

# FUJITSU Software Cloud Storage Gateway V1.0.0



# **Reference Guide**

J2UL-2276-01ENZ0(00) April 2018

# Preface

# **Purpose of This Manual**

This manual describes the specifications of the REST API that can be used for FUJITSU Software Cloud Storage Gateway (hereinafter referred to as "this product"), the meanings and actions for the output messages, and the terms used in the manuals for this product.

# Intended Readers

This manual is intended for users who are considering the installation of this product or system administrators who install or manage this product.

In addition, this manual assumes that the reader has knowledge of the following:

- Server virtualization system (VMware vSphere or KVM)
- Network Attached Storage (NAS)
- Cloud Storage

# **Structure of This Manual**

The structure of this manual is as follows:

# Chapter 1 CSG REST APIs

Describes the specifications of the REST API that can be used for this product.

# **Chapter 2 Messages**

Describes the meanings and actions for the output messages.

# Glossary

Describes the terms used for this product.

# Conventions

The style shown below are used in this manual.

- Style
  - Screen and keyboard keys

Item	Description	Example
Screen name	Screen names are described in bold.	Datastore screen
Panel name	Panel names are described in bold.	Logs panel
Tab name	Tab names are described in bold.	Mail server tab
Field name	Field names are described in bold.	Mail address field
Button name	Button names are described in bold.	ОК
Radio button name	Radio button names are described in bold.	Shared folder radio button
Key name of keyboard	Keyboard keys are enclosed in square brackets ([]).	[Enter] key

- Manual related names

Item	Description	Example			
Manual name	Enclosed in double	Refer to "Messages" in the "Reference			
Chapter/section title within the manual	quotes (").	Guide".			

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# **Documentation Road Map**

# Manual Organization

The manual organization of this product is as follows.

Manual Title	Description	Purpose/Use		-			
		Concept	Assessment	POC and Installation	Training	Tuning and Migration	As Required
User's Guide	Purpose To understand the product overview, installation procedure, and operation procedure of this product. Contents - Product overview - Install and setup procedure - Operation procedure	1	1	✓ 	✓ 	✓ 	

Manual Title	Description		Purpose/Use				
		Concept	Assessment	POC and Installation	Training	Tuning and Migration	As Required
	Prerequisite manual						
	None.						
Reference Guide	<ul> <li>Purpose <ul> <li>To understand the detailed information about the available REST</li> <li>API specifications, the meanings and actions for the output messages, and the terms and their descriptions for the manuals of this product.</li> </ul> </li> <li>Contents <ul> <li>Description of the REST API format and function</li> <li>Message meaning and action plan</li> <li>Terms and their description</li> </ul> </li> <li>Prerequisite manual <ul> <li>None.</li> </ul> </li> </ul>						J

 $\checkmark$  indicates which manual to read for which purpose/use.

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# Chapter 1 CSG REST APIs

This chapter gives an overview of CSG REST APIs and describes available CSG REST APIs.

# 1.1 Overview

# 1.1.1 Authentication

CSG REST APIs require a user name and password at login. If the specified user name and password are valid, a token is issued. To perform subsequent processing with CSG REST APIs, you must specify this token for each API. When each API is executed, the validity of the specified token is checked. When you log out, the token is discarded.

For details about the CSG REST APIs for login and logout, refer to "1.2.1 POST /v1/auth/tokens" and "1.2.2 DELETE /v1/auth/tokens".

# **First Login**

When you log in for the first time, create an initial user first. An initial user is created when you log in to CSG Web GUI for the first time. For details about how to create an initial user, refer to "Starting CSG Web GUI" in the "User's Guide".



After setting up this product, create an initial user immediately.

# 1.1.2 Usage

# 1.1.2.1 Request

When you send a request to this product, use any REST client. There is no restriction on REST clients you can use.

# Sending an HTTP Request

You can send an HTTP request as follows.

When the HTTP Method Is GET or DELETE

https://<host name:port number>/<version>/<resource name>?<parameters>

For the host name, specify the IP address or FQDN of a virtual machine on which this product operates.

You can omit the port number only when the port number is 443.

Specify parameters following a resource name and a question mark "?". When you specify more than one parameter, use an ampersand "&" to separate each parameter.

# 💕 Example

If you use the curl command as the REST client (to check the expiration date and time of the token)

```
# curl -i -X GET \
    -H "Content-Type:application/x-www-form-urlencoded" \
    'https://192.0.2.10:9856/v1/auth/tokens/validate?token=c7133246-9f5c-4122-b9cf-7fcb72ade251'
```

# When the HTTP Method Is POST

https://<host name:port number>/<version>/<resource name>

For the host name, specify the IP address or FQDN of a virtual machine on which this product operates. You can omit the port number only when the port number is 443. Specify parameters in the request body.

# Example

If you use the curl command as the REST client (to log in and obtain a token)

```
# curl -i -X POST \
    -H "Content-Type:application/x-www-form-urlencoded" \
    -d "user_name=admin" \
    -d "password=root" \
    'https://192.0.2.10:9856/v1/auth/tokens'
```

Specify the following contents when you send an HTTP request.

Content	Description
HTTP Method	CSG REST APIs support the following HTTP Methods: - GET: Displays an information list or displays details - POST: Creates new data or adds data - DELETE: Deletes data
Host name of the virtual machine in which this product is running	Specify the IP address or the FQDN that you specified during the installation.
Version	Specify the version of CSG REST APIs. Specify "v1".
Resource name	Specify a resource name given in "1.2 List of CSG REST APIs". Enter as follows for the part shown as "{ }". {id}: When you must specify only one resource, specify the ID of the resource. When you use multiple resources with the same name, you can use a list display function for which you do not need IDs of the resources. By executing the CSG REST API, you can obtain a numerical value for the [id] column displayed in the response. Enter the obtained value in {id}.
Parameter	Specify parameters given in "1.2 List of CSG REST APIs". Specify each parameter in the format of "parameter name=value".

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# 1.1.2.2 Response

You can check a response returned for a request of a CSG REST API on a REST client.

A response consists of the following three types of information:

- Status Code
- Response Header
- Response Body

# Status Code

A status code is a three-digit number that represents the meaning of a response from the Web server. The following table shows the status codes that CSG REST APIs return.

Code	Meaning	Description
200	ОК	This code is returned when synchronous processing is requested and completed successfully.
202	Accepted	<ul> <li>This code is returned when asynchronous processing is requested and accepted successfully.</li> <li>You can check the status and the results of the asynchronous processing in the operation log of the "Logs" panel which is in the dashboard of CSG Web GUI.</li> <li>Asynchronous processing may take time to be completed.</li> <li>In addition, asynchronous processing may take time to be completed when many requests are waiting to be processed.</li> <li>For the requests that are being processed and waiting to be processed, check the status of each request in the operation log.</li> </ul>
400	Bad Request	This code is returned if an invalid parameter is specified. This code is returned if a syntax error occurs and also if the parameter does not meet the specification.
401	Unauthorized	This code is returned if authentication failed.
403	Forbidden	This code is returned if privileges are insufficient to perform the desired processing.
404	Not Found	This code is returned if there is no data that has the specified identifier (id). However, this code is not returned if no item is displayed when you execute the CSG REST API to display statuses.
409	Conflict	This code is returned if a conflict is detected, for example, when you try to create something that already exists.
413	Request Entity Too Large	This code is returned if the request is beyond an allowable range.
500	Internal Server Error	This code is returned if an unexpected error has occurred.

# **Response Header**

A response header is data that represents the state of the response for a request.

In the response header, "Content-Type", which represents the content type of the response body, is "application/json;charset=UTF-8".

# **Response Body**

The format of a response is a JSON format and its encoding is UTF-8 (without BOM).

A response is returned as a JSON object. For details, refer to "Response Details" of each "CSG REST API".

The following shows examples of responses.

Example 1: When a Single Resource Is Returned

```
"key_name": {
    "name": "sample",
    "created_at": "YYYY-MM-DDThh:mm:ss+09:00"
    }
}
```

If an Error Has Occurred

If an error has occurred, a JSON object, which contains a message number and an error message, is returned.

The key names are "msg\_id" and "error".

The following shows a response example that is returned in this case.

Example 2: When an Error Message Is Returned

```
{
"msg_id":st10000103,
"error":"st10000103: invalid authentication token."
}
```

Usually, an error is returned as shown above. However, if an error has occurred during token acquisition, the following message that contains an additional "detail" key is returned.

Example 3: When an Error Message Is Returned During Token Acquisition

# 1.1.3 Processing Types of CSG REST APIs and How to Check Processing Results

This section describes the processing types of CSG REST APIs and how to check the results of processing.

