NetApp

Cloud Manager API documentation

Cloud Manager Automation

NetApp
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Cloud Manager API documentation

Get started

Overview of the Cloud Manager platform

The Cloud Manager platform is composed of multiple internal service components. Each service implements a specific function or capability and typically exposes one or more REST APIs. Collectively these services form a flexible and extensible platform. The Cloud Volumes ONTAP API is the typical starting place for automation specialists using the Cloud Manager platform.

Related information

[Cloud Volumes ONTAP API](#)

REST implementation details

While REST establishes a common set of technologies and best practices, the details of each API can vary based on the design choices of the development team. You should be aware of the details and operational characteristics of the Cloud Manager REST API before using it with a live deployment.

Basic concepts

Representational State Transfer (REST) is a style for creating distributed web applications. When applied to the design of a web services API, it establishes a set of technologies and best practices for exposing server-based resources and managing their states. The Cloud Manager platform REST APIs use mainstream protocols and standards to provide a flexible foundation for deploying and administering your cloud-based resources.

Overview of the API resources

The REST style of application development begins by identifying the set of server-based resources. Considering the Cloud Volumes ONTAP API as an example, the resources are broadly categorized as follows:

- Administrative resources

  Used to set up and configure Cloud Manager

- Auditing resources

  Used to view details about Cloud Manager activities and operations

- Authentication resources

  Used to authenticate to Cloud Manager so you can make API calls

- Working environment resources

  Used to deploy and manage working environments, including: single Cloud Volumes ONTAP systems,

Cloud Volumes ONTAP HA configurations, and ONTAP clusters

REST endpoints

REST resources are accessed through endpoints identified in the URL path. Each endpoint provides access to one of the following:

- Resource instance
- Collection of resource instances

Types of input parameters

There are several types of parameters available with the Cloud Manager platform APIs with each HTTP request.

Type	Description
Path parameter	Identifiers or names for resource instances that are included in the URL path.
Query parameter	One or more key-value pairs at the end of the URL which qualify and extend the base call.
Request header	Key-value pairs in the request which carry additional information available to the server.
Body parameter	Data which is optionally included with a request and formatted using JSON.

HTTP details

The Cloud Manager platform REST APIs are based on the HTTP protocol as well as JSON for content exchange. This section describes the details of how HTTP is used.

Request

HTTP methods

The HTTP methods supported by the Cloud Manager platform REST APIs are shown in the following table. Not all HTTP methods are available at each of the REST endpoints. For more information, see the reference documentation for the specific API you are using.

HTTP method	Description
GET	Retrieves object properties for a resource instance or collection of resources.
POST	Creates a new resource instance based on the supplied input values.
PUT	Updates an existing resource instance based on the supplied input values.
PATCH	Updates specific fields of an existing resource instance based on the supplied input values.
DELETE	Deletes an existing resource instance.

Request headers

The common HTTP request headers are described below.

Request header	Description
Authorization	This header contains a bearer token used to access the server.
x-agent-id	The agent identifier is based on the client ID and is used to identify the user agent.
Content-Type	This representation header is used to indicate the original media type of the resource.
Accept	The server automatically returns content in JSON format if Accept header is not specified.

Response

HTTP status codes

The common HTTP status codes are described below.

Status code	Reason Phrase	Description
200	OK	The request was completed successfully.
202	Accepted	The request was accepted and is currently in process. Cloud Manager returns this code when the API call operates asynchronously. For example, the `/vsa/working-environments` call returns with 202 but the Cloud Volumes ONTAP instance launches up to 25 minutes later.
204	No Content	The operation was completed successfully and the server did not send a response message.
400	Bad Request	The request input is not recognized or is inappropriate. An error response explains the reason.
401	Unauthorized	The user has not authenticated.
403	Forbidden	This operation is not allowed for the current authenticated user.
409	Conflict	The operation failed because another operation is already in progress.
420	---	Cloud Manager has not been set up. You must set up Cloud Manager using the API call /occm/setup/init
5xx	---	An unexpected error occurred within the Cloud Manager server which has prevented it from fulfilling the request.

Additional considerations

There are several additional characteristics of the Cloud Manager REST APIs affecting their operation and use. You should be aware of these considerations before issuing an API call.

Public identifiers

All resources exposed through the Cloud Volumes ONTAP API (for example, working environments) are assigned a public ID. Whenever a resource is created or returned, the public ID is displayed in the response. You must specify a resource's public ID when performing operations on the resource. For example, you must specify the public ID for a working environment when you create a volume.

Asynchronous processing

For most of the Cloud Manager platform REST APIs, all HTTP request methods except GET are processed asynchronously. If needed, you can check the status of an active task based on the `request id` returned in the original HTTP response. Each task has a status value as described in the following table.

Status	Description
1	The asynchronous task completed successfully.
0	The background task is still running and has not completed.
-1	The asynchronous task completed but failed.

For more information about how to retrieve the status of a background task for an asynchronous request see Get active task.

Identity and authorization

Generate an NSS user ID

You can create a NetApp Support Site (NSS) user ID through the Cloud Manager web user interface. This ID is included when creating a Cloud Manager working environment.

About this task

Registering NSS credentials with Cloud Manager and creating an NSS user ID enables subscription to the Cloud Volumes ONTAP system, product support and analytics. For information about related NSS administrative tasks, see Manage NSS credentials.

Before you begin

You must have a NetApp account (formerly Cloud Central account). You normally create this account when first signing in to Cloud Manager and it's displayed at the top of the web user interface. See Learn about NetApp accounts for more information.

Steps

1. Navigate to the Cloud Manager web site using a browser:

   https://cloudmanager.netapp.com

2. Sign in using your NetApp account (formerly Cloud Central account) credentials.

3. Click on the **?** icon at the top right of the page and select **Support**.

4. Navigate to the **NSS Management** tab and click **Add NSS Account**.

5. When prompted, click **Continue** which redirects you to a Microsoft login page.

   NetApp uses Microsoft Azure Active Directory as the identity provider for authentication services specific to support and licensing.

6. Provide the NSS email address and password. After successful authentication, you will be redirected to the Cloud Manager page and an NSS user ID will be automatically generated.

After you finish

You can use the generated NSS user ID when creating a working environment with your preferred licensing

model and cloud provider. The NSS user ID is required with BYOL licensing and optional for the PAYGO subscription.

Get the client and account identifiers

You can sign into the Cloud Manager web user interface to retrieve the client and account identifiers to use with the workflows. You can use these identifiers to access the metadata, authentication, and security related information.

> ⓘ This page includes two tasks describing how to use the Cloud Manager web user interface to retrieve the ID values. You can also use the Cloud Manager REST API to get the ID values. See Get supported services for more information.

Get the client identifier

You can retrieve the client ID and use it with the x-agent-id HTTP request header.

About this task

You need to access the client ID which is unique for each Cloud Manager Connector and then use it as the agent identifier.

Before you begin

You must have a NetApp account (formerly Cloud Central account). You created this account when you first logged in to Cloud Manager and it was displayed at the top of the Cloud Manager user interface. See Learn more about NetApp accounts for more information.

Steps

1. Navigate to the Cloud Manager web site using a browser:

   https://cloudmanager.netapp.com

2. Sign in using your NetApp account (formerly Cloud Central account) credentials.
3. Click **Connector** at the top right of the page and select **Manage Connectors**.
4. On the **Manage Connectors** page, click the ellipses (…) icon.
5. Select the **Connector ID**. This value is based on the client ID.

   You can use the Connector ID in the x-agent-id HTTP request header as shown in the workflow curl examples, `uzJbMFKEnuzi2ryLaENbCP52KBTXx0aIclients`.

Get the account identifier

You can also retrieve the account ID.

About this task

You can create multiple accounts and access the unique identifier for each account.

Before you begin

You must have a NetApp account (formerly Cloud Central account). You created this account when you first logged in to Cloud Manager and it's displayed at the top of the Cloud Manager user interface. Learn more about NetApp accounts.

Steps

1. Navigate to the Cloud Manager web site using a browser:

   https://cloudmanager.netapp.com

2. Sign in using your NetApp account (formerly Cloud Central account) credentials.
3. Click the **Account** drop-down and click **Manage Account** for the selected account.
4. In the **Overview** section copy the **Account ID** value.

Create user token

You must generate a bearer token to authenticate and access the Cloud Manager REST API. There are two workflows available depending on the type of authentication. You need to select the correct workflow:

- Federated
- Nonfederated

Create a user token with federated authentication

This workflow describes how to create an access token when using federated authentication.

Before you begin

Review the parameters in the **JSON input example** for the second workflow step. In particular, you must have the client identifier.

1. Generate a NetApp refresh token

Navigate to Refresh Token Generator and generate a long-lived token. You need to provide this in the `refresh_token` JSON input parameter in the next step.

2. Generate the user token

This API call uses the *Auth0* authentication service and not the NetApp Cloud Manager service. See the URL in the curl example below and adjust for your environment as needed.

HTTP method	Resource path
POST	/oauth/token

curl example

```
curl --location --request POST 'https://netapp-cloud-
account.auth0.com/oauth/token' --header 'Content-Type: application/json'
--d @JSONinput
```

Input parameters

   The JSON input example includes the list of input parameters.

JSON input example

```
{
    "grant_type": "refresh_token",
    "refresh_token": "<REFRESH_TOKEN>",
    "client_id": "<CLIENT_ID>"
}
```

Output

The JSON output example includes the list of returned values. The `expires_in` value is expressed in seconds.

JSON output example

```
{
    "access_token": "<USER_TOKEN>",
    "id_token": "<ID_TOKEN>",
    "scope": "openid profile cc:update-password",
    "expires_in": 86400,
    "token_type": "Bearer"
}
```

Create a user token with nonfederated authentication

This workflow describes how to create an access token when using non-federated authentication.

Before you begin

Review the parameters in the **JSON input example** for the first workflow step. In particular, you must have the account credentials and the client identifier.

1. Generate the user token

This API call uses the *Auth0* authentication service and not the NetApp Cloud Manager service. See the URL in the curl example below and adjust for your environment as needed.

HTTP method	Resource path
POST	/oauth/token

curl example

```
curl --location --request POST 'https://netapp-cloud-
account.auth0.com/oauth/token' --header 'Content-Type: application/json'
--d @JSONinput
```

Input parameters

The JSON input example includes the list of input parameters.

JSON input example

```json
{
    "username": "user@my-company-demo.com",
    "scope": "openid profile",
    "audience": "https://api.cloud.netapp.com",
    "client_id": "<CLIENT_ID>",
    "grant_type": "password",
    "password": "userpassword",
    "Realm":"Username-Password-Authentication"
}
```

Output

The JSON output example includes the list of returned values. The `expires_in` value is expressed in seconds.

JSON output example

```json
{
    "access_token": "<USER_TOKEN>",
    "id_token": "<ID_TOKEN>",
    "scope": "openid profile cc:update-password",
    "expires_in": 86400,
    "token_type": "Bearer"
}
```

Storage services APIs

Cloud Volumes ONTAP

Overview of the Cloud Volumes ONTAP REST API

The NetApp Cloud Manager service includes a REST API, Cloud Volumes ONTAP API, you can use programmatically to administer your cloud-based resources. The Cloud Volumes ONTAP REST API provides access to a subset of the functionality available in the Cloud Manager platform with a focus on Cloud Volumes ONTAP deployments.

There are several benefits to using the Cloud Volumes ONTAP REST API.

Built on REST technology and design principles

The Cloud Volumes ONTAP API has been designed based on REST technology and current best practices. The core technologies include Hypertext Transfer Protocol (HTTP) and JavaScript Object Notation (JSON).

Anchors the Cloud Manager development platform

The Cloud Volumes ONTAP REST API provides the primary external interface to the Cloud Manager platform. There are additional REST APIs which support the various platform services.

Access to NetApp cloud token-based security

Cloud Manager authentication and authorization is based on the *OAuth2* standard. NetApp relies on the *Auth0* service implementation.

Alignment with the Cloud Manager web UI

The Cloud Manager web user interface uses the same core REST API and therefore there is consistency between the two access paths.

Getting started

You can quickly get started using the Cloud Manager REST API by first preparing as described in Before you begin. You'll also need a client identifier to test the curl sample in Hello world. After that you can begin preparing to use the workflows and plan a deployment.

Hello world

You can issue a curl command to get started using the Cloud Volumes ONTAP REST API and confirm its availability.

> (i) The example provided below is very simple. The workflow samples later in this guide use a more robust format. As a start, see Understanding the workflow processes.

Before you begin

You must do the following:

- Determine the identifier to use for the `x-agent-id` request header as well as the related client ID. See Get the client and account identifiers.

- Acquire an access token for the `Authorization` request header. See Create user token.

Curl example

The following curl command retrieves information about the Cloud Manager server.

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/occm/system/about'
--header 'Content-Type: application/json' --header 'x-agent-id:
<AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
```

Output example

Information about the system is provided in the following format.

```
{
  "version": "string",
  "build": "string",
  "buildTimestamp": "integer",
  "systemId": "string",
  "environment": "string",
  "siteIdentifier": {
    "company": "string",
    "host": "string",
    "site": "string"
  },
  "serverTimeZone": {
    "timeZoneName": "string",
    "formattedTimeZone": "string"
  },
  "beta": "boolean",
  "releaseNumber": "integer",
  "simplicatorUrl": "string",
  "migrationPerformed": "boolean",
  "demoMode": "boolean",
  "usingDockerInfra": "boolean",
  "privateIp": "string"
}
```

Understanding the workflow processes

You should be familiar with the high-level organization and format of the Cloud Volumes ONTAP workflow processes before using them with a live cloud deployment.

Introduction

A **_workflow_** is a sequence of one or more steps needed to accomplish a specific administrative task or goal. With the Cloud Volumes ONTAP workflows, each step can be one of the following:

- REST API call

- Invocation of another workflow

- Miscellaneous task such as deciding on the size of a new volume

The workflows provided include the minimum steps and parameters needed to accomplish each task. You can use these workflows as a starting point and customize them for your environment as needed.

> ⓘ   All the workflow examples are designed to be used with NetApp Cloud Volumes ONTAP.

High level organization of the workflows

At a high level, the workflows are organized based on three primary attributes. The organization is reflected in the navigation sidebar.

1. Cloud provider

Most of the workflows can be performed with one cloud provider. The supported cloud platforms include:

- Amazon Web Services

- Microsoft Azure

- Google Cloud Platform

2. Functional category

The workflows for each cloud provider (AWS, Azure, GCP) are placed in a specific functional category. The major categories as reflected in the navigation sidebar are presented below.

> ⓘ   In addition to the workflows used with the specific cloud providers, there is also a set of common workflows that can be used with any cloud provider. See Common workflows for all cloud providers for more information about these workflows and how they are organized.

Working environments

A working environment is the context within which a Cloud Volumes ONTAP instance is deployed and run. These workflows allow you to create working environments and perform related administrative tasks. You can perform specific workflows to create a working environment based on your preferred licensing model (PAYGO or BYOL), remove a working environment, and retrieve the details of a working environment. In addition, you can configure the CIFS server when creating a volume that uses the CIFS protocol as part of creating a working environment.

Aggregates

An aggregate is the low-level structure for Cloud Volumes ONTAP storage. These workflows allow you to create aggregates and perform related administrative tasks.

Volumes

You can expose the storage volumes for use by your applications. You can perform these workflows to create a volume (using NFS, CIFS, or iSCSI protocol) as well as delete, retrieve, and modify an existing volume based on your storage requirements.

Metadata

The metadata workflows allow you to view and administer the basic configuration of your cloud environment.

Miscellaneous

A workflow that is not assigned to an existing functional category is considered *Miscellaneous*. For example, there is a workflow to create a cloud provider account. The cloud provider account securely stores and manages your cloud provider credentials and establishes an identity for users (such as InstanceProfile with AWS and ManagedIdentity with Azure). This account provides fine-grained authorization of the services and resources based on multiple critical conditions.

3. Single node and High availability workflows

Many of the workflows vary based on the type of the deployment.

Single node

The cluster consists of a single Cloud Volumes ONTAP instance or ONTAP node.

HA pair

The cluster consists of two linked Cloud Volumes ONTAP instances which together provide the ONTAP high availability (HA) feature.

> ⓘ If both versions of a workflow exist for an administrative task, they are included on the same page.

Base URLs and REST endpoint paths

The REST API calls in the workflows use different URLs and URL formats depending on the desired service and resource.

> ⓘ Every API call used in the workflows includes the resource path to the REST endpoint. The path is relative and appended to the appropriate **base** URL. Unless otherwise indicated for a specific API call, the base URL addresses the NetApp Cloud Manager service. You should always carefully review the curl examples provided in the workflows before using them.

Cloud Manager endpoints

The majority of the workflow REST API calls are made to the **NetApp Cloud Manager** service. The base URL of the SaaS interface is:

https://cloudmanager.netapp.com/

Auth0 authentication service

Some of the REST API calls used in the identity workflows are made to the **Auth0** token authentication service. The base URL is:

https://netapp-cloud-account.auth0.com/

Common parameters and variables

There are several parameters or variables common among the workflows.

Request headers

Nearly all the REST API calls used in the workflows require the following two request headers.

> (i) Rather than cite these headers as a prerequisite in every REST API call, they are considered a universal requirement. If a workflow does not use these headers or has different prerequisites, the section **Before you begin** is included at the top of the workflow and describes the prerequisites.

Authorization request header

To get a bearer token for this header, perform the appropriate workflow at Create a user token and extract the `access_token` value.

x-agent-id request header

This header contains the agent ID which is based on the client ID. See Get client and account identifiers for information about creating this value.

Presentation of common tokens and identifiers

Most of the variable tokens, identifiers, and other variables used in the sample REST API calls consist of long strings of letters, numbers, and special characters. They are considered *opaque* with no easily discernible content or meaning. Therefore, rather than including the actual original strings, smaller reserved keywords are used instead. This has several benefits:

- The curl and JSON samples are simpler and easier to understand.
- Because all keywords use the same format (including capital letters), you can quickly identify the content to insert or extract.
- No value is lost because the original values cannot be copied and used with an actual deployment.

A list of the keywords used in the workflow curl examples is presented in the table below.

Keyword	Description
<ACCESS_TOKEN>	An access token is a temporary string which establishes identity and access based on the OAuth2 standard.
<ID_TOKEN>	The ID token contains additional identity information for the user based on OpenID Connect (OIDC).
<CLIENT_ID>	This value uniquely identifies the user within a specific authorization domain.
<AGENT_ID>	The agent identifier is based on the client ID and is used to identify the user agent.
<ACCOUNT_ID>	This value identifies your NetApp account.
<NSS_KEY_ID>	This value identifies an entitlement key and is used by NetApp support.
<WORKING_ENV_ID>	This value identifies a working environment for the ONTAP runtime and so is synonymous with a Cloud Volumes ONTAP instance.
<SVM_NAME>	The name used for an ONTAP storage virtual machine.
<VOLUME_NAME>	The name used for an ONTAP storage volume.
<AGGR_NAME>	The aggregate name for a disk operation.

Keyword	Description
<REQUEST_ID>	This value is returned to the caller in the HTTP response and uniquely identifies the request.
<PROVIDER>	Abbreviation for the cloud provider.
<CLOUD_ACC_ID>	Account ID for the cloud provider.
<REFRESH_TOKEN>	NetApp refresh token used for federated authentication.

JSON input for curl command

In many cases, a workflow step accepts JSON input in the request body of the REST API call. This input is indicated in the curl command through the -d option, with the corresponding sample included in the **JSON input example** section.

Working environment status requirements

Many of the workflows require the working environment to have a specific status (such as ON or DEGRADED) before the REST API call can be performed. Review the API reference content for details about the requirements for each API call.

Typical Cloud Volumes ONTAP deployment

A summary of the major steps needed to deploy and administer a Cloud Volumes ONTAP instance using the Cloud Manager REST API is presented below.

REST implementation details

HTTP methods

Method	Description
POST	Create an object instance
GET	Retrieve an object instance or collection
PATCH	Update an existing object
DELETE	Remove an existing object

Request headers

Request Header	Description
Authorization	Contains the user JWT access token and is required
`x-agent-id`	Contains the Cloud Manager Connector ID and can be included depending on the call

Query parameters

You can use query parameters with endpoints in the following component:

Component	Query Parameter
Resource	account (required) resourceType workspace resourceClass resourceId

Response headers

This API uses the standard HTTP response headers common with all the Cloud Manager platform REST APIs. See REST implementation for more information.

HTTP status codes

HTTP Status Code	Reason phrase	Description
200	OK	Returned for successful operation completion
400	Bad Request	Returned if the input is malformed and could not be parsed
401	Unauthorized	Returned if user authentication failed or the token has expired
403	Forbidden	Returned for authorization errors depending on the resource and token

API reference

This section contains the details of the Cloud Volumes ONTAP REST API calls, including resources, endpoints, parameters, and status codes. You can refer to this content when developing applications that use the REST API.

Resources

This section describes the API calls available for each resource.

Accounts

Creates an AWS account.

```
POST /accounts/aws
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body		true	AwsAccountRequest	

Responses

HTTP Code	Description	Schema
default	success	AwsAccountResponse

Consumes

- application/json

Produces

- application/json

Retrieves an Nss account by public Id.

```
GET /accounts/nss/{cloudProviderAccountId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	cloudProviderAccountId	Public Id of Nss account	true	string	

Responses

HTTP Code	Description	Schema
default	success	NssAccountResponse

Consumes

- application/json

Produces

- application/json

Updates an existing Nss account.

```
PUT /accounts/nss/{cloudProviderAccountId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	cloudProviderAccountId	Public Id of Nss account	true	string	
BodyParameter	body		false	NssAccountRequest	

Responses

HTTP Code	Description	Schema
200	success	NssAccountResponse
404	Nss Account with the given account id does not exist	No Content

Consumes

- application/json

Produces

- application/json

get aws cloud account id for the given creds.

```
POST /accounts/aws/validate-creds
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body		true	AwsAccountRequest	

Responses

HTTP Code	Description	Schema
default	success	string

Consumes

- application/json

Produces

- application/json

Retrieves all accounts that are only for cloud (AWS, AZURE, GCP).

```
GET /accounts/cloud-providers
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	providerType		false	enum (AWS, AZURE, GCP)	

Responses

HTTP Code	Description	Schema
default	success	CloudProviderAccountResponse

Consumes

- application/json

Produces

- application/json

Deletes an existing account. It is not possible to delete an account that has working environments attached to it.

```
DELETE /accounts/{cloudProviderAccountId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	cloudProviderAccountId	Public Id of the account to be deleted	true	string	

Responses

20

HTTP Code	Description	Schema
404	Account with the given account id does not exist	No Content

Consumes

- application/json

Produces

- application/json

Retrieves accounts.

```
GET /accounts
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	providerType		false	enum (AWS, AZURE, GCP, NSS)	

Responses

HTTP Code	Description	Schema
default	success	CloudProviderAccountResponse

Consumes

- application/json

Produces

- application/json

Retrieve Gcp Storage account by public Id.

```
GET /accounts/gcp/{cloudProviderAccountId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	cloudProviderAccountId	Public Id of Gcp Storage account	true	string	

Responses

HTTP Code	Description	Schema
default	success	GcpAccountResponse

Consumes

- application/json

Produces

- application/json

Updates an existing Gcp storage account.

```
PUT /accounts/gcp/{cloudProviderAccountId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	cloudProviderAccountId	Public Id of Gcp storage account	true	string	
BodyParameter	body		false	GcpStorageAccountRequest	

Responses

HTTP Code	Description	Schema
200	success	GcpAccountResponse
404	Gcp Storage Account with the given account does not exist	No Content

Consumes

- application/json

Produces

- application/json

Retrieves an AWS account by public Id.

```
GET /accounts/aws/{cloudProviderAccountId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	cloudProviderAccountId	Public Id of AWS account	true	string	

Responses

HTTP Code	Description	Schema
default	success	AwsAccountResponse

Consumes

- application/json

Produces

- application/json

Updates an existing AWS account.

```
PUT /accounts/aws/{cloudProviderAccountId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	cloudProviderAccountId	Public Id of AWS account	true	string	
BodyParameter	body		false	AwsAccountRequest	

Responses

HTTP Code	Description	Schema
200	success	AwsAccountResponse
404	AWS Account with the given account id does not exist	No Content

Consumes

- application/json

Produces

- application/json

Retrieves an Azure account by public Id.

```
GET /accounts/azure/{cloudProviderAccountId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	cloudProviderAccountId	Public Id of Azure account	true	string	

Responses

HTTP Code	Description	Schema
default	success	AzureAccountResponse

Consumes

- application/json

Produces

- application/json

Updates an existing Azure account.

```
PUT /accounts/azure/{cloudProviderAccountId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	cloudProviderAccountId	Public Id of Azure account	true	string	
BodyParameter	body		false	AzureAccountRequest	

Responses

HTTP Code	Description	Schema
200	success	AzureAccountResponse
404	Azure Account with the given account id does not exist	No Content

Consumes

- application/json

Produces

- application/json

Create a Gcp Storage account.

```
POST /accounts/gcp
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body		true	GcpStorageAccountRequest	

Responses

HTTP Code	Description	Schema
default	success	GcpAccountResponse

Consumes

- application/json

Produces

- application/json

Creates an Azure account.

```
POST /accounts/azure
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body		true	AzureAccountRequest	

Responses

HTTP Code	Description	Schema
default	success	AzureAccountResponse

Consumes

- application/json

Produces

- application/json

Validate an Azure account request.

```
POST /accounts/azure/validate-creds
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body		true	AzureAccountRequest	

Responses

HTTP Code	Description	Schema
default	success	AssociatedSubscription array

Consumes

- application/json

Produces

- application/json

Creates a Nss account.

```
POST /accounts/nss
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body		true	NssAccountRequest	

Responses

HTTP Code	Description	Schema
default	success	NssAccountResponse

Consumes

- application/json

Produces

- application/json

validate gcp account request.

```
POST /accounts/gcp/validate-creds
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body		true	GcpStorageAccountRequest	

Responses

HTTP Code	Description	Schema
default	success	string

Consumes

- application/json

Produces

- application/json

Updates vsa list of an existing Nss account.

```
PUT /accounts/nss/set-vsa-list/{cloudProviderAccountId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	cloudProviderAccountId	Public Id of Nss account	true	string	
BodyParameter	body		false	NssAccountVsaListRequest	

Responses

HTTP Code	Description	Schema
200	success	NssAccountResponse
404	Nss Account with the given account id does not exist	No Content

Consumes

- application/json

Produces

- application/json

Audit

Retrieves the audit group entry for the specific request ID.

```
GET /audit/{requestId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	requestId	Retrieve audit group entries for this request ID	true	string	
QueryParameter	records	with records	false	boolean	

Responses

HTTP Code	Description	Schema
default	success	AuditGroupSummary array

Consumes

- application/json

Produces

- application/json

Retrieves timeline filter options for local UI.

```
GET /audit/local/audit/{accountId}/options
```

Responses

HTTP Code	Description	Schema
default	success	CloudCentralAuditOptionsResponse

Consumes

- application/json

Produces

- application/json

Retrieves audit record for given request id for local UI.

```
GET /audit/local/audit/{accountId}/{service}/{requestId}/records
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	requestId	request ID	true	string	

Responses

HTTP Code	Description	Schema
default	success	CloudCentralAuditRecordResponse array

Consumes

- application/json

Produces

- application/json

Retrieve active task for this request ID.

```
GET /audit/activeTask/{requestId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	requestId	request ID	true	string	

Responses

HTTP Code	Description	Schema
default	success	TaskCacheEntry

Consumes

- application/json

Produces

- application/json

Retrieves audit group entries optionally filtered by query parameters for local UI.

```
GET /audit/local/audit/{accountId}
```

Responses

HTTP Code	Description	Schema
default	success	CloudCentralAuditGroupResponse array

Consumes

- application/json

Produces

- application/json

Retrieves audit group entries optionally filtered by query parameters.

```
GET /audit
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	limit	Limit entries to specific amount	false	integer (int32)	
QueryParameter	after	Filter entries after specific date	false	integer (int64)	

Type	Name	Description	Required	Schema	Default
QueryParameter	workingEnvironm entId	Filter entries by working environment public ID	false	string	

Responses

HTTP Code	Description	Schema
default	success	AuditGroupSummary array

Consumes

- application/json

Produces

- application/json

Retrieves audit groups and group records optionally filtered by query parameters.

```
GET /audit/auditserver
```

Responses

HTTP Code	Description	Schema
default	success	AuditGroupSummary array

Consumes

- application/json

Produces

- application/json

Aws-ha:aggregates

Creates a new aggregate

```
POST /aws/ha/aggregates
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Create Aggregate Request	true	VsaAggregateCreateRequest	

Consumes

- application/json

Produces

- application/json

Retrieves aggregates

```
GET /aws/ha/aggregates
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	workingEnvironmentId	Public Id of working environment	false	string	

Responses

HTTP Code	Description	Schema
default	success	AggregateResponse array

Consumes

- application/json

Produces

- application/json

Adds disks to an existing aggregate

```
POST /aws/ha/aggregates/{workingEnvironmentId}/{aggregateName}/disks
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
PathParameter	aggregateName	Name of aggregate to be updated	true	string	
BodyParameter	body	Add disk to aggregate request	true	AddDisksToAggregateRequest	

Consumes

- application/json

Produces

- application/json

Deletes an existing aggregate

```
DELETE /aws/ha/aggregates/{workingEnvironmentId}/{aggregateName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
PathParameter	aggregateName	Name of aggregate to be deleted	true	string	

Consumes

- application/json

Produces

- application/json

Aws-ha:discovery

Retrieves a list of discovered working environments visible to the current user in the specified AWS region.

```
GET /aws/ha/discovery/discover
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region	Region to discover working environments	true	string	
QueryParameter	cloudProviderAccountId		false	string	

Responses

HTTP Code	Description	Schema
default	success	DiscoveredAwsHaResponse array

Consumes

- application/json

Produces

- application/json

Saves a previously discovered Cloud Volumes ONTAP working environment to the Cloud Manager database.

