

# **FUJITSU Software**

## **Cloud Services Management V1.0.0**

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

# Operation Guide

Windows(64)

B1WS-1229-01ENZ0(00)  
October 2015

# Preface

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## Purpose of This Document

This manual explains the basic operations for operation and maintenance of FUJITSU Software Cloud Services Management (hereinafter Cloud Services Management).

## Intended Readers

This manual is written for the following people:

The operators who operate and maintain Cloud Services Management

## Required Knowledge

It is assumed that readers have the following knowledge:

- Knowledge about the operating system they are using, including adjustment and execution of batch files
- General knowledge about cloud services
- General understanding of the setting methods for servers, storage, and network devices
- Knowledge of relational databases, including PostgreSQL databases

## Structure of This Document

The structure of this manual is as follows.

### [Chapter 1 Overview](#)

Provides an overview of the operations and maintenance work performed by each department that uses Cloud Services Management.

### [Chapter 2 Operation](#)

Explains how to start and stop Cloud Services Management, and the system settings that are required for definition files.

### [Chapter 3 Billing](#)

Explains the billing of Cloud Services Management.

### [Chapter 4 Maintenance](#)

Explains the operations related to maintenance of Cloud Services Management and the method for collecting troubleshooting data when trouble occurs.

### [Chapter 5 Command Reference](#)

Explains the commands used to manage data and perform maintenance, etc. when using Cloud Services Management.

### [Chapter 6 Trouble Shooting](#)

Explains the trouble shootings for Cloud Services Management

### [Appendix A Operation of RDB and SLB](#)

Explains the operations for RDB and SLB of Cloud Services Management.

## Positioning of This Document

Refer to the "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 "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

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## Revision History

Month/Year Issued, Edition	Manual Code
October 2015, First Edition	B1WS-1229-01ENZ0(00)

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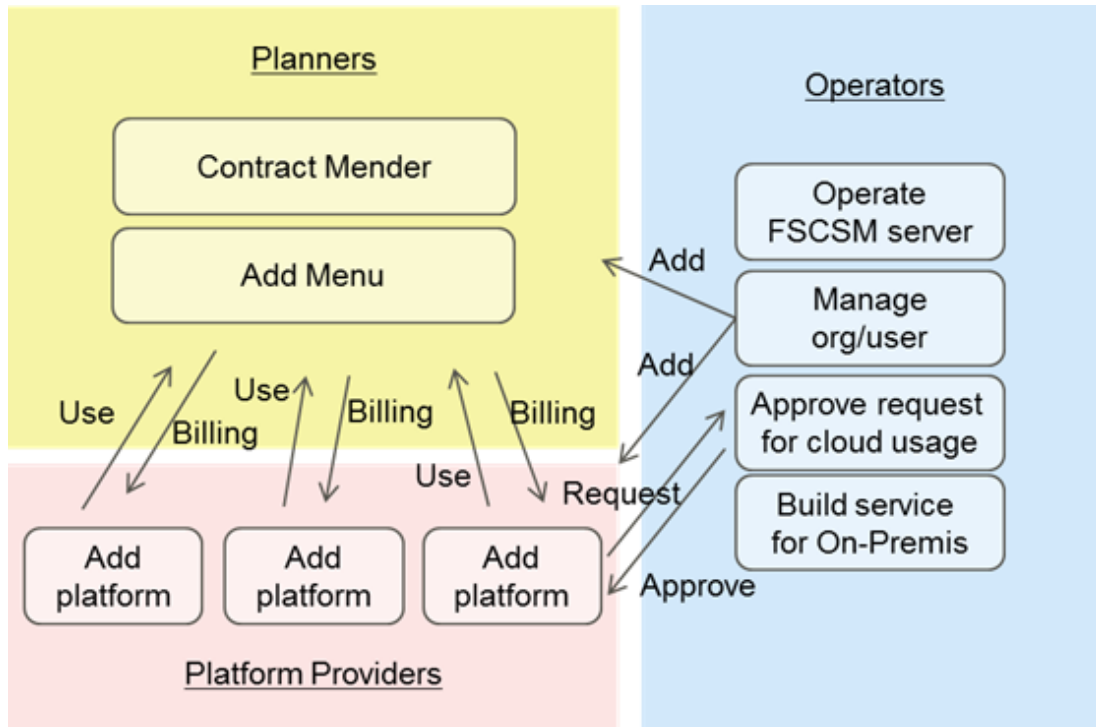
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# Chapter 1 Overview

Users of Cloud Services Management are categorized into the following three departments:

- Planners
- Operators
- Platform Providers

Figure 1.1 The Three Departments and Their Main Tasks in Cloud Services Management



The role of planners is to manage subscriptions provided by cloud providers and present the fee structure and services available to the users of Cloud Services Management.

The role of operators is to perform system operation and maintenance of Cloud Services Management.

The role of platform providers is to set up the platforms that use cloud services and provide them to end users.

This chapter explains the overview of the operations and maintenance work of each department.

## 1.1 Overview of Operations and Maintenance Performed by Planners

This section explains the operations and maintenance performed by planners.

Planners create concrete specifications of the menus provided by IaaS and PaaS and determine the optimal realization measures for the required service level.

Planners perform the following work:

- Organizing subscriptions with Cloud providers

Planners evaluate the services offered by Cloud providers and then arrange subscriptions.

After arranging subscriptions, planners request the operators to register the subscribed information with Cloud Service Management. When arranging a subscription with a new vendor, planners also request for registration of vendor information.

- Menu registration

Based on the service content provided by the cloud service subscribed to, the initial costs, basic charges, option fees, etc. for the service usage via Cloud Services Management are determined. This information is registered with Cloud Services Management as a menu and published. For details on operation procedures for registration and publishing, refer to the "FUJITSU Software Cloud Services Management User's Guide for Planner and Operator".

For the registered menus, a usage guide is provided for platform providers.

- Usage status check

Planners check the usage status and accounting status of menus as appropriate. Usage status and billing status can be checked from the [Billing Management] window of the Cloud Services Management cloud management portal. For detailed procedures, refer to the "FUJITSU Software Cloud Services Management User's Guide for Planner and Operator".

- Menu management

Planners manage subscription statuses. Planners also update and add menus when changes are made, for example, when the vendor has added services.

For details on the procedures for updating and adding menus, refer to the "FUJITSU Software Cloud Services Management User's Guide for Planner and Operator".

## 1.2 Overview of Operations and Maintenance Performed by Operators

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This section explains the operations and maintenance performed by operators.

Operators is the department that has the role of managing configuration information and user information for operating Cloud Services Management and performing maintenance of the Cloud Services Management environment, including operation and maintenance of servers.

Operators perform the following work:

- Installation and setup of Cloud Services Management

Perform installation and setup of Cloud Services Management. For installation and setup operations, refer to the "FUJITSU Software Cloud Services Management Installation Guide".

- Operation and maintenance of the management server for Cloud Services Management

Monitor operation status of Cloud Services Management and perform trouble response. Refer to "[Chapter 2 Operation](#)" and "[Chapter 4 Maintenance](#)".

Operators also manage the Cloud Services Management system information. When reconfiguration becomes necessary according to the operation, refer to "[2.2 Initial Configuration before Operation](#)".

- Creation of Notifications information

It is possible to display the content to be displayed for users of the cloud management portal on the Home window. For setting of Notifications information, refer to "[2.5.4 Notification Information](#)".

- Creation and modification of organization information and users

Create and modify user accounts for the users of the cloud management portal. Operators also create and modify the information of the organization to which the user belongs.

Creation and modification of organization information and user information can be performed from the cloud management portal or by using commands. For details on the creation and modification procedure from the cloud management portal, refer to the "FUJITSU Software Cloud Services Management User's Guide for Planner and Operator". For details on the creation and modification procedures using commands, refer to "[5.2.1 Organization Operation Commands](#)" and "[5.2.2 User Operation Commands](#)".

- Creation and modification of vendor information and operation options

Upon request from planners, operators perform creation of the connection information with vendors or cloud management software, or modification of parameters. For setting vendor information, refer to "[2.5.2 Vendor Information](#)". When adding options to a menu, refer to the description about configuration in "[2.5.3 Operation Option Information](#)".

- Creation of contract information

Contract information can be created from the cloud management portal or by using commands. For details on the creation procedure from the cloud management portal, refer to the "FUJITSU Software Cloud Services Management User's Guide for Planner and Operator". For details on the creation procedure using commands, refer to "[5.2.3 Contract Operation Commands](#)".

- Receiving cloud service subscription applications from platform providers

Upon request from a department that wants to use a cloud service, operators perform registration of organization information and user creation for the Platform Provider.

In addition, operators receive and approve requests for registration, modification, and deletion from platform providers.

Depending on the platform requested by platform providers, operators may also perform installation and deployment of RDB and SLB. As for the operation for RDB and SLB, refer to "[Appendix A Operation of RDB and SLB](#)".

- Approval of Requests

Registration, modification, and deletion of the following information managed by Cloud Services Management requires final approval by operators.

- Organization information
- User information
- Platform information
- Service information

For the operation procedure for requests, refer to the "FUJITSU Software Cloud Services Management User's Guide for Planner and Operator".

- Management of the metering log

Operations such as registration and deletion of platforms and starting and stopping of virtual machines are recorded in a log. This log can be stored as resource usage records.

For the procedure for outputting metering logs, refer to "[5.2.7 Metering Log Output Command](#)".

## 1.3 Overview of Operations and Maintenance Performed by Platform Providers

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This section explains the operations and maintenance performed by platform providers.

Platform providers set up the platforms that use cloud service menus planned by the planners and provide them to end users.

Platform providers performs the following work:

- Application for platform subscription to operators

Platform providers organize the administrator, management organization, and application route of the platform to be created and then request operators to create the organization information and user registration.

- Registration of platforms

From the cloud management portal, platform providers select the menus to use and register the platforms. For the procedure for registering platforms, refer to the "FUJITSU Software Cloud Services Management User's Guide for Platform Providers".

- Installation and operation of platforms

Platform providers perform installation and operation of platforms on the cloud service user environment.

- Checking billing information

Charges for cloud services can be checked from the cloud management portal. For the Billing window, refer to the "FUJITSU Software Cloud Services Management User's Guide for Platform Providers".



# Chapter 2 Operation

This chapter explains the system operation of Cloud Services Management.

## 2.1 Starting and Stopping

This section explains how to start and stop the services of manager server.

Start and stop procedures of the manager server and coordination adaptor are not dependent. They need to be operated respectively.

### 2.1.1 Starting and Stopping Manager Server

This section explains how to start and stop the services of manager server.

Manager server consists of the following services:

- FUJITSU Software Cloud Services Management Web Server (GUI)
- FUJITSU Software Cloud Services Management Web Server (API)
- FUJITSU Software Cloud Services Management DB Service (fjsvfscsmbd\_FSCSMSYSTEM)
- FUJITSU Software Cloud Services Management DB Service (fjsvfscsmbd\_FSCSMETERINGLOG)
- FUJITSU Software Cloud Services Management DB Service (fjsvfscsmbd\_FSCSMACCOUNTING)

From the Windows Control Panel, open [Administrative Tools], and then open the [Services] window to check the state of each service.

#### 2.1.1.1 Starting

Execute the following command using the command prompt:

```
net start "FUJITSU Software Cloud Services Management Web Server(GUI)"
```

The above service and other services of Cloud Services Management start in sequence.

#### 2.1.1.2 Stopping

Execute the following command using the command prompt:

```
net stop "FUJITSU Software Cloud Services Management DB Service (fjsvfscsmbd_FSCSMSYSTEM)"
```

The above service and other services of Cloud Services Management stop in sequence.

### 2.1.2 Starting and Stopping Coordination Adapter

#### 2.1.2.1 Starting

Execute the following command using the command prompt:

```
%FSCSM_HOME%\SWRBA\SWRBAM\bin\swrba_start
```

Completion message to start is shown after correctly starting.

```
Systemwalker Runbook Automation is starting up.  
The Process Management Database has started.  
The server function has started.  
The console function has started.  
CMDB Manager has started.  
The Scheduling has started.  
Systemwalker Runbook Automation startup has completed successfully.
```

## 2.1.2.2 Stopping

Execute the following command using the command prompt:

```
%FSCSM_HOME%\SWRBA\SWRBAM\bin\swrba_stop
```

Completion message to stop is shown after correctly stopping.

```
Systemwalker Runbook Automation is stopping.  
The Scheduling has stopped.  
CMDB Manager has stopped.  
The console function has stopped.  
The server function has stopped.  
The Process Management Database has stopped.  
Systemwalker Runbook Automation stop has completed successfully.
```

## 2.2 Initial Configuration before Operation

This section explains initial configuration work after installation and setup of Cloud Services Management.

### 1. Configure definition files

Configure the system information, vendor information, operation options, "Notifications" of the cloud management portal, etc. These settings can be configured using the "definition file" for Cloud Services Management. For the procedure for editing definition files, refer to ["2.5 Changing Settings"](#).

### 2. Create organizations and users

Creation of organization information and user information can be performed from the cloud management portal or by using commands. For details on the creation procedure from the cloud management portal, refer to the "FUJITSU Software Cloud Services Management User's Guide for Planners and Operators". For details on the creation procedure using commands, refer to ["5.2.1 Organization Operation Commands"](#) and ["5.2.2 User Operation Commands"](#).

## 2.3 Vendor Information Configuration Flow

### 2.3.1 Cloud Preparations

For using Cloud Services Management, preparation for integrated cloud vendors is necessary.

- When using AWS and Azure, arranges subscriptions with cloud vendors. When using ROR, performs setup of cloud management software.
- Prepares resources in cloud environments, and enables the deployment of virtual machines, depending on the service specifications to be released as a menu.

In Cloud Services Management, the subscription with the cloud vendor and the information regarding cloud management software can be managed using contract information. The information required to deploy virtual machines is configured in the vendor information parameter.

#### Information Related to Contracts

The information managed by the contract information is as shown below. Collect this information in advance.

Information Name	Required	Information to Prepare	Usage	Remarks
Contract number	-	The ID that can be used for identifying the information of subscriptions with cloud vendors and cloud management software	It is used for display to make it easy to determine which contract information is linked to the contract information of this product.	-

Vendor portal ID	-	The ID for logging in to the cloud vendor portal	It is used for identifying the ID used for logging on to the cloud vendor portal.	For AWS and Azure only
Maintenance service ID	-	The ID used for contacting cloud vendors	It is possible to enter the ID used for contacting cloud vendors.	For AWS and Azure only

### Information Required to Deploy Virtual Machines

The following two types of parameters are required to deploy virtual machines:

- Configuration option parameter

A parameter specifying the following information related to the configuration of a virtual machine:

- Instance type
- System disk image
- Additional data disks

Additional configuration information other than what is listed above may be specifiable, depending on the vendor.

A configuration option parameter can be selected when adding a virtual machine.

- Vendor unique parameter

Another parameter required to deploy virtual machines. A vendor unique parameter is a value which is fixed depending on the provided menu.

Certain preparations may be required in addition to parameters, depending on the individual vendor.

Vendor dependent required information is as shown below.

- For AWS

- Configuration option parameters

Information to Prepare	Parameter Name to be Specified as Vendor Information	Note
Instance type of EC2	param_instance_type	-
EC2 image ID	param_image_id	Specify EC2 image ID. EC2 image ID can be obtained from AWS management console.
Size of additional block devices (GB)	param_block_device_size	Specify the size of additional block devices by the unit of GB.  The same value is applied to all additional disks.  * It is not possible to set a different size for each additional disk.
Volume type of additional block devices	param_block_device_type	Specify "gp2", "io1", or "standard".  The same value is applied to all additional disks.  * Define this parameter when param_block_device_size is specified.
Number of additional block device	param_block_device_num	Specify "[dataDiskNum]".  The number of additional block device is specified in the applications of virtual machines.

- Additional configuration options

Information to Prepare	Parameter Name to be Specified as Vendor Information	Note
Whether to use SLB	"slb"	-
Whether to use RDB	"rdb"	-
Whether to use snapshot	"snapshot"	-

- Vendor Unique Parameter

Information to Prepare	Parameter Name to be Specified as Vendor Information	Note
Security group ID of EC2	param_security_group_id	Specify existing security group ID.
Subnet ID for creating instances	param_subnet_id	Specify subnet ID for creating instances. This parameter cannot be defined along with param_availability_zone. This parameter can be omitted. When not defined, the subnet for the instances depends on the definition of param_availability_zone. If param_availability_zone is defined, subnet for the instances will be the default subnet of the availability zone. Otherwise, default subnet of the default VPC will be applied.
Whether to assign public IP addresses to the instances when the subnet ID is specified	param_associate_public_ipaddress	Specify "true" or "false". This parameter can be omitted. When not defined, public IP address will be assigned according to the configuration of subnet.
Region where instances are created	param_region	Specify the region code of the region which supports EC2. For details on supported regions of EC2, refer to the published AWS information.
Availability zone where instances are created	param_availability_zone	Specify subnet availability zone where instances are created. This parameter cannot be defined along with param_subnet_id. This parameter can be omitted. When not defined, availability zone will be assigned according to the configuration of subnet.
A list of device names of additional block devices, separated by commas	param_block_device_names	Example: /dev/sdf,/dev/sdg,/dev/sdh

- Other information

Information to Prepare	Parameter Name to be Specified as Vendor Information	Note
------------------------	--	------

Key pair name	None	Store the key pair as a file. For details, refer to <a href="#">"2.5.6 Storage Location of Key Pair Files for AWS"</a> .
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- For Azure

- Configuration option parameters

Information to Prepare	Parameter Name to be Specified as Vendor Information	Note
Instance size of Azure	param_instance_size	-
Image name or disk name of Azure	param_image_name	Specify image name or disk name. Image names and disk names of Azure can be obtained by Azure commands or APIs.
	param_os	Specify "Windows" or "Linux" for the OS type of image or disk.  * Define this parameter when param_image_name is specified.
Size of additional block devices (GB)	param_block_device_size	Specify the size of additional block devices by the unit of GB.  The same value is applied to all additional disks.  * It is not possible to set a different size for each additional disk.
Volume type of additional block devices	param_block_device_type	Specify "ReadWrite", "ReadOnly", or "None".  The same value is applied to all additional disks.  * It is not possible to set a different type for each additional disk.  * Define this parameter when param_block_device_size is specified.
Number of additional block device	param_block_device_num	Specify "[dataDiskNum]".  The number of additional block device is specified in the applications of virtual machines.