When a CSG REST API is executed, one of the following types of processing is executed.

Synchronous Processing

When a CSG REST API is executed and it returns a response with the status code 200, the processing is completed at the time when the response is returned. This type of processing is called "synchronous processing". The results of synchronous processing are written in the response and you can check the results immediately.

Note that if an error has occurred, a status code other than 200 and a message are displayed in the response.

Asynchronous Processing

When a CSG REST API is executed and it returns a response with the status code 202, the processing continues internally after the response is returned and the processing is completed after a certain period of time. This type of processing is called "asynchronous processing".

After asynchronous processing is completed, the operation log is updated.

Check the operation log on CSG Web GUI.



Even if an error has occurred during asynchronous processing, no error message is displayed in the response. Check the operation log.

# 1.1.4 Display and Input of Symbols

# Symbols Displayed in Responses

CSG REST APIs return responses in a JSON format. Therefore, some symbols written in the responses may be escaped as shown below. For some REST clients, symbols may be displayed unchanged. For cURLs, however, some symbols are escaped as follows.

Original Symbol	Displayed Result
"	\"
&	\u0026
<	\u003c

Original Symbol	Displayed Result		
>	\u003e		
١	//		

# Symbols Entered for Parameters

When you enter specific symbols for parameters, you may need to escape the symbols manually.

For some REST clients, you may not need manual escape. For cURLs, however, you must escape some symbols manually.

The following table shows the relevant symbols and their escaped forms.

Symbol	Escaped Form	Remarks
%	%25	
&	%26	
'	%27	
+	%2B	If you enter a plus sign "+" directly, it is replaced with a space.

# **1.2 List of CSG REST APIs**

# 1.2.1 POST /v1/auth/tokens

# Function

Login and authentication token acquisition

# **Processing Overview**

This API authenticates the user for login and issues an authentication token for the user.

- Specify the issued token for the "token" parameter of each CSG REST API.
- The user who can log in is a local authentication user or a user for the authentication server.
- Up to 100 sessions can exist simultaneously.
- If the same user has already been logged in, this API returns an error (status code: 401). In this case, this API stores the information of the conflict session by adding a "detail" key in the standard error response (that contains two keys: "msg\_id" and "error"). For details, refer to "If an Error Has Occurred" of "Response Body" in "1.1.2.2 Response".
  - user: User name
  - role: Role
  - client\_info: Client IP address
  - login\_date: Login date and time
  - last\_ope\_date: Last operation date and time

# Parameters

Parameter Name	Description	Required/ Optional	Data Type	Paramete r Type
user_name	<ul> <li>Specify a user name.</li> <li>When a user name for the authentication server is used for login, specify the user name in the format of "user name@domain name".</li> <li>Valid characters: Alphanumeric characters, "@", "!", "-", "_", and "."</li> </ul>	Required	string	query

Parameter Name	Description	Required/ Optional	Data Type	Paramete r Type
	- Number of characters: 1 to 512			
	The user name is case sensitive.			
password	Specify a password.	Required	string	query
	- Valid characters: Alphanumeric characters and symbols			
	- Number of characters: 8 to 64			
	The password is case sensitive.			
force	Specify whether or not to perform a forced login. You can specify one of the following values:	Optional	boolean	query
	- true: Log in again as the user who has already logged in.			
	- false: Do not perform a forced login.			
	If omitted, "false" is used.			
call_from	Specify the name of a caller of CSG REST APIs.	Optional	string	query
	- Valid characters: Alphanumeric characters, "-", ".", and "_"			
	- Maximum number of characters: 32			
	The caller name is case sensitive.			

# Status Codes

If the execution of this REST API is successfully completed, the following status code is returned.

- 200

For details about status codes, refer to "Status Code".

A message is output according to the status code. For details about messages, refer to "Chapter 2 Messages".

# **Response Details**

This API returns a response in a JSON format.

- The name of the key that stores data: token
- This API returns a single resource.

For details about the response format, refer to "Response Body" in "1.1.2.2 Response".

Status Code	Кеу	Description	Data Type	Enumeration Constant
200	token	Token	string	
	session_id	Session ID	integer	
	user_name	User name	string	
	user_role	User role	string	
	expires_at	Expiration date and time of the token	string	
	issued_at	Generation date and time of the token	string	

# 1.2.2 DELETE /v1/auth/tokens

# Function

Logout and discard of the authentication token

# **Processing Overview**

This API logs out the user and discards the authentication token for the user.

# Generation with CSG REST APIs, use this API to log out.

# Parameter

Parameter Name	Description	Required/Optional	Data Type	Parameter Type
token	Specify an authentication token.	Required	string	query

# **Status Code**

If the execution of this REST API is successfully completed, the following status code is returned.

- 200

For details about status codes, refer to "Status Code".

# **Response Details**

This API returns a response in a JSON format.

- The name of the key that stores data: token
- This API returns a single resource.

For details about the response format, refer to "Response Body" in "1.1.2.2 Response".

Status Code	Кеу	Description	Data Type	Enumeration Constant
200	token	Token	string	
	session_id	Session ID	integer	
	user_name	User name	string	
	user_role	User role	string	
	expires_at	Expiration date and time of the token	string	
	issued_at	Generation date and time of the token	string	

# 1.2.3 GET /v1/auth/tokens/validate

# Function

Validity check of an authentication token

# **Processing Overview**

This API validates the specified token.

If the specified token is invalid, this API returns the status code 401.

# Parameter

F	Parameter Name	Description	Required/Optional	Data Type	Parameter Type
t	oken	Specify an authentication token.	Required	string	query

# Status Codes

If the execution of this REST API is successfully completed, the following status code is returned.

- 200

For details about status codes, refer to "Status Code".

A message is output according to the status code. For details about messages, refer to "Chapter 2 Messages".

# **Response Details**

This API returns a response in a JSON format.

- The name of the key that stores data: token
- This API returns a single resource.

For details about the response format, refer to "Response Body" in "1.1.2.2 Response".

Status Code	Кеу	Description	Data Type	Enumeration Constant
200	token	Token	string	
	session_id	Session ID	integer	
	user_name	User name	string	
	user_role	User role	string	
	expires_at	Expiration date and time of the token	string	
	issued_at	Generation date and time of the token	string	

# 1.2.4 GET /v1/datastore\_folders

# Function

Display of the names of shared folders in a datastore

# **Processing Overview**

This API displays the names of shared folders that are set for a datastore.



After restoring a datastore, when you create shared folders in the datastore again, you must specify the same name for each shared folder as the previous ones. You can use this API to check the names of the shared folders that you created previously.

.....

# Parameters

. . . . .

Parameter Name	Description	Required/Optional	Data Type	Parameter Type
datastore_id	Specify the ID of the datastore. You can specify only one ID.	Required	integer	query
	You can check the datastore ID from the " <b>Datastore</b> " screen of CSG Web GUI (by selecting "ID" in "Display settings").			

Parameter Name	Description	Required/Optional	Data Type	Parameter Type
token	Specify an authentication token.	Required	string	query

# Status Codes

If the execution of this REST API is successfully completed, the following status code is returned.

- 200

For details about status codes, refer to "Status Code".

A message is output according to the status code. For details about messages, refer to "Chapter 2 Messages".

# **Response Details**

This API returns a response in a JSON format.

- The name of the key that stores data: datastore\_folders
- This API returns a single resource.

For details about the response format, refer to "Response Body" in "1.1.2.2 Response".

Status Code	Кеу	Description	Data Type	Enumeration Constant
200	folder_list	Lists the shared folder names that are set for the specified datastore. The list is displayed as a string separated by a comma (,) when there are multiple shared folders.	string	

# 1.2.5 POST /v1/datastores/{id}/metadata/recovery

# Function

Meta data recovery for a datastore

# **Processing Overview**

This API restores the datastore metadata to the cache area.

# Parameters

Parameter Name	Description	Required/Optional	Data Type	Parameter Type
id	Specify the ID of the datastore. You can specify only one ID. You can check the datastore ID from the "Datastore" screen of CSG Web GUI (by selecting "ID" in "Display settings").	Required	integer	path
token	Specify an authentication token.	Required	string	query

# Status Codes

If the execution of this REST API is successfully completed, the following status code is returned.

- 202

For details about status codes, refer to "Status Code".

# 1.2.6 GET /v1/datastores/{id}/metadata/recovery

# Function

Display of the progress of meta data recovery for a datastore

# **Processing Overview**

This API displays the progress of meta data recovery for a datastore.

