

FUJITSU Software

Cloud Services Management V1.1.0

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

Installation Guide

Windows(64)

B1WS-1228-02ENZ0(00)
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Preface

Purpose of This Document

This manual explains the operations involved in installing Cloud Services Management.

Intended Readers

This manual is written for people who will install and set up Cloud Services Management.

Required Knowledge

Knowledge of the following is necessary to use this product.

- General knowledge regarding the operation system that will be used
- General knowledge regarding networks
- General knowledge regarding user authentication methods using LDAP

Structure of This Document

The structure and content of this manual is as follows.

[Chapter 1 Installation](#)

Explains the method for installing Cloud Services Management.

[Chapter 2 Setup](#)

Explains the method for setting up Cloud Services Management.

[Chapter 3 Post-Setup Initial Configuration](#)

Explains the work that is necessary after setup is completed.

[Chapter 4 Unsetup and Uninstallation](#)

Explains the methods for unsetup and uninstalling Cloud Services Management.

[Appendix A Port Numbers](#)

Explains the port numbers that Cloud Services Management uses.

[Appendix B About "Uninstall \(Middleware\)"](#)

Explains about "Uninstallation and Management (Middleware)".

[Appendix C Modifying Installation Environments](#)

Explains about modifying installation environments.

[Appendix D Configuring SVOM](#)

Explains about the necessary configurations for coordinating with different versions of ROR.

Positioning of This Document

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

Notational Conventions

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

Proper Name	Abbreviation
FUJITSU Software Cloud Services Management	Cloud Services Management

Proper Name	Abbreviation
FUJITSU Software ServerView Resource Orchestrator	ROR
FUJITSU Cloud Service A5 for Microsoft Azure	Azure
Amazon Web Services	AWS
FUJITSU Cloud Service K5	K5
VMware vSphere	VMware
ServerView Operations Manager	SVOM

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Chapter 1 Installation

This chapter explains the installation of Cloud Services Management.

1.1 Precautions for Installation

This section explains precautions for installation.

1.1.1 Confirming Windows Firewall Settings

When installing Cloud Services Management in an environment with the Windows firewall function enabled, it is necessary to configure the Windows firewall function to allow the necessary communication (ports).

For details on the procedure for configuring the Windows firewall function to allow the necessary communication (ports), refer to the manual for the OS.

For details on the ports used by Cloud Services Management, refer to "[A.1 Port Numbers](#)".



As the Windows firewall function is enabled by default, it is necessary to specify the ports and protocol to be used by this product as exceptions in the Windows firewall configuration beforehand.

1.1.2 Confirming hosts File Settings

IP addresses must be correctly obtained according to the host name. Check the hosts file settings before installation and confirm that name resolution can be performed correctly.



- Configure the relevant host name and "localhost" to support IPv4 addresses only. Do not configure an IPv6 address for the relevant host name and "localhost".
- Confirm that the relevant host name is not configured for "127.0.0.1".

1.1.3 Preparing the SMTP Server

Cloud Services Management uses email functions. Prepare the SMTP server for email.

1.1.4 Confirming .Net Framework 3.5

This product uses .NET Framework 3.5 (including .NET 2.0 and 3.0). Before installation, check if .NET Framework 3.5 (including .NET 2.0 and 3.0) has been installed referring to the following.

- Server Manager, <The Installation Destination Server>, Roles and Features

When .Net Framework 3.5 has not been installed, install it using the "Add Roles and Features Wizard" or "DISM".

When installing it using "DISM", open Windows PowerShell using administrator authorities and execute one of the commands below.

- If the server can access Windows Update or a default source file location has been already configured according to the group policy, execute the following command:

```
DISM /Online /Enable-Feature /FeatureName:NetFx3 /All
```

- If the server can access the OS installation media, and the installation media is in the D drive, execute the following command:

```
DISM /Online /Enable-Feature /FeatureName:NetFx3 /All /LimitAccess /Source:d:\sources\sxs
```

1.1.5 Installing Required Software

Install the software required for Cloud Services Management.

When installing SVOM as required software, for the password of the administrator account of the directory service, specify a character string 8 to 64 letters in length using !#()-.@`{ }~ and alphanumeric characters.

For details on required software, refer to "System Requirements" in the "FUJITSU Software Cloud Services Management Overview".

1.1.6 Confirming the OS User for Database Connection (fjsvcsmdb)

During the setup of the management server and the coordination adapter platform (APP), an OS user that is used to connect to databases in Cloud Services Management (fjsvcsmdb) is automatically created.

If the same OS user already exists, delete it.

1.2 Installation Procedure

This section explains the installation procedure for Cloud Services Management.



- If installation fails, restart the server and log in as the user that performed the installation, and then perform uninstallation following the uninstallation procedure.

After that, resolve the cause of the failure referring to the meaning and corrective actions of the output message, and then perform installation again.

Refer to "FUJITSU Software Cloud Services Management Messages" for details.

For uninstallation, refer to "[4.2 Uninstallation](#)".

- When installing on Windows Server 2012, the following messages may be output in the event log during installation. In this case, the installation has been processed correctly and there is no problem. No action is required.

Log name: Application

Source: Application Error

Event ID: 1000

Level: Error

Application name with problem: explorer.exe

1. Log in using an account belonging to the Administrators group.
2. Start the installer. Execute it as an administrator.

The installer is automatically started when the following DVD-ROM is inserted in the DVD-ROM drive. If the installer does not start automatically, start it manually by executing the fscsmsetup.exe command.

- FUJITSU Software Cloud Services Management V1.1

In the displayed window, select [Install on Server].

Figure 1.1 Launcher Window



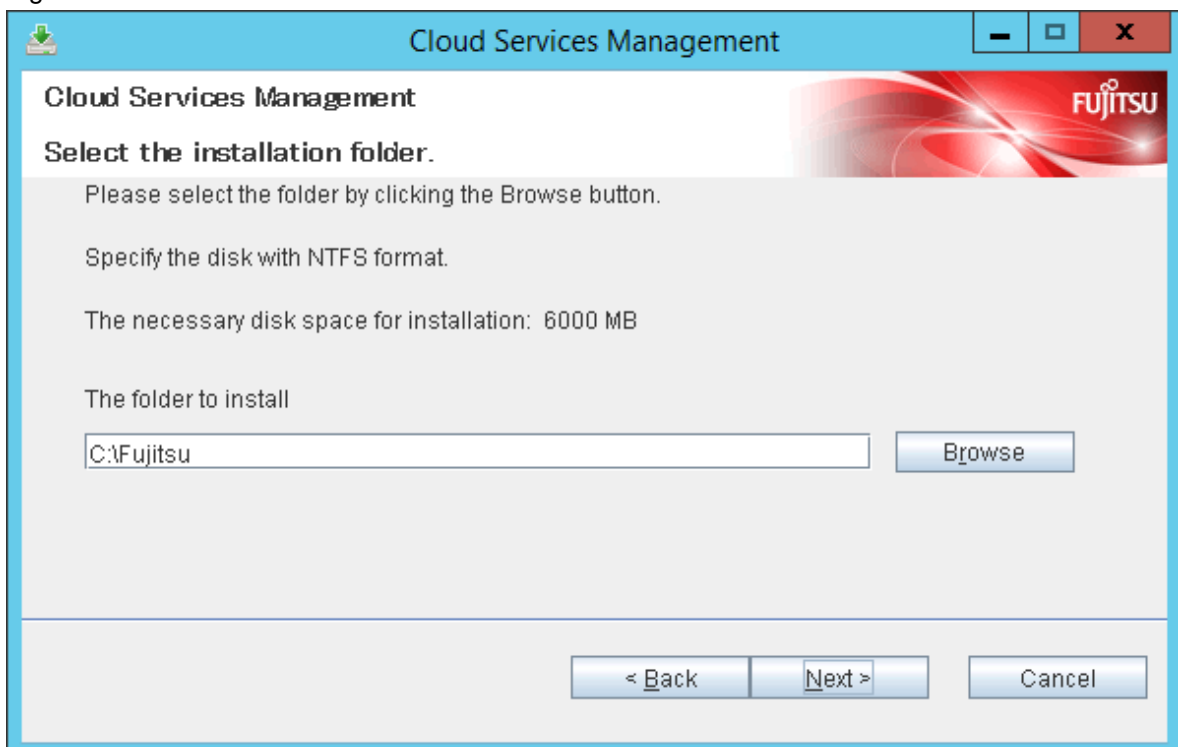
3. The [Welcome] dialog is displayed.
Confirm the content and click the [Next] button.

Figure 1.2 Welcome Window



4. Select the installation destination of Cloud Services Management.
Specify the installation destination folder and then click the [Next] button.

Figure 1.3 Select the installation folder Window



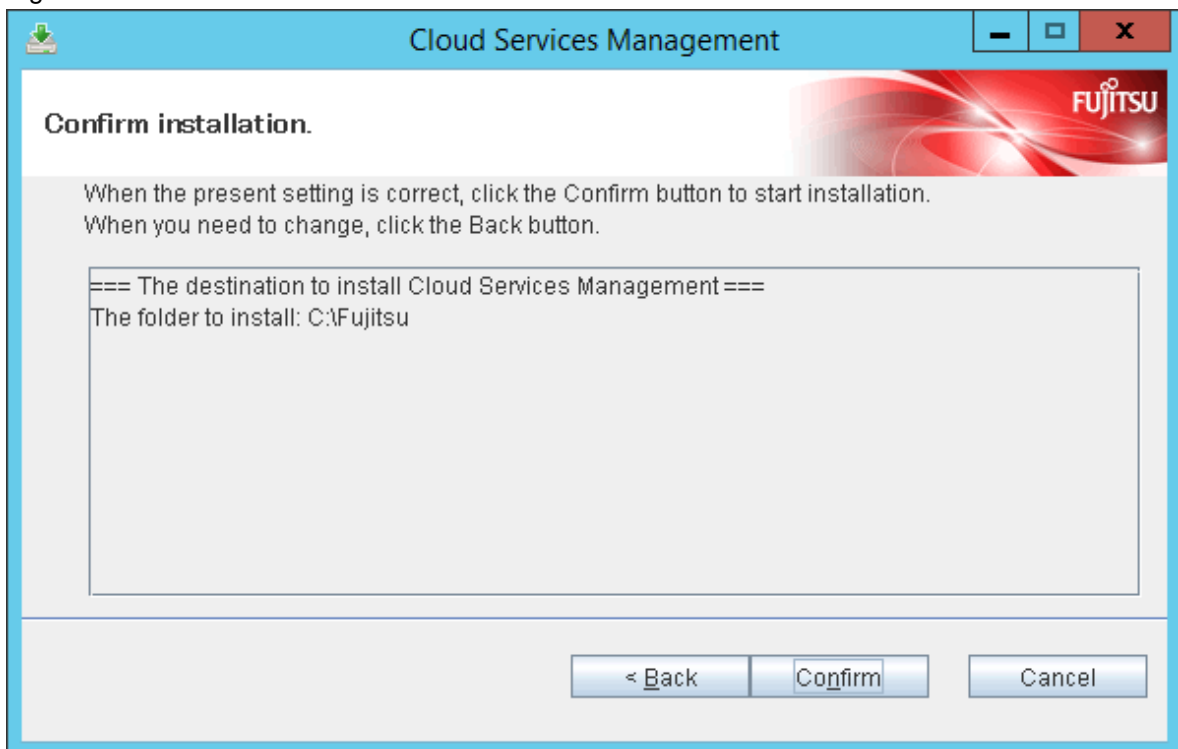
Note

- The path length of the installation destination can up be to 25 bytes.
- Specify an NTFS disk for the installation destination folder.
- Installation to a folder configured with encryption is not possible.
Either install to a folder without encryption configured, or remove any configured encryption before installing.
- Paths starting with "\\\" and relative paths cannot be specified.
- The characters that can be used for the folder name are alphanumeric characters, hyphens ("-"), and underscores ("_").
Folder names containing blank spaces (for example, "C:\Program Files" and "C:\Program Files (x86)") cannot be specified.
- The package necessary for Cloud Services Management to operate will be installed in the "FSCSM" folder in the folder specified as the installation destination. If this folder exists in the folder specified as the installation destination and there are files or other folders in the folder, an error will occur.

5. Confirm installation.

In the [Confirm installation] window, check the specification content. If there are no mistakes in the content, click the [Confirm] button. Installation will start.

Figure 1.4 Confirm installation Window



6. When installation is complete, the following window is displayed.

Click the [Finish] button.

Figure 1.5 Installation Completed Window



Chapter 2 Setup

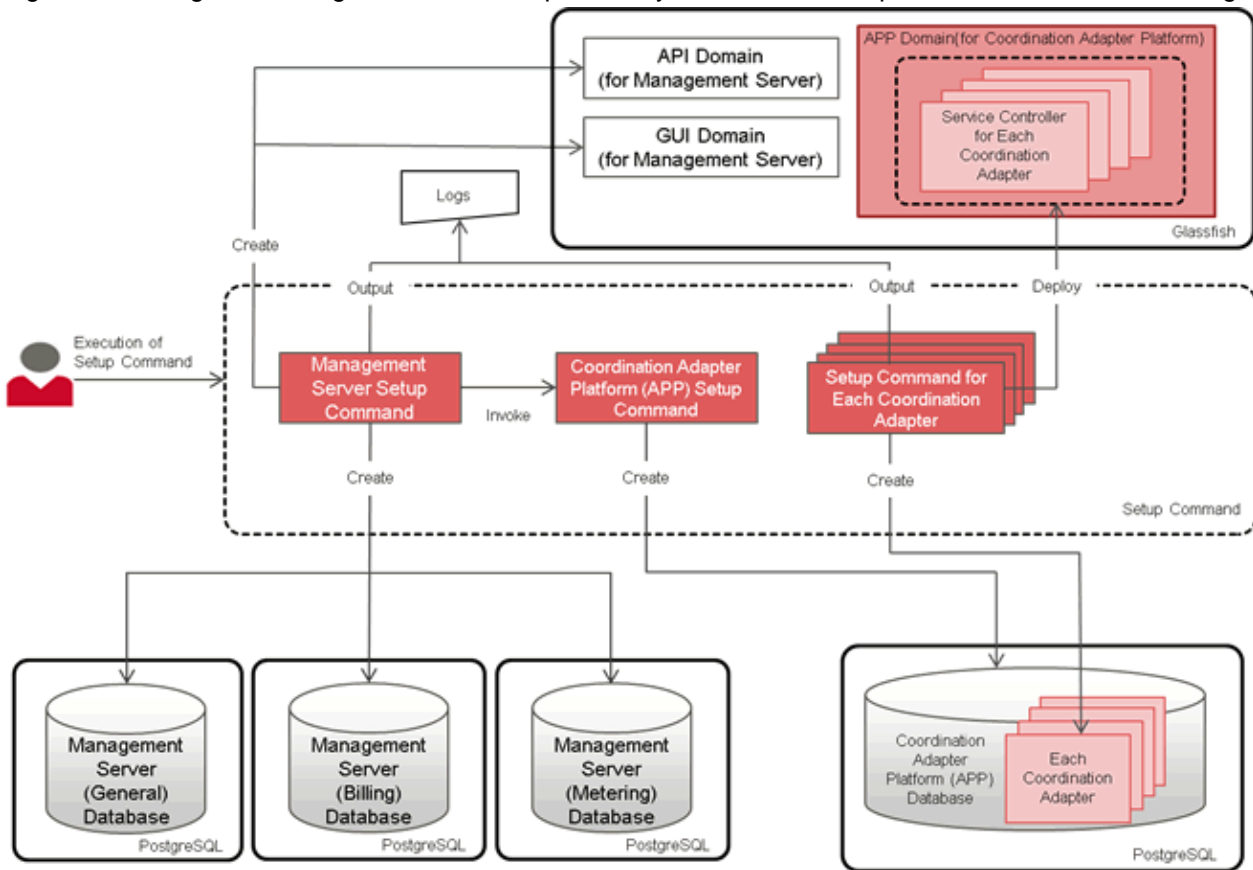
This chapter explains how to set up Cloud Services Management.