```
POST /aws/ha/discovery/recover
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Working environment	true	RecoverVsaRequest	

Responses

HTTP Code	Description	Schema
default	success	VsaWorkingEnvironmentResponse

Consumes

- application/json

Produces

- application/json

Aws-ha:encryption

Updates the key manager CA certificate on the Cloud Volumes ONTAP system

```
POST /aws/ha/encryption/{workingEnvironmentId}/update-key-manager-ca-
certificate
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironm entId	Public Id of working environment	true	string	
BodyParameter	body	Update Cloud Volumes ONTAP key manager CA certificate request parameters	true	UpdateKeyMana gerCaCertificate Request	

Responses

HTTP Code	Description	Schema
default	success	CertificateResponse

Consumes

- application/json

Produces

- application/json

Updates the client certificate on the Cloud Volumes ONTAP system

```
POST /aws/ha/encryption/{workingEnvironmentId}/update-client-certificate
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironm entId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	CertificateResponse

Consumes

- application/json

Produces

- application/json

Adds a key manager to the Cloud Volumes ONTAP system

```
POST /aws/ha/encryption/{workingEnvironmentId}/key-managers/{keyManagerIp}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironm entId	Public Id of working environment	true	string	
PathParameter	keyManagerIp	Key manager IP address	true	string	

Consumes

- application/json

Produces

- application/json

Deletes a key manager from the Cloud Volumes ONTAP system

```
DELETE /aws/ha/encryption/{workingEnvironmentId}/key-
managers/{keyManagerIp}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
PathParameter	keyManagerIp	Key manager IP address	true	string	

Consumes

- application/json

Produces

- application/json

Aws-ha:metadata

Retrieves VPCs

```
GET /aws/ha/metadata/vpcs
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region		true	string	
QueryParameter	roleArn		false	string	
QueryParameter	cloudProviderAccountId		false	string	

Responses

HTTP Code	Description	Schema
default	success	VpcExtendedResponse array

Consumes

- application/json

Produces

- application/json

Retrieves the minimum number of required IPs for a single Cloud Volumes ONTAP system, an HA node, and HA mediator

```
GET /aws/ha/metadata/network-requirements
```

Responses

HTTP Code	Description	Schema
default	success	NetworkRequirementsResponse

Consumes

- application/json

Produces

- application/json

Retrieves AWS user Key Pairs for all regions

```
GET /aws/ha/metadata/key-pairs-by-region
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	roleArn		false	string	
QueryParameter	cloudProviderAccountId		false	string	

Responses

HTTP Code	Description	Schema
default	success	KeyPairsByRegionResponse

Consumes

- application/json

Produces

- application/json

Retrieves AWS user Key Pairs for specific region

```
GET /aws/ha/metadata/key-pairs
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region		true	string	
QueryParameter	roleArn		false	string	
QueryParameter	cloudProviderAccountId		false	string	

Responses

HTTP Code	Description	Schema
default	success	string array

Consumes

- application/json

Produces

- application/json

Retrieves all the Tag names

```
GET /aws/ha/metadata/tag-keys
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	roleArn		false	string	
QueryParameter	cloudProviderAccountId		false	string	

Responses

HTTP Code	Description	Schema
default	success	TagKeyResponse array

Consumes

- application/json

Produces

- application/json

Retrieves supported capacity tiers for EBS volume types

```
GET /aws/ha/metadata/supported-capacity-tiers
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region		true	string	
QueryParameter	ontapVersion		true	string	
QueryParameter	dataEncryptionType		true	string	
QueryParameter	licenseType		true	string	
QueryParameter	instanceType		true	string	

Responses

HTTP Code	Description	Schema
default	success	SupportedCapacityTiers

Consumes

- application/json

Produces

- application/json

Retrieves packages configuration

```
GET /aws/ha/metadata/packages
```

Responses

HTTP Code	Description	Schema
default	success	PackageInfoResponse array

Consumes

- application/json

Produces

- application/json

Retrieves default snapshot policies available on a cluster

```
GET /aws/ha/metadata/default-snapshot-policies
```

Responses

HTTP Code	Description	Schema
default	success	SnapshotPolicy array

Consumes

- application/json

Produces

- application/json

Retrieves all Cloud Manager manifests. Refer to the API Developers Guide in order to understand how to extract valid region codes, license types, instance types and Cloud Volumes ONTAP version parameters for the creation of a Cloud Volumes ONTAP working environment.

```
GET /aws/ha/metadata/manifests
```

Responses

HTTP Code	Description	Schema
default	success	MetadataResponse

Consumes

- application/json

Produces

- application/json

Retrieves AWS encryption keys for specific region

```
GET /aws/ha/metadata/aws-encryption-keys
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region		true	string	
QueryParameter	roleArn		false	string	

Type	Name	Description	Required	Schema	Default
QueryParameter	cloudProviderAccountId		false	string	

Responses

HTTP Code	Description	Schema
default	success	AwsEncryptionKey array

Consumes

- application/json

Produces

- application/json

Retrieve all S3 buckets

```
GET /aws/ha/metadata/buckets
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	tagsRequired		false	boolean	

Responses

HTTP Code	Description	Schema
default	success	S3BucketInfo array

Consumes

- application/json

Produces

- application/json

Retrieves all Cloud Volumes ONTAP configurations.

```
GET /aws/ha/metadata/permutations
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region	Filter by region	false	string	
QueryParameter	version	Filter by version	false	string	
QueryParameter	license	Filter by license	false	string	
QueryParameter	instance_type	Filter by instance type	false	string	
QueryParameter	default_instance _type	Filter by default instance type	false	string	
QueryParameter	feature	Filter by feature	false	string	
QueryParameter	latest_only	Filter latest only	false	string	
QueryParameter	ami	Filter by ami id	false	string	

Responses

HTTP Code	Description	Schema
default	success	Configuration array

Consumes

- application/json

Produces

- application/json

Retrieves route tables per vpc and their subnet associations.

```
GET /aws/ha/metadata/route-tables
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region		true	string	
QueryParameter	vpcId		true	string	
QueryParameter	roleArn		false	string	
QueryParameter	cloudProviderAc countId		false	string	

Responses

HTTP Code	Description	Schema
default	success	RouteTableResponse array

Consumes

- application/json

Produces

- application/json

Create new S3 bucket

```
POST /aws/ha/metadata/create-bucket
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region		true	string	
QueryParameter	bucketName		true	string	

Consumes

- application/json

Produces

- application/json

Retrieve all S3 buckets with additional info

```
GET /aws/ha/metadata/get-buckets-details
```

Responses

HTTP Code	Description	Schema
default	success	S3BucketsSummary

Consumes

- application/json

Produces

- application/json

Retrieves AWS instance profiles

```
GET /aws/ha/metadata/instance-profiles
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	roleArn		false	string	
QueryParameter	cloudProviderAccountId		false	string	

Responses

HTTP Code	Description	Schema
default	success	InstanceProfileResponse array

Consumes

- application/json

Produces

- application/json

Retrieves instance types not supporting acceleration and capacity tiering

```
GET /aws/ha/metadata/instance-types-not-supporting-acceleration-and-
capacity-tiering
```

Responses

HTTP Code	Description	Schema
default	success	InstanceTypesNotSupportingAccelerationAndCapacityTieringResponse

Consumes

- application/json

Produces

- application/json

Retrieves supported features

```
GET /aws/ha/metadata/supported-features
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region		true	string	
QueryParameter	ontapVersion		true	string	
QueryParameter	dataEncryptionType		true	string	
QueryParameter	licenseType		true	string	
QueryParameter	instanceType		true	string	

Responses

HTTP Code	Description	Schema
default	success	SupportedFeaturesResponse

Consumes

- application/json

Produces

- application/json

Retrieves supported EBS volume types

```
GET /aws/ha/metadata/ebs-volume-types
```

Responses

HTTP Code	Description	Schema
default	success	EbsVolumeType array

Consumes

- application/json

Produces

- application/json

Retrieves AWS regions over which an Cloud Volumes ONTAP working environment may be created

```
GET /aws/ha/metadata/regions
```

Responses

HTTP Code	Description	Schema
default	success	Region array

Consumes

- application/json

Produces

- application/json

Retrieve S3 buckets policy status and tiering level

```
POST /aws/ha/metadata/get-buckets-application-info
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Request for retrieving Buckets Additional info	true	BucketsPolicyAndTieringInfoRequest	

Responses

HTTP Code	Description	Schema
default	success	BucketAdditionalData array

Consumes

- application/json

Produces

- application/json

Validate HA floating IPs.

```
POST /aws/ha/metadata/validate-floating-ips
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Validate HA floating IPs request	true	AwsHaFloatingIp ValidationData	

Responses

HTTP Code	Description	Schema
default	success	AwsHaFloatingIpValidationResponse

Consumes

- application/json

Produces

- application/json

Validates the current user is subscribed to Cloud Volumes ONTAP product in Amazon marketplace

```
POST /aws/ha/metadata/validate-subscribed-to-ontap-cloud
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Validate subscribed to Cloud Volumes ONTAP request	true	AwsValidateSub scribedToOntap CloudRequest	

Responses

HTTP Code	Description	Schema
default	success	AwsValidateSubscribedToOntapCloudResponse

Consumes

- application/json

Produces

- application/json

Retrieve S3 buckets summary

```
GET /aws/ha/metadata/s3-summary
```

Responses

HTTP Code	Description	Schema
default	success	S3Summary

Consumes

- application/json

Produces

- application/json

Aws-ha:volumes

Retrieves volumes for Backup Activation.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
GET /aws/ha/volumes/volumes-for-backup
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	workingEnvironmentId	Filter volumes by this working environment	true	string	
QueryParameter	offset	offset	false	integer (int32)	
QueryParameter	limit	limit	false	integer (int32)	
QueryParameter	search	search	false	string	
QueryParameter	filterBy	filterBy should be of the form field:value. For multiple filters use comma separator.	false	ref	

Type	Name	Description	Required	Schema	Default
QueryParameter	sortBy	sortBy should be of the form field:Asc or field:Desc. For multiple sorting use comma separator.	false	ref	

Responses

HTTP Code	Description	Schema
default	success	[VolumesListForBackup](#)

Consumes

- application/json

Produces

- application/json

Change underlying volume tier.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST /aws/ha/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/change-
tier
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	
BodyParameter	body		true	[ChangeVolumeTierRequest](#)	

Consumes

- application/json

Produces

- application/json

Create snapshot manually.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST
/aws/ha/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/snapshot
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	
BodyParameter	body	Create snapshot request	true	SnapshotCreate Request	

Consumes

- application/json

Produces

- application/json

Delete snapshot manually.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
DELETE
/aws/ha/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/snapshot
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	
BodyParameter	body	Create snapshot request	true	SnapshotDelete Request	

Consumes

- application/json

Produces

- application/json

Return a list of snapshot descriptions for the volume.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
GET
/aws/ha/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/snapshots
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	

Responses

HTTP Code	Description	Schema
default	success	SnapshotResponse array

Consumes

- application/json

Produces

- application/json

Add ISCSI initiator.

```
POST /aws/ha/volumes/initiator
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	ISCSI initiator request	true	Initiator	

Consumes

- application/json

Produces

- application/json

Get all ISCSI initiators.

```
GET /aws/ha/volumes/initiator
```

Responses

HTTP Code	Description	Schema
default	success	InitiatorEntry array

Consumes

- application/json

Produces

- application/json

Creates a new volume. If the properties aggregateName and maxNumOfDisksApprovedToAdd are not filled in, then the response will fail with a suggested aggregate name and the number of disks that will need to be created in order to fulfill the request.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST /aws/ha/volumes
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	createAggregateIfNotFound	On create volume request, allow creating not-found aggregate	false	boolean	
BodyParameter	body	Create volume request	true	VsaVolumeCreateRequest	

Consumes

- application/json

Produces

- application/json

Retrieves volumes.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
GET /aws/ha/volumes
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	workingEnvironm entId	Filter volumes by this working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	VolumeResponse array

Consumes

- application/json

Produces

- application/json

Get all igroups.

```
GET /aws/ha/volumes/igroups/{workingEnvironmentId}/{svmName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironm entId		true	string	
PathParameter	svmName		true	string	

Responses

HTTP Code	Description	Schema
default	success	IGroup array

Consumes

- application/json

Produces

- application/json

Move an existing volume.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST /aws/ha/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/move
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	
BodyParameter	body		true	VolumeMoveRequest	

Consumes

- application/json

Produces

- application/json

Quotes a new volume. Returns a resource quote needed to satisfy the requested volume.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST /aws/ha/volumes/quote
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Quote volume request	true	VsaVolumeQuoteRequest	

Responses

HTTP Code	Description	Schema
default	success	VsaVolumeQuoteResponse

Consumes

- application/json

Produces

- application/json

Clones an existing volume.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST /aws/ha/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/clone
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	
BodyParameter	body		true	VolumeCloneRequest	

Consumes

- application/json

Produces

- application/json

Modify an existing volume.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
PUT /aws/ha/volumes/{workingEnvironmentId}/{svmName}/{volumeName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	ref	
BodyParameter	body	Modify volume request	true	VolumeModifyRequest	

Consumes

- application/json

Produces

- application/json

Deletes an existing volume.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
DELETE /aws/ha/volumes/{workingEnvironmentId}/{svmName}/{volumeName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	

Consumes

- application/json

Produces

- application/json

Aws-ha:working-environments

Register extra capacity license

```
POST /aws/ha/working-environments/{workingEnvironmentId}/extra-capacity-
licenses
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	extra capacity licenses(s)	true	LicensesContent	

Consumes

- application/json

Produces

- application/json

Get extra capacity licenses for cvo

```
GET /aws/ha/working-environments/{workingEnvironmentId}/extra-capacity-
licenses
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Consumes

- application/json

Produces

- application/json

Update extra capacity license

```
PUT /aws/ha/working-environments/{workingEnvironmentId}/extra-capacity-
licenses
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	extra capacity license(s)	true	LicensesContent	

Consumes

- application/json

Produces

- application/json

Uploads a Cloud license file content on the provided Cloud Volumes ONTAP

```
POST /aws/ha/working-environments/{workingEnvironmentId}/upload-licenses
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	license file content request	true	LicenseFileContent	

Consumes

- application/json

Produces

- application/json

Activate FPolicy for ransomeware files

```
PUT /aws/ha/working-environments/{workingEnvironmentId}/activate-fpolicy
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	

Consumes

- application/json

Produces

- application/json

Disable FPolicy for ransomeware files

```
PUT /aws/ha/working-environments/{workingEnvironmentId}/disable-fpolicy
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	

Consumes

- application/json

Produces

- application/json

Modify the net port broadcast domain mtu of the Cloud Volumes ONTAP

```
PUT /aws/ha/working-
environments/{workingEnvironmentId}/networkOptimization
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Use optimization	true	ChangeNetworkOptimizationRequest	

Consumes

- application/json

Produces

- application/json

Setup NTP server

```
POST /aws/ha/working-environments/{workingEnvironmentId}/ntp
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	NTP Configuration request	true	NTPConfigurationRequest	

Consumes

- application/json

Produces

- application/json

Retrieves editable tags for cloud resources of a given Cloud Volumes ONTAP instance

```
GET /aws/ha/working-environments/{workingEnvironmentId}/user-tags
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	UserTagsResponse

Consumes

- application/json

Produces

- application/json

Modify user tags for cloud resources of a given Cloud Volumes ONTAP instance

```
PUT /aws/ha/working-environments/{workingEnvironmentId}/user-tags
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironm entId	Public Id of working environment	true	string	
BodyParameter	body	Modify user tags request	true	ModifyUserTags Request	

Consumes

- application/json

Produces

- application/json

Retrieves images already installed on the Cloud Volumes ONTAP

```
GET /aws/ha/working-environments/{workingEnvironmentId}/ontap-available-
images
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironm entId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	UpdateLocalImage array

Consumes

- application/json

Produces

- application/json

Retrieves an HA Cloud Volumes ONTAP working environment.

```
GET /aws/ha/working-environments/{workingEnvironmentId}
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	fields		false	string	
PathParameter	workingEnvironmentId		true	string	

Responses

HTTP Code	Description	Schema
default	success	VsaWorkingEnvironmentResponse

Consumes

- application/json

Produces

- application/json

Deletes an existing Cloud Volumes ONTAP working environment, including all Cloud resources created for this working environment (unless the localDelete flag is set to true)

```
DELETE /aws/ha/working-environments/{workingEnvironmentId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
QueryParameter	localDelete	If true, the Cloud Volumes ONTAP instance is not terminated in Cloud, but Cloud Manager no longer manages the working environment.	false	boolean	false

Type	Name	Description	Required	Schema	Default
QueryParameter	forceDelete	If true, the working environment will be deleted even if it is part of one or more SnapMirror relationships.	false	boolean	false

Consumes

- application/json

Produces

- application/json

Register extra capacity serials

```
POST /aws/ha/working-environments/{workingEnvironmentId}/extra-capacity-serials
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	licenses serial(s)	true	LicensesSerials	

Consumes

- application/json

Produces

- application/json

Update extra capacity serials

```
PUT /aws/ha/working-environments/{workingEnvironmentId}/extra-capacity-serials
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	extra capacity serial(s)	true	LicensesSerials	

Consumes

- application/json

Produces

- application/json

Delete extra capacity licenses by serials

```
DELETE /aws/ha/working-environments/{workingEnvironmentId}/extra-capacity-
serials
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	extra capacity serial(s)	true	LicensesSerials	

Consumes

- application/json

Produces

- application/json

Change tier level

```
POST /aws/ha/working-environments/{workingEnvironmentId}/change-tier-level
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Change tier level request	true	[ChangeTierLevel Request](#)	

Consumes

- application/json

Produces

- application/json

Stops a specific Cloud Volumes ONTAP instance

```
POST /aws/ha/working-environments/{workingEnvironmentId}/stop
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
QueryParameter	takeSnapshots	Take snapshots before stopping Cloud Volumes ONTAP	true	boolean	true

Consumes

- application/json

Produces

- application/json

Setup a new CIFS using workgroup configuration to an existing Cloud Volumes ONTAP working environment

```
POST /aws/ha/working-environments/{workingEnvironmentId}/cifs-workgroup
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	CIFS Configuration request	true	CIFSWorkgroupConfigurationRequest	

Consumes

- application/json

Produces

- application/json

Modify the svm name of the Cloud Volumes ONTAP

```
PUT /aws/ha/working-environments/{workingEnvironmentId}/svm
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Svm name modification request	true	SvmNameModificationRequest	

Consumes

- application/json

Produces

- application/json

Updates default vscan file operation profile. Profile on existing CIFS shares will change only on writes-only mode

```
PUT /aws/ha/working-environments/{workingEnvironmentId}/vscan-file-op
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Vscan file-operation Request	true	[VscanFileOpRequest](#)	

Consumes

- application/json

Produces

- application/json

Starts a specific Cloud Volumes ONTAP instance

```
POST /aws/ha/working-environments/{workingEnvironmentId}/start
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Consumes

- application/json

Produces

- application/json

Checks for the presence of non-persistent locks held on CIFs Sessions.

```
GET /aws/ha/working-environments/{workingEnvironmentId}/cifs-locks-exist
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	

Responses

HTTP Code	Description	Schema
default	success	boolean

Consumes

- application/json

Produces

- application/json

Activate snapshot policy assignment to all not protected rw volumes

```
PUT /aws/ha/working-environments/{workingEnvironmentId}/activate-snapshot-
policy
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironm entId	Public Id of working environment	true	string	

Consumes

- application/json

Produces

- application/json

Retrieves a list of versions to which this Cloud Volumes ONTAP can be upgraded

```
GET /aws/ha/working-environments/{workingEnvironmentId}/occm-provided-
upgrade-versions
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironm entId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	OntapUpdateImageMetadata array

Consumes

- application/json

Produces

- application/json

Working Environment Ontap Saving

```
GET /aws/ha/working-environments/{workingEnvironmentId}/ontap-saving
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	WorkingEnvironmentOntapSavingResponse

Consumes

- application/json

Produces

- application/json

Updates mediator of the specified Cloud Volumes ONTAP with the given version.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST /aws/ha/working-environments/{workingEnvironmentId}/update-mediator
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	

Consumes

- application/json

Produces

- application/json

Setup a new CIFS Configuration to an existing Cloud Volumes ONTAP working environment

```
POST /aws/ha/working-environments/{workingEnvironmentId}/cifs
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	CIFS Configuration request	true	CIFSConfigurationRequest	

Consumes

- application/json

Produces

- application/json

Retrieves CIFS Configuration to an existing Cloud Volumes ONTAP working environment

```
GET /aws/ha/working-environments/{workingEnvironmentId}/cifs
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
QueryParameter	svm		false	string	

Responses

HTTP Code	Description	Schema
default	success	CIFSConfigurationResponse array

Consumes

- application/json

Produces

- application/json

Working Environment Cost And Usage

```
GET /aws/ha/working-environments/{workingEnvironmentId}/cost-and-usage
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
QueryParameter	start	cost and usage start period	false	string	
QueryParameter	end	cost and usage end period	false	string	

Responses

HTTP Code	Description	Schema
default	success	WorkingEnvironmentCostAndUsageResponse

Consumes

- application/json

Produces

- application/json

Sets the writing speed for Cloud Volumes ONTAP

```
PUT /aws/ha/working-environments/{workingEnvironmentId}/writing-speed
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Writing speed request	true	WritingSpeedRequest	

Consumes

- application/json

Produces

- application/json

Activate offbox configuration

```
PUT /aws/ha/working-environments/{workingEnvironmentId}/offbox
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Consumes

- application/json

Produces

- application/json

Performs a complete image update operation on the single node of the specified Cloud Volumes ONTAP

```
POST /aws/ha/working-environments/{workingEnvironmentId}/update-image
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Update system image request	true	UpdateSystemImageRequest	

Consumes

- application/json

Produces

- application/json

Updates Cloud Manager password of a specific Cloud Volumes ONTAP

```
PUT /aws/ha/working-environments/{workingEnvironmentId}/update-credentials
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Update Cloud Manager password request	true	UpdateCredentialsRequest	

Consumes

- application/json

Produces

- application/json

Delete CIFS Configuration of an existing Cloud Volumes ONTAP working environment

```
POST /aws/ha/working-environments/{workingEnvironmentId}/delete-cifs
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Type	Name	Description	Required	Schema	Default
BodyParameter	body	CIFS Configuration request	true	CIFSDeleteRequest	

Consumes

- application/json

Produces

- application/json

Create snapshot policy

```
POST /aws/ha/working-environments/{workingEnvironmentId}/snapshot-policy
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
BodyParameter	body	Create snapshot policy request	true	SnapshotPolicyCreateRequest	

Consumes

- application/json

Produces

- application/json

Manually triggers subscription sync for all Cloud Volumes ONTAP working environments

```
POST /aws/ha/working-environments/sync-subscription
```

Consumes

- application/json

Produces

- application/json

Change serial number of Cloud Volumes ONTAP

```
POST /aws/ha/working-environments/{workingEnvironmentId}/change-serial
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Change serial number request	true	ChangeSerialNumberRequest	

Consumes

- application/json

Produces

- application/json

Updates the route tables of an HA Cloud Volumes ONTAP working environment.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
PUT /aws/ha/working-environments/{workingEnvironmentId}/route-tables
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
BodyParameter	body		true	UpdateRouteTablesRequest	

Consumes

- application/json

Produces

- application/json

Delete FPolicy for ransomeware files

```
DELETE /aws/ha/working-environments/{workingEnvironmentId}/fpolicy
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	

Consumes

- application/json

Produces

- application/json

Retrieves all license types and their associated instance types for a given Cloud Volumes ONTAP instance

```
GET /aws/ha/working-environments/{workingEnvironmentId}/license-instance-
type
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	LicenseAndInstanceType array

Consumes

- application/json

Produces

- application/json

Sets the instance type of a specific Cloud Volumes ONTAP

```
PUT /aws/ha/working-environments/{workingEnvironmentId}/license-instance-
type
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironm entId	Public Id of working environment	true	string	
BodyParameter	body	Instance type modification request	true	LicenseAndInsta nceTypeModifica tionRequest	

Consumes

- application/json

Produces

- application/json

Creates a new AWS HA Cloud Volumes ONTAP working environment.

```
POST /aws/ha/working-environments
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Working environment	true	CreateAwsHaWo rkingEnvironmen tRequest	

Responses

HTTP Code	Description	Schema
default	success	VsaWorkingEnvironmentResponse

Consumes

- application/json

Produces

- application/json

List start-stop schedules for Cloud Volumes ONTAP

```
GET /aws/ha/working-environments/{workingEnvironmentId}/schedules
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironm entId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	VsaSchedule array

Consumes

- application/json

Produces

- application/json

Set schedules for Cloud Volumes ONTAP

```
PUT /aws/ha/working-environments/{workingEnvironmentId}/schedules
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironm entId	Public Id of working environment	true	string	
BodyParameter	body	Cloud Volumes ONTAP working environment update schedule request	true	VsaSchedulesRe quest	

Consumes

- application/json

Produces

- application/json

Sets the cluster password of a specific Cloud Volumes ONTAP

```
PUT /aws/ha/working-environments/{workingEnvironmentId}/set-password
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
QueryParameter	occmOnly		false	boolean	
BodyParameter	body	Set password request	true	[PasswordWrapper](#)	

Consumes

- application/json

Produces

- application/json

Uploads a Cloud license file on the provided Cloud Volumes ONTAP

```
POST /aws/ha/working-environments/{workingEnvironmentId}/upload-license-
file
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
HeaderParameter	filename	Cloud license file name	false	string	
BodyParameter	license	license	false	string	

Consumes

- multipart/form-data

Produces

- application/json

Retrieves action parameters used in create request of a given Cloud Volumes ONTAP instance

```
GET /aws/ha/working-environments/{workingEnvironmentId}/create-request-
parameters
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironm entId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	CreateRequestParametersRespons e

Consumes

- application/json

Produces

- application/json

Retrieves eligibility support status of a Cloud Volumes ONTAP system. Valid values - NSS_NOT_VALID, NOT_REGISTERED, IPA_PROBLEM, VALID, NSS_NOT_EXISTS, LICENSE_EXPIRED

```
GET /aws/ha/working-environments/{workingEnvironmentId}/update-eligibility
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironm entId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
200	success	EligibilityResponse
400	Working Environment must be ON or UPDATING in order to check eligibility	No Content

Consumes

- application/json

Produces

- application/json

Enable capacity tiering

```
POST /aws/ha/working-environments/{workingEnvironmentId}/enable-capacity-
tiering
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironm entId	Public Id of working environment	true	string	
BodyParameter	body	Enable capacity tiering request	false	EnableCapacityT ieringRequest	

Consumes

- application/json

Produces

- application/json

Parses an uploaded Cloud license file

```
POST /aws/ha/working-environments/parse-license-file
```

Parameters

Type	Name	Description	Required	Schema	Default
HeaderParamete r	filename	Cloud license file name	false	string	
BodyParameter	license	license	false	string	

Responses

HTTP Code	Description	Schema
default	success	ProvidedLicenseResponse

Consumes

- multipart/form-data

Produces

- application/json

Registers a Cloud Volumes ONTAP system with NetApp

```
POST /aws/ha/working-environments/{workingEnvironmentId}/support-
registration
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
QueryParameter	nssAccountId		false	string	

Responses

HTTP Code	Description	Schema
default	success	SupportRegistrationResponse

Consumes

- application/json

Produces

- application/json

Retrieves the support registration status of a Cloud Volumes ONTAP system

```
GET /aws/ha/working-environments/{workingEnvironmentId}/support-
registration
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	SupportRegistrationResponse

Consumes

- application/json

Produces

- application/json

Azure-ha:aggregates

Creates a new aggregate

```
POST /azure/ha/aggregates
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Create Aggregate Request	true	VsaAggregateCreateRequest	

Consumes

- application/json

Produces

- application/json

Retrieves aggregates

```
GET /azure/ha/aggregates/{workingEnvironmentId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	

Responses

HTTP Code	Description	Schema
default	success	AggregateResponse array

Consumes

- application/json

Produces

- application/json

Deletes an existing aggregate

```
DELETE /azure/ha/aggregates/{workingEnvironmentId}/{aggregateName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
PathParameter	aggregateName	Name of aggregate to be deleted	true	string	

Consumes

- application/json

Produces

- application/json

Adds disks to an existing aggregate

```
POST /azure/ha/aggregates/{workingEnvironmentId}/{aggregateName}/disks
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
PathParameter	aggregateName	Name of aggregate to be updated	true	string	
BodyParameter	body	Add disk to aggregate request	true	AddDisksToAggregateRequest	

Consumes

- application/json

Produces

- application/json

Azure-ha:discovery

Retrieves a list of discovered working environments visible to the current user in the specified Azure region.

```
GET /azure/ha/discovery/discover
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region	Region to discover working environments	true	string	
QueryParameter	subscriptionId		false	string	
QueryParameter	cloudProviderAccountId		false	string	

Responses

HTTP Code	Description	Schema
default	success	DiscoveredAzureHaResponse array

Consumes

- application/json

Produces

- application/json

Saves a previously discovered Cloud Volumes ONTAP working environment to the Cloud Manager database.

