Point

The menu name changes to [\*\* Management] or [Refer to \*\*] depending on the operation authority of the login user.

For example, the [Project Management] menu is displayed for users with the authority for addition, modification, and deletion. The [Refer to Projects] menu is displayed for users who have only reference authorities.

Figure 1.2 Home Window



a. Login user

The ID of the user currently logged in is displayed. Click the user ID to select the [Help], [Profile], or [Log Out] menus.

Help

This displays the user's guide for platform providers of Cloud Services Management in a separate window.

Profile

The user information of the currently logged in user is displayed. Also allows for changes to be made. The password can also be changed here.

Changes to the profile do not require approval, so any changes made are reflected immediately.

The following items can be changed.

- User Name

Any UTF-8 format character string up to 64 characters in length, excluding control characters such as line feeds, can be specified.

- Description

Any UTF-8 format character string up to 256 characters in length, excluding control characters such as line feeds, can be specified.

- Email address

A character string up to 256 characters in length which qualifies as a `"/^[w\.\-]+@(?:[w\-\+\.])+[w\-\+$/]"` regular expression can be specified. If X is defined as a string which contains alphanumeric characters, hyphens ("-"), and underscores ("\_"), and Y contains X and periods ("."), the format of the regular expression is "Y@X.X".

- Contact information

Any UTF-8 format character string up to 256 characters in length, excluding control characters such as line feeds, can be specified.

- Password

A password may contain 8 to 64 alphanumeric characters, \$\"=|[:\*+;<>?/ and ASCII characters excluding blank spaces and control characters.

- User specific information

Any UTF-8 format character string up to 256 characters in length, excluding control characters such as line feeds, can be specified.

### Point

The [Password] field may not be displayed depending on the system configuration. To modify the password, contact the operators.

### Switch Role

The role of the login user can be changed. Switching roles does not require approval, so the change is reflected immediately. The [Switch Role] menu is displayed only for users who possess multiple roles.

- Role before switching

The name of the role used by the login user is displayed.

- Role after switching

The login user selects the role to switch to. When a user has three roles, multiple roles to switch to are displayed.

When the role switchover completes, the [Home] window is displayed.

In this product, the operations of multiple roles cannot be performed using a single account at the same time. For example, if the same account is logged in on multiple browsers, if the role is switched on one browser, an error will occur when operating another browser. When such an error occurs, logging in again enables operations using the role after switching.

### Logout

Allows users to log out of the Cloud Management Portal.

#### b. Navigation

Clicking a tab switches the window between pages.

#### c. Main

Available window menus are displayed depending on the authority level of the user. Clicking a menu name displays the corresponding window. Within each menu, available links such as [To the list] and [Add New] are provided depending on the user's authority level.

#### d. Notifications

Notifications from the operators are displayed.

### Note

This note explains the corrective actions to take if problems occur on the Cloud Management Portal.

- If the Cloud Management Portal window is maximized in a web client and the Windows taskbar is set to auto-hide, the buttons locked on the bottom section of the Cloud Management Portal window will be covered up when the Windows taskbar appears, preventing you from clicking on them. To click these buttons, disable maximization of the web client.
- If the user information of a login user is modified due to the operations of another user or another session, the session information becomes outdated, and the operations performed by the logged in user may not be reflected on the system, buttons may not be displayed, etc. Press the [F5] key or click the [Refresh] button of the Web browser to update the session information.
- Under following conditions, an error dialog is shown which states that communication with the management server has failed. To correct the error, log in again to the Cloud Management Portal.
  - When a user has not performed operations on the Cloud Management Portal for 30 minutes.



- When services of the management server of the Cloud Services Management are restarted while a user is logged in.
- When the session information on the web browser is deleted by operations in another window.

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 Point

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This section explains the points to keep in mind when operating the Cloud Management Portal.

In the Cloud Management Portal, the items to be configured by selected from several choices are selected from a list box. When there is only one option in a list box, the option is automatically selected, and modification is not possible.

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## Chapter 2 Organization and User Management

Organization information shows organizations to which users belong and configures the approval flow for each added user. It also manages the accounting information of platforms. Organizations can have hierarchical structures, and under them platform provider users and organizations can be created.

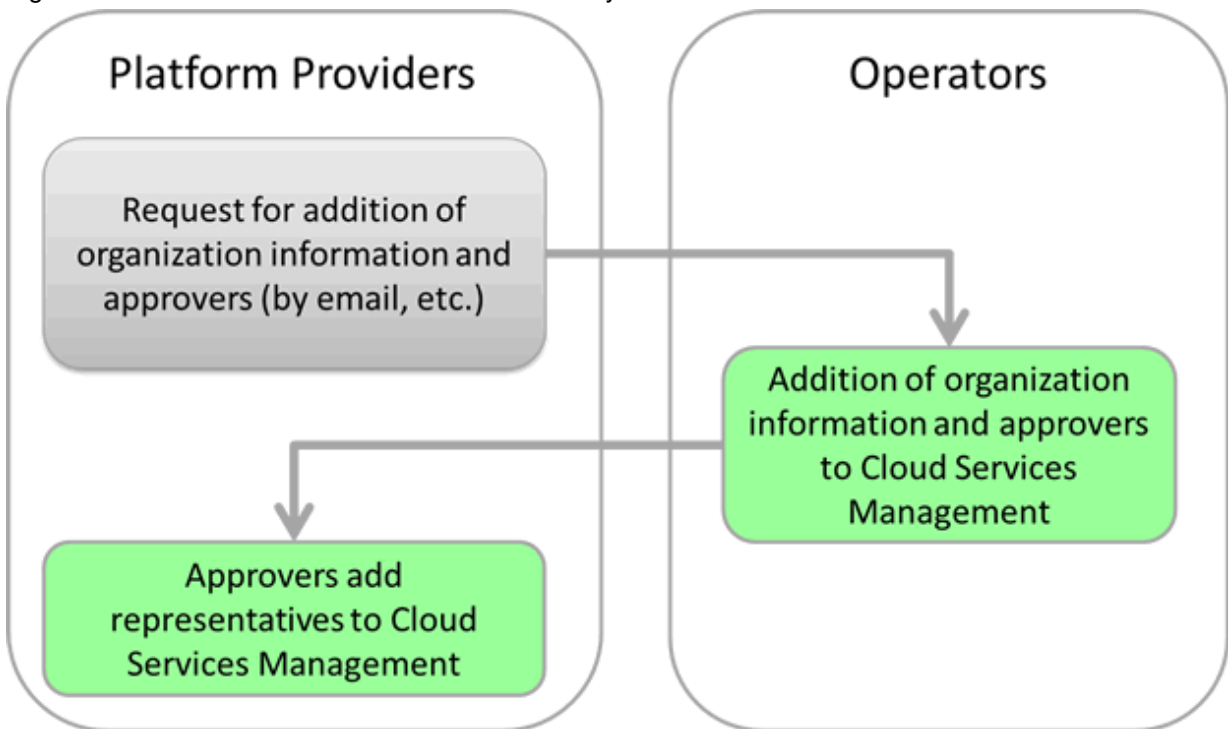
"Users" refers to all users who use the Cloud Management Portal.

The operators manage the organizations of platform providers and the initial addition of users.

For this reason, requests for additions must be made to the operators (outside the system).

In system providers, in addition to representatives and approvers, users belonging to organizations can be added and modified.

Figure 2.1 The User Addition Process Performed by Platform Providers



This section explains how to confirm organizations and add and modify users in the Cloud Management Portal.

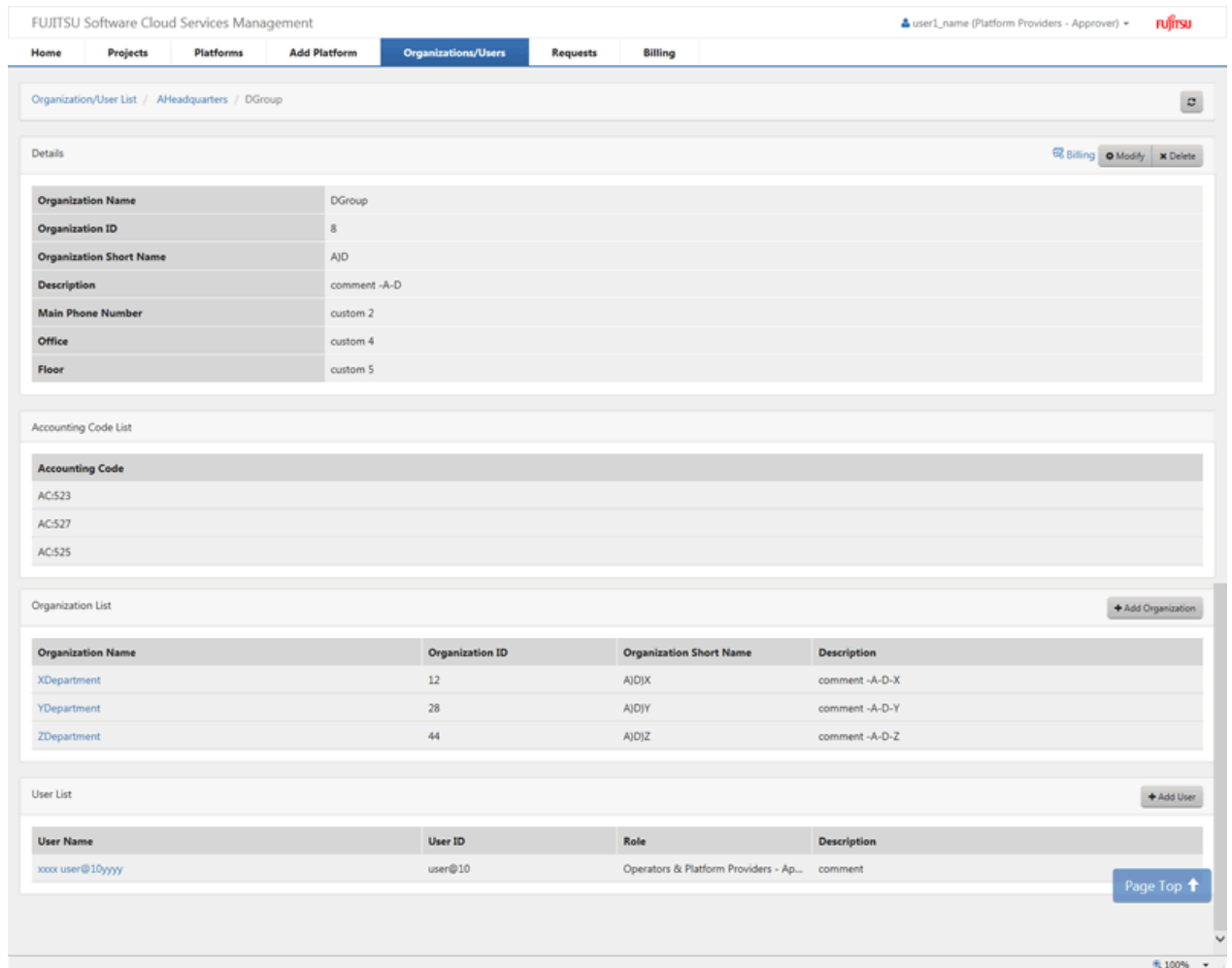
### 2.1 Confirming Organizations and Users

This section explains how to confirm organizations and users.

1. From the [Home] window, click the link to the [Organization/User Management] menu, or select the [Organizations/Users] navigation tab.

2. The [Organization/User List] window is displayed.

Figure 2.2 Organization/User List



In this window, confirm the following information:

- [Details] shows details of the organization to which the login user belongs.
  - [Accounting Code List] shows a list of the accounting codes linked with the organization.
  - [Organization List] shows a list of organizations under the organization to which the login user belongs.
  - [User List] shows a list of the users belonging to the organization to which the login user belongs.
3. From [Organization List], click the name of an organization to confirm the details of the organization. In the details window, a list of organizations under the affiliation is displayed in [Organization List]. From this list, select the organization names sequentially to confirm organizations in hierarchical order.
  4. Along with the detailed information of the organization displayed, users belonging to that organization are displayed in [User List]. Click a user name to confirm the detailed information of that user.

## 2.2 User Management

This section explains how to add, modify, delete, and confirm users, and the approval flow for user addition.

### 2.2.1 Adding Users

This section explains how to add users.

1. Go to the [Organization/User Management] menu in the [Home] window and click the [To the list] link, or select the [Organizations/Users] navigation tab.
2. The [Organization/User Details] window is displayed. This window shows the details of the organizations to which the login user belongs.
3. The displayed [Organization List] shows a list of the names of the organizations under the organization to which the login user belongs. Select the target organization for user addition or its superior organization.
4. [Organization/User List] belonging to the selected organization is displayed. From [Organization List], select in order the organization names up to the relevant hierarchical level.
5. While [Details] shows the target organization for user addition, click the [Add User] button next to [User List] displayed in the same window.
6. Specify the following items: The organization ID is displayed in addition to the following items, but it is grayed out because the ID of the organization to which the added user belongs is automatically set.

#### User Name (Required)

Enter the name to be displayed in lists, etc.

Any UTF-8 format character string up to 64 characters in length, excluding control characters such as line feeds, can be specified.

#### User ID (Required)

Enter an ID to distinguish the information of the user from that of other users. This item can only be specified during addition.

Do not specify a user ID which has already been added.

A character string up to 320 characters in length containing alphanumeric characters, hyphens ("-"), underscores ("\_"), periods ("."), and at marks ("@") can be specified.



#### Note

The character input is case insensitive, so user IDs that only differ by the cases of the characters used will be recognized as the same user ID. For example, if "User" has been registered, then "user" cannot be registered.

#### Role (Required)

Select the user's authority.

- Platform Providers - Approver

Have the authority to approve the addition of representatives in the approval flow.

- Platform Providers - Representative

Approval is always required during addition and other operations. All other privileges are similar to the privileges of an approver.

#### Description

Specify a description (comment).

Any UTF-8 format character string up to 256 characters in length, excluding control characters such as line feeds, can be specified.

#### Email Address (Required)

Specify the user's email address. During the approval process, notification emails will be sent to this email address.

A character string up to 256 characters in length which qualifies as a `"/^[\\w\\.\\-]+@[?:[\\w\\-]+\\.]+[\\w\\-]+$/` regular expression can be specified. If X is defined as a string which contains alphanumeric characters, hyphens ("-"), and underscores ("\_"), and Y contains X and periods ("."), the format of the regular expression is "Y@X.X".

#### Contact Information (Required)

Specify the user's contact information.

Any UTF-8 format character string up to 256 characters in length, excluding control characters such as line feeds, can be specified.

### Password (Required)

Specify the password for authentication to be used by the user when logging in.

A password may contain 8 to 64 alphanumeric characters, \$\"=[:\*;,+,<>?/ and ASCII characters excluding blank spaces and control characters.

### Confirm Password (Required)

Specify the password for confirmation. The same character string as the specified password must be entered.

### User Specific Information (Up to Five Entries)

These items are defined by the operators. Specify them based on the displayed description.

Any UTF-8 format character string up to 256 characters in length, excluding control characters such as line feeds, can be specified.

7. Clicking the [Next] button displays the [Confirmation] window. To correct any incorrect entries, go back to the previous windows for entry using the [Prev] button and make any necessary corrections.
8. Click the [Request] button in the [Confirmation] window. The request is indicated as waiting processing, and a request for approval email is automatically sent to the approvers.



.....  
The [Password] field may not be displayed depending on the system configuration.  
.....

## 2.2.2 Modifying Users

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This section explains how to modify users.

1. Go to the [Organization/User Management] menu in the [Home] window and click the [To the list] link, or select the [Organizations/Users] navigation tab.
2. The [Organization/User Details] window is displayed. The window initially displays the details of the organization to which the login user belongs.
3. The displayed [Organization List] shows a list of the names of the organizations under the organization to which the login user belongs. Select the organization to which the user to modify belongs, or its superior organization.
4. [Organization/User List] belonging to the selected organization is displayed. From [Organization List], select in order the organization names up to the relevant hierarchical level.
5. While [Details] shows the target organization for user modification, click the relevant user name in [User List].
6. The [User Details] window is displayed. Clicking the [Modify] button enables the editing of details. The following items can be modified:
  - User Name
  - Organization Short Name: Organization ID
  - Role
  - Description
  - Email address
  - Contact information
  - Password
  - User specific information
7. Clicking the [Next] button displays the [Confirmation] window. To correct any incorrect entries, go back to the previous windows for entry using the [Prev] button and make any necessary corrections.

8. Click the [Request] button in the [Confirmation] window. The request is indicated as waiting processing, and a request for approval email is automatically sent to the approvers.

### Point

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The [Password] field may not be displayed depending on the system configuration. To modify the password, contact the operators.

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### Note

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- Platform provider users do not have the authority to modify the roles of users who possess the roles of both platform provider and another department, nor the authority to grant users multiple roles. Therefore, make requests for such modifications to the operators.
  - By modifying the role of a user who is a project manager from platform provider approver to another role, the conditions required for the user to be a project manager are no longer satisfied. Therefore, modify the project manager to another user with the platform provider approver role.
- 

## 2.2.3 Deleting Users

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This section explains how to delete users.

1. Go to the [Organization/User Management] menu in the [Home] window and click the [To the list] link, or select the [Organizations/Users] navigation tab.
2. The [Organization/User Details] window is displayed. The window initially displays the details of the organization to which the login user belongs.
3. The displayed [Organization List] shows a list of the names of the organizations under the organization to which the login user belongs. Select the organization to which the user to be deleted belongs, or its superior organization.
4. [Organization/User List] belonging to the selected organization is displayed. From [Organization List], select in order the organization names up to the relevant hierarchical level.
5. While [Details] shows the target organization for user deletion, click the relevant user name in [User List].
6. Clicking the [Delete] button on the upper right of [Details] window displays the [Confirmation] window.
7. Clicking the [Yes] button on the lower right in the displayed [Confirmation] window causes the request to be indicated as waiting processing, and a request for approval email is automatically sent to the approvers.

### Note

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Platform provider users do not have the authority to delete users who possess roles of both platform provider and another department. Therefore, make requests to delete users who possesses multiple roles to the operators.

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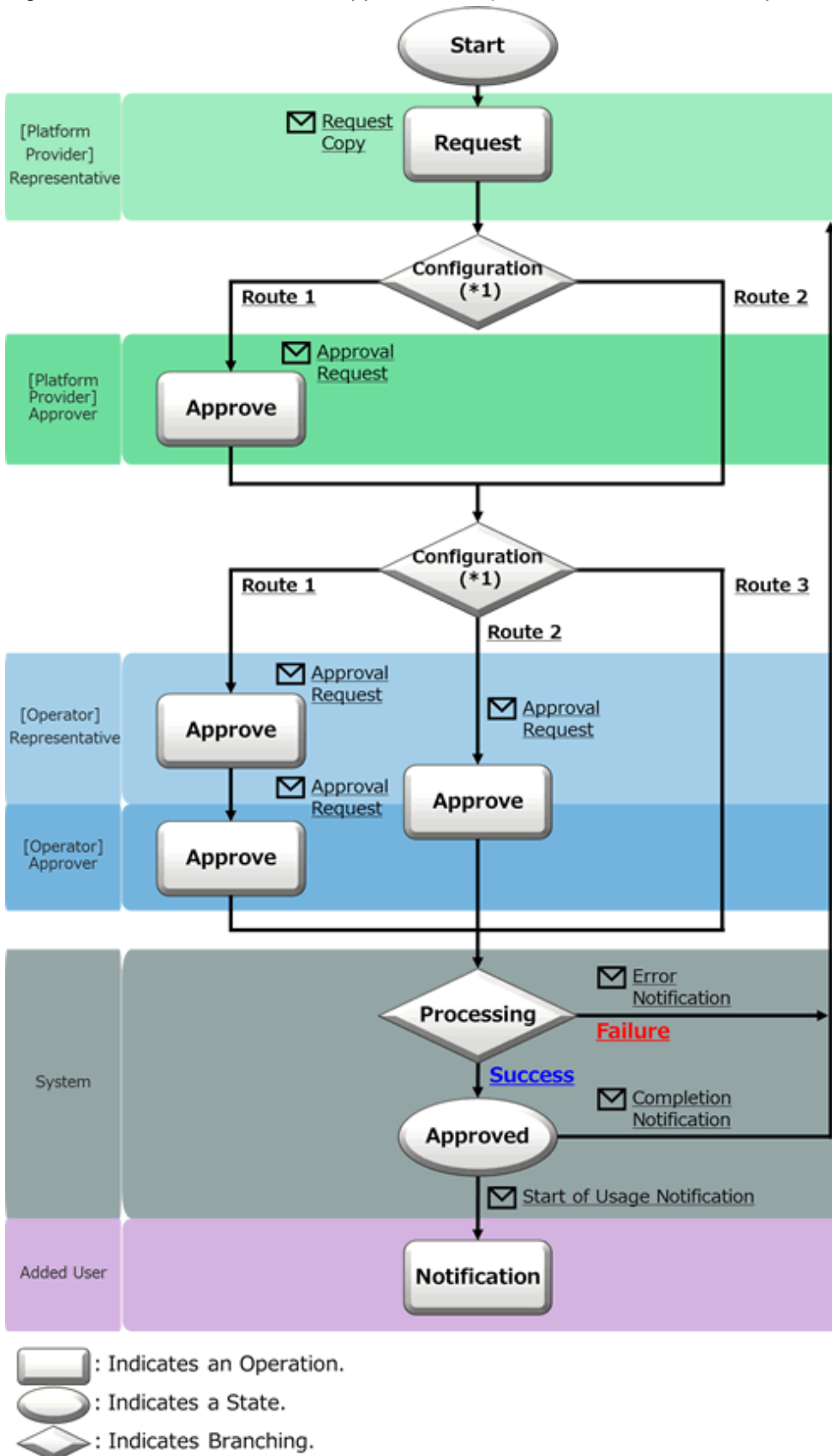
## 2.2.4 The Approval Process

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In the process of addition, modification, and deletion of a user, a request is submitted and the status of the user changes to under request for the corresponding operation.