A Cloud Services Management system consists of a management server which is responsible for the overall control of Cloud Services Management, coordination adapters which coordinate with clouds, and a coordination adapter platform (APP) which controls each of the coordination adapters. It is necessary to perform setup for each of these components.

Cloud Services Management uses GlassFish as its Java EE execution environment, and PostgreSQL for its database.

The following sections describe the setup procedure in order.

Figure 2.1 Configuration Diagram of Servers Operated by Coordination Adapters of Cloud Services Management



2.1 Pre-setup Advisory Notes

This section explains advisory notes relevant before setup.

2.1.1 Preparations

This section explains the points to check before performing setup.

Check the following points:

- Installation of Cloud Services Management has completed.
- The "FSCSM" folder has been created in the installation destination folder of Cloud Services Management.
- You are logged in as a user with administrator authorities.

The login ID used during setup will be necessary when performing unsetup.

2.1.2 Installation Folder

The installer of Cloud Services Management creates the "FSCSM" folder in the folder specified as the installation destination and then stores the files necessary for setup and operation in that folder. This folder can be referenced using the system environment variable.

Environment Variable Name	Description
FSCSM_HOME	The absolute path of the folder in which the files and folders necessary for setup and operation are deployed or placed. Example: C:\Fujitsu\FSCSM



.....
In this manual, the absolute path of this "FSCSM" folder is referred to as "%FSCSM_HOME%".
.....

2.1.3 Setup Target

Perform setup of the following three items:

- Management server
- Coordination adapter platform (APP)
- Coordination Adapter

When performing the setup of the management server, the setup command of the coordination adapter platform (APP) is automatically executed, and its setup is performed simultaneously.

After setup of the management server and the coordination adapter platform (APP) has completed, perform setup of coordination adapters.

2.1.4 Configuring Passwords for Database Connection

During the setup of the management server and the coordination adapter platform (APP), an OS user that is used to connect to databases in Cloud Services Management (fjsvcsmdb) is automatically created. Before performing setup, configure a login password for this user in the following variable name of the user environment variables.

For the login password, configure the value in accordance with the security policy of the OS being used.

Environment Variable Name	Description
FSCSM_DBUSER_PASSWORD	The password of the OS user for database connection.

This user environment variable is also referenced during the setup of coordination adapters.

As this password becomes unnecessary once the setup of the management server, coordination adapter platform (APP), and coordination adapters are complete, delete it from the user environment variables after it becomes unnecessary.

2.2 Setup of the Management Server and the Coordination Adapter Platform (APP)

This section explains how to setup the management server and the coordination adapter platform (APP).

2.2.1 Setup Procedure

This section explains how to setup the management server and the coordination adapter platform (APP).

Execute the following command to perform the setup of the management server and the coordination adapter platform (APP).

```
%FSCSM_HOME%\setup\fscsm_setup <Parameters>
```

In *<Parameters>*, specify all of the parameters in "[Table 2.1 List of Setup Parameters](#)" in the listed order, starting from No.1. Insert a blank space between each parameter. For details on the port numbers used by the management server, refer to "[A.1 Port Numbers](#)".

Information

The parameters listed in the following "[Table 2.1 List of Setup Parameters](#)" need to be configured for the management server.

In addition, the parameters listed in "[Table 2.2 List of Parameters Configured Automatically during Setup](#)" are configured for the coordination adapter platform (APP). The parameters listed in this list are configured automatically within the system during setup.

Table 2.1 List of Setup Parameters

No.	Parameter Name	Description
1	AS_ADMIN_USER	The user name of the administrator of the Java EE execution environment. Example: Administrator
2	AS_ADMIN_PASSWORD	The password of the administrator of the Java EE execution environment. Example: User1234
3	AS_BASE_PORT	The port number base for the Java EE execution environment (API domain). A number equal to this number plus the port number is configured for each port of the API domain (*1). Example: 3700
4	AS_GUI_BASE_PORT	The port number base for the Java EE execution environment (GUI domain). A number equal to this number plus the port number is configured for each port of the GUI domain (*1). Example: 3600
5	AS_APP_BASE_PORT	The port number base for the Java EE execution environment (APP domain). The number equal to this number plus port number is configured as each port of the APP domain (*1). Example: 3900
6	PGS_SERVER	The PostgreSQL server name. Only "localhost" can be specified. This parameter is used for the initialization and setup of databases.
7	PGS_PORT	The port number used for database connection (general). Example: 3807
8	PGS_ACCOUNT_PORT	The port number used for database connection (billing). Example: 3808
9	PGS_METER_PORT	The port number used for database connection (metering). Example: 3809
10	PGS_APP_PORT	The port number used for database connection (APP). Example: 3810
11	SMTP_HOST	The host name of the SMTP server.
12	SMTP_PORT	The port number for the SMTP server.
13	MAIL_ADDRESS	The destination address of emails from this product. Example: toaddr@example.com
14	MAIL_RESPONSE_ADDRESS	The sender address of emails from this product. Example: fromaddr@example.com

*1: The port number to be used by each domain is calculated based on the specified port number base. For details, refer to "A.1 Port Numbers".

Example

```
%FSCSM_HOME%\setup\fscsm_setup Administrator User1234 3700 3600 3900 localhost 3807 3808 3809 3810
smtp.b.net 25 toaddr@example.com fromaddr@example.com
```

The parameters for the coordination adapter platform (APP) configured automatically during setup are shown below.

Table 2.2 List of Parameters Configured Automatically during Setup

No.	Parameter Name	Description
1	APP_BASE_URL	The URL used to access the coordination adapter platform (APP). Default: http://localhost:<AS_APP_BASE_PORT+80>/oscm-app
2	APP_TIMER_INTERVAL	The polling (status check) interval. The coordination adapter platform (APP) checks the statuses of servers deployed on the cloud at the interval specified here to see if deployment has been completed. Reducing the polling (status check) interval reduces the time taken for deployment to be completed, but may increase the burden on the servers where Cloud Services Management is installed and the cloud. The unit is milliseconds. Default: 15000
3	APP_ADMIN_MAIL_ADDRESS	The email address used for notifications. When trouble occurs during the operation of the coordination adapter platform (APP), the information is sent to this email address. Default: The value of the MAIL_ADDRESS parameter
4	BSS_WEBSERVICE_HOST_PORT	The URL host name and port number used by the coordination adapter platform (APP) to access management server domains (API and GUI domains). Default: localhost:<AS_GUI_BASE_PORT+80>
5	BSS_USER_PWD	The password for access to management server domains (API and GUI domains). Default: admin123
6	BSS_USER_KEY	The user key for access to management server domains (API and GUI domains). Fixed value: 1000 This parameter cannot be modified.

Note

- For the user name (AS_ADMIN_USER), use alphanumeric characters, underscores ("_"), hyphens ("-"), or periods (".").
- For the password (AS_ADMIN_PASSWORD), use eight or more characters, including alphanumeric characters, underscores ("_"), hyphens ("-"), and periods (".").
- For the SMTP host name (SMTP_HOST), specify a host name or an IP address that can be accessed by the server. The user authentication settings for the SMTP server is configured as follows. For the procedure to change the setting, refer to "Appendix C Modifying Installation Environments".
 - Authentication: Disabled

- User name: saas
- Password: password
- Specify each port number in the range from 1 to 65535.
- For AS_BASE_PORT, AS_GUI_BASE_PORT, and AS_APP_BASE_PORT, specify a value in the range from 0 to 65359, because the ports up to "the specified number + 176" will be used.
- Port numbers that are currently active can be checked using the following command. Do not specify the port numbers displayed by this command.

```
netstat -a -n
```

Specified port numbers may be used by other software that is not currently operating. Check and confirm the port numbers used by other software by referring to the documents of the already installed software.

- For email addresses (MAIL_ADDRESS and MAIL_RESPONSE_ADDRESS), use alphanumeric characters, an at mark ("@"), underscores ("_"), hyphens ("-"), and periods (".").

Confirm execution

The message prompting for confirmation of execution of setup is displayed.

Enter "y" to execute setup or "n" to cancel setup, and then press the Enter key.

```
Are you sure you want to start setup of FUJITSU Software Cloud Services Management? (y/n)[n]
```

Start setup

When setup is started, the following message is displayed:

```
FUJITSU Software Cloud Services Management setup start.
```

Confirm completion

When setup is complete, the following message is displayed:

```
FUJITSU Software Cloud Services Management setup end.
```

2.2.2 Messages and Corrective Actions

If an error occurs, check the output message and resolve the cause of the error, and then perform setup again.

For the messages that are output during setup of the management server, refer to "FUJITSU Software Cloud Services Management Messages".

2.2.3 Log Output

Execution content of setup and unsetup is output to log files. Log files are used for troubleshooting performed when setup or unsetup fails.

Storage Location

```
%FSCSM_HOME%\log
```

Types of Log Files

The following log files are output.

Table 2.3 List of Log File Names

File Name	Description
fscsm_setup.log	When an error occurs during setup, troubleshooting data regarding the setup is output. Input parameters other than passwords are output.

File Name	Description
fscsm_unsetup.log	When an error occurs during unsetup, troubleshooting data regarding the unsetup is output.
fscsm_initdb.log	When an error occurs during initialization of databases, troubleshooting data is output.
fscsm_removedb.log	When an error occurs during deletion of databases, troubleshooting data is output.
build-db-ant.log	When an error occurs during setup of databases, troubleshooting data regarding the setup is output. As the data contains password information, this file can only be read by users with administrator privileges.
build-db-ant_changeappSettings.log	When the coordination adapter platform (APP) is reconfigured, the database modification results are output.
build-glassfish-setup-ant.log	Configuration information for the database is output during setup.
build-glassfish-setup-ant_APPInteg.log	Configuration information for the database is output during setup.
fscsm_copyGF.log	Copy results of GlassFish files are output.
fscsm_setupSC.log	Part of the setup results are output. Alternatively, when modification of service information fails, troubleshooting data is output.
fscsm_changeAPPInteg.log	When the coordination adapter platform (APP) is reconfigured, the execution results are output.
fscsm_changeK5Integ.log	When the K5 coordination adapter is reconfigured, the execution results are output.
fscsm_changeRORInteg.log	When the ROR coordination adapter is reconfigured, the execution results are output.
fscsm_changeVMwareInteg.log	When the VMware coordination adapter is reconfigured, the execution results are output.
fscsm_setupAPPInteg.log	When the setup command is executed, the execution results of the coordination adapter platform (APP) segment are output.
fscsm_setupAWSInteg.log	When the setup command for the AWS coordination adapter is executed, the execution results are output.
fscsm_setupAzureInteg.log	When the setup command for the Azure coordination adapter is executed, the execution results are output.
fscsm_setupK5Integ.log	When the setup command for the K5 coordination adapter is executed, the execution results are output.
fscsm_setupRORInteg.log	When the setup command for the ROR coordination adapter is executed, the execution results are output.
fscsm_setupVMwareInteg.log	When the setup command for the VMware coordination adapter is executed, the execution results are output.
fscsm_unsetupAPPInteg.log	When the unsetup command is executed, the execution results of the coordination adapter platform (APP) segment are output.
fscsm_unsetupAWSInteg.log	When the unsetup command for the AWS coordination adapter is executed, the execution results are output.
fscsm_unsetupAzureInteg.log	When the unsetup command for the Azure coordination adapter is executed, the execution results are output.
fscsm_unsetupK5Integ.log	When the unsetup command for the K5 coordination adapter is executed, the execution results are output.
fscsm_unsetupRORInteg.log	When the unsetup command for the ROR coordination adapter is executed, the execution results are output.
fscsm_unsetupVMwareInteg.log	When the unsetup command for the VMware coordination adapter is executed, the execution results are output.
CSM_install.log	The execution result of the installer is output.
vcredist_install.log	The execution result of the installer is output.

Output Format

Logs are output in the following format.

Table 2.4 Log Output Format

Item	Content
Date and time	The date and time (local time) when the event occurred is output in the following format: "YYYY/MM/DD hh:mm:ss.xxx"
Label	"FSCSM" is output.
Error type	"INFO", "ERROR", or "DEBUG" is output.
Output source	The name of the command which was executed is output.
Messages	Messages describing the content of the event are output.
Variable information	Supplementary information is output according to the event type.

Output Example

The information is output as shown below:

```
[2016/04/19 13:08:11.52] FSCSM: fscsm_setup: INFO: 101: FUJITSU Software Cloud Services Management  
setup start.
```

2.2.4 Post-setup Operations

This section explains the operations to perform after setup of the management server and the coordination adapter platform (APP).

Changing the Access Path to the Coordination Adapter Platform (APP)

The access path to the coordination adapter platform (APP) is configured in the following format as the value for the parameter APP_BASE_URL:

```
http://localhost:<AS_APP_BASE_PORT+80>/oscm-app
```

This path may be included as the link to the Browser Interface for Management of the Coordination Adapter Platform (URL) in error notification emails sent when internal process errors occur.

Modify "localhost" to the value allowing the recipient of the emails (the email address specified for APP_ADMIN_MAIL_ADDRESS) access to the coordination adapter platform.

For details on the command for reconfiguration, refer to "[C.3 Reconfiguring the Coordination Adapter Platform \(APP\)](#)".

2.3 License Registration

This section explains license registration.

2.3.1 Inputting License Keys

After installation of the product is complete, input the license key using the license key input command. Inputting the license key configures the authorized user of this product.

This product performs the following checks regarding license registration:

- During startup of the cloud management portal, it checks if valid licenses have been registered. When no valid licenses have been registered, the Cloud Management Portal stops automatically.
- Once a day, it checks whether the number of managed servers which were provisioned through Cloud Management Portal exceeds the total number allowed under the registered licenses. If the allowed number is exceeded, a warning email will be sent to the address that was specified for the parameter MAIL_ADDRESS during "[2.2 Setup of the Management Server and the Coordination Adapter Platform \(APP\)](#)".

2.3.2 License Registration Command

fjlic Command

Input license keys and start authorized use of this product. There are two methods for inputting license keys. One is to directly input license keys as a parameter, and the other is to define license keys in a file and input that file.