```
POST /azure/ha/discovery/recover
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Working environment	true	RecoverAzureHARequest	

Responses

HTTP Code	Description	Schema
default	success	AzureVsaWorkingEnvironmentResponse

Consumes

- application/json

Produces

- application/json

Azure-ha:metadata

Retrieves Network Extended Info

```
GET /azure/ha/metadata/vnets
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region		true	string	
QueryParameter	subscriptionId		false	string	
QueryParameter	cloudProviderAccountId		false	string	

Responses

HTTP Code	Description	Schema
default	success	AzureNetworkExtendedResponse

Consumes

- application/json

Produces

- application/json

Retrieves all the Tag names

```
GET /azure/ha/metadata/tag-keys
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	subscriptionId		false	string	
QueryParameter	cloudProviderAccountId		false	string	

Responses

HTTP Code	Description	Schema
default	success	TagKeyResponse array

Consumes

- application/json

Produces

- application/json

Retrieve all vaults

```
GET /azure/ha/metadata/vaults
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	subscriptionId		false	string	
QueryParameter	cloudProviderAccountId		false	string	
QueryParameter	region		false	string	

Responses

HTTP Code	Description	Schema
default	success	AzureKeyVault array

Consumes

- application/json

Produces

- application/json

Create new blob container

```
POST /azure/ha/metadata/create-container
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Create blob container request	true	CreateBlobContainerRequest	

Consumes

- application/json

Produces

- application/json

Retrieves supported capacity tiers for Azure disk types

```
GET /azure/ha/metadata/supported-capacity-tiers
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region		true	string	
QueryParameter	ontapVersion		true	string	
QueryParameter	dataEncryptionType		true	string	
QueryParameter	licenseType		true	string	
QueryParameter	instanceType		true	string	
QueryParameter	subscriptionId		false	string	
QueryParameter	cloudProviderAccountId		false	string	

Responses

HTTP Code	Description	Schema
default	success	SupportedCapacityTiers

Consumes

- application/json

Produces

- application/json

Retrieve all blob containers

```
GET /azure/ha/metadata/containers
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	subscriptionId		false	string	
QueryParameter	cloudProviderAccountId		false	string	
QueryParameter	resourceGroupName		true	string	
QueryParameter	storageAccountName		true	string	

Responses

HTTP Code	Description	Schema
default	success	AzureBlobContainer array

Consumes

- application/json

Produces

- application/json

Retrieves associated subscriptions

```
GET /azure/ha/metadata/associated-subscriptions
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	cloudProviderAccountId		false	string	

Responses

HTTP Code	Description	Schema
default	success	AssociatedSubscription array

Consumes

- application/json

Produces

- application/json

Retrieve all keys in a vault

```
GET /azure/ha/metadata/keys-vault
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	subscriptionId		false	string	
QueryParameter	cloudProviderAccountId		false	string	
QueryParameter	resourceGroupName		true	string	
QueryParameter	vaultName		true	string	

Responses

HTTP Code	Description	Schema
default	success	AzureKey array

Consumes

- application/json

Produces

- application/json

Retrieves Azure regions over which an Cloud Volumes ONTAP working environment may be created

```
GET /azure/ha/metadata/regions
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	fields		false	string	
QueryParameter	subscriptionId		false	string	
QueryParameter	cloudProviderAccountId		false	string	

Responses

HTTP Code	Description	Schema
default	success	AzureRegionResponse array

Consumes

- application/json

Produces

- application/json

Retrieves instance types not supporting acceleration and capacity tiering

```
GET /azure/ha/metadata/instance-types-not-supporting-acceleration-and-
capacity-tiering
```

Responses

HTTP Code	Description	Schema
default	success	InstanceTypesNotSupportingAccelerationAndCapacityTieringResponse

Consumes

- application/json

Produces

- application/json

Validates the current user is subscribed to Cloud Volumes ONTAP product in Azure marketplace

```
POST /azure/ha/metadata/validate-subscribed-to-ontap-cloud
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Validate subscribed to Cloud Volumes ONTAP request	true	AzureValidateSubscribedToOntapCloudRequest	

Responses

HTTP Code	Description	Schema
default	success	AzureValidateSubscribedToOntapCloudResponse

Consumes

- application/json

Produces

- application/json

Retrieves Azure resource groups by region

```
GET /azure/ha/metadata/resource-groups
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region		true	string	
QueryParameter	subscriptionId		false	string	
QueryParameter	cloudProviderAccountId		false	string	

Responses

HTTP Code	Description	Schema
default	success	AzureResourceGroupByRegionResponse array

Consumes

- application/json

Produces

- application/json

Retrieves Azure availability zones by region

```
GET /azure/ha/metadata/availability-zones
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region		true	string	
QueryParameter	subscriptionId		false	string	
QueryParameter	cloudProviderAccountId		false	string	

Responses

HTTP Code	Description	Schema
default	success	AzureAvailabilityZoneResponse array

Consumes

- application/json

Produces

- application/json

Retrieves default snapshot policies available on a cluster

```
GET /azure/ha/metadata/default-snapshot-policies
```

Responses

HTTP Code	Description	Schema
default	success	SnapshotPolicy array

Consumes

- application/json

Produces

- application/json

Retrieves all ONTAP Cloud configurations.

```
GET /azure/ha/metadata/permutations
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region	Filter by region	false	string	
QueryParameter	version	Filter by version	false	string	
QueryParameter	license	Filter by license	false	string	
QueryParameter	instance_type	Filter by instance type	false	string	
QueryParameter	default_instance_type	Filter by default instance type	false	string	
QueryParameter	feature	Filter by feature	false	string	
QueryParameter	latest_only	Filter latest only	false	string	
QueryParameter	marketplace_version	Filter by marketplace version	false	string	
QueryParameter	marketplace_sku	Filter by marketplace sku	false	string	

Responses

HTTP Code	Description	Schema
default	success	Configuration array

Consumes

- application/json

Produces

- application/json

Retrieves the minimum number of required IPs for a Cloud Volumes ONTAP system

```
GET /azure/ha/metadata/network-requirements
```

Responses

HTTP Code	Description	Schema
default	success	AzureNetworkRequirementsResponse

Consumes

- application/json

Produces

- application/json

Retrieves supported Azure storage account types

```
GET /azure/ha/metadata/storage-account-types
```

Responses

HTTP Code	Description	Schema
default	success	AzureStorageAccountTypeResponse array

Consumes

- application/json

Produces

- application/json

Retrieves supported features

```
GET /azure/ha/metadata/supported-features
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region		true	string	
QueryParameter	ontapVersion		true	string	
QueryParameter	dataEncryptionType		true	string	
QueryParameter	licenseType		true	string	
QueryParameter	instanceType		true	string	

Responses

HTTP Code	Description	Schema
default	success	SupportedFeaturesResponse

Consumes

- application/json

Produces

- application/json

Retrieves packages configuration

```
GET /azure/ha/metadata/packages
```

Responses

HTTP Code	Description	Schema
default	success	PackageInfoResponse array

Consumes

- application/json

Produces

- application/json

Azure-ha:volumes

Add ISCSI initiator.

```
POST /azure/ha/volumes/initiator
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	ISCSI initiator request	true	Initiator	

Consumes

- application/json

Produces

- application/json

Get all ISCSI initiators.

```
GET /azure/ha/volumes/initiator
```

Responses

HTTP Code	Description	Schema
default	success	InitiatorEntry array

Consumes

- application/json

Produces

- application/json

Change underlying volume tier.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST
/azure/ha/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/change-
tier
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	
BodyParameter	body		true	ChangeVolumeTierRequest	

Consumes

- application/json

Produces

- application/json

Retrieves volumes for Backup Activation.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
GET /azure/ha/volumes/volumes-for-backup
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	workingEnvironmentId	Filter volumes by this working environment	true	string	
QueryParameter	offset	offset	false	integer (int32)	
QueryParameter	limit	limit	false	integer (int32)	
QueryParameter	search	search	false	string	
QueryParameter	filterBy	filterBy should be of the form field:value. For multiple filters use comma separator.	false	ref	
QueryParameter	sortBy	sortBy should be of the form field:Asc or field:Desc. For multiple sorting use comma separator.	false	ref	

Responses

HTTP Code	Description	Schema
default	success	VolumesListForBackup

Consumes

- application/json

Produces

- application/json

Clones an existing volume.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST /azure/ha/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/clone
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	
BodyParameter	body		true	VolumeCloneRequest	

Consumes

- application/json

Produces

- application/json

Move an existing volume.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST /azure/ha/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/move
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	
BodyParameter	body		true	VolumeMoveRequest	

Consumes

- application/json

Produces

- application/json

Get all igroups.

```
GET /azure/ha/volumes/igroups/{workingEnvironmentId}/{svmName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	

Responses

HTTP Code	Description	Schema
default	success	IGroup array

Consumes

- application/json

Produces

- application/json

Modify an existing volume.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
PUT /azure/ha/volumes/{workingEnvironmentId}/{svmName}/{volumeName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	ref	
BodyParameter	body	Modify volume request	true	VolumeModifyRequest	

Consumes

- application/json

Produces

- application/json

Deletes an existing volume.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
DELETE /azure/ha/volumes/{workingEnvironmentId}/{svmName}/{volumeName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	

Consumes

- application/json

Produces

- application/json

Creates a new volume. If the properties aggregateName and maxNumOfDisksApprovedToAdd are not filled in, then the response will fail with a suggested aggregate name and the number of disks that will need to be created in order to fulfill the request.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST /azure/ha/volumes
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	createAggregateIfNotFound	On create volume request, allow creating not-found aggregate	false	boolean	
BodyParameter	body	Create volume request	true	VsaVolumeCreateRequest	

Consumes

- application/json

Produces

- application/json

Retrieves volumes.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
GET /azure/ha/volumes
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	workingEnvironm entId	Filter volumes by this working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	VolumeResponse array

Consumes

- application/json

Produces

- application/json

Quotes a new volume. Returns a resource quote needed to satisfy the requested volume.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST /azure/ha/volumes/quote
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Quote volume request	true	VsaVolumeQuot eRequest	

Responses

HTTP Code	Description	Schema
default	success	VsaVolumeQuoteResponse

Consumes

- application/json

Produces

- application/json

Create snapshot manually.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST
/azure/ha/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/snapshot
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	
BodyParameter	body	Create snapshot request	true	SnapshotCreate Request	

Consumes

- application/json

Produces

- application/json

Delete snapshot manually.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
DELETE
/azure/ha/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/snapshot
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	
BodyParameter	body	Create snapshot request	true	SnapshotDelete Request	

Consumes

- application/json

Produces

- application/json

Return a list of snapshot descriptions for the volume.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
GET
/azure/ha/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/snapshots
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	

Responses

HTTP Code	Description	Schema
default	success	SnapshotResponse array

Consumes

- application/json

Produces

- application/json

Azure-ha:working-environments

Manually triggers subscription sync for all Cloud Volumes ONTAP working environments

```
POST /azure/ha/working-environments/sync-subscription
```

Consumes

- application/json

Produces

- application/json

Create snapshot policy

```
POST /azure/ha/working-environments/{workingEnvironmentId}/snapshot-policy
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
BodyParameter	body	Create snapshot policy request	true	SnapshotPolicyCreateRequest	

Consumes

- application/json

Produces

- application/json

Setup NTP server

```
POST /azure/ha/working-environments/{workingEnvironmentId}/ntp
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	NTP Configuration request	true	NTPConfigurationRequest	

Consumes

- application/json

Produces

- application/json

List start-stop schedules for Cloud Volumes ONTAP

```
GET /azure/ha/working-environments/{workingEnvironmentId}/schedules
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	VsaSchedule array

Consumes

- application/json

Produces

- application/json

Set schedules for Cloud Volumes ONTAP

```
PUT /azure/ha/working-environments/{workingEnvironmentId}/schedules
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Cloud Volumes ONTAP working environment update schedule request	true	VsaSchedulesRequest	

Consumes

- application/json

Produces

- application/json

Modify the svm name of the Cloud Volumes ONTAP

```
PUT /azure/ha/working-environments/{workingEnvironmentId}/svm
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Svm name modification request	true	SvmNameModificationRequest	

Consumes

- application/json

Produces

- application/json

Change tier level

```
POST /azure/ha/working-environments/{workingEnvironmentId}/change-tier-
level
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Change tier level request	true	ChangeTierLevelRequest	

Consumes

- application/json

Produces

- application/json

Setup a new CIFS using workgroup configuration to an existing Cloud Volumes ONTAP working environment

```
POST /azure/ha/working-environments/{workingEnvironmentId}/cifs-workgroup
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	CIFS Configuration request	true	CIFSWorkgroup ConfigurationRe quest	

Consumes

- application/json

Produces

- application/json

Checks for the presence of non-persistent locks held on CIFs Sessions.

```
GET /azure/ha/working-environments/{workingEnvironmentId}/cifs-locks-exist
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	

Responses

HTTP Code	Description	Schema
default	success	boolean

Consumes

- application/json

Produces

- application/json

Starts a specific Cloud Volumes ONTAP instance

```
POST /azure/ha/working-environments/{workingEnvironmentId}/start
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Consumes

- application/json

Produces

- application/json

Updates default vscan file operation profile. Profile on existing CIFS shares will change only on writes-only mode

```
PUT /azure/ha/working-environments/{workingEnvironmentId}/vscan-file-op
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Vscan file-operation Request	true	VscanFileOpRequest	

Consumes

- application/json

Produces

- application/json

Delete CIFS Configuration of an existing Cloud Volumes ONTAP working environment

```
POST /azure/ha/working-environments/{workingEnvironmentId}/delete-cifs
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	CIFS Configuration request	true	[CIFSDeleteRequest](#)	

Consumes

- application/json

Produces

- application/json

Returns true if a resource group with that name already exists, false otherwise

```
GET /azure/ha/working-environments/resource-group-
exists/{resourceGroupName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	resourceGroupName	resource group name	true	string	
QueryParameter	subscriptionId		false	string	
QueryParameter	cloudProviderAccountId		false	string	

Responses

HTTP Code	Description	Schema
default	success	boolean

Consumes

- application/json

Produces

- application/json

Stops a specific Cloud Volumes ONTAP instance

```
POST /azure/ha/working-environments/{workingEnvironmentId}/stop
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
QueryParameter	takeSnapshots	Take snapshots before stopping Cloud Volumes ONTAP	true	boolean	true

Consumes

- application/json

Produces

- application/json

Enable capacity tiering

```
POST /azure/ha/working-environments/{workingEnvironmentId}/enable-
capacity-tiering
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Enable capacity tiering request	false	EnableCapacityTieringRequest	

Consumes

- application/json

Produces

- application/json

Retrieves a list of versions to which this Cloud Volumes ONTAP can be upgraded

```
GET /azure/ha/working-environments/{workingEnvironmentId}/occm-provided-
upgrade-versions
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	OntapUpdateImageMetadata array

Consumes

- application/json

Produces

- application/json

Disable FPolicy for ransomeware files

```
PUT /azure/ha/working-environments/{workingEnvironmentId}/disable-fpolicy
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	

Consumes

- application/json

Produces

- application/json

Retrieves images already installed on the Cloud Volumes ONTAP

```
GET /azure/ha/working-environments/{workingEnvironmentId}/ontap-available-
images
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	UpdateLocalImage array

Consumes

- application/json

Produces

- application/json

Creates a new Azure HA Cloud Volumes ONTAP working environment.

```
POST /azure/ha/working-environments
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Working environment	true	CreateAzureVSAWorkingEnvironmentRequest	

Responses

HTTP Code	Description	Schema
default	success	AzureVsaWorkingEnvironmentResponse

Consumes

- application/json

Produces

- application/json

Retrieves Cloud Volumes ONTAP working environments visible to the currently logged in user

```
GET /azure/ha/working-environments
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	fields		false	string	
QueryParameter	tenantId		false	string	

Responses

HTTP Code	Description	Schema
default	success	AzureVsaWorkingEnvironmentResponse array

Consumes

- application/json

Produces

- application/json

Activate snapshot policy assignment to all not protected rw volumes

```
PUT /azure/ha/working-environments/{workingEnvironmentId}/activate-
snapshot-policy
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Consumes

- application/json

Produces

- application/json

Retrieves number of available ip addresses in the Cloud Volumes ONTAP working environment's subnet

```
GET /azure/ha/working-environments/{workingEnvironmentId}/available-ips-
in-subnet
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	

Responses

HTTP Code	Description	Schema
default	success	AvailableIpsResponse

Consumes

- application/json

Produces

- application/json

Sets the writing speed for Cloud Volumes ONTAP

```
PUT /azure/ha/working-environments/{workingEnvironmentId}/writing-speed
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Writing speed request	true	WritingSpeedRequest	

Consumes

- application/json

Produces

- application/json

Retrieves editable tags for cloud resources of a given Cloud Volumes ONTAP instance

```
GET /azure/ha/working-environments/{workingEnvironmentId}/user-tags
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	UserTagsResponse

Consumes

- application/json

Produces

- application/json

Modify user tags for cloud resources of a given Cloud Volumes ONTAP instance

```
PUT /azure/ha/working-environments/{workingEnvironmentId}/user-tags
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Modify user tags request	true	ModifyUserTags Request	

Consumes

- application/json

Produces

- application/json

Register extra capacity serials

```
POST /azure/ha/working-environments/{workingEnvironmentId}/extra-capacity-
serials
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	licenses serial(s)	true	LicensesSerials	

Consumes

- application/json

Produces

- application/json

Update extra capacity serials

```
PUT /azure/ha/working-environments/{workingEnvironmentId}/extra-capacity-
serials
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	extra capacity serial(s)	true	LicensesSerials	

Consumes

- application/json

Produces

- application/json

Delete extra capacity licenses by serials

```
DELETE /azure/ha/working-environments/{workingEnvironmentId}/extra-
capacity-serials
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	extra capacity serial(s)	true	LicensesSerials	

Consumes

- application/json

Produces

- application/json

Register extra capacity license

```
POST /azure/ha/working-environments/{workingEnvironmentId}/extra-capacity-
licenses
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	extra capacity licenses(s)	true	LicensesContent	

Consumes

- application/json

Produces

- application/json

Get extra capacity licenses for cvo

```
GET /azure/ha/working-environments/{workingEnvironmentId}/extra-capacity-
licenses
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Consumes

- application/json

Produces

- application/json

Update extra capacity license

```
PUT /azure/ha/working-environments/{workingEnvironmentId}/extra-capacity-
licenses
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	extra capacity license(s)	true	LicensesContent	

Consumes

- application/json

Produces

- application/json

Performs a complete image update operation on the single node of the specified Cloud Volumes ONTAP

```
POST /azure/ha/working-environments/{workingEnvironmentId}/update-image
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Update system image request	true	UpdateSystemImageRequest	

Consumes

- application/json

Produces

- application/json

Change serial number of Cloud Volumes ONTAP

```
POST /azure/ha/working-environments/{workingEnvironmentId}/change-serial
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Change serial number request	true	ChangeSerialNumberRequest	

Consumes

- application/json

Produces

- application/json

Setup a new CIFS Configuration to an existing Cloud Volumes ONTAP working environment

```
POST /azure/ha/working-environments/{workingEnvironmentId}/cifs
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	CIFS Configuration request	true	CIFSConfigurationRequest	

Consumes

- application/json

Produces

- application/json

Retrieves CIFS Configuration to an existing Cloud Volumes ONTAP working environment

```
GET /azure/ha/working-environments/{workingEnvironmentId}/cifs
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
QueryParameter	svm		false	string	

Responses

HTTP Code	Description	Schema
default	success	CIFSConfigurationResponse array

Consumes

- application/json

Produces

- application/json

Retrieves an Cloud Volumes ONTAP working environment

```
GET /azure/ha/working-environments/{workingEnvironmentId}
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	fields		false	string	
PathParameter	workingEnvironmentId		true	string	

Responses

HTTP Code	Description	Schema
default	success	AzureVsaWorkingEnvironmentResponse

Consumes

- application/json

Produces

- application/json

Deletes an existing Cloud Volumes ONTAP working environment, including all Cloud resources created for this working environment (unless the localDelete flag is set to true)

```
DELETE /azure/ha/working-environments/{workingEnvironmentId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
QueryParameter	localDelete	If true, the Cloud Volumes ONTAP instance is not terminated in Cloud, but Cloud Manager no longer manages the working environment.	false	boolean	false

Type	Name	Description	Required	Schema	Default
QueryParameter	forceDelete	If true, the working environment will be deleted even if it is part of one or more SnapMirror relationships.	false	boolean	false

Consumes

- application/json

Produces

- application/json

Uploads a Cloud license file content on the provided Cloud Volumes ONTAP

```
POST /azure/ha/working-environments/{workingEnvironmentId}/upload-licenses
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	license file content request	true	LicenseFileContent	

Consumes

- application/json

Produces

- application/json

Retrieves eligibility support status of a Cloud Volumes ONTAP system. Valid values - NSS_NOT_VALID, NOT_REGISTERED, IPA_PROBLEM, VALID, NSS_NOT_EXISTS, LICENSE_EXPIRED

```
GET /azure/ha/working-environments/{workingEnvironmentId}/update-
eligibility
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironm entId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
200	success	[EligibilityResponse](#)
400	Working Environment must be ON or UPDATING in order to check eligibility	No Content

Consumes

- application/json

Produces

- application/json

Parses an uploaded Cloud license file

```
POST /azure/ha/working-environments/parse-license-file
```

Parameters

Type	Name	Description	Required	Schema	Default
HeaderParamete r	filename	Cloud license file name	false	string	
BodyParameter	license	license	false	string	

Responses

HTTP Code	Description	Schema
default	success	[ProvidedLicenseResponse](#)

Consumes

- multipart/form-data

Produces

- application/json

Delete FPolicy for ransomeware files

```
DELETE /azure/ha/working-environments/{workingEnvironmentId}/fpolicy
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	

Consumes

- application/json

Produces

- application/json

Working Environment Ontap Saving

```
GET /azure/ha/working-environments/{workingEnvironmentId}/ontap-saving
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	WorkingEnvironmentOntapSavingResponse

Consumes

- application/json

Produces

- application/json

Registers a Cloud Volumes ONTAP system with NetApp

```
POST /azure/ha/working-environments/{workingEnvironmentId}/support-
registration
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
QueryParameter	nssAccountId		false	string	

Responses

HTTP Code	Description	Schema
default	success	SupportRegistrationResponse

Consumes

- application/json

Produces

- application/json

Retrieves the support registration status of a Cloud Volumes ONTAP system

```
GET /azure/ha/working-environments/{workingEnvironmentId}/support-
registration
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	SupportRegistrationResponse

Consumes

- application/json

Produces

- application/json

Activate FPolicy for ransomeware files

```
PUT /azure/ha/working-environments/{workingEnvironmentId}/activate-fpolicy
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	

Consumes

- application/json

Produces

- application/json

Working Environment Cost And Usage

```
GET /azure/ha/working-environments/{workingEnvironmentId}/cost-and-usage
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
QueryParameter	start	cost and usage start period	false	string	
QueryParameter	end	cost and usage end period	false	string	

Responses

HTTP Code	Description	Schema
default	success	WorkingEnvironmentCostAndUsageResponse

Consumes

- application/json

Produces

- application/json

Modify the net port broadcast domain mtu of the Cloud Volumes ONTAP

```
PUT /azure/ha/working-
environments/{workingEnvironmentId}/networkOptimization
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Use optimization	true	ChangeNetwork OptimizationReq uest	

Consumes

- application/json

Produces

- application/json

Sets the cluster password of a specific Cloud Volumes ONTAP

```
PUT /azure/ha/working-environments/{workingEnvironmentId}/set-password
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
QueryParameter	occmOnly		false	boolean	
BodyParameter	body	Set password request	true	PasswordWrapper	

Consumes

- application/json

Produces

- application/json

Updates Cloud Manager password of a specific Cloud Volumes ONTAP

```
PUT /azure/ha/working-environments/{workingEnvironmentId}/update-
credentials
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Update Cloud Manager password request	true	UpdateCredentialsRequest	

Consumes

- application/json

Produces

- application/json

Retrieves action parameters used in create request of a given Cloud Volumes ONTAP instance

```
GET /azure/ha/working-environments/{workingEnvironmentId}/create-request-
parameters
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	CreateRequestParametersResponse

Consumes

- application/json

Produces

- application/json

Activate offbox configuration

```
PUT /azure/ha/working-environments/{workingEnvironmentId}/offbox
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Consumes

- application/json

Produces

- application/json

Retrieves all license types and their associated instance types for a given Cloud Volumes ONTAP instance

```
GET /azure/ha/working-environments/{workingEnvironmentId}/license-
instance-type
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	LicenseAndInstanceType array

Consumes

- application/json

Produces

- application/json

Sets the instance type of a specific Cloud Volumes ONTAP

```
PUT /azure/ha/working-environments/{workingEnvironmentId}/license-
instance-type
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Instance type modification request	true	LicenseAndInstanceTypeModificationRequest	

Consumes

- application/json

Produces

- application/json

Uploads a Cloud license file on the provided Cloud Volumes ONTAP

```
POST /azure/ha/working-environments/{workingEnvironmentId}/upload-license-
file
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
HeaderParameter	filename	Cloud license file name	false	string	
BodyParameter	license	license	false	string	

Consumes

- multipart/form-data

Produces

- application/json

Azure-vsa:aggregates

Retrieves aggregates.Operation may only be performed on working environments whose status is: ON, INITIALIZING, DEGRADED

```
GET /azure/vsa/aggregates/{workingEnvironmentId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	

Responses

HTTP Code	Description	Schema
default	success	AggregateResponse array

Consumes

- application/json

Produces

- application/json

Adds disks to an existing aggregate

```
POST /azure/vsa/aggregates/{workingEnvironmentId}/{aggregateName}/disks
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
PathParameter	aggregateName	Name of aggregate to be updated	true	string	

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Add disk to aggregate request	true	AddDisksToAggregateRequest	

Consumes

- application/json

Produces

- application/json

Creates a new aggregate

```
POST /azure/vsa/aggregates
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Create Aggregate Request	true	VsaAggregateCreateRequest	

Consumes

- application/json

Produces

- application/json

Deletes an existing aggregate

```
DELETE /azure/vsa/aggregates/{workingEnvironmentId}/{aggregateName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
PathParameter	aggregateName	Name of aggregate to be deleted	true	string	

Consumes

- application/json

Produces

- application/json

Azure-vsa:discovery

Retrieves a list of discovered working environments visible to the current user in the specified Azure region.

```
GET /azure/vsa/discover
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region	Region to discover working environments	true	string	
QueryParameter	subscriptionId		false	string	
QueryParameter	cloudProviderAccountId		false	string	

Responses

HTTP Code	Description	Schema
default	success	DiscoveredAzureVSAResponse array

Consumes

- application/json

Produces

- application/json

Saves a previously discovered Cloud Volumes ONTAP working environment to the Cloud Manager database.

```
POST /azure/vsa/recover
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Working environment	true	RecoverAzureVSARequest	

Responses

HTTP Code	Description	Schema
default	success	AzureVsaWorkingEnvironmentResponse

Consumes

- application/json

Produces

- application/json

Azure-vsa:metadata

Retrieve all vaults.

```
GET /azure/vsa/metadata/vaults
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	subscriptionId		false	string	
QueryParameter	cloudProviderAccountId		false	string	
QueryParameter	region		false	string	

Responses

HTTP Code	Description	Schema
default	success	AzureKeyVault array

Consumes

- application/json

Produces

- application/json

Retrieves supported capacity tiers for Azure disk types.