- Vendor Unique Parameter

Information to Prepare	Parameter Name to be Specified as Vendor Information	Note
Affinity group name	param_affinity_group	Specify the name of existing affinity group.  This parameter is mandatory.
Azure subscription ID	param_subscription_id	-
Virtual machine name (DNS name)	param_servername	Specify "[serviceid]".  Virtual machine name is specified by the service ID in the applications of virtual machines.
Storage account name	param_storage_account_name	Specified value will be used to manage storages.

Availability set name	param_availability_set	This parameter can be omitted.
Administrator name	param_username	When OS is Linux, the fixed value "azureuser" is used. Specified value is used to login to the virtual machines. Notify the value to platform providers.
Administrator password	param_password	Specified value is used to login to the virtual machines. Notify the value to platform providers.
Virtual network where virtual machines are created	param_virtual_network_name	To use fixed IP addresses for virtual machines, this parameter must be specified. This parameter can be omitted.
Subnet ID for creating virtual machines	param_subnet_id	To specify the virtual network for virtual machines, this parameter must be specified. If not, omit this parameter.

### Point

As mentioned in "2.4 Usage of Services", the IP address of the virtual machine for Azure is either fixed or dynamically allocated. Configurations of vendor unique parameters for each operation are as follows.

- To fix the IP address of the virtual machines

Specify "param\_virtual\_network\_name" and "param\_subnet\_id" respectively.

- To dynamically allocate the IP address of the virtual machines

The specifications of parameters "param\_virtual\_network\_name" and "param\_subnet\_id" are arbitrarily.

### Note

When deploying virtual machines for Azure, Cloud Services Management creates a cloud service for each virtual machine. There are limit for numbers of cloud services that one can create for each subscriptions of Azure. Depending on the estimated numbers of providing virtual machines, modify the limit of cloud services. Refer to Azure support for the procedures of how to modify the limit of cloud services.

- For ROR

- Configuration option parameters

Information to Prepare	Parameter Name to be Specified as Vendor Information	Note
Number of CPUs	param_numofprocessor	Specify a number between 1 and 8.
CPU performance	param_processorspeed	Enter a number between 0.1 and 8, in units of GHz. * Define this parameter when param_numofprocessor is specified.
Memory size	param_memorysize	Enter a number between 0.1 and 255, in units of GB * Define this parameter when param_numofprocessor is specified.

Cloning image name of deploying virtual machine	param_imagename	-
Size of additional block devices (GB)	param_block_device_size	The same value is applied to all additional disks.  * It is not possible to set a different size for each additional disk.
Number of additional block device	param_block_device_num	Specify "[dataDiskNum]".  The number of additional block device is specified in the applications of virtual machines.

- Vendor Unique Parameter

Information to Prepare	Parameter Name to be Specified as Vendor Information	Note
L-Server template name of deploying virtual machine	param_templatename	NIC defined in the L-Server template must be single. L-Server templates with multiple NICs are unsupported.
Administrator password of deploying virtual machine	param_serverpassword	Specify the administrator password to login to the virtual machines. Notify the value to platform providers.  Note that when this value differs from the preset password in the image, whether the specified password will be applied to the virtual machine depend on the type of the VM host and OS. If ROR uses such setting that the password of the administrator cannot be modified, specify same value as the preset password in the image for this parameter.  Refer to the "Setup Guide" of ROR for details.
Network resource name	param_network	For configuring the network environment of the server to be configured
IP address of ROR manager server	param_manageserver	-
Virtual machine name	param_servername	Specify "[serviceid]".  Virtual machine name is specified by the service ID in the applications of virtual machines.

- Other information

Information to Prepare	Parameter Name to be Specified as Vendor Information	Note
Product key of deploying virtual machine	None	If the OS of the deploying virtual machine is Windows, define the product key in the OS property file of ROR in advance.

## 2.3.2 Registering Contract Information

Register contract information by using information collected during "2.3.1 Cloud Preparations". Register by one of the following methods:

- Registering on the cloud management portal

Users who have the operators role can register contract information from the cloud management portal. For details on the creation procedure, refer to "FUJITSU Software Cloud Services Management User's Guide for Planners and Operators".

- Registering by the command

For details on how to use commands, refer to "[5.2.3 Contract Operation Commands](#)".

## 2.3.3 Configuring Vendor Information

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Register vendor information by using information collected during "[2.3.1 Cloud Preparations](#)". For details on how to register, refer to "[2.5.2 Vendor Information](#)".

## 2.3.4 Registering Menu Information

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Register menu by one of the following methods:

- Registering on the cloud management portal

Users who have the planners role can register menu from the cloud management portal. For details on how to register menu, refer to the "FUJITSU Software Cloud Services Management User's Guide for Planners and Operators".

- Registering by the command

For details on how to use commands, refer to "[5.2.4 Menu Operation Commands](#)".



Point

.....  
In [Details] during registering menu from cloud management portal, select "vendor unique parameter" specified in the vendor information. Adjust which parameter should be selected between planners and operators before.  
.....

## 2.3.5 Registering Platforms

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For AWS, select authentication information in [Details]. To select authentication information, select it from the files stored in the "[2.5.6 Storage Location of Key Pair Files for AWS](#)". Notification of the selected authentication should be given beforehand by the operators announcing it or by describing the information in the "Description Details" of the menu.

## 2.3.6 Registration, Modification, and Deletion of Services and Sending of Email

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Services can be created from the cloud management portal by users who have the platform providers role. For the creation procedure from the cloud management portal, refer to the "FUJITSU Software Cloud Services Management User's Guide for Platform Providers".

For services whose service type is VM instance, when all approvals are completed, deployment is processed.

At this time, if a problem occurs with the coordination adapter, the approval status becomes "Pending". In this case, the administrator is notified of the error details by email. The administrator should remove the error and then instruct the platform providers to perform service request again.

Even when the approval status becomes "Completed", if a problem occurs with the cloud vendor or cloud management software, deployment of VM instances may fail. In this case the applicant is notified of the failure and the administrator is notified of the error details by email. Contact the operators for error details.

When deployment is successfully completed, an email containing VM instance connection information is sent to the applicant.

When operating in coordination with ROR, creation and deletion of services are performed automatically, but modification is not performed automatically. Modification must be performed manually by direct operation of ROR. For requests that can be operated directly, the operators modify them manually and then approve it. For requests that cannot be modified directly, reject the approval request.



## 2.4 Usage of Services

To use a service created on a cloud environment, it is necessary to notify the platform providers that applied to use the service of the information necessary to access the service. The following information related to virtual machines is necessary to access a service:

- Access information  
IP address of the virtual machine
- OS login information  
User ID, initial password, private key, etc.

This section explains the detailed information necessary for access, the preparations related to service usage, and the operations for each cloud service. It also explains the operations when using the request function of a physical server.

### Point

In Cloud Services Management, it is assumed that operations are performed connecting a network on a public cloud with the network in a company using a dedicated line or an Internet VPN (Virtual Private Network). Therefore, to access from a company network to a virtual machine on a public cloud, an internal IP address is used, not an external IP address.

### 2.4.1 AWS

The information necessary to use a virtual machine is as shown below.

Information	Description
IP address of the virtual machine	Notified to platform providers using the deployment completion e-mail for the virtual machine.
Login user ID	A fixed user ID, which is different for each OS type of virtual machine, is used. <ul style="list-style-type: none"><li>- For Windows Administrator</li><li>- For Linux ec2-user</li></ul> * Note: This may differ depending on the disk image being used. Operators notify platform providers of the information using an e-mail or a Web site.
Key pair	The key pair selected when a task is created by platform providers is used. For each OS type of virtual machines, the key pair is used for the following purpose: <ul style="list-style-type: none"><li>- For Windows Notification of the initial password encrypted using the public key of the key pair is received from AWS. It is possible to obtain the initial password by decrypting it using the private key of the key pair.</li><li>- For Linux Use the private key of the key pair for SSH login authentication.</li></ul>

#### Operation of Key Pairs

The key pair used for each task by platform providers must be created by the operators in advance, and registered with AWS and the manager server. To use a virtual machine, the operators must provide the private key of the key pair to platform providers. The following is an operation example of the key pair:

1. The operators define the policy to which the key pair is allocated. The following is an example of the policy to be allocated:
  - Allocate the key pair to each platform provider.
  - Allocate the key pair to each platform.

2. Operators create the necessary key pair.

The created key pair is registered with AWS.



Using the AWS console, it is possible to both create and register a key pair at the same time. For details on how to create and register a key pair, refer to the published AWS information.

3. Operators store the created key pair on the admin server. For details on how to store the key pair, refer to "[2.5.6 Storage Location of Key Pair Files for AWS](#)".
4. When platform providers apply for registration of a platform, check the available key pairs with the operators. The operators allocate a key pair to the platform providers based on the policy that is allocated, and provide the name of the allocated key pair and the private key to the platform providers.
5. The platform providers select the key pair notified by the operators when applying for registration of their platform. The private key of the key pair must be stored in a secure location.

### Accessing Virtual Machines

The key pair selected when applying for registration of a platform is commonly applied to the virtual machines created in that platform. Depending on the OS type, use the following method to access a virtual machine:

- For Windows

The initial password encrypted using the public key of the key pair is notified to platform providers using the deployment completion e-mail for the virtual machine. It is possible to obtain the initial password by decrypting it using the private key of the key pair. Use the information of the login user ID and the decrypted initial password to log in to the virtual machine.



For details on how to decrypt the initial password, refer to the published AWS information.

- For Linux

Use the private key of the key pair for SSH login authentication.



- For details on the private key format and SSH authentication method, refer to the published AWS information.
- For details on the SSH login method using a private key, refer to the documents of the SSH client being used.

### 2.4.2 Azure

The information necessary to use a virtual machine is as shown below.

Information	Description
IP address of the virtual machine	<p>The internal IP address of the virtual machine is allocated using DHCP. It is necessary for operators to take one of the following actions after deployment is completed, because immediately after deployment, the settings are configured so the IP address is changed every time shutdown or startup of the virtual machine is performed.</p> <ul style="list-style-type: none"> <li>- Fix the IP address, and notify the platform providers of the fixed IP address.</li> </ul>

Information	Description
	- Configure the network environment so that IP addresses are dynamically allocated. For example, use dynamic DNS.
Login user ID	This is different for each type of virtual machine. <ul style="list-style-type: none"> <li>- For Windows Configure the information as the vendor information parameter. The value is fixed for each menu.</li> <li>- For Linux azureuser (fixed) * Note: This may differ depending on the disk image being used.</li> </ul> Operators notify platform providers of the information using an e-mail or a Web site.
Login password	Configure the information as the vendor information parameter. The value is fixed for each menu. Operators notify platform providers of the information using an e-mail or a Web site.

### Operation Example when Fixing IP Addresses

This section explains an operation example when fixing an IP address.

1. When fixing an IP address, it is necessary to deploy the virtual machine in the subnet on the virtual network. The operators must create the virtual network and the subnet on Azure in advance, and register them in the vendor information. Planners must create and publish the menus using the relevant vendor information.
2. Platform providers apply for registration of the service after specifying the relevant menu and registering the service. After the request is approved, the virtual machine is deployed on the cloud environment, and the e-mail notifying completion of deployment is sent to operators and platform providers.
3. Operators fix the IP address of the deployed virtual machine. For details on how to fix an IP address, refer to the published Azure information.
4. Using an e-mail, operators notify the platform providers of the information of virtual machines and IP addresses.
5. Platform providers access the virtual machine based on the information provided by operators.

### 2.4.3 ROR

The information necessary to use a virtual machine is as shown below.

Information	Description
IP address of the virtual machine	Notified to platform providers using the deployment completion e-mail for the virtual machine.
Login user ID	A fixed user ID, which is different for each OS type of virtual machine, is used. <ul style="list-style-type: none"> <li>- For Windows Administrator</li> <li>- For Linux root</li> </ul> Operators notify platform providers of the information using an e-mail or a Web site.
Login password	For details on how to configure the password, refer to the description in the ROR vendor unique parameter in "2.3.1 Cloud Preparations". The value is fixed for each menu. Operators notify platform providers of the information using an e-mail or a Web site.

## Accessing Virtual Machines

Use the following method to access a virtual machine:

1. The platform providers are notified of the IP address of the virtual machine using the notification e-mail of deployment completion of the virtual machine.
2. The platform provider user uses the login password and password received from operators, and logs in to the virtual machine.

## 2.4.4 Physical Servers

---

In Cloud Services Management, a single platform is linked with a single or multiple physical servers.

The operations from preparation of the physical server to enabling the platform provider user to use the software are as shown below.

1. Configuring Vendor Information

Refer to "[2.5.2 Vendor Information](#)".

2. Registering Contract Information

Select the vendor information configured in step 1, and register the contract information.

3. Registering Menus

Select the vendor information registered in step 2, and register the menu.

Enter the information for physical servers, etc., that is provided in the detailed description.

4. Applying for Platforms

Platform providers request for registration of the platform, and operators approve the registration request.

The operators configure the physical server to be provided before the final approval is given by the approver of operators.

5. Notification of Physical Server Access Information

After the final registration request of the platform is approved, platform providers are notified of the information necessary to access the allocated physical server by the operators, through an e-mail or Web site.

## 2.5 Changing Settings

---

This section explains the definition files for Cloud Services Management.

Definition files handle configuration information of Cloud Services Management. Modify definition files if necessary.



.....

For the storage location of the files and directories explained in this manual, the environment variable "FSCSM\_HOME" is used. "FSCSM\_HOME" indicates the absolute path of the folder which contains files and folders that are necessary for setup and operation. For details on "FSCSM\_HOME", refer to the "FUJITSU Software Cloud Services Management Installation Guide".

.....



.....

Depending on the definition file, it may be necessary to restart the services of manager server of Cloud Services Management to reflect modifications. Refer to the explanation of each definition file. To restart, perform the "[2.1.1.2 Stopping](#)" operation first and then perform the "[2.1.1.1 Starting](#)" operation.

.....

### 2.5.1 System Information

---

The system information definition file defines the information involved with overall system behavior, such as port numbers for mail transmission and cut-off dates for usage charges. It is necessary to restart the services to reflect the modification.

The file name and storage location are as follow:

File Name

fscsm\_config.xml

Storage Location

%FSCSM\_HOME%\conf

Setting Items

Item	Description
sendmail.smtp	IP address or hostname of the smtp server for sending email
sendmail.smtp.port	Port number of the smtp server for sending email
sendmail.fromAddr	Email address of the sender
gui.global.title.label	Specify the strings to show in header part of cloud management portal, and the sender name of Email for user notification.  Default: FUJITSU Software Cloud Services Management
accounting.calc.use	Specify whether to use the usage charge calculation function in following format:  true: Use false: Do not use  Default: true
accounting.cutoff.date	Specify the cut off date for usage charges.  Specify a value between 1 and 31.  In cases where the specified date does not exist, the cut-off date will be the end of the month. For example, if 31 is specified, but the month only has 30 days, then the 30th will be used as the cut-off date.  In case to modify this item, modify this after setting up this product in mandatory. Not modify this after starting the operation of this product.  Default: 31
accounting.cutoff.month	Specify the month to be used as the base when referencing usage charges for multiple months in the [Billing] window.  Specify a value between 1 and 12.  Default: 4
accounting.retention.use	Specify whether to use the function for storing (deleting) usage charge data (including metering) in following format:  true: Use. Usage charge data for which the storage period has expired is deleted. false: Do not use. Usage charge data is not deleted.  Default: false
accounting.retention.period	Specify storage period of usage charge data (including metering). Specify the year and month of storage period in the format YY-MM.  Default: 09-00  Not to specify 00-00. It is automatically executed to delete the expired usage charges data, on 1:15 every day.  Valid only when the function for storing (deleting) usage charge data is set to "true".
accounting.mail.sender.address	The sender address used when sending monthly usage charge files.

Item	Description
accounting.mail.sender.name	The sender name used when sending monthly usage charge files.
accounting.mail.receiver.address	Specify the destination used when sending monthly usage charge files. Multiple addresses can be specified.
help.url.operation_manager	Specify the path or the external URL of the file (User's guide) displayed when the [Help] link is clicked in case that Operator - Approver is logging in to the Cloud Management Portal. Default: /manual/index.html
help.url.operation_user	Specify the path or the external URL of the file (User's guide) displayed when the [Help] link is clicked in case that Operator - Representative is logging in to the Cloud Management Portal. Default: /manual/index.html
help.url.planEval_manager	Specify the path or the external URL of the file (User's guide) displayed when the [Help] link is clicked in case that Planner - Approver is logging in to the Cloud Management Portal. Default: /manual/index.html
help.url.planEval_user	Specify the path or the external URL of the file (User's guide) displayed when the [Help] link is clicked in case that Planner - Representative is logging in to the Cloud Management Portal. Default: /manual/index.html
help.url.bizSysProv_manager	Specify the path or the external URL of the file (User's guide) displayed when the [Help] link is clicked in case that platform provider - Representative is logging in to the Cloud Management Portal. Default: /manual/html/B1WS-1231-01ENZ0-00/index.html
help.url.bizSysProv_user	Specify the path or the external URL of the file (User's guide) displayed when the [Help] link is clicked in case that platform provider - Representative is logging in to the Cloud Management Portal. Default: /manual/html/B1WS-1231-01ENZ0-00/index.html
help.url.default	Specify the path or the external URL of the file (User's guide) displayed when the [Help] link is clicked by the objective role user in case that key of help.url.<role ID>on the cloud management portal. Default: /manual/index.html
org.depth.max	Specify the maximum number of levels of the organization hierarchy. Specify an integer between 1 and 5. When changing the value of this item, modify the value of gui.org.hierarchy.label.<n> accordingly. Default: 3
gui.org.hierarchy.label.<n>	Specify the name for the organization hierarchy. For <n>, specify the level in the organization hierarchy using an integer between 1 and 5. When modifying org.depth.max, specify the value for this item according to the new value of org.depth.max. Default: gui.org.hierarchy.label.1: Unit gui.org.hierarchy.label.2: Division gui.org.hierarchy.label.3: Department If something other than an integer between 1 and 5 is specified, the organization hierarchy name corresponding to that value is not displayed.

Item	Description
gui.org.customfield.label.<n>	Specify the item name of the custom field that can be defined for the organization.  - Only specify an integer between 1 and 5 for <n> when you want to add an item.  Default: gui.org.customfield.label.<n>: Organization Custom Field <n>(defined in fscsm_config.xml)
gui.user.customfield.label.<n>	Specify the item name of the custom field that can be defined for users. For <n>, specify an integer between 1 and 5.  By adding this item, it is possible to increase the items that can be configured when creating and modifying users.  Up to five items can be added.  Default: gui.user.customfield.label.<n>: User Custom Field name <n>(defined in fscsm_config.xml)

## 2.5.2 Vendor Information

Vendor information refers to the information about the vendor that is selected first when registering contract information with Cloud Services Management. Vendors and connection information with the cloud management software is managed here.