Use the following route to approve addition, modification, and deletion requested by a platform provider representative.

Figure 2.3 The User Information Approval Flow (for Platform Providers - Representative)

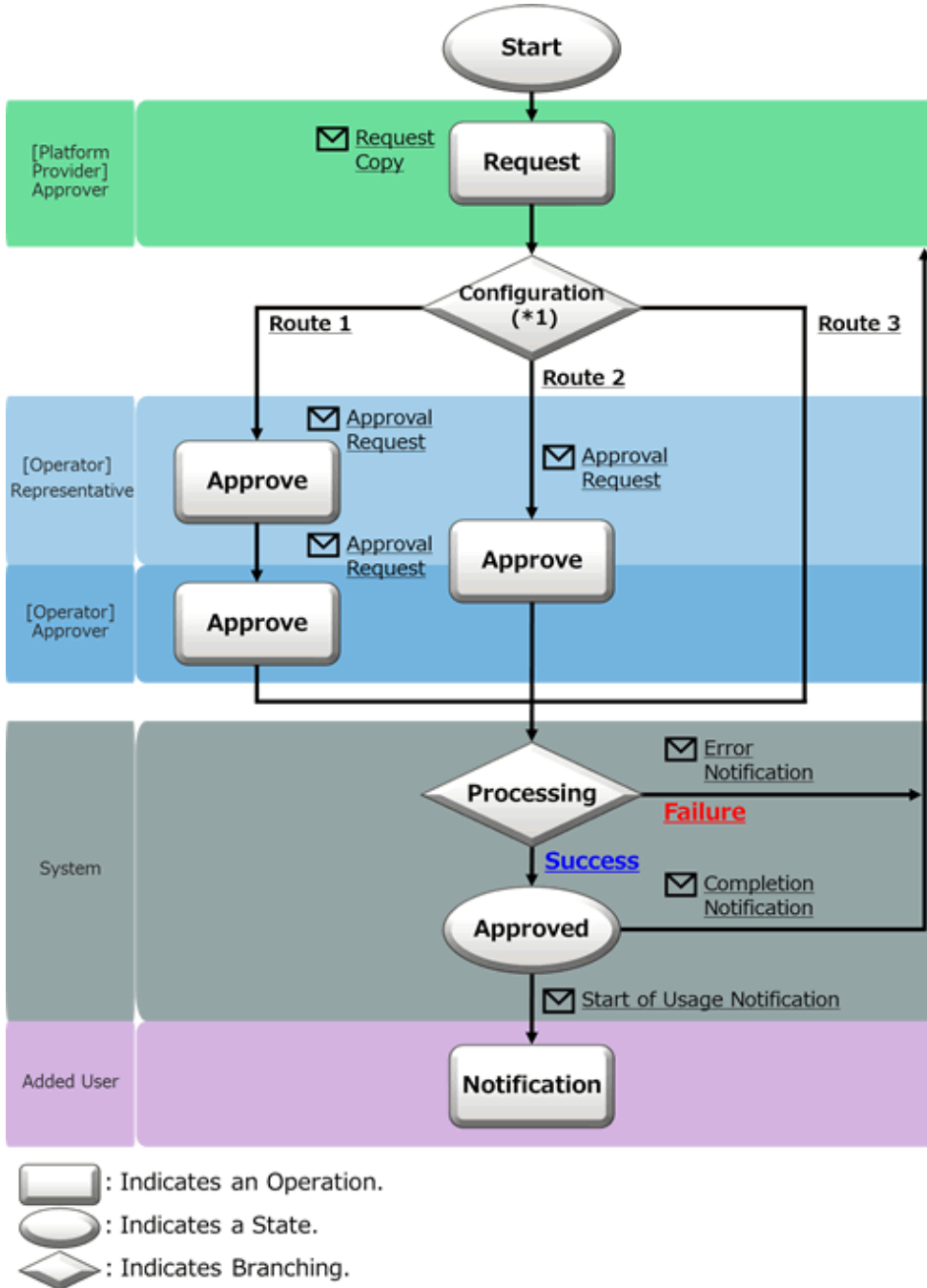


\*1: The approval flow is defined according to the settings performed by the operators. Contact the operators.

In [Operation] in the diagram above, not only approval, but also rejection and cancellation operations can be performed. For details on operations related to and statuses of requests, refer to "Figure 5.1 Changes in Request Status".

Use the following route to approve addition, modification, and deletion requested by a platform provider approver.

Figure 2.4 The User Information Approval Flow (for Platform Providers - Approver)



\*1: The approval flow is defined according to the settings performed by the operators. Contact the operators.

In [Operation] in the diagram above, not only approval, but also rejection and cancellation operations can be performed. For details on operations related to and statuses of requests, refer to "Figure 5.1 Changes in Request Status".



## **Email Notifications Related to Approvals**

After a request is submitted or intermediate approval is granted, a request for approval email is sent to all subsequent approvers in the approval flow.

In addition, a notification email with a copy of the request is sent to the user who performs the operation.

After the final approval is granted, the details of the addition or modification are reflected to the system. Upon reflection, a notification of approval completion email is sent to the requester. After that, a notification of availability email is sent to added users. When the reflection fails for some reason, an error notification email is sent to the requester (TO) and the request operator (CC).

## **Confirmation of Request Statuses**

To confirm the approval statuses and details of requests for addition, modification, and deletion, view the [Request Management] window.

For details on how to perform the main operations in the [Request Management] window, refer to "[Chapter 5 Request Management](#)".

# Chapter 3 Project Management

The Project Management function manages users who use the same platforms.

A user who belongs to any organization can be added as a project member, and the members can share the platforms in the project.

Multiple platforms can be added to one project, and the approval flow according to the menus, billing, and limits can be shared. A project manager, by managing usage limits based on a budget, can facilitate the appropriate usage of platforms.

This chapter explains how to operate projects in the Cloud Management Portal.

## 3.1 Project Roles

In Project Management, user roles within a project are available besides the user roles in Cloud Services Management (representative and approver).

These roles limit the operation authorities regarding the platforms and services linked with the project.

### Project Manager

A user who creates a project has the project manager role.

Projects can be created by users who have the role of platform provider approver.

All types of information in a project can be managed, modified, and deleted.

### Project User

A user added to a project has the project user role.

Platforms added to a project and services added to platforms can be used.

The operation authorities which are granted to each role are as follows.

"Service operations" refers to starting and stopping VM machines, and collecting, restoring, and deleting snapshots.

Table 3.1 Project Roles and Authorities

Project Role	Projects	Platforms	Services
<b>Project Manager</b>	Modify/Delete Add/Delete of project members	Add/Modify/Delete	Add/Modify/Delete Service Operations
<b>Project User</b>	Add/Delete of project members	Add/Modify/Delete	Add/Modify/Delete Service Operations

If a project manager modifies [Supervisor ID] by modifying the project, the project manager role can be transferred to another user.



### Note

If the user who possesses the project manager role is absent, it is possible to transfer the project manager role to another user, and continue using the project. If the project manager is absent and you want to transfer the role of project manager to another user, contact the operators.

## 3.2 Limit Management

Cloud Services Management calculates usage charges through daily processes, based on the usage amount of the platform and the unit price configured in the menu.

The limit management function enables the setting of thresholds on monthly billing charges in order to restrict the unregulated use of services.

Limits are configured for projects. Cloud Services Management compares the configured quotas with the usage charges which are calculated daily, and sends notifications regarding exceeded thresholds and restricts resource usage.

## Configuring Limits

When creating a project, consider the number or the size of the platform which can be created under the project before defining the upper limit of monthly usage charges. Configure the defined value in [Limit] in the [Project Management] window. In [Threshold], configure a threshold value to send an alert email when a usage charge is likely to exceed [Limit].

## Exceeding a Threshold

In the daily processes, after usage charges are calculated, the charges are compared with [Threshold].

When the sum of usage charges for platforms and services which belong to a project exceeds the percentage specified in [Threshold], the following email is automatically sent.

The destination of this email is the email address specified in the [Project Management] window.

```
Subject:Warning of Exceeded Threshold for Project XXXXX

Dear Project Manager of XXXXX

The usage charges of your project have exceeded the configured alert notification threshold.

Usage Charge [$]:275
Limit [$]:300
Threshold [%]:90
Date:2016/04/27

* This mail has been sent from a send-only mail address.
  Please note that if you directly reply to this mail, it will not be answered.
```

In "XXXXX", the corresponding project ID is configured.

## Exceeding a Limit

According to the amount of usage charges which is calculated daily, operations which might further increase usage charges may be suppressed.

When, by performing the following operations, a usage charge value is likely to exceed [Limit], a warning message is displayed.

- Platforms
  - Addition
  - Migration to another project
  - Addition of operation options
- Services
  - Addition
  - Modification of instance types
  - Addition of data disks
  - Collection of snapshots

When the usage charges have already exceeded [Limit], in addition to the operation above, the following operations cannot be performed. Also, buttons such as [Add] are no longer displayed.

- Starting virtual machine services

## Actions when a Limit is Exceeded

Modification is reflected on the [Limit] of the project when the final approval of the modification request is granted. Therefore, even if the limit is exceeded, if additional platforms and services are necessary, take actions to increase the amount of charges for [Limit].

Restriction of operations are lifted after the monthly billing process is performed.

## 3.3 Adding, Modifying, Deleting, and Confirming Projects

This section explains how to add, modify, delete, and confirm projects.

### 3.3.1 Adding Projects

To add a project, perform the following operations.

1. Go to the [Project Management] menu in the [Home] window and click the [Add New] link.
2. Specify the details using the wizard. Click the [Next] button to proceed. Clicking the [Cancel] button discards all of the entries.

Figure 3.1 Add Project Window

The screenshot shows the 'Add Project' window in the FUJITSU Software Cloud Services Management interface. The window has a title bar with 'FUJITSU Software Cloud Services Management' and a user profile 'user1\_name (Platform Providers - Approver)'. Below the title bar, there's a breadcrumb 'Add Project' and a progress indicator with four steps: 'Basic Information' (selected), 'Member', 'Confirmation', and 'Complete'. The main content area is titled 'Enter the basic information.' and contains the following fields:

- Project Name:** Enter a string. Entry is mandatory.
- Project ID:** Enter the ID using lower-case alphanumeric characters, underscores ('\_'), hyphens ('-'), and periods ('.'). The first character must be a lower-case alphanumeric character. Entry is mandatory.
- Supervisor ID: Supervisor Name:** user1 : user1\_name
- Accounting Code: Organization Short Name:** - Select the item - (dropdown menu)
- Email Address:** Enter an email address. Entry is mandatory.
- Limit management:**  Use  Do not use
- Limit:** \$ Enter an integer value of 0 or more. (Within 8 integer digits, and 2 decimal digits) per month
- Threshold:** Enter an integer between 0 and 100. %
- Description:** Enter a string.
- Main Phone Number:** Enter a string.
- Office:** Enter a string.
- Floor:** Enter a string.

At the bottom right, there are 'Next' and 'Cancel' buttons. The window also shows a zoom level of 100%.

#### a. Basic information

Specify the following items:

##### Project Name (Required)

This name which is displayed in the project list, etc.

Any UTF-8 format character string up to 64 characters in length, excluding control characters such as line feeds, can be specified.

##### Project ID (Required)

This ID is used to identify the project.

This item can only be specified during addition and cannot be modified.

Do not specify a project ID which has already been added.

A character string up to 32 characters in length containing lower-case alphanumeric characters, hyphens ("-"), underscores ("\_") and periods (".") can be specified. The beginning character must be a lower-case alphanumeric character.

##### Supervisor ID: Supervisor Name (Required)

Specify the user ID of a user who has the final authority regarding the modification and deletion of the details of the project. The specified user has the project manager role.

When adding a project, the user who performs the addition is automatically configured. Modification can be performed after addition is complete.

When the operating user is an administrator, the supervisor can be selected from among all platform provider approvers.

#### Accounting Code: Organization Short Name (Required)

Specify the accounting codes of the platforms to be added to the project.

When the operating user is an operator approver, the codes can be selected from the accounting codes linked with the organization to which the user belongs and the organizations under it.

When the operating user is an administrator, the codes can be selected from among all accounting codes.



Accounting codes are added by operators. When specifiable accounting codes are not displayed, or when they are not the expected accounting codes, contact the operators.

The added accounting codes can be confirmed in the [Organization/User List] window.

#### Email Address (Required)

The email address used for receiving notification from operators, notification of exceeding a threshold, and notification when creating and updating a key pair.

A character string up to 256 characters in length which qualifies as a `"/^[\\w\\.-]+@(?:[\\w\\-]+\\.)+[\\w\\-]+$/"` regular expression can be specified. If X is defined as a string which contains alphanumeric characters, hyphens ("-"), and underscores ("\_"), and Y contains X and periods ("."), the format of the regular expression is "Y@X.X".

#### Limit Management

Enable limit management for each project, and configure whether the usage charges are managed using a limit.

#### Limit

Specify an upper limit value for monthly billing available for use by the project.

Any number up to 8 digits and within 2 decimal points can be specified.

#### Threshold

Specify a percentage of the usage charge threshold specified in limit. When usage charges exceed the specified percentage in the project, an alert e-mail will be automatically sent.

An integer from 0 to 100 can be specified.



When configuring [Limit] and [Threshold], the values can be specified only when [Limit Management] is enabled. Depending on the settings configured by the operators, [Limit Management] may not be displayed.

#### Description

A description (comment) about the project can be specified.

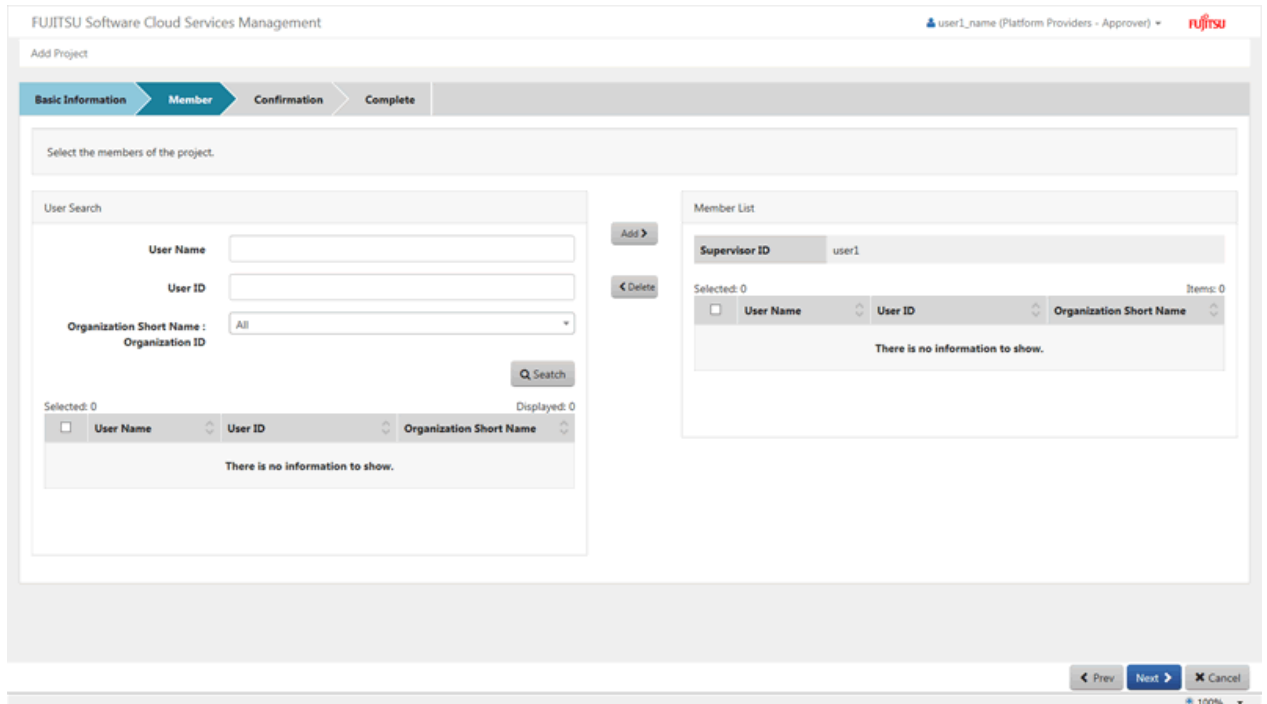
Any UTF-8 format character string up to 256 characters in length, excluding control characters such as line feeds, can be specified.

#### Project Specific Information (Up to Five Entries)

These items are defined by the operators. Specify them based on the displayed description.

Any UTF-8 format character string up to 256 characters in length, excluding control characters such as line feeds, can be specified.

Figure 3.2 Addition of Project Members



b. Member

Add a user who performs platform development of the corresponding project as a member.

Select a user to be added in the [User Search] area, and add the target user in the [Member List] area.

Specifying a user name, user ID, and organization short name, and clicking the [Search] button displays the users who match the search conditions in a list, and the number of search results is displayed in the [Displayed] field. Selecting the checkbox of the user to be added and clicking the [Add] button migrates the selected user to the [Member List] area.

Selecting the checkbox of a user in the [Member List] area and clicking the [Delete] button migrates the selected user to the [User Search] area.

Use [Add] or [Delete] to define the members. After defining the members, click the [Next] button.

**P** Point

In the list in the [User Search] area, users displayed in the [Member List] area and the user specified for the supervisor ID are not displayed.

c. Confirmation

A summary of the specified information is displayed. To correct any incorrect entries, go back to the previous windows for entry using the [Prev] button and make any necessary corrections.

d. Complete

Click the [Request] button in the [Confirmation] window. The request is indicated as waiting processing, and a request for approval email is automatically sent to the approvers.

### 3.3.2 Modifying Projects

To modify a project, perform the following operations.

1. Go to the [Project Management] menu in the [Home] window and click the [To the list] link. Alternatively, select the [Project Management] navigation tab.
2. From the list of added projects, click the name of the project to be modified.
3. The Details window for the project to be modified is displayed.
4. Click the [Modify] button on the upper right of [Details].

The following items can be modified.

- Project Name
- Supervisor ID: Supervisor Name
- Accounting Code: Organization Short Name
- Email Address
- Limit Management
- Limit
- Threshold
- Description
- Project Specific Information

### Point

- Only a user or an administrator with the project manager role of the project to be modified can modify the details of the project. A user with the project user role cannot modify the detailed information, and can only add or delete members.
- The conditions for a user to be displayed in [Supervisor ID: Supervisor Name] are as follows:
  - A member of the project
  - Has the platform provider approver role

5. Proceeding to the next view using the [Next] button on the wizard displays a window in which addition and deletion of members is possible.

As the members displayed in the [Member List] area can be added, use [Add] or [Delete] to define the members. After defining the members, click the [Next] button.

6. Clicking the [Next] button displays the [Confirmation] window. To correct any incorrect entries, go back to the previous windows for entry using the [Prev] button and make any necessary corrections.
7. Click the [Request] button in the [Confirmation] window. The request is indicated as waiting processing, and a request for approval email is automatically sent to the approvers.

### Note

To delete a user who is a platform manager from the list of project members in a platform under the project, switch the role of the manager of the platform to another user in advance.

## 3.3.3 Deleting Projects

Only a user or an administrator with the project manager role of the project to be deleted can delete the project.

To delete a project, perform the following operations.

1. Go to the [Project Management] menu in the [Home] window and click the [To the list] link. Alternatively, select the [Project] navigation tab.
2. From the list of added projects, click the name of the project to be deleted.

3. The Details window for the project to be deleted is displayed.
4. Clicking the [Delete] button on the upper right of [Details] displays the [Confirmation] window.
5. Clicking the [Yes] button on the lower right in the displayed [Confirmation] window causes the request to be indicated as waiting processing, and a request for approval email is automatically sent to the approvers.