- Method that directly inputs the license keys as a parameter

Input the license key as a parameter using the **fjlic register** command:

```
%FSCSM_HOME%\lic\fjlic register -k License key
```

Specify the license key for the -k option. When specifying multiple license keys, separate them using commas.

- Method for defining license keys in a file and inputting that file

Input the file with license keys defined using the **fjlic register** command:

```
%FSCSM_HOME%\lic\fjlic register -f Path to the license key file
```

Specify the full path of the file in which the license keys are defined for the -f option. When creating the file with license keys, use the following format for the content:

```
XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XX  
XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XX
```

Separate each license key by line feed codes (use \r\n or \n for line feed codes).



License keys that are already registered cannot be confirmed or deleted.

2.4 Setup of Coordination Adapters

This section explains the procedure for setting up the coordination adapter.

2.4.1 Preparations for Setup

This section explains the points to check before performing setup of coordination adapters.

Check the following points:

- Installation of Cloud Services Management has completed.
- You are logged in as a user with administrator authorities.
- The OS user (fjsvcsbdb) is added.

This user is created during the setup of Cloud Services Management. The same user is also used by coordination adapters for database connection. For details, refer to "[2.1.4 Configuring Passwords for Database Connection](#)".

- The coordination adapter platform (APP) has been started.

In Cloud Services Management, the start and stop processes of the coordination adapter platform (APP) and the management server are linked.

For details on how to start, refer to "Starting and Stopping" in the "FUJITSU Software Cloud Services Management Operation Guide".

When setting up the coordination adapter for ROR, also check the following points:

- ROR has been installed and is ready to operate.

- Tenants are created in ROR. Configuration of tenant resources, setup of tenant users and administrators, and creation of the L-Platform template for Cloud Services Management have been completed.
- Check the version of SVOM being used by ROR.
For details, refer to "[Appendix D Configuring SVOM](#)".

When setting up the coordination adapter for AWS, also check the following points:

- An AWS account (an access key ID and a secret access key) for the administrator of the AWS service controller has been created.
For details on setup of AWS accounts for the service controller, refer to "[2.4.3.3 Configuring AWS Connection Information \(Only when Performing AWS Coordination\)](#)".

2.4.2 Setup Procedure

This section explains the setup procedure for coordination adapters. For adapters which will not be coordinated, setup is not necessary.

In addition, setup can be performed later, when coordination becomes necessary.

1. Execute commands

Setup commands for coordination adapters are as follows. Execute the setup command for each coordination destination as a user with administrator privileges.

- a. The setup command for the ROR coordination adapter

```
%FSCSM_HOME%\setup\fscsm_setupRORInteg <Parameters>
```

- b. The setup command for the AWS coordination adapter

```
%FSCSM_HOME%\setup\fscsm_setupAWSInteg <Parameters>
```

- c. The setup command for the Azure coordination adapter

```
%FSCSM_HOME%\setup\fscsm_setupAzureInteg <Parameters>
```

- d. The setup command for the K5 coordination adapter

```
%FSCSM_HOME%\setup\fscsm_setupK5Integ <Parameters>
```

- e. The setup command for the VMware coordination adapter

```
%FSCSM_HOME%\setup\fscsm_setupVMwareInteg <Parameters>
```

For the setup command for each coordination adapter, it is necessary to specify the following parameters. Specify the parameters marked with "Yes" in the column of the coordination adapter to set up as indicated in the following table. The parameters must be specified in order of No., separated using spaces.

Table 2.5 List of Setup Parameters for Coordination Adapters

No.	Parameter Name	Coordination Adapter					Description
		ROR	AWS	Azure	K5	VMware	
1	AS_APP_ADMIN_USER	Yes	Yes	Yes	Yes	Yes	The user name of the administrator of the Java EE execution environment for the APP domain. Specify the value specified in AS_ADMIN_USER in " Table 2.1 List of Setup Parameters ".
2	AS_APP_ADMIN_PASSWORD	Yes	Yes	Yes	Yes	Yes	The password of the administrator of the Java EE

No.	Parameter Name	Coordination Adapter					Description
		ROR	AWS	Azure	K5	VMware	
							execution environment for the APP domain. Specify the value specified in AS_ADMIN_PASSWORD in "Table 2.1 List of Setup Parameters".
3	AS_APP_BASE_PORT	Yes	Yes	Yes	Yes	Yes	The base port for APP domains. Specify the value specified in AS_APP_BASE_PORT in "Table 2.1 List of Setup Parameters".
4	IAAS_ROR_USER_ID	Yes	-	-	-	-	The user ID of the ROR tenant administrator.
5	IAAS_ROR_PWD	Yes	-	-	-	-	The password of the ROR tenant administrator.
6	IAAS_ROR_TENANT	Yes	-	-	-	-	The ROR tenant name.
7	IAAS_ROR_HOST_PORT	Yes	-	-	-	-	The URL host name and port number for the ROR L-Platform API. Specify a host name and port number where the management function API of ROR is operating in the following format: <i><hostname or IP address>:<port number></i> Specify the host name referring to the server certificate. The URL of the L-Platform API of ROR is configured as follows during setup: https:// <IAAS_ROR_HOST_PORT>/cfmgapi/endpoint
8	IAAS_K5_USER_ID	-	-	-	Yes	-	The user name for connecting to K5.
9	IAAS_K5_PWD	-	-	-	Yes	-	The user password for connecting to K5.
10	IAAS_K5_DOMAIN	-	-	-	Yes	-	The K5 domain name used for API access.
11	IAAS_VMWARE_URL	-	-	-	-	Yes	The destination URL of the VMware API. https://<Host name of VMware vCenter Server>/sdk/vimService?wsdl
12	IAAS_VMWARE_USER_ID	-	-	-	-	Yes	The user ID for connecting to VMware vCenter Server.

No.	Parameter Name	Coordination Adapter					Description
		ROR	AWS	Azure	K5	VMware	
13	IAAS_VMWARE_PWD	-	-	-	-	Yes	The password for connecting to VMware vCenter Server.

Yes: Specification is mandatory.

-.: Specification is not possible.

Example

Specification examples for the setup commands for coordination adapters are as follows.

a. For ROR

```
%FSCSM_HOME%\setup\fscsm_setupRORInteg Administrator User1234 3900 roruserid rorpassword
rortenant rorhost.example.com:8014
```

b. For AWS

```
%FSCSM_HOME%\setup\fscsm_setupAWSInteg Administrator User1234 3900
```

c. For Azure

```
%FSCSM_HOME%\setup\fscsm_setupAzureInteg Administrator User1234 3900
```

d. For K5

```
%FSCSM_HOME%\setup\fscsm_setupK5Integ Administrator User1234 3900 k5user@example.com
k5password K5DOMAIN
```

e. For VMware

```
%FSCSM_HOME%\setup\fscsm_setupVMwareInteg Administrator User1234 3900 https://
vmhost.example.com/sdk/vimService?wsdl vmuser@example.com vmpassword
```

2. Confirm execution

The message prompting for confirmation of execution of setup is displayed. The following message is an example for the AWS coordination adapter.

Enter "y" to execute setup or "n" to cancel setup, and then press the Enter key.

```
Are you sure you want to start setup of FUJITSU Software Cloud Services Management AWS
Integration? (y/n)[n]
```

3. Start setup

When setup is started, the start message is displayed. The following message is an example for the AWS coordination adapter.

```
FUJITSU Software Cloud Services Management AWS Integration setup start.
```

4. Confirm completion

When setup is complete, the completion message is displayed. The following message is an example for the AWS coordination adapter.

```
FUJITSU Software Cloud Services Management AWS Integration setup end.
```

Note

If an error occurs, check the output message and resolve the cause of the error, and then perform setup again.

If an error occurs after confirming execution of the setup command, ensure you execute the unsetup command before executing the setup command again.

See

For the messages that are output during setup of coordination adapters, refer to "FUJITSU Software Cloud Services Management Messages".

2.4.3 Post-setup Operations

This section explains the tasks to perform after the setup of coordination adapters.

Note

When adding a coordination adapter after offline backup has been performed, perform offline backup again after setup.

Note that if the backup is not performed then the added coordination adapter will not be restored.

For details on offline backup, refer to "Backup and Restore", and "Offline Backup" in the "Fujitsu Software Cloud Services Management Operation Guide".

2.4.3.1 Configuring and Modifying Proxy Server Connection Information for External Connections

When the server that performs setup of coordination adapters uses a proxy to access the cloud to be coordinated, it is necessary to configure the proxy and authentication information for the APP domain.

The proxy and authentication information can be configured using the administration command of the Java EE execution environment (asadmin command). To execute the command, the following information about Java EE execution environment of the domain to modify is necessary.

- Admin port number

Specify as a command option.

- User name of the administrator

Specify as a command option.

- Password of the administrator

Specify according to the prompt shown when executing the command.

Use the value specified in "[2.2 Setup of the Management Server and the Coordination Adapter Platform \(APP\)](#)".

Configuring

Execute the following command if necessary:

1. The command for configuring a proxy host

Execute the following command with a value specified in *<proxy host>*.

```
"%FSCSM_HOME%\SWCTMG\glassfish3\bin\asadmin" -p <admin port number> -u <user name of administrator> create-jvm-options -Dhttps.proxyHost=<proxy host>
```

2. The command for configuring a proxy port

Execute the following command with a value specified in *<PORT NO>*.

```
"%FSCSM_HOME%\SWCTMG\glassfish3\bin\asadmin" -p <admin port number> -u <user name of administrator> create-jvm-options -Dhttps.proxyPort=<PORT NO>
```

3. The command for configuring a proxy authentication user

When the proxy performs authentication, execute the following command with a value specified in *<authentication user name>*.

```
"%FSCSM_HOME%\SWCTMG\glassfish3\bin\asadmin" -p <admin port number> -u <user name of administrator> create-jvm-options -Dhttps.proxyUser=<authentication user name>
```

4. The command for configuring a proxy authentication password

When the proxy performs authentication, execute the following command with a value specified in *<authentication password>*.

```
"%FSCSM_HOME%\SWCTMG\glassfish3\bin\asadmin" -p <admin port number> -u <user name of administrator> create-jvm-options -Dhttps.proxyPassword=<authentication password>
```

When the above proxy configurations have been performed, to enable communications which does not use a proxy, it is necessary to configure a directly connected host.

- Be sure to configure the following:

```
localhost|127.0.0.1
```

- If there is a cloud which does not use a proxy, configure as necessary.

Execute the following command with values specified in *<host names or IP addresses to be connected directly>*. When there are multiple host names or IP addresses to be connected directly, separate them using vertical bars ("|").

```
"%FSCSM_HOME%\SWCTMG\glassfish3\bin\asadmin" -p <admin port number> -u <user name of administrator> create-jvm-options -Dhttps.proxyHost="<host names or IP addresses to be connected directly>"
```

After performing the above procedure, restart the APP domain. In Cloud Services Management, the start and stop processes of the coordination adapter platform (APP) and the management server are linked.



See

.....
For details on how to restart, refer to "Starting and Stopping" in the "FUJITSU Software Cloud Services Management Operation Guide".
.....

Deleting configurations

To delete a configuration, execute the following.

Execute the following command to delete a target configuration:

```
"%FSCSM_HOME%\SWCTMG\glassfish3\bin\asadmin" -p <admin port number> -u <user name of administrator> delete-jvm-options <operand of jvm-options to delete>
```

Example of command execution: (With a proxy host)

Configure the already configured value of `-Dhttps.proxyHost` using the format `"-Dhttps.proxyHost=value"` in *<operand of jvm-options to delete>*.

```
"%FSCSM_HOME%\SWCTMG\glassfish3\bin\asadmin" -p 3948 -u Administrator delete-jvm-options -Dhttps.proxyHost=proxy.com  
Enter admin password for user "Administrator">
```



```
Deleted 1 option(s)
Command delete-jvm-options executed successfully.
```

Modifying configurations

To modify a configuration, first delete the existing configurations using the procedure in "[Deleting configurations](#)", then configure again using the procedure in "[Configuring](#)".

2.4.3.2 Configuring ROR Connection Information (Only when Performing ROR Coordination)

This step is necessary for ROR coordination. This step is not required when not performing ROR coordination.

Add the ROR admin serve certificate required for the ROR coordination adapter to connect the ROR admin server to the APP domain.

Exporting the Certificate for the ROR Admin Server

This section explains how to export the certificate for the ROR admin server and save it as a file.



After exporting the certificate file, copy it to the server that performs setup of the ROR coordination function for use. Delete the certificate file that is no longer necessary.

- Export using a web browser

This section explains how to export a certificate using Internet Explorer as the web browser. When performing this procedure, start Internet Explorer as an administrator.

1. Start the ROR management console.

Using a web browser, access the login window of the ROR management console. Access the following URL:

```
https://<FQDN of the ROR admin server>:<Port number for ROR L-Platform API>/cfmgapi/endpoint
```

The default port number for the ROR L-Platform API is 8014.

2. View the certificate.

On the security status bar of the web browser, click [Certificate Error] and then select [View Certificates]. The [Certificate] window is displayed.

3. Export the certificate.

On the [Certificate] window, click the [Details] tab and click the [Copy to File] button.

Follow the instructions on the displayed window to export the certificate.

For the format of the exported file, accept the default format DER encoded binary X.509.

- Export using a command

Export a certificate using the `cmmkpfx` command, which is a function provided by ROR.

Exporting with a command requires the password for the Interstage certificate environment and the nickname of the certificate that were specified when adding the certificate to the ROR admin server.

For details, refer to "Importing a Certificate to ServerView SSO Authentication Server" in the "ServerView Resource Orchestrator Cloud Edition Setup Guide".

Importing the Certificate for the ROR Admin Server

This section explains how to import the exported certificate for an ROR admin server into the truststore for the APP domain.

Import using the following procedure:

1. Import the certificate into the truststore for the APP domain.

Execute the following command. In "[Certificate file for the ROR admin server]", specify the certificate file for the ROR server to which the certificate was exported (It is not necessary to include line feeds in this command. When copying this command from the manual, delete line feeds before using it).

The message prompting for confirmation of trusting this certificate is displayed. If you trust this certificate, enter "y" and then press the Enter key.

```
%FSCSM_HOME%\SWCTMG\jdk7\bin\keytool -import -file [Certificate file for the ROR admin server] -trustcacerts -alias rorsv -keystore %FSCSM_HOME%\SWCTMG\glassfish3\glassfish\domains\app-domain\config\cacerts.jks -storepass changeit
```

2. Confirm that the certificate file for the ROR admin server has been added in the truststore for the APP domain.

Execute the following command:

```
%FSCSM_HOME%\SWCTMG\jdk7\bin\keytool -list -keystore %FSCSM_HOME%\SWCTMG\glassfish3\glassfish\domains\app-domain\config\cacerts.jks -storepass changeit
```

2.4.3.3 Configuring AWS Connection Information (Only when Performing AWS Coordination)

This step is necessary for AWS coordination. This step is not required when not performing AWS coordination.

Configure an access key ID and a secret access key for AWS to the AWS service controller by using the following procedure.

1. Confirm the user key (1000) and password (BSS_USER_PWD) for access to management server domains (API and GUI domains).