When arranging a subscription with a new vendor or when registering a private cloud as a service, new registration is necessary.

Files in the following storage location are loaded as vendor information. It is necessary to restart the services to reflect the modification.

Storage Location

```
%FSCSM_HOME%\conf\vendors
```



Point

Following sample files of vendor information are registered in installing this product. Copy and use these files to modify necessary part.

Vendor	Sample file name of vendor information
AWS	default_aws.xml
Azure	default_azure.xml
ROR	default_ror.xml
Physical Server	default_physical.xml



Note

- In case to modify the vendor information after starting the operation of this product, since it might already be in use, add each parameters of option as new parameter or create new vendor information, and not modify the existing vendor information. Also, in case to delete the vendor information after starting the operation of this product, delete the vendor information which is not used for contract, do not delete it if it is used.
- As for vendor information of physical machine, "vendor" and "basicMenus/basicMenu" of "Setting Items" are only configured. There are no configurations for other setting items, "optional parameter value" and "other available configuration option".

Setting Items

Category	Item	Description
vendor	vendorId	ID for managing the vendor and the connection information with cloud management software uniquely. Specify a value different from other vendor information.
	vendorName	Display name of the vendor and connection information with cloud management software.
basicMenus/basicMenu	-	It is possible to manage the item names of the general menu supported by this menu. The value for the item can be defined during menu registration.
	menuId	ID for managing the general menu uniquely. Specify a value different from the general menu in this vendor information.
	name	Display name of the general menu displayed during menu registration.
instanceOptions/serviceOption	-	It is possible to manage the options about virtual machines in the configuration options that can be selected during service registration.
	optionId	ID for managing an option definition for virtual machines in the configuration options uniquely.
	name	Display name of this option definition.
	parameter	The parameter sent to the vendor and cloud management software when this option is selected during service registration.  Specify with the format "parameter name=value ". In case to specify multiply, divide them with "&";
	defaultPrice	Unit price of this option that is displayed by default during menu registration.
systemDiskImageOptions/serviceOption	-	It is possible to manage the options about the system disk in the configuration options that can be selected during service registration.
	optionId	ID for managing an option definition for the system disk in the configuration options uniquely.
	name	Display name of this option definition.
	parameter	The parameter sent to the vendor and cloud management software when this option is selected during service registration.  Specify with the format "parameter name=value ". In case to specify multiply, divide them with "&";
	defaultPrice	Unit price of this option that is displayed by default during menu registration.
	diskSize	Disk space used for calculation of usage charges when this option is used.



Category	Item	Description
dataDiskImageOptions/serviceOption		It is possible to manage the options about additional data disks in the configuration options that can be selected during service registration.
	optionId	ID for managing an option definition for additional data disks in the configuration options uniquely.
	name	Display name of this option definition.
	parameter	The parameter sent to the vendor and cloud management software when this option is selected during service registration.  Specify with the format "parameter name=value ". In case to specify multiply, divide them with "&";
	defaultPrice	Unit price of this option that is displayed by default during menu registration.
	diskSize	Disk space used for calculation of usage charges when this option is used.
othersOptions/serviceOption	-	It is possible to manage the other options in the configuration options that can be selected during service registration.  Omit serviceOption category for the vendor for which other option is not prepared.
	optionId	ID for managing other option definitions in the configuration options uniquely.  Solid ID must be specified for each vendor.
	name	Display name of this option definition.
deployParameters/deployParameter	-	Specific parameter information that is passed to the vendor and cloud management software, excluding configuration options, can be managed. This item can be selected during menu registration.
	id	ID for managing specific parameter information uniquely.
	name	Display name of the specific parameter information.
	parameter	The value of the specific parameter information that is passed to the vendor and cloud management software.  Specify with the format "parameter name=value ". In case to specify multiply, divide them with "&";



Available strings for each item is explained.

- As for id, it can be specified for small alphanumeric letters, alphanumeric numbers, hyphen(-), underscore(\_) and period(.) within 32 letters. Leading character must be small alphanumeric letters, alphanumeric numbers.

- As for name, excluding the control character like line break, all character with UTF-8 format can be specified within 64 letters.
- As for defaultPrice, in case of "to be defined after discussion", specify -1 or -1.0000.

Optional parameter value

AWS

Category/Item	Parameter to specify to parameter factor
instanceOptions/serviceOption	param_instance_type
systemDiskImageOptions/serviceOption	param_image_id
dataDiskImageOptions/serviceOption	param_block_device_size param_block_device_type param_block_device_num
deployParameters/deployParameter	param_security_group_id param_subnet_id param_associate_public_ipaddress param_region param_availability_zone param_block_device_names

Azure

Category/Item	Parameter to specify to parameter factor
instanceOptions/serviceOption	param_instance_size
systemDiskImageOptions/serviceOption	param_image_name param_os
dataDiskImageOptions/serviceOption	param_block_device_size param_block_device_type param_block_device_num
deployParameters/deployParameter	param_affinity_group param_subscription_id param_servername param_storage_account_name param_availability_set param_username param_password param_virtual_network_name param_subnet_id

ROR

Category/Item	Parameter to specify to parameter factor
instanceOptions/serviceOption	param_numofprocessor param_processorspeed param_memorysize

Category/Item	Parameter to specify to parameter factor
systemDiskImageOptions/serviceOption	param_imageName
dataDiskImageOptions/serviceOption	param_block_device_size param_block_device_num
deployParameters/deployParameter	param_templatename param_serverpassword param_network param_manageserver param_servername

Other available configuration option

AWS

Available option	Value of option_id attribute
Whether to use SLB	"slb"
Whether to use RDB	"rdb"
Whether to use snapshot	"snapshot"

Azure

There are no other available configuration options.

ROR

There are no other available configuration options.



Point

As for the meaning and available strings for each parameter, refer to "[Information Required to Deploy Virtual Machines](#)".

And for the example of specification for each parameter, refer to the samples of vender information.

## 2.5.3 Operation Option Information

Operation option information is the information about the option services provided using menus. Operation option information is displayed as selectable operation options when registering a menu in the cloud management portal.

It is necessary to restart the services to reflect the modification. The file name and storage location are as follow:

File Name

extraOption.xml

Storage Location

%FSCSM\_HOME%\conf

Setting Items

Category	Item	Description
extendedOptions/extendedOption	-	It is possible to manage the operation options. This item is displayed as an operation option candidate during menu registration.
	optionId	ID for managing an operation option uniquely.
	optionName	Display name of the operation option.

Category	Item	Description
	defaultPrice	This is the value displayed as the default unit price of the operation options during menu registration.
	comment	This is the item for describing the explanation of operation option when adding platform.  Excluding the control character, all character with UTF-8 format can be specified within 64 letters.

### Point

As for the available strings for each item, refer to the point of "[2.5.2 Vendor Information](#)".

### Note

In case to modify the operation information after starting the operation of this product, since it might already be in use, add new parameters and do not modify the existing parameters.

## 2.5.4 Notification Information

Notification information is displayed in the Home window of the cloud management portal.

Restarting of services is not necessary to reflect modifications. The file name and storage location are as follow:

File Name

```
messages.txt
```

Storage Location

```
%FSCSM_HOME%\conf
```

### Setting Content

In the notification information file, one message is stated on each line.

```
Date,message
```

Enter the date and a message separated by a comma (,).

The character strings entered for date and message are displayed as is. For the message section, text such as information about system stoppage and contact information can be registered.

In this file, "YYYY-MM-DD,XXXX" is stated by default. Edit the file as required to suit your needs.

### Note

Use UTF-8 for the character code of the notification information file.

### Setting Example

```
2011/06/25,Maintenance is scheduled on the weekend.
```

## 2.5.5 Menu Icons

Icons to be displayed in the menu list window for platform providers can be registered.

Files in the following storage location are loaded as icon files and displayed in a list during menu registration so that you can select one from the list. Save each icon as an image file in a format supported by web browsers, such as png.

Storage Location

```
%FSCSM_HOME%\conf\images
```



The dimension of each icon should be 92 px \* 92 px.

## 2.5.6 Storage Location of Key Pair Files for AWS

---

Store the key pair files to be used when a menu using AWS is specified.

Files in the following storage location are loaded as authentication information and displayed in a list during platform addition so that you can select one from the list.

Storage Location

```
%FSCSM_HOME%\conf\adapter\aws\keypair
```



As for key pair file, not specify the type of file, and specify the key pair name to file name.

# Chapter 3 Billing

This chapter explains billing.

## 3.1 Overview of Billing

---

This section explains the overview of the billing function.

The billing function provides the basis for billing corresponding to the platforms used by all organizations.

Billing includes the following functions.

- Unit Price Management Using Menus

Performs setting and modification of the unit prices for billing resources that are the subjects of charges, such as platforms and virtual machines.

For details of menu management, refer to the "FUJITSU Software Cloud Services Management User's Guide for Planner and Operator".

In addition, when requesting for services, it is possible to display the estimated charge for the services based on the preset unit price.

For details of estimated charge of services, refer to the "FUJITSU Software Cloud Services Management User's Guide for Platform Provider".

- Calculation of Billing

Calculates billing based on the usage amount of platforms and the unit price that was preset using menus. For details on how to calculate and operate billing, refer to "[3.2 Calculation of Billing](#)" and "[3.3 Operation of Billing](#)".

- Viewing of Billing

Billing can be viewed from the cloud management portal. Billing information can also be downloaded as a file. For details, refer to the "FUJITSU Software Cloud Services Management User's Guide for Planner and Operator".

## 3.2 Calculation of Billing

---

This section explains the calculation of billing.

Refer to "[3.4 Metering Logs](#)" for information on the metering log, which is the information upon which the calculation of billing is based.

### 3.2.1 Aggregation of Usage Time of Resources

---

When a user performs operation of a platform or a virtual machine, each operation that was performed is recorded in the metering log. The usage time of resources are aggregated based on the content of this log.

Billing is calculated for each platform based on the aggregated usage time, the amount of resources used, and the unit price in the menu.

### 3.2.2 Calculation Procedure of Billing

---

#### Resource Usage Time

There are two types of resource usage time. One is the deployed time and the other is the operated time. Both types of resource usage time are aggregated based on the information in the metering log.

- Deployment time is the time between when the resource is deployed and when it is deleted.

- Operation time is the time between when the resource is started and when it is stopped.

For both deployment time and operation time, the total usage time per day is aggregated in units of minutes.

Aggregation results are rounded off to the nearest minute. 30 seconds or over is counted as 1 minute and less than 30 seconds is counted as 0 minutes.

## Calculation Procedure of Resource Usage and Billing

Billing is calculated for all resources using the following formula: <usage amount or usage time of resources> \* <unit price>

There are two types of calculation methods for billing: by fixed rate and by the amount used.

- With fixed-rate charging, the billing is charged according to a fixed fee rather than the usage time of the resources.
- With charging by the amount used, the billing is incurred based on the usage time of the resources.

The type of calculation method is used for billing is determined by the resource.

The following table shows whether usage amount or usage time is applied to each resource and the charging method applied.

Resource	Usage Amount or Usage Time	Type
Basic charges	When the deployment time of a platform exists, the usage amount is counted as "1".	Fixed charging
Initial costs	When the deployment time of a platform exists in the month when the platform was created, the usage amount is counted as "1".	Fixed charging
Operation options	When the deployment time of a platform with operation options selected exists, the usage amount is counted as "1".	Fixed charging
Virtual machine	The operation time of virtual machines is regarded as the usage time. Operation time is counted in units of hours.	Charge by amount of use
System disk image	When the deployment time of a virtual machine with a corresponding system disk image selected exists, the usage amount is counted as "1".	Fixed charging
Data disks	The number of data disks is regarded as the usage amount. The number of data disks that yields the maximum billing in the given month is used as the usage amount.	Fixed charging
Snapshots	The total size of the snapshots is regarded as the usage amount. Snapshot size includes the system disk and data disk. The unit is GB. The snapshot size that yields the maximum billing in the given month is used as the usage amount.	Fixed charging
SLBs	The number of SLBs is regarded as the usage amount. The SLB configuration that yields the maximum billing in the given month is used as the usage amount.	Fixed charging
RDBs	The number of RDBs is regarded as the usage amount. The configuration that yields the maximum billing in the given month is used as the usage amount.	Fixed charging

### Note

When organizations or platforms are deleted or moved, the following applies regarding billing target organizations and billing.

- When organizations or platforms are deleted

For the resources to which fixed charging is applied, fixed billing is charged.

For the resources to which charging by the amount of use is applied, billing is charged based on the usage time until the corresponding resources are deleted.

The billing occurred in deleted platform is shown on [Billing] window after the platform is deleted.

- When organizations or platforms are moved

For the resources to which fixed charging is applied, fixed billing is charged to the movement destination organization, not to the movement source organization.

For the resources to which charging by the amount of use is applied, the billing is charged to the movement destination organization based on the usage time of the resources after movement. To the movement source organization, the billing is charged based on the usage time of the resources before movement.

When an organization is moved, the organization before the movement and the organization after the movement are displayed as two different organizations in the [Billing] window.

In case to modify menu, the changed unit price is reflected to billing calculation since the request for modifying menu. Though, as for billing, the unit price is adapted that makes maximum billing in the month. This means that, in case to modify menu and reduce unit price, the unit price before modifying can be adapted in the month to change.

---

 **Example**

When organization B belonging to organization A is moved to organization C, the following organizations are displayed in the [Billing] window.

- In the [Billing] window, for the month when the movement of the organization was performed, organization B is displayed as two different organizations. One belongs to organization A and the other belongs to organization C.
- For the next and subsequent months after the movement, only organization B belonging to organization C is displayed.

---

### 3.2.3 Sending Billing

The billing for the previous month (confirmed the day after the cut-off date) are attached to an email as a billing file and a billing detail file and sent to the destination email address. An explanation of the billing file and the billing details file is given below.

- Billing File
  - File name: acnt\_cutoff\_YYYY-MM.zip
  - A ZIP file containing billing details files. YYYY-MM indicates the year and month of the billing period.
- Billing Details File
  - File name: <Organization ID>(YYYY-MM-DDTHHMMSS-YYYY-MM-DDTHHMMSS)<Platform ID>.csv
  - A CSV file showing the breakdown of billing for each platform. YYYY-MM-DDTHHMMSS indicates the start date and the end date of the valid time period for the corresponding organization. When there is no end date, an empty string is displayed for the latter YYYY-MM-DDTHHMMSS. As for the valid time of start date, adding date for organization or moving operation date is shown for destination organization. As for that of end date, deleting date for organization or moving operation date is shown for source organization.

---

 **Point**

Character code of output file is UTF-8.

For the details of Billing files, refer to "[5.2.8 Charge Output Command](#)".

---

## 3.3 Operation of Billing

This section explains how to operate billing.

Billing can be operated by setting, modifying, and viewing the unit prices that are set in the menu. For details on operation procedures, refer to the "FUJITSU Software Cloud Services Management User's Guide for Planner and Operator".

### 1. Creating a Menu

When creating a menu, set the unit price for each resource.

Design the values to be set beforehand, referring to "[3.2.2 Calculation Procedure of Billing](#)".

Unit prices in the menu are used for billing calculation from when the menu is created to when the menu is deleted.



## 2. Modifying a Menu

Unit prices of each resource can be modified when modifying the menu.

For example, unit prices can be modified when you want to set time-limited prices such as campaign prices or when you want to raise prices.

Unit prices that were changed using the menu are reflected on billing calculation upon approval of the application for menu changes.

## 3. Viewing Unit Prices

Unit price information can be viewed from the [Detail] window of the menu.

# 3.4 Metering Logs

---

This section explains the items output to the metering log.

Metering log records the operations performed by users as operation log, in order to aggregate the usage time of resources. The objective operations to record are to add, modify and delete platform, and to add, modify, start/stop and delete service. When executing billing calculation, the usage time of resources are aggregated according to this metering log

Refer to following table for the details of items output in metering log.

Item Name	Description	Value
version	Version information	Version information of file format is output. Example: 1
eventTime	Time of event	A character string is output. The following format is used. Format: YYYY-MM-DDThh:mm:ss.SSSZ Example: Displays "2012-04-01T00:00:00.000+0900" for the date and time 12:00 A.M. and 00.000 seconds on April 1, 2012 in time zone UTC+9:00
event	Event	The following character strings are output. ADD: Add events. CHANGE: Change events. DELETE: Delete events. START: Start events. STOP: Stop events.
resourceType	Resource type	The following character strings are output. system: Platform vm: Virtual machine snapshot: Snapshot rdb: RDB slb: SLB
orgId	Organization ID	The organization ID is output.
bizSystemId	Platform ID	The platform ID is output.
menuId	Menu ID	The menu ID is output.
extendedOptions	Operation options	The operation options being used by the platform are output.
userId	Administrator	The user ID of the administrator of the platform.
resourceId	Resource ID	The following values are output for each resource type: system: <i>None</i>

		vm: Virtual machine ID snapshot: Snapshot ID rdb: RDB ID slb: SLB ID
resourceIdentifier	Resource identifier	The following values are output for each resource type: system: <i>None</i> vm: Instance type snapshot: Snapshot option ID rdb: RDB option ID slb: SLB option ID
systemDiskImage	System disk image	System disk image is output.
dataDiskType	Data disk type.	Data disk type is output.
dataDiskNum	The number of data disks	The number of data disks is output.
snapshotSize	Snapshot size	The snapshot size is output.

# Chapter 4 Maintenance

This chapter explains system maintenance of Cloud Services Management.

## 4.1 Logs

This section explains the logs that are output.

### 4.1.1 Audit Logs

Outputs the audit log of operations performed on the resources managed by this product, excluding viewing operations.

Audit logs are output for the operations from the cloud management portal and commands. Registration, modification, and deletion operations for which application tasks occur are logged to the audit log using the applicant ID when all approval processes are output and corresponding resource operation has actually occurred.

The resource operations that are logged are as follow:

- Registration, Modification, Deletion
  - Contract information
  - Menus
  - Platforms
  - Services
  - Organizations
  - Users
- Starting, Stopping, Snapshots
  - Services

#### 4.1.1.1 Log Settings

This section explains how to configure the audit log and the information that is output.

