FUJITSU Software
Cloud Storage Gateway V1.3.0

Reference Guide

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, KVM, or Hyper-V)

- Public cloud services (Amazon Web Services or Microsoft Azure)

- 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.

Appendix A Incompatibility Information

Describes information about incompatibility with old products.

Glossary

Describes the terms used for this product.

Conventions

The abbreviations and style shown below are used in this manual.

- Abbreviations

Type	Formal Name	Abbreviation
Software products	FUJITSU Storage ETERNUS SF AdvancedCopy Manager	ETERNUS SF AdvancedCopy Manager or AdvancedCopy Manager

- 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.	**OK**

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

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Update History

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Modified the explanation of the message.	2.2 (csgdp01005)	

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 Prerequisite manual None.	R	R	R	R	R	
Reference Guide	Purpose To understand the detailed information about the available REST API specifications, the meanings and actions for the output messages, and the terms and their descriptions for the manuals of this product. Contents - Description of the REST API format and function - Message meaning and action plan - Terms and their description						R

Manual Title	Description	Purpose/Use					
		Concept	Assessment	POC and Installation	Training	Tuning and Migration	As Required
	Prerequisite manual None.						

R: indicates which manual to read for which purpose/use.

Contents

Chapter 1 CSG REST APIs

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

1.1 Overview

HTTPS communication must be configured to use the CSG REST API.
For information on configuring HTTPS communication, refer to "CSG Web GUI communication settings" in the "User's Guide".

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 Performs 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 "post /v1/auth/tokens" and "delete /v1/auth/tokens".

First Login

When you log in for the first time, create an initial user first. The initial user can be created not only when you log in to CSG Web GUI for the first time, but also with the CSG REST API.
For details about how to create an initial user, refer to "1.2.1 Initial User Creation".

📗 Point
. . . .
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 time of the token)

```
# curl -i -X GET \
  'https://192.0.2.10:9856/v1/auth/tokens/validate?token=c7133246-9f5c-4122-b9cf-7fcb72ade251'
```

- If you use the curl command as the REST client (Operation log download)

  If you request a file download, specify the name of the output file with "-o".

```
# curl -X GET \
    -o 'audit_log.zip' \
  'https://192.0.2.10:9856/v1/log/audit_logs/download?token=c7133246-9f5c-4122-
b9cf-7fcb72ade251'
```

When the HTTP Method Is POST or PUT

```
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 \
    -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.

Table 1.1 Specification Contents for Sending 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 - PUT: Changes the settings - 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".

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

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.

Table 1.2 List of Status Codes for CSG REST APIs

Code	Meaning	Description
200	OK	This code is returned when synchronous processing is requested and completed successfully.
202	Accepted	This code is returned when asynchronous processing is requested and accepted successfully. 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. Asynchronous processing may take time to be completed. In addition, asynchronous processing may take time to be completed when many requests are waiting to be processed. For the requests that are being processed and waiting to be processed, you can check the status of each request in the operation log.
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 Performs 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. If the message occurs even if the operation is re-executed, reboot this product and try again. If the problem persists, collect the information required for troubleshooting and contact our customer support department.

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".
However, the "Content-Type" for collecting troubleshooting data, downloading audit logs, and downloading performance data is "application/zip".

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.
However, for troubleshooting data collections, audit log downloads, and performance data downloads, the binary data is returned in the zip file format.

The following shows response examples.

When Processing Is Completed or Accepted Successfully

- When a single object is returned

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

- When an object array is returned

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

- 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.

- When an error message is returned during token acquisition

```
{
"msg_id":st10310001,
"error":"st10310001: The specified user is already logged in."
"detail": { "user": "username",
            "role": "Administrator",
            "client_info": "1.1.1.1",
            "login_date": "YYYY-MM-DDThh:mm:ss",
            "last_ope_date": "YYYY-MM-DDThh:mm:ss"
          }
}
```

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.

For confirmation of the operation logs, refer to "1.2.17 Operation Log".

P Point
. . . .
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
>	\u003e
\	\\

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

The following is a list of the CSG REST APIs: Refer to each section for more information.

Table 1.3 List of CSG REST APIs

CSG REST API	Overview
1.2.1 Initial User Creation	Creates an initial user.

CSG REST API	Overview
1.2.2 Authentication Token	Performs operations related to logins and logouts.
1.2.3 Local Authentication User	Performs operations related to local authentication users.
1.2.4 Login Session	Displays a list of login users or details of a login session. You cannot login or logout with this operation.
1.2.5 License	Performs operations related to licenses.
1.2.6 Network	Performs operations related to the network.
1.2.7 Mail Server	Performs operations related to the mail server used for the E-mail notification feature.
1.2.8 Mail Notification	Performs operations related to the E-mail addresses used for the E-mail notification feature.
1.2.9 NAS Access Group	Performs operations related to the group definition when local authentication is used for shared folders.
1.2.10 NAS Access User	Performs operations related to the user definition when local authentication is used for shared folders.
1.2.11 NAS Authentication Server	Performs operations related to the authentication server definitions when external authentication is used for shared folders.
1.2.12 Cloud Provider	Performs operations related to cloud providers.
1.2.13 Datastore	Performs operations related to datastores.
1.2.14 Shared Folder	Performs operations related to shared folders.
1.2.15 Performance	Performs operations related to the performance data of datastores.
1.2.16 Request	Displays information related to the running operations.
1.2.17 Operation Log	Displays or downloads the operation logs.
1.2.18 Event Log	Displays or downloads the event logs.
1.2.19 Troubleshooting Data Download	Downloads troubleshooting data.
1.2.20 Meta Data Recovery	Performs operations related to the meta data recovery of datastores.
1.2.21 Shared Folder List (on Recovery)	Displays the names of the shared folders set in a datastore.

1.2.1 Initial User Creation

1.2.1.1 POST /v1/auth/users/initial

Function

Initial user creation

Processing Overview

Creates an initial local authentication user. The role is always set to Administrator.
This function cannot be used if a local authentication user has already been registered.

Parameters

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
name	Specify a user name. - Valid characters: alphanumeric characters - Valid symbols: ! - _ . - Number of characters: 1 to 64	Required	string	query

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
	Space is not available.			

password	Specify a password.
	
	  - Valid characters: alphanumeric characters
	
	  - Valid symbols: ! " # $ & ' ( ) * + , - . / @ [\ ] ^ _ ` {
		} ~ : ; < = > ?
		
		  - Number of characters: 8 to 64
		
		Space is not available.
		They are case sensitive.
		You must use more three or more from A - Z (uppercase), a - z (lowercase), 0 - 9 (number), and a symbol.
			Required	string	query

mail_address	Specify an E-mail address. - Maximum number of characters: 63 Space is not available.	Optional	string	query
description	Enter a user description. - Maximum number of characters: 256 [Example] First User	Optional	string	query

Status Codes

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

  - 200

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

  - The name of the key that stores data: user

  - This REST API returns a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
200	id	User ID	integer	
	session_id	Session ID	integer	
	name	User name	string	
	role	User role	enum	Administrator: All operations are allowed.
	mail_address	E-mail address	string	
	password_changed_at	Last password change time	timestamp	
	description	User description	string	

1.2.2 Authentication Token

1.2.2.1 GET /v1/auth/tokens/validate

Function

Validity check of an authentication token

Processing Overview

This REST API validates the specified token.
If the specified token is invalid, this REST API returns the status code 401 Unauthorized.

Parameter

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

It is displayed as a JSON-formatted response.

- The name of the key that stores data: token

- This REST API returns a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
200	token	Authentication token	string	
	session_id	Session ID	integer	
	user_name	User name	string	
	user_role	User role	string	
	expires_at	Expiration time of the token	timestamp	
	issued_at	Generation time of the token	timestamp	

1.2.2.2 POST /v1/auth/tokens

Function

Login and authentication token acquisition

Processing Overview

Logs in and acquires an authentication token.

- Specify the issued token for the "token" parameter of each CSG REST API.

- The user who can log in is a local authentication user.

- Up to 100 sessions can exist simultaneously.

- If the same user has already been logged in, this REST API returns an error (status code: 401). For details, refer to "If an Error Has Occurred" of "Response Body" in "1.1.2.2 Response".

Parameters

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
user_name	Specify a user name. Valid characters: alphanumeric characters - Valid symbols: @ ! - _ . - Number of characters: 1 to 512 Space is not available. The user name is case sensitive.	Required	string	query
password	Specify a password. - Valid characters: alphanumeric characters and symbols - Number of characters: 8 to 64 Space is not available. The password is case sensitive.	Required	string	query
force	Specify whether or not to performs a forced login. You can specify one of the following values: - true: Log in again as the user who has already logged in. - false: Do not performs a forced login. The default value is "false".	Optional	boolean	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

It is displayed as a JSON-formatted response.

- The name of the key that stores data: token

- This REST API returns a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
200	token	Authentication token	string	
	session_id	Session ID	integer	
	user_name	User name	string	
	user_role	User role	string	
	expires_at	Expiration time of the token	timestamp	
	issued_at	Generation time of the token	timestamp	

1.2.2.3 DELETE /v1/auth/tokens

Function

Logout and discard of the authentication token

Processing Overview

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

🔶 Note

. . . .

When you end the operation with CSG REST APIs, use this REST 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

It is displayed as a JSON-formatted response.

- The name of the key that stores data: token

- This REST API returns a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
200	token	Authentication token	string	
	session_id	Session ID	integer	
	user_name	User name	string	
	user_role	User role	string	
	expires_at	Expiration time of the token	timestamp	
	issued_at	Generation time of the token	timestamp	

1.2.3 Local Authentication User

1.2.3.1 GET /v1/auth/users

Function

Displays a list of users

Processing Overview

Displays a list of local authentication users that have been created.

If the executing user has the Monitor role, only the information for that user is displayed.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
filter_cols	Specify the filtered column name. It is possible to specify multiple columns by delimiting them with ",". [Example] id,role	Optional	string	query
filter_vals	Specify the filter criteria in the specified order for the column names specified in the "filter_cols" parameter. Filter conditions. Where there are numerical values, this can be specified within a range using "~". [Example] 1~*,Administrator	Optional	string	query
sort_cols	Specify column name to sort. [Example] id,role	Optional	string	query
sort_vals	For the column name specified in the "sort_cols" parameter, specify the sort criteria in the order specified. - Ascending: asc - Descending: desc [Example] asc,asc,desc	Optional	string	query
show_cols	Specify column name to display. [Example] id,role	Optional	string	query
hide_cols	Specify column name to hide. [Example] id,role	Optional	string	query
limit	Specify the numbers of lines to display.	Optional	integer	query
offset	Specify the position from where to start displaying the items.	Optional	integer	query

Status Codes

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

- 200

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: users

- This REST API returns an object array.

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

Code	Key	Description	Display	Data Type	Enumeration Constant
200	id	User ID	Yes	integer	
	session_id	Session ID	No	integer	
	name	User name	Yes	string	
	role	User role	Yes	enum	Administrator: All operations are allowed. Monitor: Only browse operations are allowed.
	mail_address	E-mail address	No	string	
	password_changed_at	Last password change time	No	timestamp	
	description	User description	No	string	

1.2.3.2 GET /v1/auth/users/{id}

Function

Displays the details of a user

Processing Overview

Displays details on a user.

If the executing user has "Monitor" role, only information on the executing user is displayed.

Parameter

Parameter Name	Description	Required/Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
id	Specify the resource identifier. Only one specification is possible	Required	integer	path

Status Codes

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

- 200

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: user

- This REST API returns a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
200	id	User ID	integer	
	session_id	Session ID	integer	

Code	Key	Description	Data Type	Enumeration Constant
	name	User name	string	
	role	User role	enum	Administrator: All operations are allowed. Monitor: Only browse operations are allowed.
	mail_address	E-mail address	string	
	password_changed_at	Last password change time	timestamp	
	description	User description	string	

1.2.3.3 POST /v1/auth/users

Function

Creates a user

Processing Overview

Creates a local authentication user.

The limit for the number of local authentication users is 100.

If the executing user has the Monitor role, this REST API cannot be executed.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
name	Specify a user name. - Valid characters: alphanumeric characters - Valid symbols: ! - _ . - Number of characters: 1 to 64 Space is not available.	Required	string	query
password	Specify a password. - Valid characters: alphanumeric characters - Valid symbols: ! " # $ & ' ( ) * + , - . / @ [\ ] ^ _ ` { | } ~ : ; < = > ? - Number of characters: 8 to 64 Space is not available. They are case sensitive. You must use more three or more from A - Z (uppercase), a - z (lowercase), 0 - 9 (number), and a symbol.	Required	string	query
role	Specify the role of the user. - Select: [Administrator | Monitor]	Required	enum	query
mail_address	Specify an E-mail address. - Maximum number of characters: 63 Space is not available.	Optional	string	query

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
description	Enter a user description. - Maximum number of characters: 256 [Example] First User	Optional	string	query

Status Codes

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

- 200

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: user

- This REST API returns a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
200	id	User ID	integer	
	session_id	Session ID	integer	
	name	User name	string	
	role	User role	enum	Administrator: All operations are allowed. Monitor: Only browse operations are allowed.
	mail_address	E-mail address	string	
	password_changed_at	Last password change time	timestamp	
	description	User description	string	

1.2.3.4 PUT /v1/auth/users/{id}

Function

Changes the user settings

Processing Overview

Changes the registration information for local authentication users.

Only the items specified in the parameters are changed.

When no parameters to change are specified, nothing is changed and 200 OK is returned.

If the executing user has "Monitor" role, it is possible to change your own password, E-mail address and description.

The user carrying out the operation or the final internal authentication user with "Administrator" role cannot disable the account.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
id	Specify the user ID.	Required	integer	path
password	Specify the user password. - Valid characters: alphanumeric characters - Valid symbols: ! " # $ & ' ( ) * + , - . / @ [\ ] ^ _ ` { | } ~ : ; < = > ? - Number of characters: 8 to 64 Space is not available. They are case sensitive. You must use more three or more from A - Z (uppercase), a - z (lowercase), 0 - 9 (number), and a symbol.	Optional	string	query
role	Specify the role of the user. - Select: [Administrator | Monitor]	Optional	enum	query
mail_address	Specify an E-mail address. - Maximum number of characters: 63 Space is not available. Specify an empty string ("") to delete the settings.	Optional	string	query
description	Enter a user description. - Maximum number of characters: 256 Specify an empty string ("") to delete the settings. [Example] First User	Optional	string	query

Status Codes

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

- 200

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: user

- Returns the value specified as a parameter among the following values as a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
200	id	User ID	string	
	role	User role	enum	Administrator: All operations are allowed. Monitor: Only browse operations are allowed.
	mail_address	E-mail address	string	

Code	Key	Description	Data Type	Enumeration Constant
	description	User description	string	

1.2.3.5 DELETE /v1/auth/users

Function

Deletes a user

Processing Overview

Deletes local authentication users.

When multiple user IDs are specified, deletion processing is carried out only for users with existing ID.

When deletion of all specified users is successful, this returns 200 OK.

When users that cannot be deleted are included, 409 Conflict is returned.

When none of the specified user IDs exists, 404 Not Found is returned.

Users operating this REST API cannot delete themselves.

If the executing user has "Monitor" role, this REST API cannot be executed.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
ids	Specify IDs of users to delete. You can specify multiple items delimited by "," (comma). [Example] 1,2,3	Required	string	query
force	Specify whether to delete logged-in users. - Select: [true | false] If you specify "true", the users will be deleted even if they are logged in. If you specify "false", it will not be deleted. The default value is "false". [Example] true	Optional	string	query

Status Codes

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

- 200

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: user

- Returns the value specified as a parameter among the following values as a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
200	ids	Deleted user IDs (if there are multiple IDs, they are displayed as comma-delimited string)	string	
	force	The value specified in "force" parameter	string	

1.2.4 Login Session

1.2.4.1 GET /v1/auth/sessions

Function

Displays a list of login sessions

Processing Overview

The lists of the currently logged-in internal authentication users are displayed.

If the executing user has the Monitor role, only the session information for that user is displayed.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
filter_cols	Specify the filtered column name. It is possible to specify multiple columns by delimiting them with ",". [Example] id,user_role	Optional	string	query
filter_vals	Specify the filter criteria in the specified order for the column names specified in the "filter_cols" parameter. Filter conditions. Where there are numerical values, this can be specified within a range using "~". [Example] 1~*,Administrator	Optional	string	query
sort_cols	Specify column name to sort. [Example] id,user_role	Optional	string	query
sort_vals	For the column name specified in the "sort_cols" parameter, specify the sort criteria in the order specified. - Ascending: asc - Descending: desc [Example] asc,asc,desc	Optional	string	query
show_cols	Specify column name to display. [Example] id,user_role	Optional	string	query
hide_cols	Specify column name to hide. [Example] id,user_role	Optional	string	query

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
limit	Specify the numbers of lines to display.	Optional	integer	query
offset	Specify the position from where to start displaying the items.	Optional	integer	query

Status Codes

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

- 200

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: sessions

- This REST API returns an object array.

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

Code	Key	Description	Display	Data Type	Enumeration Constant
200	id	Session ID	Yes	integer	
	user_name	User name	Yes	string	
	user_role	User role	Yes	enum	Administrator: All operations are allowed. Monitor: Only browse operations are allowed.
	auth_server_ip_address	IP address of the authentication server that performed the authentication	No	cidr	
	connect_ip_address	Connection source IP address	No	cidr	
	final_logged_in_at	Final login time	No	timestamp	
	final_operated_at	Final operation time	No	timestamp	

1.2.4.2 GET /v1/auth/sessions/{id}

Function

Displays the details of a login session

Processing Overview

Displays details of the currently logged in internal authentication users.

If the executing user has "Monitor" role, only session information for the executing user can be displayed.

Parameter

Parameter Name	Description	Required/Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query

Parameter Name	Description	Required/Optional	Data Type	Parameter Type
id	Specify the identifier for the resource. Only one can be specified.	Required	integer	path

Status Codes

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

- 200

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: session

- This REST API returns a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
200	id	Session ID	integer	
	user_name	User name	string	
	user_role	User role	enum	Administrator: All operations are allowed. Monitor: Only browse operations are allowed.
	auth_server_ip_address	IP address of authentication Server performing authentication	cidr	
	connect_ip_address	Connection source IP address	cidr	
	final_logged_in_at	Final login time	timestamp	
	final_operated_at	Final operation time	timestamp	

1.2.4.3 DELETE /v1/auth/sessions

Function

Forced logout

Processing Overview

Forces users to logout.

When multiple session IDs are specified, a forced logout process is performed only for users with existing session IDs.

When all the specified forced logouts of sessions are successful, 200 OK is returned.

If sessions that cannot be forcibly logged out are included, 409 Conflict is returned.

When none of the specified session IDs exist, 404 Not Found is returned.

If the executing user has "Monitor" role, this REST API cannot be executed.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
ids	Specify user session IDs to logout forcibly. You can specify multiple items delimited by "," (comma). [Example] 1,2,3	Required	string	query

Status Codes

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

- 200

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: session

- This REST API returns a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
200	ids	Session IDs of the users who were forcibly logged out (if there are multiple IDs, they are displayed as comma-delimited string)	string	

1.2.5 License

1.2.5.1 GET /v1/licenses

Function

Displays a list of licenses

Processing Overview

Lists the licenses that are registered with the system.

If the total capacity of the license is greater than or equal to 500 TB, "total_license_capacity" will output 500 TB, which is the maximum allowable capacity of the registered license.

"total_license_capacity_real" outputs the total capacity in which the invalid capacity was included.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
filter_cols	Specify the filtered column name. It is possible to specify multiple columns by delimiting them with ",". [Example] id,license_type	Optional	string	query

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
filter_vals	Specify the filter criteria in the specified order for the column names specified in the "filter_cols" parameter. Filter conditions. Where there are numerical values, this can be specified within a range using "~". [Example] 1~*,REGULAR	Optional	string	query
sort_cols	Specify column name to sort. [Example] id,license_type	Optional	string	query
sort_vals	For the column name specified in the "sort_cols" parameter, specify the sort criteria in the order specified. - Ascending: asc - Descending: desc [Example] asc,asc,desc	Optional	string	query
show_cols	Specify column name to display. [Example] id,license_type	Optional	string	query
hide_cols	Specify column name to hide. [Example] id,license_type	Optional	string	query
limit	Specify the numbers of lines to display.	Optional	integer	query
offset	Specify the position from where to start displaying the items.	Optional	integer	query

Status Codes

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

- 200

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- This REST API returns a single object.

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

Code	Key	Description	Display	Data Type	Enumeration Constant
200	total_license_capacity	Total capacity (TB) of registered licenses valid for this product (TB)	Yes	integer	
	total_license_capacity_real	Actual total capacity of registered licenses (TB)	Yes	integer	
	licenses	Individual license Information	Yes	Object array	

The object array of the licenses is as follows:

- The name of the key that stores data: license

Key	Description	Display	Data Type	Enumeration Constant
id	License registration	Yes	integer	
license_type	License types - Regular license - Trial license	Yes	enum	REGULAR: Regular license TRIAL: Trial license
name	License name	Yes	string	
capacity	License capacity (TB)	Yes	integer	
registration_date	License registration date (YYYY-MM-DDThh:mm:ss +hh:mm)	Yes	timestamp	
expiration_date	License expiration date (for trial only) (YYYY-MM-DDThh:mm:ss +hh:mm)	Yes	timestamp	
license_validity	License validity - true: valid - false: invalid	Yes	boolean	

1.2.5.2 POST /v1/licenses

Function

Registers licenses

Processing Overview

Registers a license in the system.
If the total capacity of the license before issuing this REST API is 500 TB or higher, you will not be able to create a new license. If the total capacity of the license becomes more than 500 TB after issuing this REST API, 500 TB is treated as the valid license capacity, and capacity over 500 TB is invalid.

If the executing user has "Monitor" role, this REST API cannot be executed.

Parameter

Parameter Name	Description	Required/Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
license_key	License key (0-9A-F 32 characters). [Example] 00112233445566778899AABBCCDDEEFF	Required	string	query

Status Codes

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

- 200

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: license

- This REST API returns a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
200	id	License registration	integer	
	license_type	License types - Regular license - Trial license	enum	REGULAR: Regular license TRIAL: Trial license
	name	License name	string	
	capacity	License capacity (TB)	integer	
	registration_date	License registration date (YYYY-MM-DDThh:mm:ss+hh:mm)	timestamp	
	expiration_date	License expiration date (for trial only) (YYYY-MM-DDThh:mm:ss+hh:mm)	timestamp	
	license_validity	License validity - true: valid - false: invalid	boolean	

1.2.6 Network

1.2.6.1 GET /v1/networks

Function

Displays a list of network interfaces

Processing Overview

Displays a list of network interfaces recognized by the operating system.

The network ID of the first network is always 0.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
filter_cols	Specify the filtered column name. It is possible to specify multiple columns by delimiting them with ",". [Example] id,dhcp	Optional	string	query
filter_vals	Specify the filter criteria in the specified order for the column names specified in the "filter_cols" parameter. Filter conditions. Where there are numerical values, this can be specified within a range using "~".	Optional	string	query

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
	[Example] 1~*,Disable			
sort_cols	Specify column name to sort. [Example] id,dhcp	Optional	string	query
sort_vals	For the column name specified in the "sort_cols" parameter, specify the sort criteria in the order specified. - Ascending: asc - Descending: desc [Example] asc,asc,desc	Optional	string	query
show_cols	Specify column name to display. [Example] id,dhcp	Optional	string	query
hide_cols	Specify column name to hide. [Example] id,dhcp	Optional	string	query
limit	Specify the numbers of lines to display.	Optional	integer	query
offset	Specify the position from where to start displaying the items.	Optional	integer	query

Status Codes

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

 - 200

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It isdisplayed as a JSON-formatted response.

 - The name of the key that stores data: networks

 - This REST API returns a single object.

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

Code	Key	Description	Display	Data Type	Enumeration Constant
200	configured	Status of network interface settings - true: configured - false: not set	Yes	boolean	
	id	Network ID	Yes	integer	
	network_name	Network name	Yes	string	
	mac_address	MAC address	Yes	string	

Code	Key	Description	Display	Data Type	Enumeration Constant
	dhcp	Enable/Disable DHCP	Yes	enum	Enable: DHCP enabled is set. Disable: DHCP disabled is set.
	ip_address	IP address	Yes	string	
	subnet_mask	Subnet mask	Yes	string	
	gateway_address	Gateway	Yes	string	

Example