### Note

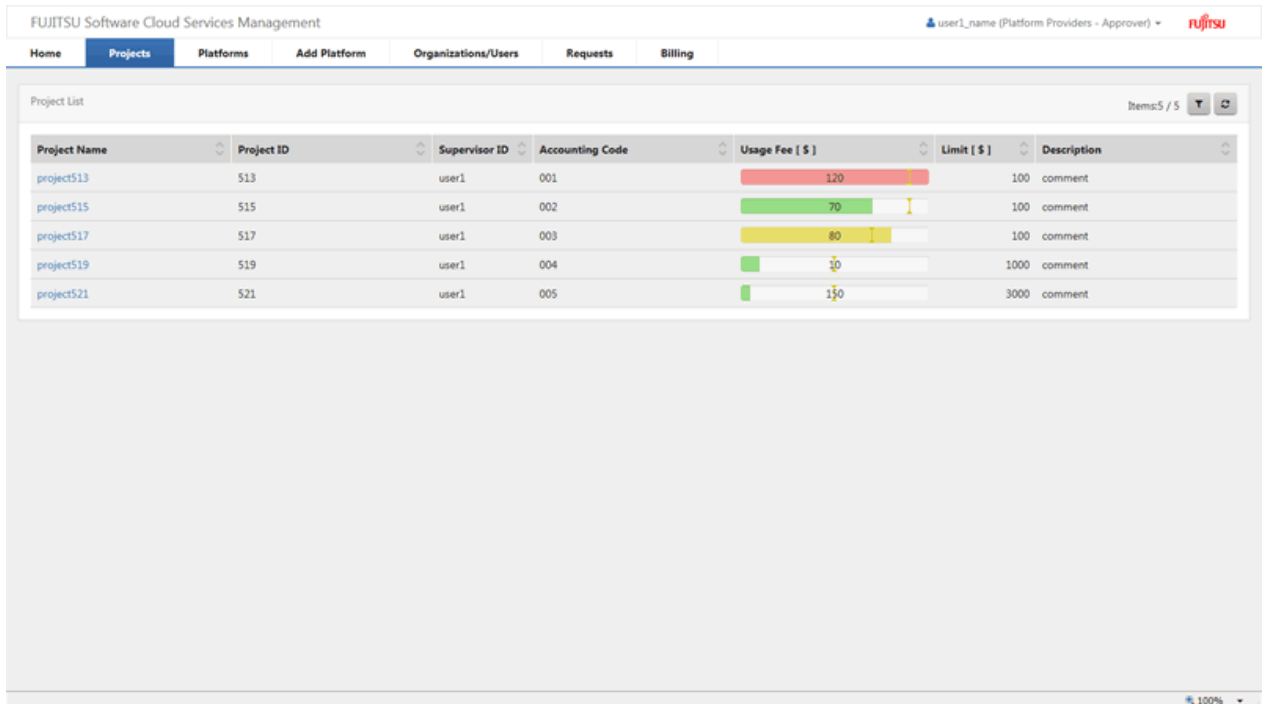
When a platform exists under the project, the project information cannot be deleted. Delete any platforms, or migrate them to under another project before performing deletion.

## 3.3.4 Confirming Added Projects

To confirm an added project, perform the following operations.

1. Go to the [Project Management] menu in the [Home] window and click the [To the list] link. Alternatively, select the [Project] navigation tab.
2. The list of the information of currently added projects is displayed.

Figure 3.3 Project List Window



Project Name	Project ID	Supervisor ID	Accounting Code	Usage Fee [ \$ ]	Limit [ \$ ]	Description
project513	513	user1	001	120	100	comment
project515	515	user1	002	70	100	comment
project517	517	user1	003	80	100	comment
project519	519	user1	004	10	1000	comment
project521	521	user1	005	150	3000	comment

In [Usage Fee], the value of [Limit] is configured as 100%, and the percentage of the corresponding usage charges are indicated using progress bars. The progress bars change color depending on the amount of use in relation to the threshold and limit values.

- a. Usage charges < Threshold: green
- b. Usage charges >= Threshold: yellow
- c. Usage charges >= Limit value: red

Clicking the [Filter] button displayed in the upper right of the list displays the Project Filter window. Specify keywords for [Project Name], [Project ID], [Supervisor ID], or [Accounting Code] to refine the displayed list of projects. Usage charges can be filtered based on their status, such as "Under the Threshold", "Under the Limit, over the Threshold", and "Over the Limit".



## Information

The items displayed to the left of the [Filter] button are displayed as "filtered items / items retrieved from the management server".

## Point

### **Range of project reference depends on the user role**

Depending on the user role, the projects which can be checked will vary.

User Role	Projects which Can be Referenced
Planners - Approver and Representative Operators - Approver, Representative, and Administrator	All Projects
Platform Providers - Approver	<ul style="list-style-type: none"><li>- The approver's own organization and the projects linked to the organizations under it</li><li>- Projects of which the approver is a project manager or a project member</li></ul>
Platform Providers - Representative	Projects of which the representative is a project member

3. Clicking a project name in the list displays the [Project Details] window. [Details] displays the details of an added project, the list of project members, and a list of platforms linked to the project.

Figure 3.4 Project Details Window

The screenshot shows the 'Project Details' window in the FUJITSU Software Cloud Services Management interface. The window is titled 'Project List / Project Detail' and includes a navigation bar with tabs for Home, Projects, Platforms, Add Platform, Organizations/Users, Requests, and Billing. The main content area is divided into three sections: Details, Member List, and Platform List.

**Details Section:**

Project Name	project521
Project ID	521
Supervisor ID	user1
Accounting Code	005
Description	comment
Email Address	test@co.jp
Limit management	Use
Usage Fee / Limit [ \$ ] (Percentage)	0.033 / 0.111 (29%)
Threshold	70%
Main Phone Number	custom 2
Office	custom 4
Floor	custom 5

**Member List Section:**

User Name	User ID	Project Role	Organization Short Name	Email Address	Contact Information
admin	user1	Project Manager	none	xxxx@mail.com	0000-00-00
project user	projectUser001	Project User	none	xxxx@mail.com	0000-00-00
service user	serviceUser001	Service User	none	xxxx@mail.com	0000-00-00
xxxx user@486yyyy	user@486	Project User	none	zzz@mail.mail	001-612-764
xxxx user@214yyyy	user@214	Project User	B/D/Z	zzz@mail.mail	001-922-474
xxxx user@98yyyy	user@98	Project User	A/E/Z	zzz@mail.mail	001-392-243

**Platform List Section:**

Platform Name	Platform ID	Supervisor ID	Platform Code	Description
System Development - 972 - 10	1100	user@374	code-109	comment -- 9
System Development - 1256 - 9	1370	user@394	code-108	comment -- 8

The interface also includes a 'Billing' button, a 'Modify' button, and a 'Page Top' button. The bottom right corner shows a zoom level of 100%.

### 3.3.5 The Approval Process

A request is submitted after addition, modification and deletion of projects and addition and deletion of project members. Operations related to projects and project members can be approved using the corresponding approval flows. This section explains the approval flow of projects and project members.

#### 3.3.5.1 Addition, Modification, and Deletion of Projects

Addition, modification, and deletion of a project are executed after receiving the following two types of approval.

- Approval of the organization linked with the accounting code

Specify the accounting code for the project information. The organization linked with this accounting code is the approver.

Depending on the configurations performed by the operators, in some cases, multiple approvals are required, and in the other cases, no approval is required.

## Point

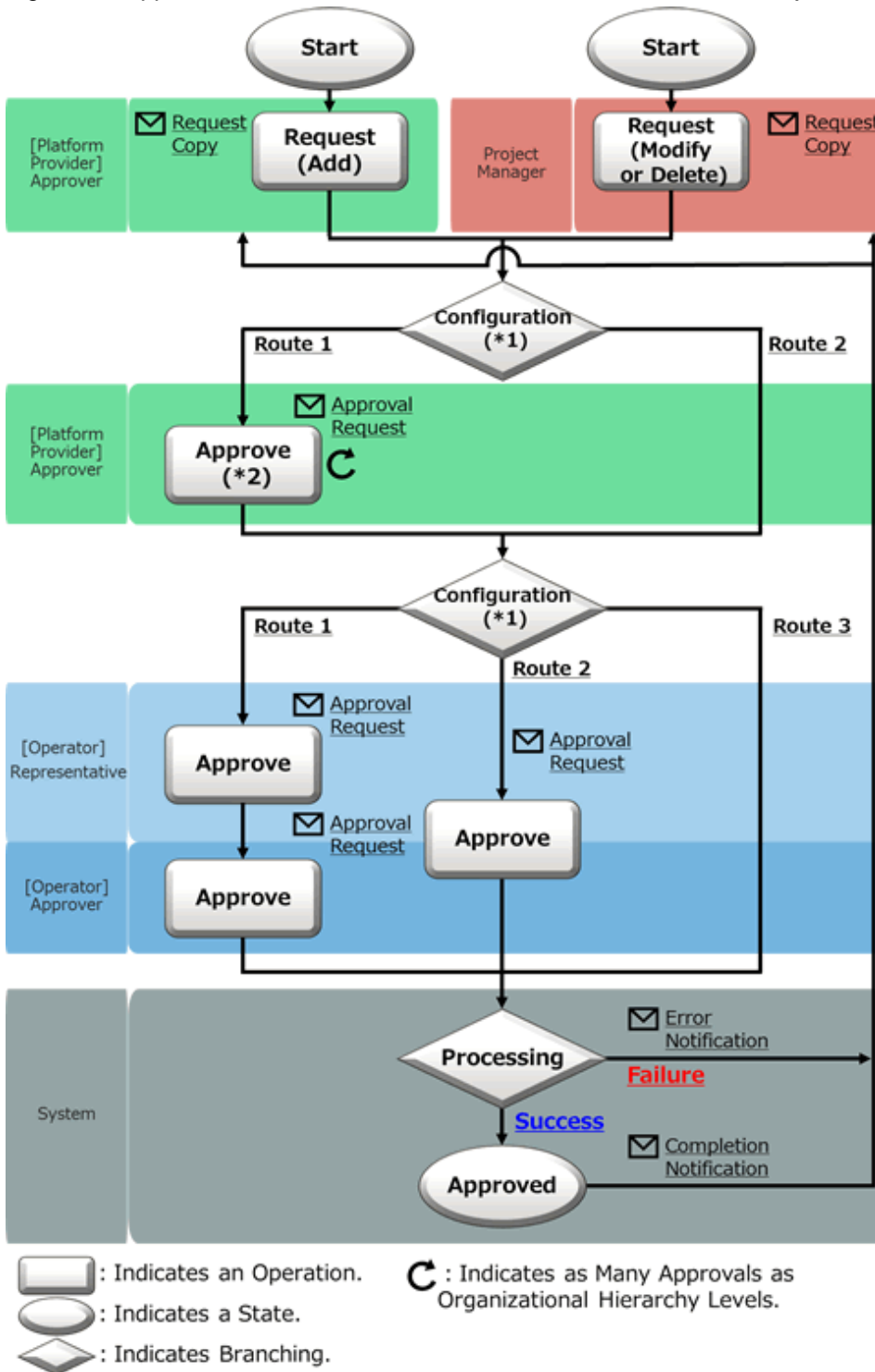
When there is no organization linked with an accounting code, approval by the organization is not required.

### - Approval by operators

Approval is granted by operator representatives or approvers.

Depending on the configurations performed by the operators, in some cases, multiple approvals are required, and in the other cases, no approval is required.

Figure 3.5 Approval Flow of Addition, Modification, and Deletion of a Project



\*1: The approval flow is defined according to the settings performed by the operators. Contact the operators.

\*2: The approver is a user who has the approver role of the organization linked with the accounting code added to the project information.

In [Operation] in the diagram above, not only approval, but also rejection and cancellation operations can be performed. For details on operations and statuses of requests, refer to "Figure 5.1 Changes in Request Status".

### Email Notifications Related to Approvals

After the request or intermediate approval, a request for approval email is sent to all following approvers in the approval flow.

In addition, a notification email with a copy of the request is sent to the user who performs the operation.

After the final approval is granted, the details of the addition or modification are reflected to the system. Upon reflection, a notification of approval completion email is sent to the requester. When the reflection fails for some reason, an error notification email is sent to the requester (TO) and the request operator (CC).

### Confirmation of Request Statuses

To confirm the approval statuses and details of requests for addition, modification, and deletion, view the [Request Management] window.

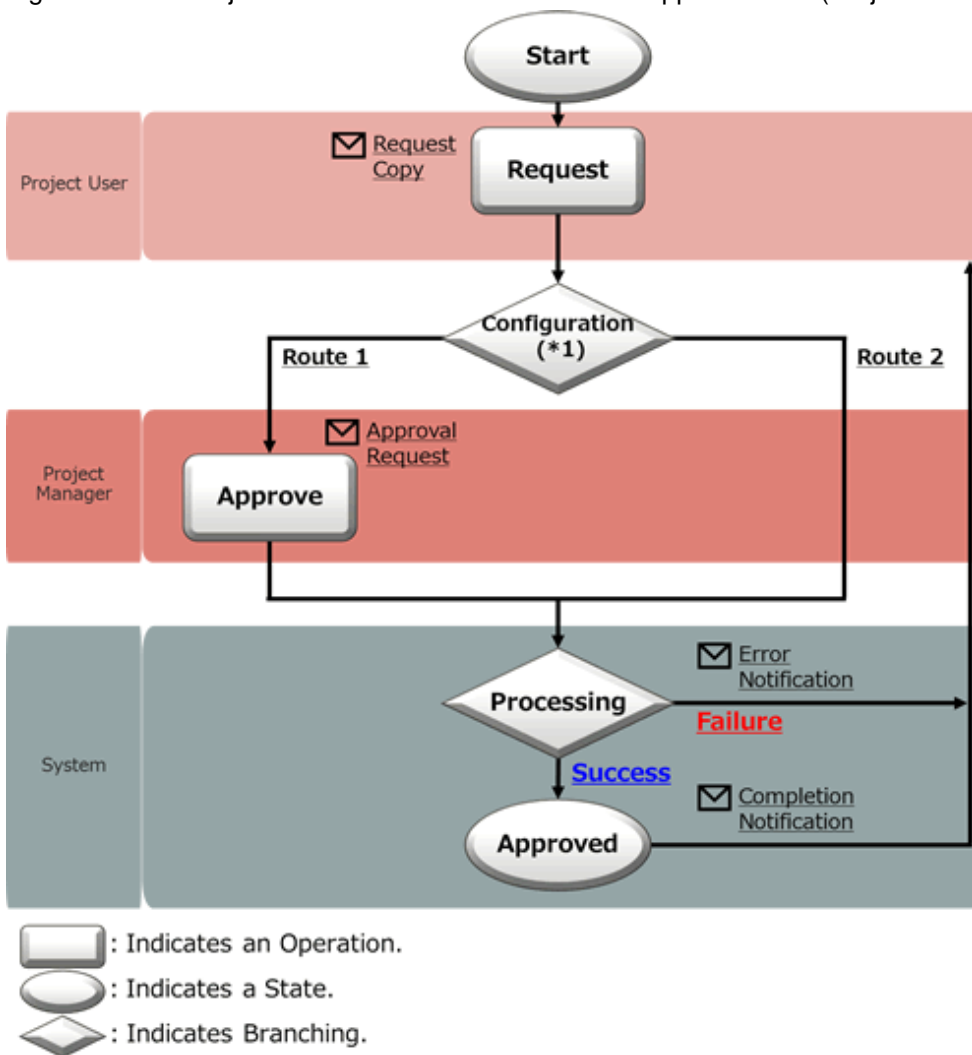
For details on how to perform the main operations in the [Request Management] window, refer to "[Chapter 5 Request Management](#)".

### 3.3.5.2 Addition and Deletion of Project Members

Addition or deletion of project members completes once approval is granted by the project manager of the project to which members are being added or deleted.

Depending on the configuration of the operators, no approval may be required.

Figure 3.6 The Project Member Addition and Deletion Approval Flow (Project User)

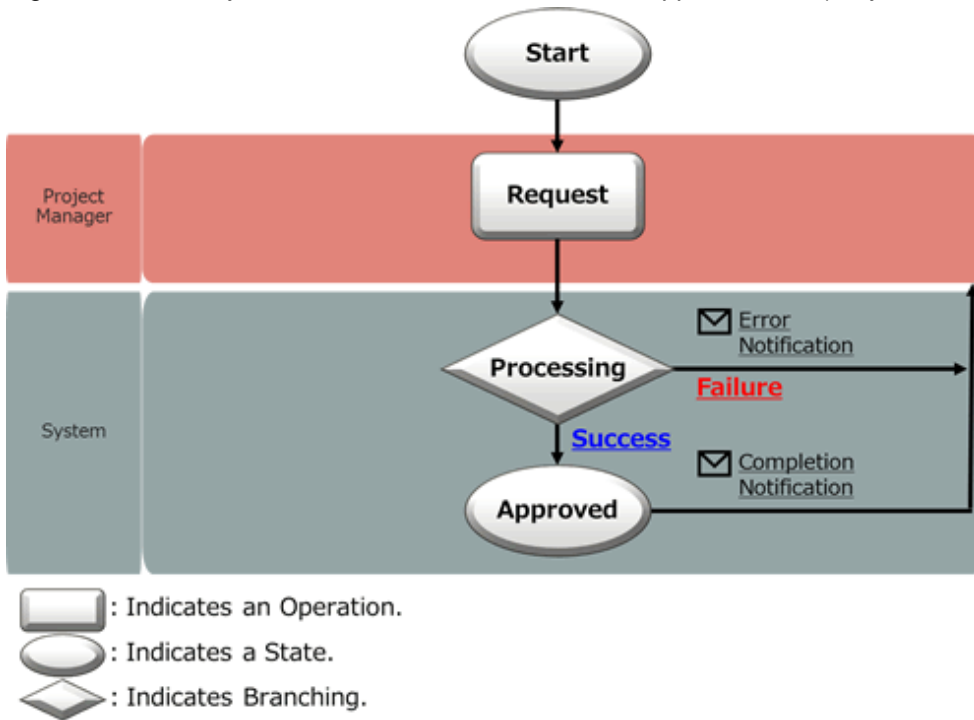


\*1: The approval flow is defined according to the settings performed by the operators. Contact the operators.

In [Operation] in the diagram above, not only approval, but also rejection and cancellation operations can be performed. For details on operations related to and statuses of requests, refer to "[Figure 5.1 Changes in Request Status](#)".

For addition or deletion of members performed by a project manager, approvals are always unnecessary.

Figure 3.7 The Project Member Addition and Deletion Approval Flow (Project Manager)



### Email Notifications Related to Approvals

When an operation is performed by a project user, an approval request email is sent to the project manager.

In addition, a notification email with a copy of the request is sent to the user who performs the operation.

After the final approval is granted, the details of the addition or modification are reflected to the system. Upon reflection, a notification of approval completion email is sent to the requester. When the reflection fails for some reason, an error notification email is sent to the requester (TO) and the request operator (CC).

### Confirmation of Request Statuses

To confirm approval statuses and contents of requests, view the [Request Management] window.

For details on how to perform the main operations in the [Request Management] window, refer to "[Chapter 5 Request Management](#)".

#### Point

- With the administrator role, when adding, modifying, and deleting a project, or adding and deleting a member, as the approval is granted immediately, no approval is necessary.
- When modifying a project in addition to addition and deletion of a project member, the approval flow of addition, modification, and deletion of a project is applied.

# Chapter 4 Platform Management

A platform displays the systems which perform various tasks using clouds. In Platform Management, the connection information of the clouds to use and the usage environment are managed. The platform providers that configure systems submit usage requests.

It is necessary to add a platform to an existing project. If there are no projects available, create a new project for the addition of services.

The authorities of users to perform addition, modification, deletion, or service operations are determined depending on the users' roles (project manager or project user) within the project to which the platform belongs.

This chapter explains how to operate platforms in the Cloud Management Portal.

## 4.1 Adding, Modifying, Deleting, and Confirming Platforms

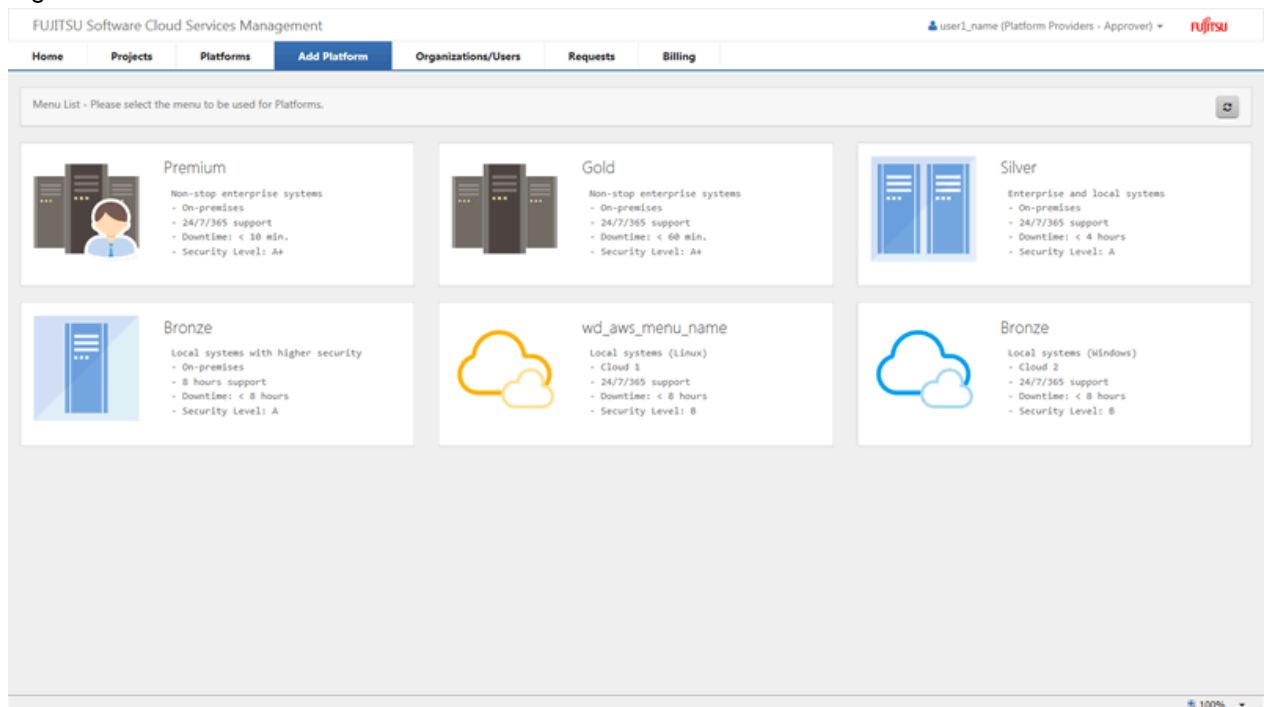
This section explains how to add, modify, delete, and confirm platforms.