File Name

csm\_auditlog.xml

Storage Location

%FSCSM\_HOME%\conf\

Setting Items

Setting Items	Value	Default Value	Description
File	<Output_file_name>	\${com.fujitsu.csb.home}/log/fscsm_audit.log	The output destination of the audit log.  \${com.fujitsu.csb.home} indicates the installation folder.
MaxFileSize	<Maximum size of the log file>	10 MB	Specify the maximum file size for the audit log file. The file size can be specified using the combination of an integer greater than 0 and a unit (KB, MB, or GB).

Setting Items	Value	Default Value	Description
MaxBackupIndex	<The number of versions of the log file>	9	Specify the number of versions of the log file that can be saved. Specify an integer between 1 and 100.

#### Estimating Output Log Size

Depending on the user ID or resource ID, approximately 70 bytes are used for logging of each operation. Estimate the total amount of resource operations performed per day and then set MaxFileSize and MaxBackupIndex so that the log file has enough space to record the expected operation events.

#### 4.1.1.2 Log Entry Format

Each entry is output in the following format:

"Time    Operator    Operation    Success/Failure"
--

For Command Operations

"Time    Command name    Operation    Success/Failure"
--

Item	Content
Time	Outputs the date and time when the operation was performed in "yyyy/MM/dd HH:mm:ss.SSS" format.
Operator/Applicant	Outputs the ID of the user who performed the operation or the user who applied for the operation.
Operation	Operation and target resources
Success/Failure	When a resource operation was successful, "SUCCESS" is output. When a resource operation failed, "FAILED" is output.

List of Operations

Operation	Content
When contract information was created	create contract:[Contract information ID]
When contract information was modified	modify contract:[Contract information ID]
When contract information was deleted	delete contract:[Contract information ID]
When a menu was created	post_menus=create menu:[Menu ID]
When a menu was modified	modify menu:[Menu ID]
When a menu was deleted	delete menu:[Menu ID]
When a platform was created	create bizsystem:[Platform ID]
When a platform was modified	modify bizsystem:[Platform ID]
When a Platform was deleted	delete bizsystem:[Platform ID]
When a service was created	create service:[Service ID]
When a service was modified	modify service:[Service ID]
When a service was deleted	delete service:[Service ID]
When an organization was created	create org:[Organization ID]
When an organization was modified	modify org:[Organization ID]
When an organization was deleted	delete org:[Organization ID]

Operation	Content
When a user was created	create user:[User ID]
When a user was modified	modify user:[User ID]
When a user was deleted	delete user:[User ID]
When a service was started	start service:[Service ID]
When a service was stopped	stop service:[Service ID]
When a snapshot was created	create snapshot:[Snapshot ID]
When a snapshot was reverted	restore snapshot:[Snapshot ID]
When a snapshot was deleted	delete snapshot:[Snapshot ID]

#### Log Output Example

```

2015/06/29 14:35:30.902 fscsm_user create user:op_user SUCCESS
2015/06/29 14:38:18.230 fscsm_user create user:op_manager FAILED
2015/06/29 15:29:43.361 op_manager create org: org_01 SUCCESS
2015/06/29 15:33:51.690 pl_manager create menu: menu_01 SUCCESS
2015/06/29 15:47:30.988 op_manager delete user: sv_manager SUCCESS
2015/06/29 15:49:49.692 op_manager modify user:biz_manager SUCCESS
2015/06/29 16:07:07.381 biz_manger_002 create bizsystem:1 SUCCESS
2015/06/29 16:11:26.194 biz_manager01 create bizsystem:2 SUCCESS
2015/06/29 16:16:19.288 biz_manger_002 modify user:biz_manger SUCCESS
2015/06/29 16:18:49.851 pl_manager modify menu: menu_01 SUCCESS
2015/06/29 16:19:18.382 biz_manger_002 create bizsystem:3 SUCCESS
2015/06/29 16:21:49.945 pl_user modify menu: menu_01 SUCCESS
2015/06/29 16:25:22.274 biz_manager create service:vm-1-biz01 FAILED
2015/06/29 18:07:40.583 biz_manager create service:vm-1-gyoumu100 SUCCESS
2015/06/29 18:07:45.654 biz_manager start service: vm-1-gyoumu100 SUCCESS
2015/06/29 18:09:10.942 biz_manager create snapshot:vm-1-gyoumu100 SUCCESS

```

## 4.1.2 Deleting Coordination Adapter Logs

The coordination adapter uses an internal database to record the processing status of each request and to create files for use in the investigation of any failures which might occur during system operation. This data is not automatically deleted. To delete the data that has been stored for longer than a certain period after process completion, use the following procedure:

### Deleting Process Instances

The coordination adapter manages the statuses and results of processes using information called process instances. A process instance is created for each request and is recorded and managed in the internal database. To delete process instances which have been stored for a certain period after process completion, execute the following command as a user with administrator privileges:

```

%FSCSM_HOME%\SWRBA\SWRBAM\bin\swrba_admin pi-delete -user swrbaadmin -password <password> -
startedbefore <process completion date>

```

Option	Description
-user	Specifies the user name of the user for controlling processes of the coordination adapter.

Option	Description
	The user name is fixed as "swrbaadmin".
-password	Specify the password of the user for controlling processes of the coordination adapter. Specify the value that was specified during the setup of the coordination adapter.
-startedbefore	Specify the ending start date of the period for the processes to be targeted. Specify the value using the following format: yyyy-mm-dd



## Example

An example for deleting process instances that were started before December 31, 2015 is shown below:

```
%FSCSM_HOME%\SWRBA\SWRBAM\bin\swrba_admin pi-delete -user swrbaadmin -password systemwalker#1 -
startedbefore 2015-12-31
```

## Deleting Logs

The coordination adapter logs information such as request and response parameters and the results of processes. The log files are created in the following directory:

```
%FSCSM_HOME%\log\adapter
```

Separate log files are created for each request. Once created, these files are never modified nor referenced by the coordination adapter.

Log in as a user with administrator privileges, check the time stamp of the log files, and then delete the log files that have been stored for a certain period of time after process termination.

## 4.2 Backup and Restore

### 4.2.1 Backup and Restore for Manager Server

This section explains how to back up and restore the system of manager server of Cloud Services Management.

#### 4.2.1.1 Backup

To back up the databases and configuration for manager server, perform the following procedure:

1. Stop the System

Stop manager server. For details on how to stop Cloud Services Management, refer to "[2.1.1.2 Stopping](#)".

2. Back up the Databases

Back up the content in each data dictionary for the three databases used by manager server.

```
%FSCSM_HOME%\db\CSMSYSTEM
%FSCSM_HOME%\db\CSMMETERINGLOG
%FSCSM_HOME%\db\CSMACCOUNTING
```

Use any method to back them up. An example is shown below.



## Example

Using Explorer, back up the content in each data dictionary to a compressed folder in the ZIP format.

### 3. Back up Logs

```
%FSCSM_HOME%\log
```

Back up the logs if necessary.

### 4. Back up the Configuration Files

Configuration files are stored in the following two folders. Back up the contents of these folders.

```
%FSCSM_HOME%\conf
```

```
%FSCSM_HOME%\sys\conf
```

Use any method to back them up.

### 5. Back up required software

Back up required software for this product. For details on procedure, refer to manual of required software.



When user information is registered or modified on this product, backup of ServerView Operations Manager must be performed.

If previous backup of ServerView Operation Manager is available and the differences from this product don't exist, the backup of ServerView Operations Manager is unnecessary.

### 6. Start the System

To resume operation after backup, start Cloud Services Management.

For details on how to start Cloud Services Management, refer to "[2.1.1.1 Starting](#)".

## 4.2.1.2 Restore

To restore the databases and configuration for Cloud Services Management, perform the following procedure:

#### 1. Stop the System

Stop Cloud Services Management. For details on how to stop Cloud Services Management, refer to "[2.1.1.2 Stopping](#)".

#### 2. Restore Databases

According to the backup method that was used, back up all of the old files that exist in the data dictionary and then place the data that was already backed up into the data dictionary.

If the operation example described in "[4.2.1.1 Backup](#)" in this manual has been performed, perform the following operation:

- Using Explorer, copy the files that were backed up to a compressed folder in the ZIP format into each data dictionary.

#### 3. Restore Log and Configuration Files

Depending on procedure for backup, put backup data under log or configuration file folder after all old files under log and configuration folder are saved.

#### 4. Restore Required Software

Restore required software for this product. For details on procedure, refer to manual of required software.

#### 5. Start the System

To resume operation after restoration, start manager server.

For details on how to start manager server, refer to "[2.1.1.1 Starting](#)".

## 4.2.2 Backup and Restoration for Coordination Adapter

This section explains how to back up and restore the system of coordination adapter.

## 4.2.2.1 Notes on Backup and Restoration

### Notes on the environments where backups and restorations are performed

When backup and restoration are performed, the environment backed up and the restored environment must be in the same condition. Therefore, the backup and restoration cannot be performed in the following conditions:

- When OS are different in from backup and to restore  
However, execution will be possible if the operating system versions of the same vendor are different.
- When the product installation directories are different
- When the host information (host name/IP address) is different
- When the code types are different
- When the Web server (Interstage HTTP Server), message broker, and server function port numbers are different

### Notes on the timing of backups and restorations

- When backup and restore are executed, it will be necessary to stop, and then, restart coordination adapter. Additionally, at the time of restore coordination adapter is stopped, and then, restarted. For this reason, the operator should execute backup and restore in a time zone that does not use this product.
- The status of the coordination adapter will be restored exactly as it was at the point when the backup was executed. For this reason, if the restoration was executed using the backup resources of the coordination adapter while it was running, the activity of the coordination adapter will be restarted. It is recommended that you first check that there are no coordination adapter which are running, before executing the backup.

### Handling backup resources

- When moving backup resources to the restoration target, move the directory specified as the backup directory and all its files.
- Do not delete the backup resources in the directory specified as the backup directory until the restoration completes.
- The backup command cannot be used to back up data to the following types of media:
  - Optical disks such as CD-Rs and DVD-Rs  
To save user assets to optical disks, first back up the data to the local disk, and then, write it to the media using a dedicated optical disk writer, for example.
  - Network paths
  - Directories whose pathnames include spaces
- For the backup destination directory name, only alphanumeric characters can be specified. The name cannot include symbols or blank spaces.
- The backup directory name can contain up to the following number of characters:

32 bytes
----------

- If the specified directory does not exist, it will be created by the backup command.

### Handling restoration resources

- The restore command cannot be used to restore data from the following type of media:
  - Directories whose pathnames contain spaces
  - Restore from network path
- For the backup destination directory name, only alphanumeric characters can be specified. The name cannot include symbols or blank spaces.



- The backup directory name can contain up to the following number of characters:

```
32 bytes
```

## 4.2.2.2 Backup

This section describes how to back up the coordination adapter environment.

Back up as following steps:

1. Stop coordination adapter
2. Backup LDAP resources
3. Backup coordination adapter execution environment
4. Start coordination adapter

### 4.2.2.2.1 Stop Coordination Adapter

Stop coordination adapter. For details on how to stop coordination adapter, refer to “[2.1.2.2 Stopping](#)”.

### 4.2.2.2.2 Backup LDAP Resources

This section explains how to back up the LDAP resources.

In the following example, the repository "fscsm" is backed up to the backup directory "X:\Backup\fscsm".

1. Log in as the system administrator.
2. Stop Interstage directory service.

Stop "Interstage Directory Service(fscsm)" from [Control Panel] >> [Administrative tool] >> [Service]. Or stop it by the following command.

```
net stop "Interstage Directory Service(fscsm) "
```

3. Create a directory for backup. Note that there is no need to create a directory for fscsm in X:\Backup.

```
mkdir X:\Backup
```

4. Execute the backup command.

```
%FSCSM_HOME%\SWRBA\IAPS\bin\irepbacksys -d X:\Backup\fscsm -R fscsm
```

5. Start the Interstage Directory Service, if it is used.

Click [Start] >> [Control Panel] >> [Administrative Tools], and then, double-click [Services]. From the displayed list of services, right-click Interstage Directory Service(fscsm) and click Start.

Alternatively, start the Interstage Directory Service using the following command:

```
net start "Interstage Directory Service(fscsm) "
```



### Information

Refer to "Maintenance (Resource Backup)" in the Interstage Application Server Operator's Guide for information on how to back up the Interstage Directory Service.

### 4.2.2.2.3 Back up coordination adapter execution environment

This section describes how to back up the coordination execution environment.

1. Check the space available in the backup directory.
2. Back up resources.

## Checking the space available in the backup directory

Amount of space for backup directory is estimated as the following:

```
Space required for the backup directory =  
Total size of the files and directories under the directory "%FSCSM_HOME%\SWRBA\SWRBADB"  
+ Total size of the files and directories under the directory "%FSCSM_HOME%\SWRBA\SWRBADM"  
+ Total size of the files and directories under the directory "%FSCSM_HOME%\SWRBA\SWOMGR"  
+100MB
```

## Backing up resources

Describes the steps for backing up backup directory "X:\Backup\adapter".

1. Login as a system administrator.
2. Create back up directory.

```
mkdir X:\Backup\adapter
```

3. Execute back up command.

Back up the resources of coordination adapter by executing the following command:

```
%FSCSM_HOME%\SWRBA\SWRBAM\bin\swrba_backup X:\Backup\adapter
```

After executing command, the message below will be displayed:

```
Systemwalker Runbook Automation backup has started.  
Database backup has started.  
Database backup has completed successfully.  
File backup has started.  
File backup has completed successfully.  
Backup of the Scheduling is starting.  
Backup of the Scheduling has finished.  
Starting to back up the CMDB Manager.  
Finished backing up the CMDB Manager.  
Systemwalker Runbook Automation backup has completed successfully.
```

After completing backup, the message below will be displayed:

```
Systemwalker Runbook Automation backup has completed successfully.
```

### 4.2.2.2.4 Start Coordination Adapter

Start coordination adapter. For details on how to start coordination adapter, refer to [“2.1.2.1 Starting”](#).

### 4.2.2.3 Restore

This section describes how to restore the coordination adapter environment.

Restore as following steps:

1. Restore LDAP resources.
2. Restore coordination adapter execution environment.

#### 4.2.2.3.1 Restoring LDAP Resources

This section explains how to restore the LDAP resources.

In the following example, the repository "fscsm" backed up to the directory "X:\Backup\fscsm" is restored.

1. Delete the "fscsm" directory if it exists in "X:\Backup".

2. Recovery repository by the following command.

```
%FSCSM_HOME%\SWRBA\IAPS\bin\ireprestsys -d X:\Backup\fscsm -R fscsm
```

3. [Click Start] >> [Control Panel] >> [Administrative Tools], and then, double-click [Services]. From the displayed list of services, right-click "Interstage Directory Service(fscsm)" and click Start.

Alternatively, start it using the following command:

```
net start "Interstage Directory Service(fscsm) "
```

### Information

Refer to "Maintenance (Resource Backup)" in the Interstage Application Server Operator's Guide for information on how to restore the Interstage Directory Service.

### Note

You may not restore if repository exists. Delete repository from Interstage Management Console.

## 4.2.2.3.2 Restoring Coordination Adapter Execution Environment

This section explains how to restore the coordination adapter execution environment.

In the following example, the resources backed up to the directory "X:\Backup\adapter" is restored.

1. If the setup of coordination adapter is complete, stop coordination adapter.

For details on how to start coordination adapter, refer to "2.1.2.2 Stopping".

2. Execute restore command.

Restore the resources of coordination adapter by executing the following command:

```
%FSCSM_HOME%\SWRBA\SWRBAM\bin\swrba_restore X:\Backup\adapter
```

If the command is executed in a state in which the setup of coordination adapter is complete, the following message will be displayed.

```
Systemwalker Runbook Automation restore has started.
Initialization of the restoration destination directory will start.
Initialization of the restoration destination directory has finished.
Database restore has started.
Database restore has completed successfully.
File restore has started.
File restore has completed successfully.
Restore of the Scheduling is starting.
Restore of the Scheduling has finished.
Starting to restore the Interstage Business Process Manager.
Finished restoring the Interstage Business Process Manager.
Starting to restore the CMDB Manager.
Finished restoring the CMDB Manager.
Systemwalker Runbook Automation restore has completed successfully.
```

If the command is executed in a state in which the setup of coordination adapter is not complete, the following message will be displayed.

```
Systemwalker Runbook Automation restore has started.
The Systemwalker Runbook Automation environment build to the restoration destination management
server will start.
Starting the Process Management Database build.
Creating the Process Management Database has completed.
Starting to set up the environment for Systemwalker Runbook Automation.
```

```
Setting up the environment for Systemwalker Runbook Automation has completed.
The CMDB environment setup will start.
The CMDB environment setup is now complete.
The Systemwalker Runbook Automation environment build to the restoration destination management
server has finished.
Systemwalker Runbook Automation restore has started.
Initialization of the restoration destination directory will start.
Initialization of the restoration destination directory has finished.
Database restore has started.
Database restore has completed successfully.
File restore has started.
File restore has completed successfully.
Restore of the Scheduling is starting.
Restore of the Scheduling has finished.
Starting to restore the Interstage Business Process Manager.
Finished restoring the Interstage Business Process Manager.
Starting to restore the CMDB Manager.
Finished restoring the CMDB Manager.
Systemwalker Runbook Automation restore has completed successfully.
```

If the command is executed in a state in which the previous setup of coordination adapter ended abnormally, the following message will be displayed.

```
Systemwalker Runbook Automation restore has started.
Deletion of the Systemwalker Runbook Automation environment from the restoration destination
management server will start.
The CMDB environment deletion will start.
Deletion of the CMDB environment is now complete.
Canceling the environment settings for Systemwalker Runbook Automation.
The environment settings for Systemwalker Runbook Automation have been canceled.
Deletion of the Process Management Database is about to start.
Deletion of the Process Management Database is now complete.
Deletion of the Systemwalker Runbook Automation environment from the restoration destination
management server has finished.
Systemwalker Runbook Automation restore has started.
Initialization of the restoration destination directory will start.
Initialization of the restoration destination directory has finished.
Database restore has started.
Database restore has completed successfully.
File restore has started.
File restore has completed successfully.
Restore of the Scheduling is starting.
Restore of the Scheduling has finished.
Starting to restore the Interstage Business Process Manager.
Finished restoring the Interstage Business Process Manager.
Starting to restore the CMDB Manager.
Finished restoring the CMDB Manager.
Systemwalker Runbook Automation restore has completed successfully.
```

Restoration is completed, then the message below displayed:

```
Systemwalker Runbook Automation restore has completed successfully.
```

### 3. Start coordination adapter.

For details on how to start coordination adapter, refer to [“2.1.2.1 Starting”](#).