For details on the password (BSS_USER_PWD), refer to "[Table 2.2 List of Parameters Configured Automatically during Setup](#)".

2. To open the [AWS Controller Configuration] window, access the following URL using a web browser.

In *<server>*, specify the host name or IP address of the management server for Cloud Services Management. In *<port>*, specify the HTTP listener port for the APP domain.

```
http://<server>:<port>/oscm-app-aws/
```

The port number of the HTTP listener of the APP domain is "AS_APP_BASE_PORT + 80/tcp".

3. In the [Login] window, specify the user key and password confirmed in step 1 to log in.
4. After logging in, the [AWS Controller Configuration] window is displayed.
5. Specify the access key ID and the secret access key.
6. Save the settings.



Note

To modify items displayed in [General controller settings] in the [AWS Controller Configuration] window, modify using the reconfiguration command, not this menu. For details on the reconfiguration command, refer to "[C.4 Reconfiguring Coordination Adapters](#)".

2.4.3.4 Configuring Azure Connection Information (Only when Performing Azure Coordination)

This step is necessary for Azure coordination. This step is not required when not performing Azure coordination.

Register the subscription file for connecting with Azure.

Perform the following procedure to configure Azure connection information.

1. Access the page for generating Azure subscription files at:

```
https://manage.windowsazure.com/publishsettings
```

After login, a management certificate is generated and registered on Azure. In addition, downloading of the subscription file starts. Save it in a safe folder.

Note

The above URL and the download procedure are subject to change.

For details on generation of management certificates and subscription files, contact the Azure service support desk.

2. Save the downloaded subscription file on the management server.

- a. Create a folder named "Subscription_ID" in the following folder:

```
%FSCSM_HOME%\conf\adapter\azure\certificate
```

- b. Place the subscription file in the created folder as is. It is not necessary to change the file name. The folder structure should be as follows:

```
%FSCSM_HOME%\conf\adapter\azure\certificate\<Subscription ID folder>\<Subscription file>
```

Point

When you want to modify Azure connection information, delete the subscription ID folder and the subscription file first, then register a new subscription file. If you want to use multiple subscriptions, create a subscription ID folder for each subscription and place each subscription file in its own folder.

2.4.3.5 Configuring VMware Connection Information (Only when Performing VMware Coordination)

This step is necessary for VMware coordination. This step is not required when not performing VMware coordination.

Add the VMware certificate required for the VMware coordination adapter to connect the VMware to the APP domain.

For details on how to obtain VMware certificates, refer to the following. (As of May 2016)

- VMware vSphere 6.0 Documentation Center

```
http://pubs.vmware.com/vsphere-60/index.jsp#com.vmware.wssdk.dsg.doc/sdk_sg_server_certificate_Appendixes.6.4.html
```

Execute the following command to import the certificate into the truststore for the APP domain. In "[*Certificate file for VMware*]", specify the obtained VMware certificate file.

The message prompting for confirmation of trusting this certificate is displayed. If you trust this certificate, enter "y" and then press the Enter key.

```
%FSCSM_HOME%\SWCTMG\jdk7\bin\keytool -import -file [Certificate file for VMware] -trustcacerts -alias vmware -keystore %FSCSM_HOME%\SWCTMG\glassfish3\glassfish\domains\app-domain\config\cacerts.jks -storepass changeit
```

Chapter 3 Post-Setup Initial Configuration

This chapter explains the initial configuration tasks to perform after setup.

3.1 Initial Configuration of Management Servers

This section explains the initial configuration required for using this product.

The required initial configuration is as follows:

1. Configuration of communications with SVOM
2. Configuration of the mail server
3. Billing configuration
4. Reflecting configurations
5. Creating initial users
6. Backup



This section explains the minimum settings required for starting use of this product. The settings configured here can be modified after starting use of this product.

For details on setting items, procedures for modifying settings, and operation procedures, refer to the "FUJITSU Software Cloud Services Management Operation Guide", and the "FUJITSU Software Cloud Services Management User's Guide for Planner and Operator".

3.1.1 Configuration of Communications with SVOM

The management server of this product communicates with SVOM for authentication. It is necessary to perform the following configurations in advance:

Settings for the SVOM Directory Service

When changing a directory service coordinated with SVOM from the one provided with SVOM to Active Directory, it is necessary to configure or modify the following items in the definition file. This task is not necessary when using the directory service provided with SVOM.

The file name and storage location are as follows:

File Name

fscsm_config.xml

Storage Location

%FSCSM_HOME%\conf

Setting Items

Item	Configuration Value	
ldap.mode	Specify when using the directory service provided with SVOM (default)	read_write
	Specify when using Active Directory coordination	read_only

For details on the system information definition file, refer to "System Information" in the "FUJITSU Software Cloud Services Management Operation Guide".

Password Settings for Communication with SVOM

Set the password for access to the directory service for SVOM by executing the following command:

This task is not necessary when using Active Directory as the directory service for SVOM.

```
%FSCSM_HOME%\bin\fscsm_passwordset -svom <Password>
```

The following option is available for this command.

Option Name	Value
-svom	Specify the password for the management account used in the directory service to be coordinated with SVOM. Specify using a character string 8 to 64 characters in length, using !#()-.@`{}~ and alphanumeric characters.

3.1.2 Configuration of the Mail Server

This product sends information such as requests and monthly billing to users by email. Configure the mail server to be used for sending these emails by editing the definition file for system information.

The file name and storage location are as follows:

File Name

```
fscsm_config.xml
```

Storage Location

```
%FSCSM_HOME%\conf
```

Setting Items

Item	Description
sendmail.smtp	IP address or hostname of the mail server
sendmail.smtp.port	Port number for the mail server
sendmail.fromAddr	Sending email address



Example

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<!DOCTYPE properties SYSTEM "http://java.sun.com/dtd/properties.dtd">
<properties>
...
<entry key="sendmail.smtp">smtp.example.com</entry>
<entry key="sendmail.smtp.port">25</entry>
<entry key="sendmail.fromAddr">from.csm@jp.fujitsu.com</entry>
...
</properties>
```

For details on the system information definition file, refer to "System Information" in the "FUJITSU Software Cloud Services Management Operation Guide".

3.1.3 Configuration of Billing

Configuring the Unit of Currency

A unit of currency must be configured for the calculation of the billing of clouds used by this product. Upon installation, US dollars (USD) are configured as the default unit. Modify the setting in accordance with the operation environment.

For details on how to modify the unit of currency, refer to "Unit of Currency Operation Commands" in the "FUJITSU Software Cloud Services Management Operation Guide".

Configuring Cut-off Dates and Payers for Monthly Billing

The cut-off date for the calculation of billing for charges incurred using this program is configured by default to the 31st (or the last day of the month) during installation. Modify the setting in accordance with the operation environment. Modification of the cut-off date must be performed immediately after setup is complete. Do not modify after operation has started.

Settings for the automatic creation and sending of the monthly billing charges file, the payer, and payer name are also set at this time.

The file name and storage location are as follows:

File Name

```
fscsm_config.xml
```

Storage Location

```
%FSCSM_HOME%\conf
```

Setting Items

Item	Description
accounting.cutoff.date	Cut-off date for billing
accounting.mail.sender.name	Name of the sender for sending monthly billing files
accounting.mail.receiver.address	Destination to send monthly billing files (multiply addresses can be specified)



Example

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<!DOCTYPE properties SYSTEM "http://java.sun.com/dtd/properties.dtd">
<properties>
...
<entry key="accounting.cutoff.date">20</entry>
...
<entry key="accounting.mail.sender.name">CSMsender</entry>
<entry key="accounting.mail.receiver.address">to.csm@jp.fujitsu.com</entry>
...
</properties>
```

For details on the system information definition file, refer to "System Information" in the "FUJITSU Software Cloud Services Management Operation Guide".

3.1.4 Reflecting Configurations

Restart the management server to reflect the configuration. From the command prompt, execute the following commands:

1. Execute the stop command.

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

2. Execute the startup command.

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

For details regarding starting and stopping Cloud Services Management, refer to "Starting and Stopping" in the "FUJITSU Software Cloud Services Management Operation Guide".

3.1.5 Creating Initial Users

Operation of Cloud Services Management requires users with the operator approver role. As an initial user, create a user with the operator approver role or a user with both the operator approver role and operator administrator role.

Point

Both the users with the operator approver role and the operator administrator role can perform the initial setup and operation of this product. When using request functions during initial setup, create a user with the operator approver role. Otherwise, create a user with the administrator role.

Create the user using the following procedure:

1. Create the file which describes the user information. Create an XML file with following content:

```
Example:
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<users>
  <user>
    <userId>op_manager</userId>
    <orgId>!mgr</orgId>
    <password>password</password>
    <userName>Operation Manager</userName>
    <roleIds>
      <roleId>operation_manager</roleId>
    </roleIds>
    <mailAddress>op_manager@example.com</mailAddress>
    <phoneNumber>0000-0000</phoneNumber>
  </user>
</users>
```

Element Name	Content	Specified Value
userId	User ID	Specify a character string up to 320 characters in length containing alphanumeric characters, underscores ("_"), hyphens ("-"), periods ("."), and at marks ("@"). This field is case insensitive, so user IDs that only differ by the cases of the characters used will be recognized as the same user ID. For example, if "User" has been registered, then "user" cannot be registered.
orgId	Organization ID	When the organization is operators, specify "!mgr".
password	Password	Specify a character string 8 to 64 characters in length containing alphanumeric characters and symbols, but no spaces.
userName	Display name	Specify a character string up to 64 characters in length.
roleId	Role type	For an Operators - Approver, specify operation_manager. For an Operators - Approver who is also an Operators - Administrator, add a roleId element with operation_admin specified.

Element Name	Content	Specified Value
mailAddress	Email address	Specify a character string which follows the format of an email address.
phoneNumber	Contact information	Specify a character string up to 256 characters in length.

Note

Settings for User ID and Passwords When Coordinating with Active Directory

When using Active Directory as the directory service for SVOM, it is necessary to add the user information specified here to Active Directory beforehand. For the user ID, specify the login name used in the coordinating SVOM.

For password, it is not necessary to specify a value. When specified, the value is regarded as invalid.

2. Register the user information. Execute the following command:

```
%FSCSM_HOME%\bin\fscsm_user create -file <file to describe user information>
```

Note

The password is contained in the file which describes the user information. After using the password, either delete the value of password in the file, delete the file, or move the file to a secure folder.

3. Access the Cloud Management Portal. Access the following URL.

```
http://<hostname or IP address of the management server>:<port number>/
```

Point

For the port number, specify a value equal to 80 plus the parameter AS_GUI_BASE_PORT specified in the setup command described in "2.2 Setup of the Management Server and the Coordination Adapter Platform (APP)". For example, if 3600 is specified for AS_GUI_BASE_PORT, the port number is 3680.

4. The [Login] window is displayed. In the login window, enter the user ID and password created using the command in the relevant fields and click the [Login] button.
5. Confirm that the [Home] window of the Cloud Management Portal is displayed. After confirmation, click the user ID displayed in the upper right of the window, and select [Logout] in the displayed menu to log out from the Cloud Management Portal.

See

For details and the format of the file which describes user information, refer to "User Information" in the "FUJITSU Software Cloud Services Management Operation Guide".

For details on the "fscsm_user" command, refer to "User Operation Commands" in the "FUJITSU Software Cloud Services Management Operation Guide". For details on the Cloud Management Portal, refer to the "FUJITSU Software Cloud Services Management User's Guide for Planner and Operator".

3.1.6 Backup

The resources of Cloud Services Management can be backed up once initial configuration has been completed.

If you have not started operation, perform only offline backup.

For details on offline backup, refer to "Backup and Restore", and "Offline Backup" in the "Fujitsu Software Cloud Services Management Operation Guide".

Chapter 4 Unsetup and Uninstallation

This chapter explains unsetup and uninstallation.

4.1 Unsetup

This section explains the unsetup of Cloud Services Management.

- Pre-unsetup Advisory Notes
- Unsetup Procedure

4.1.1 Pre-unsetup Advisory Notes

When unsetup is performed, all files, including user resources and configuration information, are deleted. For this reason, if you want to keep resources such as existing configuration information, back them up beforehand.

For details on the backup operation, refer to the "FUJITSU Software Cloud Services Management Operation Guide".

Unsetup must be performed in the following order:

- Unsetup of Coordination Adapters
- Unsetup of the Management Server and the Coordination Adapter Platform (APP)

4.1.2 Unsetup of Coordination Adapters

This section explains the unsetup procedure for the coordination adapter.

Executing Unsetup Commands

Execute the unsetup command for the coordination adaptor using the following procedure.

1. Execute commands

The unsetup commands for coordination adapters are as follows. Execute the unsetup command for each coordination destination as a user with administrator privileges.

- a. The unsetup command for the ROR coordination adapter

```
%FSCSM_HOME%\setup\fscsm_unsetupRORInteg
```

- b. The unsetup command for the AWS coordination adapter

```
%FSCSM_HOME%\setup\fscsm_unsetupAWSInteg
```

- c. The unsetup command for the Azure coordination adapter

```
%FSCSM_HOME%\setup\fscsm_unsetupAzureInteg
```

- d. The unsetup command for the K5 coordination adapter

```
%FSCSM_HOME%\setup\fscsm_unsetupK5Integ
```

- e. The unsetup command for the VMware coordination adapter

```
%FSCSM_HOME%\setup\fscsm_unsetupVMwareInteg
```

2. Confirm execution

The message prompting for confirmation of execution of unsetup is displayed. The following message is an example for the AWS coordination adapter.

Enter "y" to execute unsetup or "n" to cancel unsetup, and then press the Enter key.

```
Are you sure you want to start unsetup of FUJITSU Software Cloud Services Management AWS
Integration? (y/n)[n]
```

3. Start unsetup

When unsetup is started, the start message is displayed. The following message is an example for the AWS coordination adapter.

```
FUJITSU Software Cloud Services Management AWS Integration unsetup start.
```

4. Confirm completion

When unsetup is complete, the completion message is displayed. The following message is an example for the AWS coordination adapter.

```
FUJITSU Software Cloud Services Management AWS Integration unsetup end.
```

4.1.3 Unsetup of the Management Server and the Coordination Adapter Platform (APP)

This section explains unsetup of the management server and the coordination adapter platform (APP).

Unsetup of the management server and the coordination adapter platform (APP) must be performed after the unsetup of coordination adapters is completed.

Use the following command to perform unsetup:

```
%FSCSM_HOME%\setup\fscsm_unsetup
```

After the unsetup completes, the OS user for database connection (fjsvcsmdb) is automatically deleted.

Confirm Execution

The message prompting for confirmation of execution of unsetup is displayed.

Enter "y" to execute unsetup or "n" to cancel unsetup, and then press the Enter key.

```
Are you sure you want to start unsetup of FUJITSU Software Cloud Services Management? (y/n)[n]
```

Start unsetup

When unsetup is started, the following message is displayed:

```
FUJITSU Software Cloud Services Management unsetup start.
```

Confirm Completion

When unsetup is complete, the following message is displayed:

```
FUJITSU Software Cloud Services Management unsetup end.
```

Post-Unsetup Operations

This section explains the operation after unsetup is completed.