### 4.1.1 Adding Platforms

To add a platform, perform the following operations.

1. Go to the [Platform Management] menu in the [Home] window and click the [Add New] link. Alternatively, select the [Add Platform] navigation tab.
2. From [Menu List], click the desired menu.

Figure 4.1 Menu List Window



3. The service contents and charges of the selected menu are displayed.

Figure 4.2 Menu Details Window

The screenshot displays the 'Menu Details' window for a 'Silver' platform. The interface includes a top navigation bar with 'Home', 'Projects', 'Platforms', 'Add Platform', 'Organizations/Users', 'Requests', and 'Billing'. The 'Add Platform' button is highlighted. Below the navigation, the breadcrumb 'Menu List / Menu Details' is visible. The main content area features a 'Silver' platform icon and an 'Add Platform' button. The 'Description' section lists: 'Enterprise and local systems', 'On-premises', '24/7/365 support', 'Downtime: < 4 hours', and 'Security Level: A'. The 'Charges' section is divided into several categories:

Category	Item	Price
Initial Costs	Initial Costs	\$ 10,000,000
	Basic Charges	\$ 5,000,000 per month
Operation Options	Backup	\$3,000,000 per month
	DR	\$ 10,000,000 per service-month
Configuration Options	Instance Type (Small(CPU 1v, Memory 2GiB))	\$ 5,000,000 per hour
	System Disk Image (RHEL)	\$ 5,000,000 per month
	Type of Additional Data Disk (500GiB standard)	\$ 5,000,000 per disk-month
	Others	
SLB	\$ 5,000,000 per month	
RDB	\$ 5,000,000 per month	
Snapshot	\$ 0.500,000 per GB-month	

At the bottom of the content area, there is an 'Add Platform' button. A 'Page Top' button is located in the bottom right corner. The page footer shows a 100% zoom level.

4. Click the [Add Platform] button.



5. Specify the details using the wizard. Click the [Next] button to proceed. Clicking the [Cancel] button discards all of the entries.

Figure 4.3 Add Platform Window

The screenshot shows the 'Add Platform' window in the Fujitsu Software Cloud Services Management interface. The window title is 'FUJITSU Software Cloud Services Management' and the user is logged in as 'user1\_name (Platform Providers - Approver)'. The 'Add Platform' wizard is in the 'Basic Information' step. The form contains the following fields:

- Platform Name:** Enter a string. Entry is mandatory.
- Platform ID:** Enter the ID using lower-case alphanumeric characters, underscores ('\_'), hyphens ('-'), and periods ('.'). The first character must be a lower-case alphanumeric character. Entry is mandatory.
- Project ID:** - Select the item - (dropdown menu)
- Supervisor ID : Supervisor Name:** user1 : user1\_name
- Platform Code:** Enter a string.
- Description:** Enter a string.

Navigation buttons: Next > and Cancel. Zoom: 100%.

a. Basic information

Specify the following items:

**Platform Name (Required)**

This name is displayed in lists such as the platform list.

Any UTF-8 format character string up to 64 characters in length, excluding control characters such as line feeds, can be specified.

**Platform ID (Required)**

This ID is used to distinguish platforms within Cloud Services Management. This item is only enabled during the addition of platforms.

This item can only be specified during addition and cannot be modified.

Do not specify a platform ID which has already been added.

A character string up to 32 characters in length containing lower-case alphanumeric characters, hyphens ("-"), underscores ("\_") and periods (".") can be specified. The beginning character must be a lower-case alphanumeric character.

**Project ID (Required)**

The ID used to manage the common platform between the project member and the payer.

Specify a project of which the operating user is a project member or a project manager.

When the operating user is an administrative user, specify from all projects added in Cloud Services Management.



**Note**

Projects which have exceeded [Limit] are not displayed in the list, and cannot be selected.

#### Supervisor ID: Supervisor Name

The user ID and user name used to identify the supervisor of this platform. When adding a project, the user who performs the addition is automatically configured. Modification can be performed after addition is complete.

#### Platform Code

Enter a code used by the platform to make it easier to link it with the system. The payer code, the serial number, etc. may be specified. If this code is omitted, the same value as the platform ID will be specified.

Any UTF-8 format character string up to 64 characters in length, excluding control characters such as line feeds, can be specified.

#### Description

Enter a description of (comment about) the platform information.

Any UTF-8 format character string up to 256 characters in length, excluding control characters such as line feeds, can be specified.

#### b. Operation options

Depending on the cloud vendor used and the configuration of the menu created, the operation options and configuration options that can be added will vary.

Check the necessary options from among those displayed and click the [Next] button.

#### c. Confirmation

Confirm the content of the addition and the user agreement, check the [Agree] check box and then click the [Request] button.



When adding a platform would cause usage charges to exceed [Limit] of the selected project, a warning message is displayed.

Even if a warning message is displayed, it is still possible to add the platform. However, the available functions are restricted when [Limit] is exceeded.

Consider increasing the [Limit] of charges and then adding the service.

#### d. Complete

Clicking the [Request] button in the [Confirmation] window, causes the request to be indicated as waiting processing, and a request for approval email is automatically sent to the approvers.

## 4.1.2 Modifying Platforms

---

To modify a platform, perform the following operations.

1. Go to the [Platform Management] menu in the [Home] window and click the [To the list] link. Alternatively, select the [Platforms] navigation tab.
2. From the added platforms list, click the name of the platform to be modified.
3. The [Platform Details] window for the platform to be modified is displayed.
4. Click the [Modify] button on the upper right of [Details].
5. The following items can be modified.
  - Platform Name
  - Project ID
  - Supervisor ID
  - Platform Code
  - Description

- Operation Options (varies depending on the selected cloud vendor and menu)

### Note

When the usage charges has already exceeded [Limit] configured in a project, the addition of operation options is not possible.

### Point

Supervisor ID can only be selected by a member (project manager or project user) of the specified project.

6. Clicking the [Next] button displays the [Confirmation] window. To correct any incorrect entries, go back to the previous windows for entry using the [Prev] button and make any necessary corrections.

### Point

When modifying a platform would cause usage charges to exceed [Limit] of the selected project, a warning message is displayed.

Even if a warning message is displayed, it is still possible to modify the platform. However, the available functions are restricted when [Limit] is exceeded.

Consider increasing [Limit] of charges and then modifying the platform.

7. Click the [Request] button in the [Confirmation] window. The request is indicated as waiting processing, and a request for approval email is automatically sent to the approvers.

### Note

After modification of a platform, when modifying a project to which the operating user belongs, the supervisor ID of a project member in the corresponding platform before the modification is specified. A user who is a project member (project manager or project user) in the platform after the modification must modify the supervisor ID of the corresponding platform.

## 4.1.3 Deleting Platforms

---

To delete a platform, perform the following operations.

1. Go to the [Platform Management] menu in the [Home] window and click the [To the list] link. Alternatively, select the [Platforms] navigation tab.
2. From the added platforms list, click the name of the platform to be deleted.
3. The [Platform Details] window of the platform to be deleted is displayed.
4. Clicking the [Delete] button on the upper right of [Details] displays the [Confirmation] window.
5. Clicking the [Yes] button on the lower right in the displayed [Confirmation] window causes the request to be indicated as waiting processing, and a request for approval email is automatically sent to the approvers.

### Note

If there are services included under the platform, it cannot be deleted. Delete any services under a platform before deleting it.

## 4.1.4 Confirming Added Platforms

---

To confirm an added platform, perform the following operations.

1. Go to the [Platform Management] menu in the [Home] window and click the [To the list] link. Alternatively, select the [Platforms] navigation tab.
2. The list of the information of currently added platforms is displayed.

Figure 4.4 Platform List Window

Platform Name	Platform ID	Project ID	Supervisor ID	Platform Code	Description
System Development - 546 - 1	548	513	user@346	code-100	comment -- 0
System Development - 546 - 2	562	513	user@326	code-101	comment -- 1
System - 546 - 3	576	513	user@372	code-102	comment -- 2
System - 546 - 4	590	513	user@10	code-103	comment -- 3
System Development - 546 - 5	604	513	user@500	code-104	comment -- 4
System - 1114 - 6	1186	513	user@24	code-105	comment -- 5
System - 1114 - 7	1200	513	user@50	code-106	comment -- 6
System Development - 1114 - 8	1214	513	user@212	code-107	comment -- 7
System Development - 1114 - 9	1228	513	user@100	code-108	comment -- 8
System Development - 1114 - 10	1242	513	user@50	code-109	comment -- 9
System - 1256 - 1	1258	513	user@234	code-100	comment -- 0
System - 1256 - 2	1272	513	user@26	code-101	comment -- 1
System - 1256 - 3	1286	513	user@250	code-102	comment -- 2
System - 1256 - 4	1300	513	user@472	code-103	comment -- 3
System - 1256 - 5	1314	513	user@86	code-104	comment -- 4
System - 1256 - 6	1328	513	user@440	code-105	comment -- 5
System - 1256 - 7	1342	513	user@234	code-106	comment -- 6
System Development - 1256 - 8	1356	513	user@302	code-107	comment -- 7
System - 1256 - 9	1370	513	user@176	code-108	comment -- 8
System - 1256 - 10	1384	513	user@320	code-109	comment -- 9
wd_bizsystem_name	wd_bizsystem	513	wd_biz_manager_c	wd_bizsystem_code	e2e

Clicking the [Filter] button on the upper right of the list, moves to a window for filtering platforms. Specify keywords for the platform name, platform ID, project ID, supervisor ID, or platform code to refine the displayed list of platforms.

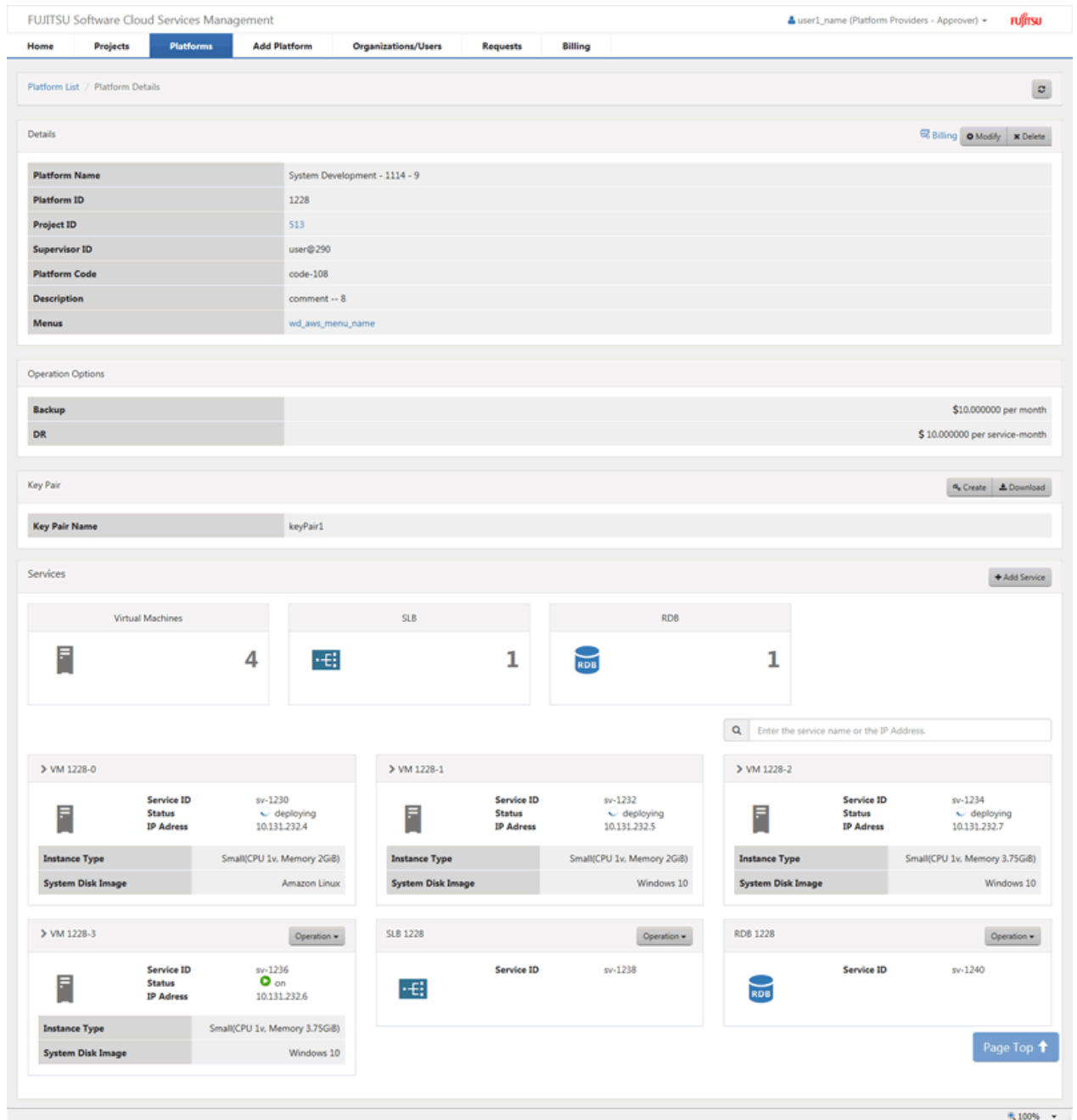
### Information

The items displayed to the left of the [Filter] button are displayed as "filtered items / items retrieved from the management server".

3. Clicking a platform name in the list opens the [Platform Details] window. [Details] displays the information entered when the platform was added. It also displays the following links.
  - Billing
  - Project ID
  - Menu

- [Services] displays a list of the services currently added to the platform. From the services list, starting, stopping, and other operations related to each service is possible. For details on service operations, refer to "4.2.2 Operating Services".

Figure 4.5 Platform Details Window



## 4.1.5 Creating Key Pairs (for AWS and K5)

For a platform created from the menu of AWS or K5, after adding a platform and before adding a service, it is necessary to create a key pair. A created key pair is used when adding the following services to a platform.

- AWS: When adding a Windows or Linux virtual machine
- K5: When adding a Linux virtual machine

### Creating Key Pairs

Use the added [Platform Details] window to create a key pair.

1. Go to the [Platform Management] menu in the [Home] window and click the [To the list] link. Alternatively, select the [Platforms] navigation tab.
2. From the added platforms list, click the name of the platform for which the key pair is created.  
The [Platform Details] window is displayed.

Figure 4.6 Creating Key Pairs



3. Clicking the [Create] button in [Key Pair] displays the confirmation dialog.
4. In the confirmation dialog, click the [Yes] button to create a key pair.  
When creation of the key pair on the cloud completes, an email of creation completion is sent to the email address specified in the project linked with the platform.
5. After receiving the creation completion email, click the [Download] button. A key pair with the file name, "key pair name.pem" is downloaded.

### Note

After creating a key pair, clicking the [Create] button allows the creation of a new key pair.

Only one key pair is retained per platform. When creating a new key pair, the old key pair is deleted. Download and store the initial key pair, before creating a new key pair.

In addition, the newly created key pair can be used to access virtual machines created after the creation of the initial key pair, but not to access virtual machines created before the initial key pair.

Use the initial key pair to access the virtual machines that were created before the new key pair.

### Point

For creation of a key pair, approval is not required.

## Downloading Key Pairs

A key pair is downloaded from the same [Platform Details] window used to create it.

1. Go to the [Platform Management] menu in the [Home] window and click the [To the list] link. Alternatively, select the [Platforms] navigation tab.
2. From the added platforms list, click the name of the platform for which the key pair will be downloaded.
3. The [Platform Details] window is displayed.
4. Click the [Download] button in the [Key Pair] field. A key pair with the file name, "key pair name.pem" is downloaded.



## Note

When [Internet Explorer's Enhanced Security Configuration] is enabled in a Windows Sever environment, it may not be possible to download files using Internet Explorer.

### 4.1.6 The Approval Process

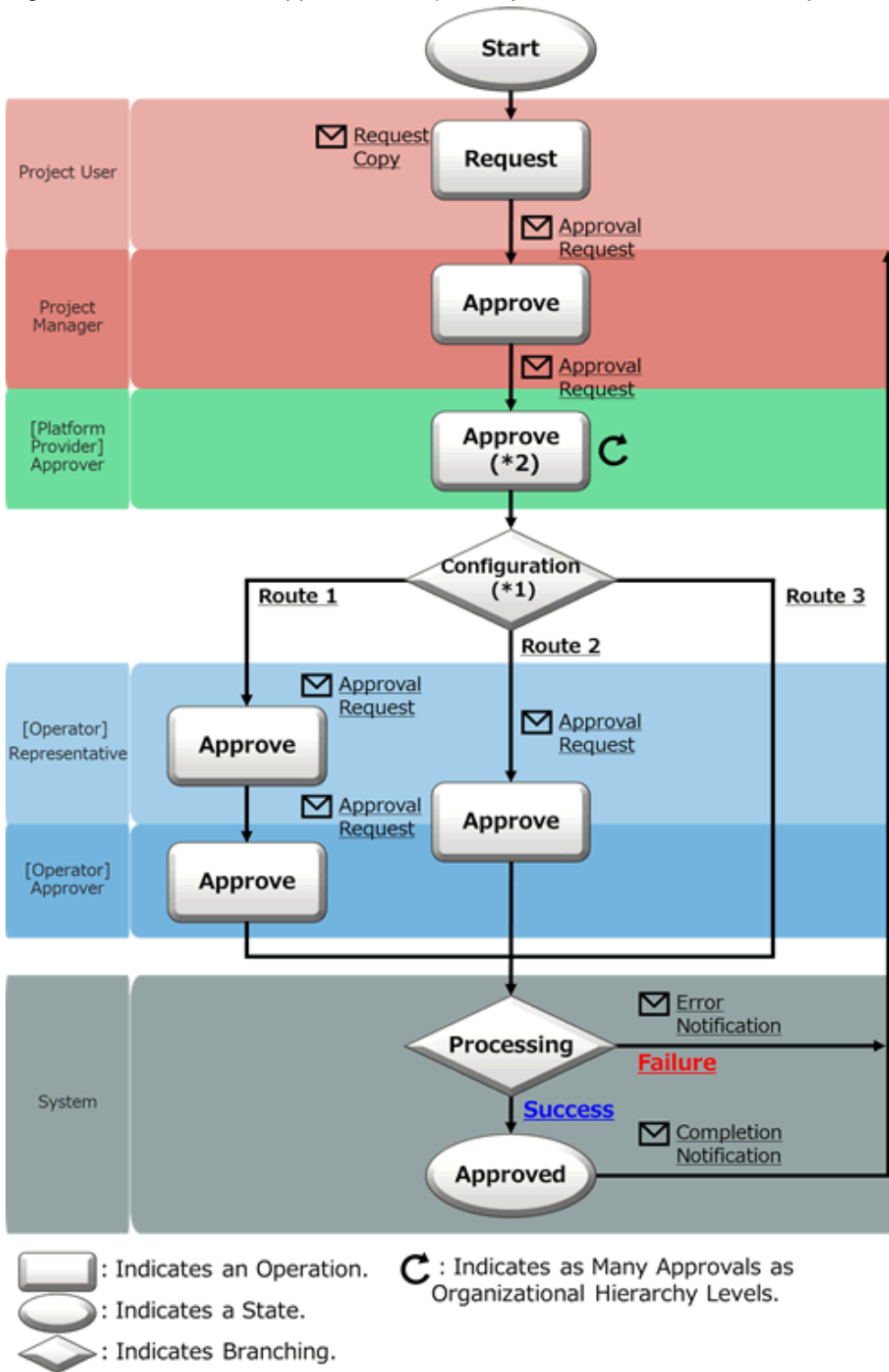
---

For the usage of a platform, approval from each department is required.

[Approval Level] is configured in the selected menu when adding a platform. The approval flow of a platform changes according to [Approval Level].

When [Approval Level] is specified, the approval flow is as described below.