# Parameters

Parameter Name	Description	Required/Optional	Data Type	Parameter Type
id	Specify the ID of the datastore. You can specify only one ID. You can check the datastore ID from the "Datastore" screen of CSG Web GUI (by selecting "ID" in "Display settings")	Required	integer	path
token	Specify an authentication token.	Required	string	query

# Status Codes

If the execution of this REST API is successfully completed, the following status code is returned.

- 200

For details about status codes, refer to "Status Code".

A message is output according to the status code. For details about messages, refer to "Chapter 2 Messages".

# **Response Details**

This API returns a response in a JSON format.

- The name of the key that stores data: metadata\_recovery\_status
- This API returns a single resource.

For details about the response format, refer to "Response Body" in "1.1.2.2 Response".

Status Code	Кеу	Description	Data Type	Enumeration Constant
200	id	Datastore ID	integer	
	status	Status of the meta data recovery	string	Active: Processing
				Error: Terminated with an error
				N/A: Completed
	downloaded_metadata_objects	Number of downloaded meta data objects	integer	
	total_metadata_objects	Total number of meta data objects	integer	
	progress	Progress (%)	integer	
	elapsed_time	Elapsed time (minutes)	integer	

# Chapter 2 Messages

This chapter describes messages that this product outputs.

If this product outputs a massage when you are using it, search this manual for the message, and check the meaning of the message and action to be taken.

# **Message Description Format**

Each message consists of a message ID and message text. The following sections describe each message according to the items listed in the table below.

Item	Description	
Message text	Shows how the message is displayed.	
Description	Describes the meaning of the message text.	
Parameters	Describes the meanings of parameters if included in the message.	
System Response	Describes how the system acts when a message is displayed.	
System Administrator Corrective Action	Describes action to be taken by the system administrator in response to this message being output.	

# Table 2.1 How to Read Message Descriptions

# 2.1 Messages with an st Prefix

st10000000: The specified parameters (undefined\_params) are not defined. params = params

# Description

You cannot specify the undefined parameters undefined\_params.

# Parameters

*undefined\_params*: Names of the parameters that are not defined among the specified parameters *params*: Names of the specified parameters

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Check available parameters and then perform the operation again.

# st10000001: The required parameters (required\_params) are not specified.

# Description

The required parameters required\_params are missing.

# Parameters

required\_params: Names of the required parameters

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Check the specified parameters and then perform the operation again.

# st10000002: The specified columns (undefined\_columns) are not defined.

# Description

The specified columns are not defined.

# Parameters

undefined\_columns: Names of the columns that are not defined among the specified columns

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Execute a CSG REST API that has an HTTP Method of GET to check the key name of response details. Specify only the key name for the parameter of the CSG REST API and then perform the operation again.

st10000003: The specified parameters (*param\_name*) must have the same number of elements as the other parameters.

# Description

The parameter *param\_name* must have the same number of elements as the other parameters, but you have specified a different number of elements.

# Parameters

param\_name: Name of the parameter that contains incorrect input values

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Specify correct elements for *param\_name* and then perform the operation again.

# st10000010: Parameter validation error : detail

# Description

The input value of a parameter is incorrect.

# Parameters

detail: Detailed reason why the input value is determined as invalid

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Check the specification of the CSG REST API that you use. Then, specify the value in the correct input format, and perform the operation again.

If "Specified parameter (*key*) must be entered using formats (*formats*) in the format list." is displayed for *detail*, use one of the following input formats to specify the value.

String Displayed in formats	Input Format	
integer	Numerical value	
decimal	Decimal number	
hex	Hexadecimal number	
ipv4	IPv4 address in the format of "***.***.***	
netmask	Netmask in the IPv4 format	

String Displayed in formats	Input Format	
enumeration	Enumeration type (one of the specified input values is selected)	
mail	E-mail address ("@" is required)	
port	Port number	
uuid	UUID in the format of "***********************************	
timestamp	Date and time in the ISO8601 format ("YYYY-MM-DDThh:mmss+hhmm")	
empty	Null character	

# st10000100: An unexpected error occurred.

# Description

An unexpected error occurred.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Perform the operation again. If the problem persists, collect the information required for troubleshooting and contact our customer support department.

# st10000101: Permission denied.

# Description

The system cannot perform the operation due to insufficient privileges.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Some functions cannot be used with Monitor role. Please run again as a user with Administrator role.

# st10000102: The specified URL or HTTP method is invalid.

# Description

The specified URL or HTTP Method is incorrect.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Check the specification of the CSG REST API that is being used. After that, perform the operation again by specifying the correct URL and HTTP Method.

# st10000103: Invalid authentication token.

# Description

The specified authentication token is invalid.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Specify a valid authentication token and then perform the operation again.

# st10000104: Your session has timed out.

# Description

The session has timed out.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Log in again.

# st10000105: This token was published by another client.

# Description

You cannot use the specified token because it was issued by another client.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Use the token from the client where the login operation was performed, or perform a forced login.

# st10000107: JSON parsing error occurred. raw\_data = raw\_data

# Description

The JSON format of the request parameter is incorrect.

# Parameters

raw\_data: Value specified for the request parameter

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Specify the value in a correct JSON format for the request parameter and then perform the operation again.

# st10000200: filter\_vals type error : detail

# Description

The value of the parameter for specifying a filtering condition is incorrect.

# Parameters

detail: Detailed reason why the input value is determined as invalid

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Check the specification of the CSG REST API that you use. Then, specify the value for the filter\_vals parameter in the correct input format, and perform the operation again.

# st10000300: The specified id (id\_value) does not exist.

# Description

The resource that has the specified ID value does not exist.

# Parameters

id\_value: Specified ID value

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Specify a correct ID value and then perform the operation again.

# st10000301: The specified resource (resource\_name, id=resource\_id) does not exist.

# Description

The resource that has the specified ID value does not exist.

# Parameters

resource\_name: Specified resource name
resource\_id: Specified ID value

#### System Response

The system terminates the operation.

# System Administrator Corrective Action

Specify a correct ID value and then perform the operation again.

# st10000302: The specified resource (resource\_name.value\_name, value=value) does not exist.

# Description

The specified resource does not exist.

# Parameters

*resource\_name*: Specified resource name *value\_name*: Name of the specified value *value*: Specified value

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Specify a value for the correct resource and then perform the operation again.

# st10000303: The specified value (value) of parameter (param) is already registered.

# Description

A resource has already been registered with the parameter param that has a value of value.

# Parameters

*param*: Specified parameter name *value*: Specified value

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Execute a CSG REST API that has an HTTP Method of GET to check the resource in the response body. Modify the value specified for *param* so that the value does not conflict with the resource and then perform the operation again.

# st10000310: The specified token is already disabled.

# Description

The system cannot continue the processing because you have already been logged out.

### System Response

The system terminates the operation.

# System Administrator Corrective Action

The specified token has already expired because you have already been logged out. Obtain a token again. Then, perform the operation again using the obtained token.

# st10000311: The specified token is already disabled due to another user's forced login operation.

### Description

The system cannot continue the processing because you have already been logged out due to another user's forced login operation.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

The specified token has already expired because you have already been logged out due to another user's forced login operation. Obtain a token again. Then, perform the operation again using the obtained token.

# st10000312: The specified token is already disabled due to another user's forced logout operation.

# Description

The system cannot continue the processing because you have already been logged out due to another user's forced logout operation.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

The specified token has already expired because you have already been logged out due to another user's forced logout operation. Obtain a token again. Then, perform the operation again using the obtained token.

# st10000313: The specified token is already disabled by the system.

# Description

The system cannot continue the processing because you have been forcibly logged out by the system.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

The specified token has already expired because you have been forcibly logged out by the system. Obtain a token again. Then, perform the operation again using the obtained token.

### st10000400: If value is specified for the parameter param, required\_params must be specified.

# Description

When you specify value for the parameter param, specify required\_params as well.

# Parameters

*param*: Specified parameter name *value*: Specified value *required\_params*: Names of the parameters that must be specified

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Specify correct parameters and then perform the operation again.

# st10000401: If value is specified for the parameter param, invalid\_params cannot be specified.

# Description

When you specify value for the parameter param, you cannot specify invalid\_params.

# Parameters

*param* : Specified parameter name *value* : Specified value *invalid\_params* : Names of the parameters that cannot be specified

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Specify correct parameters and then perform the operation again.

# st10310000: Unknown user name or password.

# Description

The specified user name or password is incorrect.

# System Response

The system terminates the operation.

### System Administrator Corrective Action

Specify a correct user name and password and then perform the operation again.