```
# curl -X GET \
   -d 'token=c7133246-9f5c-4122-b9cf-7fcb72ade251' \
 'https://192.0.2.10:9856/v1/networks'
```

1.2.6.2 POST /v1/networks

Function

Registers a network

Processing Overview

Registers the second and subsequent networks.

You cannot register the first network.

If the executing user has "Monitor" role, this REST API cannot be executed.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
network_name	Specify the network name. If omitted, the name "NET#nn" will be set. 'nn' contains two digits starting with 01. You cannot specify a network name that already exists. - Valid characters: alphanumeric characters - Valid symbols: ! @ # $ % ^ & * ( ) _ + - = [ ] { } | ' - Number of characters: 1 to 32 [Example] NET#01	Optional	string	query
mac_address	Specify the MAC address. - Valid characters: alphanumeric characters - Valid symbols: : - Number of characters: 17 [Example] a1:b2:c3:d4:e5:f6	Required	string	query

Parameter Name	Description	Required/Optional	Data Type	Parameter Type
dhcp	Set DHCP to enabled or disabled. - Enable: Enabling DHCP - Disable: Disable DHCP The default value is "Disable".	Optional	enum	query
ip_address	Specify the IP address. The IP address must be specified if DHCP is disabled. [Example] 192.168.1.10	Optional	string	query
subnet_mask	Specify the subnet mask. The subnet mask must be specified if DHCP is disabled. [Example] 255.255.255.0	Optional	string	query
gateway_address	Specify the IP address of the gateway. The gateway can be specified if DHCP is disabled. [Example] 192.168.1.1	Optional	string	query

Status Codes

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

- 202

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: network

- This REST API returns a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
202	request_id	Request ID	integer	
	id	Network ID	string	
	network_name	Network name	string	
	dhcp	Enable/Disable DHCP settings	enum	Enable: DHCP enabled is set. Disable: DHCP disabled is set.
	ip_address	IP Address	string	
	subnet_mask	Subnet mask	string	
	gateway_address	Gateway	string	

Example

- If you register a network by enabling DHCP

```
# curl -X POST \
   -d 'token=c7133246-9f5c-4122-b9cf-7fcb72ade251' \
   -d 'network_name=NET#01' \
   -d 'mac_address=a1:b2:c3:d4:e5:f6' \
   -d 'dhcp=Enable' \
 'https://192.0.2.10:9856/v1/networks'
```

- If you register a network by disabling DHCP

```
# curl -X POST \
   -d 'token=c7133246-9f5c-4122-b9cf-7fcb72ade251' \
   -d 'network_name=NET#01' \
   -d 'mac_address=a1:b2:c3:d4:e5:f6' \
   -d 'ip_address=192.168.1.10' \
   -d 'subnet_mask=255.255.255.0' \
   -d 'gateway_address=192.168.1.1' \
 'https://192.0.2.10:9856/v1/networks'
```

1.2.6.3 PUT /v1/networks/{id}

Function

Changes the network settings

Processing Overview

Changes the network.

For the first network, only the network name can be changed.

You cannot change the MAC address.

If the executing user has "Monitor" role, this REST API cannot be executed.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
id	Specify the network ID.	Required	integer	path
network_name	Specify the network name. You cannot specify a network name that already exists. - Valid characters: alphanumeric characters - Valid symbols: ! @ # $ % ^ & * ( ) _ + - = [ ] { } | ' - Number of characters: 1 to 32 [Example] NET#01	Optional	string	query
dhcp	Set DHCP to enabled or disabled. - Enable: Enabling DHCP - Disable: Disable DHCP	Optional	enum	query
ip_address	Specify the IP address. The IP address must be specified if DHCP is disabled.	Optional	string	query

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
	[Example] 192.168.1.10			
subnet_mask	Specify the subnet mask. The subnet mask must be specified if DHCP is disabled. [Example] 255.255.255.0	Optional	string	query
gateway_address	Specify the IP address of the gateway. The gateway can be specified if DHCP is disabled. [Example] 192.168.1.1	Optional	string	query

Status Codes

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

- 202

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: network

- Returns the value specified as a parameter among the following values as a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
202	request_id	Request ID	integer	
	id	Network ID	string	
	network_name	Network name	string	
	dhcp	Enable/Disable DHCP settings	enum	Enable: DHCP enabled is set. Disable: DHCP disabled is set.
	ip_address	IP address	string	
	subnet_mask	Subnet mask	string	
	gateway_address	Gateway	string	

Example

If you change the name of the network whose ID is 1 to "Network#01"

```
# curl -X PUT \
   -d 'token=c7133246-9f5c-4122-b9cf-7fcb72ade251' \
   -d 'network_name=Network#01' \
 'https://192.0.2.10:9856/v1/networks/1'
```

1.2.6.4 DELETE /v1/networks

Function

Deletes a network

Processing Overview

Deletes a network.

The network used to communicate with a cloud provider cannot be deleted. To forcibly delete it, set "true" to "force".

However, the first network cannot be deleted even if "true" is set to "force".

If the executing user has "Monitor" role, this REST API cannot be executed.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
ids	Specify the IDs of networks to delete. You can specify multiple items delimited by "," (comma). [Example] 1,2	Required	string	query
force	Specify whether to forcibly delete a network. - Select: [true | false] If "true" is specified, the specified network is deleted even if it is assigned to a cloud provider. If "false" is specified, the specified network is not deleted if it is assigned to a cloud provider. If omitted, "false" is consider to be specified. [Example] true	Optional	string	query

Status Codes

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

 - 202

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

  - The name of the key that stores data: network

  - This REST API returns a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
202	request_id	Request ID	integer	
	ids	Deleted network IDs (numbers)	string	

Example

If you delete the network whose ID is 1