Figure 4.7 The Platform Approval Flow (for Project Users, with the Level Specified)



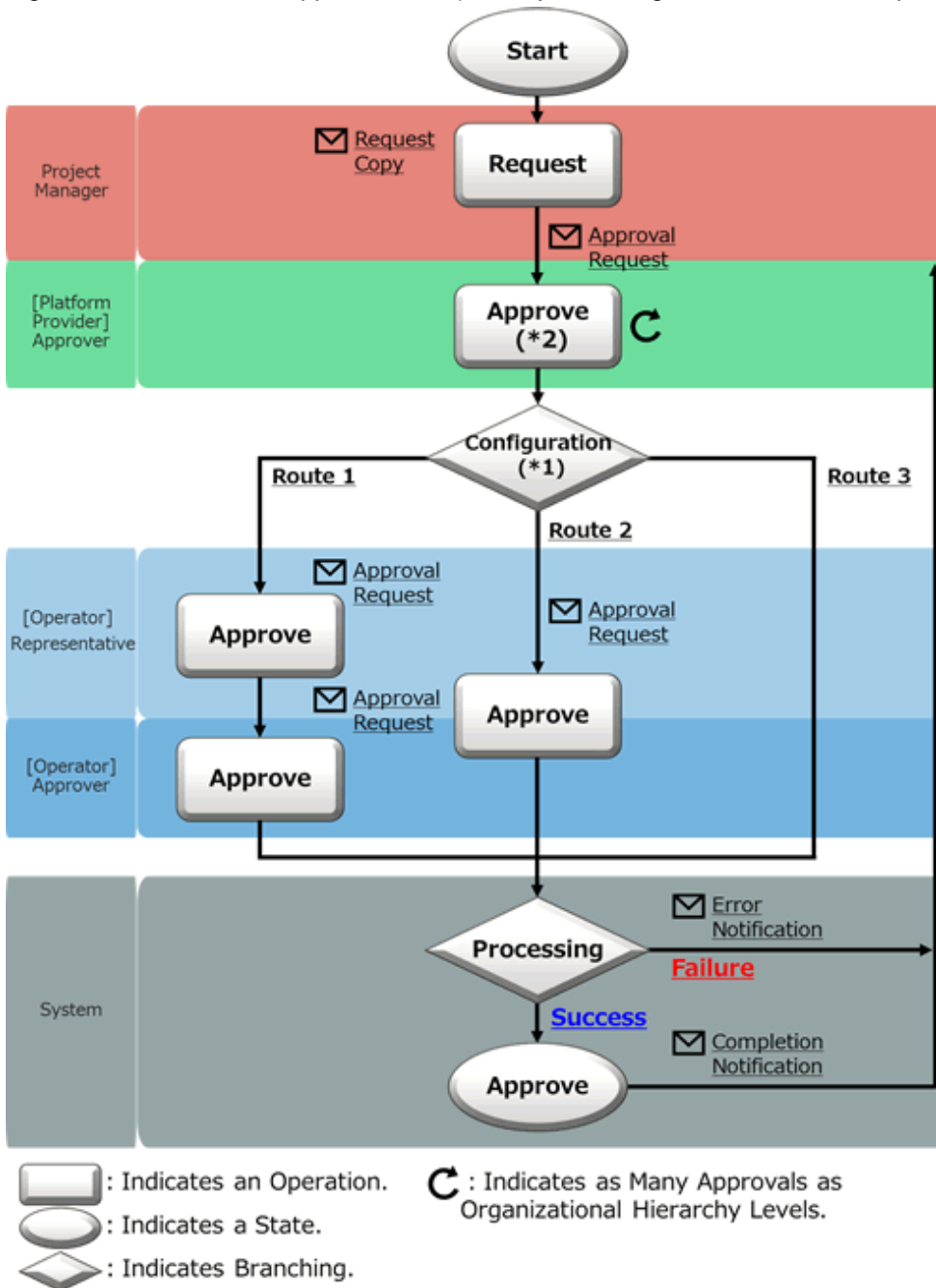
\*1: The approval flow is defined according to the settings performed by the operators. Contact the operators.

\*2: The approver is a user who has the approver role of the organization linked with the accounting code added to the project information.

In [Operation] in the diagram above, not only approval, but also rejection and cancellation operations can be performed. For details on operations and statuses of requests, refer to "[Figure 5.1 Changes in Request Status](#)".



Figure 4.8 The Platform Approval Flow (for Project Managers, with the Level Specified)



\*1: The approval flow is defined according to the settings performed by the operators. Contact the operators.

\*2: The approver is a user who has the approver role of the organization linked with the accounting code added to the project information.

In [Operation] in the diagram above, not only approval, but also rejection and cancellation operations can be performed. For details on operations and statuses of requests, refer to "Figure 5.1 Changes in Request Status".

First, approval is granted at the level of the project belonging to the platform. When the user who performs addition, modification, and deletion has the role of project user, approval must be granted by the project manager of the project to which the platform belongs ("Figure 4.7 The Platform Approval Flow (for Project Users, with the Level Specified)").

When the operating user is a project manager, approval is not necessary ("Figure 4.8 The Platform Approval Flow (for Project Managers, with the Level Specified)").

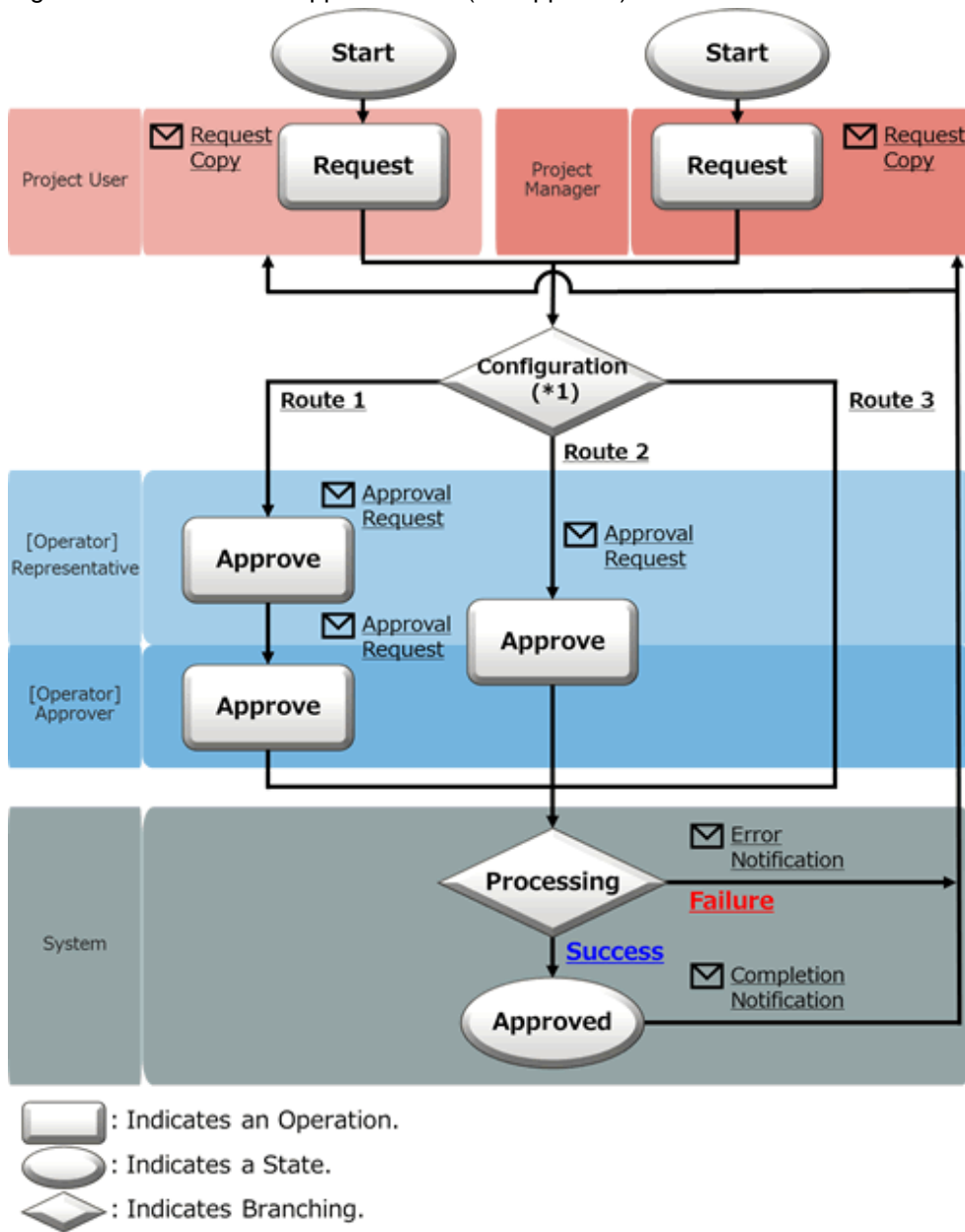
Next, approval is granted by the organization linked with the accounting code of the project. In the project, the accounting code to manage the payment type of usage charges of the platforms under the project is added. This accounting code links the project to a specific organization and approval is granted by this organization. Next, the approval depending on [Approval Level] specified in the menu is granted on each level (such as approval by department or division). When there is no organization linked with an accounting code, approval by the organization is skipped.

Last, approval is granted by the operators. The approval flow of operators is a route configured in the system based on the operation environment.

After approval on all levels, addition, modification, and deletion are reflected.

When "No Approval" is specified for [Approval Level] of the selected menu, the flow is as described below.

Figure 4.9 The Platform Approval Flow (No Approval)



\*1: The approval flow is defined according to the settings performed by the operators. Contact the operators.

In [Operation] in the diagram above, not only approval, but also rejection and cancellation operations can be performed. For details on operations related to and statuses of requests, refer to "Figure 5.1 Changes in Request Status".

When [Approval Level] of the menu is "No Approval", approvals at the level of the project to which the user belongs, and at the level of the organization linked with the accounting code, are not necessary.

After approval is granted by the operators, addition, modification, and deletion are reflected.

### Information

---

When addition, modification, and deletion are performed by an administrator user, regardless of the menu settings, addition, modification, and deletion are reflected without the need for approval.

---

## Email Notifications Related to Approvals

After a request is submitted or intermediate approval is granted, a request for approval email is sent to all subsequent approvers in the approval flow.

In addition, a notification email with a copy of the request is sent to the user who performs the operation.

After the final approval is granted, the details of the addition or modification are reflected to the system. Upon reflection, a notification of approval completion email is sent to the requester. When the reflection fails for some reason, an error notification email is sent to the requester (TO) and the request operator (CC).

## Confirmation of Request Statuses

To confirm the approval statuses and details of requests for addition, modification, and deletion, view the [Request Management] window.

For details on how to perform the main operations in the [Request Management] window, refer to "[Chapter 5 Request Management](#)".

## 4.2 Service Management

---

On the Cloud Management Portal, "services" refers to virtual machines, SLBs, and RDBs deployed in platforms.

This chapter explains service management and operations including starting and stopping.

### Note

---

- If you receive a completion notification email which contains an error, contact the operators.
  - Services created on the Cloud Management Portal must not be directly modified, deleted or stopped/started on the cloud service integrated with Cloud Services Management. When services are directly modified, deleted, stopped, or started, trouble resulting from inconsistencies between service configurations or inaccurate calculation of billing may occur.
- 

### 4.2.1 Adding, Modifying, Deleting, and Confirming Services

---

The platform providers who manage platforms mainly perform the management of services.

This section explains how to add, modify, delete, and confirm services.

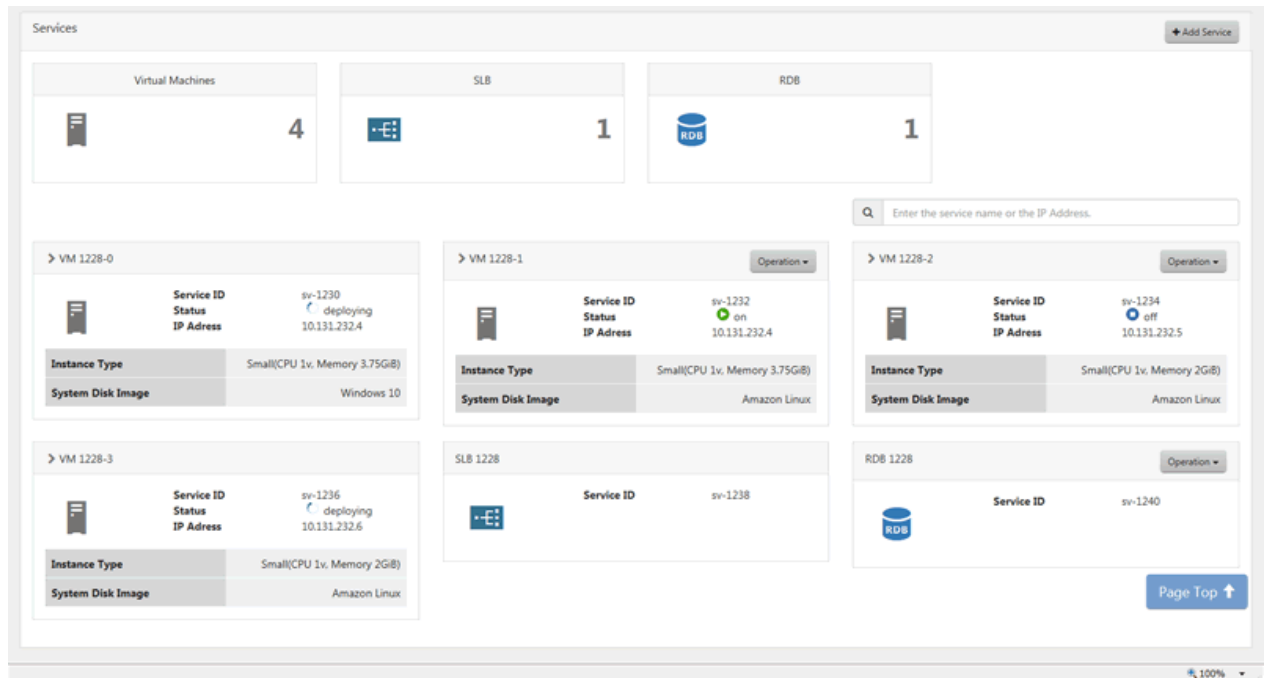
#### 4.2.1.1 Adding Services

This section explains how to add services.

1. Go to the [Platform Management] menu in the [Home] window and click the [To the list] link. Alternatively, select the [Platforms] navigation tab.
2. The [Platform List] window is displayed.
3. Click the name of the target platform for the addition of a service.

4. The [Platform Details] window is displayed. Click the [Add Service] button displayed in [Services].

Figure 4.10 Platform Details Window - Services



### Note

The addition of a service to a platform under a project which has exceeded its limit of usage charges is not possible. In addition, the [Add Service] button is not displayed.

5. The [Add Service] window is displayed. Specify the details using the wizard. Click the [Next] button to proceed. Clicking the [Cancel] button discards all of the entries.
  - a. Add Service

Select the type of service to be added and click the [Add] button, the information fields required for the addition of the corresponding service are displayed. Each time the [Add] button is clicked, information fields for a new service are displayed, allowing for multiple services to be added at once. To cancel an addition, click the cross button above an entry field to remove the entry field.

For SLBs and RDBs, addition is only supported for the platforms created from menus with configuration options which include SLB or RDB (a menu created from an AWS subscription).

### Note

The number of virtual machine that can be added in one addition operation can be limited to one depending by the menu linked to the platform. Confirm the restrictions for each menu with the [Menu Details] window displayed when clicking the [Menus] link in the [Platform Details] window. If services are added which exceed the limit of a menu, the request is rejected by the operators.

#### Adding Virtual Machines

Specify the following items:

Item	Entry
Service Name (Required)	Specify the service name.

Item	Entry
	Any UTF-8 format character string up to 64 characters in length, excluding control characters such as line feeds, can be specified.
Service ID (Required)	<p>Specify the service ID.</p> <p>This item can only be specified during addition and cannot be modified.</p> <p>Do not specify a service ID which has already been added.</p> <p>A character string 3 to 15 characters in length containing lower-case alphanumeric characters and hyphens ("-") can be specified. The first character must be a lower-case alphabetic character, the final character must be a lower-case alphanumeric character.</p> <p>The service ID is used as name of the virtual machine on the cloud service integrated with Cloud Services Management.</p>
Instance Type (Required)	Select from the list box if several options exist.
System Disk Image (Required)	Select from the list box if several options exist.
Type of Additional Data Disk	Select from the list box.
Number of Additional Data Disks	<p>Only displayed if an additional data disks are specified.</p> <p>Specify using a numeral from 0 to 99999999.</p>

### Note

#### **When additional disks are included in the image of a virtual machine**

Specify the number of additional data disks including the number of additional data disks in the image.

#### **When adding the first virtual machine under a platform in ROR**

It is necessary to specify the number of additional data disks defined in the L-Platform template for [Number of Additional Data Disks].

When the value is different from the value defined in the L-Platform template, an error occurs.

If you want to modify the number of additional data disks, first add the first virtual machine, and then specify [Number of Additional Data Disks] by modifying the service.

#### **When adding the second or later virtual machines under a platform in ROR**

After confirming that the first virtual machine has been added to the cloud, add the second and later virtual machines.

When adding multiple virtual machines at the same time, if virtual machines are added before the L-Platform is created, the addition may fail.

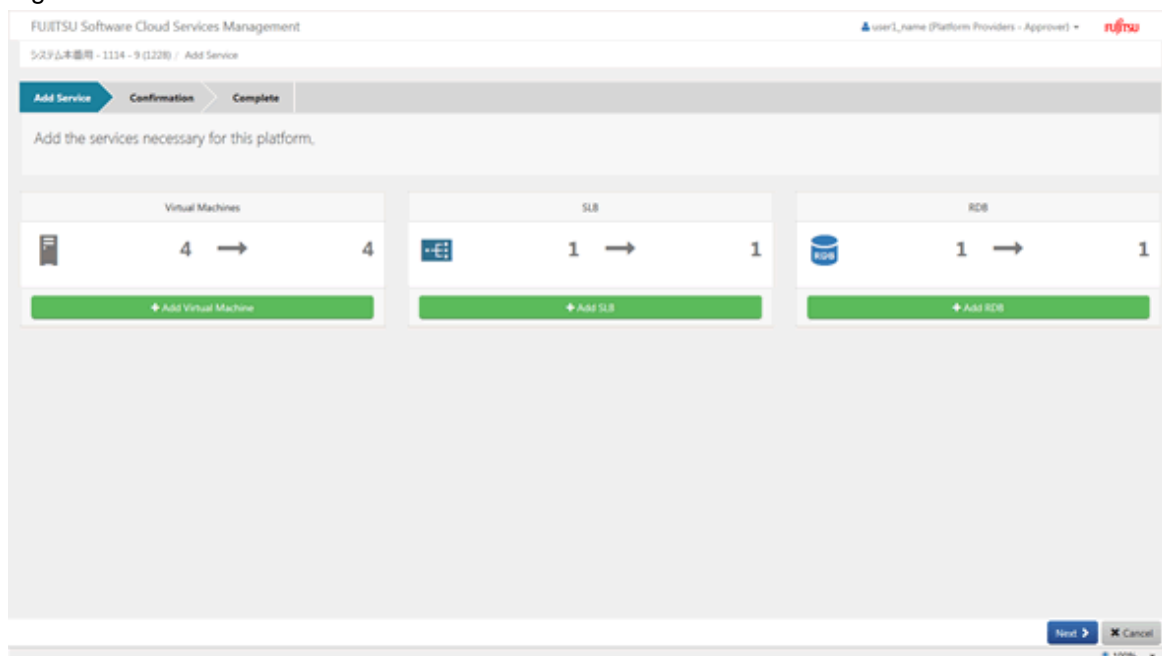
#### Adding SLBs or RDBs

Specify the following items:

Item	Entry
Service Name (Required)	Specify the service name.

Item	Entry
	Any UTF-8 format character string up to 64 characters in length, excluding control characters such as line feeds, can be specified.
Service ID (Required)	<p>Specify the service ID.</p> <p>This item can only be specified during addition and cannot be modified.</p> <p>Do not specify a service ID which has already been added.</p> <p>A character string 3 to 15 characters in length containing lower-case alphanumeric characters and hyphens ("-") can be specified. The first character must be a lower-case alphabetic character, the final character must be a lower-case alphanumeric character.</p>

Figure 4.11 Add Service Window



#### b. Confirmation

The Confirmation window for the additional services is displayed. This window shows entries and estimated charges for the monthly usage of the additional services. To correct any incorrect entries, go back to the previous windows for entry using the [Prev] button and make any necessary corrections. Check the box to the left of [Agree] in the user agreement and click the [Request] button on the lower right.

#### Note

When adding a service would cause usage charges to exceed [Limit] of the selected project, a warning message is displayed.

Even if a warning message is displayed, it is still possible to add the service. However, the available functions are restricted when [Limit] is exceeded.

Consider increasing the [Limit] of charges and then adding the service.

c. Complete

Click the [Complete] button. The request is indicated as waiting processing, and a request for approval email is automatically sent to the approvers.

 Point

.....  
If a user agreement is not specified for the menu linked to the platform, the [Agree] check box is not displayed and the check is not necessary.  
.....

## 4.2.1.2 Modifying Services

This section explains how to modify services.

 Note

.....  
The modification of a service is reflected after the final approval of the request has been granted, and the processing on the integrated cloud has finished.

For AWS, ROR, and VMware, the relevant virtual machine must be stopped once the request for modification is approved by an operator approver. If the virtual machine is running, the service is not modified and an error message is sent to the address specified during setup. When modifying a virtual machine, perform one of the following operations:

- Before a virtual machine is modified, stop the virtual machine and do not start the virtual machine again until the modification of the service has completed.
- Coordinate with the operators regarding the timing of the modification of the virtual machine before performing the modification. Stop the service by the predetermined time and do not start the services again until modification has been completed.

However, it is not necessary to stop a virtual machine when changing the virtual machine name.

For Azure and K5, a service can be modified even if it is running or stopped. After modification, the status of a service is the same as its status before modification.

- .....
1. Go to the [Platform Management] menu in the [Home] window and click the [To the list] link. Alternatively, select the [Platforms] navigation tab.
  2. The [Platform List] window is displayed.
  3. Click the name of the platform on which services are to be modified.
  4. The [Platform Details] window is displayed. Here, select [Modify] from the [Operation] pull-down menu located next to the name of the target service.
  5. The [Modify Service] window is displayed. The following items can be modified:
    - a. Virtual machine modification
      - Service name
      - Instance type
      - Type of Additional Data Disk
      - Number of Additional Data Disks
    - b. SLB/RDB modification
      - Service name

## Note

"Type of Additional Data Disk" can only be modified from "None" once. Only one type of disk can be specified for each virtual machine. Even if the number of additional data disks is modified to "0", the specified types of additional data disks is retained.