```
GET /azure/vsa/metadata/supported-capacity-tiers
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region		true	string	
QueryParameter	ontapVersion		true	string	
QueryParameter	dataEncryptionType		true	string	
QueryParameter	licenseType		true	string	
QueryParameter	instanceType		true	string	
QueryParameter	subscriptionId		false	string	
QueryParameter	cloudProviderAccountId		false	string	

Responses

HTTP Code	Description	Schema
default	success	SupportedCapacityTiers

Consumes

- application/json

Produces

- application/json

Retrieve all blob containers.

```
GET /azure/vsa/metadata/containers
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	subscriptionId		false	string	
QueryParameter	cloudProviderAccountId		false	string	
QueryParameter	resourceGroupName		true	string	

Type	Name	Description	Required	Schema	Default
QueryParameter	storageAccountName		true	string	

Responses

HTTP Code	Description	Schema
default	success	AzureBlobContainer array

Consumes

- application/json

Produces

- application/json

Retrieves Azure resource groups by region.

```
GET /azure/vsa/metadata/resource-groups
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region		true	string	
QueryParameter	subscriptionId		false	string	
QueryParameter	cloudProviderAccountId		false	string	

Responses

HTTP Code	Description	Schema
default	success	AzureResourceGroupByRegionResponse array

Consumes

- application/json

Produces

- application/json

Validates the current user is subscribed to Cloud Volumes ONTAP product in Azure marketplace.

```
POST /azure/vsa/metadata/validate-subscribed-to-ontap-cloud
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Validate subscribed to Cloud Volumes ONTAP request	true	AzureValidateSubscribedToOntapCloudRequest	

Responses

HTTP Code	Description	Schema
default	success	AzureValidateSubscribedToOntapCloudResponse

Consumes

- application/json

Produces

- application/json

Retrieve all keys in a vault.

```
GET /azure/vsa/metadata/keys-vault
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	subscriptionId		false	string	
QueryParameter	cloudProviderAccountId		false	string	
QueryParameter	resourceGroupName		true	string	
QueryParameter	vaultName		true	string	

Responses

HTTP Code	Description	Schema
default	success	AzureKey array

Consumes

- application/json

Produces

- application/json

Retrieves associated subscriptions.

```
GET /azure/vsa/metadata/associated-subscriptions
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	cloudProviderAccountId		false	string	

Responses

HTTP Code	Description	Schema
default	success	AssociatedSubscription array

Consumes

- application/json

Produces

- application/json

Retrieves all Cloud Volumes ONTAP configurations.

```
GET /azure/vsa/metadata/permutations
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region	Filter by region	false	string	
QueryParameter	version	Filter by version	false	string	
QueryParameter	license	Filter by license	false	string	
QueryParameter	instance_type	Filter by instance type	false	string	
QueryParameter	default_instance_type	Filter by default instance type	false	string	

Type	Name	Description	Required	Schema	Default
QueryParameter	feature	Filter by feature	false	string	
QueryParameter	latest_only	Filter latest only	false	string	
QueryParameter	marketplace_ver sion	Filter by marketplace version	false	string	
QueryParameter	marketplace_sku	Filter by marketplace sku	false	string	

Responses

HTTP Code	Description	Schema
default	success	Configuration array

Consumes

- application/json

Produces

- application/json

Retrieves Azure availability zones by region.

```
GET /azure/vsa/metadata/availability-zones
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region		true	string	
QueryParameter	subscriptionId		false	string	
QueryParameter	cloudProviderAc countId		false	string	

Responses

HTTP Code	Description	Schema
default	success	AzureAvailabilityZoneResponse array

Consumes

- application/json

Produces

- application/json

Retrieves Network Extended Info.

```
GET /azure/vsa/metadata/vnets
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region		true	string	
QueryParameter	subscriptionId		false	string	
QueryParameter	cloudProviderAccountId		false	string	

Responses

HTTP Code	Description	Schema
default	success	AzureNetworkExtendedResponse

Consumes

- application/json

Produces

- application/json

Retrieves packages configuration

```
GET /azure/vsa/metadata/packages
```

Responses

HTTP Code	Description	Schema
default	success	PackageInfoResponse array

Consumes

- application/json

Produces

- application/json

Retrieves supported features

```
GET /azure/vsa/metadata/supported-features
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region		true	string	
QueryParameter	ontapVersion		true	string	
QueryParameter	dataEncryptionType		true	string	
QueryParameter	licenseType		true	string	
QueryParameter	instanceType		true	string	

Responses

HTTP Code	Description	Schema
default	success	SupportedFeaturesResponse

Consumes

- application/json

Produces

- application/json

Retrieves Azure regions over which an Cloud Volumes ONTAP working environment may be created.

```
GET /azure/vsa/metadata/regions
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	fields		false	string	
QueryParameter	subscriptionId		false	string	
QueryParameter	cloudProviderAccountId		false	string	

Responses

HTTP Code	Description	Schema
default	success	AzureRegionResponse array

Consumes

- application/json

Produces

- application/json

Retrieves the minimum number of required IPs for a Cloud Volumes ONTAP system.

```
GET /azure/vsa/metadata/network-requirements
```

Responses

HTTP Code	Description	Schema
default	success	AzureNetworkRequirementsResponse

Consumes

- application/json

Produces

- application/json

Retrieves instance types not supporting acceleration and capacity tiering

```
GET /azure/vsa/metadata/instance-types-not-supporting-acceleration-and-
capacity-tiering
```

Responses

HTTP Code	Description	Schema
default	success	InstanceTypesNotSupportingAccelerationAndCapacityTieringResponse

Consumes

- application/json

Produces

- application/json

Retrieves all the Tag names.

```
GET /azure/vsa/metadata/tag-keys
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	subscriptionId		false	string	
QueryParameter	cloudProviderAc countId		false	string	

Responses

HTTP Code	Description	Schema
default	success	TagKeyResponse array

Consumes

- application/json

Produces

- application/json

Retrieves supported Azure storage account types.

```
GET /azure/vsa/metadata/storage-account-types
```

Responses

HTTP Code	Description	Schema
default	success	AzureStorageAccountTypeRespon se array

Consumes

- application/json

Produces

- application/json

Create new blob container.

```
POST /azure/vsa/metadata/create-container
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Create blob container request	true	CreateBlobContainerRequest	

Consumes

- application/json

Produces

- application/json

Retrieves default snapshot policies available on a cluster

```
GET /azure/vsa/metadata/default-snapshot-policies
```

Responses

HTTP Code	Description	Schema
default	success	SnapshotPolicy array

Consumes

- application/json

Produces

- application/json

Azure-vsa:volumes

Return a list of snapshot descriptions for the volume.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
GET
/azure/vsa/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/snapshots
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	

Responses

HTTP Code	Description	Schema
default	success	SnapshotResponse array

Consumes

- application/json

Produces

- application/json

Move an existing volume.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST /azure/vsa/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/move
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	
BodyParameter	body		true	VolumeMoveRequest	

Consumes

- application/json

Produces

- application/json

Retrieves volumes for Backup Activation.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
GET /azure/vsa/volumes/volumes-for-backup
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	workingEnvironmentId	Filter volumes by this working environment	true	string	
QueryParameter	offset	offset	false	integer (int32)	
QueryParameter	limit	limit	false	integer (int32)	
QueryParameter	search	search	false	string	
QueryParameter	filterBy	filterBy should be of the form field:value. For multiple filters use comma separator.	false	ref	
QueryParameter	sortBy	sortBy should be of the form field:Asc or field:Desc. For multiple sorting use comma separator.	false	ref	

Responses

HTTP Code	Description	Schema
default	success	VolumesListForBackup

Consumes

- application/json

Produces

- application/json

Clones an existing volume.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST
/azure/vsa/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/clone
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	
BodyParameter	body		true	VolumeCloneRequest	

Consumes

- application/json

Produces

- application/json

Quotes a new volume. Returns a resource quote needed to satisfy the requested volume.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST /azure/vsa/volumes/quote
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Quote volume request	true	VsaVolumeQuoteRequest	

Responses

HTTP Code	Description	Schema
default	success	VsaVolumeQuoteResponse

Consumes

- application/json

Produces

- application/json

Modify an existing volume.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
PUT /azure/vsa/volumes/{workingEnvironmentId}/{svmName}/{volumeName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	ref	
BodyParameter	body	Modify volume request	true	VolumeModifyRequest	

Consumes

- application/json

Produces

- application/json

Deletes an existing volume.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
DELETE /azure/vsa/volumes/{workingEnvironmentId}/{svmName}/{volumeName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	

Consumes

- application/json

Produces

- application/json

Creates a new volume. If the properties aggregateName and maxNumOfDisksApprovedToAdd are not filled in, then the response will fail with a suggested aggregate name and the number of disks that will need to be created in order to fulfill the request.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST /azure/vsa/volumes
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	createAggregateI fNotFound	On create volume request, allow creating not-found aggregate	false	boolean	
BodyParameter	body	Create volume request	true	[VsaVolumeCreat eRequest](#)	

Consumes

- application/json

Produces

- application/json

Retrieves volumes.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
GET /azure/vsa/volumes
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	workingEnvironm entId	Filter volumes by this working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	[VolumeResponse](#) array

Consumes

- application/json

Produces

- application/json

Add ISCSI initiator.

```
POST /azure/vsa/volumes/initiator
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	ISCSI initiator request	true	Initiator	

Consumes

- application/json

Produces

- application/json

Get all ISCSI initiators.

```
GET /azure/vsa/volumes/initiator
```

Responses

HTTP Code	Description	Schema
default	success	InitiatorEntry array

Consumes

- application/json

Produces

- application/json

Create snapshot manually.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST
/azure/vsa/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/snapshot
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Create snapshot request	true	SnapshotCreate Request	

Consumes

- application/json

Produces

- application/json

Delete snapshot manually.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
DELETE
/azure/vsa/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/snapshot
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	
BodyParameter	body	Create snapshot request	true	SnapshotDelete Request	

Consumes

- application/json

Produces

- application/json

Get all igroups.

```
GET /azure/vsa/volumes/igroups/{workingEnvironmentId}/{svmName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	

Type	Name	Description	Required	Schema	Default
PathParameter	svmName		true	string	

Responses

HTTP Code	Description	Schema
default	success	IGroup array

Consumes

- application/json

Produces

- application/json

Change underlying volume tier.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST
/azure/vsa/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/change-
tier
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	
BodyParameter	body		true	ChangeVolumeTierRequest	

Consumes

- application/json

Produces

- application/json

Azure-vsa:working-environments

Creates a new Cloud Volumes ONTAP working environment.

```
POST /azure/vsa/working-environments
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Working environment	true	CreateAzureVSAWorkingEnvironmentRequest	

Responses

HTTP Code	Description	Schema
default	success	AzureVsaWorkingEnvironmentResponse

Consumes

- application/json

Produces

- application/json

Retrieves Cloud Volumes ONTAP working environments visible to the currently logged in user

```
GET /azure/vsa/working-environments
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	fields		false	string	
QueryParameter	tenantId		false	string	

Responses

HTTP Code	Description	Schema
default	success	AzureVsaWorkingEnvironmentResponse array

Consumes

- application/json

Produces

- application/json

Working Environment Ontap Saving

```
GET /azure/vsa/working-environments/{workingEnvironmentId}/ontap-saving
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	WorkingEnvironmentOntapSavingResponse

Consumes

- application/json

Produces

- application/json

Stops a specific Cloud Volumes ONTAP instance

```
POST /azure/vsa/working-environments/{workingEnvironmentId}/stop
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
QueryParameter	takeSnapshots	Take snapshots before stopping Cloud Volumes ONTAP	true	boolean	true

Consumes

- application/json

Produces

- application/json

Uploads a Cloud license file on the provided Cloud Volumes ONTAP

```
POST /azure/vsa/working-environments/{workingEnvironmentId}/upload-
license-file
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
HeaderParameter	filename	Cloud license file name	false	string	
BodyParameter	license	license	false	string	

Consumes

- multipart/form-data

Produces

- application/json

Register extra capacity license

```
POST /azure/vsa/working-environments/{workingEnvironmentId}/extra-
capacity-licenses
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	extra capacity licenses(s)	true	LicensesContent	

Consumes

- application/json

Produces

- application/json

Get extra capacity licenses for cvo

```
GET /azure/vsa/working-environments/{workingEnvironmentId}/extra-capacity-
licenses
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Consumes

- application/json

Produces

- application/json

Update extra capacity license

```
PUT /azure/vsa/working-environments/{workingEnvironmentId}/extra-capacity-
licenses
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	extra capacity license(s)	true	LicensesContent	

Consumes

- application/json

Produces

- application/json

Retrieves all license types and their associated instance types for a given Cloud Volumes ONTAP instance

```
GET /azure/vsa/working-environments/{workingEnvironmentId}/license-
instance-type
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	LicenseAndInstanceType array

Consumes

- application/json

Produces

- application/json

Sets the instance type of a specific Cloud Volumes ONTAP

```
PUT /azure/vsa/working-environments/{workingEnvironmentId}/license-
instance-type
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Instance type modification request	true	LicenseAndInstanceTypeModificationRequest	

Consumes

- application/json

Produces

- application/json

Create snapshot policy

```
POST /azure/vsa/working-environments/{workingEnvironmentId}/snapshot-
policy
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
BodyParameter	body	Create snapshot policy request	true	SnapshotPolicyCreateRequest	

Consumes

- application/json

Produces

- application/json

Registers a Cloud Volumes ONTAP system with NetApp

```
POST /azure/vsa/working-environments/{workingEnvironmentId}/support-
registration
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
QueryParameter	nssAccountId		false	string	

Responses

HTTP Code	Description	Schema
default	success	SupportRegistrationResponse

Consumes

- application/json

Produces

- application/json

Retrieves the support registration status of a Cloud Volumes ONTAP system

```
GET /azure/vsa/working-environments/{workingEnvironmentId}/support-
registration
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	SupportRegistrationResponse

Consumes

- application/json

Produces

- application/json

Disable FPolicy for ransomeware files

```
PUT /azure/vsa/working-environments/{workingEnvironmentId}/disable-fpolicy
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	

Consumes

- application/json

Produces

- application/json

Retrieves a list of versions to which this Cloud Volumes ONTAP can be upgraded

```
GET /azure/vsa/working-environments/{workingEnvironmentId}/occm-provided-
upgrade-versions
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	OntapUpdateImageMetadata array

Consumes

- application/json

Produces

- application/json

Updates default vscan file operation profile. Profile on existing CIFS shares will change only on writes-only mode

```
PUT /azure/vsa/working-environments/{workingEnvironmentId}/vscan-file-op
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Vscan file-operation Request	true	VscanFileOpRequest	

Consumes

- application/json

Produces

- application/json

Sets the cluster password of a specific Cloud Volumes ONTAP

```
PUT /azure/vsa/working-environments/{workingEnvironmentId}/set-password
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
QueryParameter	occmOnly		false	boolean	
BodyParameter	body	Set password request	true	PasswordWrapper	

Consumes

- application/json

Produces

- application/json

Returns true if a resource group with that name already exists, false otherwise

```
GET /azure/vsa/working-environments/resource-group-
exists/{resourceGroupName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	resourceGroupName	resource group name	true	string	
QueryParameter	subscriptionId		false	string	
QueryParameter	cloudProviderAccountId		false	string	

Responses

HTTP Code	Description	Schema
default	success	boolean

Consumes

- application/json

Produces

- application/json

Retrieves action parameters used in create request of a given Cloud Volumes ONTAP instance

```
GET /azure/vsa/working-environments/{workingEnvironmentId}/create-request-
parameters
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	CreateRequestParametersResponse

Consumes

- application/json

Produces

- application/json

Delete FPolicy for ransomeware files

```
DELETE /azure/vsa/working-environments/{workingEnvironmentId}/fpolicy
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	

Consumes

- application/json

Produces

- application/json

Activate FPolicy for ransomeware files

```
PUT /azure/vsa/working-environments/{workingEnvironmentId}/activate-
fpolicy
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	

Consumes

- application/json

Produces

- application/json

Register extra capacity serials

```
POST /azure/vsa/working-environments/{workingEnvironmentId}/extra-
capacity-serials
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	licenses serial(s)	true	LicensesSerials	

Consumes

- application/json

Produces

- application/json

Update extra capacity serials

```
PUT /azure/vsa/working-environments/{workingEnvironmentId}/extra-capacity-
serials
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironm entId	Public Id of working environment	true	string	
BodyParameter	body	extra capacity serial(s)	true	LicensesSerials	

Consumes

- application/json

Produces

- application/json

Delete extra capacity licenses by serials

```
DELETE /azure/vsa/working-environments/{workingEnvironmentId}/extra-
capacity-serials
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironm entId	Public Id of working environment	true	string	
BodyParameter	body	extra capacity serial(s)	true	LicensesSerials	

Consumes

- application/json

Produces

- application/json

Setup NTP server

```
POST /azure/vsa/working-environments/{workingEnvironmentId}/ntp
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	NTP Configuration request	true	NTPConfigurationRequest	

Consumes

- application/json

Produces

- application/json

Sets the writing speed for Cloud Volumes ONTAP

```
PUT /azure/vsa/working-environments/{workingEnvironmentId}/writing-speed
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Writing speed request	true	WritingSpeedRequest	

Consumes

- application/json

Produces

- application/json

Delete CIFS Configuration of an existing Cloud Volumes ONTAP working environment

```
POST /azure/vsa/working-environments/{workingEnvironmentId}/delete-cifs
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	CIFS Configuration request	true	CIFSDeleteRequest	

Consumes

- application/json

Produces

- application/json

Activate offbox configuration

```
PUT /azure/vsa/working-environments/{workingEnvironmentId}/offbox
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Consumes

- application/json

Produces

- application/json

Enable capacity tiering

```
POST /azure/vsa/working-environments/{workingEnvironmentId}/enable-
capacity-tiering
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Enable capacity tiering request	false	EnableCapacityTieringRequest	

Consumes

- application/json

Produces

- application/json

Retrieves images already installed on the Cloud Volumes ONTAP

```
GET /azure/vsa/working-environments/{workingEnvironmentId}/ontap-
available-images
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	UpdateLocalImage array

Consumes

- application/json

Produces

- application/json

Manually triggers subscription sync for all Cloud Volumes ONTAP working environments

```
POST /azure/vsa/working-environments/sync-subscription
```

Consumes

- application/json

Produces

- application/json

Retrieves eligibility support status of a Cloud Volumes ONTAP system. Valid values - NSS_NOT_VALID, NOT_REGISTERED, IPA_PROBLEM, VALID, NSS_NOT_EXISTS, LICENSE_EXPIRED

```
GET /azure/vsa/working-environments/{workingEnvironmentId}/update-
eligibility
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
200	success	EligibilityResponse
400	Working Environment must be ON or UPDATING in order to check eligibility	No Content

Consumes

- application/json

Produces

- application/json

Updates Cloud Manager password of a specific Cloud Volumes ONTAP

```
PUT /azure/vsa/working-environments/{workingEnvironmentId}/update-
credentials
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Update Cloud Manager password request	true	UpdateCredentialsRequest	

Consumes

- application/json

Produces

- application/json

Change tier level

```
POST /azure/vsa/working-environments/{workingEnvironmentId}/change-tier-
level
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Change tier level request	true	ChangeTierLevel Request	

Consumes

- application/json

Produces

- application/json

Starts a specific Cloud Volumes ONTAP instance

```
POST /azure/vsa/working-environments/{workingEnvironmentId}/start
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Consumes

- application/json

Produces

- application/json

Change serial number of Cloud Volumes ONTAP

```
POST /azure/vsa/working-environments/{workingEnvironmentId}/change-serial
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Change serial number request	true	ChangeSerialNumberRequest	

Consumes

- application/json

Produces

- application/json

List start-stop schedules for Cloud Volumes ONTAP

```
GET /azure/vsa/working-environments/{workingEnvironmentId}/schedules
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	VsaSchedule array

Consumes

- application/json

Produces

- application/json

Set schedules for Cloud Volumes ONTAP

```
PUT /azure/vsa/working-environments/{workingEnvironmentId}/schedules
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Cloud Volumes ONTAP working environment update schedule request	true	VsaSchedulesRequest	

Consumes

- application/json

Produces

- application/json

Retrieves an Cloud Volumes ONTAP working environment

```
GET /azure/vsa/working-environments/{workingEnvironmentId}
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	fields		false	string	

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	

Responses

HTTP Code	Description	Schema
default	success	AzureVsaWorkingEnvironmentResponse

Consumes

- application/json

Produces

- application/json

Deletes an existing Cloud Volumes ONTAP working environment, including all Cloud resources created for this working environment (unless the localDelete flag is set to true)

```
DELETE /azure/vsa/working-environments/{workingEnvironmentId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
QueryParameter	localDelete	If true, the Cloud Volumes ONTAP instance is not terminated in Cloud, but Cloud Manager no longer manages the working environment.	false	boolean	false
QueryParameter	forceDelete	If true, the working environment will be deleted even if it is part of one or more SnapMirror relationships.	false	boolean	false

Consumes

- application/json

Produces

- application/json

Activate snapshot policy assignment to all not protected rw volumes

```
PUT /azure/vsa/working-environments/{workingEnvironmentId}/activate-
snapshot-policy
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Consumes

- application/json

Produces

- application/json

Working Environment Cost And Usage

```
GET /azure/vsa/working-environments/{workingEnvironmentId}/cost-and-usage
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
QueryParameter	start	cost and usage start period	false	string	
QueryParameter	end	cost and usage end period	false	string	

Responses

HTTP Code	Description	Schema
default	success	WorkingEnvironmentCostAndUsageResponse

Consumes

- application/json

Produces

- application/json

Setup a new CIFS using workgroup configuration to an existing Cloud Volumes ONTAP working environment

```
POST /azure/vsa/working-environments/{workingEnvironmentId}/cifs-workgroup
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	CIFS Configuration request	true	CIFSWorkgroupConfigurationRequest	

Consumes

- application/json

Produces

- application/json

Uploads a Cloud license file content on the provided Cloud Volumes ONTAP

```
POST /azure/vsa/working-environments/{workingEnvironmentId}/upload-licenses
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Type	Name	Description	Required	Schema	Default
BodyParameter	body	license file content request	true	[LicenseFileCont ent](#)	

Consumes

- application/json

Produces

- application/json

Modify the svm name of the Cloud Volumes ONTAP

```
PUT /azure/vsa/working-environments/{workingEnvironmentId}/svm
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironm entId	Public Id of working environment	true	string	
BodyParameter	body	Svm name modification request	true	[SvmNameModifi cationRequest](#)	

Consumes

- application/json

Produces

- application/json

Parses an uploaded Cloud license file

```
POST /azure/vsa/working-environments/parse-license-file
```

Parameters

Type	Name	Description	Required	Schema	Default
HeaderParamete r	filename	Cloud license file name	false	string	
BodyParameter	license	license	false	string	

Responses

HTTP Code	Description	Schema
default	success	ProvidedLicenseResponse

Consumes

- multipart/form-data

Produces

- application/json

Performs a complete image update operation on the single node of the specified Cloud Volumes ONTAP

```
POST /azure/vsa/working-environments/{workingEnvironmentId}/update-image
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Update system image request	true	UpdateSystemImageRequest	

Consumes

- application/json

Produces

- application/json

Retrieves number of available ip addresses in the Cloud Volumes ONTAP working environment's subnet

```
GET /azure/vsa/working-environments/{workingEnvironmentId}/available-ips-in-subnet
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	

Responses

HTTP Code	Description	Schema
default	success	AvailableIpsResponse

Consumes

- application/json

Produces

- application/json

Setup a new CIFS Configuration to an existing Cloud Volumes ONTAP working environment

```
POST /azure/vsa/working-environments/{workingEnvironmentId}/cifs
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	CIFS Configuration request	true	CIFSConfigurationRequest	

Consumes

- application/json

Produces

- application/json

Retrieves CIFS Configuration to an existing Cloud Volumes ONTAP working environment

```
GET /azure/vsa/working-environments/{workingEnvironmentId}/cifs
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
QueryParameter	svm		false	string	

Responses

HTTP Code	Description	Schema
default	success	CIFSConfigurationResponse array

Consumes

- application/json

Produces

- application/json

Modify the net port broadcast domain mtu of the Cloud Volumes ONTAP

```
PUT /azure/vsa/working-
environments/{workingEnvironmentId}/networkOptimization
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Use optimization	true	ChangeNetworkOptimizationRequest	

Consumes

- application/json

Produces

- application/json

Retrieves editable tags for cloud resources of a given Cloud Volumes ONTAP instance

```
GET /azure/vsa/working-environments/{workingEnvironmentId}/user-tags
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	UserTagsResponse

Consumes

- application/json

Produces

- application/json

Modify user tags for cloud resources of a given Cloud Volumes ONTAP instance

```
PUT /azure/vsa/working-environments/{workingEnvironmentId}/user-tags
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Modify user tags request	true	ModifyUserTags Request	

Consumes

- application/json

Produces

- application/json

Cloud-compliance

Retrieve Cloud Compliance info.

```
GET /cloud-compliance/info
```

Responses

HTTP Code	Description	Schema
default	success	CloudComplianceInfoResponse

Produces

- application/json

Disable scan.

```
POST /cloud-compliance/{serviceId}/disable-service-scan
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	serviceId	Service ID	true	enum (ANF, S3)	

Produces

- application/json

Disable scan.

```
POST /cloud-compliance/{workingEnvironmentId}/disable-scan
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Produces

- application/json

Deploy Cloud Compliance instance by working environments.

```
POST /cloud-compliance/deploy-by-working-environments
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	deploy Cloud Compliance request	true	CreateCloudComplianceByWesRequest	

Produces

- application/json

Enable scan.

```
POST /cloud-compliance/{workingEnvironmentId}/enable-onprem-scan
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of onprem working environment	true	string	

Produces

- application/json

Enable scan.

```
POST /cloud-compliance/{workingEnvironmentId}/enable-scan
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Produces

- application/json

Retrieve service Cloud Compliance status.

```
GET /cloud-compliance/fsx/{fileSystemId}/compliance-status
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	fileSystemId	File System ID	true	string	

Responses

HTTP Code	Description	Schema
default	success	CloudComplianceStatusResponse

Produces

- application/json

Enable scan.

```
POST /cloud-compliance/{serviceId}/enable-service-scan
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	serviceId	Service ID	true	enum (ANF, S3)	
BodyParameter	body	Enable Cloud Compliance request	false	EnableServiceScanRequest	

Produces

- application/json

Retrieve service Cloud Compliance status.

```
GET /cloud-compliance/{serviceId}/compliance-status
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	serviceId	Service ID	true	enum (ANF, S3)	

Responses

HTTP Code	Description	Schema
default	success	CloudComplianceStatusResponse

Produces

- application/json

Disable onprem scan.

```
POST /cloud-compliance/{workingEnvironmentId}/disable-onprem-scan
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of onprem working environment	true	string	

Produces

- application/json

Enable scan.

```
POST /cloud-compliance/fsx/{fileSystemId}/enable-scan
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	fileSystemId	File System ID	true	string	

Produces

- application/json

Disable scan.

```
POST /cloud-compliance/fsx/{fileSystemId}/disable-scan
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	fileSystemId	File System ID	true	string	

Produces

- application/json

Cloudsync

Retrieve all S3 buckets.

```
GET /cloudsync/buckets
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	userId	User ID of the working environment creator	true	string	

Responses

HTTP Code	Description	Schema
default	success	S3BucketInfo array

Consumes

- application/json

Produces

- application/json

List S3 bucket's sub directories.

```
GET /cloudsync/buckets/{bucketName}/sub-directories
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	userId	User ID of the working environment creator	true	string	
QueryParameter	fullPath	Full path to list sub directories	false	string	
PathParameter	bucketName	Bucket name to get sub directories from	true	string	

Responses

HTTP Code	Description	Schema
default	success	BucketInformation

Consumes

- application/json

Produces

- application/json

Get Cloud Sync Service url, according to the current environment.

```
GET /cloudsync/service-url
```

Responses

HTTP Code	Description	Schema
default	success	ServiceUrl

Consumes

- application/json

Produces

- application/json

Retrieves AWS user Key Pairs for working environment's account and region.

```
GET /cloudsync/key-pairs-by-vsa/{workingEnvironmentId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of VSA working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	string array

Consumes

- application/json

Produces

- application/json

Create sync of OnPrem working environment with Cloud Sync service.Operation may only be performed on working environments whose status is: ON

```
POST /cloudsync/sync/onprem/{workingEnvironmentId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of OnPrem working environment	true	string	
BodyParameter	body	Create sync request	true	CreateSyncRequest	

Consumes

- application/json

Produces

- application/json

Delete sync of OnPrem working environment to Cloud Sync service.Operation may only be performed on working environments whose status is: ON

```
DELETE /cloudsync/sync/onprem/{workingEnvironmentId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of OnPrem working environment	true	string	

Consumes

- application/json

Produces

- application/json

Create sync of VSA working environment with Cloud Sync service.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST /cloudsync/sync/{workingEnvironmentId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of VSA working environment	true	string	
BodyParameter	body	Create sync request	true	CreateSyncRequest	

Consumes

- application/json

Produces

- application/json

Delete sync of VSA working environment to Cloud Sync service.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
DELETE /cloudsync/sync/{workingEnvironmentId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of VSA working environment	true	string	

Consumes

- application/json

Produces

- application/json

List S3 bucket's sub directories in working environment's account.