# st10310001: The specified user is already logged in.

# Description

The specified user has already logged in.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Force the login user to log out, or perform a forced login.

# st10310003: The number of sessions has exceeded the upper limit.

# Description

The user cannot log in because the maximum number of sessions that can exist simultaneously has been reached.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Force another user to log out, or perform a forced login.

# st10310005: This user is already logged in on the same terminal.

# Description

Another user has already logged in on the same terminal.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Force the user who logged in on the same terminal to log out, or perform a forced login.

# st10310007: The specified ID (ids) cannot be logged out forcibly.

# Description

The specified ID session cannot be forcibly logged out.

# Parameters

ids: Session ID of the user that is forcibly logged out

# System Response

The system terminates the operation.

# System Administrator Corrective Action

The user session that is operating cannot be forcibly logged out. Check whether the specified ID is correct.

# st10312000: It cannot be executed for the user performing this operation.

# Description

This operation cannot be executed for the currently operating user.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Check whether the specified ID is correct.

# st10312001: It cannot be executed for the last user who has the Administrator authority.

# Description

This operation cannot be executed for the last user who has the Administrator authority.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Check whether the specified ID is correct.

# st10312002: The account has specified name exists.

# Description

An account with the specified user name exists.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Enter a different user name.

# st10312006: No more local authentication user can be created.

# Description

Additional local authentication users cannot be created because the upper limit has been exceeded.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Delete any unnecessary local authentication users and try again.

# st10312007: User who has a session cannot be deleted.

### Description

The user cannot be deleted because a session exists.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Log out of the specified user session and try again.

# st10312009: The complexity of the password does not fill the policy.

# Description

The password requirements are not satisfied.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Specify a password that combines three or more of the following: uppercase letters, lowercase letters, numbers, and symbols (!"#\$&'()\* +,-./@[\]^`{|}~:;<=>?).

# st10312010: Information of user who is logged in cannot be changed.

# Description

Other users who are currently logged in cannot be changed.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

After the other user is logged out, try again.

# st10312011: Initial user already exist.

# Description

The initial user already exists.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

No action is required.

# st10313000: The number of authentication servers has exceeded the upper limit.

# Description

Authentication servers cannot be registered because the upper limit has been exceeded.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Delete any unnecessary authentication servers and try again.

# st10313001: Failed to connect to authentication server.

### Description

Connection to the authentication server failed.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Check whether the IP address and port of the authentication server are specified correctly.

# st10313002: The authentication failed.

# Description

The authentication failed.

# System Response

The system terminates the operation.

### System Administrator Corrective Action

Check whether the username and password are correct.

# st10313003: Server used in NAS authentication cannot be deleted.

# Description

The authentication server cannot be deleted because it is currently set as the NAS authentication server.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Remove the NAS authentication server setting and try again.

# st10313004: Server used in NAS authentication cannot be modified when following parameters are specified. Parameters = ip\_address, port\_no, domain\_name, administator\_name, administrator\_password.

# Description

The following parameters cannot be specified because the server is set as the NAS authentication server.

- ip\_address
- port\_no
- domain\_name
- administator\_name
- administrator\_password

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Remove the NAS authentication server setting and try again.

# st10500001: Internal error occurred.

# Description

An internal error occurred.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Perform the operation again. If the problem persists, collect the information required for troubleshooting and contact our customer support department.

# st10500002: A database reference error has occurred.

# Description

A database reference error occurred.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

The operation target resource may be deleted or changed. On the **"Logs"** panel of the CSG Web GUI dashboard, check whether conflicts occur for operations with the same resource.

If the problem persists, collect the information required for troubleshooting and contact our customer support department.

# st10500003: Failed to communicate with the server.

# Description

Communication with the virtual machine in which this product is running failed.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Check the status of the network related to the virtual machine in which this product is running. If any error has occurred, restore the network and perform the operation again.

If the problem persists, collect the information required for troubleshooting and contact our customer support department.

# st10501001: Failed to store the panel settings. Check the status of the network and manager server, and then retry panel operation.

### Description

The panel settings failed to be stored.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Check the status of the virtual machine in which this product is running and the status of the network that is related to the virtual machine. If any error has occurred, restore the virtual machine or the network, and then perform the operation again.

If the problem persists, collect the information required for troubleshooting and contact our customer support department.

# 2.2 Messages with a csgcp Prefix

# csgcp01000: The specified request cannot be executed because another request is running.

# Description

The system cannot perform the specified operation because the system is performing other processing.

#### System Response

The system terminates the operation.

#### System Administrator Corrective Action

Wait for about one minute and then perform the operation again.

# csgcp01001: The specified license key is invalid.

# Description

The specified license key is incorrect.

#### System Response

The system terminates the operation.

# System Administrator Corrective Action

Specify a correct license key and then perform the operation again.

# csgcp01002: A license is already registered.

# Description

You cannot register the license because another regular license or trial license has been registered.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

In the "License" screen of CSG Web GUI, check the license registration status.

- If a regular license has been registered, you cannot register a trial license or another regular license.
- You cannot register a license key that is the same as the registered license key.

# csgcp01004: The trial license is expired.

# Description

The system cannot accept the specified operation because the trial license has expired.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

In the "License" screen of CSG Web GUI, check the expiration date of the trial license.

Register another trial license that has not expired or a regular license and then perform the operation again.

# csgcp01005: The specified operation cannot be executed because the license is not registered.

# Description

The system cannot perform the specified operation because no license has been registered.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Register a trial license or a regular license and then perform the operation again.

# csgcp01007: Communication with the SMTP server failed.

# Description

Communication with the SMTP server failed.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

In the "Mail server" screen of CSG Web GUI, check if the IP address or FQDN and the port number of the SMTP server are correct. If any value is incorrect, correct the incorrect value and then perform the operation again.

If all values are correct, the SMTP server may have a problem. Check the status of the SMTP server.

# csgcp01008: SMTP authentication failed.

# Description

SMTP authentication failed.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

In the "Mail server" screen of CSG Web GUI, check whether the user account name and password for the SMTP server are correct. If the name or password is incorrect, correct it and then perform the operation again.

If both the name and password are correct, the SMTP server may have a problem. Check the status of the SMTP server.

csgcp01009: The specified cloud provider name is already in use.

# Description

The specified cloud provider name is already in use.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Specify an unused cloud provider name and then perform the operation again.

# csgcp01010: The specified cloud provider cannot be registered because the maximum number of registerable cloud providers has been exceeded.

# Description

The maximum number of cloud providers that you can register has been reached.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

You can register up to four cloud providers.

Delete unnecessary cloud providers and then perform the operation again.

# csgcp01011: The specified cloud provider is inaccessible.

# Description

Access to the specified cloud provider failed.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Take the following actions:

- Check whether the specified parameters (URI, user name, password) are correct. If any of the specified parameters are incorrect, specify correct parameters and then perform the operation again.
- Check whether the environment for communication between this product and the cloud provider has any error. If it has any error, fix the error and then perform the operation again.
- For Proxy environments, check whether the Proxy setting has been properly performed. In addition, when using a hostname (FQDN) in the proxy setting, please refer to "Setting Up Virtual Appliances" in the "User's Guide" and verify that a DNS server has been registered.
- Check whether the account or the access key ID that is entered for the username has proper permission.

If the problem persists, collect the information required for troubleshooting and contact our customer support department.

# csgcp01012: The specified cloud provider is being used by an active shared folder.

# Description

The specified cloud provider cannot be updated because the cloud provider has one or more enabled shared folders.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Disable all shared folders related to the specified cloud provider and then perform the operation again.

# csgcp01013: The specified cloud provider is being used by a datastore.

# Description

The specified cloud provider cannot be deleted because the cloud provider has a datastore.

# System Response

The system terminates the operation.

#### System Administrator Corrective Action

Delete datastores related to the specified cloud provider and then perform the operation again.

# csgcp01014: The bucket list cannot be acquired from the specified cloud provider.

# Description

The bucket list cannot be acquired from the specified cloud provider.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Check whether any error has occurred in the specified cloud provider or in the network.

If no error has occurred, collect the information required for troubleshooting and contact our customer support department.

# csgcp01015: The specified datastore name is already in use.

# Description

The specified datastore name is already in use.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Specify an unused datastore name and then perform the operation again.

# csgcp01016: The specified bucket does not exist.

# Description

The datastore cannot be created or updated because the specified bucket for the cloud provider does not exist.

# System Response

The system terminates the operation.

#### System Administrator Corrective Action

Specify a correct bucket name and then perform the operation again.