## 4.3 Data Collection Tool

When trouble occurs during system operation, the state of the system at the point when the trouble occurred can be collected using the data collection tool.

This section explains how to use the data collection tool.

1. From [Start] or the [Apps] menu, select [FJQSS(Information Collect Tool)] - [FUJITSU Software Cloud Services Management].
2. When the command prompt opens, follow the displayed instructions, type "Y" and then press the [Enter] key.
3. When data collection is completed, the folder to which the troubleshooting data is output is displayed. Confirm that the troubleshooting data has been created in the displayed folder.
4. Press the [Enter] key to exit the command prompt.
5. The following file is created in the output destination folder of troubleshooting data. Send this file to Fujitsu support staff.

```
resultYYYYMMDDHHMMSS_1_1.cab  
(YYYYMMDDHHMMSS: Year, month, date, hour, minutes, and seconds when the data was collected)
```

# Chapter 5 Command Reference

This chapter explains how to use the commands provided by Cloud Services Management.

## 5.1 Command Overview

This section provides an overview of the commands provided by Cloud Services Management.

### fscsm\_org

Performs registration, modification, deletion, and display of organization information. Using this command, it is also possible to output the registered organization information as a file.

### fscsm\_user

Performs registration, modification, deletion, and display of user information. Using this command, it is also possible to output the registered user information as a file.

### fscsm\_contract

Performs registration, modification, deletion, and display of contract information. Using this command, it is also possible to output the registered contract information as a file.

### fscsm\_menu

Performs registration, modification, deletion, and display of menu information. Using this command, it is also possible to output the registered menu information as a file.

### fscsm\_bizsystem

Performs registration, modification, deletion, and display of platform information. Using this command, it is also possible to output the registered platform information as a file.

### fscsm\_service

Displays service information. This command also outputs the registered service information as a file.

### fscsm\_meteringexport

Outputs accumulated metering logs as files.

### fscsm\_chargeexport

Outputs the information about monthly charges for the specified month as a file.

### fscsm\_currency

Configures the currency unit used for the charges to be invoiced.

### fscsm\_passwordset

Configures the password for directory server of Serverview Operations Manager (SVOM) and the password for for access to the coordination adapter.

### Authority to Execute Commands

The above commands must be executed by a user with administrator privileges (Administrator) within the operating system.

### Command Execution Location

The above commands must be executed on the management server where Cloud Services Management is operating.

The above commands are located in the following directory. Move to this directory to execute commands.

```
%FSCSM_HOME%\bin
```

## 5.2 How to Use Each Command

---

This section explains how to use individual commands. Some commands require XML files to limit the target data. For details on these XML files, refer to "[5.3 Format of XML Files Used in the CLI](#)".

In this section, commands are described according to the following notational conventions:

- *Italic*: Indicates variables
- `[]`: Indicates an omissible section
- `|`: Indicates that one of the options must be entered
- `>`: Indicates a cursor location in the command prompt
- `<RETURN>`: Press the Return key

For the messages displayed during command execution, refer to the "Messages".

### 5.2.1 Organization Operation Commands

---

#### Command Name

fscsm\_org

#### Format

```
fscsm_org create -file input-file
```

```
fscsm_org modify -file input-file
```

```
fscsm_org delete -orgId organizationID
```

```
fscsm_org export [-orgId organizationID] -file output-file
```

```
fscsm_org list
```

#### Description

Performs registration, modification, deletion, and outputting of organization information.

#### Subcommands

**create -file *input-file***

Registers organization information.

In *input-file*, enter the name of the file containing the organization information to be registered. For details on the format of the file, refer to "[5.3.1 Organization Information](#)".

**modify -file *input-file***

Updates organization information. Only information for a single organization can be modified at one time.

In *input-file*, enter the name of the file containing the organization information to be modified. For details on the format of the file, refer to "[5.3.1 Organization Information](#)".

**delete -orgId *organizationID***

Deletes organization information.

In *organizationID*, specify the organization ID to be deleted.

**export [-orgId *organizationID*] -file *output-file***

Outputs organization information as an XML file.

*-orgId organizationID* can be omitted. If specified, only the information for that organization will be output. If not specified, the information for all organizations will be output.

In *output-file*, specify the file name using a character string containing alphanumeric characters, hyphens, underscores, and periods. For details on the format of the file, refer to "5.3.1 Organization Information".

When the specified file already exists, an error occurs.

#### list

Displays all of the registered organization information in the prompt window.

The following items are displayed:

- Organization name
- Organization ID
- Abbreviation of the organization name
- Description
- Parent organization ID

#### Example

- When registering organization information

```
>fscsm_org create -file addorg.xml<RETURN>
```

- When modifying organization information

```
>fscsm_org modify -file updorg.xml<RETURN>
```

- When deleting the organization information whose organization ID is 101

```
>fscsm_org delete -orgId 101<RETURN>
```

- When outputting the organization information of AUnit (Organization ID is 101) as a file

```
>fscsm_org export -orgId 101 -file orgdata_A.xml<RETURN>
```

- When outputting all organization information as a file

```
>fscsm_org export -file orgdata_ALL.xml<RETURN>
```

- When outputting the organization information to the screen

```
>fscsm_org list<RETURN>
orgName          orgId          orgAbbreviation  comment          parentOrgId
-----
A Unit           101            A Unit           Comments for A Unit
B Unit           201            B Unit           Comments for B Unit
C Unit           301            C Unit           Comments for C Unit
D Division       10101          A)D Division     Comments for D Division  101
```

## 5.2.2 User Operation Commands

#### Command Name

fscsm\_user

#### Format

```
fscsm_user create -file input-file
```

```
fscsm_user modify -file input-file
```



```
fscsm_user delete -userId userID
```

```
fscsm_user export [-orgId organizationID | -userId userID] -file output-file
```

```
fscsm_user list [-orgId organizationID]
```

## Description

Performs registration, modification, deletion, and outputting of user information.

## Subcommands

### create -file *input-file*

Registers user information.

In *input-file*, enter the name of the file containing the user information to be registered. For details on the format of the file, refer to ["5.3.2 User Information"](#).

### modify -file *input-file*

Updates user information. Only the information of a single user can be modified at one time.

In *input-file*, enter the name of the file containing the user information to be modified. For details on the format of the file, refer to ["5.3.2 User Information"](#).

### delete -userId *userID*

Deletes user information.

In *userID*, specify the user ID to be deleted.

### export [-orgId *organizationID* | -userId *userID*] -file *output-file*

Outputs user information as an XML file.

*organizationID* and *userID* can be omitted. However, it is possible to narrow down the target user information by specifying either one of them.

In *organizationID*, specify the organization ID. In *userID*, specify the user ID.

In *output-file*, specify the file name using a character string containing alphanumeric characters, hyphens, underscores, and periods. For details on the format of the file, refer to ["5.3.2 User Information"](#).

When the specified file already exists, an error occurs.

### list [-orgId *organizationID*]

Displays the registered user information in the prompt window.

-orgId *organizationID* can be omitted. If specified, only the information of the users belonging to that organization will be output. If not specified, the information for all users will be output.

The following items are displayed in the ascending order of user IDs.

- User ID
- User name
- Organization ID
- Role

## Example

- When registering user information

```
>fscsm_user create -file adduser.xml<RETURN>
```

- When modifying user information

```
>fscsm_user modify -file upduser.xml<RETURN>
```

- When deleting the user information whose user ID is user-6

```
>fscsm_user delete -userId user-6<RETURN>
```

- When outputting the user information of A Unit (Organization ID is 101) as a file

```
>fscsm_user export -orgId 101 -file userdata_A.xml<RETURN>
```

- When outputting the user information whose user ID is user-6 as a file

```
>fscsm_user export -userId user-6 -file userdata_user-6.xml<RETURN>
```

- When outputting all user information as a file

```
>fscsm_user export -file userdata_ALL.xml<RETURN>
```

- When outputting the user information of A Unit (organization ID is 101) to the screen

```
>fscsm_user list -orgId 101<RETURN>
userId          username          orgId            roleId
-----
--
user-1          Ichiro_Fujitsu   101              bizSysProv_manager
user-2          Jiro_Fujitsu     101              bizSysProv_manager
user-3          Saburo_Fujitsu   101              bizSysProv_user
```

- When outputting all user information to the screen

```
>fscsm_user list<RETURN>
userId          userName          orgId            roleId
-----
user-1          Ichiro_Fujitsu   101              bizSysProv_manager
user-2          Jiro_Fujitsu     101              bizSysProv_manager
user-3          Saburo_Fujitsu   101              bizSysProv_user
user-b1         Taro_Fuji        !mgr             operation_manager
```

## Information

In the case of users belonging to operators and planners, the orgIds are displayed as "!mgr".

Each role name corresponds to the following:

planEval_manager	Approver of the planners
planEval_user	Representative of the planners
operation_manager	Approver of the operators
operation_user	Representative of the operators
bizSysProv_manager	Approver of the platform providers
bizSysProv_user	Representative of platform providers

## 5.2.3 Contract Operation Commands

Command Name

fscsm\_contract

## Format

```
fscsm_contract create -file input-file
```

```
fscsm_contract modify -file input-file
```

```
fscsm_contract delete -contractId ContractID
```

```
fscsm_contract export [-contractId ContractID] -file output-file
```

```
fscsm_contract list
```

## Description

Performs registration, modification, deletion, and outputting of contract.

## Subcommands

**create -file *input-file***

Registers contract.

In *input-file*, enter the name of the file containing the contract to be registered. For details on the format of the file, refer to "[5.3.3 Contract Information](#)".

**modify -file *input-file***

Updates contract. Only information for a single contract can be modified at one time.

In *input-file*, enter the name of the file containing the contract to be modified. For details on the format of the file, refer to "[5.3.3 Contract Information](#)".

**delete -contractId *ContractID***

Deletes contract.

In *ContractID*, specify the contract ID to be deleted.

**export [-contractId *ContractID*] -file *output-file***

Outputs contract as an XML file.

*ContractID* can be omitted. If specified, only the information for the specified contract will be output. If not specified, the information for all contracts will be output.

In *output-file*, specify the file name using a character string containing alphanumeric characters, hyphens, underscores, and periods. For details on the format of the file, refer to "[5.3.3 Contract Information](#)".

When the specified file already exists, an error occurs.

**list**

Displays all of the registered contract in the prompt window.

The following items are displayed in the ascending order of contract IDs.

- Contract ID
- Contract name
- Vendor ID

## Example

- When registering contract

```
>fscsm_contract create -file addcontract.xml<RETURN>
```

- When modifying contract

```
>fscsm_contract modify -file updcontract.xml<RETURN>
```

- When deleting the contract whose contract ID is 515

```
>fscsm_contract delete -contractId 515<RETURN>
```

- When outputting the contract whose contract ID is 515 as a file

```
>fscsm_contract export -contractId 515 -file contdata_ROR.xml<RETURN>
```

- When outputting the contract to the screen

```
>fscsm_contract list<RETURN>
contractId      contractName      vendorId
-----
          515      ror - contract of 2015      ror
          521      aws - contract of 2015      aws
```

## 5.2.4 Menu Operation Commands

### Command Name

fscsm\_menu

### Format

```
fscsm_menu create -file input-file
```

```
fscsm_menu modify -file input-file
```

```
fscsm_menu delete -menuId MenuID
```

```
fscsm_menu export [-menuId MenuID | -contractId ContractID] -file output-file
```

```
fscsm_menu list [-contractId ContractID]
```

### Description

Performs registration, modification, deletion, and outputting of menu information.

### Subcommands

#### create -file *input-file*

Registers menu information.

In *input-file*, enter the name of the file containing the menu information to be registered. For details on the format of the file, refer to "[5.3.4 Menu Information](#)".

#### modify -file *input-file*

Updates menu information. Only information for a single menu can be modified at one time.

In *input-file*, enter the name of the file containing the menu information to be modified. For details on the format of the file, refer to "[5.3.4 Menu Information](#)".

#### delete -menuId *MenuID*

Deletes menu information.

In *MenuID*, specify the menu ID to be deleted.

#### export [-menuId *MenuID* | -contractId *ContractID*] -file *output-file*

Outputs menu information as an XML file.

Both *MenuID* and *ContractID* can be omitted. However, it is possible to narrow down the target menu information by specifying one of them.

In *MenuID*, specify the menu ID. In *ContractID*, specify the contract ID.

In *output-file*, specify the file name using a character string containing alphanumeric characters, hyphens, underscores, and periods. For details on the format of the file, refer to "[5.3.4 Menu Information](#)".

When the specified file already exists, an error occurs.

#### list [-contractId *ContractID*]

Displays the registered menu information in the prompt window.

*ContractID* can be omitted. If specified, only the menu information linked to the specified contract will be output. If not specified, all menu information will be output.

The following items are displayed in the ascending order of menu IDs.

- Menu ID
- Menu name
- Contract ID
- Status

#### Example

- When registering menu information

```
>fscsm_menu create -file addmenu.xml<RETURN>
```

- When modifying menu information

```
>fscsm_menu modify -file updmenu.xml<RETURN>
```

- When deleting the menu information whose menu ID is ror-2015-001

```
>fscsm_menu delete -menuId ror-2015-001<RETURN>
```

- When outputting the menu information whose menu ID is ror-2015-001 as a file

```
>fscsm_menu export -menuId ror-2015-001 -file menudata_ROR2015001.xml<RETURN>
```

- When outputting the menu information whose contract ID is 515 as a file

```
>fscsm_menu export -contractId 515 -file menudata_ROR.xml<RETURN>
```

- When outputting the menu information whose contract ID is 515 to the screen

```
>fscsm_menu list -contractId 515<RETURN>
menuId          menuName          contractId        status
-----
ror-2015-001    GOLD              515              published
ror-2015-002    SILVER            515              hidden
```

- When outputting the menu information to the screen

```
>fscsm_menu list<RETURN>
menuId          menuName          contractId        status
-----
aws-2015-001    COPPER            521              published
ror-2015-001    GOLD              515              published
ror-2015-002    GOLD              515              hidden
```

## 5.2.5 Platform Operation Commands

---

Command Name

fscsm\_bizsystem

Format

```
fscsm_bizsystem create -file input-file
```

```
fscsm_bizsystem modify -file input-file
```

```
fscsm_bizsystem delete -bizsystemId PlatformID
```

```
fscsm_bizsystem export [-bizsystemId PlatformID | -orgId OrganizationID | -menuId MenuID] -file  
output-file
```

```
fscsm_bizsystem list [-orgId OrganizationID | -menuId MenuID]
```

Description

Performs registration, modification, deletion, and outputting of platform information.

Subcommands

**create -file *input-file***

Registers platform information.

In *input-file*, enter the name of the file containing the platform information to be registered. For details on the format of the file, refer to "[5.3.5 Platform Information](#)".

**modify -file *input-file***

Updates platform information. Only information for a single platform can be modified at one time.

In *input-file*, enter the name of the file containing the menu information to be modified. For details on the format of the file, refer to "[5.3.5 Platform Information](#)".

**delete -bizsystemId *PlatformID***

Deletes platform information.

In *PlatformID*, specify the platform ID to be deleted.

**export [-bizsystemId *PlatformID* | -orgId *OrganizationID* | -menuId *MenuID*] -file *output-file***

Outputs the platform information as an XML file.

All of *PlatformID*, *OrganizationID*, and *MenuID* can be omitted. However, it is possible to narrow down the target platform information by specifying one of them.

In *PlatformID*, *OrganizationID*, and *MenuID*, specify the platform ID, the organization ID, and the menu ID, respectively.

In *output-file*, specify the file name using a character string containing alphanumeric characters, hyphens, underscores, and periods. For details on the format of the file, refer to "[5.3.5 Platform Information](#)".

When the specified file already exists, an error occurs.

**list [-orgId *OrganizationID* | -menuId *MenuID*]**

Displays the registered platform information in the prompt window.

Both *OrganizationID* and *MenuID* can be omitted. However, it is possible to narrow down the target platform information by specifying one of them.

In *OrganizationID* and *MenuID*, specify the organization ID and the menu ID, respectively.

The following items are displayed in the ascending order of platform IDs.

- Platform ID
- Platform name

- Organization ID
- Menu ID

### Example

- When registering platform information

```
>fscsm_bizsystem create -file addbizsys.xml<RETURN>
```

- When modifying platform information

```
>fscsm_bizsystem modify -file updbizsys.xml<RETURN>
```

- When deleting the platform information whose platform ID is 533

```
>fscsm_bizsystem delete -bizsystemId 533<RETURN>
```

- When outputting the platform information whose platform ID is 533 as a file

```
>fscsm_bizsystem export -bizsystemId 533 -file bizsysdata_533.xml<RETURN>
```

- When outputting the platform information whose organization ID is 101 as a file

```
>fscsm_bizsystem export -orgId 101 -file bizsysdata_A.xml<RETURN>
```

- When outputting the platform information whose menu ID is aws-2015-001 as a file

```
>fscsm_bizsystem export -menuId aws-2015-001 -file bizsysdata_AWS.xml<RETURN>
```

- When outputting all platform information as a file

```
>fscsm_bizsystem export -file bizsysdata_ALL.xml<RETURN>
```

- When outputting the platform information whose organization ID is 101 to the screen

```
>fscsm_bizsystem list -orgId 101<RETURN>
bizSystemId      bizSystemName    orgId            menuId
-----
501              SystemA          101              ror-2015-001
502              SystemB          101              aws-2015-001
```

- When outputting the platform information whose menu ID is aws-2015-001 to the screen

```
>fscsm_bizsystem list -menuId aws-2015-001<RETURN>
bizSystemId      bizSystemName    orgId            menuId
-----
502              SystemB          101              aws-2015-001
801              SystemG          501              aws-2015-001
```

## 5.2.6 Service Operation Commands

### Command Name

fscsm\_service

### Format

```
fscsm_service export [-serviceId ServiceID | -bizsystemId PlatformID ] -file output-file
```

```
fscsm_service list [-bizsystemId PlatformID]
```

## Description

Performs outputting of service information.

## Subcommands

`export [-serviceId ServiceID] [-bizsystemId PlatformID] -file output-file`

Outputs the service information as an XML file.

Both *ServiceID* and *PlatformID* can be omitted. However, it is possible to narrow down the target service information by specifying one of them.

In *ServiceID*, specify the service ID. In *PlatformID*, specify the platform ID.

In *output-file*, specify the file name using a character string containing alphanumeric characters, hyphens, underscores, and periods. For details on the format of the file, refer to "[5.3.6 Service Information](#)".