```
# curl -X DELETE \
   -d 'token=c7133246-9f5c-4122-b9cf-7fcb72ade251' \
   -d 'ids=1' \
 'https://192.0.2.10:9856/v1/networks'
```

1.2.7 Mail Server

1.2.7.1 GET /v1/mail/server

Function

Displays the mail server settings

Processing Overview

Displays configuration information for the mail server.

Parameter

Parameter Name	Description	Required/Optional	Data Type	Parameter Type
token	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 more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

  - The name of the key that stores data: mail_server

  - This REST API returns a single object.

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

Code	Key	Description	Display	Data Type	Enumeration Constant
200	port	SMTP server port number	Yes	integer	
	server_address	SMTP server address	Yes	string	
	auth_method	Authentication method for connecting to an SMTP server	Yes	enum	none: Connect to the SMTP server without using authentication. cram-md5: Connect to an SMTP server using AUTH SMTP authentication and use CRAM-MD5 for authentication methods. plain: Connect to the SMTP server using AUTH SMTP authentication and

Code	Key	Description	Display	Data Type	Enumeration Constant
					use plain for the authentication method. Login: Use auth SMTP authentication to connect to the SMTP server and use login for authentication methods.
	user_name	User account name to connect to the SMTP server	Yes	string	
	from_address	The content of the sender field of the E-mail sent from the system	Yes	string	

1.2.7.2 PUT /v1/mail/server

Function

Changes the mail server settings

Processing Overview

Sets up your mail server.

To set a new mail server, the following parameters must be specified: "token", "server_address", "from_address", and "auth_method".

To delete the mail server setting, only specify the following parameters: "token", "server_address", and "from_address". In this case, empty strings ("") must be specified to the "server_address" and "from_address" parameters.

If the executing user has "Monitor" role, this REST API cannot be executed.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
port	Specify the port number of the SMTP server. If this parameter is omitted when a new mail server is set, the default value of 25 will be used. - Range: 1 to 65,535 - Initial value: 25 [Example] 586	Optional	integer	query
server_address	Specify the address of the SMTP server. The SMTP server address can be up to 64 characters in IPv4 or FQDN format. - Maximum number of characters: 64 [Example] smtp.example.com	Optional	string	query
auth_method	Specify the authentication method for connecting to the SMTP server. - Select: [none | cram-md5 | plain | login] [Example] none	Optional	enum	query
user_name	Specify the user account name to connect to the SMTP server. - Number of characters: 1 to 255	Optional	string	query

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
	If a parameter other than "none" is set for the authentication method, this parameter must be specified. [Example] user01			
user_pass	Specify the password for the user account to connect to the SMTP server. - Number of characters: 1 to 64 If a parameter other than "none" is set for the authentication method, this parameter must be specified. [Example] password	Optional	string	query
from_address	Specify the content of the sender field of the E-mail sent from the system. - Number of characters: 1 to 63 [Example] admin@example.com	Optional	string	query

Status Codes

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

- 200

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: mail_server

- Returns the value specified as a parameter among the following values as a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
200	port	SMTP server port number	string	
	server_address	SMTP server address	string	
	auth_method	Authentication method for connecting to an SMTP server	enum	none: Connect to the SMTP server without using authentication. cram-md5: Connect to an SMTP server using AUTH SMTP authentication and use CRAM-MD5 for authentication methods. plain: Connect to the SMTP server using AUTH SMTP authentication and use plain for the authentication method.

Code	Key	Description	Data Type	Enumeration Constant
				login: Connect to the SMTP server using AUTH SMTP authentication and use login for authentication methods.
	user_name	User account name to connect to the SMTP server	string	
	from_address	The content of the sender field of the E-mail sent from the system	string	

1.2.8 Mail Notification

1.2.8.1 GET /v1/mail/address

Function

Displays the E-mail address settings

Processing Overview

Displays E-mail address configuration information.

Parameter

Parameter Name	Description	Required/Optional	Data Type	Parameter Type
token	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 more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: mail_address

- This REST API returns a single object.

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

Code	Key	Description	Display	Data Type	Enumeration Constant
200	to_address_1	E-mail address of the notification destination 1	Yes	string	
	to_address_2	E-mail address of the notification destination 2	Yes	string	
	to_address_3	E-mail address of the notification destination 3	Yes	string	

1.2.8.2 PUT /v1/mail/address

Function

Sets the E-mail address

Processing Overview

Sets the E-mail address.

If the executing user has "Monitor" role, this REST API cannot be executed.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
to_address_1	Specify the E-mail address of the notification destination 1. - Maximum number of characters: 63 Specify an empty string ("") to delete the settings. [Example] user01@example.com	Optional	string	query
to_address_2	Specify the E-mail address of the notification destination 2. - Maximum number of characters: 63 Specify an empty string ("") to delete the settings. [Example] user02@example.com	Optional	string	query
to_address_3	Specify the E-mail address of the notification destination 3. - Maximum number of characters: 63 Specify an empty string ("") to delete the settings. [Example] user03@example.com	Optional	string	query

Status Codes

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

  - 200

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

  - The name of the key that stores data: mail_address

  - Returns the value specified as a parameter among the following values as a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
200	to_address_1	E-mail address of the notification destination 1	string	
	to_address_2	E-mail address of the notification destination 2	string	
	to_address_3	E-mail address of the notification destination 3	string	

1.2.8.3 POST /v1/mail/address/test

Function

Sends a test E-mail

Processing Overview

Sends test mail.

If the executing user has "Monitor" role, this REST API cannot be executed.

Parameter

Parameter Name	Description	Required/Optional	Data Type	Parameter Type
token	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 more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: mail_address

- This REST API returns a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
200	to_address_1	E-mail address of the notification destination 1	string	
	to_address_2	E-mail address of the notification destination 2	string	
	to_address_3	E-mail address of the notification destination 3	string	

1.2.9 NAS Access Group

1.2.9.1 GET /v1/nas_access/groups

Function

Displays a list of NAS access groups

Processing Overview

Displays a list of group definitions when using local authentication for shared folders.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
filter_cols	Specify the filtered column name. It is possible to specify multiple columns by delimiting them with ",".	Optional	string	query

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
	[Example] id,used_by_shared_folders,users_belonging_to			
filter_vals	Specify the filter criteria in the specified order for the column names specified in the "filter_cols" parameter. Filter conditions. Where there are numerical values, this can be specified within a range using "~". [Example] 500~*,false,username	Optional	string	query
sort_cols	Specify column name to sort. [Example] id,used_by_shared_folders,users_belonging_to	Optional	string	query
sort_vals	For the column name specified in the "sort_cols" parameter, specify the sort criteria in the order specified. - Ascending: asc - Descending: desc [Example] asc,asc,desc	Optional	string	query
show_cols	Specify column name to display. [Example] id,used_by_shared_folders,users_belonging_to	Optional	string	query
hide_cols	Specify column name to hide. [Example] id,used_by_shared_folders,users_belonging_to	Optional	string	query
limit	Specify the numbers of lines to display.	Optional	integer	query
offset	Specify the position from where to start displaying the items.	Optional	integer	query

Status Codes

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

- 200

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: groups

- This REST API returns an object array.

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

Code	Key	Description	Display	Data Type	Enumeration Constant
200	name	Name	Yes	string	
	id	Group ID	Yes	integer	
	used_by_shared_folders	Whether this group is being used by one of the shared folders.	Yes	string	

Code	Key	Description	Display	Data Type	Enumeration Constant
		"true": This group is being used by one of the shared folders. "false": This group is not in use by any of the shared folder.			
	users_belonging_to	The names of the users in the group (if multiple names exist, they are displayed as a comma-delimited string).	Yes	string	

1.2.9.2 POST /v1/nas_access/groups

Function

Creates a NAS access group

Processing Overview

Creates a NAS access group.

Enter the name of the group and the group ID.

The name of the group must be unique in the system. It is also case-insensitive.

The group ID is optional, and the default is automatically numbered in ascending order.

If the executing user has "Monitor" role, this REST API cannot be executed.

Parameter

Parameter Name	Description	Required/Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
name	Specify the group name. - Valid characters: alphanumeric characters - Valid symbols: - _ $ - Maximum number of characters: 32 Space is not available. You cannot specify reserved words for the group name. For information about reserved words for the group name, refer to "NAS Access Group settings" in the "User's Guide".	Required	string	query
id	Specify the group ID. - Range: 500 to 999 If omitted, an unused number between 500 and 999 is assigned automatically.	Optional	integer	query

Status Codes

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

- 200

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: group

- This REST API returns a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
200	name	Name	string	
	id	Group ID	integer	
	used_by_shared_folders	Whether this group is being used by one of the shared folders. - "true": Used - "false": Unused	string	
	users_belonging_to	The names of the users in the group (if there are multiple names, they are displayed as comma-delimited string).	string	

1.2.9.3 DELETE /v1/nas_access/groups

Function

Deletes NAS access groups

Processing Overview

Deletes a NAS access group.

You cannot delete groups that users belong to, or groups that are set to shared folders.

If you want to delete such a group, delete the user or the shared folder first.

If the executing user has "Monitor" role, this REST API cannot be executed.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
ids	Specify the IDs (numbers) of groups to delete. You can specify multiple items delimited by "," (comma). [Example] 1,2,3,4,5	Required	string	query

Status Codes

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

- 200

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: group

- This REST API returns a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
200	ids	Deleted group IDs (if there are multiple IDs, they are displayed as comma-delimited string)	string	

1.2.10 NAS Access User

1.2.10.1 GET /v1/nas_access/users

Function

Displays a list of NAS access users

Processing Overview

Displays a list of user definitions when local authentication is used for shared folders.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
filter_cols	Specify the filtered column name. It is possible to specify multiple columns by delimiting them with ",". [Example] id,primary_group	Optional	string	query
filter_vals	Specify the filter criteria in the specified order for the column names specified in the "filter_cols" parameter. Filter conditions. Where there are numerical values, this can be specified within a range using "~". [Example] 500~*,group1	Optional	string	query
sort_cols	Specify column name to sort. [Example] i id,primary_group,secondary_groups	Optional	string	query
sort_vals	For the column name specified in the "sort_cols" parameter, specify the sort criteria in the order specified. - Ascending: asc - Descending: desc [Example] asc,asc,desc	Optional	string	query
show_cols	Specify column name to display. [Example] id,primary_group,secondary_groups	Optional	string	query
hide_cols	Specify column name to hide.	Optional	string	query

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
	[Example] id,primary_group,secondary_groups			
limit	Specify the numbers of lines to display.	Optional	integer	query
offset	Specify the position from where to start displaying the items.	Optional	integer	query

Status Codes

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

- 200

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: users

- This REST API returns an object array.

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

Code	Key	Description	Display	Data Type	Enumeration Constant
200	name	Name	Yes	string	
	id	User ID	Yes	integer	
	primary_group	The name of the group to which the user belongs	Yes	string	
	secondary_groups	The names of the groups to which the user belongs (if there are multiple names, they are displayed as comma-delimited string)	Yes	string	

1.2.10.2 POST /v1/nas_access/users

Function

Creates NAS access users

Processing Overview

Creates a NAS access user.

Select the user information and the groups to which you want to join.

The name of the user must be unique in the system. It is also case-insensitive.

The user ID is optional, and the default is automatically numbered in ascending order.

The primary group ID is optional, and the default is automatically specified in the primary group, "sharegroup$(451)".

The ID of the primary group cannot be "BUILTIN_Administrators(1002)", "BUILTIN_Users(1003)", or "BUILTIN_BackupOperators(1004)".

The ID of the secondary group cannot contain the ID of the primary group.

If the executing user has "Monitor" role, this REST API cannot be executed.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
name	Specify the user name. - Valid characters: alphanumeric characters - Valid symbols: - _ $ - Maximum number of characters: 32 Space is not available. You cannot specify reserved words for the user name. For information about reserved words for the user name, refer to "NAS Access User Settings" in the "User's Guide". [Example] username	Required	string	query
password	Specify the user password. - Valid characters: alphanumeric characters - Valid symbols: ! " # $ & ' ( ) * + , - . / @ [\ ] ^ _ ` { | } ~ : ; < = > ? - Number of characters: 8 to 32 Space is not available. They are case sensitive. You must use more than three characters from A - Z (uppercase), a - z (lowercase), 0 - 9 (number), and a symbol. [Example] Password123#	Required	string	query
id	Specify the user ID. - Range: 500 to 999 If omitted, an unused number between 500 and 999 is assigned automatically.	Optional	integer	query
primary_group_id	Specify the ID of the primary group to which the user belongs. If omitted, 451 is set. [Example] 500	Optional	integer	query
secondary_group_ids	Specify the IDs of the secondary groups to which the user belongs (a comma-delimited string if multiple is specified). Up to 16 IDs can be specified. [Example] 501,502,503	Optional	string	query

Status Codes

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

- 200

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: user

- This REST API returns a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
200	name	Name	string	
	id	User ID	integer	
	primary_group	The name of the group to which the user belongs	string	
	secondary_groups	The names of the groups to which the user belongs (if there are multiple names, they are displayed as comma-delimited string)	string	

1.2.10.3 PUT /v1/nas_access/users/{id}

Function

Changes the NAS access user settings

Processing Overview

Changes the user information. Specify only the parameters you want to change.

You cannot change the user name and ID.

The ID of the primary group cannot be "BUILTIN_Administrators(1002)", "BUILTIN_Users(1003)", or "BUILTIN_BackupOperators(1004)".

The ID of the secondary group cannot contain the ID of the primary group.

If the executing user has "Monitor" role, this REST API cannot be executed.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
id	Specify the user ID. - Range: 500 to 999	Required	integer	path
password	Specify the user password. - Valid characters: alphanumeric characters - Valid symbols: ! " # $ & ' ( ) * + , - . / @ [\ ] ^ _ ` { | } ~ : ; < = > ? - Number of characters: 8 to 32 Space is not available. They are case sensitive. You must use more than three characters from A - Z (uppercase), a - z (lowercase), 0 - 9 (number), and a symbol. [Example] Password123#	Optional	string	query
primary_group_id	Specify the ID of the primary group to which the user belongs. If an empty string ("") is specified, 451 is set.	Optional	integer	query

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
	[Example] 500			
secondary_group_ids	Specify the IDs of the secondary groups to which the user belongs (a comma-delimited string if multiple is specified). Up to 16 IDs can be specified. [Example] 501,502,503	Optional	string	query
delete_all_secondary_groups	If you want to unregister all secondary groups that the user belongs to, specify "true". If "false" is specified, this is updated to the secondary group specified in the "secondary_group_ids" parameter. - Select: [true | false] [Example] true	Optional	string	query

Status Codes

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

- 200

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: user

- Returns the value specified as a parameter among the following values as a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
200	id	User ID	string	
	primary_group_id	ID of the primary group that the user belongs to	string	
	secondary_group_ids	IDs of the secondary groups that the user belongs to (if there are multiple IDs, they are displayed as comma-delimited string)	string	
	delete_all_secondary_groups	"true" or "false" specified by the parameter	string	

1.2.10.4 DELETE /v1/nas_access/users

Function

Deletes NAS access users

Processing Overview

Deletes a NAS access user.

If the executing user has "Monitor" role, this REST API cannot be executed.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
ids	Specify IDs of NAS access users to delete. You can specify multiple items delimited by "," (comma). [Example] 501,502,503,504,505	Required	string	query

Status Codes

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

- 200

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: user

- This REST API returns a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
200	ids	Deleted user IDs (if there are multiple IDs, they are displayed as comma-delimited string)	string	

1.2.11 NAS Authentication Server

1.2.11.1 GET /v1/auth/servers

Function

Displays a list of authentication servers

Processing Overview

Displays a list of authentication servers.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
filter_cols	Specify the filtered column name. It is possible to specify multiple columns by delimiting them with ",". [Example] id,name,capacity_total	Optional	string	query

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
filter_vals	Specify the filter criteria in the specified order for the column names specified in the "filter_cols" parameter. Filter conditions. Where there are numerical values, this can be specified within a range using "~". [Example] 0,name,1024~*	Optional	string	query
sort_cols	Specify column name to sort. [Example] id,name,capacity_total	Optional	string	query
sort_vals	For the column name specified in the "sort_cols" parameter, specify the sort criteria in the order specified by regular expression. ^((desc)|(asc))(,((desc)|(asc)))*$ - Ascending: asc - Descending: desc [Example] asc,asc,desc	Optional	string	query
show_cols	Specify column name to display. [Example] capacity_consumed,storage_id	Optional	string	query
hide_cols	Specify column name to hide. [Example] id,name	Optional	string	query
limit	Specify the numbers of lines to display.	Optional	integer	query
offset	Specify the position from where to start displaying the items.	Optional	integer	query

Status Codes

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

- 200

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: servers

- This REST API returns an object array.

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

Code	Key	Description	Display	Data Type	Enumeration Constant
200	id	User ID	Yes	integer	
	ip_address	IP address	Yes	string	
	port_no	Port number	No	integer	
	domain	Authentication server domain	No	string	
	bind_user	Bind user	No	string	

Code	Key	Description	Display	Data Type	Enumeration Constant
	description	Description of the authentication server	No	string	

1.2.11.2 GET /v1/auth/servers/{id}

Function

Displays authentication server details

Processing Overview

Displays authentication server details.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
id	Specify the resource identifier. Only one identifier can be specified. [Example] 1	Required	integer	path

Status Codes

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

- 200

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: server

- This REST API returns a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
200	id	Authentication server ID	integer	
	ip_address	IP address	string	
	port_no	Port number	integer	
	domain	Authentication server domain	string	
	bind_user	Bind user	string	
	description	Description of the authentication server	string	

1.2.11.3 POST /v1/auth/servers

Function

Registers authentication servers

Processing Overview

Registers SMB authentication servers.

Up to one AD can be registered for each authentication server. Communication with authentication servers is carried out through port 389.

If this operation is performed, NAS access to the current shared folder is suspended. Confirm that there is no NAS access before performing an operation.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
ip_address	Specify the IP address. - Data Type: IPv4 [Example] 192.168.1.1	Required	string	query
domain	Specify the domain name. - Data Type: ascii - Maximum number of characters: 255 - Valid symbols: - _ . Space is not available. [Example] domain.local	Required	string	query
bind_user	Specify a bind user using one of the following formats: **User logon name**(*username@domain*) or **User logon name (pre-Windows 2000)**(*workgroup\username*). You can omit the *domain* and *workgroup*. - Data Type: ascii - Maximum number of characters: 255 - Valid symbols: @ \ ! - _ . [Example] administrator@domain.local	Required	string	query
bind_password	Specify a bind user password. - Data Type: ascii - Maximum number of characters: 130 [Example] capacity_consumed,stora	Required	string	query
description	Specify a description of authentication server. - Maximum number of characters: 256 [Example] Main Server	Optional	string	query

Status Codes

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

- 202

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: server

- This REST API returns a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
202	request_id	Request ID	integer	
	ip_address	IP address	string	
	port_no	Port number	integer	
	domain	Authentication server domain	string	
	bind_user	Bind user	string	
	description	Description of the authentication server	string	

1.2.11.4 PUT /v1/auth/servers/{id}

Function

Changes the authentication server

Processing Overview

Changes the registration information for the authentication server.
Only the items specified in the parameters can be changed.
If parameters are not specified, no change is made and a successful completion response is returned.
If this operation is performed, NAS access to the current shared folder is suspended. Confirm that there is no NAS access before performing an operation.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
id	Authentication server ID	Required	integer	path
ip_address	Specify the IP address. - Data Type: IPv4 [Example] 192.168.1.1	Optional	string	query
domain	Specify the domain name. - Data Type: ascii - Maximum number of characters: 255 - Valid symbols: - _ . Space is not available. [Example] domain.local	Optional	string	query

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type

bind_user	Specify a bind user using one of the following formats: **User logon name**(*username*@*domain*) or **User logon name (pre-Windows 2000)**(*workgroup\username*).
	You can omit the *domain* and *workgroup*.
	
	  - Data Type: ascii
	
	  - Maximum number of characters: 255
	
	  - Valid symbols: @ \ ! - _ .
	
	[Example]
	administrator@domain.local
		Optional	string	query

bind_password	Specify a bind user password.
	
	  - Data Type: ascii
	
	  - Maximum number of characters: 130
	
	[Example]
	capacity_consumed,stora
		Optional	string	query

description	Specify a description of authentication server. - Maximum number of characters: 256 [Example] Main Server	Optional	string	query

Status Codes

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

  - 202

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

  - The name of the key that stores data: server

  - This REST API returns a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
202	request_id	Request ID	integer	
	id	Authentication server ID	integer	
	ip_address	IP address	string	
	port_no	Port number	integer	
	domain	Authentication server domain	string	
	bind_user	Bind user	string	
	description	Description of the authentication server	string	

1.2.11.5 DELETE /v1/auth/servers

Function

Deletes authentication servers

Processing Overview

Deletes authentication servers.
If this operation is performed, NAS access to the current shared folder is suspended. Confirm that there is no NAS access before performing an operation.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
ids	Specify the authentication server ID. You can specify multiple items delimited by "," (comma). [Example] 1,2,3	Required	string	query

Status Codes

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

- 202

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: server

- This REST API returns a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
202	request_id	Request ID	integer	
	ids	Specified authentication server ID	string	

1.2.11.6 POST /v1/auth/servers/{id}/test

Function

Tests authentication servers

Processing Overview

Performs an operation test on the selected authentication servers.
When the authentication server ID, user name, and password are specified and the operation test is carried out successfully, a successful completion response is returned.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
id	Authentication server ID	Required	integer	path
user_name	Specify a user name. - Data Type: ascii - Maximum number of characters: 255 - Valid symbols: @ \ ! - _ . Specify a user name using one of the following formats: - **User logon name**(*username*@*domain*) - **User logon name (pre-Windows 2000)**(*workgroup \username*) [Example] example@domain.local	Required	string	query
password	Specify a password. - Data Type: ascii - Number of characters: 1 to 130 [Example] password	Required	string	query

Status Codes

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

- 200

For more information on the status code, refer to "Status Code".

The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: server

- This REST API returns a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
200	id	Authentication server ID	integer	
	ip_address	IP address	string	
	port_no	Port number	integer	
	domain	Authentication server domain	string	
	bind_user	Bind user	string	
	description	Description of the authentication server	string	

1.2.12 Cloud Provider

1.2.12.1 GET /v1/cloud_providers

Function

Displays a list of cloud providers

Processing Overview

Displays a list of Cloud providers.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
filter_cols	Specify the filtered column name. It is possible to specify multiple columns by delimiting them with ",". [Example] id,provider_type,network_id	Optional	string	query
filter_vals	Specify the filter criteria in the specified order for the column names specified in the "filter_cols" parameter. Filter conditions. Where there are numerical values, this can be specified within a range using "~". [Example] 1~*,OpenStack Swift,1	Optional	string	query
sort_cols	Specify column name to sort. [Example] id,provider_type,network_id	Optional	string	query
sort_vals	For the column name specified in the "sort_cols" parameter, specify the sort criteria in the order specified. - Ascending: asc - Descending: desc [Example] asc,asc,desc	Optional	string	query
show_cols	Specify column name to display. [Example] id,provider_type,network_id	Optional	string	query
hide_cols	Specify column name to hide. [Example] id,provider_type,network_id	Optional	string	query
limit	Specify the numbers of lines to display.	Optional	integer	query
offset	Specify the position from where to start displaying the items.	Optional	integer	query

Status Codes

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

- 200

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: cloud_providers

- This REST API returns an object array.

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

Code	Key	Description	Display	Data Type	Enumeration Constant
200	id	Cloud provider ID	Yes	integer	
	provider_type	Type of cloud provider	Yes	enum	Amazon S3: Amazon S3 Microsoft Azure Blob Storage: Microsoft Azure Blob Storage OpenStack Swift: OpenStack Swift
	provider_name	Cloud provider name	Yes	string	
	provider_uri	Cloud provider URI	Yes	string	
	user_name	User name, access key ID, or storage account name	Yes	string	
	domain_id	Domain ID	Yes	string	
	project_id	Project ID	Yes	string	
	network_id	Network ID for cloud transfer	Yes	integer	
	network_name	Network name for cloud transfer	Yes	string	

Example