```
GET /cloudsync/buckets/{bucketName}/sub-directories/{workingEnvironmentId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of VSA working environment	true	string	
QueryParameter	fullPath	Full path to list sub directories	false	string	
PathParameter	bucketName	Bucket name to get sub directories from	true	string	

Responses

HTTP Code	Description	Schema
default	success	BucketInformation

Consumes

- application/json

Produces

- application/json

Retrieve all S3 buckets in working environment's account.

```
GET /cloudsync/buckets/{workingEnvironmentId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of VSA working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	S3BucketInfo array

Consumes

- application/json

Produces

- application/json

Add Cloud Sync relationship to an OnPrem volume.Operation may only be performed on working environments whose status is: ON

```
POST /cloudsync/relationship/onprem/{workingEnvironmentId}/{volumeName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of OnPrem working environment	true	string	
PathParameter	volumeName		true	ref	

Consumes

- application/json

Produces

- application/json

Delete Cloud Sync relationship from an OnPrem volume.Operation may only be performed on working environments whose status is: ON

```
DELETE /cloudsync/relationship/onprem/{workingEnvironmentId}/{volumeName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of OnPrem working environment	true	string	
PathParameter	volumeName		true	ref	

Consumes

- application/json

Produces

- application/json

Add Cloud Sync relationship to a VSA volume.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST /cloudsync/relationship/{workingEnvironmentId}/{volumeName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of VSA working environment	true	string	
PathParameter	volumeName		true	ref	

Consumes

- application/json

Produces

- application/json

Delete Cloud Sync relationship from a VSA volume.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
DELETE /cloudsync/relationship/{workingEnvironmentId}/{volumeName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of VSA working environment	true	string	
PathParameter	volumeName		true	ref	

Consumes

- application/json

Produces

- application/json

Retrieves VPCs for working environment's account and region.

```
GET /cloudsync/vpcs-by-vsa/{workingEnvironmentId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of VSA working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	VpcExtendedResponse array

Consumes

- application/json

Produces

- application/json

Filesystem

Register OCCM in StoutBroker.

```
POST /aws/filesystem/register-occm
```

Consumes

- application/json

Produces

- application/json

List available software versions, both CVO and mediator.

```
GET /aws/filesystem/software-versions
```

Responses

HTTP Code	Description	Schema
default	success	SoftwareVersionsResponse

Consumes

- application/json

Produces

- application/json

Configure S3 bucket name and prefix destination for metrics uploading.

```
POST /aws/filesystem/s3-config
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body		true	ConfigureS3Request	

Consumes

- application/json

Produces

- application/json

List region to AMI mapping for software version.

```
GET /aws/filesystem/software-metadata/{version}/ami
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	version	version	true	string	

Responses

HTTP Code	Description	Schema
default	success	SoftwareVersionAmisResponse

Consumes

- application/json

Produces

- application/json

Modify region to AMI mapping for software version.

```
PUT /aws/filesystem/software-metadata/{version}/ami
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	version	version	true	string	
BodyParameter	body		true	ModifyMappingRequest	

Consumes

- application/json

Produces

- application/json

Creates a new SVM on AWS HA Cloud Volumes ONTAP filesystem.Operation may only be performed on working environments whose status is: ON

```
POST /aws/filesystem/ha/{workingEnvironmentId}/svm
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
BodyParameter	body		true	CreateSvmHaRequest	

Consumes

- application/json

Produces

- application/json

Add supported instance types for software version.

```
PUT /aws/filesystem/software-metadata/{version}/instance-types
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	version	version	true	string	
BodyParameter	body		true	AddInstanceTypesRequest	

Consumes

- application/json

Produces

- application/json

Creates a new AWS HA Cloud Volumes ONTAP filesystem.

```
POST /aws/filesystem/ha
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body		true	CreateFilesystemRequest	

Responses

HTTP Code	Description	Schema
default	success	VsaWorkingEnvironmentResponse

Consumes

- application/json

Produces

- application/json

Add supported AWS regions.

```
PUT /aws/filesystem/software-metadata/regions
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body		true	AddAwsRegions Request	

Consumes

- application/json

Produces

- application/json

Fsx:volumes

Creates a new volume.

```
POST /fsx/volumes
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Create volume request	true	FsxVolumeCreat eRequest	

Consumes

- application/json

Produces

- application/json

Retrieves volumes.

```
GET /fsx/volumes
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	fileSystemId	Filter volumes by this file system	true	string	

Responses

HTTP Code	Description	Schema
default	success	VolumeResponse array

Consumes

- application/json

Produces

- application/json

Clones an existing volume.

```
POST /fsx/volumes/{fileSystemId}/{svmName}/{volumeName}/clone
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	fileSystemId	File System Id	true	string	
PathParameter	svmName	SVM name	true	string	
PathParameter	volumeName	Name of volume to be cloned	true	string	
BodyParameter	body	Clone volume request	true	VolumeCloneRequest	

Consumes

- application/json

Produces

- application/json

Return a list of snapshot descriptions for the volume.

```
GET /fsx/volumes/{fileSystemId}/{svmName}/{volumeName}/snapshots
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	fileSystemId	File System Id	true	string	
PathParameter	svmName	SVM name	true	string	

Type	Name	Description	Required	Schema	Default
PathParameter	volumeName	Filter snapshot descriptions for specified volume	true	string	

Responses

HTTP Code	Description	Schema
default	success	SnapshotResponse array

Consumes

- application/json

Produces

- application/json

Modify an existing volume.

```
PUT /fsx/volumes/{fileSystemId}/{svmName}/{volumeName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	fileSystemId	File System Id	true	string	
PathParameter	svmName	SVM name	true	string	
PathParameter	volumeName	Name of volume to be modified	true	ref	
BodyParameter	body	Modify volume request	true	FsxVolumeModifyRequest	

Consumes

- application/json

Produces

- application/json

Deletes an existing volume.

```
DELETE /fsx/volumes/{fileSystemId}/{svmName}/{volumeName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	fileSystemId	File System Id	true	string	
PathParameter	svmName	SVM name	true	string	
PathParameter	volumeName	Name of volume to be deleted	true	string	

Consumes

- application/json

Produces

- application/json

Create snapshot manually.

```
POST /fsx/volumes/{fileSystemId}/{svmName}/{volumeName}/snapshot
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	fileSystemId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	
BodyParameter	body	Create snapshot request	true	SnapshotCreate Request	

Consumes

- application/json

Produces

- application/json

Delete snapshot manually.

```
DELETE /fsx/volumes/{fileSystemId}/{svmName}/{volumeName}/snapshot
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	fileSystemId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	
BodyParameter	body	Delete snapshot request	true	SnapshotDelete Request	

Consumes

- application/json

Produces

- application/json

Fsx:working-environments

Setup a new CIFS Configuration for existing FSx working environment.

```
POST /fsx/working-environments/{fileSystemId}/cifs
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	fileSystemId	File System Id	true	string	
BodyParameter	body	CIFS Configuration request	true	CIFSConfiguratio nRequest	

Consumes

- application/json

Produces

- application/json

Retrieves CIFS Configuration for existing FSx working environment.

```
GET /fsx/working-environments/{fileSystemId}/cifs
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	fileSystemId	File System Id	true	string	
QueryParameter	svm		false	string	

Responses

HTTP Code	Description	Schema
default	success	CIFSConfigurationResponse array

Consumes

- application/json

Produces

- application/json

Retrieves SVM list for existing FSx working environment.

```
GET /fsx/working-environments/{fileSystemId}/svms
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	fileSystemId	File System Id	true	string	

Responses

HTTP Code	Description	Schema
default	success	Svm array

Consumes

- application/json

Produces

- application/json

Retrieve snapshot policies for existing FSx working environment.

```
GET /fsx/working-environments/{fileSystemId}/snapshot-policies
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	fileSystemId	File System Id	true	string	

Responses

HTTP Code	Description	Schema
default	success	SnapshotPolicy array

Consumes

- application/json

Produces

- application/json

Validate provided credentials for existing FSx working environment.

```
POST /fsx/working-environments/validate-credentials
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	FSx credentials	true	ZapiCredentials	

Responses

HTTP Code	Description	Schema
default	success	FsxCredentialsStatusResponse

Consumes

- application/json

Produces

- application/json

Gcp-ha:aggregates

Deletes an existing aggregate

```
DELETE /gcp/ha/aggregates/{workingEnvironmentId}/{aggregateName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
PathParameter	aggregateName	Name of aggregate to be deleted	true	string	

Consumes

- application/json

Produces

- application/json

Adds disks to an existing aggregate

```
POST /gcp/ha/aggregates/{workingEnvironmentId}/{aggregateName}/disks
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
PathParameter	aggregateName	Name of aggregate to be updated	true	string	
BodyParameter	body	Add disk to aggregate request	true	[AddDisksToAggregateRequest](#)	

Consumes

- application/json

Produces

- application/json

Creates a new aggregate

```
POST /gcp/ha/aggregates
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Create Aggregate Request	true	VsaAggregateCreateRequest	

Consumes

- application/json

Produces

- application/json

Retrieves aggregates

```
GET /gcp/ha/aggregates/{workingEnvironmentId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	

Responses

HTTP Code	Description	Schema
default	success	AggregateResponse array

Consumes

- application/json

Produces

- application/json

Gcp-ha:discovery

Saves a previously discovered Cloud Volumes ONTAP working environment to the Cloud Manager database.

```
POST /gcp/ha/discovery/recover
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Working environment	true	RecoverGcpHaRequest	

Responses

HTTP Code	Description	Schema
default	success	GcpVsaWorkingEnvironmentResponse

Consumes

- application/json

Produces

- application/json

Retrieves a list of discovered working environments visible to the current user in the specified Gcp region.

```
GET /gcp/ha/discovery/discover
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region	Region to discover working environments	true	string	
QueryParameter	project	Project to discover working environments	false	string	

Responses

HTTP Code	Description	Schema
default	success	DiscoveredGcpHaResponse array

Consumes

- application/json

Produces

- application/json

Gcp-ha:metadata

Retrieves supported features

```
GET /gcp/ha/metadata/supported-features
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region		true	string	
QueryParameter	ontapVersion		true	string	
QueryParameter	dataEncryptionType		true	string	
QueryParameter	licenseType		true	string	
QueryParameter	instanceType		true	string	

Responses

HTTP Code	Description	Schema
default	success	SupportedFeaturesResponse

Consumes

- application/json

Produces

- application/json

Retrieves GCP networks and subnetworks over which an Cloud Volumes ONTAP working environment may be created.

```
GET /gcp/ha/metadata/vpcs
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region		true	string	
QueryParameter	project		false	string	

Responses

HTTP Code	Description	Schema
default	success	GcpConnectivityResponse array

Consumes

- application/json

Produces

- application/json

Retrieves the minimum number of required IPs for a Cloud Volumes ONTAP system

```
GET /gcp/ha/metadata/network-requirements
```

Responses

HTTP Code	Description	Schema
default	success	GcpNetworkRequirementsResponse

Consumes

- application/json

Produces

- application/json

Retrieves GCP encryption keys for specific region

```
GET /gcp/ha/metadata/gcp-encryption-keys
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region		true	string	
QueryParameter	project		true	string	

Responses

HTTP Code	Description	Schema
default	success	GcpEncryptionKey array

Consumes

- application/json

Produces

- application/json

Retrieves all the Labels in the given project Id and region.

```
GET /gcp/ha/metadata/tag-keys
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region		true	string	
QueryParameter	projectId		false	string	

Responses

HTTP Code	Description	Schema
default	success	TagKeyResponse array

Consumes

- application/json

Produces

- application/json

Retrieves list of Service Accounts from the project

```
GET /gcp/ha/metadata/service-accounts
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	project		false	string	

Responses

HTTP Code	Description	Schema
default	success	GcpServiceAccountsResponse

Consumes

- application/json

Produces

- application/json

Retrieves list of Projects that the caller has permission on

```
GET /gcp/ha/metadata/projects
```

Responses

HTTP Code	Description	Schema
default	success	GcpProjectsResponse

Consumes

- application/json

Produces

- application/json

Retrieves packages configuration

```
GET /gcp/ha/metadata/packages
```

Responses

HTTP Code	Description	Schema
default	success	PackageInfoResponse array

Consumes

- application/json

Produces

- application/json

Retrieves GCP regions over which an Cloud Volumes ONTAP working environment may be created

```
GET /gcp/ha/metadata/regions
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	project		false	string	
QueryParameter	fields		false	string	

Responses

HTTP Code	Description	Schema
default	success	GcpRegionResponse array

Consumes

- application/json

Produces

- application/json

Retrieves all cloud storage buckets

```
GET /gcp/ha/metadata/buckets
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	projectId		false	string	

Responses

HTTP Code	Description	Schema
default	success	GcpBucket array

Consumes

- application/json

Produces

- application/json

Retrieves GCP regions and zones over which an Cloud Volumes ONTAP working environment may be created.

```
GET /gcp/ha/metadata/zones
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	project		false	string	

Responses

HTTP Code	Description	Schema
default	success	GcpZonesAndRegionResponse array

Consumes

- application/json

Produces

- application/json

Retrieves all Cloud Volumes ONTAP configurations.

```
GET /gcp/ha/metadata/permutations
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region	Filter by region	false	string	
QueryParameter	version	Filter by version	false	string	
QueryParameter	license	Filter by license	false	string	
QueryParameter	machine_type	Filter by machine type	false	string	
QueryParameter	latest_only	Filter latest only	false	string	

Responses

HTTP Code	Description	Schema
default	success	Configuration array

Consumes

- application/json

Produces

- application/json

Retrieves supported disk types

```
GET /gcp/ha/metadata/gcp-disk-types
```

Responses

HTTP Code	Description	Schema
default	success	GcpDiskTypeResponse array

Consumes

- application/json

Produces

- application/json

Retrieves default snapshot policies available on a cluster

```
GET /gcp/ha/metadata/default-snapshot-policies
```

Responses

HTTP Code	Description	Schema
default	success	SnapshotPolicy array

Consumes

- application/json

Produces

- application/json

Create new bucket

```
POST /gcp/ha/metadata/create-bucket
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Create new bucket request	true	CreateBucketRequest	

Consumes

- application/json

Produces

- application/json

Retrieves instance types not supporting acceleration and capacity tiering

```
GET /gcp/ha/metadata/instance-types-not-supporting-acceleration-and-
capacity-tiering
```

Responses

HTTP Code	Description	Schema
default	success	InstanceTypesNotSupportingAccelerationAndCapacityTieringResponse

Consumes

- application/json

Produces

- application/json

Retrieves supported capacity tiers for gcp disk types

```
GET /gcp/ha/metadata/supported-capacity-tiers
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region		true	string	
QueryParameter	ontapVersion		true	string	
QueryParameter	dataEncryptionType		true	string	
QueryParameter	licenseType		true	string	
QueryParameter	instanceType		true	string	

Responses

HTTP Code	Description	Schema
default	success	SupportedCapacityTiers

Consumes

- application/json

Produces

- application/json

Gcp-ha:volumes

Move an existing volume

```
POST /gcp/ha/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/move
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	
BodyParameter	body		true	VolumeMoveRequest	

Consumes

- application/json

Produces

- application/json

Creates a new volume. If the properties aggregateName and maxNumOfDisksApprovedToAdd are not filled in, then the response will fail with a suggested aggregate name and the number of disks that will need to be created in order to fulfill the request

```
POST /gcp/ha/volumes
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	createAggregateIfNotFound	On create volume request, allow creating not-found aggregate	false	boolean	

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Create volume request	true	VsaVolumeCreateRequest	

Consumes

- application/json

Produces

- application/json

Retrieves volumes

```
GET /gcp/ha/volumes
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	workingEnvironmentId	Filter volumes by this working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	VolumeResponse array

Consumes

- application/json

Produces

- application/json

Quotes a new volume. Returns a resource quote needed to satisfy the requested volume

```
POST /gcp/ha/volumes/quote
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Quote volume request	true	VsaVolumeQuoteRequest	

Responses

HTTP Code	Description	Schema
default	success	VsaVolumeQuoteResponse

Consumes

- application/json

Produces

- application/json

Get all igroups

```
GET /gcp/ha/volumes/igroups/{workingEnvironmentId}/{svmName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	

Responses

HTTP Code	Description	Schema
default	success	IGroup array

Consumes

- application/json

Produces

- application/json

Clones an existing volume

```
POST /gcp/ha/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/clone
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	
BodyParameter	body		true	[VolumeCloneRequest](#)	

Consumes

- application/json

Produces

- application/json

Retrieves volumes for Backup Activation

```
GET /gcp/ha/volumes/volumes-for-backup
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	workingEnvironmentId	Filter volumes by this working environment	true	string	
QueryParameter	offset	offset	false	integer (int32)	
QueryParameter	limit	limit	false	integer (int32)	
QueryParameter	search	search	false	string	
QueryParameter	filterBy	filterBy should be of the form field:value. For multiple filters use comma separator.	false	ref	
QueryParameter	sortBy	sortBy should be of the form field:Asc or field:Desc. For multiple sorting use comma separator.	false	ref	

Responses

HTTP Code	Description	Schema
default	success	VolumesListForBackup

Consumes

- application/json

Produces

- application/json

Change underlying volume tier

```
POST /gcp/ha/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/change-
tier
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	
BodyParameter	body		true	ChangeVolumeTierRequest	

Consumes

- application/json

Produces

- application/json

Create snapshot manually

```
POST
/gcp/ha/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/snapshot
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	
BodyParameter	body	Create snapshot request	true	[SnapshotCreate Request](#)	

Consumes

- application/json

Produces

- application/json

Delete snapshot manually

```
DELETE
/gcp/ha/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/snapshot
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	
BodyParameter	body	Create snapshot request	true	[SnapshotDelete Request](#)	

Consumes

- application/json

Produces

- application/json

Add ISCSI initiator

```
POST /gcp/ha/volumes/initiator
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	ISCSI initiator request	true	Initiator	

Consumes

- application/json

Produces

- application/json

Get all ISCSI initiators

```
GET /gcp/ha/volumes/initiator
```

Responses

HTTP Code	Description	Schema
default	success	InitiatorEntry array

Consumes

- application/json

Produces

- application/json

Modify an existing volume

```
PUT /gcp/ha/volumes/{workingEnvironmentId}/{svmName}/{volumeName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	ref	
BodyParameter	body	Modify volume request	true	VolumeModifyRequest	

Consumes

- application/json

Produces

- application/json

Deletes an existing volume

```
DELETE /gcp/ha/volumes/{workingEnvironmentId}/{svmName}/{volumeName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	

Consumes

- application/json

Produces

- application/json

Return a list of snapshot descriptions for the volume

```
GET
/gcp/ha/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/snapshots
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	

Responses

HTTP Code	Description	Schema
default	success	SnapshotResponse array

Consumes

- application/json

Produces

- application/json

Gcp-ha:working-environments

Activate snapshot policy assignment to all not protected rw volumes

```
PUT /gcp/ha/working-environments/{workingEnvironmentId}/activate-snapshot-
policy
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Consumes

- application/json

Produces

- application/json

Performs a complete image update operation on the single node of the specified Cloud Volumes ONTAP

```
POST /gcp/ha/working-environments/{workingEnvironmentId}/update-image
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Update system image request	true	UpdateSystemImageRequest	

Consumes

- application/json

Produces

- application/json

Working Environment Cost And Usage

```
GET /gcp/ha/working-environments/{workingEnvironmentId}/cost-and-usage
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
QueryParameter	start	cost and usage start period	false	string	
QueryParameter	end	cost and usage end period	false	string	

Responses

HTTP Code	Description	Schema
default	success	WorkingEnvironmentCostAndUsageResponse

Consumes

- application/json

Produces

- application/json

Retrieves a list of versions to which this Cloud Volumes ONTAP can be upgraded

```
GET /gcp/ha/working-environments/{workingEnvironmentId}/occm-provided-
upgrade-versions
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	OntapUpdateImageMetadata array

Consumes

- application/json

Produces

- application/json

Retrieves an Cloud Volumes ONTAP working environment

```
GET /gcp/ha/working-environments/{workingEnvironmentId}
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	fields		false	string	
PathParameter	workingEnvironmentId		true	string	

Responses

HTTP Code	Description	Schema
default	success	GcpVsaWorkingEnvironmentResponse

Consumes

- application/json

Produces

- application/json

Deletes an existing Cloud Volumes ONTAP working environment, including all Cloud resources created for this working environment (unless the localDelete flag is set to true)

```
DELETE /gcp/ha/working-environments/{workingEnvironmentId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
QueryParameter	localDelete	If true, the Cloud Volumes ONTAP instance is not terminated in Cloud, but Cloud Manager no longer manages the working environment.	false	boolean	false
QueryParameter	forceDelete	If true, the working environment will be deleted even if it is part of one or more SnapMirror relationships.	false	boolean	false

Consumes

- application/json

Produces

- application/json

Setup a new CIFS Configuration to an existing Cloud Volumes ONTAP working environment

```
POST /gcp/ha/working-environments/{workingEnvironmentId}/cifs
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	CIFS Configuration request	true	CIFSConfigurationRequest	

Consumes

- application/json

Produces

- application/json

Retrieves CIFS Configuration to an existing Cloud Volumes ONTAP working environment

```
GET /gcp/ha/working-environments/{workingEnvironmentId}/cifs
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
QueryParameter	svm		false	string	

Responses

HTTP Code	Description	Schema
default	success	CIFSConfigurationResponse array

Consumes

- application/json

Produces

- application/json

Creates a new Cloud Volumes ONTAP GCP HA working environment.

```
POST /gcp/ha/working-environments
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Working environment	true	CreateGcpVsaWorkingEnvironmentRequest	

Responses

HTTP Code	Description	Schema
default	success	GcpVsaWorkingEnvironmentResponse

Consumes

- application/json

Produces

- application/json

Retrieves Cloud Volumes ONTAP working environments visible to the currently logged in user

```
GET /gcp/ha/working-environments
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	fields		false	string	
QueryParameter	tenantId		false	string	

Responses

HTTP Code	Description	Schema
default	success	GcpVsaWorkingEnvironmentResponse array

Consumes

- application/json

Produces

- application/json

Delete FPolicy for ransomeware files

```
DELETE /gcp/ha/working-environments/{workingEnvironmentId}/fpolicy
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	

Consumes

- application/json

Produces

- application/json

Modify the net port broadcast domain mtu of the Cloud Volumes ONTAP

```
PUT /gcp/ha/working-
environments/{workingEnvironmentId}/networkOptimization
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironm entId	Public Id of working environment	true	string	
BodyParameter	body	Use optimization	true	ChangeNetwork OptimizationReq uest	

Consumes

- application/json

Produces

- application/json

Starts a specific Cloud Volumes ONTAP instance

```
POST /gcp/ha/working-environments/{workingEnvironmentId}/start
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironm entId	Public Id of working environment	true	string	

Consumes

- application/json

Produces

- application/json

List start-stop schedules for Cloud Volumes ONTAP

```
GET /gcp/ha/working-environments/{workingEnvironmentId}/schedules
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	VsaSchedule array

Consumes

- application/json

Produces

- application/json

Set schedules for Cloud Volumes ONTAP

```
PUT /gcp/ha/working-environments/{workingEnvironmentId}/schedules
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Cloud Volumes ONTAP working environment update schedule request	true	VsaSchedulesRequest	

Consumes

- application/json

Produces

- application/json

Change tier level

```
POST /gcp/ha/working-environments/{workingEnvironmentId}/change-tier-level
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Change tier level request	true	ChangeTierLevelRequest	

Consumes

- application/json

Produces

- application/json

Setup NTP server

```
POST /gcp/ha/working-environments/{workingEnvironmentId}/ntp
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	NTP Configuration request	true	NTPConfigurationRequest	

Consumes

- application/json

Produces

- application/json

Parses an uploaded Cloud license file

```
POST /gcp/ha/working-environments/parse-license-file
```

Parameters

Type	Name	Description	Required	Schema	Default
HeaderParameter	filename	Cloud license file name	false	string	
BodyParameter	license	license	false	string	

Responses

HTTP Code	Description	Schema
default	success	ProvidedLicenseResponse

Consumes

- multipart/form-data

Produces

- application/json

Register extra capacity serials

```
POST /gcp/ha/working-environments/{workingEnvironmentId}/extra-capacity-
serials
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	licenses serial(s)	true	LicensesSerials	

Consumes

- application/json

Produces

- application/json

Update extra capacity serials

```
PUT /gcp/ha/working-environments/{workingEnvironmentId}/extra-capacity-
serials
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	extra capacity serial(s)	true	LicensesSerials	

Consumes

- application/json

Produces

- application/json

Delete extra capacity licenses by serials

```
DELETE /gcp/ha/working-environments/{workingEnvironmentId}/extra-capacity-
serials
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	extra capacity serial(s)	true	LicensesSerials	

Consumes

- application/json

Produces

- application/json

Disable FPolicy for ransomeware files

```
PUT /gcp/ha/working-environments/{workingEnvironmentId}/disable-fpolicy
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	

Consumes

- application/json

Produces

- application/json

Delete CIFS Configuration of an existing Cloud Volumes ONTAP working environment

```
POST /gcp/ha/working-environments/{workingEnvironmentId}/delete-cifs
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	CIFS Configuration request	true	[CIFSDeleteRequest](#)	

Consumes

- application/json

Produces

- application/json

Working Environment Ontap Saving

```
GET /gcp/ha/working-environments/{workingEnvironmentId}/ontap-saving
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironm entId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	WorkingEnvironmentOntapSavingR esponse

Consumes

- application/json

Produces

- application/json

Retrieves images already installed on the Cloud Volumes ONTAP

```
GET /gcp/ha/working-environments/{workingEnvironmentId}/ontap-available-
images
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironm entId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	UpdateLocalImage array

Consumes

- application/json

Produces

- application/json

Uploads a Cloud license file content on the provided Cloud Volumes ONTAP

```
POST /gcp/ha/working-environments/{workingEnvironmentId}/upload-licenses
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	license file content request	true	LicenseFileContent	

Consumes

- application/json

Produces

- application/json

Registers a Cloud Volumes ONTAP system with NetApp

```
POST /gcp/ha/working-environments/{workingEnvironmentId}/support-
registration
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
QueryParameter	nssAccountId		false	string	

Responses

HTTP Code	Description	Schema
default	success	SupportRegistrationResponse

Consumes

- application/json

Produces

- application/json

Retrieves the support registration status of a Cloud Volumes ONTAP system

```
GET /gcp/ha/working-environments/{workingEnvironmentId}/support-
registration
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	SupportRegistrationResponse

Consumes

- application/json

Produces

- application/json

Change serial number of Cloud Volumes ONTAP

```
POST /gcp/ha/working-environments/{workingEnvironmentId}/change-serial
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Change serial number request	true	ChangeSerialNumberRequest	

Consumes

- application/json

Produces

- application/json

Stops a specific Cloud Volumes ONTAP instance

```
POST /gcp/ha/working-environments/{workingEnvironmentId}/stop
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
QueryParameter	takeSnapshots	Take snapshots before stopping Cloud Volumes ONTAP	true	boolean	true

Consumes

- application/json

Produces

- application/json

Sets the writing speed for Cloud Volumes ONTAP

```
PUT /gcp/ha/working-environments/{workingEnvironmentId}/writing-speed
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Writing speed request	true	WritingSpeedRequest	

Consumes

- application/json

Produces

- application/json

Register extra capacity license

```
POST /gcp/ha/working-environments/{workingEnvironmentId}/extra-capacity-
licenses
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	extra capacity licenses(s)	true	LicensesContent	

Consumes

- application/json

Produces

- application/json

Get extra capacity licenses for cvo

```
GET /gcp/ha/working-environments/{workingEnvironmentId}/extra-capacity-
licenses
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Consumes

- application/json

Produces

- application/json

Update extra capacity license

```
PUT /gcp/ha/working-environments/{workingEnvironmentId}/extra-capacity-
licenses
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	extra capacity license(s)	true	LicensesContent	

Consumes

- application/json

Produces

- application/json

Create snapshot policy

```
POST /gcp/ha/working-environments/{workingEnvironmentId}/snapshot-policy
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
BodyParameter	body	Create snapshot policy request	true	SnapshotPolicyCreateRequest	

Consumes

- application/json

Produces

- application/json

Modify the svm name of the Cloud Volumes ONTAP

```
PUT /gcp/ha/working-environments/{workingEnvironmentId}/svm
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Svm name modification request	true	SvmNameModificationRequest	