- Delete Datastores

Datastores remain even after unsetup is completed. If the datastores are necessary, back them up before performing re-setup and then delete them. Data is stored in the following folders:

- %FSCSM_HOME%\db\CSMSYSTEM
- %FSCSM_HOME%\db\CSMACCOUNTING
- %FSCSM_HOME%\db\CSMMETERINGLOG

- %FSCSM_HOME%\db\CSMAPP

4.2 Uninstallation

This section explains uninstallation of Cloud Services Management.

- Pre-uninstallation Advisory Notes
- Uninstallation Procedure
- Post-uninstallation Advisory Notes



The screen examples shown in this chapter may differ from the screens actually displayed.

4.2.1 Pre-uninstallation Advisory Notes

When performing uninstallation, note the following points.

- When using online backup, it is necessary to delete the periodical backup schedule for online backup before performing uninstallation.

To do so, execute the following command as an OS administrator:

```
schtasks /delete /tn FSCSM_onlinebackup_batch
```

- When uninstalling this product, it is necessary to unsetup the environment for Cloud Services Management in advance. For details on unsetup, refer to "[4.1 Unsetup](#)".

4.2.2 Uninstallation Procedure

This section explains the procedure for uninstalling Cloud Services Management.



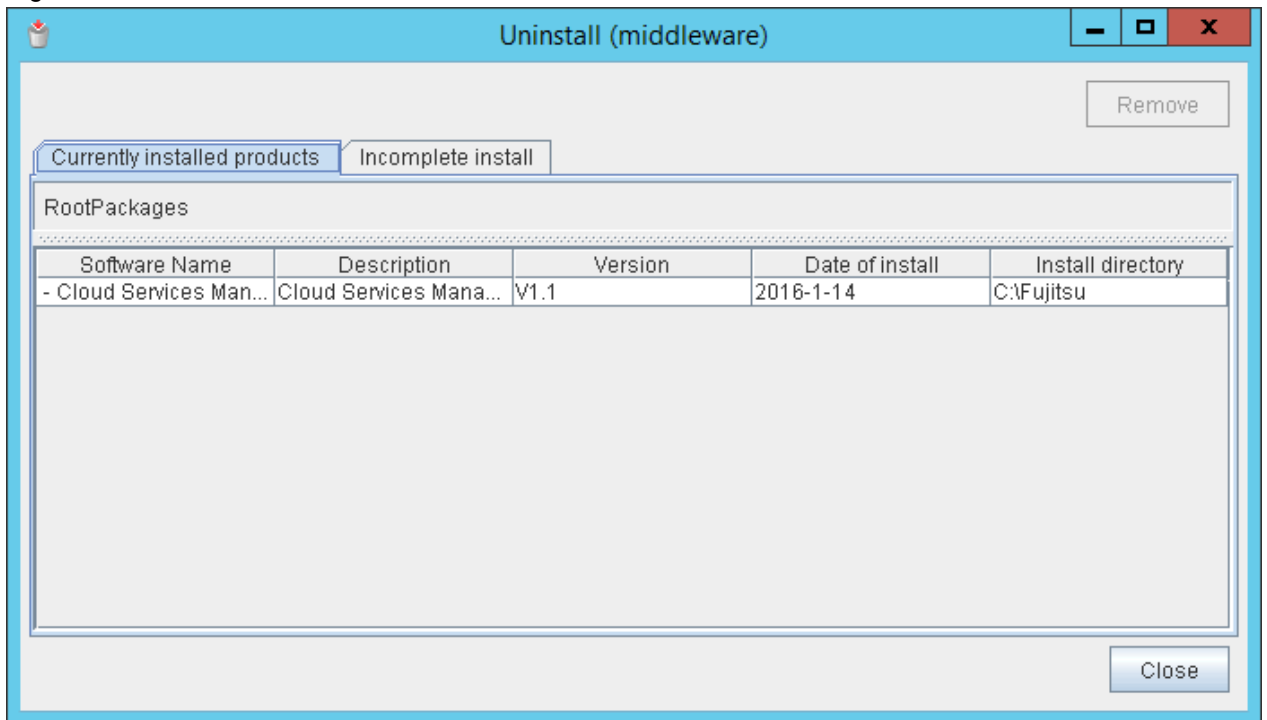
- When an error occurs during uninstallation, resolve the cause of the failure referring to the meaning of the output message and the suggested corrective actions in "FUJITSU Software Cloud Services Management Messages". Then, perform uninstallation again.
- Do not uninstall Cloud Services Management from [Programs and Features] in the Windows Control Panel.

1. Log in using an account belonging to the Administrators group.

2. Start the uninstaller.

Select [Start]-[Apps]-[Fujitsu]-[Uninstall (Middleware)].

Figure 4.1 Uninstall Window



Note

When uninstalling Cloud Services Management due to an installation failure, "Cloud Services Management" may be displayed in the [Incomplete install] tab. If it is not displayed in [Currently installed products], click the [Incomplete install] tab and check if it is displayed in that tab. In either case, the subsequent uninstallation procedure is the same.

See

For details on "Uninstall (middleware)", refer to "[Appendix B About "Uninstall \(Middleware\)""](#)".

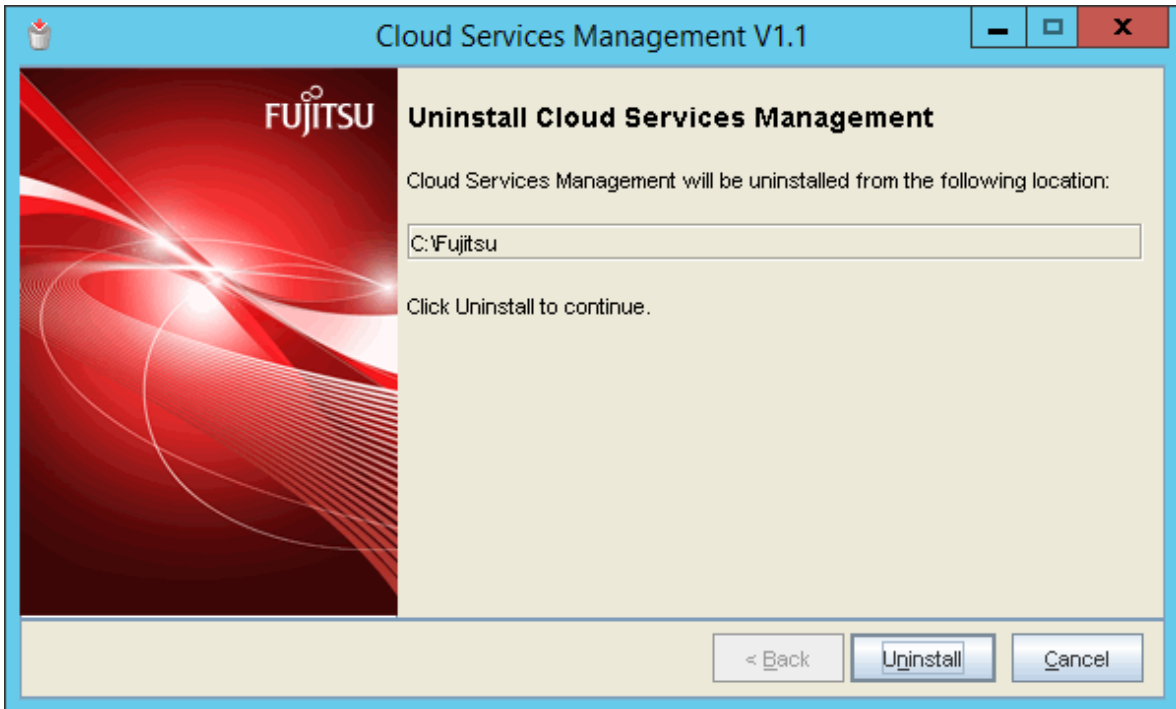
Point

When using Windows Server 2012 or Windows Server 2012 R2, select [Start]-[Apps]-[Fujitsu] and then select [Uninstall (Middleware)].

3. Select [Cloud Services Management] and then click the [Remove] button.

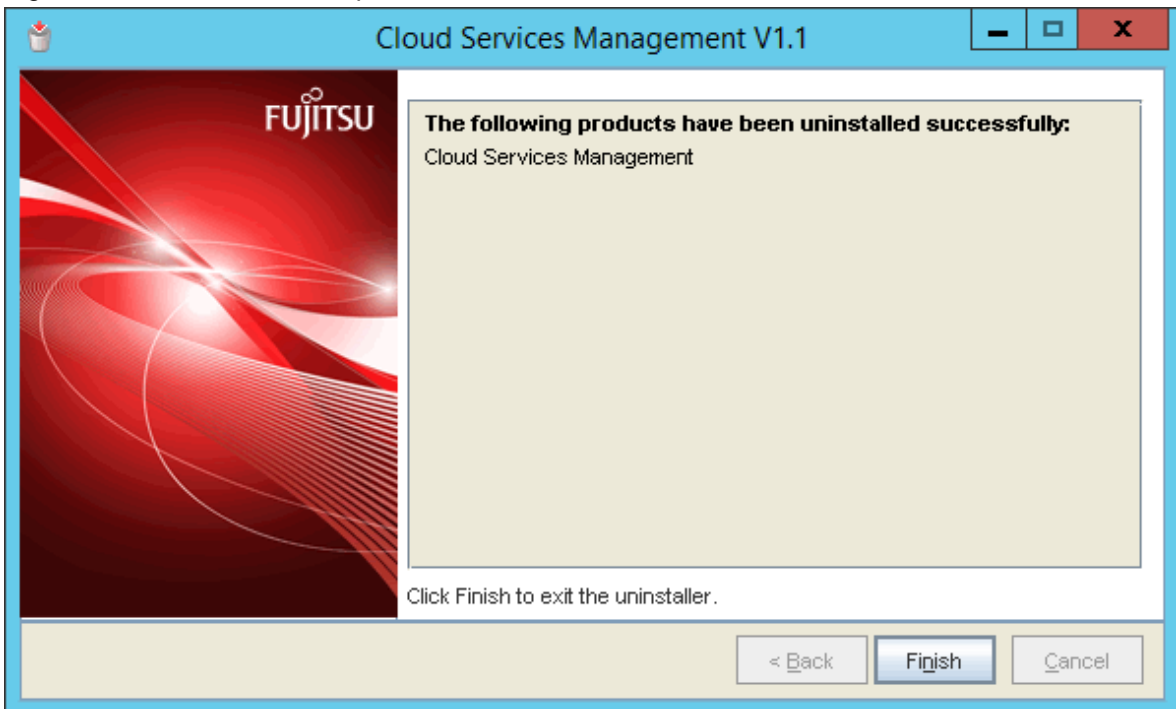
To proceed with deletion, click [Uninstall].

Figure 4.2 Uninstallation Start Window



4. When uninstallation is complete, click the [Finish] button to exit the uninstaller.

Figure 4.3 Uninstallation Completed Window



4.2.3 Post-uninstallation Advisory Notes

This section explains advisory notes about after uninstallation of Cloud Services Management.

Folders and Files Remaining after Uninstallation

After uninstallation, some folders and files may remain. Delete the following folder (along with contained files and subdirectories) and files:

```
%FSCSM_HOME%\log
```

Deletion of the folder may fail due to locked files. In that case, delete the files after restarting the OS.

Appendix A Port Numbers

This appendix explains the ports used by this product. Port numbers being used by other software cannot be used for this product. If such port numbers exist, take the following corrective action.

- Port numbers that can be changed

Change the port number according to the instructions given in "[A.2 Changing Port Numbers Used by the Management Server and the Coordination Adapter Platform \(APP\)](#)".

- Port numbers that cannot be changed

Change the port number that is configured for other software using the corresponding software.

A.1 Port Numbers

Table A.1 Port Numbers for Inbound Access from External Sources

Function	Port Number/Protocol to Use	Changing
HTTP listener of the GUI domain	AS_BASE_PORT + 80/tcp	Possible
HTTP SSL listener of the GUI domain	AS_BASE_PORT + 81/tcp	Possible

Table A.2 Port Number for the SMTP Server

Function	Port Number/Protocol to Use	Changing
Port Number for the SMTP Server	SMTP_PORT	Possible

Table A.3 Port Numbers for Internal Communications Using Databases

Function	Port Number/Protocol to Use	Changing
DB connection (general)	PGS_PORT/tcp	Possible
DB connection (billing)	PGS_ACCOUNT_PORT/tcp	Possible
DB connection (metering)	PGS_METER_PORT/tcp	Possible
DB connection (APP)	PGS_APP_PORT/tcp	Only during setup

Table A.4 Port Numbers for Internal Communications Using GUI Domains

Function	Port Number/Protocol to Use	Changing
Management of Java EE execution environments	AS_BASE_PORT + 48/tcp	Possible
JMX connector listener	AS_GUI_BASE_PORT + 86/tcp	Only during setup
JMS host	AS_GUI_BASE_PORT + 76/tcp	Only during setup
IIOP listener	AS_GUI_BASE_PORT + 37/tcp	Only during setup
Port used temporarily, during setup only	AS_GUI_BASE_PORT + 9/tcp	-
Port used temporarily, during setup only	AS_GUI_BASE_PORT + 66/tcp	-

Table A.5 Port Numbers for Internal Communications Using API Domains

Function	Port Number/Protocol to Use	Changing
HTTP listener	AS_BASE_PORT + 80/tcp	Possible
HTTP SSL listener	AS_BASE_PORT + 81/tcp	Possible

Function	Port Number/Protocol to Use	Changing
Management of Java EE execution environments	AS_BASE_PORT + 48/tcp	Only during setup
JMX connector listener	AS_BASE_PORT + 86/tcp	Only during setup
JMS host	AS_BASE_PORT + 76/tcp	Only during setup
IIOP listener	AS_BASE_PORT + 37/tcp	Only during setup
Port used temporarily, during setup only	AS_BASE_PORT + 9/tcp	-
Port used temporarily, during setup only	AS_BASE_PORT + 66/tcp	-

Table A.6 Port Numbers for Internal Communications Using APP Domains

Function	Port Number/Protocol to Use	Changing
HTTP listener	AS_APP_BASE_PORT + 80/tcp	Possible
HTTP SSL listener	AS_APP_BASE_PORT + 81/tcp	Only during setup
Management of Java EE execution environments	AS_APP_BASE_PORT + 48/tcp	Only during setup
JMX connector listener	AS_APP_BASE_PORT + 86/tcp	Only during setup
JMS host	AS_APP_BASE_PORT + 76/tcp	Only during setup
IIOP listener	AS_APP_BASE_PORT + 37/tcp	Only during setup
IIOP SSL listener	AS_APP_BASE_PORT + 38/tcp	Only during setup
IIOP listener for authentication of SSL communication clients	AS_APP_BASE_PORT + 39/tcp	Only during setup
Port used temporarily, during setup only	AS_APP_BASE_PORT + 9/tcp	-
Port used temporarily, during setup only	AS_APP_BASE_PORT + 66/tcp	-



See

For AS_BASE_PORT, AS_GUI_BASE_PORT, AS_APP_BASE_PORT, PGS_PORT, PGS_ACCOUNT_PORT, PGS_METER_PORT, and PGS_APP_PORT, refer to "Table 2.1 List of Setup Parameters".