```
# curl -X GET \
   -d 'token=c7133246-9f5c-4122-b9cf-7fcb72ade251' \
 'https://192.0.2.10:9856/v1/cloud_providers'
```

1.2.12.2 POST /v1/cloud_providers

Function

Registers a cloud provider

Processing Overview

Registers a cloud provider.

If the executing user has "Monitor" role, this REST API cannot be executed.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
provider_type	Specify the type of cloud provider. - Selection: [Amazon S3 | Microsoft Azure Blob Storage | OpenStack Swift] [Example] Amazon S3	Required	enum	query
provider_name	Specify the name of the Cloud provider. If omitted, the name will be automatically set.	Optional	string	query

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
	- Valid characters: alphanumeric characters - Valid symbols: ! @ # $ % ^ & * ( ) _ + - = [ ] { } | ' - Number of characters: 1 to 32 [Example] FO#001			
provider_uri	Specify the URI of the cloud provider. - Number of characters: 1 to 65,535 For Amazon S3, specify a URI that includes the region. For details, refer to "Information Required for Registering a Cloud Provider" in the "User's Guide". [Example] https://cloud.example.com	Required	string	query
domain_id	Specify the domain ID. - Valid characters: alphanumeric characters - Maximum number of characters:32 You can be specified for OpenStack Swift. [Example] ABCDEFGH	Optional	string	query
project_id	Specify the project ID. - Valid characters: alphanumeric characters - Maximum number of characters: 32 You can be specified for OpenStack Swift. [Example] ABCDEFGH	Optional	string	query

user_name	- For OpenStack Swift:
	  Specify the user name.
	
	- For Amazon S3:
	  Specify the access key ID.
	
	- For Microsoft Azure Blob storage:
	  Specify the storage account name.
	
	- Number of characters: 1 to 255
	
	[Example]
	accesskey
		Required	string	query

user_pass	- For OpenStack Swift:
	  Specify the password.
	
	- For Amazon S3:
	  Specify the secret access Key.
	
	- For Microsoft Azure Blob storage:
	  Specify the access key of the storage account.
	
	- Number of characters: 1 to 255
	
	[Example]
	password
		Required	string	query

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
network_id	Specify the network ID to use for the cloud transfer. Specify the ID assigned at time of network registration. - Range: 0 to 2 The default value is 0.	Optional	integer	query

Status Codes

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

  - 202

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

  - The name of the key that stores data: cloud_provider

  - This REST API returns a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
202	request_id	Request ID	integer	
	provider_type	Type of cloud provider	enum	Amazon S3: Amazon S3 Microsoft Azure Blob Storage: Microsoft Azure Blob Storage OpenStack Swift: OpenStack Swift
	provider_name	Cloud provider name	string	
	provider_uri	Cloud provider URI	string	
	user_name	User name, access key ID, or storage account name	string	
	domain_id	Domain ID	string	
	project_id	Project ID	string	
	network_id	Network ID for cloud transfer	string	

Example

If you register a cloud provider with Amazon S3 by specifying 1 as the network ID

```
curl -X POST \
   -d 'token=c7133246-9f5c-4122-b9cf-7fcb72ade251' \
   -d 'provider_type=Amazon S3' \
   -d 'provider_name=S3#001' \
   -d 'provider_uri=https://example.amazonaws.com' \
   -d 'user_name=accesskey' \
   -d 'user_pass=password' \
   -d 'network_id=1' \
 'https://192.0.2.10:9856/v1/cloud_providers'
```

1.2.12.3 PUT /v1/cloud_providers/{id}

Function

Changes the cloud provider settings

Processing Overview

Changes your Cloud provider settings.

If you change the "provider_name" or "provider_uri", all shared folders that are using the specified cloud provider must have the activation status disabled.

If the executing user has "Monitor" role, this REST API cannot be executed.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
id	Cloud provider ID	Required	integer	path
provider_name	Specify the name of the Cloud provider. - Valid characters: alphanumeric characters - Valid symbols: ! @ # $ % ^ & * ( ) _ + - = [ ] { } | ' - Number of characters: 1 to 32 [Example] FO#001	Optional	string	query
provider_uri	Specify the URI of the cloud provider. - Number of characters: 1 to 65,535 For Amazon S3, specify a URI that includes the region. For details, refer to "Information Required for Registering a Cloud Provider" in the "User's Guide". [Example] https://cloud.example.com	Optional	string	query
user_name	- For OpenStack Swift: Specify the user name. - For Amazon S3: Specify the access key ID. - For Microsoft Azure Blob storage: Specify the storage account name. - Number of characters: 1 to 255 [Example] accesskey	Optional	string	query
user_pass	- For OpenStack Swift: Specify the password. - For Amazon S3: Specify the secret access key. - For Microsoft Azure Blob storage: Specify the access key of the storage account. - Number of characters: 1 to 255	Optional	string	query

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
	[Example] password			
network_id	Specify the network ID to use for the cloud transfer. Specify the ID assigned at time of network registration. - Range: 0 to 2	Optional	integer	query

Status Codes

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

- 202

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: cloud_provider

- Returns the value specified as a parameter among the following values as a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
202	request_id	Request ID	integer	
	id	Cloud provider ID	string	
	provider_name	Cloud provider name	string	
	provider_uri	Cloud provider URI	string	
	user_name	User name, access key ID, or storage account name	string	
	network_id	Network ID used for cloud transfers	string	

Example

When changing the password for the cloud provider whose ID is 1

```
curl -X PUT \
   -d 'token=c7133246-9f5c-4122-b9cf-7fcb72ade251' \
   -d 'user_pass=newpassword' \
 'https://192.0.2.10:9856/v1/cloud_providers/1'
```

1.2.12.4 DELETE /v1/cloud_providers

Function

Deletes a cloud provider

Processing Overview

Deletes a cloud provider.

If the executing user has "Monitor" role, this REST API cannot be executed.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
ids	Specify the IDs of cloud providers to delete. You can specify multiple items delimited by "," (comma). [Example] 1,2,3	Required	string	query

Status Codes

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

- 202

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: cloud_provider

- This REST API returns an object array.

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

Code	Key	Description	Data Type	Enumeration Constant
202	request_id	Request ID	integer	
	ids	The ID of the deleted Cloud provider	string	

Example

When deleting the cloud provider whose ID is 1