# csgcp01017: The specified datastore cannot be created because the maximum number of creatable datastores has been exceeded.

# Description

The maximum number of datastores that you can create has been reached.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Only one datastore can be created.

Delete unnecessary datastores and then perform the operation again.

# csgcp01018: A shared folder exists in the specified datastore.

# Description

The specified datastore cannot be deleted because one or more shared folders exist in the datastore.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Delete all shared folders in the specified datastore and then perform the operation again.

# csgcp01019: The specified datastore capacity exceeds the settable upper limit value.

# Description

The datastore cannot be created or updated because the datastore capacity exceeds its upper limit.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

The upper limit of the datastore capacity is the license capacity that you purchased. Check the license capacity in the "License" screen of CSG Web GUI.

Then, specify a capacity value less than or equal to the license capacity, and perform the operation again.

# csgcp01020: The specified datastore capacity exceeds the settable lower limit value.

# Description

The datastore cannot be created or updated because the specified datastore capacity is less than the minimum required capacity.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Specify a datastore capacity value greater than or equal to the minimum required capacity and then perform the operation again.

# csgcp01021: The specified cache capacity exceeds the settable upper limit value.

# Description

The datastore cannot be created because the specified cache capacity exceeds its upper limit.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Specify a cache capacity value less than or equal to the available capacity of the storage pool for cache and then perform the operation again.

The procedure for checking the available capacity of the storage pool for cache is as follows.

1. Log in to the console using the administrator account (administrator).

2. Execute the following command to check the value of VFree of CsgStoragePool.

# csgadm storagepool show

# csgcp01022: The specified cache capacity exceeds the settable lower limit value.

# Description

The datastore cannot be modified because the specified cache capacity is less than the minimum required capacity.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Specify a cache capacity value greater than or equal to the minimum required capacity and then perform the operation again.

# csgcp01023: An active shared folder exists on the specified datastore.

# Description

The specified datastore cannot be modified because one or more enabled shared folders exist in the datastore.

#### System Response

The system terminates the operation.

# System Administrator Corrective Action

Disable all shared folders in the specified datastore and then perform the operation again.

# csgcp01024: The specified shared folder name is already in use.

# Description

The specified shared folder name is already in use.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Specify an unused shared folder name and then perform the operation again.

csgcp01026: The specified shared folder cannot be created because the maximum number of creatable shared folders has been exceeded.

# Description

The maximum number of shared folders that you can create has been reached.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

You can create up to 128 shared folders.

Delete unnecessary shared folders and then perform the operation again.

# csgcp01027: The specified parameter (param\_name) cannot be used if the storage protocol is NFS.

# Description

You cannot use the specified parameter for the NFS protocol.

# Parameters

param\_name: Specified parameter

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Specify a correct parameter and then perform the operation again.

# csgcp01028: The specified parameter (param\_name) cannot be used if the storage protocol is SMB.

# Description

You cannot use the specified parameter for the SMB protocol.

# Parameters

param\_name: Specified parameter

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Specify a correct parameter and then perform the operation again.

# csgcp01029: 'NFS allow hosts' must be specified if 'NFS root squash hosts' is specified.

# Description

NFS allowed hosts are not specified.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

When you specify NFS no root squash hosts, specify NFS allowed hosts at the same time.

# csgcp01030: The specified shared folder is enabled.

# Description

The system cannot perform the operation because the specified shared folder is enabled.

# System Response

The system terminates the operation.

### System Administrator Corrective Action

Disable the specified shared folder and then perform the operation again.

# csgcp01031: Data remains in the specified shared folder.

# Description

The specified shared folder cannot be deleted because one or more files or folders exist under the shared folder.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Delete all data in the specified shared folder and then perform the operation again.

# csgcp01032: Failed to download the troubleshooting data file.

# Description

The information file required for troubleshooting cannot be downloaded.

### System Response

The system terminates the operation.

# System Administrator Corrective Action

Wait for about one minute and then perform the operation again.

If the problem still occurs, contact our customer support department.

# csgcp01033: The operation cannot be executed because an external authentication server is registered.

# Description

The system cannot perform the operation because an external authentication server (LDAP authentication server or AD authentication server) has been configured.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

You can use NAS local users only when no external authentication server is used.

Cancel the configuration of the external authentication server and then perform the operation again.

# csgcp01034: The specified user name cannot be used because it is a reserved keyword.

# Description

You cannot use the specified user name because it is a reserved keyword.

#### System Response

The system terminates the operation.

# System Administrator Corrective Action

Change the user name and then perform the operation again.

For details about the reserved keywords related to user names, refer to "NAS Access User Settings" in the "User's Guide".

# csgcp01035: The specified user name is already in use.

# Description

The specified user name is already in use.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Specify an unused user name and then perform the operation again.

# csgcp01036: The specified user id is already in use.

# Description

The specified user ID is already in use.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Specify an unused user ID and then perform the operation again.

# csgcp01037: The primary group ID and the primary group cannot be specified simultaneously.

# Description

You cannot specify a primary group ID and a primary group at the same time.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Specify either a primary group ID or a primary group and then perform the operation again.

# csgcp01038: The secondary group ID and the secondary group cannot be specified simultaneously.

# Description

You cannot specify a secondary group ID and a secondary group at the same time.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Specify either a secondary group ID or a secondary group and then perform the operation again.

# csgcp01039: The specified NAS local user cannot be created because the maximum number of creatable NAS local users has been exceeded.

# Description

You cannot create the specified NAS local authentication user because the maximum number of NAS local authentication users that you can create has been reached.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

You cannot create the NAS local authentication user because all the user IDs from 500 through 999 are in use.

Check and delete unnecessary NAS local authentication users and then perform the operation again.

# csgcp01040: The specified password is the same as the current one.

# Description

The specified password is the same as the current one.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Specify a password different from the current one and then perform the operation again.

csgcp01041: The specified group name cannot be used because it is a reserved keyword.

# Description

You cannot use the specified group name because it is a reserved keyword.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Change the group name and then perform the operation again.

For details about the reserved keywords related to group names, refer to "NAS Access Group Settings" in the "User's Guide".

# csgcp01042: The specified group name is already in use.

# Description

The specified group name is already in use.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Specify an unused group name and then perform the operation again.

# csgcp01043: The specified group id is already in use.

# Description

The specified group ID is already in use.

#### System Response

The system terminates the operation.

#### System Administrator Corrective Action

Specify an unused group ID and then perform the operation again.

# csgcp01044: The specified NAS local group cannot be created because the maximum number of creatable NAS local groups has been exceeded.

# Description

You cannot create the specified NAS local authentication group because the maximum number of NAS local authentication groups that you can create has been reached.

# System Response

The system terminates the operation.

### System Administrator Corrective Action

You cannot create the NAS local authentication group because all the group IDs from 500 through 999 are in use.

Check and delete unnecessary NAS local authentication groups and then perform the operation again.

# csgcp01046: Metadata does not exist in the target bucket.

# Description

The system cannot perform the operation because meta data does not exist in the target bucket.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Collect the information required for troubleshooting and contact our customer support department.

# csgcp01047: The metadata in the target bucket is invalid.

# Description

The system cannot perform the operation because the meta data in the target bucket is invalid.

#### System Response

The system terminates the operation.

# System Administrator Corrective Action

Collect the information required for troubleshooting and contact our customer support department.

# csgcp01048: Failed to download the metadata.

#### Description

The meta data cannot be downloaded.

#### System Response

The system terminates the operation.

### System Administrator Corrective Action

Collect the information required for troubleshooting and contact our customer support department.

# csgcp01049: The cache capacity is insufficient.

# Description

The meta data recovery failed because the cache capacity is insufficient to store the meta data.

#### System Response

The system terminates the operation.

#### System Administrator Corrective Action

Collect the information required for troubleshooting and contact our customer support department.

csgcp01050: The number of groups has exceeded the upper limit (*maxGroups*). Delete unnecessary groups before executing.

#### Description

The maximum number of groups has been reached.

#### Parameters

maxGroups: Maximum number of groups

#### System Response

The system terminates the operation.

## System Administrator Corrective Action

Delete unnecessary groups and then perform the operation again.

# csgcp01051: The group to which the user belongs cannot be deleted. Delete the users first.

# Description

You cannot delete a group that one or more users belong to.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Delete all users in the group that you want to delete and then delete the group.

# csgcp01052: The groups set to shared folders cannot be deleted. Delete Shared folder first.

## Description

You cannot delete a group specified for a shared folder.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Delete all shared folders for which you have specified the group that you want to delete and then delete the group.

# csgcp01053: Built-in groups cannot be deleted.

# Description

You cannot delete built-in groups.