When the specified file already exists, an error occurs.

`list [-bizsystemId PlatformID]`

Displays the registered service information in the prompt window.

*PlatformID* can be omitted. If specified, only the information for the specified platform will be output. If not specified, the information for all platforms will be output.

The following items are displayed in the ascending order of service IDs.

- Service ID
- Service name
- Service type

## Example

- When outputting the service information whose service ID is 533-01 as a file

```
>fscsm_service export -serviceId 533-01 -file servicedata_533-01.xml<RETURN>
```

- When outputting the platform information whose platform ID is 533 to the screen

```
>fscsm_service list -bizsystemId 533<RETURN>
serviceId      serviceName      serviceType
-----
533-01         VM533-01        VM
533-02         VM533-02        VM
533-03         SLB533          SLB
533-04         RDB533          RDB
```

- When outputting all service information to the screen

```
>fscsm_service list -menuId aws-2015-001<RETURN>
serviceId      serviceName      serviceType
-----
533-01         VM533-01        VM
533-02         VM533-02        VM
533-03         SLB533          SLB
533-04         RDB533          RDB
534-01         VM534-01        VM
```

## 5.2.7 Metering Log Output Command

### Command Name

`fscsm_meteringexport`



## Format

```
fscsm_meteringexport -file output-file [-start Startingdate] [-end Endingdate] [-format Formattype]
```

## Description

Outputs a metering log. The log is output as a file in CSV or XML format.

In *Startingdate*, specify the start date of the target period for which metering logs are to be output, in the format of YYYY-MM-DD. When omitted, the date of the oldest data in the metering log accumulated in Cloud Services Management is regarded as the start date.

In *Endingdate*, specify the end date of the target period for which metering logs are to be output, in the format of YYYY-MM-DD. When omitted, the day before the date of command execution is regarded as the end date.

In *output-file*, specify the file name using a character string containing alphanumeric characters corresponding to the format type which is the parameter that follows, hyphens, underscores, and periods. This parameter cannot be omitted.

When the specified file already exists, an error occurs.

In *Formattype*, enter the file format of the file to be output. Specify "csv" to output in CSV format, or specify "xml" to output in XML format. This parameter can be omitted. When it is omitted, the log is output in CSV format.

## Example

- When outputting the information for May 2015 in the metering log as a CSV file

```
>fscsm_meteringexport -start 2015-05-01 -end 2015-05-31 -file meter201505.csv<RETURN>
```

- When outputting the information up until 2014 in the metering log as an XML file

```
>fscsm_meteringexport -end 2014-12-31 -file mater2014.xml -format xml<RETURN>
```

## Output Format

When the metering log is output in CSV format, the content of the output file should look like the following:

```
# version, eventTime, event, resourceType, orgId, bizSystemId, menuId, extendedOptions, userId, resourceId, resourceIdentifier,
systemDiskImage, dataDiskType, dataDiskNum, snapshotSize
1, "2015-01-01 00:00:00.000+0900", "ADD", "system", "org001", "bizsys001", "menu001", "optionA,optionB", "user001", "", "", "",
"", ,
1, "2015-01-01 01:00:00.000+0900", "ADD", "vm", "org001", "bizsys001", "", "", "", "vm001", "type_small", "WS2012",
"type_middle", 1,
1, "2015-01-01 02:00:00.000+0900", "START", "vm", "org001", "bizsys001", "", "", "", "vm001", "", "", "", ,
1, "2015-01-01 03:00:00.000+0900", "STOP", "vm", "org001", "bizsys001", "", "", "", "vm001", "", "", "", ,
1, "2015-01-01 04:00:00.000+0900", "CHANGE", "vm", "org001", "bizsys001", "", "", "", "vm001", "type_middle", "WS2012",
"type_middle", 1,
1, "2015-01-01 05:00:00.000+0900", "ADD", "slb", "org001", "bizsys001", "", "", "", "slb001", "optionSLB", "", "", ,
1, "2015-01-01 05:00:00.000+0900", "ADD", "rdb", "org001", "bizsys001", "", "", "", "rdb001", "optionRDB", "", "", ,
1, "2015-01-01 06:00:00.000+0900", "DELETE", "slb", "org001", "bizsys001", "", "", "", "slb001", "", "", "", ,
1, "2015-01-01 06:00:00.000+0900", "DELETE", "rdb", "org001", "bizsys001", "", "", "", "rdb001", "", "", "", ,
1, "2015-01-01 06:00:00.000+0900", "DELETE", "vm", "org001", "bizsys001", "", "", "", "vm001", "", "", "", ,
1, "2015-01-01 07:00:00.000+0900", "DELETE", "system", "org001", "bizsys001", "", "", "", "", "", "", "", ,
```

## 5.2.8 Charge Output Command

### Command Name

fscsm\_chargeexport

### Format

```
fscsm_chargeexport -dir output-directory [-month Targetmonth] [-bizsystemId PlatformID] [-orgId OrganizationID]
```

### Description

Outputs the monthly charge for the specified month as a CSV file.

In *output-directory*, specify the directory name using a character string containing alphanumeric characters, hyphens, and underscores. This parameter cannot be omitted.

In *PlatformID*, specify the platform ID. This parameter can be omitted. If it is omitted, charge data for all platforms will be the target.

In *OrganizationID*, specify the organization ID. This parameter can be omitted. If it is omitted, charge data for all organizations will be the target.

In *Targetmonth*, specify the year and month of the output target in the format of YYYY-MM. This parameter can be omitted. If omitted, the data for the most recent year and month for which the cut-off process has been completed will be the target.

### Example

- When outputting the monthly charges for May 2015 for the platform ID 533 as a file

```
>fscsm_chargeexport -bizsystemId 533 -month 2015-05 -dir .\usertmp\chargeex\biz
\533\201505<RETURN>
```

### File Name and Output Content

The file name of the file to which charge data is output is decided based on the output unit and target year and month.

#### File for Each Platform

Refer to "Billing Details File" of "[3.2.3 Sending Billing](#)".

Table 5.1 List of element output to file

Element	Output Value or Example
version	Version of file format
date	Target month
orgId	Organization ID
bizSystemName	Platform name
category	Category
breakdown	Breakdown In the case of virtual machine, system disk image or data disk image, some information divided by " " is output. <ul style="list-style-type: none"> <li>• In the case of virtual machine "Virtual machine   &lt;Service ID&gt;   &lt;Instance type&gt;"</li> <li>• In the case of system disk image "Image   &lt;Service ID&gt;   &lt;System disk image&gt;"</li> <li>• In the case of data disk "Data disk"   &lt;Service ID&gt;   &lt;Data disk type&gt;"</li> </ul>
unitPrice[<Currency Sign>]	Unit price

unitPriceUnit	Unit of unit price
usage	Usage
usageUnit	Unit of usage
charge[<Currency Sign >]	Charge

#### Output Example

```
# version, date, orgId, bizSystemId, category, breakdown, unitPrice[¥], unitPriceUnit, usage, usageUnit, charge[¥]
1, "2015-01(2015-01-01 - 2015-01-31)", "org001", "bizsys001", "basicMenu", "Initial Cost", 2000, "per month", 1, "month", 2000
1, "2015-01(2015-01-01 - 2015-01-31)", "org001", "bizsys001", "basicMenu", "Basic Charge", 2000, "per month", 1, "month", 2000
1, "2015-01(2015-01-01 - 2015-01-31)", "org001", "bizsys001", "extendedOption", "Backup", 500, "per month", 1, "month", 500
1, "2015-01(2015-01-01 - 2015-01-31)", "org001", "bizsys001", "extendedOption", "Standard Monitoring", 500, "per month", 1, "month", 500
1, "2015-01(2015-01-01 - 2015-01-31)", "org001", "bizsys001", "serviceOption", "Virtual Machine | server001 | small", 30, "per hour", 550, "hour", 16500
1, "2015-01(2015-01-01 - 2015-01-31)", "org001", "bizsys001", "serviceOption", "Image | server001 | win2012", 500, "per month", 1, "month", 500
1, "2015-01(2015-01-01 - 2015-01-31)", "org001", "bizsys001", "Data Disk | server001 | 200G", 1000, "per number-month", 1, "number-month", 2000
```

## 5.2.9 Currency Unit Operation Commands

#### Command Name

fscsm\_currency

#### Format

```
fscsm_currency modify -code Currencycode
```

```
fscsm_currency export -file output-file
```

#### Description

Use this command to change the currency unit to be used for billing in Cloud Services Management. This command also outputs the currency unit being used.

#### Subcommands

`modify -code Currencycode`

Changes the currency unit.

In *Currencycode*, specify an ISO 4217 currency code. If currency not written in the following table is specified, the ISO 4217 code is displayed as currency sign depending on language specified on [Region] >> [Format:] of OS. For displaying currency sign, specify language, where the currency is generally used, to [Region] >> [Format:] of OS.

Table 5.2 Example of Currency Codes

Currency Code	Currency Unit	Currency Sign	Number of Decimal Places
USD	United States Dollar	\$	2
JPY	Japanese Yen	¥	0
EUR	Euro	€	2

Currency Code	Currency Unit	Currency Sign	Number of Decimal Places
SGD	Singapore Dollar	S\$	2

`export -file output-file`

Outputs the information about the currently configured currency as a text file.

In *output-file*, specify the file name using a character string containing alphanumeric characters, hyphens, underscores, and periods. When the specified file already exists, an error occurs.

Output Example

The information is output as shown below:

```
currency.code = USD
currency.symbol = $
currency.fraction.digits = 2
```

Example

- When changing the currency unit to Euro

```
>fscsm_currency modify -code EUR<RETURN>
```

- When outputting currency unit information as a file

```
>fscsm_currency export -file currency.txt<RETURN>
```

## 5.2.10 Coordination Password Change Command

Command Name

`fscsm_passwordset`

Format

```
fscsm_passwordset -svom password
```

```
fscsm_passwordset -adapter password
```

Description

This command provides the following operations:

`-svom password`

Setting of the password for access to the SVOM directory server.

In *password*, specify a character string containing 8 to 64 alphanumeric characters and `!#()-.@`{ }~`.

`-adapter password`

Setting of the password for access to the coordination adapter.

In *password*, specify a character string containing 8 to 50 alphanumeric characters and `!#()-.@`{ }~`.



Note

In order to reflect configuration, restart the manager server. For restarting the manager server, performed "2.1.1.2 Stopping" and "2.1.1.1 Starting" in this order.

## Example

- When setting the password for access to the SVOM directory server

```
>fscsm_passwordset -svom password<RETURN>
```

- When setting the password for access to the coordination adapter

```
>fscsm_passwordset -adapter password<RETURN>
```

## 5.3 Format of XML Files Used in the CLI

This section explains the format of XML files used when operating information retained by Cloud Services Management.

This section writes element names and contents of element in XML files like the following.

```
<[Element name]>[Element value]</[Element name]>
<[Element name] [Attribute 1]="[Attribute 1]" [Attribute 2]="[Attribute 2]">[Element value]</[Element name]>
```

To edit the XML files, use your preferred text editor.

The character code of XML file must be UTF-8.

Don't write unnecessary line blank spaces and blanks in case to modify the XML file, because line breaks and blanks are recognized as data in the rule of XML.

In table explained by this section, "Omission is permitted." is the case of no elements and attributes of XML files. In case that elements and attributes of XML files are omitted in modify operation, the value of elements and attributes before executing command is maintained.

In this section, some resources can be specified at the same time in register operation. However the target of modify operation must be only one.

### Note

Tags and attributes that are not written in each XML rules, are not read.

If the tag having no attributes is written, the empty element tag, e.g. <comment/>, must be specified instead of the end tag.

Escape in case to specify the following type of characters because of the XML rules.

Specified Character	Escape
<	&lt;
>	&gt;
&	&amp;
"	&quot;

### 5.3.1 Organization Information

Among the commands that operate organization information, the following three types of commands use XML:

- fscsm\_org create (organization information registration)
- fscsm\_org modify (organization information modification)
- fscsm\_org export (organization information output)

The formats of the XML files corresponding to each of these commands are explained below.

Elements of XML must be as the following stratum structure:

```

<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<orgs>
  <org rId="Resource ID of the Organization" tree="Organization attribute">
    <orgId>Organization ID</orgId>
    <orgAbbreviation> Abbreviation of the Organization Name</orgAbbreviation>
    <orgName>Organization Name</orgName>
    <parentOrgRId>Resource ID of the Parent Organization</parentOrgRId>
    <comment>Description</comment>
    <customFields>
      <customField no="1">Organization Custom Field 1</customField>
      <customField no="2">Organization Custom Field 2</customField>
      <customField no="3">Organization Custom Field 3</customField>
      <customField no="4">Organization Custom Field 4</customField>
      <customField no="5">Organization Custom Field 5</customField>
    </customFields>
  </org>
</orgs>

```

Element (Name or Attribute)	Omission or Display			Acceptable Value in Registration or Modification	
	Registration	Modification	Output		
Resource ID of the Organization (org rId)	×	×	○	-	
Organization Attribute (org tree)	○	○ *1	○	Specify one of the followings:	
				Value	Description
				node	Owns child organizations.
				leaf	Owns platforms and representatives.
Organization ID (orgId)	○	○ *1	○	Specify a character string beginning with an alphanumeric character and containing 1 to 32 alphanumeric characters, underscores ("_"), hyphens ("-"), and periods (".").  The ID must not overlap other organization ID. Specify a unique value.	
Organization Abbreviation (orgAbbreviation)	○	○	○	Specify a character string containing 1 to 64 characters.	
Organization Name (orgName)	○	○	○	Specify a character string containing 1 to 64 characters.	

Resource ID of the Parent Organization (parentOrgRId)	○	○	○	Resource ID of the registered parent organization. Specify an integer number within 8-digit. Use organization operation commands to get resource ID of the existing parent organization. Specify 0 if parent organization does not exist. Organization whose attribute is node, is only specified as parent organization. The level of the organization hierarchy cannot exceed the maximum number set in the system information (default: 3, maximum: 5), cannot be registered. And the level of the organization hierarchy cannot be loop structure.
Description (comment)	△	△	○	Specify a character string containing 0 to 256 characters.
Organization Custom Field N (customField no="N")	△	△	○	Specify a character string containing 0 to 256 characters as a value of the custom field. Specifying only custom fields to be made or modified is permitted. Specify a sequential number in the Ns if custom fields are specified. The Ns can be omitted and can be specified by five numbers. On the cloud management portal, custom fields are displayed to the number of gui.org.customfield.label.<n> specified in the system information.

Refer to the following about symbols of the "Omission or Display" column.

○: Entry is mandatory, or element is output.

△: Omission is permitted.

×: Specifying is not permitted, or element is not output.

\*1: Modifying is not permitted.

## 5.3.2 User Information

Among the commands that operate user information, the following three types of commands use XML:

- fscsm\_user create (user information registration)
- fscsm\_user modify (user information modification)
- fscsm\_user export (user information output)

The formats of the XML files corresponding to each of these commands are explained below.

Elements of XML must be as the following stratum structure:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>