```
curl -X DELETE \
   -d 'token=c7133246-9f5c-4122-b9cf-7fcb72ade251' \
   -d 'ids=1' \
 'https://192.0.2.10:9856/v1/cloud_providers'
```

1.2.12.5 GET /v1/cloud_providers/{id}/buckets

Function

Displays a list of bucket names

Processing Overview

Retrieves and displays a list of buckets from a cloud provider.

(Get a list of buckets by issuing the REST API from this product to a cloud provider)

Parameter

Parameter Name	Description	Required/Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
id	Specify the identity of the Cloud provider.	Required	integer	path

Status Codes

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

- 200

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- This REST API returns a single object.

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

Code	Key	Description	Display	Data Type	Enumeration Constant
200	id	Cloud provider ID	Yes	string	
	buckets	Individual bucket information	Yes	Object array	

The object array of the buckets is as follows.

- The name of the key that stores data: buckets

Key	Description	Data Type	Enumeration Constant
bucket_name	List of bucket names. (if there are multiple buckets, they are displayed as comma-delimited string)	string	

1.2.13 Datastore

1.2.13.1 GET /v1/datastores

Function

Displays a list of datastores

Processing Overview

Displays a list of datastores.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
filter_cols	Specify the filtered column name. It is possible to specify multiple columns by delimiting them with ",". [Example] id,is_cache_untransferred	Optional	string	query
filter_vals	Specify the filter criteria in the specified order for the column names specified in the "filter_cols" parameter. Filter conditions. Where there are numerical values, this can be specified within a range using "~". [Example] 1~*,false	Optional	string	query

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
sort_cols	Specify column name to sort. [Example] id,is_cache_untransferred	Optional	string	query
sort_vals	For the column name specified in the "sort_cols" parameter, specify the sort criteria in the order specified. - Ascending: asc - Descending: desc [Example] asc,asc,desc	Optional	string	query
show_cols	Specify column name to display. [Example] id,is_cache_untransferred	Optional	string	query
hide_cols	Specify column name to hide. [Example] id,is_cache_untransferred	Optional	string	query
limit	Specify the numbers of lines to display.	Optional	integer	query
offset	Specify the position from where to start displaying the items.	Optional	integer	query

Status Codes

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

- 200

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: datastores

- This REST API returns an object array.

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

Code	Key	Description	Display	Data Type	Enumeration Constant
200	id	Datastore ID	Yes	integer	
	datastore_level	Datastore level - For datastores created with version 1.2.0 or later: 1 - For datastores created with version 1.1.0 or earlier: 0	Yes	integer	
	datastore_name	Datastore name	Yes	string	
	datastore_capacity	Capacity allocated to the datastore (GB)	Yes	integer	
	cache_capacity	Capacity allocated to cache (GB)	Yes	integer	

Code	Key	Description	Display	Data Type	Enumeration Constant
	compression_mode	Whether compression is performed after deduplication when storing data in the cache area	Yes	enum	Enable: Yes Disable: No
	cloud_provider_id	Cloud provider ID	Yes	integer	
	cloud_provider_name	Cloud provider name	Yes	string	
	bucket_name	Bucket name	Yes	string	
	provider_encryption_mode	Whether encryption is performed when storing it in the cloud provider	Yes	enum	Enable: Yes Disable: No
	datastore_usage	Datastore usage (MB)	Yes	integer	
	cache_usage	Cache consumption (MB)	Yes	integer	
	cache_guarantee_period	Reserved for future use	Yes	timestamp	
	cache_status	Cache state	Yes	enum	Normal: Normal state Warning: State of attention Error: Abnormal condition Unknown: State unknown
	connect_status	Network connection state	Yes	enum	Normal: Normal state Warning: State of attention Error: Abnormal condition Unknown: State unknown
	datastore_status	Datastore state	Yes	enum	Normal: Normal state Warning: State of attention Error: Abnormal condition Unknown: State unknown
	cache_meta_data	Meta data capacity (MB)	Yes	integer	
	cache_untransferred	Untransferred data capacity (MB)	Yes	integer	
	cache_transferred	Transferred data capacity (MB)	Yes	integer	

Code	Key	Description	Display	Data Type	Enumeration Constant
	is_cache_untransferred	Presence/absence of untransferred data - true: yes - false: no	Yes	boolean	
	transfer_completed_at	Transfer completion time (iso8601 extended format YYYY-MM-DDThh:mm:ss+hh:mm)	Yes	string	
	reduced_rate	Reduced rate (%) (Truncated decimals)	Yes	integer	
	traffic_control	Maximum transfer rate for cloud transfers	Yes	integer	

1.2.13.2 POST /v1/datastores

Function

Registers a datastore

Processing Overview

Creates a datastore.

If you want to enable the maximum transfer rate for a Cloud transfer, specify a number between 4 and 10,240. Specify 0 or omit if you want to disable it.
If the executing user has "Monitor" role, this REST API cannot be executed.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
datastore_name	Specify the datastore name. If omitted, the name "DS#nnn" is set. "nnn" indicates a three-digit number starting with 1. You cannot specify a datastore name that already exists. - Valid characters: alphanumeric characters - Valid symbols: ! @ # $ % ^ & * ( ) _ + - = [ ] { } | ' - Number of characters: 1 to 32 [Example] DS#001	Optional	string	query
datastore_capacity	Specify the amount of space to allocate to the datastore. The capacity is specified in GB. - Specified range: 100 to "License capacity" (1 GB unit) If omitted, 100 is set. [Example] 100	Optional	integer	query

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
cache_capacity	Specify the amount of capacity to allocate to the cache. For the capacity, specify a value with a range from 10 % of the datastore capacity (20 GB minimum) to the virtual disk size of the cache area. The capacity is specified in GB. Specified range: 20 to 102,398,976 (1 GB units) If omitted, 50 % of the datastore capacity is set. [Example] 500	Optional	integer	query
compression_mode	Specify whether compression is performed after deduplication when storing data in the cache area. 　- Select: [Enable | Disable] If omitted, "Enable" is assumed to be specified. [Example] Disable	Optional	enum	query
cloud_provider_id	Specify the cloud provider ID. [Example] 1	Required	integer	query
bucket_name	Specify the name of the bucket. [Example] bucket01	Required	string	query
provider_encryption_mode	Specify whether encryption should be performed when storing in the Cloud provider. 　- Select: [Enable | Disable] If omitted, "Disable" is assumed to be specified. [Example] Disable	Optional	enum	query
provider_encryption_pass	Specify the encryption password to store in the Cloud provider. If Provider_encryption_mode is enabled, it must be specified. 　- Valid characters: alphanumeric characters 　- Valid symbols: ! . - _ 　- Number of characters: 8 to 16 Must contain all alphabets, numbers, and symbols. [Example] password	Optional	string	query
traffic_control	Specify the maximum transfer rate for a Cloud transfer. The same values are set for each data transfer from writing to the datastore and from the datastore. The unit of transfer rate is specified in Mbit/s. You can specify 0, or 4 to 10,240.	Optional	integer	query

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
	If 0 is specified, the setting of the upper bound value is disabled. If omitted, 0 is set. - Range: 0, 4 to 10,240 [Example] 500			

Status Codes

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

 - 202

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

 - The name of the key that stores data: datastore

 - This REST API returns a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
202	request_id	Request ID	integer	
	datastore_name	Datastore name	string	
	datastore_capacity	Capacity allocated to the datastore	string	
	cache_capacity	Capacity allocated to cache	string	
	compression_mode	Whether compression is performed after deduplication when storing data in the cache area	enum	Enable: Yes Disable: No
	cloud_provider_id	Cloud Provider ID	string	
	bucket_name	Bucket name	string	
	provider_encryption_mode	Whether encryption is performed when storing it in a Cloud provider	enum	Enable: Yes Disable: No
	traffic_control	Maximum transfer rate for Cloud transfers	string	

1.2.13.3 PUT /v1/datastores/{id}

Function

Changes the datastore settings

Processing Overview

Changes the datastore settings.

If you want to enable the maximum transfer rate for cloud transfer, specify a number between 4 and 10,240. When disabled, specify 0.
If the executing user has "Monitor" role, this REST API cannot be executed.
For datastores created with version 1.1.0 or earlier, the range of values that can be specified for the capacity allocated to the datastore and the capacity allocated to the cache is different. Check the datastore level to determine the version in which the datastore was created. Use the "GET /v1/datastores" command to check the datastore level.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
id	Datastore ID	Required	integer	path
datastore_name	Specify the datastore name. You cannot specify a datastore name that already exists. - Valid characters: alphanumeric characters - Valid symbols: ! @ # $ % ^ & * ( ) _ + - = [ ] { } | ' - Number of characters: 1 to 32 [Example] DS#001	Optional	string	query
datastore_capacity	Specify the amount of space to allocate to the datastore. For the capacity, specify a value with a range from 100 GB to a size that is 10 times the cache capacity or a size equal to the license capacity, whichever is smaller. Note: For datastores created with version 1.1.0 or earlier (datastore level: 0), you can specify a value with a range from 100 GB to a size that is five times the cache capacity or a size equal to the license capacity, whichever is smaller. The capacity is specified in GB. - Specified range: 100 to "License capacity" (1 GB unit) [Example] 100	Optional	integer	query
cache_capacity	Specify the amount of capacity to allocate to the cache. For the capacity, specify a value with a range from 10 % of the datastore capacity (20 GB minimum) to the virtual disk size of the cache area. Note: For datastores created with version 1.1.0 or earlier (datastore level: 0), you can specify a value with a range from 20 % of the datastore capacity to the virtual disk size of the cache area. The capacity is specified in GB. - Specified range: 20 to 102,398,976 (1 GB units) [Example] 500	Optional	integer	query
compression_mode	Specify whether compression is performed after deduplication when storing data in the cache area. - Select: [Enable | Disable]	Optional	enum	query

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
	[Example] Disable			
traffic_control	Specify the maximum transfer rate for a Cloud transfer. The same values are set for each data transfer from writing to the datastore and from the datastore. The unit of transfer rate is specified in Mbit/s. You can specify 0, or 4 to 10,240. If 0 is specified, the setting of the upper bound value is disabled. - Range: 0, 4 to 10,240 [Example] 500	Optional	integer	query

Status Codes

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

- 202

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: datastore

- Returns the value specified as a parameter among the following values as a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
202	request_id	Request ID	integer	
	id	Datastore ID	string	
	datastore_name	Datastore name	string	
	datastore_capacity	Capacity allocated to the datastore	string	
	cache_capacity	Capacity allocated to the cache	string	
	compression_mode	Whether compression is performed after deduplication when storing data in the cache area	enum	Enable: Yes Disable: No
	traffic_control	Maximum transfer rate for Cloud transfers	string	

1.2.13.4 DELETE /v1/datastores

Function

Deletes a datastore

Processing Overview

Deletes a datastore.

If the executing user has "Monitor" role, this REST API cannot be executed.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
ids	Specify the IDs of datastores to delete. You can specify multiple items delimited by "," (comma). [Example] 1,2,3	Required	string	query

Status Codes

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

- 202

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: datastore

- This REST API returns a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
202	request_id	Request ID	integer	
	ids	IDs of the deleted datastores (if there are multiple IDs, they are displayed as comma-delimited string)	string	

1.2.14 Shared Folder

1.2.14.1 GET /v1/shared_folders

Function

Displays a list of shared folders

Processing Overview

Displays a list of shared folders.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
filter_cols	Specify the filtered column name. It is possible to specify multiple columns by delimiting them with ",". [Example] id,protocol,activation_status	Optional	string	query

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
filter_vals	Specify the filter criteria in the specified order for the column names specified in the "filter_cols" parameter. Filter conditions. Where there are numerical values, this can be specified within a range using "~". [Example] 1~*,NFS,Disable	Optional	string	query
sort_cols	Specify column name to sort. [Example] id,protocol,activation_status	Optional	string	query
sort_vals	For the column name specified in the "sort_cols" parameter, specify the sort criteria in the order specified. - Ascending: asc - Descending: desc [Example] asc,asc,desc	Optional	string	query
show_cols	Specify column name to display. [Example] id,protocol,activation_status	Optional	string	query
hide_cols	Specify column name to hide. [Example] id,protocol,activation_status	Optional	string	query
limit	Specify the numbers of lines to display.	Optional	integer	query
offset	Specify the position from where to start displaying the items.	Optional	integer	query

Status Codes

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

- 200

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: shared_folders

- This REST API returns an object array.

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

Code	Key	Description	Display	Data Type	Enumeration Constant
200	id	Shared folder ID	Yes	integer	
	shared_folder_name	Shared folder name	Yes	string	
	owner_name	Shared folder owner	Yes	string	
	group_name	Shared folder group	Yes	string	
	datastore_id	The ID of the datastore where the shared folder is created	Yes	integer	

Code	Key	Description	Display	Data Type	Enumeration Constant
	datastore_name	Datastore name	Yes	string	
	protocol	Storage protocols used	Yes	enum	NFS: Network File System SMB: Server Message Block
	activation_status	Created shared folder activation state	Yes	enum	Enable: Enabled Disable: Disabled
	nfs_allow_hosts	Host to allow access	Yes	string	
	nfs_no_root_squash_hosts	Host that allows access to the shared folder with root privileges	Yes	string	
	smb_allow_hosts	Host to allow access	Yes	string	
	smb_deny_hosts	Host to deny access	Yes	string	
	smb_encryption	Whether to enable the SMB encryption feature	Yes	enum	Enable: Enabled Disable: Disabled
	op_locks	Whether the shared folder uses the opportunistic locking feature (oplocks feature) to avoid conflicts by locking files	Yes	enum	Enable: Enabled Disable: Disabled
	nfs_export_path	Directory path that can be exported to an NFS connection host	Yes	string	
	status	Shared folder status	Yes	enum	Normal: Normal status Warning: State of attention Error: Abnormal condition Unknown: State unknown

1.2.14.2 POST /v1/shared_folders

Function

Registers a shared folder

Processing Overview

Creates a shared folder.

If the executing user has "Monitor" role, this REST API cannot be executed.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query

shared_folder_name	Specify the name of the shared folder.
	If omitted, the name "SF#nnn" is set. "nnn" indicates a three-digit number starting with 1.
	You cannot specify a shared folder name that already exists.
	
	- Valid characters: alphanumeric characters and symbols.
	
	- Number of characters: 1 to 76
	
	- Space characters and the following symbols are not allowed.
	  \ / : * ? " < > | = , ; [ ] % +
	
	- You cannot use the following names without case sensitivity:
	  ".snap", "global", "homes", "printers", "IPC $", "." (dot 1 character), and ".." (dot 2 characters)
	
	- You cannot prefix with "@gmt" without case sensitivity.
	
	[Example]
	SF#001
		Optional	string	query

owner_name	Specify the owner of the shared folder. If omitted, the owner is root. If this parameter is specified, the "group_name" parameter must be specified. You cannot specify reserved words for the user name. For information about reserved words for the user name, refer to "NAS Access User Settings" in the "User's Guide". To specify an AD server user, specify **User logon name (pre-Windows 2000)**. [Example] user	Optional	string	query
group_name	Specify a group of shared folders. If omitted, the group becomes root. If this parameter is specified, the "owner_name" parameter must be specified. You cannot specify reserved words for the group name. For information about reserved words for the group name, refer to "NAS Access Group settings" in the "User's Guide". To specify an AD server group, specify **Group name (pre-Windows 2000)**. However, group names that have @ cannot be specified. [Example] group	Optional	string	query
datastore_id	Specify the identity of the datastore for which you want to create a shared folder. [Example] 1	Required	integer	query
protocol	Specify the storage protocol to use.	Optional	enum	query

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
	- Select: [NFS | SMB] The default value is "NFS". [Example] NFS			
activation_status	Specify the enabled state of the shared folder that you created. - Select: [Enable | Disable] The default value is "Enable". [Example] Disable	Optional	enum	query

nfs_allow_hosts	Specify the host to which you want to grant access. The host can be specified in the following format: It is possible to specify a maximum of 10 hosts. You can specify multiple hosts by delimiting them with a comma ",". If more than one host is specified, the priority applied will be different, according to the specified format and the specified order. The priority is one is the highest and third is the lowest. In the case of the same priority, the priority of the host described first (left side) is higher.
	
	  1. FQDN, IPv4 address
	
	  2. IPv4 Network (* 1)
	
	  3. FQDN including "*"
	
	(* 1) You must specify an IPv4 network in one of the following formats:
	
	  - CIDR notation (prefix notation) (e.g.: 192.168.10.0/24)
	
	  - Subnet notation (e.g. 192.168.10.0/255.255.255.0)
	
	If omitted, all hosts are allowed access. This can be specified only if the usage Protocol is NFS.
	
	[Example]
	serv01.example.com
		Optional	string	query

nfs_no_root_squash_hosts	Specify the host to which to allow access to the shared folder with root privileges. The host can be specified in the following format: It is possible to specify a maximum of 10 hosts. It is possible to specify multiple hosts by delimiting them with "," If more than one host is specified, the priority applied will be different, according to the specified format and the specified order. The priority is one is the highest and third is the lowest. In the case of the same priority, the priority of the host described first (left side) is higher.
	
	  1. FQDN, IPv4 address
	
	  2. IPv4 Network (* 1)
	
	  3. FQDN including "*"
	
	(* 1) You must specify an IPv4 network in one of the following formats:
		Optional	string	query

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
	- CIDR notation (prefix notation) (e.g. 192.168.10.0/24) - Subnet notation (e.g. 192.168.10.0/255.255.255.0) It must be the same string as the host specified in the "nfs_allow_hosts" parameter (case sensitive). The following specifications are not allowed: [Example] nfs_allows_hosts: *.example.com nfs_no_root_squash_hosts: srv01.example.com If omitted, root access will not be allowed for all hosts. It can be specified only if the usage Protocol is NFS. [Example] serv01.example.com			
smb_allow_hosts	Specify the host to which you want to grant access. The host can be specified in the following format: It is possible to specify a maximum of 10 hosts. You can specify multiple hosts by delimiting them with a comma ",". If more than one host is specified, matches are made from the host described in the first (left). - FQDN - IPv4 Address - IPv4 Network (* 1) - Domain name starting with "." - EXCEPT(*2) (* 1) You must specify an IPv4 network in one of the following formats: - CIDR notation (prefix notation) (e.g. 192.168.10.0/24) - Subnet notation (e.g. 192.168.10.0/255.255.255.0) (*2) Specify in format "<List 1> EXCEPT <List 2>" where <List 1> and <List 2> are space-separated lists formed from one or more of the following items. - FQDN - IPv4 Address - IPv4 Network (* 1) - Domain name starting with "." Of those specified in <List 1>, access is permitted to items other than those specified in <Lists 2>. [Example 1] 192.168.10.1/24 EXCEPT 192.168.10.2 [Example 2] .example1.com EXCEPT host1.example.com host2.example.com If omitted, all hosts are allowed access. You can only specify SMB as the protocol to use. If the definition overlaps with this parameter and "smb_deny_hosts" parameter, the specification of this parameter takes precedence.	Optional	string	query