### System Response

The system terminates the operation.

# System Administrator Corrective Action

Check whether you have specified a correct group.

# csgcp01054: The number of users has exceeded the upper limit (*maxUsers*). Delete unnecessary users first.

## Description

The maximum number of users has been reached.

# Parameters

maxUsers: Maximum number of users

# System Response

The system terminates the operation.

### System Administrator Corrective Action

Delete unnecessary users and then perform the operation again.

# csgcp01055: Built-in user cannot be deleted.

# Description

You cannot delete built-in users.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Check whether you have specified a correct user.

csgcp01056: The dollar sign (\$) can only be specified as the last character of the name.

# Description

You can use the dollar sign (\$) only as the last character of a name.

# System Response

The system terminates the operation.

#### System Administrator Corrective Action

If you use the dollar sign (\$), use it only as the last character of the name and then perform the operation again.

# csgcp01057: The name must start with either an alphanumeric character or the underscore (\_).

# Description

The first character in the specified name is not an alphanumeric character or an underscore (\_).

#### System Response

The system terminates the operation.

#### System Administrator Corrective Action

Use an alphanumeric character or an underscore (\_) as the first character in the name and then perform the operation again.

# csgcp01058: Names consisting only of numbers cannot be used. Please enter a different name.

#### Description

You cannot use a string that consists of only numbers for a group name.

#### System Response

The system terminates the operation.

#### System Administrator Corrective Action

Specify a group name that meets the conditions described in "NAS Access Group Settings" of the User's Guide and then perform the operation again.

# csgcp01059: The name entered cannot be used. Please enter a different name.

# Description

You cannot use a reserved keyword for a user name.

# System Response

The system terminates the operation.

### System Administrator Corrective Action

For information about user name reserved keywords, refer to "NAS Access User Settings" in the "User's Guide".

For information about group name reserved keywords, refer to "NAS Access Group Settings" in the "User's Guide".

# csgcp01060: Already existing names cannot be specified. Please try again.

#### Description

You cannot specify a name that already exists.

#### System Response

The system terminates the operation.

# System Administrator Corrective Action

Specify an unregistered name and then perform the operation again.

# csgcp01061: Already existing IDs cannot be specified. Please try again.

# Description

You cannot specify an ID that already exists.

# System Response

The system terminates the operation.

#### System Administrator Corrective Action

Specify an unregistered ID and then perform the operation again.

# csgcp01062: Do not include the group specified for primary group in secondary groups. Please specify other than primary group for secondary groups.

### Description

Primary groups cannot be included in secondary groups.

#### System Response

The system terminates the operation.

# System Administrator Corrective Action

Specify a group other than the primary group for secondary groups.

# csgcp01063: The maximum number of authentication servers (maxNumber) has been exceeded.

# Description

The maximum number of authentication servers that you can register has been reached.

### Parameters

maxNumber: Maximum number of authentication servers

#### System Response

The system terminates the operation.

# System Administrator Corrective Action

Delete unnecessary authentication servers and then perform the operation again.

# csgcp01064: (auth\_server\_type) authentication servers cannot be specified for (shared\_folder\_type).

#### Description

The combination of the specified shared folder type and the specified authentication server type is not allowed.

#### Parameters

auth\_server\_type: Authentication server type (LDAP/AD)

shared\_folder\_type: Shared folder type (NFS/SMB)

# System Response

The system terminates the operation.

#### System Administrator Corrective Action

Specify an AD authentication server for SMB and specify an LDAP authentication server for NFS.

csgcp01065: BUILTIN\_Administrators, BUILTIN\_Users, and BUILTIN\_BackupOperators cannot be specified for primary group.

# Description

BUILTIN\_Administrators, BUILTIN\_Users, and BUILTIN\_BackOperators cannot be specified for the primary group.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Specify a group other than BUILTIN\_Administrators, BUILTIN\_Users, and BUILTIN\_BackOperators for the primary group.

# csgcp01066: The specified parameter (*param\_name*) cannot be used for the cloud provider type (*provider\_type*).

# Description

You cannot use the specified parameter for the cloud provider type provider\_type.

## Parameters

*param\_name*: Specified parameter *provider\_type*: Cloud provider type

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Specify correct parameters and then perform the operation again.

# csgcp01067: The same host is specified for parameter (param\_name).

# Description

You have specified the same host for param\_name.

# Parameters

param\_name: Specified parameter

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Specify a different host and then perform the operation again.

csgcp01068: The number of hosts in the specified parameter (*param\_name*) exceeds the upper limit value.

## Description

The number of hosts that you have specified exceeds the maximum number of hosts that you can specify.

## Parameters

param\_name: Specified parameter

## System Response

The system terminates the operation.

## System Administrator Corrective Action

You can specify up to ten hosts at one operation. Specify ten hosts or less and then perform the operation again.

# csgcp01069: The same host cannot be specified in 'SMB allow hosts' and 'SMB deny hosts'.

# Description

You have specified the same host for both SMB allowed hosts and SMB denied hosts.

# System Response

The system terminates the operation.

#### System Administrator Corrective Action

Specify different hosts for SMB allowed hosts and SMB denied hosts and then perform the operation again.

# csgcp01070: The specified datastore ID (datastore\_id) cannot be found.

#### Description

The specified datastore ID cannot be found.

#### Parameters

datastore\_id: Specified parameter

### System Response

The system terminates the operation.

#### System Administrator Corrective Action

Check the datastore ID and then perform the operation again. If the problem persists, collect the information required for troubleshooting and contact our customer support department.

# csgcp01071: The e-mail notification destination is not specified. Specify at least one notification destination.

# Description

Test E-mail cannot be sent because you have specified no E-mail notification destination.

### System Response

The system terminates the operation.

#### System Administrator Corrective Action

Specify E-mail notification destinations and then perform the operation again.

# csgcp01072: The e-mail server is not specified. Specify the e-mail server in advance.

# Description

Test E-mail cannot be sent because you have not specified an E-mail server.

# System Response

The system terminates the operation.

#### System Administrator Corrective Action

Specify an E-mail server and then perform the operation again.

# csgcp01073: The specified id (*id\_value*) does not exist.

# Description

The resource that has the specified ID value does not exist.

#### Parameters

id\_value : Specified ID value

# System Response

The system terminates the operation.

#### System Administrator Corrective Action

Specify a correct ID value and then perform the operation again.

### csgcp01074: The storage pool for cache does not exist.

# Description

No storage pool for cache exists.

#### System Response

The system terminates the operation.

#### System Administrator Corrective Action

Allocate the local storage to a storage pool for cache and then perform the operation again. For details about how to allocate the local storage to the storage pool for cache, refer to "Allocating Local Storage to Storage Pool for Cache" in the "User's Guide".

# csgcp01075: Failed to set a NAS authentication server.

#### Description

The settings for the NAS authentication server failed.

## System Response

The system terminates the operation.

#### System Administrator Corrective Action

Perform the following actions and then execute the operation again.

- Check the information of the registered authentication server from the **Authentication server** screen of CSG Web GUI. If there is a mistake, register the correct information.
- Confirm whether the authentication is started.
- For information on the DNS settings, refer to "Setting Up Virtual Appliances" in the "User's Guide" and confirm the settings by executing initial\_setup.

If no DNS is set or if the set values are incorrect, set the correct DNS server.

If this problem persists even after performing the operation again, collect the information required for troubleshooting and contact our customer support department.

# csgcp10001: The trial license is expired. Please register a regular license.

#### Description

The system has disabled the license (and prohibits writing to shared folders) because the trial license has expired.

# System Response

The system has disabled the license (and prohibits writing to shared folders).

#### System Administrator Corrective Action

In the "License" screen of CSG Web GUI, check the expiration date of the trial license and register a regular license. After registering a regular license, you can write to the shared folders again.

# 2.3 Messages with a csgdp Prefix

# csgdp01000: The cache is exhausted because the data cannot be transferred to the datastore. Check the connection to the datastore and remove the cause of the error.

#### Description

Data cannot be transferred because the system cannot connect to the datastore. Due to this problem, the cache is exhausted and the system cannot store the data in the cache.

# System Response

The system terminates the operation.

#### System Administrator Corrective Action

Check the connection to the datastore and eliminate the cause of the connection problem.

On the "Status" panel of the CSG Web GUI dashboard, check the status of the network. If the status is not normal, an error may have occurred in the network. Check the connection and restore the network.

# csgdp01001: Increase the amount of memory assigned to the virtual appliance and try again.

#### Description

There is not enough available memory.