Consumes

- application/json

Produces

- application/json

Retrieves eligibility support status of a Cloud Volumes ONTAP system. Valid values - NSS_NOT_VALID, NOT_REGISTERED, IPA_PROBLEM, VALID, NSS_NOT_EXISTS, LICENSE_EXPIRED

```
GET /gcp/ha/working-environments/{workingEnvironmentId}/update-eligibility
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
200	success	EligibilityResponse
400	Working Environment must be ON or UPDATING in order to check eligibility	No Content

Consumes

- application/json

Produces

- application/json

Updates default vscan file operation profile. Profile on existing CIFS shares will change only on writes-only mode

```
PUT /gcp/ha/working-environments/{workingEnvironmentId}/vscan-file-op
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Vscan file-operation Request	true	VscanFileOpRequest	

Consumes

- application/json

Produces

- application/json

Enable capacity tiering

```
POST /gcp/ha/working-environments/{workingEnvironmentId}/enable-capacity-tiering
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Enable capacity tiering request	false	EnableCapacityTieringRequest	

Consumes

- application/json

Produces

- application/json

Sets the cluster password of a specific Cloud Volumes ONTAP

```
PUT /gcp/ha/working-environments/{workingEnvironmentId}/set-password
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
QueryParameter	occmOnly		false	boolean	
BodyParameter	body	Set password request	true	PasswordWrapper	

Consumes

- application/json

Produces

- application/json

Uploads a Cloud license file on the provided Cloud Volumes ONTAP

```
POST /gcp/ha/working-environments/{workingEnvironmentId}/upload-license-file
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
HeaderParameter	filename	Cloud license file name	false	string	
BodyParameter	license	license	false	string	

Consumes

- multipart/form-data

Produces

- application/json

Retrieves editable tags for cloud resources of a given Cloud Volumes ONTAP instance

```
GET /gcp/ha/working-environments/{workingEnvironmentId}/user-tags
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	UserTagsResponse

Consumes

- application/json

Produces

- application/json

Modify user tags for cloud resources of a given Cloud Volumes ONTAP instance

```
PUT /gcp/ha/working-environments/{workingEnvironmentId}/user-tags
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Modify user tags request	true	ModifyUserTags Request	

Consumes

- application/json

Produces

- application/json

Activate offbox configuration

```
PUT /gcp/ha/working-environments/{workingEnvironmentId}/offbox
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Consumes

- application/json

Produces

- application/json

Manually triggers subscription sync for all Cloud Volumes ONTAP working environments

```
POST /gcp/ha/working-environments/sync-subscription
```

Consumes

- application/json

Produces

- application/json

Retrieves action parameters used in create request of a given Cloud Volumes ONTAP instance

```
GET /gcp/ha/working-environments/{workingEnvironmentId}/create-request-
parameters
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	CreateRequestParametersResponse

Consumes

- application/json

Produces

- application/json

Updates Cloud Manager password of a specific Cloud Volumes ONTAP

```
PUT /gcp/ha/working-environments/{workingEnvironmentId}/update-credentials
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Update Cloud Manager password request	true	UpdateCredentialsRequest	

Consumes

- application/json

Produces

- application/json

Activate FPolicy for ransomeware files

```
PUT /gcp/ha/working-environments/{workingEnvironmentId}/activate-fpolicy
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	

Consumes

- application/json

Produces

- application/json

Setup a new CIFS using workgroup configuration to an existing Cloud Volumes ONTAP working environment

```
POST /gcp/ha/working-environments/{workingEnvironmentId}/cifs-workgroup
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	CIFS Configuration request	true	CIFSWorkgroup ConfigurationRequest	

Consumes

- application/json

Produces

- application/json

Checks for the presence of non-persistent locks held on CIFs Sessions.

```
GET /gcp/ha/working-environments/{workingEnvironmentId}/cifs-locks-exist
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	

Responses

HTTP Code	Description	Schema
default	success	boolean

Consumes

- application/json

Produces

- application/json

Retrieves all license types and their associated instance types for a given Cloud Volumes ONTAP instance

```
GET /gcp/ha/working-environments/{workingEnvironmentId}/license-instance-
type
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	LicenseAndInstanceType array

Consumes

- application/json

Produces

- application/json

Sets the instance type of a specific Cloud Volumes ONTAP

```
PUT /gcp/ha/working-environments/{workingEnvironmentId}/license-instance-
type
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Instance type modification request	true	LicenseAndInstanceTypeModificationRequest	

Consumes

- application/json

Produces

- application/json

Gcp-vsa:aggregates

Creates a new aggregate

```
POST /gcp/vsa/aggregates
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Create Aggregate Request	true	VsaAggregateCreateRequest	

Consumes

- application/json

Produces

- application/json

Deletes an existing aggregate

```
DELETE /gcp/vsa/aggregates/{workingEnvironmentId}/{aggregateName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Type	Name	Description	Required	Schema	Default
PathParameter	aggregateName	Name of aggregate to be deleted	true	string	

Consumes

- application/json

Produces

- application/json

Adds disks to an existing aggregate

```
POST /gcp/vsa/aggregates/{workingEnvironmentId}/{aggregateName}/disks
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
PathParameter	aggregateName	Name of aggregate to be updated	true	string	
BodyParameter	body	Add disk to aggregate request	true	AddDisksToAggregateRequest	

Consumes

- application/json

Produces

- application/json

Retrieves aggregates.Operation may only be performed on working environments whose status is: ON, INITIALIZING, DEGRADED

```
GET /gcp/vsa/aggregates/{workingEnvironmentId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironm entId		true	string	

Responses

HTTP Code	Description	Schema
default	success	AggregateResponse array

Consumes

- application/json

Produces

- application/json

Gcp-vsa:discovery

Retrieves a list of discovered working environments visible to the current user in the specified Gcp zone.

```
GET /gcp/vsa/discover
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region	Region to discover working environments	true	string	
QueryParameter	project	Project to discover working environments	false	string	

Responses

HTTP Code	Description	Schema
default	success	DiscoveredGcpVsaResponse array

Consumes

- application/json

Produces

- application/json

Saves a previously discovered Cloud Volumes ONTAP working environment to the Cloud Manager database.

```
POST /gcp/vsa/recover
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Working environment	true	RecoverGcpVsa Request	

Responses

HTTP Code	Description	Schema
default	success	GcpVsaWorkingEnvironmentResponse

Consumes

- application/json

Produces

- application/json

Gcp-vsa:metadata

Retrieves GCP regions over which an Cloud Volumes ONTAP working environment may be created.

```
GET /gcp/vsa/metadata/regions
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	project		false	string	
QueryParameter	fields		false	string	

Responses

HTTP Code	Description	Schema
default	success	GcpRegionResponse array

Consumes

- application/json

Produces

- application/json

Retrieves list of Service Accounts from the project.

```
GET /gcp/vsa/metadata/service-accounts
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	project		false	string	

Responses

HTTP Code	Description	Schema
default	success	GcpServiceAccountsResponse

Consumes

- application/json

Produces

- application/json

Retrieves supported disk types.

```
GET /gcp/vsa/metadata/gcp-disk-types
```

Responses

HTTP Code	Description	Schema
default	success	GcpDiskTypeResponse array

Consumes

- application/json

Produces

- application/json

Retrieves GCP encryption keys for specific region.

```
GET /gcp/vsa/metadata/gcp-encryption-keys
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region		true	string	
QueryParameter	project		true	string	

Responses

HTTP Code	Description	Schema
default	success	GcpEncryptionKey array

Consumes

- application/json

Produces

- application/json

Retrieves all Cloud Volumes ONTAP configurations.

```
GET /gcp/vsa/metadata/permutations
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region	Filter by region	false	string	
QueryParameter	version	Filter by version	false	string	
QueryParameter	license	Filter by license	false	string	
QueryParameter	machine_type	Filter by machine type	false	string	
QueryParameter	latest_only	Filter latest only	false	string	

Responses

HTTP Code	Description	Schema
default	success	Configuration array

Consumes

- application/json

Produces

- application/json

Retrieves supported features

```
GET /gcp/vsa/metadata/supported-features
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region		true	string	
QueryParameter	ontapVersion		true	string	
QueryParameter	dataEncryptionType		true	string	
QueryParameter	licenseType		true	string	
QueryParameter	instanceType		true	string	

Responses

HTTP Code	Description	Schema
default	success	SupportedFeaturesResponse

Consumes

- application/json

Produces

- application/json

Create new bucket.

```
POST /gcp/vsa/metadata/create-bucket
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Create new bucket request	true	CreateBucketRequest	

Consumes

- application/json

Produces

- application/json

Retrieves instance types not supporting acceleration and capacity tiering

```
GET /gcp/vsa/metadata/instance-types-not-supporting-acceleration-and-
capacity-tiering
```

Responses

HTTP Code	Description	Schema
default	success	InstanceTypesNotSupportingAccelerationAndCapacityTieringResponse

Consumes

- application/json

Produces

- application/json

Retrieves list of Projects that the caller has permission on.

```
GET /gcp/vsa/metadata/projects
```

Responses

HTTP Code	Description	Schema
default	success	GcpProjectsResponse

Consumes

- application/json

Produces

- application/json

Retrieves all cloud storage buckets.

```
GET /gcp/vsa/metadata/buckets
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	projectId		false	string	

Responses

HTTP Code	Description	Schema
default	success	GcpBucket array

Consumes

- application/json

Produces

- application/json

Retrieves supported capacity tiers for gcp disk types.

```
GET /gcp/vsa/metadata/supported-capacity-tiers
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region		true	string	
QueryParameter	ontapVersion		true	string	
QueryParameter	dataEncryptionType		true	string	
QueryParameter	licenseType		true	string	
QueryParameter	instanceType		true	string	

Responses

HTTP Code	Description	Schema
default	success	SupportedCapacityTiers

Consumes

- application/json

Produces

- application/json

Retrieves all the Labels in the given project Id and zone.

```
GET /gcp/vsa/metadata/tag-keys
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	projectId		true	string	
QueryParameter	zone		true	string	

Responses

HTTP Code	Description	Schema
default	success	TagKeyResponse array

Consumes

- application/json

Produces

- application/json

Retrieves default snapshot policies available on a cluster

```
GET /gcp/vsa/metadata/default-snapshot-policies
```

Responses

HTTP Code	Description	Schema
default	success	SnapshotPolicy array

Consumes

- application/json

Produces

- application/json

Retrieves the minimum number of required IPs for a Cloud Volumes ONTAP system.

```
GET /gcp/vsa/metadata/network-requirements
```

Responses

HTTP Code	Description	Schema
default	success	GcpNetworkRequirementsResponse

Consumes

- application/json

Produces

- application/json

Retrieves packages configuration

```
GET /gcp/vsa/metadata/packages
```

Responses

HTTP Code	Description	Schema
default	success	PackageInfoResponse array

Consumes

- application/json

Produces

- application/json

Gcp-vsa:volumes

Creates a new volume. If the properties aggregateName and maxNumOfDisksApprovedToAdd are not filled in, then the response will fail with a suggested aggregate name and the number of disks that will need to be created in order to fulfill the request.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST /gcp/vsa/volumes
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	createAggregateI fNotFound	On create volume request, allow creating not-found aggregate	false	boolean	
BodyParameter	body	Create volume request	true	[VsaVolumeCreat eRequest](#)	

Consumes

- application/json

Produces

- application/json

Retrieves volumes.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
GET /gcp/vsa/volumes
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	workingEnvironm entId	Filter volumes by this working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	[VolumeResponse](#) array

Consumes

- application/json

Produces

- application/json

Create snapshot manually.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST
/gcp/vsa/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/snapshot
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	
BodyParameter	body	Create snapshot request	true	SnapshotCreate Request	

Consumes

- application/json

Produces

- application/json

Delete snapshot manually.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
DELETE
/gcp/vsa/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/snapshot
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	
BodyParameter	body	Create snapshot request	true	SnapshotDelete Request	

Consumes

- application/json

Produces

- application/json

Clones an existing volume.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST /gcp/vsa/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/clone
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	
BodyParameter	body		true	VolumeCloneRequest	

Consumes

- application/json

Produces

- application/json

Get all igroups.

```
GET /gcp/vsa/volumes/igroups/{workingEnvironmentId}/{svmName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	

Responses

HTTP Code	Description	Schema
default	success	IGroup array

Consumes

- application/json

Produces

- application/json

Change underlying volume tier.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST
/gcp/vsa/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/change-tier
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	
BodyParameter	body		true	ChangeVolumeTierRequest	

Consumes

- application/json

Produces

- application/json

Return a list of snapshot descriptions for the volume.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
GET
/gcp/vsa/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/snapshots
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	

Responses

HTTP Code	Description	Schema
default	success	SnapshotResponse array

Consumes

- application/json

Produces

- application/json

Quotes a new volume. Returns a resource quote needed to satisfy the requested volume.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST /gcp/vsa/volumes/quote
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Quote volume request	true	VsaVolumeQuoteRequest	

Responses

HTTP Code	Description	Schema
default	success	VsaVolumeQuoteResponse

Consumes

- application/json

Produces

- application/json

Modify an existing volume.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
PUT /gcp/vsa/volumes/{workingEnvironmentId}/{svmName}/{volumeName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	

Type	Name	Description	Required	Schema	Default
PathParameter	svmName		true	string	
PathParameter	volumeName		true	ref	
BodyParameter	body	Modify volume request	true	VolumeModifyRequest	

Consumes

- application/json

Produces

- application/json

Deletes an existing volume.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
DELETE /gcp/vsa/volumes/{workingEnvironmentId}/{svmName}/{volumeName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	

Consumes

- application/json

Produces

- application/json

Add ISCSI initiator.

```
POST /gcp/vsa/volumes/initiator
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	ISCSI initiator request	true	Initiator	

Consumes

- application/json

Produces

- application/json

Get all ISCSI initiators.

```
GET /gcp/vsa/volumes/initiator
```

Responses

HTTP Code	Description	Schema
default	success	InitiatorEntry array

Consumes

- application/json

Produces

- application/json

Move an existing volume.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST /gcp/vsa/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/move
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	
BodyParameter	body		true	VolumeMoveRequest	

Consumes

- application/json

Produces

- application/json

Retrieves volumes for Backup Activation.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
GET /gcp/vsa/volumes/volumes-for-backup
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	workingEnvironmentId	Filter volumes by this working environment	true	string	
QueryParameter	offset	offset	false	integer (int32)	
QueryParameter	limit	limit	false	integer (int32)	
QueryParameter	search	search	false	string	
QueryParameter	filterBy	filterBy should be of the form field:value. For multiple filters use comma separator.	false	ref	
QueryParameter	sortBy	sortBy should be of the form field:Asc or field:Desc. For multiple sorting use comma separator.	false	ref	

Responses

HTTP Code	Description	Schema
default	success	VolumesListForBackup

Consumes

- application/json

Produces

- application/json

Gcp-vsa:working-environments

Register extra capacity license

```
POST /gcp/vsa/working-environments/{workingEnvironmentId}/extra-capacity-
licenses
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	extra capacity licenses(s)	true	LicensesContent	

Consumes

- application/json

Produces

- application/json

Get extra capacity licenses for cvo

```
GET /gcp/vsa/working-environments/{workingEnvironmentId}/extra-capacity-
licenses
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Consumes

- application/json

Produces

- application/json

Update extra capacity license

```
PUT /gcp/vsa/working-environments/{workingEnvironmentId}/extra-capacity-
licenses
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	extra capacity license(s)	true	LicensesContent	

Consumes

- application/json

Produces

- application/json

Parses an uploaded Cloud license file

```
POST /gcp/vsa/working-environments/parse-license-file
```

Parameters

Type	Name	Description	Required	Schema	Default
HeaderParameter	filename	Cloud license file name	false	string	
BodyParameter	license	license	false	string	

Responses

HTTP Code	Description	Schema
default	success	ProvidedLicenseResponse

Consumes

- multipart/form-data

Produces

- application/json

Setup NTP server

```
POST /gcp/vsa/working-environments/{workingEnvironmentId}/ntp
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	NTP Configuration request	true	NTPConfigurationRequest	

Consumes

- application/json

Produces

- application/json

Delete CIFS Configuration of an existing Cloud Volumes ONTAP working environment

```
POST /gcp/vsa/working-environments/{workingEnvironmentId}/delete-cifs
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	CIFS Configuration request	true	CIFSDeleteRequest	

Consumes

- application/json

Produces

- application/json

Retrieves editable tags for cloud resources of a given Cloud Volumes ONTAP instance

```
GET /gcp/vsa/working-environments/{workingEnvironmentId}/user-tags
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	UserTagsResponse

Consumes

- application/json

Produces

- application/json

Modify user tags for cloud resources of a given Cloud Volumes ONTAP instance

```
PUT /gcp/vsa/working-environments/{workingEnvironmentId}/user-tags
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Modify user tags request	true	ModifyUserTags Request	

Consumes

- application/json

Produces

- application/json

Uploads a Cloud license file on the provided Cloud Volumes ONTAP

```
POST /gcp/vsa/working-environments/{workingEnvironmentId}/upload-license-
file
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
HeaderParameter	filename	Cloud license file name	false	string	
BodyParameter	license	license	false	string	

Consumes

- multipart/form-data

Produces

- application/json

Setup a new CIFS Configuration to an existing Cloud Volumes ONTAP working environment

```
POST /gcp/vsa/working-environments/{workingEnvironmentId}/cifs
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	CIFS Configuration request	true	CIFSConfigurationRequest	

Consumes

- application/json

Produces

- application/json

Retrieves CIFS Configuration to an existing Cloud Volumes ONTAP working environment

```
GET /gcp/vsa/working-environments/{workingEnvironmentId}/cifs
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
QueryParameter	svm		false	string	

Responses

HTTP Code	Description	Schema
default	success	CIFSConfigurationResponse array

Consumes

- application/json

Produces

- application/json

Uploads a Cloud license file content on the provided Cloud Volumes ONTAP

```
POST /gcp/vsa/working-environments/{workingEnvironmentId}/upload-licenses
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	license file content request	true	LicenseFileContent	

Consumes

- application/json

Produces

- application/json

Sets the writing speed for Cloud Volumes ONTAP

```
PUT /gcp/vsa/working-environments/{workingEnvironmentId}/writing-speed
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Writing speed request	true	WritingSpeedRequest	

Consumes

- application/json

Produces

- application/json

Register extra capacity serials

```
POST /gcp/vsa/working-environments/{workingEnvironmentId}/extra-capacity-serials
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	licenses serial(s)	true	LicensesSerials	

Consumes

- application/json

Produces

- application/json

Update extra capacity serials

```
PUT /gcp/vsa/working-environments/{workingEnvironmentId}/extra-capacity-
serials
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	extra capacity serial(s)	true	LicensesSerials	

Consumes

- application/json

Produces

- application/json

Delete extra capacity licenses by serials

```
DELETE /gcp/vsa/working-environments/{workingEnvironmentId}/extra-
capacity-serials
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	extra capacity serial(s)	true	LicensesSerials	

Consumes

- application/json

Produces

- application/json

Delete FPolicy for ransomeware files

```
DELETE /gcp/vsa/working-environments/{workingEnvironmentId}/fpolicy
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironm entId		true	string	

Consumes

- application/json

Produces

- application/json

Registers a Cloud Volumes ONTAP system with NetApp

```
POST /gcp/vsa/working-environments/{workingEnvironmentId}/support-
registration
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironm entId	Public Id of working environment	true	string	
QueryParameter	nssAccountId		false	string	

Responses

HTTP Code	Description	Schema
default	success	SupportRegistrationResponse

Consumes

- application/json

Produces

- application/json

Retrieves the support registration status of a Cloud Volumes ONTAP system

```
GET /gcp/vsa/working-environments/{workingEnvironmentId}/support-
registration
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	SupportRegistrationResponse

Consumes

- application/json

Produces

- application/json

Modify the net port broadcast domain mtu of the Cloud Volumes ONTAP

```
PUT /gcp/vsa/working-
environments/{workingEnvironmentId}/networkOptimization
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Use optimization	true	ChangeNetworkOptimizationRequest	

Consumes

- application/json

Produces

- application/json

Working Environment Cost And Usage

```
GET /gcp/vsa/working-environments/{workingEnvironmentId}/cost-and-usage
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
QueryParameter	start	cost and usage start period	false	string	
QueryParameter	end	cost and usage end period	false	string	

Responses

HTTP Code	Description	Schema
default	success	WorkingEnvironmentCostAndUsageResponse

Consumes

- application/json

Produces

- application/json

Retrieves a list of versions to which this Cloud Volumes ONTAP can be upgraded

```
GET /gcp/vsa/working-environments/{workingEnvironmentId}/occm-provided-
upgrade-versions
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	OntapUpdateImageMetadata array

Consumes

- application/json

Produces

- application/json

Retrieves images already installed on the Cloud Volumes ONTAP

```
GET /gcp/vsa/working-environments/{workingEnvironmentId}/ontap-available-
images
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	UpdateLocalImage array

Consumes

- application/json

Produces

- application/json

Updates Cloud Manager password of a specific Cloud Volumes ONTAP

```
PUT /gcp/vsa/working-environments/{workingEnvironmentId}/update-
credentials
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Update Cloud Manager password request	true	UpdateCredentialsRequest	

Consumes

- application/json

Produces

- application/json

List start-stop schedules for Cloud Volumes ONTAP

```
GET /gcp/vsa/working-environments/{workingEnvironmentId}/schedules
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	VsaSchedule array

Consumes

- application/json

Produces

- application/json

Set schedules for Cloud Volumes ONTAP

```
PUT /gcp/vsa/working-environments/{workingEnvironmentId}/schedules
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Cloud Volumes ONTAP working environment update schedule request	true	VsaSchedulesRequest	

Consumes

- application/json

Produces

- application/json

Starts a specific Cloud Volumes ONTAP instance

```
POST /gcp/vsa/working-environments/{workingEnvironmentId}/start
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Consumes

- application/json

Produces

- application/json

Stops a specific Cloud Volumes ONTAP instance

```
POST /gcp/vsa/working-environments/{workingEnvironmentId}/stop
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
QueryParameter	takeSnapshots	Take snapshots before stopping Cloud Volumes ONTAP	true	boolean	true

Consumes

- application/json

Produces

- application/json

Enable capacity tiering

```
POST /gcp/vsa/working-environments/{workingEnvironmentId}/enable-capacity-
tiering
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Enable capacity tiering request	false	EnableCapacityTieringRequest	

Consumes

- application/json

Produces

- application/json

Retrieves eligibility support status of a Cloud Volumes ONTAP system. Valid values - NSS_NOT_VALID, NOT_REGISTERED, IPA_PROBLEM, VALID, NSS_NOT_EXISTS, LICENSE_EXPIRED

```
GET /gcp/vsa/working-environments/{workingEnvironmentId}/update-
eligibility
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
200	success	EligibilityResponse
400	Working Environment must be ON or UPDATING in order to check eligibility	No Content

Consumes

- application/json

Produces

- application/json

Disable FPolicy for ransomeware files

```
PUT /gcp/vsa/working-environments/{workingEnvironmentId}/disable-fpolicy
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	

Consumes

- application/json

Produces

- application/json

Sets the cluster password of a specific Cloud Volumes ONTAP

```
PUT /gcp/vsa/working-environments/{workingEnvironmentId}/set-password
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
QueryParameter	occmOnly		false	boolean	
BodyParameter	body	Set password request	true	[PasswordWrapper](#)	

Consumes

- application/json

Produces

- application/json

Manually triggers subscription sync for all Cloud Volumes ONTAP working environments

```
POST /gcp/vsa/working-environments/sync-subscription
```

Consumes

- application/json

Produces

- application/json

Activate offbox configuration

```
PUT /gcp/vsa/working-environments/{workingEnvironmentId}/offbox
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Consumes

- application/json

Produces

- application/json

Performs a complete image update operation on the single node of the specified Cloud Volumes ONTAP

```
POST /gcp/vsa/working-environments/{workingEnvironmentId}/update-image
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Update system image request	true	UpdateSystemImageRequest	

Consumes

- application/json

Produces

- application/json

Retrieves an Cloud Volumes ONTAP working environment.

```
GET /gcp/vsa/working-environments/{workingEnvironmentId}
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	fields		false	string	
PathParameter	workingEnvironmentId		true	string	

Responses

HTTP Code	Description	Schema
default	success	[GcpVsaWorkingEnvironmentResponse](#)

Consumes

- application/json

Produces

- application/json

Deletes an existing Cloud Volumes ONTAP working environment, including all Cloud resources created for this working environment (unless the localDelete flag is set to true)

```
DELETE /gcp/vsa/working-environments/{workingEnvironmentId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Type	Name	Description	Required	Schema	Default
QueryParameter	localDelete	If true, the Cloud Volumes ONTAP instance is not terminated in Cloud, but Cloud Manager no longer manages the working environment.	false	boolean	false
QueryParameter	forceDelete	If true, the working environment will be deleted even if it is part of one or more SnapMirror relationships.	false	boolean	false

Consumes

- application/json

Produces

- application/json

Change serial number of Cloud Volumes ONTAP

```
POST /gcp/vsa/working-environments/{workingEnvironmentId}/change-serial
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Change serial number request	true	ChangeSerialNumberRequest	

Consumes

- application/json

Produces

- application/json

Setup a new CIFS using workgroup configuration to an existing Cloud Volumes ONTAP working environment

```
POST /gcp/vsa/working-environments/{workingEnvironmentId}/cifs-workgroup
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	CIFS Configuration request	true	CIFSWorkgroupConfigurationRequest	

Consumes

- application/json

Produces

- application/json

Retrieves all license types and their associated instance types for a given Cloud Volumes ONTAP instance

```
GET /gcp/vsa/working-environments/{workingEnvironmentId}/license-instance-type
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	LicenseAndInstanceType array

Consumes

- application/json

Produces

- application/json

Sets the instance type of a specific Cloud Volumes ONTAP

```
PUT /gcp/vsa/working-environments/{workingEnvironmentId}/license-instance-
type
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Instance type modification request	true	LicenseAndInstanceTypeModificationRequest	

Consumes

- application/json

Produces

- application/json

Create snapshot policy

```
POST /gcp/vsa/working-environments/{workingEnvironmentId}/snapshot-policy
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
BodyParameter	body	Create snapshot policy request	true	SnapshotPolicyCreateRequest	

Consumes

- application/json

Produces

- application/json

Activate snapshot policy assignment to all not protected rw volumes

```
PUT /gcp/vsa/working-environments/{workingEnvironmentId}/activate-
snapshot-policy
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Consumes

- application/json

Produces

- application/json

Change tier level

```
POST /gcp/vsa/working-environments/{workingEnvironmentId}/change-tier-
level
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Change tier level request	true	ChangeTierLevel Request	

Consumes

- application/json

Produces

- application/json

Activate FPolicy for ransomeware files

```
PUT /gcp/vsa/working-environments/{workingEnvironmentId}/activate-fpolicy
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	

Consumes

- application/json

Produces

- application/json

Working Environment Ontap Saving

```
GET /gcp/vsa/working-environments/{workingEnvironmentId}/ontap-saving
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	WorkingEnvironmentOntapSavingResponse

Consumes

- application/json

Produces

- application/json

Modify the svm name of the Cloud Volumes ONTAP

```
PUT /gcp/vsa/working-environments/{workingEnvironmentId}/svm
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Svm name modification request	true	SvmNameModificationRequest	

Consumes

- application/json

Produces

- application/json

Creates a new Cloud Volumes ONTAP working environment.

```
POST /gcp/vsa/working-environments
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Working environment	true	CreateGcpVsaWorkingEnvironmentRequest	

Responses

HTTP Code	Description	Schema
default	success	GcpVsaWorkingEnvironmentResponse

Consumes

- application/json

Produces

- application/json

Retrieves Cloud Volumes ONTAP working environments visible to the currently logged in user.

```
GET /gcp/vsa/working-environments
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	fields		false	string	
QueryParameter	tenantId		false	string	

Responses

HTTP Code	Description	Schema
default	success	GcpVsaWorkingEnvironmentResponse array

Consumes

- application/json

Produces

- application/json

Updates default vscan file operation profile. Profile on existing CIFS shares will change only on writes-only mode

```
PUT /gcp/vsa/working-environments/{workingEnvironmentId}/vscan-file-op
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Vscan file-operation Request	true	VscanFileOpRequest	

Consumes

- application/json

Produces

- application/json

Retrieves action parameters used in create request of a given Cloud Volumes ONTAP instance

```
GET /gcp/vsa/working-environments/{workingEnvironmentId}/create-request-
parameters
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	CreateRequestParametersResponse

Consumes

- application/json

Produces

- application/json

Monitoring

Retrieve Monitoring info.

```
GET /monitoring/info
```

Responses

HTTP Code	Description	Schema
default	success	MonitoringInfoResponse

Produces

- application/json

Disable monitoring.

```
POST /monitoring/{workingEnvironmentId}/disable-monitoring
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Produces

- application/json

Enable monitoring.

```
POST /monitoring/{workingEnvironmentId}/enable-monitoring
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Produces

- application/json

Deploy monitoring instance by working environments.