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
	[Example] serv01.example.com			

smb_deny_hosts	Specify the host to deny access to. The host can be specified in the following format: It is possible to specify a maximum of 10 hosts. You can specify multiple hosts by delimiting them with a comma ",". If more than one host is specified, matches are made from the host described in the first (left).
	
	  - FQDN
	
	  - IPv4 Address
	
	  - IPv4 Network (* 1)
	
	  - Domain name starting with "."
	
	  - EXCEPT(*2)
	
	(* 1) You must specify an IPv4 network in one of the following formats:
	
	  - CIDR notation (prefix notation) (e.g. 192.168.10.0/24)
	
	  - Subnet notation (e.g.192.168.10.0/255.255.255.0)
	
	(*2) Specify in format "<List 1> EXCEPT <List 2>" where <List 1> and <List 2> are space-separated lists formed from one or more of the following items.
	
	  - FQDN
	
	  - IPv4 Address
	
	  - IPv4 Network (* 1)
	
	  - Domain name starting with "."
	
	Of those specified in <List 1>, access is refused to items other than those specified in <Lists 2>.
	[Example 1] 192.168.10.1/24 EXCEPT 192.168.10.2
	[Example 2] .example1.com EXCEPT host1.example.com host2.example.com
	
	You can only specify SMB as the protocol to use. If the definition overlaps with this parameter and "smb_allow_hosts" parameter, the "smb_allow_hosts" parameter designation takes precedence.
	
	[Example]
	serv01.example.com
		Optional	string	query

smb_encryption	Specify whether the SMB encryption feature is enabled. Enabling SMB encryption encrypts file access communications on the SMB protocol basis. It can be specified only if the protocol is SMB. - Select: [Enable	Disable] If omitted, the default is assumed to be "Disable". [Example] Enable	Optional	enum	query
op_locks	Specify whether the shared folder uses the opportunistic locking feature (Oplocks feature) to avoid conflicts when	Optional	enum	query

Parameter Name	Description	Required/Optional	Data Type	Parameter Type
	locking files. It can be specified only if the protocol is SMB. - Select: [Enable | Disable] If omitted, the default is assumed to be "Disable". [Example] Enable			

Status Codes

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

- 202

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: shared_folder

- Returns the value specified as a parameter among the following values as a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
202	request_id	Request ID	integer	
	shared_folder_name	Shared folder name	string	
	owner_name	Shared folder owner	string	
	group_name	Shared folder group	string	
	datastore_id	ID of the datastore that created the shared folder	string	
	protocol	Storage protocols used	enum	NFS: Network File System SMB: Server Message Block
	activation_status	Created shared folder activation state	enum	Enable: Enabled Disable: Disabled
	nfs_allow_hosts	Host to allow access	string	
	nfs_no_root_squash_hosts	Host that allows access to the shared folder with root privileges	string	
	smb_allow_hosts	Host to allow access	string	
	smb_deny_hosts	Host to deny access	string	
	smb_encryption	Whether to enable the SMB encryption feature	enum	Enable: Enabled Disable: Disabled

Code	Key	Description	Data Type	Enumeration Constant
	op_locks	Whether the shared folder uses the opportunistic locking feature (Oplocks feature) to avoid conflicts by locking files	enum	Enable: Enabled Disable: Disabled

1.2.14.3 PUT /v1/shared_folders/{id}

Function

Changes the shared folder settings

Processing Overview

Changes shared folder settings.

If the executing user has "Monitor" role, this REST API cannot be executed.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
id	Shared folder ID	Required	integer	path
owner_name	Specify the owner of the shared folder. If an empty string ("") is specified, the owner is set to root. If an empty string ("") is specified for this parameter, an empty string ("") must also be specified for the "group_name" parameter. If this parameter is omitted, the "owner_name" parameter remains unchanged. You cannot specify reserved words for the user name. For information about reserved words for the user name, refer to "NAS Access User Settings" in the "User's Guide". To specify an AD server user, specify **User logon name (pre-Windows 2000)**. [Example] user	Optional	string	query
group_name	Specify a group of shared folders. If an empty string ("") is specified, the group is set to root. If an empty string ("") is specified this parameter, an empty string ("") must also be set for the "owner_name" parameter. If this parameter is omitted, the "group_name" parameter remains unchanged. You cannot specify reserved words for the group name. For information about reserved words for the group name, refer to "NAS Access Group settings" in the "User's Guide". To specify an AD server group, specify **Group name (pre-Windows 2000)**. However, group names that have @ cannot be specified. [Example] group	Optional	string	query
activation_status	Specify the enabled state of the shared folder that you created. - Select: [Enable | Disable]	Optional	enum	query

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
	[Example] Disable			

nfs_allow_hosts	Specify the host to which you want to grant access. The host can be specified in the following format: It is possible to specify a maximum of 10 hosts. You can specify multiple hosts by delimiting them with a comma ",". If more than one host is specified, the priority applied will be different, according to the specified format and the specified order. The priority is one is the highest and third is the lowest. In the case of the same priority, the priority of the host described first(left side) is higher.
	
	    1. FQDN, IPv4 address
	
	    2. IPv4 Network (* 1)
	
	    3. FQDN including "*"
	
	(* 1) You must specify an IPv4 network in one of the following formats:
	
	  - CIDR notation (prefix notation) (e.g.: 192.168.10.0/24)
	
	  - Subnet notation (e.g. 192.168.10.0/255.255.255.0)
	
	Specify an empty string ("") to delete the settings.
	If this setting is deleted, access will be allowed for all hosts.
	This can be specified only if the usage Protocol is NFS.
	
	[Example]
	serv01.example.com
		Optional	string	query

nfs_no_root_squash_hosts	Specify the host to which to allow access to the shared folder with root privileges. The host can be specified in the following format: It is possible to specify a maximum of 10 hosts. You can specify multiple hosts by delimiting them with a comma ",". If more than one host is specified, the priority applied will be different, according to the specified format and the specified order. The priority is one is the highest and third is the lowest. In the case of the same priority, the priority of the host described first (left side) is higher.
	
	    1. FQDN, IPv4 address
	
	    2. IPv4 Network (* 1)
	
	    3. FQDN including "*"
	
	(* 1) You must specify an IPv4 network in one of the following formats:
	
	  - CIDR notation (prefix notation) (e.g. 192.168.10.0/24)
	
	  - Subnet notation (e.g. 192.168.10.0/255.255.255.0)
	
	It must be the same string as the host specified in the "nfs_allow_hosts" parameter (case sensitive). The following specifications are not allowed:
	
	[Example]
	nfs_allows_hosts: *.example.com
	nfs_no_root_squash_hosts: srv01.example.com
	
	Specify an empty string ("") to delete the settings.
	If this setting is deleted, root access will not be allowed for all hosts.
	It can be specified only if the usage Protocol is NFS.
		Optional	string	query

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
	[Example] serv01.example.com			
smb_allow_hosts	Specify the host to which you want to grant access. The host can be specified in the following format: It is possible to specify a maximum of 10 hosts. You can specify multiple hosts by delimiting them with a comma ",". If more than one host is specified, matches are made from the host described in the first (left). - FQDN - IPv4 Address - IPv4 Network (* 1) - Domain name starting with "." - EXCEPT(*2) (* 1) You must specify an IPv4 network in one of the following formats: - CIDR notation (prefix notation) (e.g. 192.168.10.0/24) - Subnet notation (e.g. 192.168.10.0/255.255.255.0) (*2) Specify in format "<List 1> EXCEPT <List 2>" where <List 1> and <List 2> are space-separated lists formed from one or more of the following items. - FQDN - IPv4 Address - IPv4 Network (* 1) - Domain name starting with "." Of those specified in <List 1>, access is permitted to items other than those specified in <Lists 2>. [Example 1] 192.168.10.1/24 EXCEPT 192.168.10.2 [Example 2] .example1.com EXCEPT host1.example.com host2.example.com Specify an empty string ("") to delete the settings. If this setting is deleted, access will be allowed for all hosts. You can only specify SMB as the protocol to use. If the definition overlaps with this parameter and "smb_deny_hosts" parameter, the specification of this parameter takes precedence. [Example] serv01.example.com	Optional	string	query
smb_deny_hosts	Specify the host to deny access to. The host can be specified in the following format: It is possible to specify a maximum of 10 hosts. It is possible to specify multiple hosts by delimiting them with "," If more than one host is specified, matches are made from the host described in the first (left). - FQDN - IPv4 Address - IPv4 Network (* 1) - Domain name starting with "."	Optional	string	query

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
	- EXCEPT(*2) (* 1) You must specify an IPv4 network in one of the following formats: - CIDR notation (prefix notation) (e.g. 192.168.10.0/24) - Subnet notation (e.g.192.168.10.0/255.255.255.0) (*2) Specify in format "<List 1> EXCEPT <List 2>" where <List 1> and <List 2> are space-separated lists formed from one or more of the following items. - FQDN - IPv4 Address - IPv4 Network (* 1) - Domain name starting with "." Of those specified in <List 1>, access is refused to items other than those specified in <Lists 2>. [Example 1] 192.168.10.1/24 EXCEPT 192.168.10.2 [Example 2] .example1.com EXCEPT host1.example.com host2.example.com Specify an empty string ("") to delete the settings. You can only specify SMB as the protocol to use. If the definition overlaps with this parameter and "smb_allow_hosts" parameter, the "smb_allow_hosts" parameter designation takes precedence. [Example] serv01.example.com			
smb_encryption	Specify whether the SMB encryption feature is enabled. Enabling SMB encryption encrypts file access communications on the SMB protocol basis. It can be specified only if the protocol is SMB. - Select: [Enable | Disable] [Example] Enable	Optional	enum	query
op_locks	Specify whether the shared folder uses the opportunistic locking feature (Oplocks feature) to avoid conflicts when locking files. It can be specified only if the protocol is SMB. - Select: [Enable | Disable] [Example] Enable	Optional	enum	query

Status Codes

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

- 202

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: shared_folder

- Returns the value specified as a parameter among the following values as a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
202	request_id	Request ID	integer	
	id	Shared folder ID	string	
	owner_name	Shared folder owner	string	
	group_name	Shared folder group	string	
	activation_status	Created shared folder activation state	enum	Enable: Enabled Disable: Disabled
	nfs_allow_hosts	Host to allow access	string	
	nfs_no_root_squash_hosts	Host that allows access to the shared folder with root privileges	string	
	smb_allow_hosts	Host to allow access	string	
	smb_deny_hosts	Host to deny access	string	
	smb_encryption	Whether to enable the SMB encryption feature	enum	Enable: Enabled Disable: Disabled
	op_locks	Whether the shared folder uses the opportunistic locking feature (Oplocks feature) to avoid conflicts by locking files	enum	Enable: Enabled Disable: Disabled

1.2.14.4 DELETE /v1/shared_folders

Function

Deletes a shared folder

Processing Overview

Deletes a shared folder.

If the executing user has "Monitor" role, this REST API cannot be executed.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
ids	Specify the IDs of shared folders to delete. You can specify multiple items delimited by "," (comma).	Required	string	query

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
	[Example] 1,2,3			

Status Codes

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

- 202

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: shared_folder

- This REST API returns a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
202	request_id	Request ID	integer	
	ids	IDs of the shared folders that have been deleted (if there are multiple IDs, they are displayed as comma-delimited string).	string	

1.2.15 Performance

1.2.15.1 GET /v1/datastores/{id}/performances

Function

Displays a list of performance data

Processing Overview

Displays a list of the following performance data about the specified datastore:

- Cache I/O performance

- Cloud transfer performance

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
id	Specify the configured datastore ID. [Example] 1	Required	integer	path
from_date	Specify the start date for the period you want to search.(specified in YYYYMMDD format) If omitted, this REST API acquires from the oldest performance information.	Optional	string	query

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
	[Example] 20180223			
to_date	Specify the end date for the period that you want to search.(specified in YYYYMMDD format) If omitted, the most recent performance information is obtained. [Example] 20180223	Optional	string	query

Status Codes

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

- 200

For more information on the status code, refer to "Status Code".

The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: performances

- This REST API returns an object array.

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

Code	Key	Description	Display	Data Type	Enumeration Constant
200	datastore_id	Datastore ID	Yes	integer	
	collected_at	Datastore performance information creation time	Yes	timestamp	
	cloud_transfer_read_throughput	Cloud transfer read throughput (MB/s)	Yes	float	
	cloud_transfer_write_throughput	Cloud transfer write throughput (MB/s)	Yes	float	
	cache_io_read_throughput	Cache I/O read throughput (MB/s)	Yes	float	
	cache_io_write_throughput	Cache I/O write throughput (MB/s)	Yes	float	

1.2.15.2 GET /v1/datastores/{id}/performances/download

Function

Downloads the performance data

Processing Overview

Downloads the following performance data about the datastore:

- Cache I/O performance

- Cloud transfer performance

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
from_date	Specify the start date for the period you want to download.(specified in YYYYMMDD format) If omitted, the performance information from 0:00:00 31 days before this REST API execution date is downloaded. [Example] 20180301	Optional	string	query
to_date	Specify the end date for the period that you want to download.(specified in YYYYMMDD format) If omitted, the performance information to the point of execution of this REST API is downloaded. [Example] 20180301	Optional	string	query

Status Codes

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

- 200

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

This is not present when it completes normally.

1.2.16 Request

1.2.16.1 GET /v1/requests

Function

Displays a list of asynchronous processes being executed

Processing Overview

Displays a list of asynchronous processes being executed.

Asynchronous process means that the request returned with a status code of 202.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
filter_cols	Specify the filtered column name. It is possible to specify multiple columns by delimiting them with ",". [Example] id,target_name,status	Optional	string	query
filter_vals	Specify the filter criteria in the specified order for the column names specified in the "filter_cols" parameter.	Optional	string	query

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
	Filter conditions. Where there are numerical values, this can be specified within a range using "~". [Example] 10~*,SWIFT#001,Failed			
sort_cols	Specify column name to sort. [Example] id,target_name,status	Optional	string	query
sort_vals	For the column name specified in the "sort_cols" parameter, specify the sort criteria in the order specified. - Ascending: asc - Descending: desc [Example] asc,asc,desc	Optional	string	query
show_cols	Specify column name to display. [Example] id,target_name,status	Optional	string	query
hide_cols	Specify column name to hide. [Example] i id,target_name,status	Optional	string	query
limit	Specify the numbers of lines to display.	Optional	integer	query
offset	Specify the position from where to start displaying the items.	Optional	integer	query

Status Codes

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

- 200

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: requests

- This REST API returns an object array.

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

Code	Key	Description	Display	Data Type	Enumeration Constant
200	id	Request ID	Yes	integer	
	last_updated_at	Last update time (iso8601 extended format YYYY-MM-DDThh:mm:ss+hh:mm)	Yes	timestamp	
	submitted_at	Operation submit time (iso8601 extended format YYYY-MM-DDThh:mm:ss+hh:mm)	No	timestamp	

Code	Key	Description	Display	Data Type	Enumeration Constant
	started_at	Processing start time (iso8601 extended format YYYY-MM-DDThh:mm:ss+hh:mm)	No	timestamp	
	completed_at	Processing completion time (iso8601 extended format YYYY-MM-DDThh:mm:ss+hh:mm)	No	timestamp	
	action	Processing name	Yes	string	
	action_parameter	Processing parameter	No	string	
	target_name	Target operations	Yes	string	
	user_name	User name	Yes	string	
	call_from	Caller	No	string	
	phase	Processing progress	Yes	enum	Submit: Submit Start: Start Complete: Complete
	operation_result	Processing result	Yes	enum	Success: Success Warning: Warning Failed: Failed
	status	Processing state	Yes	enum	Submit: Submit Start: Start Success: Success Warning: Warning Failed: Failed
	message	Message	No	string	

1.2.16.2 GET /v1/requests/{id}

Function

Displays the details of an asynchronous process being executed

Processing Overview

Displays details on an asynchronous process being executed.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
id	Request ID	Required	integer	path

Status Codes

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

- 200

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: request

- This REST API returns a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
200	id	Request ID	integer	
	last_updated_at	Last update time (iso8601 extended format YYYY-MM-DDThh:mm:ss+hh:mm)	timestamp	
	submitted_at	Operation submit time (iso8601 extended format YYYY-MM-DDThh:mm:ss+hh:mm)	timestamp	
	started_at	Processing start time (iso8601 extended format YYYY-MM-DDThh:mm:ss+hh:mm)	timestamp	
	completed_at	Processing complete time (iso8601 extended format YYYY-MM-DDThh:mm:ss+hh:mm)	timestamp	
	action	Processing name	string	
	action_parameter	Processing parameter	string	
	target_name	Target operations	string	
	user_name	User name	string	
	call_from	Caller	string	
	phase	Processing progress	enum	Submit: Submit Start: Start Complete: Complete
	operation_result	Processing result	enum	Success: Success Warning: Warning

Code	Key	Description	Data Type	Enumeration Constant
				Failed: Failed
	status	Processing state	enum	Submit: Submit Start: Start Success: Success Warning: Warning Failed: Failed
	message	Message	string	

1.2.17 Operation Log

1.2.17.1 GET /v1/log/audit_logs

Function

Displays a list of operation logs

Processing Overview

The operation log information of operations executed by the user in relation to the system are displayed as a list.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
filter_cols	Specify the filtered column name. It is possible to specify multiple columns by delimiting them with ",". [Example] id,phase,action_result	Optional	string	query
filter_vals	Specify the filter criteria in the specified order for the column names specified in the "filter_cols" parameter. Filter conditions. Where there are numerical values, this can be specified within a range using "~". [Example] 50~*,Complete,Failed	Optional	string	query
sort_cols	Specify column name to sort. [Example] id,phase,action_result	Optional	string	query
sort_vals	For the column name specified in the "sort_cols" parameter, specify the sort criteria in the order specified. - Ascending: asc - Descending: desc	Optional	string	query