When deleting additional data disks, note the following:

- For AWS, additional data disks are deleted in reverse order of the disk number of the OS (for Windows) or the name of the block device (for Linux).
- For Azure, additional data disks are deleted in descending order of LUN (logical unit number). The order of LUN may not be identical to the order of the devices on the OS. Delete additional data disks after confirming the correspondence relation between the LUN and the devices using OS commands, etc.
- In the other cases, additional data disks are deleted according to the device name in descending order.

When collecting snapshots, note the following points:

- For K5, when the additional data disks to be deleted are included in a snapshot, the number of additional data disks cannot be decreased.

In addition, when the usage charges have already exceeded [Limit] configured in the project, modification of instance types and attachment of additional data disks are not possible.

6. Clicking the [Next] button displays the [Confirmation] window. To correct any incorrect entries, go back to the previous windows for entry using the [Prev] button and make any necessary corrections.
7. Click the [Request] button. The request is indicated as waiting processing, and a request for approval email is automatically sent to the approvers.

### 4.2.1.3 Deleting Services

This section explains how to delete services.

1. Go to the [Platform Management] menu in the [Home] window and click the [To the list] link. Alternatively, select the [Platforms] navigation tab.
2. The [Platform List] window is displayed.
3. Click the name of the platform on which services are to be deleted.
4. The [Platform Details] window is displayed. Select [Delete] from the [Operation] pull-down menu located next to name of the target service.
5. Clicking the [Yes] button on the lower right in the displayed [Confirmation] window causes the request to be indicated as waiting processing, and a request for approval email is automatically sent to the approvers.

## Note

- For AWS and K5, the snapshots of the service to be deleted are also deleted.
- Even the service is running, the snapshots can be deleted.

### 4.2.1.4 Confirming Added Services

This section explains how to confirm added services.

1. Go to the [Platform Management] menu in the [Home] window and click the [To the list] link. Alternatively, select the [Platforms] navigation tab.
2. The [Platform List] window is displayed.

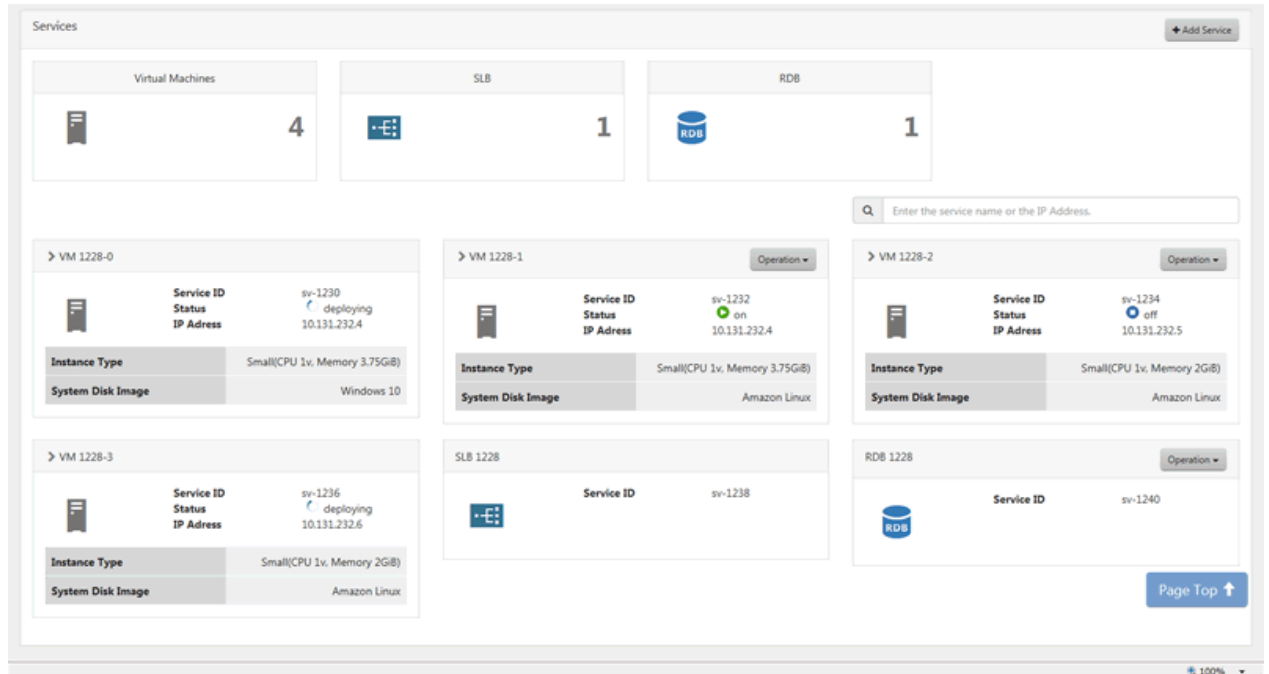


3. Click the name of the platform on which services are to be confirmed.

The [Platform Details] window is displayed. The services that are currently available are shown in the [Services] area of the [Platform Details] window. Services which are waiting processing are not displayed.

The operational status of each service can be confirmed.

Figure 4.12 Platform Details Window - Services



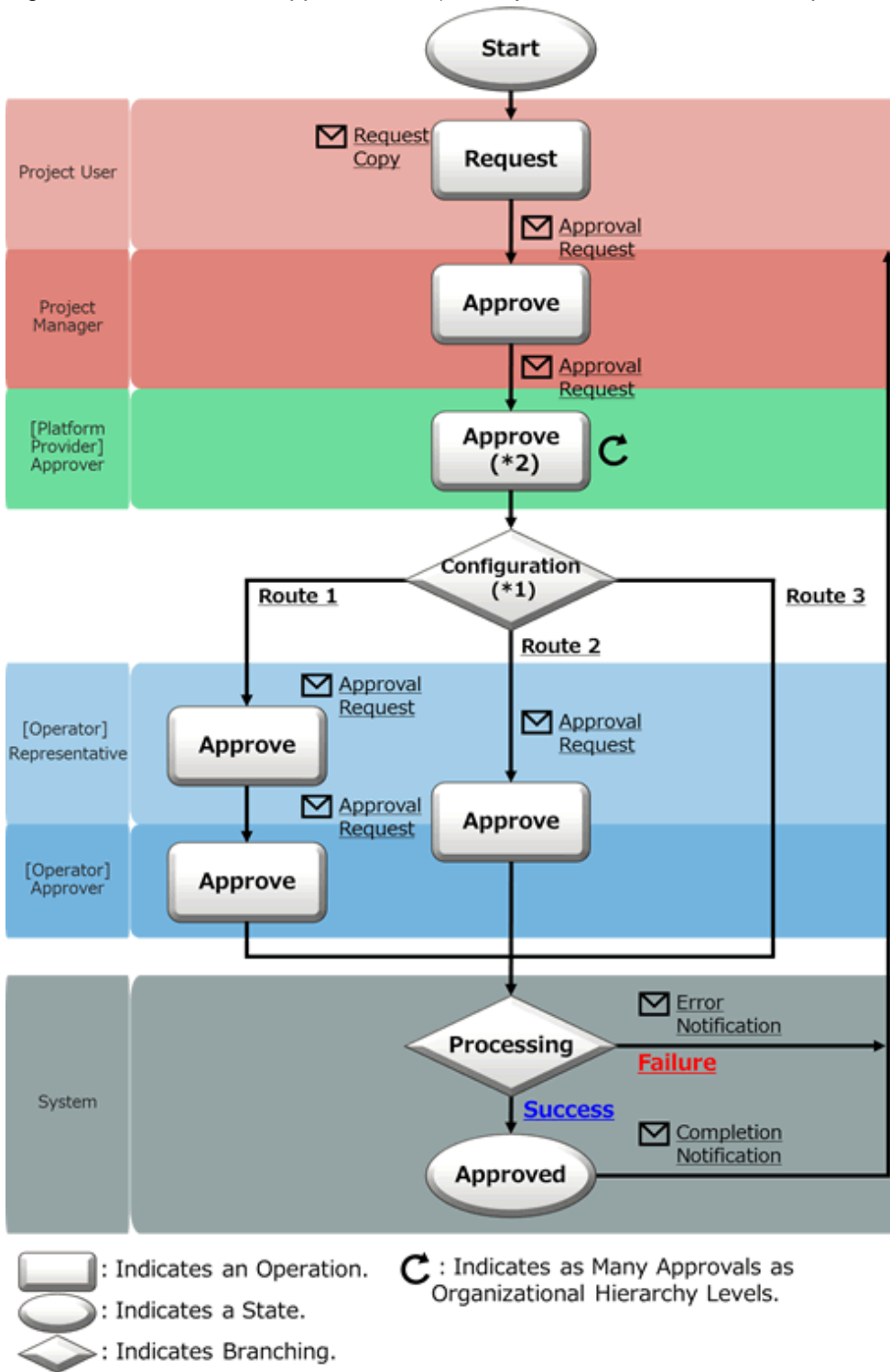
#### 4.2.1.5 The Approval Process

For addition, modification, and deletion of a service, approval by each department is required.

The approval flow of services, in the same way as for addition, modification, and deletion operations targeting platforms, varies according to [Approval Level], and is configured in the linked menu.

When [Approval Level] is specified, the approval flow is as described below.

Figure 4.13 The Service Approval Flow (for Project Users, with the Level Specified)

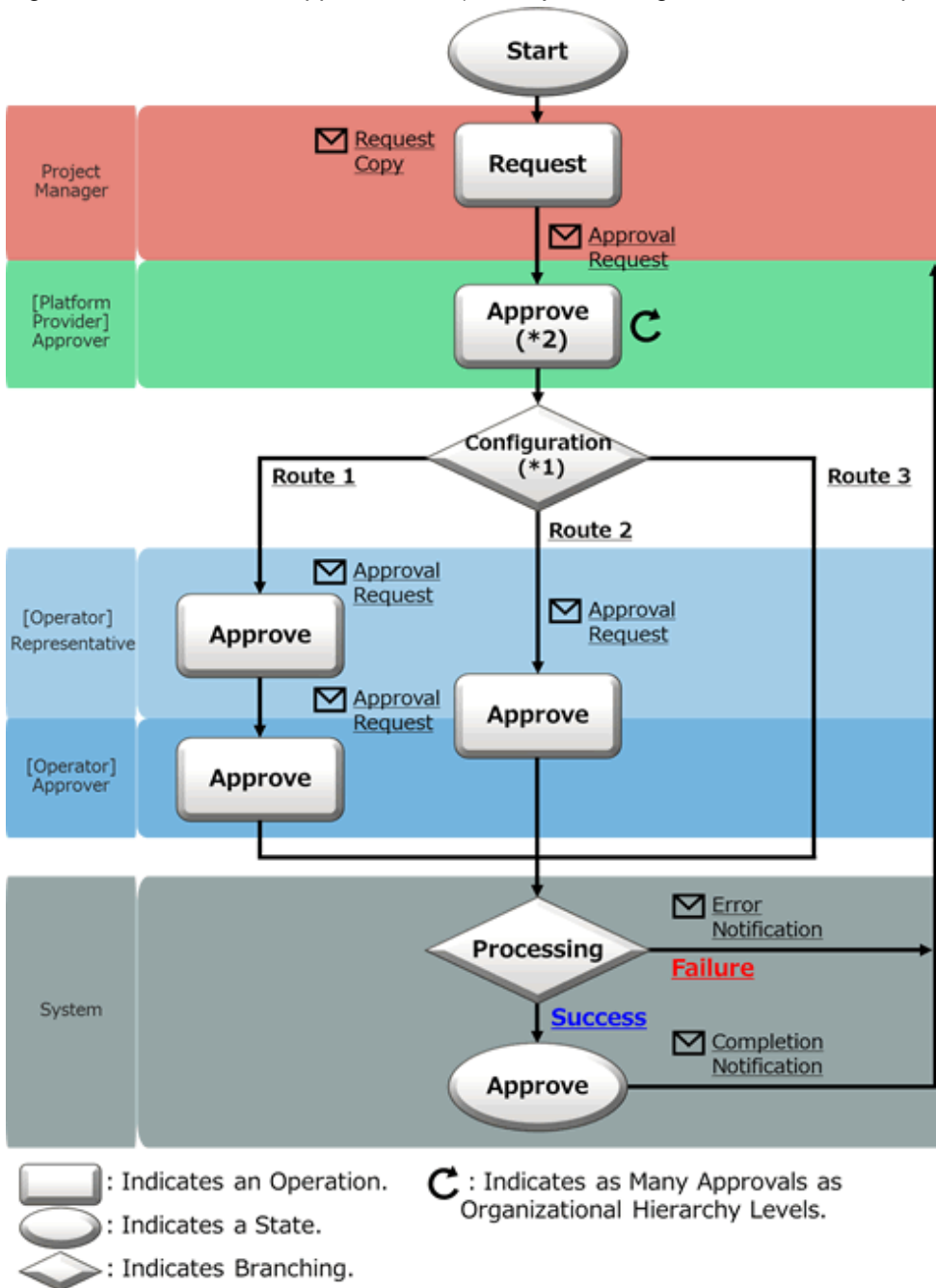


\*1: The approval flow is defined according to the settings performed by the operators. Contact the operators.

\*2: The approver is a user who has the approver role of the organization linked with the accounting code added to the project information.

In [Operation] in the diagram above, not only approval, but also rejection and cancellation operations can be performed. For details on operations and statuses of requests, refer to "Figure 5.1 Changes in Request Status".

Figure 4.14 The Service Approval Flow (for Project Managers, with the Level Specified)



\*1: The approval flow is defined according to the settings performed by the operators. Contact the operators.

\*2: The approver is a user who has the approver role of the organization linked with the accounting code added to the project information.

In [Operation] in the diagram above, not only approval, but also rejection and cancellation operations can be performed. For details on operations and statuses of requests, refer to "Figure 5.1 Changes in Request Status".

First, approval is granted at the level of the project belonging to the platform. When the user who performs addition, modification, and deletion has the role of project user, approval must be granted by the project manager of the project to which the platform belongs ("Figure 4.13 The Service Approval Flow (for Project Users, with the Level Specified)").

When the operating user is a project manager, approval is not necessary ("Figure 4.14 The Service Approval Flow (for Project Managers, with the Level Specified)").

Next, approval is granted by the organization linked with the accounting code of the project. In the project, the accounting code to manage the payment type of usage charges of the platforms under the project is added. This accounting code links the project to a specific organization and approval is granted by this organization. Next, approval is granted on each level, depending on the level specified in the menu (such as approval by department or division). When there is no organization linked with an accounting code, approval by the organization is skipped.

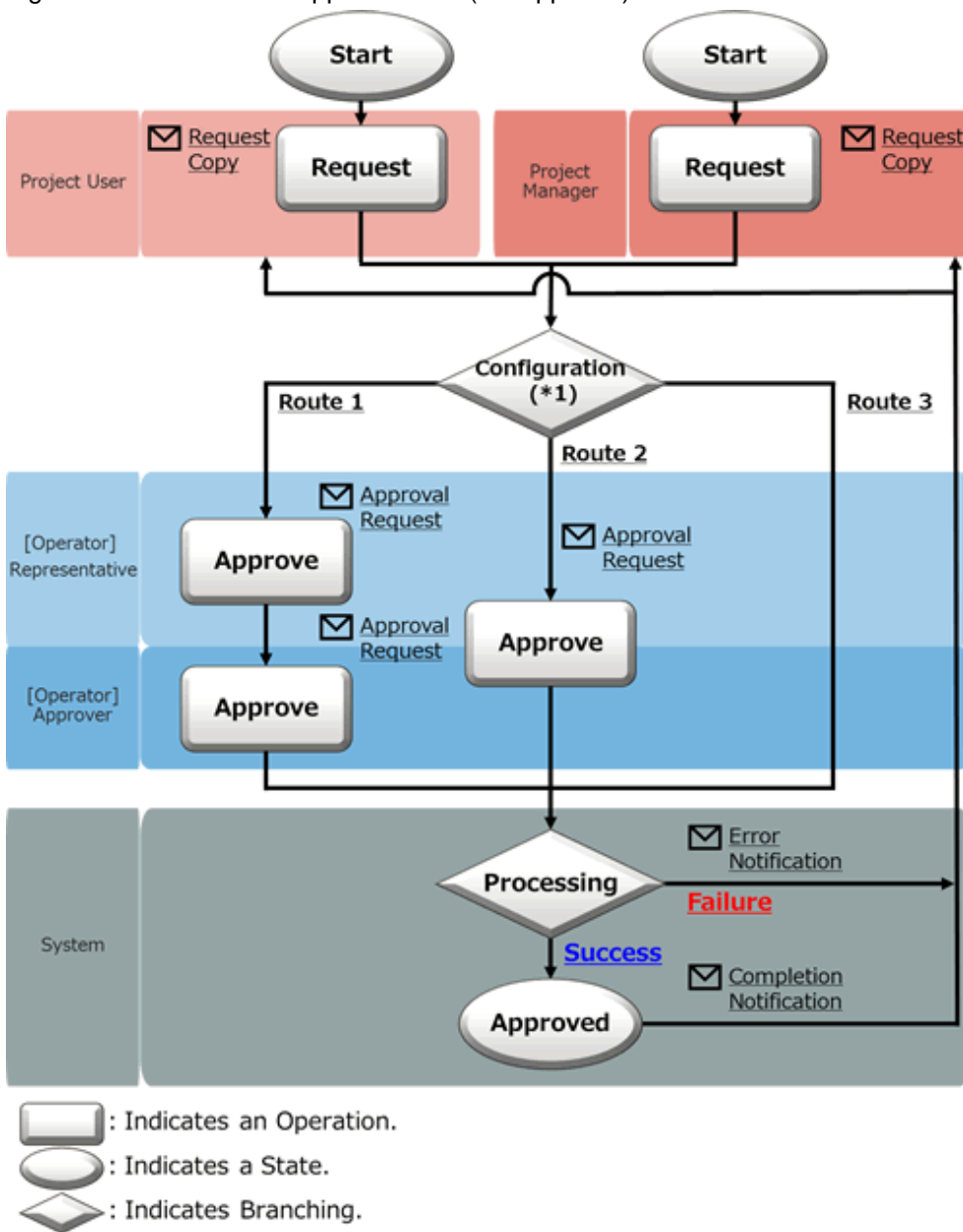
Last, approval is granted by the operators. The approval flow of operators is a route configured in the system based on the operation environment.

After approval on all levels, addition, modification, and deletion are executed.

Service operations and charge calculations will be performed after all the approvals have been granted and the service becomes available.

When "No Approval" is specified for the approval level of the linked menu, the flow is as described below.

Figure 4.15 The Service Approval Flow (No Approval)



\*1: The approval flow is defined according to the settings performed by the operators. Contact the operators.

In [Operation] in the diagram above, not only approval, but also rejection and cancellation operations can be performed. For details on operations related to and statuses of requests, refer to "[Figure 5.1 Changes in Request Status](#)".

When the approval level of the menu is "No Approval", the approval at the level of the project to which the user belongs, and the organization linked with the accounting code is not necessary.

After approval is granted by the operators, addition, modification, and deletion are executed.



## Information

When addition, modification, and deletion are performed by an administrator user, regardless of the menu settings, addition, modification, and deletion are executed without the need for approval.

## Email Notifications Related to Approvals

After a request is submitted or intermediate approval is granted, a request for approval email is sent to all subsequent approvers in the approval flow.

In addition, a notification email with a copy of the request is sent to the user who performs the operation.

After the final approval is granted, the approval completion notification email is sent, and the details of the addition or modification are reflected on the integrated cloud. When the reflection fails for some reason, an error notification email is sent to the requester (TO) and the request operator (CC).

## Confirmation of Request Statuses

To confirm the approval statuses and details of requests for addition, modification, and deletion, view the [Request Management] window.

For details on how to perform the main operations in the [Request Management] window, refer to "[Chapter 5 Request Management](#)".

## Using Services

After the final approval of the request for addition of a service is granted and the service is deployed on a cloud, in addition to a notification of approval completion, a notification of completion of deployment email and an email containing details of the service are sent to the requester.

Use the information described in the deployment completion email to access the virtual machine. For details on the types of deployment completion emails, refer to "[Table 4.1 Types and Destinations of Completion Notifications](#)".

## 4.2.2 Operating Services

---

This section explains how to operate services from the Cloud Management Portal. From the Cloud Management Portal, starting and stopping of deployed services and acquisition of snapshot operations are possible.

For service operations, approval is not required.

### 4.2.2.1 Starting

This section explains how to start services.

1. From [Services] of the [Platform Details] window, select [Start] from the [Operation] pull-down menu located next to the name of the relevant service.
2. The [Confirmation] window is displayed. Click the [Yes] button on the lower right.
3. If the status is displayed as "on", starting is complete.

## Note

- After the status displays as "on", it takes from several tens of seconds to several minutes for the virtual machine to start on the cloud.

In addition, the status displayed on the Cloud Management Portal can be different from the power status of the virtual machine (for example, when a virtual machine is shut down by access using the cloud service console). Perform any service operations from the Cloud Management Portal.

- When the usage charges have already exceeded [Limit] configured in a project, the virtual machine cannot be started.

### 4.2.2.2 Stopping

This section explains how to stop services.

1. In [Services] of the [Platform Details] window, select [Stop] from the [Operation] pull-down menu located next to the name of the target service.
2. The [Confirmation] window is displayed. Click the [Yes] button on the lower right.
3. If the status is displayed as "off", stopping is complete.

## Note

After the status displays as "off", it takes from several tens of seconds to several minutes for the virtual machine to shut down on the cloud.