A.2 Changing Port Numbers Used by the Management Server and the Coordination Adapter Platform (APP)

This section explains how to change the port numbers used by the management server and the coordination adapter platform (APP).

A.2.1 Changing Port Numbers for Management Server Domains and APP Domains

This section explains how to change the port numbers used for management server domains (API and GUI domains) and APP domains.

The changing of port numbers explained in this section is executed using the administration command of the Java EE execution environment (asadmin command). To execute the command, the following information about Java EE execution environment of the domain to modify is necessary.

- Admin port number
Specify as a command option.
- User name of the administrator
Specify as a command option.
- Password of the administrator
Specify according to the prompt shown when executing the command.

Use the value specified in "2.2 Setup of the Management Server and the Coordination Adapter Platform (APP)".

Note

In order to execute the command, the manager server must be operating.

Information

For the parameters which are changed using the "set" subcommand of asadmin command, the currently set value for the installed environment can be confirmed by executing a confirmation command.

The confirmation command is as follows.

```
"%FSCSM_HOME%\SWCTMG\glassfish3\bin\asadmin" -p <admin port number> -u <user name of administrator>
get <parameter>
```

For parameters of the asadmin command, refer to the detailed instructions regarding each command.

Changing Admin Port Numbers for Java EE Execution Environments (GUI and API Domains)

1. Execute the following command:

```
"%FSCSM_HOME%\SWCTMG\glassfish3\bin\asadmin" -p <admin port number> -u <user name of
administrator> set server-config.network-config.network-listeners.network-listener.admin-
listener.port=<port number>
```

2. Restart the management server.

For details on how to restart, refer to "Starting and Stopping" in the "FUJITSU Software Cloud Services Management Operation Guide".

Changing Port Numbers for HTTP Listeners (GUI and APP Domains)

Execute the following command to make changes.

```
"%FSCSM_HOME%\SWCTMG\glassfish3\bin\asadmin" -p <admin port number> -u <user name of administrator>
set server-config.network-config.network-listeners.network-listener.http-listener-1.port=<port
number>
```

Point

- Changes made to the HTTP listener port number are reflected immediately.
- After changing the port number, access the Cloud Management Portal using the new port number.

Note

- When changing the HTTP listener port number of a GUI domain, modify the port number specified in BSS_WEBSERVICE_HOST_PORT for the coordination adapter platform (APP). For details on the modification procedure, refer to "C.3 Reconfiguring the Coordination Adapter Platform (APP)".
- When changing the HTTP listener port number of an APP domain, modify the port number specified in APP_BASE_URL for the coordination adapter platform (APP). For details on the modification procedure, refer to "C.3 Reconfiguring the Coordination Adapter Platform (APP)".

Changing Port Numbers for HTTP Listeners (API Domains)

1. Execute the following command:

```
"%FSCSM_HOME%\SWCTMG\glassfish3\bin\asadmin" -p <admin port number> -u <user name of administrator> set server-config.network-config.network-listeners.network-listener.http-listener-1.port=<port number>
```

2. Open the following file using a text editor.

```
%FSCSM_HOME%\sys\conf\fscsm_sys_config.xml
```

3. Specify the new port number for the item "internalapi.port".

Example

When changing the port number from 3780 to 3790, specify as follows.

[Before changing]

```
<entry key="internalapi.port">3780</entry>
```

[After changing]

```
<entry key="internalapi.port">3790</entry>
```

4. Restart the management server.

For details on how to restart, refer to "Starting and Stopping" in the "FUJITSU Software Cloud Services Management Operation Guide".

Point

Changes made to the HTTP listener port number are reflected immediately.

Changing Port Numbers for HTTP SSL Listeners (GUI and API Domains)

Execute the following command to make changes.

```
"%FSCSM_HOME%\SWCTMG\glassfish3\bin\asadmin" -p <admin port number> -u <user name of administrator> set server-config.network-config.network-listeners.network-listener.http-listener-2.port=<port number>
```

Point

Changes made to the HTTP SSL listener port number are reflected immediately.

A.2.2 Procedure for Changing Port Numbers for Databases

This section explains how to change the port numbers used for databases of management servers.

1. Stop the management server.

For details on how to stop the management server, refer to "Stopping" in the "FUJITSU Software Cloud Services Management Operation Guide".

2. Open following files using a text editor, according to the port numbers to change.

- General DB

```
%FSCSM_HOME%\sys\conf\csm_csmsystem_config.xml
```

- Billing DB

```
%FSCSM_HOME%\sys\conf\csm_csmaccounting_config.xml
```

- Metering DB

```
%FSCSM_HOME%\sys\conf\csm_csmmetering_config.xml
```

3. Change the port number for the item "DB.URL".

Example

When changing the port number for the general system DB from 3807 to 3907, specify as follows.

[Before changing]

```
<entry key="DB.URL">jdbc:postgresql://localhost:3807/FSCSMSYSTEM?
useUnicode=true&characterEncoding=UTF-8</entry>
```

[After changing]

```
<entry key="DB.URL">jdbc:postgresql://localhost:3907/FSCSMSYSTEM?
useUnicode=true&characterEncoding=UTF-8</entry>
```

4. Open following files using a text editor, according to the port numbers to change.

- General DB

```
%FSCSM_HOME%\db\CSMSYSTEM\postgresql.conf
```

- Billing DB

```
%FSCSM_HOME%\db\CSMACCOUNTING\postgresql.conf
```

- Metering DB

```
%FSCSM_HOME%\db\CSMMETERINGLOG\postgresql.conf
```

5. Change the value of the item "port".

Example

When changing the port number for the general system DB from 3807 to 3907, specify as follows.

[Before changing]

```
port = 3807
```

[After changing]

```
port = 3907
```

6. Restart the management server.

For details on how to restart, refer to "Starting and Stopping" in the "FUJITSU Software Cloud Services Management Operation Guide".

Note

The port number of the APP DB cannot be modified.

Appendix B About "Uninstall (Middleware)"

"Uninstall (Middleware)" is a common tool for Fujitsu middleware products. "Uninstall (Middleware)" manages product information on Fujitsu middleware that have been installed and starts the uninstallers of Fujitsu middleware products.

Advisory Notes on "Uninstall (Middleware)"

- Uninstallation of Cloud Services Management

When uninstalling Cloud Services Management, use "Uninstall (Middleware)" for the uninstallation.

- Advisory Notes about Uninstallation of "Uninstall (Middleware)"

In addition to Cloud Services Management, this tool also manages product information on other Fujitsu middleware. Do not uninstall this tool unless absolutely necessary. In the event of accidental uninstallation, reinstall it following the procedure below.

1. Log on to the installation target machine using a user name belonging to the Administrators group or switch to an account with administrator privileges.
2. Insert the product media into the drive.
3. Execute the installation command.

```
<Product_media>\CIR\cirinst.exe
```

- Uninstallation Procedure for "Uninstall (Middleware)"

To uninstall this tool, follow the procedure below.

1. Start "Uninstall (Middleware)" and confirm that other Fujitsu middleware products do not remain. In Windows, select [Start]-[All Programs]-[Fujitsu]-[Uninstall (Middleware)].

Point

When using Windows Server 2012 or Windows Server 2012 R2, select [Start]-[Apps]-[Fujitsu] and then select [Uninstall (Middleware)].

1. After confirming that no Fujitsu middleware product has been installed, execute the following uninstallation command.

```
%SystemDrive%\FujitsuF4CR\bin\cirremove.exe
```

2. When "This software is a common tool of Fujitsu products. Are you sure you want to remove it? [y/n]:" is displayed, enter "y" to continue. Uninstallation will be completed in seconds.
3. After uninstallation is complete, delete the following folder and any contained files that remain.

```
%SystemDrive%\FujitsuF4CR
```

Appendix C Modifying Installation Environments

This appendix explains how to modify an installation environment.

C.1 Changing Host Names/IP Addresses

When changing the host name or the IP address of a server, it is necessary to modify the installation of SVOM, which is a software required for the operation of this product.



See

For details on how to modify an SVOM installation, refer to the manuals for SVOM.

C.2 Modifying Installation Environments of Management Servers

This section explains how to modify the installation environment of a management server.

The modification of setting values explained in this section is executed using the administration command of the Java EE execution environment (asadmin command). To execute the command, the following information about Java EE execution environment of the domain to modify is necessary.

- Admin port number
Specify as a command option.
- User name of the administrator
Specify as a command option.
- Password of the administrator
Specify according to the prompt shown when executing the command.

Use the values specified in "2.2 Setup of the Management Server and the Coordination Adapter Platform (APP)".



Note

In order to execute the administration command of the Java EE execution environment, the management server must be operating.

C.2.1 Changing Email Addresses Used for Emails from This Product

This section explains how to change the email addresses used by the main functions of this product.

Changing Destination Email Addresses

The destination email address is set to be the value of "MAIL_ADDRESS" which is a setup parameter of this product. To change it, execute the following procedure.

1. Open the following file using a text editor.

```
%FSCSM_HOME%\conf\csb_lisence.properties
```

2. Change the value of item "csb.lisence.to.addr".



Example

[Before changing]

```
csb.lisence.to.addr=toaddr@example.com
```

[After changing]

```
csb.liisence.to.addr=toaddrChange@example.com
```

3. Modify APP_ADMIN_MAIL_ADDRESS for the coordination adapter platform (APP). For details on the modification procedure, refer to "C.3 Reconfiguring the Coordination Adapter Platform (APP)".
4. Restart the management server of Cloud Services Management to reflect the configuration.

For details regarding starting and stopping Cloud Services Management, refer to "Starting and Stopping" in the "FUJITSU Software Cloud Services Management Operation Guide".

Changing Sending Email Addresses

The sending email address is set to be the value of "MAIL_RESPONSE_ADDRESS", which is a setup parameter of this product. The change of the sending email address explained in this section is performed using a command. Execute the command using the command prompt or console.

1. Reconfigure the Java EE execution environment.

To change the sending email address, execute the following command:

- For GUI domains

```
"%FSCSM_HOME%\SWCTMG\glassfish3\bin\asadmin" -p <admin port number> -u <user name of administrator> set server.resources.mail-resource.mail/CSBMail.from=<email address>
```

- For APP domains

```
"%FSCSM_HOME%\SWCTMG\glassfish3\bin\asadmin" -p <admin port number> -u <user name of administrator> set server.resources.mail-resource.mail/APPMail.from=<email address>
```

2. Modify the configuration file of system information.

Open the following file using a text editor.

```
%FSCSM_HOME%\conf\fscsm_config.xml
```

3. Modify the value of item "sendmail.fromAddr".

Example

[Before changing]

```
<entry key="sendmail.fromAddr">fromaddr@example.com</entry>
```

[After changing]

```
<entry key="sendmail.fromAddr">newfromaddr@example.com</entry>
```

4. Restart the management server of Cloud Services Management to reflect the configuration.

For details regarding starting and stopping Cloud Services Management, refer to "Starting and Stopping" in the "FUJITSU Software Cloud Services Management Operation Guide".

C.2.2 Changing Password for Administrator of Java EE Execution Environments

This section explains how to change the password for the administrator of a Java EE execution environment of this product.

The change of the password explained in this section is performed using a command. Execute the command using the command prompt or console.

1. Execute the following command:

```
"%FSCSM_HOME%\SWCTMG\glassfish3\bin\asadmin" -p <admin port number> -u <user name of administrator> change-admin-password --domaindir %FSCSM_HOME%\SWCTMG\glassfish3\glassfish\domains --domain_name <domain name (api-domain/gui-domain)>
```

2. The following prompt is displayed. Input the corresponding passwords.

```
Enter admin password > Input the current password
Enter new admin password > Input the new password
Enter new admin password again>> Input the new password for confirmation
Command change-admin-password executed successfully.
```

3. Restart the management server of Cloud Services Management to reflect the configuration.

For details regarding starting and stopping Cloud Services Management, refer to "Starting and Stopping" in the "FUJITSU Software Cloud Services Management Operation Guide".



Note

The password of the administrator of the Java EE execution environment of an APP domain cannot be changed.

C.2.3 Modifying Configurations of SMTP Hosts

This section explains how to modify the configuration of an SMTP host used by this product.

An SMTP host is specified using the value of "SMTP_HOST", which is a setup parameter of this product. To modify it, execute the following procedure.

Modification of an SMTP host is performed using a command. Execute the command using the command prompt or console.

1. Modify the configuration of the SMTP host.

Execute the following command to make modifications.

- For GUI domains

```
"%FSCSM_HOME%\SWCTMG\glassfish3\bin\asadmin" -p <admin port number> -u <user name of administrator> set server.resources.mail-resource.mail/CSBMail.host=<SMTP server>
```

- For APP domains

```
"%FSCSM_HOME%\SWCTMG\glassfish3\bin\asadmin" -p <admin port number> -u <user name of administrator> set server.resources.mail-resource.mail/APPMail.host=<SMTP server>
```

2. Modify the configuration file of system information.

Open the following file using a text editor.

```
%FSCSM_HOME%\conf\fscsm_config.xml
```

3. Modify the value of item "sendmail.smtp".



Example

[Before modifying]

```
<entry key="sendmail.smtp">smtp.sample.com</entry>
```

[After modifying]

```
<entry key="sendmail.smtp">newsntp.sample.com</entry>
```

- Restart the management server of Cloud Services Management to reflect the configuration.

For details regarding starting and stopping Cloud Services Management, refer to "Starting and Stopping" in the "FUJITSU Software Cloud Services Management Operation Guide".

C.2.4 Changing SMTP Ports

This section explains how to modify the configuration of the SMTP port used by this product.

An SMTP port is specified using the value of "SMTP_PORT", which is a setup parameter of this product. To change it, execute the following procedure.

Changing of an SMTP port is performed using a command. Execute the command using the command prompt or console.

- Change the configuration of the SMTP port.

Execute the following command to make changes.

- For GUI domains

```
"%FSCSM_HOME%\SWCTMG\glassfish3\bin\asadmin" -p <admin port number> -u <user name of administrator> set server.resources.mail-resource.mail/CSBMail.property.mail-smtp-port=<SMTP port>
```

- For APP domains

```
"%FSCSM_HOME%\SWCTMG\glassfish3\bin\asadmin" -p <admin port number> -u <user name of administrator> set server.resources.mail-resource.mail/APPMail.property.mail-smtp-port=<SMTP port>
```

- Change the configuration file of system information.

Open the following file using a text editor.

```
%FSCSM_HOME%\conf\fscsm_config.xml
```

- Change the value of item "sendmail.smtp.port".



Example

[Before changing]

```
<entry key="sendmail.smtp.port">25252</entry>
```

[After changing]

```
<entry key="sendmail.smtp.port">25800</entry>
```

- Restart the management server of Cloud Services Management to reflect the configuration.

For details regarding starting and stopping Cloud Services Management, refer to "Starting and Stopping" in the "FUJITSU Software Cloud Services Management Operation Guide".