<users>

  <user>

    <userId>User ID</userId>
```

```

<orgRid>Resource ID of the Organization</orgRid>

<password>Password</password>

<userName>User Name</userName>

<roleId>Role</roleId>

<mailAddress>Mail Address</mailAddress>

<phoneNumber>Contact Information</phoneNumber>

<comment>Description</comment>

<customFields>

    <customField no="1">User Custom Field 1</customField>

    <customField no="2">User Custom Field 2</customField>

    <customField no="3">User Custom Field 3</customField>

    <customField no="4"> User Custom Field 4</customField>

    <customField no="5"> User Custom Field 5</customField>

</customFields>

</user>

</users>

```

Element (Name or Attribute)	Omission or Display			Acceptable Value in Registration or Modification		
	Registration	Modification	Output			
User ID (userId)	<input type="radio"/>	<input type="radio"/> *1	<input type="radio"/>	Specify a character string beginning with an alphanumeric character and containing 1 to 32 alphanumeric characters, underscores (" _"), hyphens ("-"), and periods (".").  The ID must not overlap other user ID. Specify a unique value.		
Resource ID of the Organization (orgRid)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Specify the resource ID of the organization where the user belongs.  Specify an integer number within 8-digit.  Use organization operation commands to get the existing parent organization.  Specify 1, in the case of registering users belonging to operators or planners.  Role (roleId) and the resource ID of the organization (orgRid) cannot be modified at the same time.		
Password (password)	<input type="radio"/>	<input type="checkbox"/>	<input type="checkbox"/>	Specify a character string containing 8 to 64 alphanumeric characters, \"= []:~*+,<>?/ and ASCII characters excluding blank spaces and control characters.  Password is not modified if specifying password is omitted.		
User Name (userName)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Specify a character string containing 1 to 64 characters.		
Role (roleId)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Specify one of the followings. <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 50%;">Value</th> <th style="width: 50%;">Description</th> </tr> </table>	Value	Description
Value	Description					



				<table border="1"> <tr> <td>planEval_manager</td> <td>Planners - Approver</td> </tr> <tr> <td>planEval_user</td> <td>Planners - Representative</td> </tr> <tr> <td>operation_manager</td> <td>Operators - Approver</td> </tr> <tr> <td>operation_user</td> <td>Operators - Representative</td> </tr> <tr> <td>bizSysProv_manager</td> <td>Platform Providers - Approver</td> </tr> <tr> <td>bizSysProv_user</td> <td>Platform Providers - Representative</td> </tr> <tr> <td colspan="2">Available role depends on the current role and its attribute of organization where the user belongs.</td> </tr> <tr> <th>Current Role</th> <th>Organization Attribute</th> <th>Available Role</th> </tr> <tr> <td>planEval_manager/ planEval_user</td> <td>-</td> <td>planEval_manager/ planEval_user</td> </tr> <tr> <td>operation_manager/ operation_user</td> <td>-</td> <td>operation_manager/ operation_user</td> </tr> <tr> <td>bizSysProv_manager</td> <td>node</td> <td>bizSysProv_manager</td> </tr> <tr> <td>bizSysProv_manager/ bizSysProv_user</td> <td>leaf</td> <td>bizSysProv_manager/ bizSysProv_user</td> </tr> <tr> <td colspan="3">And role (roleId) and resource ID of the organization (orgId) cannot be modified at the same time.</td> </tr> </table>	planEval_manager	Planners - Approver	planEval_user	Planners - Representative	operation_manager	Operators - Approver	operation_user	Operators - Representative	bizSysProv_manager	Platform Providers - Approver	bizSysProv_user	Platform Providers - Representative	Available role depends on the current role and its attribute of organization where the user belongs.		Current Role	Organization Attribute	Available Role	planEval_manager/ planEval_user	-	planEval_manager/ planEval_user	operation_manager/ operation_user	-	operation_manager/ operation_user	bizSysProv_manager	node	bizSysProv_manager	bizSysProv_manager/ bizSysProv_user	leaf	bizSysProv_manager/ bizSysProv_user	And role (roleId) and resource ID of the organization (orgId) cannot be modified at the same time.		
planEval_manager	Planners - Approver																																			
planEval_user	Planners - Representative																																			
operation_manager	Operators - Approver																																			
operation_user	Operators - Representative																																			
bizSysProv_manager	Platform Providers - Approver																																			
bizSysProv_user	Platform Providers - Representative																																			
Available role depends on the current role and its attribute of organization where the user belongs.																																				
Current Role	Organization Attribute	Available Role																																		
planEval_manager/ planEval_user	-	planEval_manager/ planEval_user																																		
operation_manager/ operation_user	-	operation_manager/ operation_user																																		
bizSysProv_manager	node	bizSysProv_manager																																		
bizSysProv_manager/ bizSysProv_user	leaf	bizSysProv_manager/ bizSysProv_user																																		
And role (roleId) and resource ID of the organization (orgId) cannot be modified at the same time.																																				
Mail Address (mailAddress)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<p>Specify e-mail address which notification about requests are sent to.</p> <p>Specify a character string implemented the regular expression, which is <code> /^[w\.-]+@[?:[w\-.]+\.)+[\w\-.]+\$/ </code>.</p> <p>Format of the regular expression is "Y@X.X".</p> <p>X: a character string which consists of alphanumeric characters, underscores ("_") and hyphens ("-").</p> <p>Y: a character string which consists of alphanumeric characters, underscores ("_"), hyphens ("-"), and periods (".").</p>																																
Contact information (phoneNumber)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Specify a character string containing 1 to 256 characters as the contact phone number.																																
Description (comment)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	Specify a character string containing 0 to 256 characters.																																
User Custom Field N (customField no="N")	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<p>Specify a character string containing 0 to 256 characters as a value of the custom field.</p> <p>Specifying only custom fields to be made or modified is permitted.</p> <p>Specify sequential number in the Ns if custom fields are specified. The Ns are not permitted to omit and can be specified by five numbers.</p>																																

				On the cloud management portal, custom fields are displayed by number of gui.user.customfield.label.<n> specified in the system information.
--	--	--	--	--

Refer to the following about symbols of the "Omission or Display" column.

- : Entry is mandatory, or element is output.
- △: Omission is permitted.
- ×: Specifying is not permitted, or element is not output.
- \*1: Modifying is not permitted.

### 5.3.3 Contract Information

Among the commands that operate contract information, the following three types of commands use XML:

- fscsm\_contract create (contract information registration)
- fscsm\_contract modify (contract information modification)
- fscsm\_contract export (contract information output)

The formats of the XML files corresponding to each of these commands are explained below.

Elements of XML must be as the following stratum structure:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<contracts>
  <contract rId=" Resource ID of the Contact">
    <comment>Description</comment>
    <contractId>Contract ID</contractId>
    <contractName>Contract Name</contractName>
    <contractNo>Contract Number</contractNo>
    <contractPeriod>Contract Period</contractPeriod>
    <contractorContact>Contractor Contract Information</contractorContact>
    <contractorName>Contractor</contractorName>
    <maintenanceId>Management Service ID</maintenanceId>
    <vendorId>Vendor ID</vendorId>
    <vendorPortalId>Vendor Portal ID</vendorPortalId>
    <usePermission>User Agreement</usePermission>
  </contract>
</contracts>
```

Element (Name or Attribute)	Omission or Display			Acceptable Value in Registration or Modificaiton
	Registration	Modification	Output	
Resource ID of the Contact	×	×	○	-

(contract rId)				
Description (comment)	△	△	○	Specify a character string containing 0 to 256 characters.
Contract ID (contractId)	○	○ *1	○	Specify a character string beginning with an alphanumeric character and containing 1 to 32 alphanumeric characters, underscores ("_"), hyphens ("-"), and periods (".").  The ID must not overlap other user ID. Specify a unique value.
Contract Name (contractName)	○	○	○	Specify a character string containing 1 to 64 characters.
Contract Number (contractNo)	△	△	○	Specify a character string containing 0 to 64 characters.
Contract Period (contractPeriod)	△	△	○	Specify a character string containing 0 to 256 characters.
Contractor Contract Information (contractorContact)	△	△	○	Specify a character string containing 0 to 256 characters as the contact phone number or the e-mail address.
Contractor (contractorName)	△	△	○	Specify a character string containing 0 to 64 characters.
Management Service ID (maintenanceId)	△	△	○	Specify a character string containing 0 to 64 characters.  However specifying the ID is unnecessary if ROR or no cloud providers are specified in the vendor information.
Vendor ID (vendorId)	○	○ *1	○	Specify the vendor ID written in the vendor information.
Vendor Portal ID (vendorPortalId)	△	△	○	Specify a character string containing 0 to 64 characters.  However specifying the ID is unnecessary if ROR or no cloud providers are specified in the vendor information.
User Agreement (usePermission)	△	△ *2	○	Specify a character string containing 0 to 1024 characters.

Refer to the following about symbols of the "Omission or Display" column.

○: Entry is mandatory, or element is output.

△: Omission is permitted.

×: Specifying is not permitted, or element is not output.

\*1: Modifying is not permitted.

\*2: The value registered before is deleted if the element is omitted in the XML during executing contract modification command.

### 5.3.4 Menu Information

Among the commands that operate menu information, the following three types of commands use XML:

- fscsm\_menu create (menu information registration)
- fscsm\_menu modify (menu information modification)
- fscsm\_menu export (menu information output)

The formats of the XML files corresponding to each of these commands are explained below.

Elements of XML must be as the following stratum structure:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<menus>
  <menu rId="Resource ID of the Menu" menuName="Menu Name" menuId="Menu ID">
    <contractRId>Resource ID of the Contract</contractRId>
    <unitPrices type="basicCharge">
      <unitPrice>Basic Charge</unitPrice>
    </unitPrices>
    <unitPrices type="initialCost">
      <unitPrice>Initial Cost</unitPrice>
    </unitPrices>
    <commentSummary>Description Summary</commentSummary>
    <commentDetail>Description Details</commentDetail>
    <icon>Icon</icon>
    <basicMenus>
      <basicMenu menuId="Basic Menu ID">Basic Menu Information</basicMenu>
    </basicMenus>
    <extendedOptions>
      <extendedOption optionId="Operation Option ID">
        <unitPrices>
          <unitPrice>Unit Price of Operation Option</unitPrice>
        </unitPrices>
      </extendedOption>
    </extendedOptions>
    <serviceOptions>
      <serviceOption optionId="Configuration Option ID">
        <optionType>Configuration Option Type</optionType>
        <unitPrices>
          <unitPrice>Unit Price of Configuration Option</unitPrice>
        </unitPrices>
      </serviceOption>
    </serviceOptions>
  </menu>
</menus>
```

```

    <vendorUniqueAttribute>Vendor Unique Parameter</vendorUniqueAttribute>

    <releaseStartDate>Release Start Date</releaseStartDate>

    <releaseEndDate>Release End Date</releaseEndDate>

    <status>Status</status>

    <authLevel>Approval Level</authLevel>

</menu>

</menus>

```

Element (Name or Attribute)	Omission or Display			Acceptable Value in Registration or Modification	
	Registration	Modification	Output		
Resource ID of the menu (menu rId)	×	×	○	-	
Menu Name (menu menuName)	○	○	○	Specify a character string containing 1 to 64 characters.	
Menu ID (menu menuId)	○	○ *1	○	Specify a character string beginning with an alphanumeric character and containing 1 to 32 alphanumeric characters, underscores ("_"), hyphens ("-"), and periods (".").  The ID must not overlap other user ID. Specify a unique value.	
Resource ID of the Contract (contractRId)	○	○ *1	○	Specify an integer number within 8-digit as the resource ID of the contract.  Use contract operation commands to get resource ID of the existing contract.	
Price Type of Basic Menu (unitPrices type)	○	○	○	Specify one of the followings:	
				Value	Description
				basicCharge	Basic Charge
initialCost	Initial Cost				
Basic Charge (unitPrice)	○	○	○	Specify zero or a larger number consisting of 9 or less digits of integer and 6 or less digits after the decimal point. *5  If a price is determined after meeting, specify -1 or -1.0000.	
Initial Cost (unitPrice)	○	○	○	Specify zero or a larger number consisting of 9 or less digits of integer and 4 or less digits after the decimal point. *5  If a price is determined after meeting, specify -1 or -1.0000.	
Description Summary (commentSummary)	△	△	○	Specify a character string containing 0 to 256 characters.	
Description Details (commentDetail)	△	△	○	Specify a character string containing 0 to 1024 characters.	

Icon (icon)	△ *2	△ *3	○	Specify the file name put in the following folder. %FSCSM_HOME%\conf\images\ A character string containing 1 to 256 characters.														
Basic Menu ID (basicMenu menuId)	○	○ *4	○	Specify the menuId defined in the vendor information. (This element must be specified with respect to all menus written in the vendor information.)  Specify a character string beginning with an alphanumeric character and containing 1 to 32 alphanumeric characters, underscores ("_"), hyphens ("-"), and periods (".").														
Basic Menu Information (basicMenu)	○ *4	○ *4	○	Specify a character string containing 1 to 256 characters.														
Operation Option ID (extendedOption optionId)	△ *2	△ *3	○	Specify a character string beginning with an alphanumeric character and containing 1 to 32 alphanumeric characters, underscores ("_"), hyphens ("-"), and periods (".").  If an operation option ID is specified, please specify the unit price of operation option ID at the same time.														
Unit Price of Operation Option (unitPrice)	△	△ *3	○	Specify zero or a larger number consisting of 9 or less digits of integer and 6 or less digits after the decimal point. *5  If a price is determined after meeting, specify -1 or -1.0000.														
Configuration Option ID (serviceOption optionId)	△	△ *3	○	Specify the optionId defined in the vendor information.  Specify a character string beginning with an alphanumeric character and containing 1 to 32 alphanumeric characters, underscores ("_"), hyphens ("-"), and periods (".").  If an operation configuration option ID is specified, please specify the unit price of configuration option ID at the same time.														
Configuration Option Type (optionType)	△	△ *1 *3	○	Specify one of the followings:														
				<table border="1"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>vm</td> <td>Instance Type</td> </tr> <tr> <td>image</td> <td>System Disk Image</td> </tr> <tr> <td>disk</td> <td>Additional Data Disk</td> </tr> <tr> <td>snapshot</td> <td>Snapshot</td> </tr> <tr> <td>slb</td> <td>SLB</td> </tr> <tr> <td>rdb</td> <td>RDB</td> </tr> </tbody> </table>	Value	Description	vm	Instance Type	image	System Disk Image	disk	Additional Data Disk	snapshot	Snapshot	slb	SLB	rdb	RDB
				Value	Description													
				vm	Instance Type													
				image	System Disk Image													
				disk	Additional Data Disk													
				snapshot	Snapshot													
slb	SLB																	
rdb	RDB																	
Unit Price of Configuration Option (unitPrice)	△	△ *3	○	Specify zero or a larger number consisting of 9 or less digits of integer and 4 or less digits after the decimal point. *5  If a price is determined after meeting, specify -1 or -1.0000.														
Vendor Unique Parameter (vendorUniqueAttribute)	○	○	○	Specify the id of deployParameter defined in the vendor information. If no deployParameter is defined, please specify an empty element.														

				A character string beginning with an alphanumeric character and containing 1 to 32 alphanumeric characters, underscores ("_"), hyphens ("-"), and periods (".").						
Release Start Date (releaseStartDate)	△	△	○	Date and time when publishing of the menu is started. Specify the value in the format of YYYY-MM-DD hh:mm:ss. A value in the following range can be specified: Between 2000-01-01 00:00:00 and 3000-12-31 23:59:59 When omitted, 2000-01-01 00:00:00 is specified. Specify a date before the releaseEndDate. If the date is not intended to be modified on the operation of modifying menu, please specify the date set before.						
Release End Date (releaseEndDate)	△	△	○	Date and time when publishing of the menu is ended. Specify the value in the format of YYYY-MM-DD hh:mm:ss. A value in the following range can be specified: Between 2000-01-01 00:00:00 and 3000-12-31 23:59:59 When omitted, 3000-12-31 23:59:59 is specified. Specify a date after the releaseStartDate. If the date is not intended to be modified on the operation of modifying menu, please specify the date set before.						
Status (status)	○	○	○	Specify one of the followings: <table border="1"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>published</td> <td>The menu is published to platform providers.</td> </tr> <tr> <td>hidden</td> <td>The menu is not published to platform providers.</td> </tr> </tbody> </table>	Value	Description	published	The menu is published to platform providers.	hidden	The menu is not published to platform providers.
Value	Description									
published	The menu is published to platform providers.									
hidden	The menu is not published to platform providers.									
Approval Level (authLevel)	○	○	○	Specify a number (1 or larger). The maximum number which is permitted to be specified is a value of org.depth.max defined in the system information. Refer to " <a href="#">2.5.1 System Information</a> " for details. Specify the hierarchical levels of the request for platforms and services. If the approval level is 1, approvals are needed by the top organization.						

Refer to the following about symbols of the "Omission or Display" column.

○: Entry is mandatory, or element is output.

△: Omission is permitted.

×: Specifying is not permitted, or element is not output.

\*1: Modifying is not permitted.

\*2: The elements are not registered if specifying is omitted when the menu is registered.

\*3: The value registered before is deleted if the element is omitted in the XML during executing menu modification command.

\*4: The element is not registered if specifying is omitted in the XML when the menu is registered or modified. For modification of the element, modify it from GUI.

\*5: The input value of UnitPrice changes according to the value of "currency.fraction.digits" in the output of the fscsm\_currency export command as the following table.

Value of "currency.fraction.digits"	Input Value of UnitPrice Changes
0	11 or less digits of integer and 4 or less digits after the decimal point
1	10 or less digits of integer and 5 or less digits after the decimal point
2(Default)	9 or less digits of integer and 6 or less digits after the decimal point
3	8 or less digits of integer and 7 or less digits after the decimal point

### 5.3.5 Platform Information

Among the commands that operate platform information, the following three types of commands use XML:

- fscsm\_bizsystem create (platform information registration)
- fscsm\_bizsystem modify (platform information modification)
- fscsm\_bizsystem export (platform information output)

The formats of the XML files corresponding to each of these commands are explained below.

Elements of XML must be as the following stratum structure:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<bizSystems>
  <bizSystem rId="Resource ID of the Platform">
    <bizSystemId>Platform ID</bizSystemId>
    <bizSystemCode>Platform Code</bizSystemCode>
    <bizSystemName>Platform Name</bizSystemName>
    <menu rId="Resource ID of the Menu">
      <extendedOptions>
        <extendedOption optionId="Operation Option ID"/>
      </extendedOptions>
      <serviceOptions/>
    </menu>
    <bizSystemAdmin>Administrator ID</bizSystemAdmin>
    <orgRId>Resource ID of the Organization</orgRId>
    <comment>Description</comment>
    <auth>File Name of the Keypair</auth>
    <createDate>Registration Date of the Platform</createDate>
  </bizSystem>
</bizSystems>
```



```

</bizSystem>
</bizSystems>

```

Element (Name or Attribute)	Omission or Display			Acceptable Value in Registration or Modificaiton
	Registration	Modification	Output	
Resource ID of the Platform (bizSystem rId)	×	×	○	-
Platform ID (bizSystemId)	○	○ *1	○	Specify a character string beginning with an alphanumeric character and containing up to 32 alphanumeric characters, underscores (" _"), hyphens ("-"), and periods (".").  The ID must not overlap other Platform ID. Specify a unique value.
Platform Code (bizSystemCode)	○	○	○	Specify a character string containing 1 to 64 characters.
Platform Name (bizSystemName)	○	○	○	Specify a character string containing 1 to 64 characters.
Resource ID of the Menu (menu rId)	○	○ *1	○	Specify the resource ID of the existing menu.  Specify an integer number within 8-digit.  Refer to resource ID of the existing menu by execute contract operation commands.
Operation Option ID (extendedOption optionId)	△	△ *2	○	Specify the optionId defined in the system information.  Specify a character string beginning with an alphanumeric character and containing 1 to 32 alphanumeric characters, underscores (" _"), hyphens ("-"), and periods (".").
Administrator ID (bizSystemAdmin)	○	○	○	Specify the user ID of the existing user.  Use organization operation commands to get the existing user ID.  This user must belong to organization corresponding to the orgRId and its role must be platform providers - approver or representative.  And the ID and resource ID of the organization (orgRId) cannot be modified at the same time.
Resource ID of the Organization (orgRId)	○	○	○	Specify the resource ID of the existing organization.  Organization whose attribute is leaf, can be only specified.  Specify an integer number within 8-digit.  Use organization operation commands to get resource ID of the organization.  And the resource ID and administrator ID (bizSystemAdmin) cannot be modified at the same time.
Description (comment)	△	△	○	Specify a character string containing 0 to 256 characters.
File Name of hte Keypair (auth)	△	△	○	Specify the file name of keypair if platform is registered or modified using the menu of AWS.

				Refer to <a href="#">"2.5.6 Storage Location of Key Pair Files for AWS"</a> for details. This element doesn't need to be specified in the case of Azure, ROR or no cloud providers.
Registration Date of the Platform (createDate)	○	△ *1	○	Specify the value in the format of YYYY-MM-DD hh:mm:ss.

Refer to the following about symbols of the "Omission or Display" column.

○: Entry is mandatory, or element is output.

△: Omission is permitted.

×: Specifying is not permitted, or element is not output.

\*1: Modifying is not permitted.

\*2: The value registered before is deleted if the element is omitted in the XML when the palatform is modified.

**Note**

The <serviceOptions/> is only displayed when platform export is executed.

### 5.3.6 Service Information

Among the commands that operate service information, only one type of commands use XML:

- fscsm\_service export (service information output)

The formats of the XML files corresponding to each of these commands are explained below.