```
POST /monitoring/deploy-by-working-environments
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	deploy monitoring request	true	[EnableMonitoringRequest](#)	

Produces

- application/json

Occm:asup

Downloads a compressed file of all ASUP files from all VSAs.

```
GET /occm/asup/download-ontap-cloud-asups
```

Produces

- application/json

Downloads Cloud Manager support data.

```
GET /occm/asup/download
```

Produces

- application/json

Sends Cloud Manager support data to NetApp Support.

```
POST /occm/asup/send
```

Parameters

Type	Name	Description	Required	Schema	Default
HeaderParameter	serial	occm serial number	false	string	

Produces

- application/json

Sends Cloud Volumes ONTAP support data to NetApp Support.

```
POST /occm/asup/send-Cot-Asup
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	sendToOccm	Send Asup to OCCM	true	boolean	false

Produces

- application/json

Get Signed URL for Cloud Manager support data.

```
GET /occm/asup/download-signed
```

Responses

HTTP Code	Description	Schema
default	success	string

Produces

- application/json

Retrieves the AutoSupport configuration.

```
GET /occm/asup
```

Responses

HTTP Code	Description	Schema
default	success	AsupConfiguration

Produces

- application/json

Updates the AutoSupport configuration.

```
PUT /occm/asup
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body		false	AsupConfiguratio nRequest	

Consumes

- application/json

Produces

- application/json

Sends Cloud Volumes ONTAP performance archive support data to NetApp Support.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST /occm/asup/send-Cot-performance-Asup/{workingEnvironmentId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Produces

- application/json

Occm:config

Resets to the default simplicator URI. Internal use only.

```
POST /occm/config/simplicator/reset
```

Responses

HTTP Code	Description	Schema
default	success	ConfigResponse

Consumes

- application/json

Produces

- application/json

Retrieves Cloud Manager configuration parameters.

```
GET /occm/config
```

Responses

HTTP Code	Description	Schema
default	success	ConfigValuesResponse

Consumes

- application/json

Produces

- application/json

Configures modifiable Cloud Manager parameters.

```
PUT /occm/config
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body		false	ConfigValuesUpdateRequest	

Responses

HTTP Code	Description	Schema
default	success	ConfigValuesResponse

Consumes

- application/json

Produces

- application/json

Retrieves the current simplicator URI and status. Internal use only.

```
GET /occm/config/simplicator
```

Responses

HTTP Code	Description	Schema
default	success	ConfigResponse

Consumes

- application/json

Produces

- application/json

Occm:encryption:certificate

Validates and installs the provided certificate. Successive calls will overwrite any previously installed certificate. The certificate must match a previously generated CSR.

```
POST /occm/encryption/certificate
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	The certificate generated for Cloud Manager	true	InstallCertificates Request	

Responses

HTTP Code	Description	Schema
default	success	CertificateResponse

Consumes

- application/json

Produces

- application/json

Retrieves the installed certificate, if one exists.

```
GET /occm/encryption/certificate
```

Responses

HTTP Code	Description	Schema
default	success	CertificateResponse

Consumes

- application/json

Produces

- application/json

Occm:encryption:csr

Generates, stores and returns a certificate signing request (CSR). This CSR can be signed by a CA and then installed in Cloud Manager using /install_certificate. Successive calls will not overwrite previously generated CSRs.

```
POST /occm/encryption/csr
```

Responses

HTTP Code	Description	Schema
default	success	CsrResponse

Consumes

- application/json

Produces

- application/json

Retrieves the most recently generated CSR, if any exists.

```
GET /occm/encryption/csr
```

Responses

HTTP Code	Description	Schema
default	success	CsrResponse

Consumes

- application/json

Produces

- application/json

Occm:encryption:key-managers

Returns specific key manager by public Id.

```
GET /occm/encryption/key-managers/{keyManagerId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	keyManagerId	Public Id of the key manager	true	string	

Responses

HTTP Code	Description	Schema
default	success	KeyManagerResponse

Consumes

- application/json

Produces

- application/json

Updates an existing key manager.

```
PUT /occm/encryption/key-managers/{keyManagerId}
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Update key manager request parameters	true	KeyManagerRequest	
PathParameter	keyManagerId	Public Id of the key manager to be updated	true	string	

Responses

HTTP Code	Description	Schema
200	success	KeyManagerResponse
404	Key manager with the given id does not exist	No Content

Consumes

- application/json

Produces

- application/json

Deletes an existing key manager.

```
DELETE /occm/encryption/key-managers/{keyManagerId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	keyManagerId	Public Id of the key manager to be deleted	true	string	

Responses

HTTP Code	Description	Schema
404	Key manager with the given id does not exist	No Content

Consumes

- application/json

Produces

- application/json

Adds a new key manager.

```
POST /occm/encryption/key-managers
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Create key manager request parameters	true	KeyManagerRequest	

Responses

HTTP Code	Description	Schema
default	success	KeyManagerResponse

Consumes

- application/json

302

Produces

- application/json

Retrieves all key managers.

```
GET /occm/encryption/key-managers
```

Responses

HTTP Code	Description	Schema
default	success	KeyManagerResponse array

Consumes

- application/json

Produces

- application/json

Occm:encryption:key-managers-ca-certificates

Adds a new key manager CA certificate.

```
POST /occm/encryption/key-managers-ca-certificates
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Saves a key manager ca certificate request parameters	true	KeyManagerCaCertificateRequest	

Responses

HTTP Code	Description	Schema
default	success	CertificateResponse

Consumes

- application/json

Produces

- application/json

Retrieves all key managers CA certificates.

```
GET /occm/encryption/key-managers-ca-certificates
```

Responses

HTTP Code	Description	Schema
default	success	CertificateResponse array

Consumes

- application/json

Produces

- application/json

Retrieves a specific key manager CA certificate.

```
GET /occm/encryption/key-managers-ca-
certificates/{keyManagerCaCertificateId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	keyManagerCaCertificateId	Public Id of the key manager ca certificate	true	string	

Responses

HTTP Code	Description	Schema
default	success	CertificateResponse

Consumes

- application/json

Produces

- application/json

Deletes an existing key manager CA certificate.

```
DELETE /occm/encryption/key-managers-ca-
certificates/{keyManagerCaCertificateId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	keyManagerCaCertificateId	Public Id of the key manager ca certificate to be deleted	true	string	

Responses

HTTP Code	Description	Schema
404	Key manager ca certificate with the given ID does not exist	No Content

Consumes

- application/json

Produces

- application/json

Occm:key-store

Generate new key pair and self certificate at key store and return a certificate signing request (CSR). This CSR can be signed by a CA.

```
POST /occm/key-store/external-certificate-file
```

Parameters

Type	Name	Description	Required	Schema	Default
HeaderParameter	certificateFilename	Certificate file name	false	string	
HeaderParameter	privateKeyFilename	Private key file name	false	string	
HeaderParameter	algorithm	Private key algorithm	false	string	
BodyParameter	certificate	The CA signed certificate	false	string	

Type	Name	Description	Required	Schema	Default
BodyParameter	privateKey	The private key associated with the CA signed certificate	false	string	

Responses

HTTP Code	Description	Schema
default	success	CertificateResponse

Consumes

- multipart/form-data

Produces

- application/json

Retrieve the self certificate of Cloud Manager key store, if one exists.

```
GET /occm/key-store/self-certificate
```

Responses

HTTP Code	Description	Schema
default	success	CertificateResponse

Consumes

- application/json

Produces

- application/json

Validates and installs the provided certificate in trust store.

```
POST /occm/key-store/trusted-certificate-file
```

Parameters

Type	Name	Description	Required	Schema	Default
HeaderParameter	filename	Trusted certificate file name	false	string	

Type	Name	Description	Required	Schema	Default
BodyParameter	certificate	certificate	false	string	

Responses

HTTP Code	Description	Schema
default	success	TrustedCertificateResponse

Consumes

- multipart/form-data

Produces

- application/json

Validates and installs the provided root CA chain. Successive calls will overwrite any previously installed root CA chain.

```
POST /occm/key-store/signed-certificate
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	The CA signed certificate	true	InstallCertificates Request	

Responses

HTTP Code	Description	Schema
default	success	CertificateResponse

Consumes

- application/json

Produces

- application/json

Retrieve the CA signed certificate of Cloud Manager key store, if one exists.

```
GET /occm/key-store/signed-certificate
```

Responses

HTTP Code	Description	Schema
default	success	CertificateResponse

Consumes

- application/json

Produces

- application/json

Generate new key pair and self certificate at key store and return a certificate signing request (CSR). This CSR can be signed by a CA.

```
POST /occm/key-store
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body		false	CertificateSigningRequest	

Responses

HTTP Code	Description	Schema
default	success	CsrResponse

Consumes

- application/json

Produces

- application/json

Validates and installs the provided root CA chain. Successive calls will overwrite any previously installed root CA chain.

```
POST /occm/key-store/signed-certificate-file
```

Parameters

Type	Name	Description	Required	Schema	Default
HeaderParameter	filename	Certificate file name	false	string	
BodyParameter	certificate	The CA signed certificate	false	string	

Responses

HTTP Code	Description	Schema
default	success	CertificateResponse

Consumes

- multipart/form-data

Produces

- application/json

Return existing trusted certificates added by the user from trust store.

```
GET /occm/key-store/user-trusted-certificates
```

Responses

HTTP Code	Description	Schema
default	success	TrustedCertificateResponse array

Consumes

- application/json

Produces

- application/json

Generate new key pair and self certificate at key store and return a certificate signing request (CSR). This CSR can be signed by a CA.

```
POST /occm/key-store/external-certificate
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	The CA signed certificate and an associated private key	true	InstallCertificates AndPrivateKeyR equest	

Responses

HTTP Code	Description	Schema
default	success	CertificateResponse

Consumes

- application/json

Produces

- application/json

Delete existing trusted certificate from trust store.

```
DELETE /occm/key-store/trusted-certificate/{certificateId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	certificateId	The trusted certificate's ID	true	string	

Consumes

- application/json

Produces

- application/json

Occm:saas-mp-service

Attach Saas subscription to cloud provider account.

```
PUT /occm/saas-mp-service/attach-subscription/{provider}/{cloudAccountId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	cloudAccountId	Public Id of cloud provider account	true	string	
PathParameter	provider	cloud provider name	true	enum (AWS, AZURE, GCP)	
BodyParameter	body	Update subscription request	true	UpdateSubscriptionRequest	

Produces

- application/json

Retrieves current SaaS marketplace account and subscriptions.

```
GET /occm/saas-mp-service/account
```

Responses

HTTP Code	Description	Schema
default	success	SaasMpAccountResponse

Produces

- application/json

Retrieves SaaS marketplace subscriptions for cvo.

```
GET /occm/saas-mp-service/{workingEnvironmentId}/subscription
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	DescribeCvoSubscriptionResponse

Produces

- application/json

Occm:setup

Validates that Cloud Manager has an active Internet connection

```
POST /occm/setup/validate/connectivity
```

Consumes

- application/json

Produces

- application/json

Validates a given proxy URL.

```
POST /occm/setup/validate/proxy
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Proxy Url	true	ProxyUri	

Consumes

- application/json

Produces

- application/json

Occm:setup-portal

Setup a given proxy URL.

```
POST /occm/setup-portal/proxy/setup
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Proxy Url	true	SetProxyRequest	

Consumes

- application/json

Produces

- application/json

Performs initial setup with NetApp Cloud Central.

```
POST /occm/setup-portal/init
```

Parameters

Type	Name	Description	Required	Schema	Default
HeaderParameter	Authorization		false	string	
BodyParameter	body	Setup data	true	PortalSetupAsServiceConnectorRequest	

Responses

HTTP Code	Description	Schema
200	success	InitialSetupResponse
400	If setup already performed	No Content

Consumes

- application/json

Produces

- application/json

Register Cloud Manager to NetApp Cloud Central.

```
POST /occm/setup-portal/register
```

Responses

HTTP Code	Description	Schema
200	success	RegistrationResponse
412	Cloud Manager is not configured with NetApp Cloud Central	No Content

HTTP Code	Description	Schema
404	Failed Communicating with NetApp Cloud Central	No Content
409	Cloud Manager is already registered to NetApp Cloud Central	No Content

Consumes

- application/json

Produces

- application/json

Complete setup which was pending connectivity.

```
POST /occm/setup-portal/complete-connectivity-pending-setup
```

Responses

HTTP Code	Description	Schema
default	success	InitialSetupResponse

Consumes

- application/json

Produces

- application/json

Performs initial standalone setup with local identity provider.

```
POST /occm/setup-portal/init-standalone-local-auth
```

Parameters

Type	Name	Description	Required	Schema	Default
HeaderParameter	Authorization		false	string	
BodyParameter	body	Setup data	true	LocalAuthSetup Request	

Responses

HTTP Code	Description	Schema
200	success	InitialSetupResponse
400	If setup already performed	No Content

Consumes

- application/json

Produces

- application/json

Register Cloud Manager in dark site.

```
POST /occm/setup-portal/register-in-local-auth
```

Responses

HTTP Code	Description	Schema
default	success	RegistrationResponse

Consumes

- application/json

Produces

- application/json

Validates that Cloud Manager has an active Internet connection

```
POST /occm/setup-portal/validate/connectivity
```

Consumes

- application/json

Produces

- application/json

Occm:system

Retrieves cloud providers supported regions.

```
GET /occm/system/cloud-provider-regions
```

Responses

HTTP Code	Description	Schema
default	success	ProviderSupportedRegions

Produces

- application/json

Checks for a new version of Cloud Manager.

```
GET /occm/system/available-update-versions
```

Responses

HTTP Code	Description	Schema
default	success	UpdateInfo array

Produces

- application/json

Updates Cloud Manager with the given patch. Backup should be provided in multipart/form-data, with the file at a part named 'patch'.

```
POST /occm/system/patch
```

Parameters

Type	Name	Description	Required	Schema	Default
HeaderParameter	filename		false	string	
BodyParameter	patch	patch	false	string	

Consumes

- multipart/form-data

Produces

- application/json

Manually trigger daily notification sending.

```
POST /occm/system/manually-trigger-send-daily-notification
```

Produces

- application/json

Retrieves Cloud Manager feedback configuration.

```
GET /occm/system/external-config
```

Responses

HTTP Code	Description	Schema
default	success	OccmExternalConfiguration

Produces

- application/json

Manually activate Cloud Volumes ONTAP capacity automatic management cycle.

```
POST /occm/system/manually-activate-auto-vsa-capacity-management-cycle
```

Produces

- application/json

Performs fetch and cache of Cloud Volumes ONTAP and Cloud Manager version information files from s3.

```
POST /occm/system/cloud-ontap-update-metadata
```

Produces

- application/json

Retrieves Cloud Manager support services information.

```
GET /occm/system/support-services
```

Responses

HTTP Code	Description	Schema
default	success	SupportServices

Produces

- application/json

Retrieves the region, VPC, and subnet in which the Cloud Manager instance is running.

```
GET /occm/system/occm-instance-placement
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	clearCache		false	boolean	

Responses

HTTP Code	Description	Schema
default	success	InstancePlacementResponse

Produces

- application/json

Updates Cloud Manager to the given version.

```
POST /occm/system/update
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body		false	VersionWrapper	

Produces

- application/json

Performs fetch and processing of Cloud Volumes ONTAP image update metadata files.

```
POST /occm/system/cloud-ontap-update-image-metadata
```

Produces

- application/json

Retrieves Feature Flags.

```
GET /occm/system/feature-flags
```

Responses

HTTP Code	Description	Schema
default	success	FeatureFlag

Produces

- application/json

Restart server.

```
POST /occm/system/restart-server
```

Produces

- application/json

Retrieves Cloud Manager server information.

```
GET /occm/system/about
```

Responses

HTTP Code	Description	Schema
default	success	About

Produces

- application/json

Occm:tenancy-service

Retrieves workspaces that are visible to the currently logged in user.

```
GET /occm/tenancy-service/workspaces
```

Responses

HTTP Code	Description	Schema
default	success	WorkspaceResponse array

Produces

- application/json

Associate Service Connector to workspace.

```
POST /occm/tenancy-service/workspaces/{workspaceId}/associate
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workspaceId		true	string	

Produces

- application/json

Updates current Cloud Manager service user.

```
PUT /occm/tenancy-service/users/update-current-user
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body		false	UpdateServiceUser	

Produces

- application/json

Onprem:aggregates

Retrieves aggregates.

```
GET /onprem/aggregates
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	workingEnvironmentId	Filter aggregates by this working environment	true	string	
QueryParameter	checkTieringRestrictions	Check tiering restrictions	false	boolean	

Responses

HTTP Code	Description	Schema
default	success	OnPremAggregateResponse array

Consumes

- application/json

Produces

- application/json

Onprem:metadata

Verifies the address and credentials of the given cluster by retrieving the cluster info.

```
GET /onprem/metadata/cluster-info
```

Parameters

Type	Name	Description	Required	Schema	Default
HeaderParameter	clusterAddress	Cluster address	true	string	
HeaderParameter	clusterUsername	Cluster username	true	string	
HeaderParameter	clusterPassword	Cluster password	true	string	

Responses

HTTP Code	Description	Schema
default	success	ClusterInfoResponse

Consumes

- application/json

Produces

- application/json

Onprem:volumes

Modify an existing volume.Operation may only be performed on working environments whose status is: ON

```
PUT /onprem/volumes/{workingEnvironmentId}/{svmName}/{volumeName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
PathParameter	svmName	SVM name	true	string	
PathParameter	volumeName	Name of volume to be modified	true	ref	
BodyParameter	body	Modify volume request	true	OnPremVolume ModifyRequest	

Consumes

- application/json

Produces

- application/json

Deletes an existing volume.Operation may only be performed on working environments whose status is: ON

```
DELETE /onprem/volumes/{workingEnvironmentId}/{svmName}/{volumeName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
PathParameter	svmName	SVM name	true	string	
PathParameter	volumeName	Name of volume to be deleted	true	string	

Consumes

- application/json

Produces

- application/json

Clones an existing volume.Operation may only be performed on working environments whose status is: ON

```
POST /onprem/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/clone
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
PathParameter	svmName	SVM name	true	string	
PathParameter	volumeName	Name of volume to be cloned	true	string	
BodyParameter	body	Clone volume request	true	VolumeCloneRequest	

Consumes

- application/json

Produces

- application/json

Creates a new volume.Operation may only be performed on working environments whose status is: ON

```
POST /onprem/volumes
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Create volume request	true	OnPremVolume CreateRequest	

Consumes

- application/json

Produces

- application/json

Retrieves volumes.Operation may only be performed on working environments whose status is: ON

```
GET /onprem/volumes
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	workingEnvironm entId	Filter volumes by this working environment	true	string	
QueryParameter	withMinimumCoo lingDays	With minimum cooling days info	false	boolean	

Responses

HTTP Code	Description	Schema
default	success	VolumeResponse array

Consumes

- application/json

Produces

- application/json

Create snapshot manually.Operation may only be performed on working environments whose status is: ON

```
POST
/onprem/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/snapshot
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	
BodyParameter	body	Create snapshot request	true	SnapshotCreate Request	

Consumes

- application/json

Produces

- application/json

Delete snapshot manually.Operation may only be performed on working environments whose status is: ON

```
DELETE
/onprem/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/snapshot
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	
BodyParameter	body	Delete snapshot request	true	SnapshotDelete Request	

Consumes

- application/json

Produces

- application/json

Retrieves volumes for Backup Activation.Operation may only be performed on working environments whose status is: ON

```
GET /onprem/volumes/volumes-for-backup
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	workingEnvironmentId	Filter volumes by this working environment	true	string	
QueryParameter	offset	offset	false	integer (int32)	
QueryParameter	limit	limit	false	integer (int32)	
QueryParameter	search	search	false	string	
QueryParameter	filterBy	filterBy should be of the form field:value. For multiple filters use comma separator.	false	ref	
QueryParameter	sortBy	sortBy should be of the form field:Asc or field:Desc. For multiple sorting use comma separator.	false	ref	

Responses

HTTP Code	Description	Schema
default	success	VolumesListForBackup

Consumes

- application/json

Produces

- application/json

Return a list of snapshot descriptions for the volume.Operation may only be performed on working environments whose status is: ON

```
GET
/onprem/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/snapshots
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
PathParameter	svmName	SVM name	true	string	
PathParameter	volumeName	Filter snapshot descriptions for specified volume	true	string	

Responses

HTTP Code	Description	Schema
default	success	SnapshotResponse array

Consumes

- application/json

Produces

- application/json

Onprem:working-environments

Setup GCP Backup Cloud to Onprem.Operation may only be performed on working environments whose status is: ON

```
POST /onprem/working-environments/{workingEnvironmentId}/gcp-cloud-backup-
setup
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	GCP Create object store config request	true	GcpCloudBackupSetupRequest	

Consumes

- application/json

Produces

- application/json

Discovers on-premises working environment in Cloud Manager.

```
POST /onprem/working-environments
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Working environment	true	OnPremWorking EnvironmentDisc overRequest	

Responses

HTTP Code	Description	Schema
default	success	OnPremWorkingEnvironmentRespo nse

Consumes

- application/json

Produces

- application/json

Retrieves on-premises working environments visible to the currently logged in user.

```
GET /onprem/working-environments
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	fields		false	string	
QueryParameter	tenantId	Public Id of tenant	false	string	

Responses

HTTP Code	Description	Schema
default	success	OnPremWorkingEnvironmentRespo nse array

Consumes

- application/json

Produces

- application/json

Setup AWS Backup Cloud to Onprem.Operation may only be performed on working environments whose status is: ON

```
POST /onprem/working-environments/{workingEnvironmentId}/aws-cloud-backup-
setup
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	AWS Create object store config request	true	AwsCloudBackupSetupRequest	

Consumes

- application/json

Produces

- application/json

Retrieves IP Space List to an existing Cloud Volumes ONTAP working environment.Operation may only be performed on working environments whose status is: ON

```
GET /onprem/working-environments/{workingEnvironmentId}/ip-spaces
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
QueryParameter	vserver	Vserver name	false	string	

Responses

HTTP Code	Description	Schema
default	success	IpSpaceResponse array

Consumes

- application/json

Produces

- application/json

Retrieves an on-premises ONTAP working environment.

```
GET /onprem/working-environments/{workingEnvironmentId}
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	fields		false	string	
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	OnPremWorkingEnvironmentResponse

Consumes

- application/json

Produces

- application/json

Cloud Manager will no longer manage this working environment, but will not affect the Data ONTAP itself.

```
DELETE /onprem/working-environments/{workingEnvironmentId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Consumes

- application/json

Produces

- application/json

Setup Azure Backup Cloud to Onprem.Operation may only be performed on working environments whose status is: ON

```
POST /onprem/working-environments/{workingEnvironmentId}/azure-cloud-
backup-setup
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Azure Create object store config request	true	AzureCloudBackupSetupRequest	

Consumes

- application/json

Produces

- application/json

Retrieves CIFS Configuration to an existing Cloud Volumes ONTAP working environment.Operation may only be performed on working environments whose status is: ON

```
GET /onprem/working-environments/{workingEnvironmentId}/cifs
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
QueryParameter	vserver	Vserver name	false	string	

Responses

HTTP Code	Description	Schema
default	success	CIFSConfigurationResponse array

Consumes

- application/json

Produces

- application/json

Setup SGWS Backup Cloud to Onprem.Operation may only be performed on working environments whose status is: ON

```
POST /onprem/working-environments/{workingEnvironmentId}/sgws-cloud-
backup-setup
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	SGWS Create object store config request	true	SgwsCloudBackupSetupRequest	

Consumes

- application/json

Produces

- application/json

Updates Cloud Manager password for an On Premises working environment.

```
PUT /onprem/working-environments/{workingEnvironmentId}/update-credentials
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Update Cloud Manager password request	true	UpdateCredentialsRequest	

Consumes

- application/json

Produces

- application/json

Replication

Retrieves SnapMirror replication relationship statuses of a specific working environment.

```
GET /replication/status/{workingEnvironmentId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	ReplicationStatusResponse array

Consumes

- application/json

Produces

- application/json

Retrieves the intercluster LIFs used in a cluster peering relationship.

```
GET /replication/intercluster-lifs
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	workingEnvironmentId	Public Id of working environment	true	string	
QueryParameter	peerWorkingEnvironmentId	Public Id of peer working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	ReplicationInterClusterLifs

Consumes

- application/json

Produces

- application/json

Breaks a SnapMirror replication relationship.

```
POST
/replication/break/{destinationWorkingEnvironmentId}/{destinationSvmName}/
{destinationVolumeName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	destinationWorkingEnvironmentId	Public Id of destination working environment	true	string	
PathParameter	destinationSvmName	Destination SVM name	true	string	
PathParameter	destinationVolumeName	Destination volume name	true	string	

Consumes

- application/json

Produces

- application/json

Reversing an existing SnapMirror relationship. This method can only be performed in case the relationship has already been established and is healthy and idle.

```
POST
/replication/reverse/{destinationWorkingEnvironmentId}/{destinationSvmName
}/{destinationVolumeName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	destinationWorkingEnvironmentId	Public Id of the working environment with which the SnapMirror relationship has already been established	true	string	
PathParameter	destinationSvmName	Destination SVM name	true	string	
PathParameter	destinationVolumeName	Destination volume name	true	string	
BodyParameter	body		false	SourceSnapmirrorEndpoint	

Consumes

- application/json

Produces

- application/json

Retrieves the status of all SnapMirror relationships.

```
GET /replication/status
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	tenantId	Public Id of tenant	false	string	

Responses

HTTP Code	Description	Schema
default	success	ReplicationStatusResponse array

Consumes

- application/json

Produces

- application/json

Initializes an existing SnapMirror relationship. This method can only be performed in case the relationship has already been established and is healthy, yet is idle and uninitialized. For example, if the initial transfer were interrupted, then it can be restarted with this request.

```
POST
/replication/initialize/{destinationWorkingEnvironmentId}/{destinationSvmN
ame}/{destinationVolumeName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	destinationWorkingEnvironmentId	Public Id of the working environment with which the SnapMirror relationship has already been established	true	string	
PathParameter	destinationSvmName	Destination SVM name	true	string	
PathParameter	destinationVolumeName	Destination volume name	true	string	

Consumes

- application/json

Produces

- application/json

Retrieves replication schedules of a specific working environment.

```
GET /replication/schedules/{workingEnvironmentId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of destination working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	ReplicationSchedule array

Consumes

- application/json

Produces

- application/json

Creates a new replication to an on-premises working environment.

```
POST /replication/onprem
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body		false	CreateReplicationRequestToOnPrem	

Consumes

- application/json

Produces

- application/json

Updates the destination endpoint of the SnapMirror relationship.

```
POST
/replication/update/{destinationWorkingEnvironmentId}/{destinationSvmName}
/{destinationVolumeName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	destinationWorkingEnvironmentId	Public Id of destination working environment	true	string	
PathParameter	destinationSvmName	Destination SVM name	true	string	
PathParameter	destinationVolumeName	Destination volume name	true	string	

Consumes

- application/json

Produces

- application/json

Creates a new replication to an FSx working environment.

```
POST /replication/fsx
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body		false	CreateReplicationRequestToFsx	

Consumes

- application/json

Produces

- application/json

Resyncs a SnapMirror replication relationship.

```
POST
/replication/resync/{destinationWorkingEnvironmentId}/{destinationSvmName}
/{destinationVolumeName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	destinationWorki ngEnvironmentId	Public Id of destination working environment	true	string	
PathParameter	destinationSvmN ame	Destination SVM name	true	string	
PathParameter	destinationVolum eName	Destination volume name	true	string	

Consumes

- application/json

Produces

- application/json

Creates a new replication to an Cloud Volumes ONTAP working environment.

```
POST /replication/vsa
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body		false	CreateReplicatio nRequestToVsa	

Consumes

- application/json

Produces

- application/json

Return pairs of relationships.

```
GET /replication/all-relationships
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	workspaceId	Public Id of workspaceId	false	string	

Responses

HTTP Code	Description	Schema
default	success	AllRelationships

Consumes

- application/json

Produces

- application/json

Removes a replication relationship.

```
DELETE
/replication/{destinationWorkingEnvironmentId}/{destinationSvmName}/{desti
nationVolumeName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	destinationWorkingEnvironmentId	Public Id of destination working environment	true	string	
PathParameter	destinationSvmName	Destination SVM name	true	string	
PathParameter	destinationVolumeName	Destination volume name	true	string	

Consumes

- application/json

Produces

- application/json

Updates a SnapMirror replication relationship.

```
PUT
/replication/{workingEnvironmentId}/{destinationSvmName}/{destinationVolum
eName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Replication update request	true	ReplicationUpdateRequest	
PathParameter	destinationSvmName	Destination SVM name	true	string	
PathParameter	destinationVolumeName	Destination volume name	true	string	

Consumes

- application/json

Produces

- application/json

Replication:metadata

retrieves SnapMirror policies based on source and destination Cloud Volumes ONTAP.