C.2.5 Changing the User Authentication Setting for the SMTP Server

This section explains how to change the user authentication settings for the SMTP server used by this product.

The user authentication setting for the SMTP server is disabled (false) at the time of setup. To change it, execute the following procedure.

The change of the user authentication settings for the SMTP server explained in this section is performed using a command. Execute the command using the command prompt or console.

- Change the user authentication setting for the SMTP server.

Execute the following command to make changes.

- For GUI domains

```
"%FSCSM_HOME%\SWCTMG\glassfish3\bin\asadmin" -p <admin port number> -u <user name of administrator> set server.resources.mail-resource.mail/CSBMail.property.mail-smtp-auth=<true/false>
```

- For APP domains

```
"%FSCSM_HOME%\SWCTMG\glassfish3\bin\asadmin" -p <admin port number> -u <user name of administrator> set server.resources.mail-resource.mail/APPMail.property.mail-smtp-auth=<true/false>
```

2. Restart the management server of Cloud Services Management to reflect the configuration.

For details regarding starting and stopping Cloud Services Management, refer to "Starting and Stopping" in the "FUJITSU Software Cloud Services Management Operation Guide".

C.2.6 Changing the User Name for the SMTP Server

This section explains how to change the user name for the SMTP server used by this product.

The user name for the SMTP server is set to "saas" at the time of setup. To change it, execute the following procedure.

The change of the user name for the SMTP server explained in this section is performed using a command. Execute the command using the command prompt or console.

1. Change the user name for the SMTP server.

Execute the following command to make changes.

- For GUI domains

```
"%FSCSM_HOME%\SWCTMG\glassfish3\bin\asadmin" -p <admin port number> -u <user name of administrator> set server.resources.mail-resource.mail/CSBMail.property.mail-user=<user name>
```

- For APP domains

```
"%FSCSM_HOME%\SWCTMG\glassfish3\bin\asadmin" -p <admin port number> -u <user name of administrator> set server.resources.mail-resource.mail/APPMail.property.mail-user=<user name>
```

2. Restart the management server of Cloud Services Management to reflect the configuration.

For details regarding starting and stopping Cloud Services Management, refer to "Starting and Stopping" in the "FUJITSU Software Cloud Services Management Operation Guide".

C.2.7 Changing the User Password for the SMTP Server

This section explains how to change the user password for the SMTP server used by this product.

The user password for the SMTP server is set to "password" at the time of setup. To change it, execute the following procedure.

The change of the user password for the SMTP server explained in this section is performed using a command. Execute the command using the command prompt or console.

1. Change the user password for the SMTP server.

Execute the following command to make changes.

- For GUI domains

```
"%FSCSM_HOME%\SWCTMG\glassfish3\bin\asadmin" -p <admin port number> -u <user name of administrator> set server.resources.mail-resource.mail/CSBMail.property.mail-smtp-password=<password>
```

- For APP domains

```
"%FSCSM_HOME%\SWCTMG\glassfish3\bin\asadmin" -p <admin port number> -u <user name of administrator> set server.resources.mail-resource.mail/APPMail.property.mail-smtp-password=<password>
```

2. Restart the management server of Cloud Services Management to reflect the configuration.

For details regarding starting and stopping Cloud Services Management, refer to "Starting and Stopping" in the "FUJITSU Software Cloud Services Management Operation Guide".

C.2.8 Changing the Directory Service to Integrate

This section explains how to change the directory service to coordinate with SVOM.

When Changing from the Directory Service Provided with SVOM to Active Directory



Note

When entries to be linked with the user information of Cloud Services Management already exist on Active Directory, it is not necessary to perform steps 1, 3, 5, and 6.



See

- For details on steps 3 and 4, refer to the manuals for SVOM.
- For details on steps 5 and 6, refer to the manuals for Active Directory.

1. Export detailed information of all users of Cloud Services Management by executing the user operation command.

For details on the user operation command, refer to "User Operation Commands" in the "Cloud Services Management Operation Guide".

2. Stop Cloud Services Management.

For details regarding stopping Cloud Services Management, refer to "Starting and Stopping" in the "FUJITSU Software Cloud Services Management Operation Guide".

3. Export the user information added to the directory service provided with SVOM in the LDIF format.



Example

The following shows an example of the export command.

```
>ldapsearch -h localhost:1473 -D "uid=admin,ou=system" -w password -s sub -b "ou=users,dc=fujitsu,dc=com" > csmusers.ldif <RETURN>
```

For details on the export command, refer to the manuals for SVOM.

4. Change the directory service coordinated with SVOM from the one provided with SVOM to Active Directory.

5. Modify the user information LDIF file that was exported in step 3 to make it usable on Active Directory.

- a. Delete the entries which have cn attributes that do not match any of the userId values in the information that was exported in step 1.
- b. Modify the value of the dn attribute for each entry according to the base name of the new directory service.
- c. Delete the following attributes:

- sn

- uid
- userPassword

d. Add the following attributes to the user entries:

- userPrincipalName (Specify the same value as the cn attribute)
- userAccountControl (Specify "512")
- unicodePwd

e. Modify the value of the objectClass attribute.

Modify "inetOrgPerson" to "user".

6. Import the LDIF file that was created in step 4 into Active Directory.

Example

The following shows an example of the import command.

```
>ldifde -i -e -k -t 636 -f csmusers.ldif <RETURN>
```

For details on the import command, refer to the manuals for Active Directory.

7. Modify the SVOM communication settings for Cloud Services Management.

For details on the configuration procedure, refer to "3.1.1 Configuration of Communications with SVOM".

8. Start Cloud Services Management.

See

For details regarding starting Cloud Services Management, refer to "Starting and Stopping" in the "FUJITSU Software Cloud Services Management Operation Guide".

When Changing to the Directory Service Provided with SVOM

See

- For details on step 3, refer to the manuals for Active Directory.
- For details on steps 4, 5, and 6, refer to the manuals for SVOM.

1. Export detailed information of all users of Cloud Services Management by executing the user operation command.

For details on the user operation command, refer to "User Operation Commands" in the "Cloud Services Management Operation Guide".

2. Stop Cloud Services Management.

For details regarding stopping Cloud Services Management, refer to "Starting and Stopping" in the "FUJITSU Software Cloud Services Management Operation Guide".

3. Export the user information added to Active Directory.

Example

The following shows an example of the export command.

```
>ldifde -f csmusers.ldif <RETURN>
```



For details on the export command, refer to the manuals for Active Directory.

4. Change the directory service coordinated with SVOM from Active Directory to the one provided with SVOM.
5. Modify the user information LDIF file that was exported in step 3 to make it usable on the directory service provided with SVOM.
 - a. Delete the entries which have cn attributes that do not match any of the userId values in the information that was exported in step 1.
 - b. Modify the value of the dn attribute for each entry according to the base name of the new directory service.
 - c. Delete the attributes other than the following attributes:
 - dn
 - objectClass
 - cn
 - changetype
 - d. Add the following attributes to the user entries:
 - sn (Specify the same value as the cn attribute)
 - uid (Specify the same value as the cn attribute)
 - userPassword
 - e. Modify the value of the objectClass attribute.
Modify "user" to "inetOrgPerson".
6. Import the LDIF file that was created in step 4 into the directory service.



The following shows an example of the import command.

```
>ldapmodify -h localhost:1473 -f csmusers.ldif -D "uid=admin,ou=system" -w password -c <RETURN>
```



For details on the import command, refer to the manuals for SVOM.

7. Modify the SVOM communication settings for Cloud Services Management.
For details on the configuration procedure, refer to "[3.1.1 Configuration of Communications with SVOM](#)".
8. Start Cloud Services Management.
For details regarding starting Cloud Services Management, refer to "Starting and Stopping" in the "FUJITSU Software Cloud Services Management Operation Guide".

C.2.9 Changing the Password for the OS User for Database Connection (fjsvcsmdb)

This section explains how to change the password for the OS user that is used for database connection (fjsvcsmdb).

1. Stop Cloud Services Management.

For details regarding stopping Cloud Services Management, refer to "Starting and Stopping" in the "FUJITSU Software Cloud Services Management Operation Guide".

2. Change the password for the fjsvscsmbd user using the procedure supported by the OS.

3. In the Windows Control Panel, open [Administrative Tools]-[Services].

4. In the [Services] window, for each of the following services, select and right-click the service, select [Properties], and then select the [Log on] tab. In the [Password] and [Confirm password] fields, enter the password which you changed in step 2 and then click the [OK] button.

- FUJITSU Software Cloud Services Management DB Service(fjsvfscsmbd_FSCSMSYSTEM)
- FUJITSU Software Cloud Services Management DB Service(fjsvfscsmbd_FSCSMACCOUNTING)
- FUJITSU Software Cloud Services Management DB Service(fjsvfscsmbd_FSCSMMETERINGLOG)
- FUJITSU Software Cloud Services Management DB Service(fjsvfscsmbd_FSCSMAPP)

5. Start Cloud Services Management.

For details regarding starting Cloud Services Management, refer to "Starting and Stopping" in the "FUJITSU Software Cloud Services Management Operation Guide".

C.3 Reconfiguring the Coordination Adapter Platform (APP)

This appendix explains reconfiguration of the coordination adapter platform (APP).

C.3.1 Reconfiguring the Coordination Adapter Platform (APP) Using the Reconfiguration Command

Use the following command to modify the database of the coordination adapter platform (APP) and registration information of APP domains.

Format

```
%FSCSM_HOME%\setup\fscsm_changeAPPInteg "<Parameter name>=<Modified value>" "[<Parameter name>=<Modified value>" ... ]
```



When specifying multiple parameters, enter a blank space between each set of "<Parameter name>=<Modified value>".

Parameters

The following parameters can be specified.

Table C.1 Reconfiguration Command Parameters

No.	Parameter Name	Required	Description
1	APP_BASE_URL	No	The URL used to access the coordination adapter platform (APP). Format: http://<hostname or IP address of the management server>:<AS_APP_BASE_PORT+80>/oscm-app Example: http://example.com:8880/oscm-app
2	APP_TIMER_INTERVAL	No	The polling (status check) interval. The coordination adapter platform (APP) checks the statuses of servers deployed on the cloud at the interval specified here to see if deployment has been completed.

No.	Parameter Name	Required	Description
			<p>Reducing the polling (status check) interval reduces the time taken for deployment to be completed, but may increase the burden on the servers where Cloud Services Management is installed and the cloud.</p> <p>The unit is milliseconds.</p> <p>Default: 15000</p> <p>Example: 20000</p>
3	APP_ADMIN_MAIL_ADDRESS	No	<p>The email address used for notifications. When trouble occurs during the operation of the coordination adapter platform (APP), the information is sent to this email address.</p> <p>Default: The value of the MAIL_ADDRESS parameter</p> <p>Example: admin@example.com</p>
4	BSS_WEBSERVICE_HOST_PORT	No	<p>The URL host name and port number used by the coordination adapter platform (APP) to access management server domains (API and GUI domains).</p> <p>Format:</p> <p>Specify in the format of <i><hostname or IP address of the management server>:<HTTP SSL listener port for management server domains></i>.</p> <p>Example: localhost:8081</p>

No: Can be omitted.

Note

- Do not use double quotes (") in any parameter values.
- For APP_TIMER_INTERVAL, enter a number between 1 and 180000.
- BSS_WEBSERVICE_HOST_PORT must match the information specified for cn of the owner of the server certificate for management server domains (API and GUI domains).
- For the port number in APP_BASE_URL, specify the port number of the HTTP listener port for the coordination adapter platform (APP).

Return Value

Return Value	Meaning
0	Command execution completed successfully
1	Error

Output

When reconfiguration fails, the failed operation name is output.

The execution result is output to a log file.

Privileges Required/Execution Environment

Administrator privileges are required.

C.3.2 Configuring and Modifying Response Wait Times for Requests to Clouds

When the coordination adapter platform (APP) requests a process from a cloud, the wait time for the response from the cloud can be configured and modified.

The response wait time can be configured using the administration command of the Java EE execution environment (asadmin command).

To execute the command, the following information about Java EE execution environment of the domain to configure or modify is necessary.

- Admin port number
Specify as a command option.
- User name of the administrator
Specify as a command option.
- Password of the administrator
Following the instructions displayed on the command prompt, input the password.
Use the value specified in "2.2 Setup of the Management Server and the Coordination Adapter Platform (APP)".

Response Wait Time Configuration Command

In order to configure the response wait time, execute the following command with a value specified in *<response wait time>*.

```
"%FSCSM_HOME%\SWCTMG\glassfish3\bin\asadmin" -p <admin port number> -u <user name of administrator>  
create-jvm-options -Diaas.timeOut=<response wait time>
```

Command execution example:

```
C:\Fujitsu\FSCSM>"%FSCSM_HOME%\SWCTMG\glassfish3\bin\asadmin" -p 3948 -u Administrator create-jvm-  
options -Diaas.timeOut=18000  
Enter admin password for user "Administrator">  
Created 1 option(s)  
Command create-jvm-options executed successfully.
```

Response Wait Time Modification Command

To modify the response wait time, perform the following procedure.

1. Delete the configured response wait time.

Configure the already configured value of `-Diaas.timeOut` using the format `"-Diaas.timeOut=value"` in *<operand of jvm-options to delete>*, and execute the following command:

```
"%FSCSM_HOME%\SWCTMG\glassfish3\bin\asadmin" -p <admin port number> -u <user name of  
administrator> delete-jvm-options <operand of jvm-options to delete>
```

2. Configure the response wait time.

Execute the following command with a value specified in *<response wait time>*.

```
"%FSCSM_HOME%\SWCTMG\glassfish3\bin\asadmin" -p <admin port number> -u <user name of  
administrator> create-jvm-options -Diaas.timeOut=<response wait time>
```

Command execution example:

```
C:\Fujitsu\FSCSM>"%FSCSM_HOME%\SWCTMG\glassfish3\bin\asadmin" -p 3948 -u Administrator delete-  
jvm-options -Diaas.timeOut=10800  
Enter admin password for user "Administrator">  
Deleted 1 option(s)  
Command delete-jvm-options executed successfully.
```

```
C:\Fujitsu\FSCSM>%FSCSM_HOME%\SWCTMG\glassfish3\bin\asadmin" -p 3948 -u Administrator create-
jvm-options -Diaas.timeOut=18000
Enter admin password for user "Administrator">
Created 1 option(s)
Command create-jvm-options executed successfully.
```

Note

- The default value for the response wait time is 10800.
- For the response wait time, specify a number between 300 and 86400.
- The unit is seconds.

C.4 Reconfiguring Coordination Adapters

Use the following command to modify the content of a coordination adapter database and specified parameter values for the service controllers that are added to APP domains.

Format

- For ROR coordination adapters

```
%FSCSM_HOME%\setup\fsesm_changeRORInteg "<Parameter name>=<Modified value>" "[<Parameter
name>=<Modified value>" ...]
```

- For K5 coordination adapters

```
%FSCSM_HOME%\setup\fsesm_changeK5Integ "<Parameter name>=<Modified value>" "[<Parameter
name>=<Modified value>" ...]
```

- For VMware coordination adapters

```
%FSCSM_HOME%\setup\fsesm_changeVMwareInteg "<Parameter name>=<Modified value>" "[<Parameter
name>=<Modified value>" ...]
```

Note

When specifying multiple parameters, enter a blank space between each set of "*<Parameter name>=<Modified value>*".