# System Response

The system terminates the operation.

#### System Administrator Corrective Action

Check whether the installed memory size is consistent with the memory size shown in "Virtual Appliance Specifications List" of the *User's Guide*, and increase the memory size as needed.

#### csgdp01002: A failure occurred in the disk of the virtual appliance. Perform a recovery from the datastore.

# Description

An error occurred in the disk allocated to the virtual appliance.

#### System Response

The system terminates the operation.

# System Administrator Corrective Action

Replace the failed disk.

For details about how to restore the environment, refer to "Restoring the Environment" in the "User's Guide".

# csgdp01003: Insufficient free disk space of the virtual appliance. Check the connection to the datastore and free disk space.

# Description

There is not enough space in the disk allocated to the virtual appliance. A connection to the datastore has not been established or the meta data size of the cache capacity has reached its limit.

#### System Response

The system terminates the operation.

#### System Administrator Corrective Action

Check the connection to the datastore. If the connection failed, eliminate the cause of the problem.

If the meta data size of the cache capacity reaches its limit, delete unnecessary files from the shared folders.

If the cache remains insufficient even after the unnecessary files are deleted, the cache capacity that is allocated to the virtual appliance must be increased.

For details about how to increase the cache capacity, refer to "Expanding Areas by Recreating Cache" in the "User's Guide".

# csgdp01004: Insufficient disk space of the virtual appliance. Contact customer support.

## Description

There is not enough available space in the disk allocated to the virtual appliance.

#### System Response

The system terminates the operation.

# System Administrator Corrective Action

Collect the information required for troubleshooting and contact our customer support department.

# csgdp01005: An internal inconsistency occurred. Contact customer support.

# Description

An internal error occurred.

# System Response

The system terminates the operation.

#### System Administrator Corrective Action

Collect the information required for troubleshooting and contact our customer support department.

# csgdp01006: Detected a failure during system startup. Contact customer support.

# Description

An error was detected during system startup.

#### System Response

The system terminates the operation.

#### System Administrator Corrective Action

Collect the information required for troubleshooting and contact our customer support department.

# csgdp01007: Detected a failure during system shutdown. Contact customer support.

# Description

An error was detected during system shutdown.

#### System Response

The system terminates the operation.

# System Administrator Corrective Action

Collect the information required for troubleshooting and contact our customer support department.

# csgdp01009: The metadata recovery failed. Contact customer support.

# Description

The meta data recovery failed with an error.

#### System Response

The system terminates the operation.

# System Administrator Corrective Action

Collect the information required for troubleshooting and contact our customer support department.

# csgdp01010: The encryption setting of the datastore is invalid.

# Description

One of the following occurred while applying the encryption settings to the datastore.

- The encryption settings of the datastore are enabled but the datastore in the cloud is not encrypted.
- The encryption settings of the datastore are disabled but the datastore in the cloud is encrypted.
- The data of the datastore in the cloud cannot be decrypted due to an incorrect datastore encryption password.

#### System Response

The system terminates the operation.

#### System Administrator Corrective Action

If you create a new datastore, specify a bucket that has no data.

If you restore from cloud provider data, check the cloud provider name, bucket name, and the datastore encryption setting, and then create a datastore using the correct settings.

# csgdp01011: The metadata recovery failed because the cache capacity of the datastore is insufficient.

#### Description

The meta data recovery failed because the cache capacity of the datastore is insufficient.

#### System Response

The system terminates the operation.

#### System Administrator Corrective Action

Check the setting of the cache capacity in the "Datastore" screen of CSG Web GUI. Delete the datastore, create the datastore with correct settings again, and then perform meta data recovery again.

# csgdp01012: This system was started on another virtual machine different from the installation.

#### Description

This system was started on a virtual machine that is different from the one during the installation.

#### System Response

The system terminates the operation.

#### System Administrator Corrective Action

Check whether the virtual machine that is being used is incorrect.

If it is incorrect, stop the virtual machine and then start the correct virtual machine.

This message may be output when recovering from a system backup, however if this is the case, follow the restoration procedure.

# csgdp02000: Failed to authenticate while connecting to the datastore. Check the connection information.

#### Description

Authentication failed when the system tried to connect to the datastore. Check the connection information.

#### System Response

The system terminates the operation.

#### System Administrator Corrective Action

Check the connection information for the datastore, and eliminate the cause of the problem.

If you have modified the account information of the connection destination, use CSG Web GUI to modify the account information of the cloud provider registered in this product.

# csgdp02001: Failed to connect to the datastore. Check the state of the datastore and the network.

## Description

The connection to the datastore failed. Check the statuses of the datastore and the network.

#### System Response

The system terminates the operation.

# System Administrator Corrective Action

Check the status of the connection to the datastore and eliminate the cause of the connection problem. On the "Status" panel of the CSG Web GUI dashboard, check the statuses of the network and the datastore. In case the status is not normal, there may be an error in the network or an error in the cloud provider. In case of a network error, check the connection and fix it. In case the error state of the cloud provider is unknown, contact our customer support department.

# csgdp03001: A communication error was returned from the datastore. Check the datastore state.

#### Description

An error was returned from the datastore. An error may have occurred in the datastore.

#### System Response

The system terminates the operation.

#### System Administrator Corrective Action

On the "Status" panel of the CSG Web GUI dashboard, check the status of the datastore. If the status is not normal, an error may have occurred in the cloud provider.

If you do not know the error status of the cloud provider, contact our customer support department.

# csgdp03002: The specified bucket is already in use.

#### Description

The specified bucket is already in use.

#### System Response

The system continues processing.

#### System Administrator Corrective Action

Check whether there are mistakes in the specification of the cloud provider or the bucket. If there are mistakes, recreate the datastore. If you restore from the cloud provider data due to a disk failure, this message is output because the specified bucket has data. Ignore this message and continue the restoration procedure.

# csgdp03004: The free space of the datastore is exhausted. Delete unnecessary files in the shared folder.

# Description

The available capacity of the datastore is exhausted. You cannot write data to the datastore.

#### System Response

The system terminates the operation.

#### System Administrator Corrective Action

Delete unnecessary files in the shared folders in the relevant datastore or move the files to the shared folders in another datastore to free up space in the datastore.

# csgdp03005: The metadata recovery failed, because a communication error was returned from the datastore. Check the state of the datastore.

# Description

An error was returned from the datastore. An error may have occurred in the datastore.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Use the "Status" panel of the CSG Web GUI dashboard to check the status of the datastore. If the status is not normal, an error may have occurred in the cloud provider. Eliminate the cloud provider error and restart the system. After the restart, the meta data recovery is resumed. If you do not know the error status of the cloud provider, contact our customer support department.

# csgdp03006: The metadata recovery failed because the datastore capacity is insufficient.

## Description

Due to insufficient datastore capacity, metadata recovery failed.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Check the datastore capacity setting in the datastore screen of CSG Web GUI.

Set the datastore capacity to the same value as before metadata recovery.

In case this message appears in the situation where the set value is the same as before metadata recovery, the system operating space is insufficient, so it is necessary to temporarily set a value that is 10GB more.

Therefore update the datastore settings to increase the datastore capacity to the aforementioned value, and restart the system. After the system restarts, metadata recovery will restart.

Alternatively, delete the datastore and recreate it with capacity set to the aforementioned value, and then rerun the metadata recovery. In the case where temporarily a value was set that is 10GB more than the capacity before metadata recovery, after metadata recovery it is possible to update the datastore settings to revert the datastore capacity to the original value.

# csgdp11000: The cache may be exhausted because the data cannot be transferred to the datastore. Check the connection to the datastore and remove the cause of the error.

## Description

Data cannot be transferred because the system cannot connect to the datastore. The available capacity of the cache may be exhausted. If the available capacity of the cache is exhausted, the system cannot write data to the datastore even if the datastore has sufficient available capacity.

# System Response

The system continues the operation.

# System Administrator Corrective Action

Check the connection to the datastore and eliminate the cause of the connection problem. On the "Status" panel of the CSG Web GUI dashboard, check the status of the network. If the status is not normal, an error may have occurred in the network. Check the connection and restore the network.

csgdp13000: The free space of the datastore may be exhausted. Delete unnecessary files in the shared folder.

# Description

The available capacity of the datastore may be exhausted.

## System Response

The system continues the operation.

# System Administrator Corrective Action

Delete unnecessary files in the shared folders in the relevant datastore or move the files to the shared folders in another datastore to free up space in the datastore.

# csgdp21002: The display of the event log is limited. Check whether any other errors occurred, because a large amount of event logs have been generated in a short time.