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<services>
  <service rId="Resorce ID of the Service">
    <serviceId>Service ID</serviceId>
    <serviceName>Service Name</serviceName>
    <bizSystemRid>Resource ID of the Platform</bizSystemRid>
    <serviceType>Service Type</serviceType>
    <instances>
      <instance>
        <instanceManagementId>Managed Object ID</instanceManagementId>
        <instanceTypeId>Instance Type</instanceTypeId>
        <status>Status of Virtual Machine</status>
        <systemdiskImage>System Disk Image</systemdiskImage>
        <systemdiskSize>System Disk Size</systemdiskSize>
        <datadiskNum>Number of Additional Data Disk</datadiskNum>
        <datadiskType>Type of Additional Data Disk</datadiskType>
        <datadiskSize>Size of Additional Data Disk </datadiskSize>
      </instance>
    </instances>
  </service>
</services>
```

```

    <snapshots>
      <snapshotManagementId>Snapshot ID on the Cloud Service</snapshotManagementId>
      <snapshotName>Display Name of Snapshot</snapshotName>
      <comment>Description</comment>
      <snapshotDate>Create Date of Snapshot</snapshotDate>
    </snapshots>
  </instance>
</instances>
</service>
</services>

```

Element (Name or Attribute)	Omission or Display	Output details
	Output	
Resource ID of the Service (service rId)	<input type="radio"/>	-
Service ID (serviceId)	<input type="radio"/>	-
Service Name (serviceName)	<input type="radio"/>	-
Resource ID of the Platform (bizSystemRId)	<input type="radio"/>	-
Service Type (serviceType)	<input type="radio"/>	Output one in the following. • VM (Virtual Machine) • SLB • RDB
Managed Object ID (instanceManagementId)	<input type="radio"/>	-
Instance Type (instanceTypeId)	<input type="radio"/>	-
Status of Virtual Machine (status)	<input type="radio"/>	Output one in the following. • running • stopped • configuring
System Disk Image (systemdiskImage)	<input type="radio"/>	-
System Disk Size (systemdiskSize)	<input type="radio"/>	-
Number of Additional Data Disk (datadiskNum)	<input type="radio"/>	-
Type of Additional Data Disk	<input type="radio"/>	-

(datadiskType)		
Size of Additional Data Disk (datadiskSize)	○	-
Snapshot ID on the Cloud Service (snapshotManagementId)	○	-
Display Name of Snapshot (snapshotName)	○	-
Description (comment)	○	-
Create Date of Snapshot (snapshotDate)	○	-

Refer to the following about symbols of the "Omission or Display" column.

○: Element is output.

# Chapter 6 Trouble Shooting

This chapter explains the troubles and their handlings that may occur during the operations of Cloud Services Management and controlling processes to the cloud.

## 6.1 Investigation and Handling of Troubles

If an error occurs in the controlling processes to the cloud after approving a request, a mail is sent to the system administrator according to the error event. Investigate the error cause by looking the description of the mail and re-examine the settings and the operational environment.

The mail destination address and the state of the request after the error depend on the place where the error occurs.

- Communication errors between the management server and the coordination adapter
  - The mail is sent to the address specified at the time of the setup of management server. For details, refer to the explanation of "MAIL\_ADDRESS" parameter in "Setup Procedure" of "Setup of the Management Server" in "Cloud Services Management Installation Guide".
  - The approved request becomes pending state.
- Processing errors inside of the coordination adapter.
  - The mail is sent to the address specified at the time of the setup of coordination adapter. For details, refer to the explanation of smtp\_send\_adr in "Configuring the Communication Environment" of "Setup of the Coordination Adapter" in "Cloud Services Management Installation Guide".
  - The request becomes approved state.

### 6.1.1 Communication Errors between Management Server and Coordination Adapter

When an error occurs in the communication between the management server and the coordination adapter, an email that contains one of the following error type will be sent.

- Authentication error
- Parameter error
- Other errors

Take the following actions according to the error type.

#### Authentication Errors

This error occurs when the password settings of the process control user of the coordination adapter (swrbaadmin) are different from each other in following places.

- The password specified at the time of the setup of the coordination adapter.
- The password that was set to the management server in the post-setup operations.

Re-examine the above password settings and re-configure one or both of them if necessary.



See

Refer to "Changing the Password for Process Control User/Schedule Startup" in "Cloud Services Management Installation Guide" for the procedures on how to re-configure the password specified at the time of the setup of the coordination adapter.

Refer to "[5.2.10 Coordination Password Change Command](#)" to reconfigure the password that was set to the management server.

## Parameter error

This error occurs when request data sent from the management server to the coordination adapter contains parameters that are invalid or unsupported by the coordination adapter.

Check if the parameter names and values specified in the vender information are correct and reconfigure them if necessary.



Refer to "[2.3.1 Cloud Preparations](#)" for the parameters to be set in the vender information. Refer to "[2.5.2 Vendor Information](#)" for the vender information settings.

## Other Errors and unresolvable troubles

Collect the troubleshooting data and contact the Fujitsu support staff if other error occurs or the trouble cannot be resolved by the above actions.



Refer to "[4.3 Data Collection Tool](#)" for the collection of troubleshooting data.

## 6.1.2 Processing Errors Inside of the Coordination Adapter

An email with process ID of the coordination adapter in the title (subject) is sent when an error is detected in the coordination adapter.



The coordination adapter handles the control of the cloud in the unit of "process". The process is spawned for each control request. The process ID is unique ID to distinguish the processes.

Based on the described process ID, investigate the error cause by referring to the logs that the coordination adapter outputs.

The coordination adapter outputs the logs to the following location.

```
%FSCSM_HOME%\log\adapter\.log
```

Following detailed logs may be output depending on the coordinating cloud and the contents of the controlling request.

```
%FSCSM_HOME%\log\adapter\.txt
```

```
%FSCSM_HOME%\log\adapter\<Log type>.log
```

```
%FSCSM_HOME%\log\adapter\<Log type>.txt
```

Possible error causes are:

- Problem in the management server setting
  - Mandatory parameter is not specified in the vender information.
  - Inappropriate value of the parameter is specified in the vender information.
- Problems in the communication between the coordination adapter and cloud
  - The parameters to connect to the cloud configured in the setup of the coordination adapter are misset.
  - The external proxy connection information configured in the setup of the coordination adapter is misset.
- Error occurs on the cloud side
  - The resource that must be unique is already used (e.g. server name).

- The number of resources that can be created on the cloud reaches the upper limit.

Examples of the error output for each cloud are explained below.

## AWS

The error message returned from AWS is output to <Process ID>.log file.

- The number of resources that can be created on the cloud reaches the upper limit.

```
A client error (InstanceLimitExceeded) occurred when calling the RunInstances operation: Your
quota allows for 0 more running instance(s). You requested at least 1
```

- Nonexistent image ID is specified by the param\_image\_id paramter in the vender information.

```
A client error (InvalidAMIID.NotFound) occurred when calling the DescribeImages operation: The
image id ' [<Image ID>]' does not exist
```

- Nonexistent subnet ID is specified by the param\_subnet\_id paramter in the vender information.

```
A client error (InvalidSubnetID.NotFound) occurred when calling the RunInstances operation: The
subnet ID '<Subnet ID>' does not exist
```

- Nonexistent keypair name is specified as the authentication information when adding the platform.

```
A client error (InvalidKeyPair.NotFound) occurred when calling the RunInstances operation: The key
pair '<Keypair name>' does not exist
```

## Azure

The error message returned from Azure is output to <Process ID>\_azure.log file.

- A word that cannot be used in the virtual machine name is specified in the service ID.

```
...(omitted)...<Code>BadRequest</Code><Message>You used a word that may be considered offensive,
or the word is embedded in another word.</Message></Error>
```

- Nonexistent image name or disk name is specified by the param\_image\_id paramter in the vender information.

```
...(omitted)...<Code>BadRequest</Code><Message>OSImage <Image name> not found. If you are using a
VM image, it must be specified as VMImageName for the role, not as SourceImageName for
OSVirtualHardDisk.</Message></Error>
```

- Out-of-range disk size is specified by the param\_block\_device\_size parameter in the vender information.

```
...(omitted)...<Code>BadRequest</Code><Message>The specified disk size value of <Disk size> is
invalid. Disk size must be between 1 GB and 1023 GB.</Message></Error>
```

## ROR

The error message returned from ROR is output to <Process ID>.log file.

- Nonexistent image name is specified by the param\_imagename paramter in the vender information.

```
Error occurred. VirtualServerName=<L-Server name> detail=<Message='Invalid imagename specified.'>
```

- There are no deployable VM hosts registered in ROR.

```
The error occurred by virtual server construction processing. VirtualServerName=<L-Server name>
detail=<ReturnCode='62514' Message='Selectable VM host not found. (no accessible VM host or VM
pool found)'\>
```

- Disk size exceeding the free space of the storage pool is specified by the param\_block\_device\_size parameter in the vender information.

```
The error occurred by communication processing. VirtualServerName=<L-Server name>
detail=<ReturnCode='67154' Message='Selectable virtual_storage(size=<Disk size> vm_host=<IP
address of the VM host>):not found'>
```

## Common

The error message is output to <Process ID>.log file.

- Mandatory parameter of the vender information is not specified.

```
An indispensable parameter is not set.
```

Check if mandatory parameters are specified correctly in the vender information when this error occurs.



### Note

The error messages of AWS and Azure described here may change when the function of the cloud is updated.

Once the problem is identified, take necessary actions to solve them and then confirm that the error is not reproduced.



### See

Refer to "[2.3.1 Cloud Preparations](#)" for the parameters to be set in the vender information. Refer to "[2.5.2 Vendor Information](#)" for the vender information settings.

Refer to "Setup of the Coordination Adapter" in "Cloud Services Management Installation Guide" for the setup of the coordination adapter.

Use the management console of respective clouds to see the configuration of the cloud.

Collect the troubleshooting data and contact the Fujitsu support staff if the problem cannot be identified or the trouble cannot be resolved by the above actions.



### See

Refer to "[4.3 Data Collection Tool](#)" for the collection of troubleshooting data.

## 6.1.3 Errors without Notification

In some cases, processing will not be completed after a certain amount of time passed from the approval of the request, error mail will not be sent, and the log of the coordination adapter will not be output. In such cases, it is possible that the process in the coordination adapter had become error state and is aborted. Check the state of the process by the following procedure.

1. Check the status of the coordination adapter process by executing the following command. The list of the error processes is displayed as the result of the command.

```
%FSCSM_HOME%\SWRBA\SWRBAM\bin\swrba_admin pi-list -user swrbaadmin -password <Password> -state
error -startedafter <start date> -startedbefore <end date>
```

Options	Explanations
-user	Specify the username of the user for process control of the coordination adapter. The username is "swrbaadmin" and is fixed.
-password	Specify the password of the user for process control of the coordination adapter. Use the value specified at the setup of the coordination adapter.
-state	Specify the state of the process definition.



Options	Explanations
	"error" must be specified.
-startedafter	Specify the start date of the period when the process was started. Specify it in the form of the following. yyyy-mm-dd
-startedbefore	Specify the end date of the period when the process was started. Specify it in the form of the following. yyyy-mm-dd

### Example

Here is an example to check the error state that occurred on September 1, 2015.

```
%FSCSM_HOME%\SWRBA\SWRBAM\bin\swrba_admin pi-list -user swrbaadmin -password systemwalker#1 -state error -startedafter 2015-09-01 -startedbefore 2015-09-01
```

2. Take the following action and see if the problem is resolved in the case the trouble occurred in the request to ROR.
  - Change the setting of the communication with ROR to increase the waiting time for the responses from ROR. Refer to "Configuring the Communication Environment" in "Setup of the Coordination Adapter" in "Cloud Services Management Installation Guide" for the setup of the coordination adapter.
3. Collect the troubleshooting data and contact the Fujitsu support staff if the trouble is other than the above or the trouble cannot be resolved by the above actions.

### See

Refer to "4.3 Data Collection Tool" for the collection of troubleshooting data.

## 6.2 Secure Consistency of Management Information

Some differences may be caused between the management information on Cloud Services Management and actual cloud state in the following cases.

- Performed backup/restore of Cloud Services Management according to the manual.
- Operated services on the cloud or cloud management products directly.
- A trouble occurred during the process of Cloud Services Management.

In such cases, take the following actions to match the management information on Cloud Services Management and service state on the cloud.

### Point

Use "fscsm\_service export" command to export the service information managed in Cloud Services Management. Check the correspondence relation between the exported XML file and resources on the cloud or cloud management products.

Refer to "Service Operation Commands" in "Operation Guide" for the details of "fscsm\_service export" command.

### Cloud service without management information

Use management console of the cloud to delete the excess services if there exist a service that has no corresponding management information.

## Management information without cloud service

Ask the platform provider to request the deletion of the service from the cloud management portal if the management information exists but there is no corresponding service on the cloud.

### Note

The deletion request will cause an error because there is no corresponding service on the cloud. However, the management information will be removed on Cloud Services Management even in such case.

## Service configurations are different

Ask the platform provider to request the modification of the service from the cloud management portal if the service configurations are different.

### Point

The specification of the modification request does not necessarily match the configuration on the cloud. The configuration on the cloud will be modified according to the modification request.

## 6.3 Adjusting Charge of Billing

---

Cloud Services Management calculates the billing based on the management information. Adjust the charge of the billing to the platform providers if there were unavailable period of services which is due to situations such as maintenances and troubles.

## 6.4 Platform Management

---

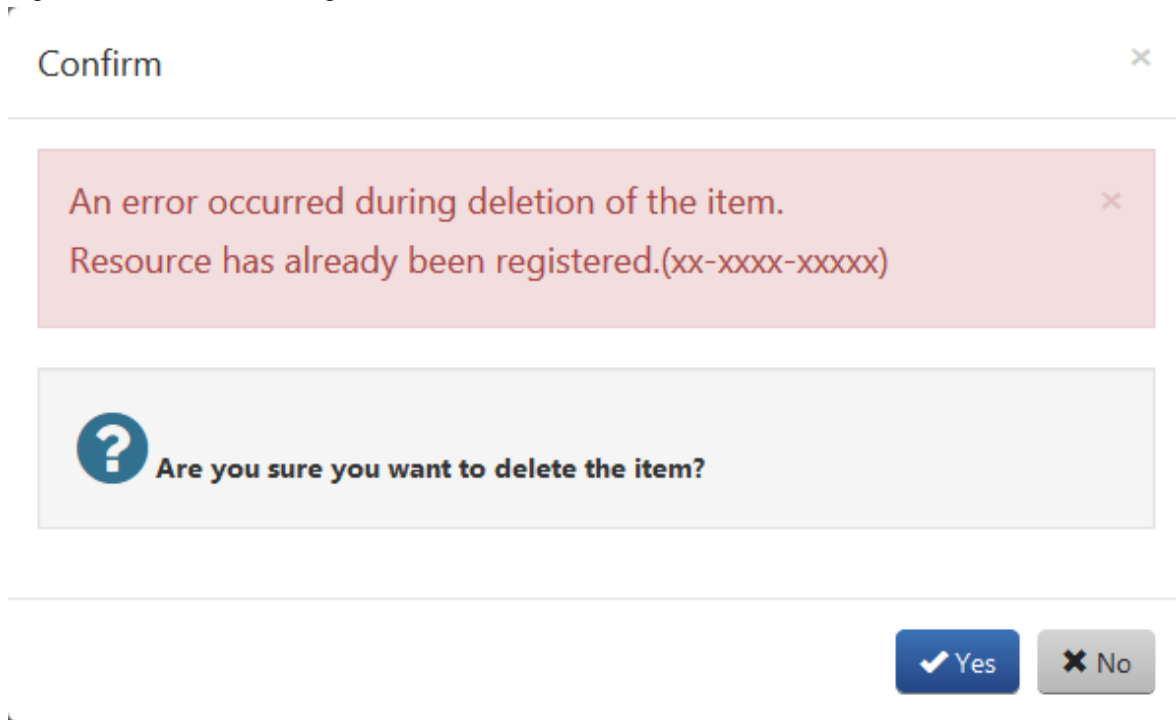
### 6.4.1 Failed to Delete Platform

---

In some cases, a platform cannot be deleted with the following message when you perform the deleting operation of the platform from [Platform Detail] in [Platform Management] menu of cloud management portal, even though there are no services shown in [Services].

```
An error occurred during deletion of the item.  
Resource has already been registered.(<Service ID>)
```

Figure 6.1 Error on Deleting Platform



**Cause**

Information of the service that has failed to add may remain, which was not deleted normally due to a network error or other reasons.

**Corrective Action**

Refer to "[5.2.5 Platform Operation Commands](#)" and delete the platform by the command.

# Appendix A Operation of RDB and SLB

This section explains procedure for startup of operating RDB and SLB.

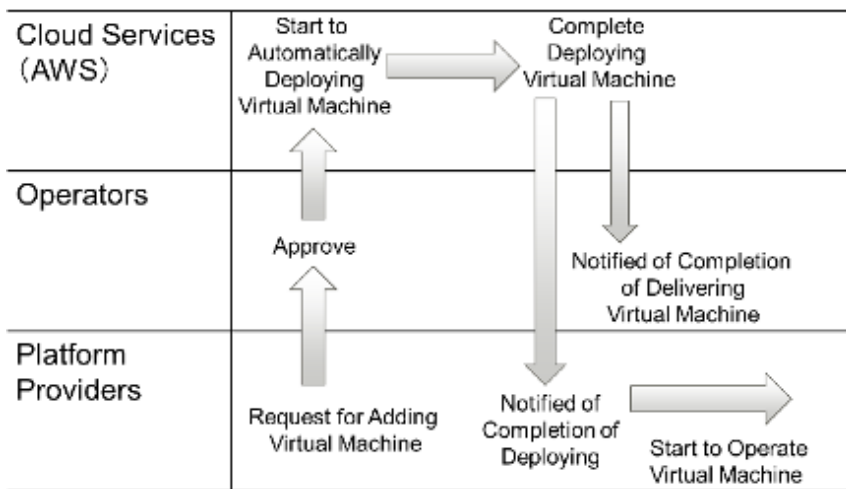
In this product, platform registered from AWS menu can only have RDB or SLB services.

The flow of startup of RDB or SLB is different from the case of virtual machine.

## A.1 Procedure for Startup of Operating RDB and SLB

Virtual machine is automatically deployed after approval for request of registration on the cloud management portal. However, RDB and SLB are not automatically deployed after the approval.

Figure A.1 Procedure for startup of operating virtual machine



If RDB or SLB is requested to register at the same time as virtual machine, operators setup the RDB or SLB on the cloud portal (AWS console), then deploying RDB or SLB is completed.

After that, operators notify the service applicant belonging to platform providers, then platform providers can start to operating RDB or SLB.

Figure A.2 Procedure for startup of operating virtual machine, RDB and SLB together