Parameters

The following parameters can be specified.

Table C.2 Reconfiguration Command Parameters

No.	Parameter Name	Coordination Adapter					Description
		ROR	AWS	Azure	K5	VMware	
1	IAAS_ROR_LOCALE	No	-	-	-	-	The locale used to access ROR APIs. It is necessary to configure according to the ROR product (language) being used. Specify an ROR locale ("ja" for Japanese, "en" for English, or "zh" for Chinese). Default: ja

No.	Parameter Name	Coordination Adapter					Description
		ROR	AWS	Azure	K5	VMware	
2	IAAS_ROR_USER_ID	No	-	-	-	-	The user ID of the ROR tenant administrator.
3	IAAS_ROR_PWD	No	-	-	-	-	The password of the ROR tenant administrator.
4	IAAS_ROR_TENANT	No	-	-	-	-	The ROR tenant name.
5	IAAS_ROR_HOST_PORT	No	-	-	-	-	The URL host name and port number for the ROR L-Platform API. Specify a host name and port number where the management function API of ROR is operating in the following format: <i><hostname or IP address>:<port number></i> Specify the host name referring to the server certificate. The URL of the L-Platform API of ROR is configured as follows during setup: https:// <IAAS_ROR_HOST_PORT>/cfmgapi/endpoint
6	IAAS_K5_USER_ID	-	-	-	No	-	The user name for connecting to K5.
7	IAAS_K5_PWD	-	-	-	No	-	The user password for connecting to K5.
8	IAAS_K5_DOMAIN	-	-	-	No	-	The K5 domain name used for API access.
9	IAAS_K5_SSL_PROTOCOL	-	-	-	No	-	The encryption protocol used for connecting to K5. Only one type can be specified. When omitted, the default value is configured. Default: TLSv1.2 * K5 supports TLSv1.2 only.
10	IAAS_VMWARE_URL	-	-	-	-	No	The destination URL of the VMware API. https://<Host name of VMware vCenter Server>/sdk/vimService?wsdl
11	IAAS_VMWARE_USER_ID	-	-	-	-	Yes	The user ID for connecting to VMware vCenter Server.
12	IAAS_VMWARE_PWD	-	-	-	-	Yes	The password for connecting to VMware vCenter Server.

Yes: Specification is mandatory.

No: Can be omitted.

-: Specification is not possible.

Note

- Do not use double quotes (") in any parameter values.
- Enclose each parameter name and its value using double quotes according to the designated format.
- To specify multiple parameters, separate them using blank spaces (" "). There are no restrictions on the specification order.

Return Value

Return Value	Meaning
0	Command execution completed successfully
1	Error

Output

When reconfiguration fails, the failed operation name is output.

The execution result is output to a log file.

Privileges Required/Execution Environment

Administrator privileges are required.

Appendix D Configuring SVOM

When the version of SVOM being used by ROR is 6.10 or later and 7.10 or earlier, it is necessary to modify the TLS/SSL communication settings used by SVOM. On the coordinated ROR admin server, perform the following procedure to modify the settings.

Note

Backup the files to be modified in advance.

1. Stop the ROR manager.

See

For details on how to stop the manager, refer to the manuals for ROR.

2. Edit the following file:

```
<SVOM_installation_folder>\jboss\standalone\configuration\standalone.xml
```

Search for the XML section `<subsystem xmlns="urn:jboss:domain:web:1.1" ...>` and then add the cipher-suite attribute to the `<ssl...>` element as follows.

[Before modifying]

```
<subsystem xmlns="urn:jboss:domain:web:1.1" default-virtual-server="default-host"
native="false">
<configuration>
<jsp-configuration x-powered-by="false" display-source-fragment="false"/>
</configuration>
<connector name="http" protocol="HTTP/1.1" scheme="http" socket-binding="http"/>
<connector name="https" protocol="HTTP/1.1" scheme="https" socket-binding="https" secure="true">
<ssl name="https" password="changeit" certificate-key-file="../../standalone/svconf/pki/keystore"
verifyclient="
false"/>
</connector>
<virtual-server name="default-host" enable-welcome-root="false"/>
</subsystem>
```

[After modifying]

```
<subsystem xmlns="urn:jboss:domain:web:1.1" default-virtual-server="default-host"
native="false">
<configuration>
<jsp-configuration x-powered-by="false" display-source-fragment="false"/>
</configuration>
<connector name="http" protocol="HTTP/1.1" scheme="http" socket-binding="http"/>
<connector name="https" protocol="HTTP/1.1" scheme="https" socket-binding="https" secure="true">
<ssl name="https" password="changeit" certificate-key-file="../../standalone/svconf/pki/keystore"
cipher-suite="
TLS_RSA_WITH_AES_128_CBC_SHA256,TLS_RSA_WITH_AES_128_CBC_SHA,SSL_RSA_WITH_RC4_128_SHA,SSL_RSA_W
ITH_3DES_EDE_
CBC_SHA,SSL_RSA_WITH_RC4_128_MD5,TLS_EMPTY_RENEGOTIATION_INFO_SCSV,TLS_RSA_WITH_NULL_SHA256,SSL
_RSA_WITH_NULL_SHA,S
SL_RSA_WITH_DES_CBC_SHA,SSL_RSA_WITH_NULL_MD5,SSL_RSA_EXPORT_WITH_RC4_40_MD5,SSL_RSA_EXPORT_WIT
H_DES40_CBC_SHA,TLS_
KRB5_WITH_RC4_128_SHA,TLS_KRB5_WITH_RC4_128_MD5,TLS_KRB5_WITH_3DES_EDE_CBC_SHA,TLS_KRB5_WITH_3D
ES_EDE_CBC_MD5,TLS_K
RB5_WITH_DES_CBC_SHA,TLS_KRB5_WITH_DES_CBC_MD5,TLS_KRB5_EXPORT_WITH_RC4_40_SHA,TLS_KRB5_EXPORT_
WITH_RC4_40_MD5,TLS_
KRB5_EXPORT_WITH_DES_CBC_40_SHA,TLS_KRB5_EXPORT_WITH_DES_CBC_40_MD5" verify-client="false"/>
```

```
</connector>
<virtual-server name="default-host" enable-welcome-root="false"/>
</subsystem>
```

Note

If the cipher-suite attribute has been specified, modify the attribute value such that it does not contain any values not listed in the cipher suites described above.

3. Edit the following file:

```
<SVOM_installation_folder>\opends\config\schema\02-config.ldif
```

4. In the objectClasses declaration for "ds-cfg-administration-connector", modify the MAY line as follows.

[Before modifying]

```
objectClasses: ( 1.3.6.1.4.1.26027.1.2.183
NAME 'ds-cfg-administration-connector'
SUP top
STRUCTURAL
MUST ( cn $
ds-cfg-listen-port $
ds-cfg-key-manager-provider $
ds-cfg-trust-manager-provider $
ds-cfg-ssl-cert-nickname )
MAY ( ds-cfg-listen-address )
X-ORIGIN 'OpenDS Directory Server' )
```

[After modifying]

```
objectClasses: ( 1.3.6.1.4.1.26027.1.2.183
NAME 'ds-cfg-administration-connector'
SUP top
STRUCTURAL
MUST ( cn $
ds-cfg-listen-port $
ds-cfg-key-manager-provider $
ds-cfg-trust-manager-provider $
ds-cfg-ssl-cert-nickname )
MAY ( ds-cfg-listen-address )
MAY ( ds-cfg-listen-address $ ds-cfg-ssl-cipher-suite $ ds-cfg-ssl-protocol )
X-ORIGIN 'OpenDS Directory Server' )
```

5. Edit the following file:

```
<SVOM_installation_folder>\opends\config\config.ldif
```

6. For the entry cn=LDAPS Connection Handler,cn=Connection Handlers,cn=config, add the ds-cfg-ssl-cipher-suite and ds-cfg-ssl-protocol attributes as follows.

[Before modifying]

```
dn: cn=LDAPS Connection Handler,cn=Connection Handlers,cn=config
objectClass: ds-cfg-ldap-connection-handler
objectClass: top
objectClass: ds-cfg-connection-handler
ds-cfg-ssl-client-auth-policy: optional
ds-cfg-key-manager-provider: cn=JKS,cn=Key Manager Providers,cn=config
ds-cfg-ssl-cert-nickname: svcs_cms
ds-cfg-trust-manager-provider: cn=JKS,cn=Trust Manager Providers,cn=config
ds-cfg-max-blocked-write-time-limit: 2 minutes
ds-cfg-allow-tcp-reuse-address: true
```

```
ds-cfg-allow-start-tls: false
ds-cfg-send-rejection-notice: true
ds-cfg-allow-ldap-v2: true
cn: LDAPS Connection Handler
ds-cfg-use-tcp-no-delay: true
ds-cfg-enabled: true
ds-cfg-java-class: org.opensds.server.protocols.ldap.LDAPConnectionHandler
ds-cfg-keep-stats: true
ds-cfg-max-request-size: 5 megabytes
ds-cfg-accept-backlog: 128
ds-cfg-buffer-size: 4096 bytes
ds-cfg-listen-address: 0.0.0.0
ds-cfg-num-request-handlers: 2
ds-cfg-listen-port: 1474
ds-cfg-use-ssl: true
ds-cfg-use-tcp-keep-alive: true
```

[After modifying]

```
dn: cn=LDAPS Connection Handler,cn=Connection Handlers,cn=config
objectClass: ds-cfg-ldap-connection-handler
objectClass: top
objectClass: ds-cfg-connection-handler
ds-cfg-ssl-client-auth-policy: optional
ds-cfg-key-manager-provider: cn=JKS,cn=Key Manager Providers,cn=config
ds-cfg-ssl-cert-nickname: svcs_cms
ds-cfg-trust-manager-provider: cn=JKS,cn=Trust Manager Providers,cn=config
ds-cfg-max-blocked-write-time-limit: 2 minutes
ds-cfg-allow-tcp-reuse-address: true
ds-cfg-allow-start-tls: false
ds-cfg-send-rejection-notice: true
ds-cfg-allow-ldap-v2: true
cn: LDAPS Connection Handler
ds-cfg-use-tcp-no-delay: true
ds-cfg-enabled: true
ds-cfg-java-class: org.opensds.server.protocols.ldap.LDAPConnectionHandler
ds-cfg-keep-stats: true
ds-cfg-max-request-size: 5 megabytes
ds-cfg-accept-backlog: 128
ds-cfg-buffer-size: 4096 bytes
ds-cfg-listen-address: 0.0.0.0
ds-cfg-num-request-handlers: 2
ds-cfg-listen-port: 1474
ds-cfg-use-ssl: true
ds-cfg-ssl-cipher-suite: SSL_DH_anon_EXPORT_WITH_RC4_40_MD5
ds-cfg-ssl-cipher-suite: SSL_DH_anon_WITH_RC4_128_MD5
ds-cfg-ssl-cipher-suite: SSL_RSA_EXPORT_WITH_RC4_40_MD5
ds-cfg-ssl-cipher-suite: SSL_RSA_WITH_NULL_MD5
ds-cfg-ssl-cipher-suite: SSL_RSA_WITH_NULL_SHA
ds-cfg-ssl-cipher-suite: SSL_RSA_WITH_RC4_128_MD5
ds-cfg-ssl-cipher-suite: SSL_RSA_WITH_RC4_128_SHA
ds-cfg-ssl-cipher-suite: TLS_ECDH_anon_WITH_NULL_SHA
ds-cfg-ssl-cipher-suite: TLS_ECDH_anon_WITH_RC4_128_SHA
ds-cfg-ssl-cipher-suite: TLS_ECDH_ECDSA_WITH_NULL_SHA
ds-cfg-ssl-cipher-suite: TLS_ECDH_ECDSA_WITH_RC4_128_SHA
ds-cfg-ssl-cipher-suite: TLS_ECDH_RSA_WITH_NULL_SHA
ds-cfg-ssl-cipher-suite: TLS_ECDH_RSA_WITH_RC4_128_SHA
ds-cfg-ssl-cipher-suite: TLS_ECDHE_ECDSA_WITH_NULL_SHA
ds-cfg-ssl-cipher-suite: TLS_ECDHE_ECDSA_WITH_RC4_128_SHA
ds-cfg-ssl-cipher-suite: TLS_ECDHE_RSA_WITH_NULL_SHA
ds-cfg-ssl-cipher-suite: TLS_ECDHE_RSA_WITH_RC4_128_SHA
ds-cfg-ssl-cipher-suite: TLS_KRB5_EXPORT_WITH_RC4_40_MD5
ds-cfg-ssl-cipher-suite: TLS_KRB5_EXPORT_WITH_RC4_40_SHA
```

```
ds-cfg-ssl-cipher-suite: TLS_KRB5_WITH_RC4_128_MD5
ds-cfg-ssl-cipher-suite: TLS_KRB5_WITH_RC4_128_SHA
ds-cfg-ssl-cipher-suite: TLS_RSA_WITH_NULL_SHA256
ds-cfg-ssl-protocol: SSLv2Hello
ds-cfg-ssl-protocol: SSLv3
ds-cfg-ssl-protocol: TLSv1
ds-cfg-use-tcp-keep-alive: true
```

Note

If the ds-cfg-ssl-cipher-suite or ds-cfg-ss-protocol attribute has been specified, modify the attribute value such that it does not contain any values not listed in the cipher suites or communication protocols described above.

7. In the same configuration file, modify the ds-cfg-listen-address attribute of the entry dn: cn=Administration Connector,cn=config as follows.

[Before modifying]

```
dn: cn=Administration Connector,cn=config
objectClass: ds-cfg-administration-connector
objectClass: top
ds-cfg-listen-address: 0.0.0.0
ds-cfg-listen-port: 4444
cn: Administration Connector
ds-cfg-key-manager-provider: cn=Administration,cn=Key Manager Providers,cn=config
ds-cfg-ssl-cert-nickname: svcs_cms
ds-cfg-trust-manager-provider: cn=Administration,cn=Trust Manager Providers,cn=config
-manager-provider: cn=Administration,cn=Trust Manager Providers,cn=config
```

[After modifying]

```
dn: cn=Administration Connector,cn=config
objectClass: ds-cfg-administration-connector
objectClass: top
ds-cfg-listen-address: 127.0.0.1
ds-cfg-listen-port: 4444
cn: Administration Connector
ds-cfg-key-manager-provider: cn=Administration,cn=Key Manager Providers,cn=config
ds-cfg-ssl-cert-nickname: svcs_cms
ds-cfg-trust-manager-provider: cn=Administration,cn=Trust Manager Providers,cn=config
```

8. Restart ROR. Execute the following command:

```
net stop "SVJBASSVC"
net start "SVJBASSVC"
```

9. Start the ROR manager.

See

For details on how to start the manager, refer to the manuals for ROR.