#### Description

The display of the event log is limited because a large amount of event logs has been generated in a short time.

#### System Response

The system continues processing.

#### System Administrator Corrective Action

Check the event log. Eliminate the cause of errors displayed in the event log.

# csgdp21003: The metadata recovery is started.

### Description

The meta data recovery has started.

### System Response

The system continues the operation.

# System Administrator Corrective Action

You do not have to take any action.

#### csgdp21004: Successfully completed the metadata recovery.

#### Description

The meta data recovery has been completed successfully.

# System Administrator Corrective Action

You do not have to take any action.

# 2.4 Messages with a csgfw Prefix

# csgfw00100: Cannot accept the operation because it exceeds the maximum number of operations of the system. Maximum number=*maxNumber*

#### Description

The system cannot accept the operation because the maximum number of operations of the system has been reached.

# Parameters

maxNumber: Maximum number of operations of the system

#### System Response

The system refused to accept the operation.

#### System Administrator Corrective Action

Check the total number of uncompleted operations on the global pane. If the total number of uncompleted operations has reached the maximum number of operations of the system, the maximum number of operations that the system can accept has been reached.

After you confirm that the total number of uncompleted operations has decreased below the maximum number of operations of the system, perform the operation again. In addition, check whether the current system operation has any problem, as needed.

If this problem persists, collect the information required for troubleshooting and contact our customer support department.

# csgfw00191: Cannot accept the operation because a system error occurred.

# Description

The system cannot accept the operation due to a system error.

# System Response

The system refused to accept the operation.

## System Administrator Corrective Action

Collect the information required for troubleshooting and contact our customer support department.

# csgfw02015: An error occurred while executing the operation.

# Description

An error occurred during the operation.

# System Response

The system terminates the operation.

# System Administrator Corrective Action

Perform the following action. If this problem persists even after performing the operation again, collect the information required for troubleshooting and contact our customer support department.

- a. If the registration operation of the shared folder terminates with an error Check whether cloud provider and bucket that are specified during the registration of the datastore and cache are correct. If a bucket that has data is specified, registration of the shared folder fails. Register the cloud provider or register the datastore and cache, and then execute subsequent operation again.
- b. For cases other than the above Execute the operation again

# csgfw02019: Operation failed because the system was restarted.

# Description

The operation failed because the system was restarted before the completion of the operation.

# System Response

The system terminates the operation.

## System Administrator Corrective Action

Use the following procedure to perform the operation again.

- 1. On the "Logs" panel of the CSG Web GUI dashboard, check whether there is an operation log that meets the following conditions:
  - "Result" is "Failed", and
  - This message (csgfw02019) is displayed in "Message".
- 2. If there is an operation log that meets the conditions in step 1, check the contents of the following items:
  - "Action" (Operation name)
  - "Target" (Operation target)
  - "Detail" (Input items for the operation)

- 3. Perform the operation again based on the contents checked in step 2.
  - If the registration operation failed, perform the registration operation again. If the registration target has been registered in the system, the registration status is incomplete. In this case, delete the registration target and then perform the registration operation again.
  - If the modification operation failed, perform the modification operation again.
  - If the deletion operation failed, perform the deletion operation again. If the deletion target has not been registered in the system, you do not have to perform the deletion operation again because the deletion has already been completed.

# csgfw02150: An inconsistency was detected in the repository during the operation.

# Description

An inconsistency was detected in the database during the operation.

#### System Response

The system terminates the operation.

# System Administrator Corrective Action

Perform the operation again.

If the problem persists, collect the information required for troubleshooting and contact our customer support department.

# Glossary

The following describes the terms used in the manuals for this product.

# Access key ID

A component of the security authentication information (access key) required for accessing Amazon S3 and NIFCLOUD object storage. It is used as the user ID for accessing the cloud service.

# Account

A user name for accessing a Cloud provider.

# Active Directory (AD)

A directory service provided with Windows operating systems. The Active Directory consolidates the managements of hardware resources such as servers, clients, and printers on a network as well as the information such as the attributes and access permissions of users who use the resources.

#### Bucket

A logical storage area created in a Cloud storage.

# Cache

A storage area that temporarily stores data written in shared folder before the data is transferred to a Datastore. Cache is created on the local disk of the virtual machine in which this product is running.

# Cache capacity

The capacity allocated to the Cache.

# Cache I/O performance

I/O performance (write/read throughput performance) of the Cache.

# Cache usage

The total amount of data kept in the Cache. It is the total value of "Meta data", "Untransferred", and "Transferred" that are displayed on the CSG Web GUI Dashboard.

# **Cloud provider**

In this product, this term refers to a cloud storage service provided by a public cloud service provider or a cloud storage function in a private cloud environment.

# **Cloud storage**

A storage device that handles data on an object basis. Unlike a file storage that manages data in a directory structure, an object storage does not have a storage limitation on data size and the number of data items, and therefore, it is suitable for storing massive data.

#### Cloud transfer performance

Data transfer performance (write/read throughput performance) between the Cache and a Datastore.

### CSG REST API

A REST API for using this product.

# CSG Web GUI

A Web GUI for using this product.

# Dashboard

A screen of CSG Web GUI that displays the summary of information managed by this product. Several types of information that the user needs during operation are displayed in one screen.

#### Datastore

In this product, a datastore refers to a data storage area in a Cloud provider. A datastore is created in a Bucket.

#### **Datastore** capacity

A maximum amount of data that a Datastore can store.

#### Datastore usage

The total amount of data after deduplication and compression and Meta data that is stored in a Datastore.

# E-mail server authentication method

An authentication method for connecting to the SMTP server.

#### **Global pane**

A band-like menu bar displayed at the top of the CSG Web GUI screen.

#### License capacity

The total capacity of the datastore whose license is registered in this product.

# Lightweight Directory Access Protocol (LDAP)

A protocol for accessing a directory service. For this product, the term "LDAP" refers to an LDAP-compliant directory service (such as, OpenLDAP) other than Active Directory (AD).

# Meta data

Management data regarding deduplication and compression, and management data such as for cloud information of the data storage destination. The meta data is kept in the Cache and a Datastore.

#### NAS access group

A group to which NAS access user belong. The NAS access users can access files in the NAS access group. There are two types of NAS access groups: Primary group and Secondary group. You need a NAS access group to define users who have NAS access for this product if you do not use an external authentication server such as Active Directory (AD) or Lightweight Directory Access Protocol (LDAP).

# NAS access user

A user who can access a Shared folder on a NAS. You need a NAS access user to define a user who has NAS access for this product if you do not use an external authentication server such as Active Directory (AD) or Lightweight Directory Access Protocol (LDAP).

# Network Attached Storage (NAS)

A storage device connected to a network.

# NFS (Network File System)

A type of protocol that is set for Shared folder. This protocol is used for UNIX-type operating systems, and allows file sharing among UNIX-type platforms.

# NFS allow hosts

Hosts that are allowed access with an NFS protocol to a Shared folder on a NAS.

# NFS no root squash hosts

Hosts that are allowed access with root privileges to a Shared folder on a NAS.

# **Oplocks**

An operating system's function for avoiding file conflicts. When a client accesses a file, this function allows the client to lock the file and cache the file data in the local disk, and prevents a file conflict in case another client tries to modify the file.

# Primary group

A NAS access group that contains files created by NAS access user. Each NAS access user must belong to a primary group.

# Reduced rate

A data reduced rate achieved by deduplication and compression. The reduced rate can be obtained from the following calculation formula:

Reduced Rate (%) =  $(1 - \text{the amount of data after deduplication and compression / the amount of data before deduplication and compression) x 100.$ 

# Secondary group

One or more NAS access group to which NAS access user belong. Each NAS access user can belong to any secondary groups as needed.

#### Secret access key

A component of the security authentication information (access key) required for accessing Amazon S3 and NIFCLOUD object storage. It is used as the password for accessing the cloud service.

# Shared folder

A folder created in a Datastore. This folder is available on the network and you can access it through the NAS interface of this product.

# Simple Mail Transfer Protocol (SMTP)

A protocol for sending E-mail.

# SMB (Server Message Block)

A type of protocol that is set for Shared folder. This protocol is used for Windows-type operating systems, and allows file sharing among Windows-type platforms.

# SMB allow hosts

Hosts that are allowed access with an SMB protocol to a Shared folder on a NAS.

# SMB deny hosts

Hosts that are not allowed access with an SMB protocol to a Shared folder on a NAS.

# SMTP port

The port number of the SMTP server.

## SMTP server

A server for sending E-mail.

# Virtual machine

A virtual computer created by virtualization software.