Parameter Name	Description	Required/Optional	Data Type	Parameter Type
	[Example] asc,asc,desc			
show_cols	Specify column name to display. [Example] id,phase,action_result	Optional	string	query
hide_cols	Specify column name to hide. [Example] id,phase,action_result	Optional	string	query
limit	Specify the numbers of lines to display.	Optional	integer	query
offset	Specify the position from where to start displaying the items.	Optional	integer	query

Status Codes

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

- 200

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: audit_logs

- This REST API returns an object array.

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

Code	Key	Description	Display	Data Type	Enumeration Constant
200	id	Operation log ID	Yes	integer	
	request_id	Request ID	No	integer	
	last_updated_at	Last update time (iso8601 extended format YYYY-MM-DDThh:mm:ss+hh:mm)	Yes	timestamp	
	submitted_at	Operation submit time (iso8601 extended format YYYY-MM-DDThh:mm:ss+hh:mm)	No	timestamp	
	started_at	Processing start time (iso8601 extended format YYYY-MM-DDThh:mm:ss+hh:mm)	No	timestamp	
	completed_at	Processing complete time (iso8601 extended format YYYY-MM-DDThh:mm:ss+hh:mm)	No	timestamp	
	target_name	Target operations	Yes	string	
	action	Processing name	Yes	string	
	action_parameter	Processing parameter	Yes	string	
	user_name	User name	Yes	string	
	user_role	User role	No	string	

Code	Key	Description	Display	Data Type	Enumeration Constant
	connection_source_ip _address	Connection source IP address	No	string	
	call_from	Caller	Yes	string	
	phase	Processing state	Yes	enum	Submit: Submit Start: Start Complete: Complete
	action_result	Processing result	Yes	enum	Success: Success Warning: Warning Failed: Failed
	message	Message	Yes	string	
	confirmation	Read/Unread - true: Read - false: Unread	Yes	boolean	

1.2.17.2 GET /v1/log/audit_logs/{id}

Function

Displays the details of the operation log

Processing Overview

Details of the various operations recorded in the operation log are displayed.

The confirmed logs are marked as read.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
id	Specify the identifier for the resource. Only one can be specified.	Required	integer	path

Status Codes

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

- 200

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: audit_log

- This REST API returns a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
200	id	Operation log ID	integer	
	request_id	Request ID	integer	
	last_updated_at	Last update time (iso8601 extended format YYYY-MM-DDThh:mm:ss+hh:mm)	timestamp	
	submitted_at	Operation submit time (iso8601 extended format YYYY-MM-DDThh:mm:ss+hh:mm)	timestamp	
	started_at	Processing start time (iso8601 extended format YYYY-MM-DDThh:mm:ss+hh:mm)	timestamp	
	completed_at	Processing complete time (iso8601 extended format YYYY-MM-DDThh:mm:ss+hh:mm)	timestamp	
	target_name	Target operations	string	
	action	Processing name	string	
	action_parameter	Processing parameter	string	
	user_name	User name	string	
	user_role	User role	string	
	connection_source_ip_address	Connection source IP address	string	
	call_from	Caller	string	
	phase	Processing state	enum	Submit: Submit Start: Start Complete: Complete
	action_result	Processing result	enum	Success: Success Warning: Warning Failed: Failed
	message	Message	string	
	confirmation	Read/Unread - true: Read - false: Unread	boolean	

1.2.17.3 GET /v1/log/audit_logs/download

Function

Downloads audit logs

Processing Overview

Downloads the audit log (operation log and the command operation log in the console).

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
from_date	For the audit log, specify the start date for the period you want to download.(specified in YYYYMMDD format) If omitted, the operation log of 0:00:00 or later 31 days prior to this REST API execution date is downloaded. [Example] 20180301	Optional	string	query
to_date	For the operation log, specify the end date of the period for which you want to download.(specified in YYYYMMDD format) If omitted, the operation log up to the time this REST API was run is downloaded. [Example] 20180301	Optional	string	query

Status Codes

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

- 200

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

This is not present when it completes normally.

1.2.18 Event Log

1.2.18.1 GET /v1/log/event_logs

Function

Displays a list of event logs

Processing Overview

The event information occurring on this system can be confirmed as a list.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
filter_cols	Specify the filtered column name. It is possible to specify multiple columns by delimiting them with ",".	Optional	string	query

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
	[Example] id,confirmation,message_id			
filter_vals	Specify the filter criteria in the specified order for the column names specified in the "filter_cols" parameter. Filter conditions. Where there are numerical values, this can be specified within a range using "~". [Example] 1~*,false,csgdp03002	Optional	string	query
sort_cols	Specify column name to sort. [Example] id,confirmation,message_id	Optional	string	query
sort_vals	For the column name specified in the "sort_cols" parameter, specify the sort criteria in the order specified. - Ascending: asc - Descending: desc [Example] asc,asc,desc	Optional	string	query
show_cols	Specify column name to display. [Example] id,confirmation,message_id	Optional	string	query
hide_cols	Specify column name to hide. [Example] id,confirmation,message_id	Optional	string	query
limit	Specify the numbers of lines to display.	Optional	integer	query
offset	Specify the position from where to start displaying the items.	Optional	integer	query

Status Codes

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

- 200

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: event_logs

- This REST API returns an object array.

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

Code	Key	Description	Display	Data Type	Enumeration Constant
200	id	Event log ID	Yes	integer	
	confirmation	Read/Unread - true: Read - false: Unread	Yes	boolean	

Code	Key	Description	Display	Data Type	Enumeration Constant
	arose_at	The time when the event occurred (iso8601 extended format YYYY-MM-DDThh:mm:ss+hh:mm)	Yes	timestamp	
	severity	Notification event level	Yes	enum	Information: Notification level or higher Warning: Warning level or higher Error: Error level
	target_name	Target operations	Yes	string	
	message_id	Message ID	Yes	string	
	message	Message	Yes	string	

1.2.18.2 GET /v1/log/event_logs/{id}

Function

Displays the details of the event log

Processing Overview

Displays details on an event log.

The confirmed logs are marked as read.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
id	Specify the event log ID.	Required	integer	path

Status Codes

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

- 200

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: Event_log

- This REST API returns a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
200	id	Event log ID	integer	
	confirmation	Read/Unread - true: Read	boolean	

Code	Key	Description	Data Type	Enumeration Constant
		- false: Unread		
	arose_at	The time when the event occurred (iso8601 extended format YYYY-MM-DDThh:mm:ss+hh:mm)	timestamp	
	severity	Notification event level	enum	Information: Notification level or higher Warning: Warning level or higher Error: Error level
	target_name	Target operations	string	
	message_id	Message ID	string	
	message	Message	string	

1.2.19 Troubleshooting Data Download

1.2.19.1 GET /v1/troubleshooting_data/download

Function

Downloads the troubleshooting data

Processing Overview

Downloads troubleshooting data.

Parameter

Parameter Name	Description	Required/ Optional	Data Type	Parameter Type
token	Authentication token	Required	string	query
type	Specify the type of research material. - Select: [small | all] The default is assumed to be "all".	Optional	enum	query

Status Codes

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

- 200

For more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

This is not present when it completes normally.

1.2.20 Meta Data Recovery

1.2.20.1 GET /v1/datastores/{id}/metadata/recovery

Function

Display of the progress of meta data recovery for a datastore

Processing Overview

This REST 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.	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 more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: metadata_recovery_status

- This REST API returns a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
200	id	Datastore ID	string	
	status	Status of the meta data recovery	enum	Active: Processing Active(Readable): In process (read-only mode) 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	

1.2.20.2 POST /v1/datastores/{id}/metadata/recovery

Function

Meta data recovery for a datastore

Processing Overview

Recovers datastore metadata to the cache area.

If the executing user has "Monitor" role, this REST API cannot be executed.

Note

Metadata recovery for a datastore is a function used to restore the environment when on-premises data is destroyed due to problems such as hardware failures or disasters. For details, refer to "Restoring the Environment" in the "User's Guide".

Parameters

Parameter Name	Description	Required/Optional	Data Type	Parameter Type
id	Specify the ID of the datastore. You can specify only one ID.	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 more information on the status code, refer to "Status Code".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: metadata_recovery

- This REST API returns a single object.

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

Code	Key	Description	Data Type	Enumeration Constant
202	request_id	Request ID	integer	
	id	Datastore ID	string	

1.2.21 Shared Folder List (on Recovery)

1.2.21.1 GET /v1/datastore_folders

Function

Displays the shared folder names of a datastore

Processing Overview

Displays the names of shared folders that are set for a datastore.

Point

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 REST 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
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 more information on the status code, refer to "Status Code".
The message is output according to the status code. For more information on the message, refer to "Chapter 2 Messages".

Response Details

It is displayed as a JSON-formatted response.

- The name of the key that stores data: datastore_folder

- This REST API returns a single object.

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

Code	Key	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	

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.

Table 2.1 How to Read Message Descriptions

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.

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 : Specified or internal 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 perform the operation again.
If the specified parameters are correct, confirm that the REST client options (the -H part in the "curl" command, etc.) are specified correctly. If any of the options are not specified correctly, the specified parameters may not be recognized.

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 "***.***.***.***"

String Displayed in *formats*	Input Format
netmask	Netmask in the IPv4 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.

st10000100: An unexpected error occurred. message=*message*

Description

An unexpected error occurred.

Parameters

message : Detailed message

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. 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

No authentication token is specified or an invalid authentication token is specified.

System Response

The system terminates the operation.

System Administrator Corrective Action

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

If a valid authentication token is specified, confirm that the REST client options (the -H part in the "curl" command, etc.) are specified correctly. If any of the options are not specified correctly, the specified parameters may not be recognized.

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.

st10000304: Same ID is specified two times or more.

Description

The same ID is specified more than once. Specify each ID only once.

System Response

The system terminates the operation.

System Administrator Corrective Action

Specify a value that does not contain the same ID and 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 authentication token has already been disabled because you have been logged out. Acquire the authentication token again. And then, use the reacquired authentication token to perform the operation again.

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 authentication token has already been disabled because you have been logged out due to another user's forced login operation. Acquire the authentication token again. And then, use the reacquired authentication token to perform the operation again.

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.

The specified authentication token has already been disabled because you have been logged out due to another user's forced logout operation. Acquire the authentication token again. And then, use the reacquired authentication token to perform the operation again.

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 authentication token has already been disabled due to a forced logout operation by the system. Acquire the authentication token again. And then, use the reacquired authentication token to perform the operation again.

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.

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

Local authentication users cannot be created because the upper limit of local authentication users has been reached.

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

Information of 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 of authentication servers has been reached.

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.
Additionally, make sure there are no problems with your physical network configuration and the network settings. Configure the
network so that this product can communicate with the authentication server and set up the network of this product. For details, refer
to "Network Configuration" in the "User's Guide".

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.

---

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 message occurs even if the operation is re-executed, reboot this product and try 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.
Or, the specified license key is expired.

System Response

The system terminates the operation.

System Administrator Corrective Action

Specify a correct license key and then perform the operation again.
If the specified license key is expired, specify a license key within the validity period and try 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.

csgcp01003: Failed to delete the specified license because it is not registered.

Description

The specified license is not 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.
Specify a registered license key and try again.

---

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.
Additionally, make sure there are no problems with your physical network configuration and the network settings. Configure the network to allow this product to communicate with the SMTP server and set up the network of this product. For details, refer to "Network Configuration" in the "User's Guide".
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, network) are correct.
  If any of the specified parameters are incorrect, specify correct parameters and then perform the operation again.

- Check whether the account or the access key ID that is entered for the username has proper permission.

- For Proxy environments, check whether the Proxy setting has been properly performed.
  In addition, when using a hostname (FQDN) in the proxy setting, refer to "Setting Up Virtual Appliances" in the "User's Guide" and verify that a DNS server has been registered.

- Make sure there are no problems with your network configuration and the network settings.
  Configure the network to allow this product to communicate with Cloud providers and set up the network of this product. For details, refer to "Network Configuration" in the "User's Guide".

- 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.

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/updated because the value set as the capacity exceeds the datastore capacity that can be created.

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" column 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 allow hosts are not specified.

System Response

The system terminates the operation.

System Administrator Corrective Action

To specify NFS root access allow hosts (NFS no root squash hosts), select hosts among NFS allow hosts.

---

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 details about the reserved keywords related to user names, refer to "NAS Access User Settings" in the "User's Guide".
For details about the reserved keywords related to group names, 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 or AD)
shared_folder_type : Shared folder type (NFS or 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.

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 allow hosts and SMB deny hosts.

System Response

The system terminates the operation.

System Administrator Corrective Action

Specify different hosts for SMB allow hosts and SMB deny 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 perform the operation again.

- Confirm that the clock of this product is synchronized with that of the authentication server.
  For the clock settings, refer to the information about the NTP server settings in "Setting Up Virtual Appliances" of the "User's Guide" or refer to "Setting the System Clock" of the "User's Guide" to check the values that are set directly.

- Confirm whether the authentication is started.

- Confirm that a DNS server for resolving the authentication server domain has been set.
  Refer to "Setting Up Virtual Appliances" in the "User's Guide" to check the DNS settings.

- Make sure there are no problems with your physical network configuration and the network settings.
  Configure the network so that this product can communicate with the authentication server and set up the network of this product.
  For details, refer to "Network Configuration" in the "User's Guide".

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

---

csgcp01076: Failed to delete the specified license due to inconsistencies in the registration state of license.

Description

You cannot delete the basic license if an additional capacity license is registered.

System Response

The system terminates the operation.

System Administrator Corrective Action

In the **License** screen of CSG Web GUI, check the registration status of the license.
Delete the additional capacity license and then delete the basic license.

csgcp01077: Failed to register the specified license due to inconsistencies in the registration state of license.

Description

You cannot register an additional capacity license without the basic license.

System Response

The system terminates the operation.

System Administrator Corrective Action

In the **License** screen of CSG Web GUI, check the registration status of the license.
Register the basic license and then register an additional capacity license.

csgcp01078: The license key is already registered.

Description

The additional capacity license cannot be registered because the same license key is already registered.

System Response

The system terminates the operation.

System Administrator Corrective Action

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

- You cannot register a license key that is the same as the already registered additional capacity license key.

csgcp01079: The total license capacity exceeds the settable upper limit.

Description

You cannot register an additional capacity license because the total license capacity has reached the upper limit.

System Response

The system terminates the operation.

System Administrator Corrective Action

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

- You cannot register a license because the total license capacity is 500 TB or more.

csgcp01080: The number of characters for the specified parameter *param_name* must be *length*.

Description

The specified number of characters for *param_name* is incorrect.

Parameters

param_name : Specified parameter
length : Number of characters for the parameter

System Response

The system terminates the operation.

System Administrator Corrective Action

Specify the correct number of characters and perform the operation again.

csgcp01081: Failed to migrate the management data. detail=*detail*.

Description

Failed to migrate the management data.

Parameters

detail : Detailed message