### 4.2.2.3 Snapshots

This section explains snapshot operations.

Snapshot is a feature used to copy and save the status of a service at any given point in time. A snapshot targets the system disk and all additional data disks. Charges are applied depending on the size of stored data.

The snapshot feature is only available for AWS and K5 virtual machines. It is not available for Azure, VMware, or ROR virtual machines.

Snapshot operations are displayed only if their use is enabled as a configuration option during platform addition.

1. In [Services] in the [Platform Details] window, confirm [Status] of the corresponding service. When the service is running, stop it. For details on how to stop a service, refer to "[4.2.2.2 Stopping](#)".
2. In [Services] of the [Platform Details] window, select [Snapshot] from the [Operation] pull-down menu located next to the name of the target service.

3. The [Snapshot List] window is displayed. The snapshots that have been collected are displayed.

Figure 4.16 Snapshot List Window

Snapshot operations can be performed for the service.  
When the service status is off, + Create Snapshot and ✓ Restore can be performed for the snapshot.

Service Name	VM 646-2	Service ID	sv-652
Status	on	System Disk Size	10 GB
Size of Additional Data Disk	20 GB	Number of Additional Dat...	1
Snapshot Unit Price	To be confirmed	Estimated Charges	To be confirmed

Snapshot Name:  Enter a string. Entry is mandatory.

Description:  Enter a string.

+ Create Snapshot

Snapshot Name	ID	Description	Created	Operation
snapshot - 1	snap-652	comment - 1	2015-05-11 10:00:20	✓ Restore ✗ Delete
snapshot - 0	snap-652	comment - 0	2015-05-11 10:00:37	✓ Restore ✗ Delete
snapshot - 2	snap-652	comment - 2	2015-05-11 10:00:44	✓ Restore ✗ Delete

Close

a. Create Snapshot

Enter [Snapshot Name] and [Description] then click the [Create Snapshot] button, and the estimated charge is displayed. Clicking the [OK] button creates a snapshot which contains the system disk and all additional data disks.

b. Restore

Select the snapshot at the desired time of restoration from the snapshot list and click the [Restore] button.

c. Delete

Select the desired snapshot for deletion from the snapshot list and click the [Delete] button.



Note

- When collecting and restoring snapshots, stop the service in advance. Confirm that the virtual machines on the cloud have completely stopped. In addition, confirm that completion notification emails are received for operations targeting the service, such as configuration modification or deletion.

When a service is running, the [Create Snapshot] button or the [Restore] button cannot be clicked. After collection and restoration of a snapshot, the virtual machine is stopped. If the type or number of additional data disks differs from the number at the time the snapshot was created, perform modification of services to revert the number of additional data disks to the appropriate number before performing recovery from a snapshot.

- When requesting the collection or restoration of snapshots, perform the operation targeting the relevant service after receiving a completion notification email. If an operation is performed targeting a service for which a snapshot is currently being collected or restored, the snapshot or service operations may not complete successfully. In such a case, perform the following corrective action:
  1. Contact the operators, and modify the management information of Cloud Services Management and the statuses of the services on the cloud to be the same.
  2. Collect or restore the snapshot.
  3. After receiving the completion notification email of snapshot collection or recovery, perform the relevant service operation.

- When the usage charges have already exceeded [Limit] configured in the project, the collection of snapshots is not possible.
- When collecting a snapshot would cause usage charges to exceed [Limit], a warning message is displayed. Even if a warning message is displayed, it is possible to create the snapshot. However, the available functions are restricted when [Limit] is exceeded. Consider increasing the [Limit] of charges and then executing the process.



See

A notification email is automatically sent when a snapshot is collected or restored. For details on notification of emails, refer to "[Table 4.1 Types and Destinations of Completion Notifications](#)".

The approximate charge of a snapshot is calculated based on the total system disk size in GB and the total of all additional data disk sizes.

### 4.2.3 Completion Notification Email

After the final approval of addition, modification, and deletion of a service is granted, when a service operation is performed, and when operations are reflected on the integrated cloud, a notification email is sent to the requester.

The operations which cause an email to be sent, their destinations, and the information to be sent are as described below.

Table 4.1 Types and Destinations of Completion Notifications

Operation	Notification Destination	Notification Details
Creation of a virtual machine	Requester	<ul style="list-style-type: none"> <li>- Project ID</li> <li>- Platform ID</li> <li>- Service ID of the virtual machine</li> <li>- IP address of the virtual machine</li> <li>- Administrator user name of the virtual machine</li> <li>- Administrator password or key pair name of the virtual machine</li> </ul>
Configuration modification of a virtual machine	Requester	<ul style="list-style-type: none"> <li>- Project ID</li> <li>- Platform ID</li> </ul>
Deletion of a virtual machine	Requester	<ul style="list-style-type: none"> <li>- Service ID of the virtual machine</li> </ul>
Starting a virtual machine	No information is sent	No information is sent
Stopping a virtual machine	No information is sent	No information is sent
Creation of a snapshot	Requester	<ul style="list-style-type: none"> <li>- Project ID</li> </ul>
Restoration of a snapshot	Requester	<ul style="list-style-type: none"> <li>- Platform ID</li> </ul>
Deletion of a snapshot	Requester	<ul style="list-style-type: none"> <li>- Service ID of the virtual machine</li> <li>- Snapshot name</li> <li>- Snapshot ID</li> </ul>
Creation of a key pair	Email address of the corresponding project	<ul style="list-style-type: none"> <li>- Project ID</li> <li>- Platform ID</li> <li>- Key pair name</li> </ul>



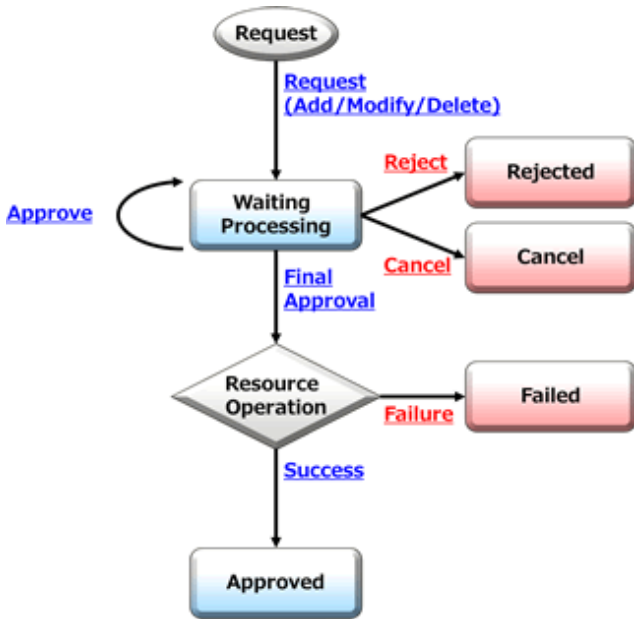
# Chapter 5 Request Management

Cloud Services Management requires the approval process when operations of the following resources are performed:

- Project Management
- Platform Management
- Service Management
- User Management

A request is submitted after the addition, modification and deletion of a resource. The status of a request changes depending on the operations of the requester and approvers, and the status of reflection within the system, as described below.

Figure 5.1 Changes in Request Status



## Point

The underlined text in the diagram indicates request operations, and the squares indicate request statuses.

The operations in the diagram indicate the following:

- Request: A request is submitted after the addition, modification and deletion of a resource.
- Approval, final approval: Approvals are granted multiple times according to the conditions.
- Rejected: When the details of a request are not appropriate, an approver rejects the request.
- Cancel: During waiting processing, the requester can perform the cancel operation.

The statuses in the diagram indicate the following:

- Waiting Processing: Indicates the status before approvers approve a request. The status becomes waiting processing until the final approval is granted.
- Rejected: Indicates that an approver rejected the request.
- Cancel: Indicates that the request has been canceled.
- Approved: Indicates that the final approval has been granted.
- Failed: Indicates that an error occurred during reflection on the system after approval.

The request management function is used to manage requests which occur in response to each operation related to a resource.

This chapter explains how to operate requests in the Cloud Management Portal.

## 5.1 Confirming Requests

This section explains how to confirm requests.

1. Go to the [Request Management] menu in the [Home] window and click the [To the list] link.
2. The [Request List] window is displayed.

In this window, tasks for which the login user has been specified as an approver and tasks which the login user has requested are displayed.

When a user possesses multiple roles, regardless of whether the role is logged in, all requests for the available roles can be viewed.

Requests for which the login user is specified as an approver are displayed on the top of the list, and below that the requests for which operations (request, approval, rejection, and cancellation) were performed by the login user are displayed in descending order of request ID. For details on the approval statuses of requests, confirm using the [Request Details] window.

Figure 5.2 Request List Window

Request Name	Request ID	Request Type	Requested By	Request Date	Status
Request for Modifying Platform	1440	Platform	wd_biz_manager_c	2016-04-26 16:19:22	! Waiting processing
Request for Modifying Platform	1442	Platform	biz_user	2016-04-27 09:35:03	! Waiting processing
Request for Modifying Organization	1445	Organization	op_user	2016-04-27 12:20:03	! Waiting processing
Request for Modifying Service	1443	Service	wd_biz_manager	2016-04-27 10:40:53	✓ Approved
Request for Adding User	1441	User	op_user	2016-04-26 16:38:34	✓ Approved

### a. Filter

For [Request Name], [Request ID], [Request Type], [Requested By], [Status], and [Request Date], specify keywords to refine the displayed list of requests.



### Information

The items displayed to the left of the [Filter] button are displayed as "filtered items / items retrieved from the management server".

### b. Links to Details windows

Clicking the link opens the Details window of the relevant request.

### c. Status

Displays the approval status of a request.

Status	Approval Status
Approved	Indicates that final approval has been granted.
Rejected	Indicates that the request has been rejected.
Waiting Processing	Indicates that the request is waiting for approval.
Failed	Indicates that an error occurred during reflection on the system after approval.
Cancel	Indicates that the request has been canceled.

d. Links to related information

Clicking a link displays the corresponding resource information.

## Point

### - The [To the waiting request list] link

Clicking the [To the waiting request list] link in the [Request Management] menu from the [Home] window displays the [Request Management] window, and the requests in the waiting processing status for which the login user has approval authority are displayed.

In addition, requests are displayed in [Requests List] in the following cases, even if the login user does not have approval authority.

- Requests targeting an organization in the waiting processing status which must be approved by an approver of the organization  
These requests are displayed to all users belonging to the target organization of the request, regardless of whether they are platform provider representatives or approvers.
- Requests targeting a project in the waiting processing status which must be approved by the project manager  
These requests are displayed to all users belonging to the target project of the request regardless of whether they are project users or project managers.

### - Requests which have exceeded the determined storage period

Requests whose approval status are approved, rejected, cancel, or failed, are automatically deleted on a regular basis when after a set storage period.

To configure the storage period, contact the operators.

## 5.2 Request Operations

The statuses of requests change depending on their approval, rejection, and cancellation. This section explains how to perform request operations.

### Note

The details of the request process depend on the information of the relevant users, organizations, and the relationship between the requester and approver when the request is submitted. Therefore, when an operation is performed which targets a user or organization related to a request which was submitted but is not yet approved, the approval may fail. Before performing the following operations, the status of all relevant requests must be canceled, rejected or approved. There must be no requests in the waiting processing status.

- Changing the organization of a requester
- Deleting a requester
- Deleting projects on the process

## 5.2.1 Approving

---

This section explains how to approve requests.

1. Go to the [Request Management] menu in the [Home] window and click the [To the waiting request list] link.
2. [Requests List] is displayed. This list shows only requests in the waiting processing status.
3. Clicking the link of the request name of the relevant request displays the [Request Details] window.
4. The [Request Details] window displays detailed information and the approval flow. If the logged in user is an approver, the [Approve] button and the [Reject] buttons are displayed as approval flow icons.

Figure 5.3 Approve and Reject Buttons



5. Clicking the [Approve] button automatically sends a request for approval email to the next approver. If it is the final approval, the operation of the relevant task is reflected and the status of the request changes to approved. If an error occurs in the system during the reflection process, the status of the request changes to failure. In either case, a request status email is automatically sent to the requester.

### Note

When the status of a request has changed to failure, contact the operators.

### Point

When a user possesses multiple roles, it is necessary to switch to a role with approval authority before approving a request.

## 5.2.2 Rejecting

---

This section explains how to reject requests.

1. Go to the [Request Management] menu in the [Home] window and click the [To the waiting request list] link.
2. [Requests List] is displayed. This list shows only requests in the waiting processing status.
3. Clicking the link of the request name of the relevant request displays the [Request Details] window.
4. The [Request Details] window displays detailed information and the approval flow. If the logged in user is an approver, the [Approve] button and the [Reject] buttons are displayed as approval flow icons. Clicking the [Reject] button displays the [Confirmation] window for specifying a description.
5. Click the [Yes] button on the lower right, automatically sends a request rejection email to the requester, and the request status changes to rejected.

### Point

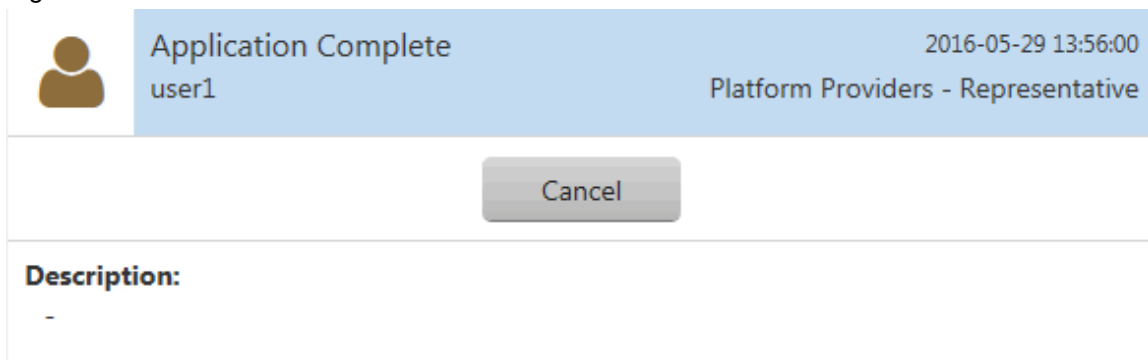
When a user possesses multiple roles, it is necessary to switch to a role with approval authority before rejecting a request.

### 5.2.3 Canceling

This section explains how to cancel requests.

1. Go to the [Request Management] menu in the [Home] window and click the [To the list] link.
2. [Requests List] is displayed.
3. Clicking the link of the name of the relevant request displays the [Request Details] window.
4. The [Request Details] window displays detailed information and the approval flow. If the login user is the requester, the [Cancel] button is displayed as an approval flow icon. Clicking the [Cancel] button displays the [Confirmation] window for specifying a description.
5. Clicking the [Yes] button on the lower right automatically sends a request cancellation email to the requester, and the request status changes to canceled.

Figure 5.4 Cancel Button



### 5.3 Responses to Requests and Approvals

If request submission, approval, rejection, or cancellation is performed, a notification email is automatically sent to the requester and the next approver. The content of the email is as follows.

Subject: Approval Request of Request for Adding Platform

Dear Operators - Approver,

The following request for approval has been received.

Requested by: user04  
 Request Name: Request for Adding Platform  
 Request ID: 17  
 Request Date: 2016-4-25 15:06:56

Please operate approval processing for the request in cloud management portal.

\*This mail has been sent from a send-only mail address.  
 Please note that if you directly reply to this mail, it will not be answered.

The destinations of notification emails are as follows.

Operation	Request Type and Operation	Notification Email Type	Destination Address
Request	Common	Approval request	(CC) Requester
			All approvers
Canceling	Common	Cancellation notification	Requester

Operation	Request Type and Operation	Notification Email Type	Destination Address
Rejected *	Common	Rejection notification	(CC) Rejecting user
			Requester
Approved (intermediate)	Common	Approval request	(CC) Approving user
			All approvers
Approval (final) *	Common	Approval complete	(CC) Approving user
			Requester
System reflection	User addition	Start of usage	Email address of user to be added
	Addition of service	Start of usage	Requester

\* Note: When the requester has been deleted, a notification email is sent to the operator of approval or rejection.

## 5.4 Actions for Failed Requests

This section explains the causes for a request status to change to failed, and the corrective actions to take. If the status of a request has changed to failed, refer to the causes and corrective actions listed in the following table:

Request Type	Operation	Cause	Action
Common	Common	The requester has been deleted.	The requester has already been deleted.
Platform	Addition	The selected project has been deleted.	Select an existing project, and submit the request again.
		The platform ID has a duplicate in the system.	Specify a platform ID which does not already exist in the system, and submit the request again.
		The selected supervisor has been deleted.	Select an existing supervisor, and submit the request again.
		The selected menu has been deleted.	Select an existing menu, and submit the request again.
	Modification	The selected project has been deleted.	Select an existing project, and submit the request again.
		The selected supervisor has been deleted.	Select an existing supervisor, and submit the request again.
		The platform has been deleted.	The platform has already been deleted.
	Deletion	Services exists under the platform.	Delete any existing services, and submit the request again.
		A service is currently being added under the platform.	After the addition of the service completes, delete any existing services, and submit the request again.
		The platform has been deleted.	The platform has already been deleted.
Service	Addition	The platform has been deleted.	Add the platform again, and submit the request again.
		The service ID has a duplicate in the system.	Specify a service ID which does not already exist in the system, and submit the request again.
		The service operation could not be accepted.	A communication error may have occurred between the management server and the coordination adapter. The cause of the error is sent by email to the email address specified during setup. For details on corrective actions, contact the operators.
	Modification	The platform has been deleted.	The service has already been deleted.

Request Type	Operation	Cause	Action
		The service has already been deleted.	The service has already been deleted.
		The service operation could not be accepted.	A communication error may have occurred between the management server and the coordination adapter. The cause of the error is sent by email to the email address specified during setup. For details on corrective actions, contact the operators.
	Deletion	The service operation could not be accepted.	A communication error may have occurred between the management server and the coordination adapter. The cause of the error is sent by email to the email address specified during setup. For details on corrective actions, contact the operators.
		The service has already been deleted.	The service has already been deleted.
User	Addition	The selected organization has been deleted.	Select an existing organization, and submit the request again.
		The user ID has a duplicate in the system.	Specify a user ID which does not already exist in the system, and submit the request again.
		The user operation failed on the directory service.	<ul style="list-style-type: none"> <li>- Connection to the directory service may have failed. Contact the operators.</li> <li>- An entry with the same user ID may already exist on the directory service. Specify a different user ID, and submit the request again. If the status of the request changes to failure even after submission made using a different user ID, contact the operators.</li> </ul>
	Modification	The selected organization has been deleted.	Select an existing organization, and submit the request again.
		The user role has been modified.	Specify the correct role, and submit the request again.
		The selected user has been deleted.	The selected user has already been deleted.
		The user operation failed on the directory service.	Connection to the directory service may have failed. Contact the operators.
	Deletion	The selected user has been deleted.	The selected user has already been deleted.
		The user is a platform manager.	Reassign the role of platform manager to another user, or, submit the request again after deleting the platform.
		The user is a project manager.	Reassign the role of project manager to another user, or, submit the request again after deleting the project.
		The user operation failed on the directory service.	Connection to the directory service may have failed. Contact the operators.
	Project	Addition	The project ID has a duplicate in the system.
The selected supervisor has been deleted.			Select an existing supervisor, and submit the request again.
The selected accounting code has been deleted.			Select an existing accounting code, and submit the request again.
Modification		The selected supervisor has been deleted.	Select an existing supervisor, and submit the request again.

Request Type	Operation	Cause	Action
		The project has been deleted.	The selected project has already been deleted.
		The selected accounting code has been deleted.	Select an existing accounting code, and submit the request again.
	Deletion	The project has been deleted.	The selected project has already been deleted.
		Platforms exist under the menu.	Delete any existing platforms, and submit the request again.



# Chapter 6 Billing Management

Cloud Services Management measures service usage and operational statuses to calculate daily charges.

The usage statuses of platforms and services are reflected on the billing calculation at the following timings:

- Platforms
  - When the status of the request for addition, modification, and deletion of a platform changes to complete
- Services
  - When the status of the request for addition of a service changes to complete and the deployment of the virtual machine completes
  - When the status of the request for modification of a service changes complete, and modification of the virtual machine completes
  - When start or stop operation of a service is performed
  - When the status of the request for deletion of a service changes to complete

When deleting or migrating a project or platform, the basis by which billing is calculated will change. The organizations used to calculate billing and the billing charges are as described below.

- When a project or platform is deleted

For the resources to which fixed charging is applied, fixed usage charges are calculated.

For resources which are charged based on the amount of use, charges are calculated based on the usage time before the resources are deleted.

The billing charges incurred in the deleted platform are displayed in the [Billing] window even after the platform itself is deleted.

- When migrating a platform to another project

For resources to which fixed charging applies, charges are calculated for the organization linked with the accounting code of the project to which resources are moved. Charges are not applied to the organization linked with the accounting code of the project from which resources are moved.

After resources which are charged based on the amount of use have been moved, charges are calculated, based on the amount of use, for the organization linked with the accounting code of the project to which resources are moved. For the organization linked with the accounting code of the project from which resources are moved, charges are calculated based on the amount of use before the movement.

The organization before the movement and the organization after the movement are displayed as two separate platforms in the [Billing] window.

- When modifying the accounting code of a project (transfer)

For resources to which fixed charging is applied, charges are calculated for the organization linked with the accounting code of the modified resource. Charges are not calculated for the organization linked with the accounting code of the resource before the modification.