System Response

The system terminates the operation.

System Administrator Corrective Action

Confirm the contents of *detail* and contact our customer support department.

csgcp01082: Database is being migrated.

Description

The database is being migrated.

System Response

The system continues processing.

System Administrator Corrective Action

No action is required.

csgcp01083: NAS access users and groups are being migrated.

Description

NAS access users and NAS access groups are being migrated.

System Response

The system continues processing.

System Administrator Corrective Action

No action is required.

csgcp01084: Datastore definition files are being migrated.

Description

The datastore definition files are being migrated.

System Response

The system continues processing.

System Administrator Corrective Action

No action is required.

csgcp01085: Shared folder definition files are being migrated.

Description

The shared folder definition files are being migrated.

System Response

The system continues processing.

System Administrator Corrective Action

No action is required.

csgcp01086: Internal logs are being migrated.

Description

The internal logs are being migrated.

System Response

The system continues processing.

System Administrator Corrective Action

No action is required.

csgcp01087: The specified network name is already in use.

Description

The specified network name is already in use.

System Response

The system terminates the operation.

System Administrator Corrective Action

Specify an unused network name and perform the operation again.

csgcp01088: The specified MAC address is already registered.

Description

The specified MAC address is already registered.

System Response

The system terminates the operation.

System Administrator Corrective Action

Specify an unused MAC address and perform the operation again.

csgcp01089: The specified network cannot be registered because the maximum number of networks that can be registered has been exceeded.

Description

The maximum number of networks that can be registered has been reached.

System Response

The system terminates the operation.

System Administrator Corrective Action

You can register up to three networks.
Delete any unnecessary networks and then perform the operation again.

csgcp01090: The first registered network cannot be deleted.

Description

You cannot delete the first registered network.

System Response

The system terminates the operation.

System Administrator Corrective Action

Specify the second and subsequent networks and perform the operation again.

csgcp01091: The network allocated to the cloud provider cannot be deleted. Release the allocation to the cloud provider first.

Description

You cannot delete a network that is assigned to a cloud provider. Remove the assignment to the cloud provider first.

System Response

The system terminates the operation.

System Administrator Corrective Action

Remove the assignment to the cloud provider and then perform the operation again.

csgcp01092: For the start date, specify a day that is earlier than or the same as the end date.

Description

Specify a day that is earlier than or the same as the end date.

System Response

The system terminates the operation.

System Administrator Corrective Action

Specify a day that is earlier than or the same as the end date and perform the operation again.

csgcp01093: The network setting failed.

Description

The network settings failed.

System Response

The system terminates the operation.

System Administrator Corrective Action

Make sure that the specified parameters (MAC address, DHCP, IP address, subnet mask, and gateway address) are correct.
If there is an error, specify the correct parameters and try again.

With the server virtualization software, confirm that the virtual NIC you are trying to configure has been added. If it has not been added, add a virtual NIC.

- If the network cannot communicate with the DHCP server, changing from a fixed IP to DHCP fails. When communication with the DHCP server is available, perform the switch to the DHCP server again.

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

csgcp01094: The specified IP address has been used for another network.

Description

The specified IP address is being used in another network.

System Response

The system terminates the operation.

System Administrator Corrective Action

The following addresses that are already set up to another network of this product cannot be specified.

- IP address set in another network

- Gateway address set in another network

- Loopback address (127.0.0.1)

You must specify an address that does not overlap any of these IP addresses.

csgcp01095: The number of secondary groups in the specified parameter exceeds the upper limit value.

Description

The number of secondary groups in the specified parameter exceeds the upper limit value.

System Response

The system terminates the operation.

System Administrator Corrective Action

You can specify up to 16 secondary groups.
Specify up to 16 secondary groups and perform the operation again.

csgcp01096: The specified license cannot be registered because the datastore capacity is larger than the license capacity.

Description

The license cannot be registered because the datastore capacity is larger than the specified license capacity.

System Response

The system terminates the operation.

System Administrator Corrective Action

For environments in which a datastore is created with a trial license and that license is changed to a regular license, a basic license cannot be registered if it has a smaller capacity than that datastore. Register a basic license that has the same capacity or larger capacity as the set capacity of that datastore.

csgcp01099: The specified storage device is busy.

Description

The operation cannot be performed because the specified storage device is in use.

System Response

The system terminates the operation.

System Administrator Corrective Action

After confirming that the storage device is in an idle state, perform the operation again.
If cloud backup script of ETERNUS SF AdvancedCopy Manager is used, after the other operations of the script are finished using the device, perform the operation again.

csgcp01101: The specified start offset is invalid.

Description

The specified start offset is invalid.

System Response

The system terminates the operation.

System Administrator Corrective Action

Specify the start offset within the following range.

- Lower limit: Start offset of the specified storage device

- Upper limit: Start offset of the specified storage device + Size from the start offset

If cloud backup script of ETERNUS SF AdvancedCopy Manager is used, register the copy pair again using the script.

csgcp01102: The specified offset size is invalid.

Description

The size from the specified start offset is invalid.

System Response

The system terminates the operation.

System Administrator Corrective Action

For the size from the start offset, specify "Start offset of the specified storage device + Size from the start offset" within the following range.

- Lower limit: Start offset of the specified storage device

- Upper limit: Start offset of the specified storage device + Size from the start offset

If cloud backup script of ETERNUS SF AdvancedCopy Manager is used, register the copy pair again using the script.

csgcp01103: The specified image file (*image_file_name*) does not exist.

Description

The specified image file does not exist.

Parameters

image_file_name : The specified image file name

System Response

The system terminates the operation.

System Administrator Corrective Action

Specify the correct image file name and perform the operation again.

csgcp01104: The disk formatting failed.

Description

Failed to format the disk.

System Response

The system terminates the operation.

System Administrator Corrective Action

Make sure the connection state between this product and the storage device is normal, and the device state of the storage device is normal. If abnormalities are found, perform a recovery and try again.

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

csgcp01105: Failed to export the storage device.

Description

Failed to export the image of the storage device.

System Response

The system terminates the operation.

System Administrator Corrective Action

Check the status of the cache, datastore, and network on the **Status** panel of CSG Web GUI dashboard. If an error has occurred, check for the cause in the **Logs** panel. After eliminating the cause, try again.

If there are no errors in the **Status** panel of CSG Web GUI dashboard, make sure the connection state between this product and the storage device is normal, and the device state of the storage device is normal. If abnormalities are found, perform a recovery and try again.

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

---

csgcp01106: Failed to import the storage device.

Description

Failed to write-back the image of the storage device.

System Response

The system terminates the operation.

System Administrator Corrective Action

Make sure the connection state between this product and the storage device is normal, and the device state of the storage device is normal. If the storage device is created with Thin Provisioning, make sure that there is sufficient physical capacity. If abnormalities are found or the capacity is insufficient, perform a recovery and try again.

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

---

csgcp01107: The image file is in use by another process.

Description

The specified image file is in use by another process.

System Response

The system terminates the operation.

System Administrator Corrective Action

After another process using the specified image file (Backup or Restore using cloud backup script of ETERNUS SF AdvancedCopy Manager) is finished, try again.

---

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" 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 the Cache Area by Adding Virtual Disks" 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

If cloud backup scripts of ETERNUS SF AdvancedCopy Manager are used, this product may reboot during a backup or a restore. If a reboot occurs, try again after the reboot.

If this product does not reboot or if cloud backup scripts of ETERNUS SF AdvancedCopy Manager are not being used, 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

This message is output if communication with the cloud provider is not available during the startup of this product. Refer to "Changing Cloud Provider Settings" in the "User's Guide", correct the cloud provider definition setting, and then restart this product.

If this problem persists even after performing the operation again, 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.

csgdp01013: The disk capacity of the meta data area is insufficient. Expand the cache area.

Description

The disk space for meta data has run out.

System Response

The system terminates the operation.

System Administrator Corrective Action

Expand the cache area.

---

csgdp01014: A write operation cannot be performed. Check the cache state.

Description

Writing operations can no longer be performed. Check the cache status.

System Response

The system continues the operation.

System Administrator Corrective Action

Check the cache status and remove the cause that is preventing the writing operations.

---

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 10 GB 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 10 GB 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.

csgdp11001: The system memory may not be reserved. Add system memory.

Description

There is a risk that this product will run out of memory.

System Response

The system continues the operation.

System Administrator Corrective Action

Confirm that the system has the amount of memory specified in "Virtual Appliance Specifications" in the "User's Guide" and then increase the memory capacity.

csgdp11002: The disk capacity of the meta data area is decreasing. Expand the cache area.

Description

There is a risk that the disk space for meta data will run out.

System Response

The system continues the operation.

System Administrator Corrective Action

Expand the cache area.

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 and 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

No action is required.

csgdp21004: Successfully completed the metadata recovery.

Description

The meta data recovery has been completed successfully.

System Administrator Corrective Action

No action is required.

csgdp21005: The data transmission was completed. Time="*YYYY-MM-DDThh:mm:ss+hh:mm*"

Description

All untransferred data has been forwarded.

Parameters

YYYY-MM-DDThh:mm:ss+hh:mm : Transfer completion time

System Response

The system continues processing.

System Administrator Corrective Action

No action is required.

csgdp21006: The expected time to complete the transfer when the metadata recovery is started is "*YYYY-MM-DDThh:mm:ss+hh:mm*"

Description

The transfer completion time when starting a metadata recovery is "*YYYY-MM-DDThh:mm:ss+hh:mm*".

Parameters

YYYY-MM-DDThh:mm:ss+hh:mm : Transfer completion time

System Response

The system continues processing.

System Administrator Corrective Action

No action is required.

---

csgdp21007: Migrating the cache metadata: *x*% complete.

Description

The cache metadata is being migrated. x % has completed.

Parameters

x : Progress rate

System Response

The system continues processing.

System Administrator Corrective Action

No action is required.

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.

- 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 perform subsequent operation again.

- If the register operation of a NAS access user or a NAS access group terminates with an error

  When the NAS authentication server is registered in this product, register with the name not registered in the NAS authentication server.

- For cases other than the above

  Perform 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:

   - "Failed" is displayed in the **Result** field, and

   - This message (csgfw02019) is displayed in the **Message** field.

2. If there is an operation log that meets the conditions in step 1, check the contents of the following fields:

   - **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.

2.5 Messages with a csgva Prefix

csgva10001: A command error occurred.

Description

A command 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.

csgva10006: The NAS access user (sftpadmin) already exists.

Description

A NAS access user for local authentication with the "sftpadmin" user name already exists.

System Response

The system terminates the operation.

System Administrator Corrective Action

Restart the system, and change the "sftpadmin" user name for NAS access.

To change the user name, delete the corresponding user first, and then create a new one. Also, change the owner of the shared folder to the new NAS access user name.

And then, perform the operation again.

csgva10007: The URI of the cloud provider is incorrect. (*detail*)

Description

The format of the cloud provider URI is incorrect.

Parameters

detail : Cloud provider URI

System Response

The system terminates the operation.

System Administrator Corrective Action

Restart the system, and change the cloud provider URI to match the format described in the "User's Guide".

And then, perform the operation again.

csgva10008: This update cannot be applied for a system whose version is *VERSION*.

Description

The software for this system version cannot be updated.

Parameters

VERSION : Version information

System Response

The system terminates the operation.

System Administrator Corrective Action

Confirm that the system version to be updated and the update module are correct.
Perform the operation again with the correct system version and update module.

csgva10009: The system has been already updated.

Description

The software for this system has already been updated.

System Response

The system completes the operation successfully.

System Administrator Corrective Action

Confirm that the system version to be updated and the update module are correct.
If there are no problems, no action is required.

csgva10010: The system update succeeded.

Description

The software has been updated successfully.

System Response

The system completes the operation successfully.

System Administrator Corrective Action

No action is required.

csgva10011: The specified shared folder (*folder name*) does not exist.

Description

The specified shared folder does not exist.

Parameters

folder name : Specified shared folder name

System Response

The system terminates the operation.

System Administrator Corrective Action

Check whether the specified shared folder name is correct and then perform the operation again with the correct name.

csgva10012: The operation cannot be executed for the specified key (*key*).

Description

The system cannot perform the specified key.

Parameters

key : Specified key

System Response

The system terminates the operation.

System Administrator Corrective Action

Check whether the specified key is correct and then perform the operation again with the correct key.

csgva10013: The specified NAS access user (*user name*) does not exist.

Description

The specified NAS access user does not exist.

Parameters

user name : Specified NAS access user name

System Response

The system terminates the operation.

System Administrator Corrective Action

Check whether the specified NAS access user is correct and then perform the operation again with the correct name.

csgva10014: The specified NAS access group (*group name*) does not exist.

Description

The specified NAS access group does not exist.

Parameters

group name : Specified NAS access group name

System Response

The system terminates the operation.

System Administrator Corrective Action

Check whether the specified NAS access group is correct and then perform the operation again with the correct name.

csgva10015: The specified value is incorrect.

Description

The specified value is incorrect.

System Response

The system terminates the operation.

System Administrator Corrective Action

Check whether there are mistakes in the specification of value or specification method and then perform the operation again with the correct value.

Appendix A Incompatibility Information

A.1 Information on the Incompatibility with Versions before V1.3.0.

There are no incompatibilities with versions before V1.3.0.

A.2 Information on the Incompatibility with Versions before V1.2.0.

This appendix provides information on the incompatibility with versions before V1.2.0.

A.2.1 Messages

The messages output by this product have changed as follows.

Table A.1 Changes to the messages

Changes	Old product (V1.1.0)	This product (V1.2.0)
csgdp01013	No output	Output when the disk space for meta data runs out.
csgdp01014	No output	Output when writing to the cache is blocked.
csgdp11001	No output	Output when there is a risk that the memory of this product will run out.
csgdp11002	No output	Output when there is a risk that the disk space for meta data will run out.

Glossary

The following definitions are for the terms used in the manuals of this product.

Access key

A component of the security authentication information required for accessing Microsoft Azure. Used as a password for accessing Microsoft Azure storage.

Access key ID

A component of the security authentication information (access key) required for accessing Amazon S3. 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.

Authentication server

A server that provides a directory service for integrated user management and authentication in a network via Active Directory (AD) or Lightweight Directory Access Protocol (LDAP).

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 level

The datastore level. This value varies depending on the version in which the datastore is created as shown below.

- For datastores created with version 1.2.0 or later: 1

- For datastores created with version 1.1.0 or earlier: 0

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.

Fast Recovery

A function that performs a read in advance even during a recovery process.

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 root access allow 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 - a / b) * 100
```

> a: Amount of data after deduplication and compression
> b: Amount of data before deduplication and compression

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. 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.

Storage account

A component of the security authentication information required for accessing Microsoft Azure. Used as a user ID for accessing Microsoft Azure storage.

Traffic control

The maximum data transfer rate can be set to reduce the bandwidth usage for data transfers to the Datastore.

Virtual machine

A virtual computer created by virtualization software.