After resources which are charged based on the amount of use have been modified, charges are calculated, based on the amount of use, for the organization linked with the accounting code of the resource after it was modified. For the organization linked with the accounting code of the resource before it was modified, charges are calculated based on the amount of use before the modification.

When modifying the accounting code of a project, the project before the modification and after the modification are displayed as two separate projects in the [Billing] window.

When modifying an organization short name, menu name, project name, or platform name, the change of name is reflected at the following timings:

- Organization short names and menu names

Immediately reflected for the charges in all periods.

- Project names

Immediately reflected. When the accounting code of a project is modified, the modification is reflected only on the latest project information. It is not reflected on the information from before the modification of the accounting code was performed.

- Platform names

Charges incurred after the change of platform name are reflected on the next billing calculation after the change takes place. When a platform is migrated to another project, the migration is reflected only on the latest platform information. It is not reflected on the information from before the migration of the project was performed.

In the [Billing] window, the billing calculated based on usage of a platform or a service can be viewed.

Platform providers can confirm usage charges in two ways, by organization and by project.

This chapter explains how to confirm billing in the Cloud Management Portal.



The billing which can be checked in the cloud management portal is the calculation result of the day before checking.

## 6.1 Confirming Usage Charges by Organization

This section explains how to confirm usage charges from the viewpoint of individual organizations.

1. Click the [Refer to Billing] menu in the [Home] window or the [Billing] navigation tab.
2. The [Billing] window is displayed. The usage charges of the organization to which the login user belongs or its affiliated organizations can be confirmed.

Figure 6.1 Billing Window (By Organization)

Organization Short Name (f)	Number of Platforms (cumulative)	Basic Menu [ \$ ]	Operation Options [ \$ ]	Configuration Options [ \$ ]	Total [ \$ ]
AIOJX	3	10.00	20.00	30.00	60.00
AIOJY	3	10.00	20.00	30.00	60.00
AIOJZ	3	10.00	20.00	30.00	60.00
Accounting Code List	2	20.00	40.00	60.00	120.00
<b>Total</b>	<b>11</b>	<b>50.00</b>	<b>100.00</b>	<b>150.00</b>	<b>300.00</b>

- a. Switch View

Switches the unit of display of charges between organizations and projects.

b. Display Period

Switches between different display periods: monthly, quarterly, semi-annual, and annual. When displaying multiple months, the starting month will vary depending on the environment.

c. Toggle List/Graph

Toggles the view between list and graph displays. The amounts in the graph display indicate total charges.

d. Download CSV

Displayed charges can be downloaded in CSV format.



Note

When [Internet Explorer's Enhanced Security Configuration] is enabled in a Windows Sever environment, it may not be possible to download files using Internet Explorer.

e. Change Page

Changes between the previous period and the next period.

f. Change the Level of the Organization/Accounting Code

Clicking this changes the unit of display to the organizations belonging to the selected organization. Drilling down switches the view to a list of the accounting codes linked to the organization. In addition, selecting an accounting code switches the view to a list of the projects linked to the selected accounting code. Selecting a project switches the view to a list of the platforms in the project. Selecting a platform displays the [Billing Details] window at the level of individual platforms.

Figure 6.2 Billing Window (By Accounting Code)

Accounting Code	Number of Platforms (cumulative)	Basic Menu [ \$ ]	Operation Options [ \$ ]	Configuration Options [ \$ ]	Total [ \$ ]
AC01X	3	10.00	20.00	30.00	60.00
AC02X	3	10.00	20.00	30.00	60.00
Total	6	20.00	40.00	60.00	120.00

Figure 6.3 Billing Window (By Project)

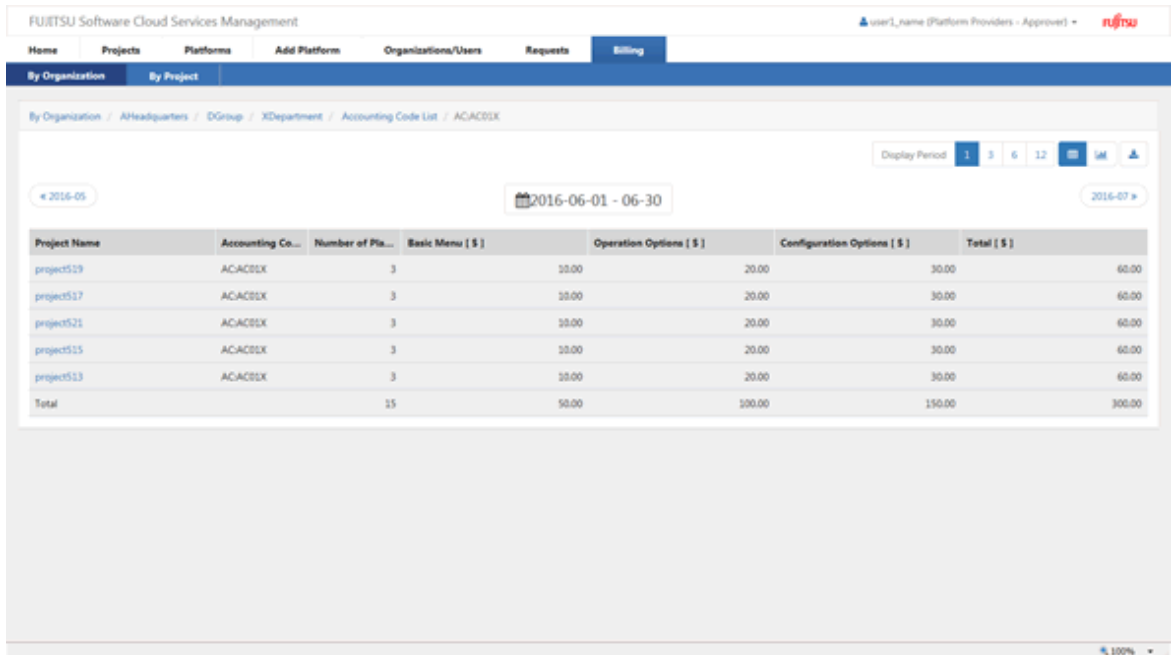


Figure 6.4 Billing Window (By Platform)

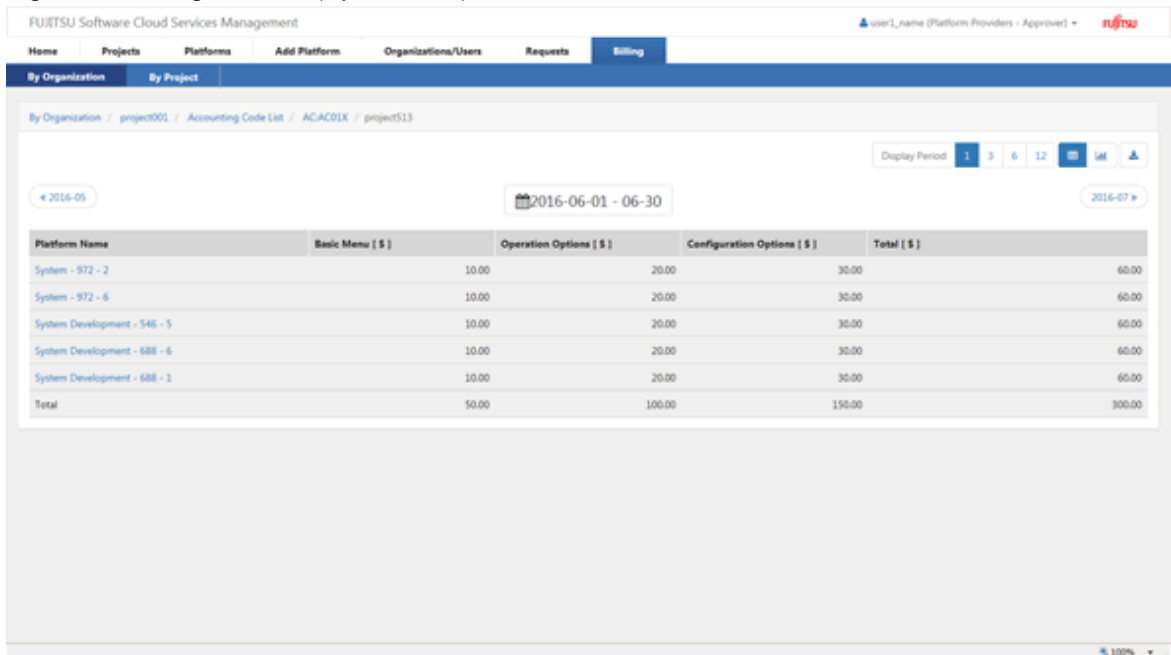
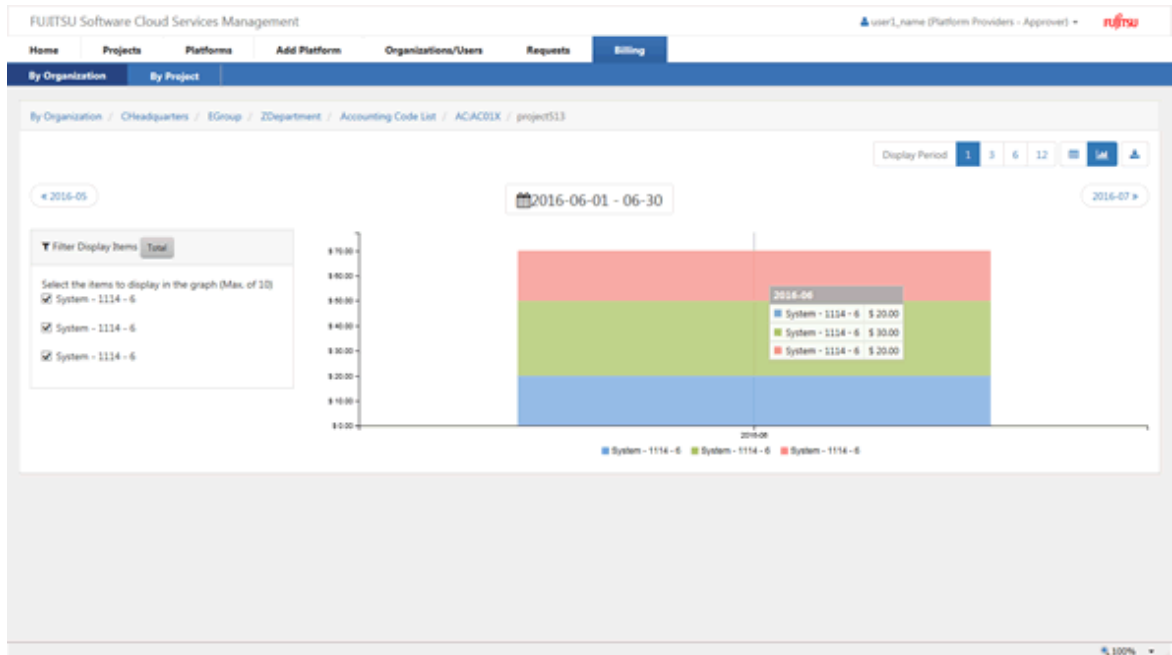


Figure 6.5 Billing Window: Graph Display

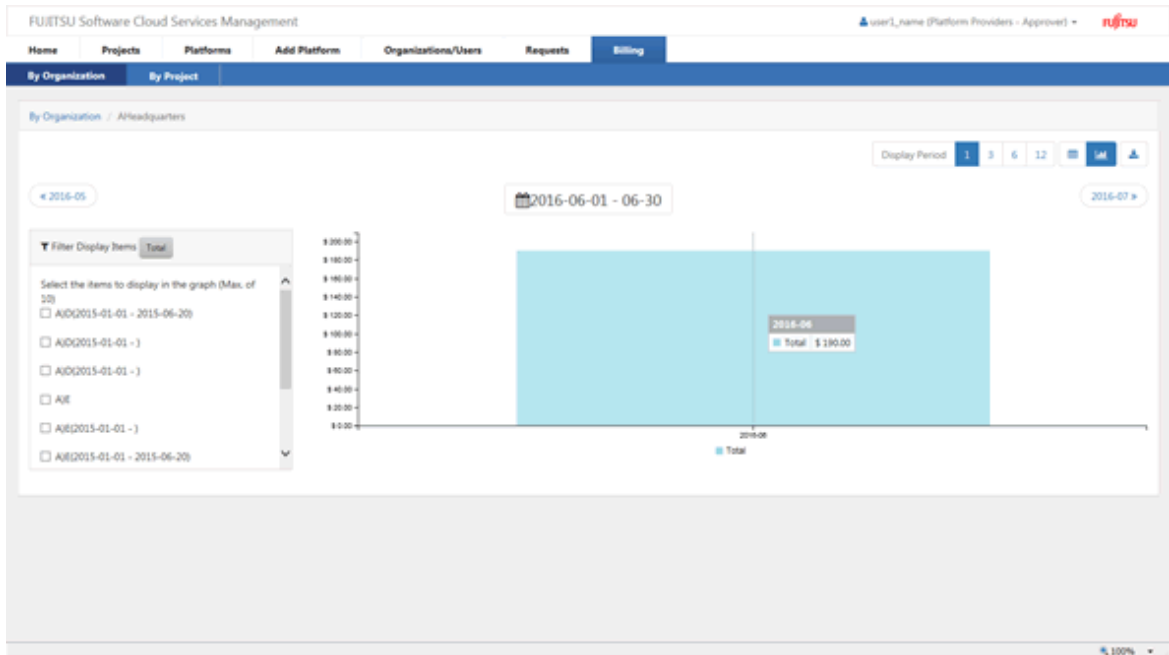


## Point

The display of data and data titles varies depending on the number of pieces of data in the display period.

- If the number of pieces of data is 10 or fewer: the breakdown of the data is displayed as a tooltip when the mouse pointer hovers over the display graph.
- If the number of pieces of data is 11 or more: the total number of pieces of data is displayed in a tooltip when the mouse pointer hovers over the graph.

- By selecting an item to be displayed in the [Filter Display Items] field, the data to be displayed can be filtered. Up to 10 items to be displayed can be selected.



## Point

When confirming usage charges by organization, approvers of platform providers can view the billing information of all organizations under organizations to which the platform provider belongs. Representatives of platform providers can only view the billing information of their own organization.

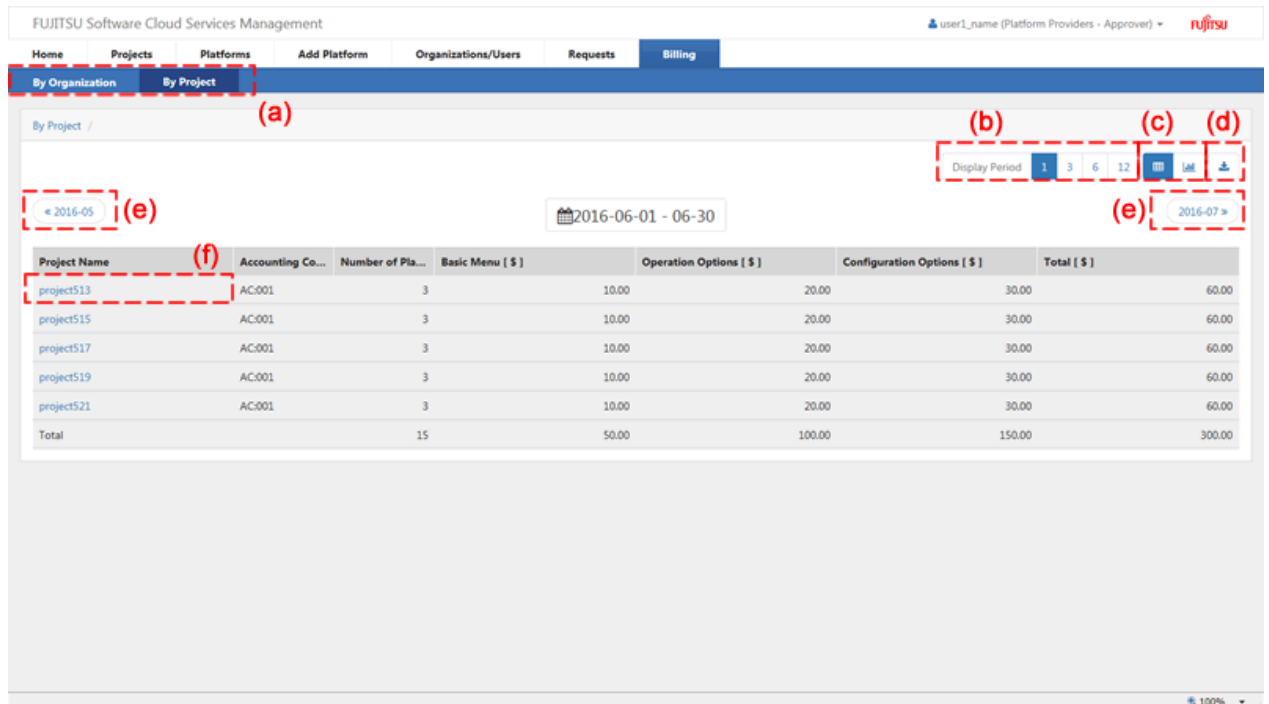
## 6.2 Confirming Usage Charges by Project

This section explains how to confirm usage charges from the by project viewpoint.

1. Go to the [Refer to Billing] menu in the [Home] window and click the [By Project] link.

2. The [Billing] window is displayed with the usage charges calculated by project.

Figure 6.6 Billing Window by Project



a. Switch View

Switches the unit of display of charges between organizations and projects.

b. Display Period

Switches between different display periods: monthly, quarterly, semi-annual, and annual. The starting month will vary depending on the system configuration. To confirm the configured month, contact the operators.

c. Toggle List/Graph

Toggles the view between list and graph displays. The amounts in the graph display indicate total charges.

d. Download CSV

Displayed charges can be downloaded in CSV format.



Note

When [Internet Explorer's Enhanced Security Configuration] is enabled in a Windows Sever environment, it may not be possible to download files using Internet Explorer.

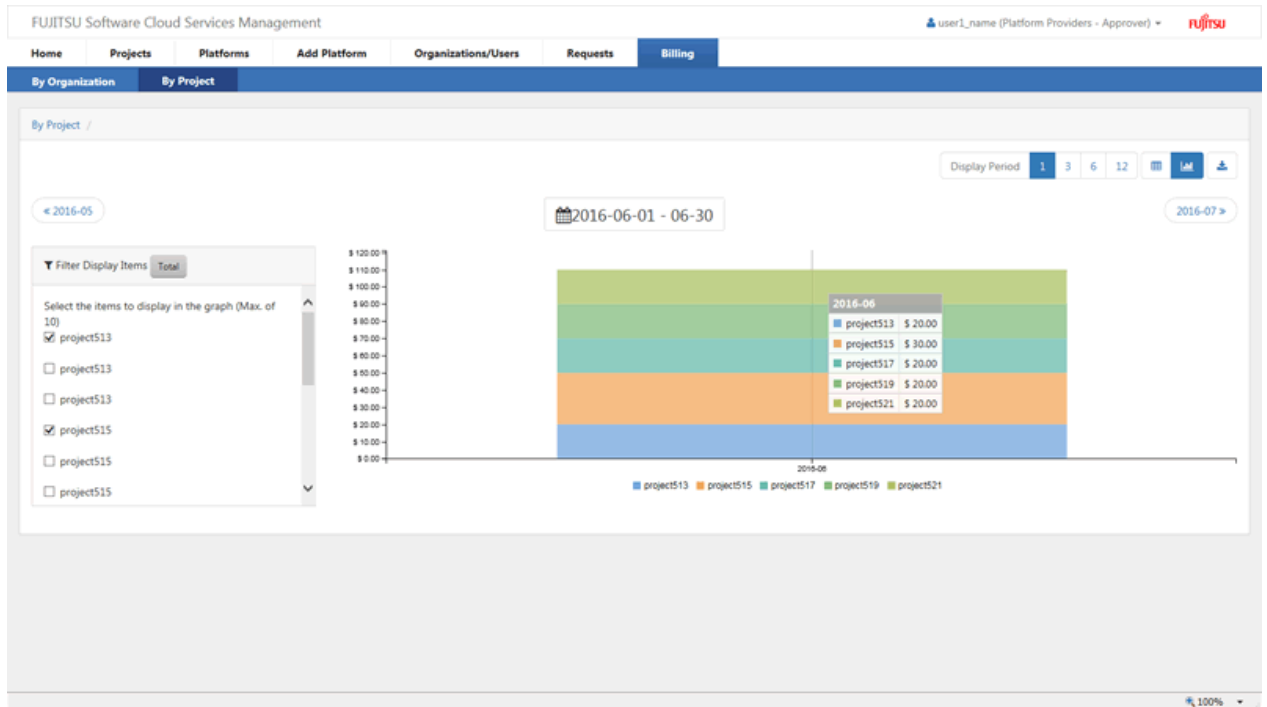
e. Change Page

Changes between the previous period and the next period.

f. Project Name

Selecting and clicking the name of a project displays the accumulated charges by platform under the selected project.

Figure 6.7 Graph Display by Project



## Point

The display of data and data titles varies depending on the number of pieces of data in the display period.

- If the number of pieces of data is 10 or smaller: a breakdown of the data is displayed as a tooltip when the mouse pointer hovers over the graph.
- If the number of pieces of data is 11 or larger: the total number of pieces of data is displayed in a tooltip when the mouse pointer hovers over the graph.
- By selecting an item to be displayed in the [Filter Display Items] field, the data to be displayed can be filtered. Up to 10 items to be displayed can be selected.