```
GET /replication/metadata/snapmirror-svm-
policies/{sourceWorkingEnvironmentId}/{svmName}/{targetWorkingEnvironmentI
d}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	sourceWorkingEnvironmentId	Public Id of source working environment	true	string	

Type	Name	Description	Required	Schema	Default
PathParameter	svmName	SVM name	true	string	
PathParameter	targetWorkingEnvironmentId	Public Id of destination working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	SnapMirrorPolicyResponse array

Consumes

- application/json

Produces

- application/json

retrieves SnapMirror policies based on source and destination Cloud Volumes ONTAP.

```
GET /replication/metadata/snapmirror-
policies/{sourceWorkingEnvironmentId}/{targetWorkingEnvironmentId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	sourceWorkingEnvironmentId	Public Id of source working environment	true	string	
PathParameter	targetWorkingEnvironmentId	Public Id of destination working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	SnapMirrorPolicyResponse array

Consumes

- application/json

Produces

- application/json

return list of snapshot labels from the volume matching labels in the passed list.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
GET /replication/metadata/snapshot-
labels/{workingEnvironmentId}/{svmName}/{volumeName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
PathParameter	svmName	SVM name	true	string	
PathParameter	volumeName	Volume name	true	string	
QueryParameter	labels		false	csv string array	

Responses

HTTP Code	Description	Schema
default	success	string array

Consumes

- application/json

Produces

- application/json

Tenants

Creates a new tenant.

```
POST /tenants
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body		true	AddTenantRequest	

Responses

HTTP Code	Description	Schema
default	success	TenantResponse

Consumes

- application/json

Produces

- application/json

Retrieves tenants that are visible to the currently logged in user.

```
GET /tenants
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	fields		false	string	

Responses

HTTP Code	Description	Schema
default	success	TenantResponse array

Consumes

- application/json

Produces

- application/json

Retrieves a tenant.

```
GET /tenants/{tenantId}
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	fields		false	string	
PathParameter	tenantId	Public Id of tenant	true	string	

Responses

HTTP Code	Description	Schema
default	success	TenantResponse

Consumes

- application/json

Produces

- application/json

Updates an existing tenant.

```
PUT /tenants/{tenantId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	tenantId	Public Id of tenant	true	string	
BodyParameter	body	Tenant update request	true	UpdateTenantRequest	

Responses

HTTP Code	Description	Schema
default	success	TenantResponse

Consumes

- application/json

Produces

- application/json

Deletes an existing tenant. It is not possible to delete a tenant over which working environments exist.

```
DELETE /tenants/{tenantId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	tenantId	Public Id of the tenant to be deleted	true	string	

Consumes

- application/json

Produces

- application/json

Links an existing tenant to a NetApp Support Site account.

```
PUT /tenants/{tenantId}/nss-keys
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	tenantId	Public Id of the tenant to be updated	true	string	
BodyParameter	body		true	SetNssKeysRequest	

Responses

HTTP Code	Description	Schema
default	success	TenantResponse

Consumes

- application/json

Produces

- application/json

User-mng:auth

Log in to Cloud Manager.

```
POST /auth/login
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body		false	UserPasswordRequest	

Responses

HTTP Code	Description	Schema
401	Incorrect email/password combination	No Content
408	Failed Communicating with Active Directory	No Content

Consumes

- application/json

Produces

- application/json

Authenticate with local identity provider.

```
POST /auth/local/authenticate
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body		false	AuthRequest	

Consumes

- application/json

Produces

- application/json

Retrieves representation of currently logged in user.

```
GET /auth/current-user
```

Responses

HTTP Code	Description	Schema
200	success	UserResponse
401	No user is currently logged in	No Content
403	No connectivity - SSL Exception	No Content
409	Setup halted. Internet connectivity required to complete	No Content

Consumes

- application/json

Produces

- application/json

Log out of Cloud Manager.

```
POST /auth/logout
```

Responses

HTTP Code	Description	Schema
401	No user is currently logged in	No Content

Consumes

- application/json

Produces

- application/json

Changes the password of the currently logged in user.

```
PUT /auth/current-user/change-password
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Change current user password request parameters	true	ResetPassword	

Responses

HTTP Code	Description	Schema
401	No user is currently logged in	No Content

Consumes

- application/json

Produces

- application/json

User-mng:users

Retrieves a specific user.

```
GET /users/{userId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	userId	Public Id of user	true	string	

Responses

HTTP Code	Description	Schema
default	success	UserResponse

Consumes

- application/json

Produces

- application/json

Updates an existing user.

```
PUT /users/{userId}
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body		false	UpdateUserRequest	

Type	Name	Description	Required	Schema	Default
PathParameter	userId	Public Id of user	true	string	

Responses

HTTP Code	Description	Schema
200	success	UserResponse
404	User with the given user id does not exist	No Content

Consumes

- application/json

Produces

- application/json

Deletes an existing user. It is not possible to delete a user that has created existing working environments. It is not possible to delete the logged in user.

```
DELETE /users/{userId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	userId	Public Id of the user to be deleted	true	string	

Responses

HTTP Code	Description	Schema
404	User with the given user id does not exist	No Content

Consumes

- application/json

Produces

- application/json

Creates a new user.

```
POST /users
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body		true	UserRequest	

Responses

HTTP Code	Description	Schema
200	success	UserResponse
404	Either the provided tenant or role assigned to the new user does not exist	No Content

Consumes

- application/json

Produces

- application/json

Retrieves all users visible to the current user.

```
GET /users
```

Responses

HTTP Code	Description	Schema
default	success	UserResponse array

Consumes

- application/json

Produces

- application/json

Add existing NetApp Cloud Central user to Cloud Manager.

```
POST /users/add-user
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body		true	AddPortalUserRequest	

Responses

HTTP Code	Description	Schema
200	success	UserResponse
404	Either the provided tenant or role assigned to the new user does not exist	No Content

Consumes

- application/json

Produces

- application/json

Remove user from Cloud Manager.

```
DELETE /users/{userId}/remove-user
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	userId	Public Id of user	true	string	

Consumes

- application/json

Produces

- application/json

Resets the password of the given user.

```
PUT /users/{userId}/reset-password
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	userId	Public Id of the user whose password is to be reset	true	string	
BodyParameter	body	Reset password request	true	ResetUserPasswordRequest	

Responses

HTTP Code	Description	Schema
403	The current user does not have permissions to perform this operation for the given user	No Content

Consumes

- application/json

Produces

- application/json

Grants or revokes permissions to the given user for performing operations over the given working environments.

```
POST /users/{userId}/working-environments-grant-revoke
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body		false	GrantPermission	
PathParameter	userId	Public Id of the user whose permissions are to be changed	true	string	

Responses

HTTP Code	Description	Schema
404	User with the given user id does not exist	No Content

Consumes

- application/json

Produces

- application/json

Vsa:aggregates

Adds disks to an existing aggregate

```
POST /vsa/aggregates/{workingEnvironmentId}/{aggregateName}/disks
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
PathParameter	aggregateName	Name of aggregate to be updated	true	string	
BodyParameter	body	Add disk to aggregate request	true	AddDisksToAggregateRequest	

Consumes

- application/json

Produces

- application/json

Deletes an existing aggregate

```
DELETE /vsa/aggregates/{workingEnvironmentId}/{aggregateName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
PathParameter	aggregateName	Name of aggregate to be deleted	true	string	

Consumes

- application/json

Produces

- application/json

Creates a new aggregate

```
POST /vsa/aggregates
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Create Aggregate Request	true	VsaAggregateCreateRequest	

Consumes

- application/json

Produces

- application/json

Retrieves aggregates

```
GET /vsa/aggregates
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	workingEnvironmentId	Public Id of working environment	false	string	

Responses

HTTP Code	Description	Schema
default	success	AggregateResponse array

Consumes

- application/json

Produces

- application/json

Vsa:discovery

Saves a previously discovered Cloud Volumes ONTAP working environment to the Cloud Manager database.

```
POST /vsa/recover
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Working environment	true	RecoverVsaRequest	

Responses

HTTP Code	Description	Schema
default	success	VsaWorkingEnvironmentResponse

Consumes

- application/json

Produces

- application/json

Retrieves a list of discovered working environments visible to the current user in the specified AWS region.

```
GET /vsa/discover
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region	Region to discover working environments	true	string	
QueryParameter	cloudProviderAccountId		false	string	

Responses

HTTP Code	Description	Schema
default	success	DiscoveredVsaResponse array

Consumes

- application/json

Produces

- application/json

Vsa:encryption

Updates the client certificate on the Cloud Volumes ONTAP system

```
POST /vsa/encryption/{workingEnvironmentId}/update-client-certificate
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	CertificateResponse

Consumes

- application/json

Produces

- application/json

Adds a key manager to the Cloud Volumes ONTAP system

```
POST /vsa/encryption/{workingEnvironmentId}/key-managers/{keyManagerIp}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
PathParameter	keyManagerIp	Key manager IP address	true	string	

Consumes

- application/json

Produces

- application/json

Deletes a key manager from the Cloud Volumes ONTAP system

```
DELETE /vsa/encryption/{workingEnvironmentId}/key-managers/{keyManagerIp}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
PathParameter	keyManagerIp	Key manager IP address	true	string	

Consumes

- application/json

Produces

- application/json

Updates the key manager CA certificate on the Cloud Volumes ONTAP system

```
POST /vsa/encryption/{workingEnvironmentId}/update-key-manager-ca-
certificate
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Update Cloud Volumes ONTAP key manager CA certificate request parameters	true	UpdateKeyManagerCaCertificateRequest	

Responses

HTTP Code	Description	Schema
default	success	CertificateResponse

Consumes

- application/json

Produces

- application/json

Vsa:metadata

Retrieve S3 buckets summary

```
GET /vsa/metadata/s3-summary
```

Responses

HTTP Code	Description	Schema
default	success	S3Summary

Consumes

- application/json

Produces

- application/json

Retrieves AWS user Key Pairs for specific region

```
GET /vsa/metadata/key-pairs
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region		true	string	
QueryParameter	roleArn		false	string	
QueryParameter	cloudProviderAccountId		false	string	

Responses

HTTP Code	Description	Schema
default	success	string array

Consumes

- application/json

Produces

- application/json

Create new S3 bucket

```
POST /vsa/metadata/create-bucket
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region		true	string	
QueryParameter	bucketName		true	string	

Consumes

- application/json

Produces

- application/json

Retrieves instance types not supporting acceleration and capacity tiering

```
GET /vsa/metadata/instance-types-not-supporting-acceleration-and-capacity-
tiering
```

Responses

HTTP Code	Description	Schema
default	success	InstanceTypesNotSupportingAccelerationAndCapacityTieringResponse

Consumes

- application/json

Produces

- application/json

Retrieves all the Tag names

```
GET /vsa/metadata/tag-keys
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	roleArn		false	string	
QueryParameter	cloudProviderAccountId		false	string	

Responses

HTTP Code	Description	Schema
default	success	TagKeyResponse array

Consumes

- application/json

Produces

- application/json

Retrieve S3 buckets policy status and tiering level

```
POST /vsa/metadata/get-buckets-application-info
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Request for retrieving Buckets Additional info	true	BucketsPolicyAndTieringInfoRequest	

Responses

HTTP Code	Description	Schema
default	success	BucketAdditionalData array

Consumes

- application/json

Produces

- application/json

Retrieves supported EBS volume types

```
GET /vsa/metadata/ebs-volume-types
```

Responses

HTTP Code	Description	Schema
default	success	EbsVolumeType array

Consumes

- application/json

Produces

- application/json

Retrieves all Cloud Manager manifests. Refer to the API Developers Guide in order to understand how to extract valid region codes, license types, instance types and Cloud Volumes ONTAP version parameters for the creation of a Cloud Volumes ONTAP working environment.

```
GET /vsa/metadata/manifests
```

Responses

HTTP Code	Description	Schema
default	success	MetadataResponse

Consumes

- application/json

Produces

- application/json

Retrieves the minimum number of required IPs for a single Cloud Volumes ONTAP system, an HA node, and HA mediator

```
GET /vsa/metadata/network-requirements
```

Responses

HTTP Code	Description	Schema
default	success	NetworkRequirementsResponse

Consumes

- application/json

Produces

- application/json

Retrieves AWS instance profiles

```
GET /vsa/metadata/instance-profiles
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	roleArn		false	string	
QueryParameter	cloudProviderAccountId		false	string	

Responses

HTTP Code	Description	Schema
default	success	InstanceProfileResponse array

Consumes

- application/json

Produces

- application/json

Retrieves AWS user Key Pairs for all regions

```
GET /vsa/metadata/key-pairs-by-region
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	roleArn		false	string	
QueryParameter	cloudProviderAccountId		false	string	

Responses

HTTP Code	Description	Schema
default	success	KeyPairsByRegionResponse

Consumes

- application/json

Produces

- application/json

Retrieves AWS encryption keys for specific region

```
GET /vsa/metadata/aws-encryption-keys
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region		true	string	
QueryParameter	roleArn		false	string	
QueryParameter	cloudProviderAccountId		false	string	

Responses

HTTP Code	Description	Schema
default	success	AwsEncryptionKey array

Consumes

- application/json

Produces

- application/json

Retrieves supported features

```
GET /vsa/metadata/supported-features
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region		true	string	
QueryParameter	ontapVersion		true	string	
QueryParameter	dataEncryptionType		true	string	
QueryParameter	licenseType		true	string	
QueryParameter	instanceType		true	string	

Responses

HTTP Code	Description	Schema
default	success	SupportedFeaturesResponse

Consumes

- application/json

Produces

- application/json

Validates the current user is subscribed to Cloud Volumes ONTAP product in Amazon marketplace

```
POST /vsa/metadata/validate-subscribed-to-ontap-cloud
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Validate subscribed to Cloud Volumes ONTAP request	true	AwsValidateSubscribedToOntapCloudRequest	

Responses

HTTP Code	Description	Schema
default	success	AwsValidateSubscribedToOntapCloudResponse

Consumes

- application/json

Produces

- application/json

Retrieves default snapshot policies available on a cluster

```
GET /vsa/metadata/default-snapshot-policies
```

Responses

HTTP Code	Description	Schema
default	success	SnapshotPolicy array

Consumes

- application/json

Produces

- application/json

Retrieve all S3 buckets with additional info

```
GET /vsa/metadata/get-buckets-details
```

Responses

HTTP Code	Description	Schema
default	success	S3BucketsSummary

Consumes

- application/json

Produces

- application/json

Retrieves AWS regions over which an Cloud Volumes ONTAP working environment may be created

```
GET /vsa/metadata/regions
```

Responses

HTTP Code	Description	Schema
default	success	Region array

Consumes

- application/json

Produces

- application/json

Retrieve all S3 buckets

```
GET /vsa/metadata/buckets
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	tagsRequired		false	boolean	

Responses

HTTP Code	Description	Schema
default	success	S3BucketInfo array

Consumes

- application/json

Produces

- application/json

Retrieves supported capacity tiers for EBS volume types

```
GET /vsa/metadata/supported-capacity-tiers
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region		true	string	
QueryParameter	ontapVersion		true	string	
QueryParameter	dataEncryptionType		true	string	
QueryParameter	licenseType		true	string	
QueryParameter	instanceType		true	string	

Responses

HTTP Code	Description	Schema
default	success	SupportedCapacityTiers

Consumes

- application/json

Produces

- application/json

Retrieves packages configuration

```
GET /vsa/metadata/packages
```

Responses

HTTP Code	Description	Schema
default	success	PackageInfoResponse array

Consumes

- application/json

Produces

- application/json

Retrieves all Cloud Volumes ONTAP configurations.

```
GET /vsa/metadata/permutations
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region	Filter by region	false	string	
QueryParameter	version	Filter by version	false	string	
QueryParameter	license	Filter by license	false	string	
QueryParameter	instance_type	Filter by instance type	false	string	
QueryParameter	default_instance_type	Filter by default instance type	false	string	
QueryParameter	feature	Filter by feature	false	string	
QueryParameter	latest_only	Filter latest only	false	string	
QueryParameter	ami	Filter by ami id	false	string	

Responses

HTTP Code	Description	Schema
default	success	Configuration array

Consumes

- application/json

Produces

- application/json

Retrieves VPCs

```
GET /vsa/metadata/vpcs
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	region		true	string	
QueryParameter	roleArn		false	string	
QueryParameter	cloudProviderAccountId		false	string	

Responses

HTTP Code	Description	Schema
default	success	VpcExtendedResponse array

Consumes

- application/json

Produces

- application/json

Vsa:volumes

Quotes a new volume. Returns a resource quote needed to satisfy the requested volume.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST /vsa/volumes/quote
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Quote volume request	true	VsaVolumeQuoteRequest	

Responses

HTTP Code	Description	Schema
default	success	VsaVolumeQuoteResponse

Consumes

- application/json

Produces

- application/json

Retrieves volumes for Backup Activation.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
GET /vsa/volumes/volumes-for-backup
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	workingEnvironmentId	Filter volumes by this working environment	true	string	
QueryParameter	offset	offset	false	integer (int32)	
QueryParameter	limit	limit	false	integer (int32)	
QueryParameter	search	search	false	string	
QueryParameter	filterBy	filterBy should be of the form field:value. For multiple filters use comma separator.	false	ref	
QueryParameter	sortBy	sortBy should be of the form field:Asc or field:Desc. For multiple sorting use comma separator.	false	ref	

Responses

HTTP Code	Description	Schema
default	success	VolumesListForBackup

Consumes

- application/json

Produces

- application/json

Create snapshot manually.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST /vsa/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/snapshot
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	

Type	Name	Description	Required	Schema	Default
PathParameter	volumeName		true	string	
BodyParameter	body	Create snapshot request	true	SnapshotCreate Request	

Consumes

- application/json

Produces

- application/json

Delete snapshot manually.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
DELETE /vsa/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/snapshot
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironm entId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	
BodyParameter	body	Create snapshot request	true	SnapshotDelete Request	

Consumes

- application/json

Produces

- application/json

Creates a new volume. If the properties aggregateName and maxNumOfDisksApprovedToAdd are not filled in, then the response will fail with a suggested aggregate name and the number of disks that will need to be created in order to fulfill the request.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST /vsa/volumes
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	createAggregateI fNotFound	On create volume request, allow creating not-found aggregate	false	boolean	
BodyParameter	body	Create volume request	true	VsaVolumeCreat eRequest	

Consumes

- application/json

Produces

- application/json

Retrieves volumes.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
GET /vsa/volumes
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	workingEnvironm entId	Filter volumes by this working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	VolumeResponse array

Consumes

- application/json

Produces

- application/json

Add ISCSI initiator.

```
POST /vsa/volumes/initiator
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	ISCSI initiator request	true	Initiator	

Consumes

- application/json

Produces

- application/json

Get all ISCSI initiators.

```
GET /vsa/volumes/initiator
```

Responses

HTTP Code	Description	Schema
default	success	InitiatorEntry array

Consumes

- application/json

Produces

- application/json

Clones an existing volume.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST /vsa/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/clone
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	
BodyParameter	body		true	VolumeCloneRequest	

Consumes

- application/json

Produces

- application/json

Change underlying volume tier.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST /vsa/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/change-
tier
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	
BodyParameter	body		true	ChangeVolumeTierRequest	

Consumes

- application/json

Produces

- application/json

Return a list of snapshot descriptions for the volume.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
GET /vsa/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/snapshots
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	

Responses

HTTP Code	Description	Schema
default	success	SnapshotResponse array

Consumes

- application/json

Produces

- application/json

Move an existing volume.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST /vsa/volumes/{workingEnvironmentId}/{svmName}/{volumeName}/move
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	
BodyParameter	body		true	VolumeMoveRequest	

Consumes

- application/json

Produces

- application/json

Get all igroups.

```
GET /vsa/volumes/igroups/{workingEnvironmentId}/{svmName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	

Type	Name	Description	Required	Schema	Default
PathParameter	svmName		true	string	

Responses

HTTP Code	Description	Schema
default	success	IGroup array

Consumes

- application/json

Produces

- application/json

Modify an existing volume.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
PUT /vsa/volumes/{workingEnvironmentId}/{svmName}/{volumeName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	ref	
BodyParameter	body	Modify volume request	true	VolumeModifyRequest	

Consumes

- application/json

Produces

- application/json

Deletes an existing volume.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
DELETE /vsa/volumes/{workingEnvironmentId}/{svmName}/{volumeName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
PathParameter	svmName		true	string	
PathParameter	volumeName		true	string	

Consumes

- application/json

Produces

- application/json

Vsa:working-environments

Register extra capacity serials.

```
POST /vsa/working-environments/{workingEnvironmentId}/extra-capacity-
serials
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	licenses serial(s)	true	LicensesSerials	

Consumes

- application/json

Produces

- application/json

Update extra capacity serials.

```
PUT /vsa/working-environments/{workingEnvironmentId}/extra-capacity-
serials
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	extra capacity serial(s)	true	LicensesSerials	

Consumes

- application/json

Produces

- application/json

Delete extra capacity licenses by serials.

```
DELETE /vsa/working-environments/{workingEnvironmentId}/extra-capacity-
serials
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	extra capacity serial(s)	true	LicensesSerials	

Consumes

- application/json

Produces

- application/json

Starts a specific Cloud Volumes ONTAP instance.Operation may only be performed on working environments whose status is: OFF

```
POST /vsa/working-environments/{workingEnvironmentId}/start
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Consumes

- application/json

Produces

- application/json

Setup a new CIFS Configuration to an existing Cloud Volumes ONTAP working environment.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST /vsa/working-environments/{workingEnvironmentId}/cifs
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	CIFS Configuration request	true	CIFSConfigurationRequest	

Consumes

- application/json

Produces

- application/json

Retrieves CIFS Configuration to an existing Cloud Volumes ONTAP working environment.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
GET /vsa/working-environments/{workingEnvironmentId}/cifs
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Type	Name	Description	Required	Schema	Default
QueryParameter	svm		false	string	

Responses

HTTP Code	Description	Schema
default	success	CIFSConfigurationResponse array

Consumes

- application/json

Produces

- application/json

Retrieves action parameters used in create request of a given Cloud Volumes ONTAP instance.

```
GET /vsa/working-environments/{workingEnvironmentId}/create-request-
parameters
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	CreateRequestParametersResponse

Consumes

- application/json

Produces

- application/json

Delete CIFS Configuration of an existing Cloud Volumes ONTAP working environment.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST /vsa/working-environments/{workingEnvironmentId}/delete-cifs
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	CIFS Configuration request	true	[CIFSDeleteRequest](#)	

Consumes

- application/json

Produces

- application/json

List start-stop schedules for Cloud Volumes ONTAP.

```
GET /vsa/working-environments/{workingEnvironmentId}/schedules
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	[VsaSchedule](#) array

Consumes

- application/json

Produces

- application/json

Set schedules for Cloud Volumes ONTAP.

```
PUT /vsa/working-environments/{workingEnvironmentId}/schedules
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Cloud Volumes ONTAP working environment update schedule request	true	VsaSchedulesRequest	

Consumes

- application/json

Produces

- application/json

Retrieves a list of versions to which this Cloud Volumes ONTAP can be upgraded.Operation may only be performed on working environments whose status is: ON

```
GET /vsa/working-environments/{workingEnvironmentId}/occm-provided-
upgrade-versions
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	OntapUpdateImageMetadata array

Consumes

- application/json

Produces

- application/json

Disable FPolicy for ransomeware files.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
PUT /vsa/working-environments/{workingEnvironmentId}/disable-fpolicy
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	

Consumes

- application/json

Produces

- application/json

Creates a new Cloud Volumes ONTAP working environment. Refer to the API Developers Guide in order to understand how to fill in the values for region, licenseType, instanceType and version.

```
POST /vsa/working-environments
```

Parameters

Type	Name	Description	Required	Schema	Default
BodyParameter	body	Working environment	true	CreateVSAWorkingEnvironmentRequest	

Responses

HTTP Code	Description	Schema
default	success	VsaWorkingEnvironmentResponse

Consumes

- application/json

Produces

- application/json

Retrieves Cloud Volumes ONTAP working environments visible to the currently logged in user.

```
GET /vsa/working-environments
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	fields		false	string	
QueryParameter	tenantId		false	string	

Responses

HTTP Code	Description	Schema
default	success	VsaWorkingEnvironmentResponse array

Consumes

- application/json

Produces

- application/json

Retrieves images already installed on the Cloud Volumes ONTAP.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
GET /vsa/working-environments/{workingEnvironmentId}/ontap-available-
images
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	UpdateLocalImage array

Consumes

- application/json

Produces

- application/json

Retrieves all license types and their associated instance types for a given Cloud Volumes ONTAP instance.

```
GET /vsa/working-environments/{workingEnvironmentId}/license-instance-type
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	LicenseAndInstanceType array

Consumes

- application/json

Produces

- application/json

Sets the instance type of a specific Cloud Volumes ONTAP.Operation may only be performed on working environments whose status is: ON, OFF

```
PUT /vsa/working-environments/{workingEnvironmentId}/license-instance-type
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Instance type modification request	true	LicenseAndInstanceTypeModificationRequest	

Consumes

- application/json

Produces

- application/json

Create snapshot policy.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST /vsa/working-environments/{workingEnvironmentId}/snapshot-policy
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	
BodyParameter	body	Create snapshot policy request	true	SnapshotPolicyCreateRequest	

Consumes

- application/json

Produces

- application/json

Registers a Cloud Volumes ONTAP system with NetApp.Operation may only be performed on working environments whose status is: ON

```
POST /vsa/working-environments/{workingEnvironmentId}/support-registration
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
QueryParameter	nssAccountId		false	string	

Responses

HTTP Code	Description	Schema
default	success	SupportRegistrationResponse

Consumes

- application/json

Produces

- application/json

Retrieves the support registration status of a Cloud Volumes ONTAP system.Operation may only be performed on working environments whose status is: ON

```
GET /vsa/working-environments/{workingEnvironmentId}/support-registration
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	SupportRegistrationResponse

Consumes

- application/json

Produces

- application/json

Enable capacity tiering.Operation may only be performed on working environments whose status is: ON

```
POST /vsa/working-environments/{workingEnvironmentId}/enable-capacity-
tiering
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Enable capacity tiering request	false	EnableCapacityTieringRequest	

Consumes

- application/json

Produces

- application/json

Setup NTP server.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST /vsa/working-environments/{workingEnvironmentId}/ntp
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	NTP Configuration request	true	NTPConfigurationRequest	

Consumes

- application/json

Produces

- application/json

Register extra capacity license.

```
POST /vsa/working-environments/{workingEnvironmentId}/extra-capacity-
licenses
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	extra capacity licenses(s)	true	LicensesContent	

Consumes

- application/json

Produces

- application/json

Get extra capacity licenses for cvo.

```
GET /vsa/working-environments/{workingEnvironmentId}/extra-capacity-
licenses
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Consumes

- application/json

Produces

- application/json

Update extra capacity license.

```
PUT /vsa/working-environments/{workingEnvironmentId}/extra-capacity-
licenses
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	extra capacity license(s)	true	LicensesContent	

Consumes

- application/json

Produces

- application/json

Stops a specific Cloud Volumes ONTAP instance.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST /vsa/working-environments/{workingEnvironmentId}/stop
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
QueryParameter	takeSnapshots	Take snapshots before stopping Cloud Volumes ONTAP	true	boolean	true

Consumes

- application/json

Produces

- application/json

Retrieves an Cloud Volumes ONTAP working environment.

```
GET /vsa/working-environments/{workingEnvironmentId}
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	fields		false	string	
PathParameter	workingEnvironmentId		true	string	

Responses

HTTP Code	Description	Schema
default	success	VsaWorkingEnvironmentResponse

Consumes

- application/json

Produces

- application/json

Deletes an existing Cloud Volumes ONTAP working environment, including all Cloud resources created for this working environment (unless the localDelete flag is set to true).

```
DELETE /vsa/working-environments/{workingEnvironmentId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
QueryParameter	localDelete	If true, the Cloud Volumes ONTAP instance is not terminated in Cloud, but Cloud Manager no longer manages the working environment.	false	boolean	false
QueryParameter	forceDelete	If true, the working environment will be deleted even if it is part of one or more SnapMirror relationships.	false	boolean	false

Consumes

- application/json

Produces

- application/json

Retrieves editable tags for cloud resources of a given Cloud Volumes ONTAP instance.Operation may only be performed on working environments whose status is: ON, DEGRADED, OFF

```
GET /vsa/working-environments/{workingEnvironmentId}/user-tags
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironm entId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	UserTagsResponse

Consumes

- application/json

Produces

- application/json

Modify user tags for cloud resources of a given Cloud Volumes ONTAP instance.Operation may only be performed on working environments whose status is: ON, DEGRADED, OFF

```
PUT /vsa/working-environments/{workingEnvironmentId}/user-tags
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironm entId	Public Id of working environment	true	string	
BodyParameter	body	Modify user tags request	true	ModifyUserTags Request	

Consumes

- application/json

Produces

- application/json

Sets the writing speed for Cloud Volumes ONTAP.Operation may only be performed on working environments whose status is: ON

```
PUT /vsa/working-environments/{workingEnvironmentId}/writing-speed
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironm entId	Public Id of working environment	true	string	
BodyParameter	body	Writing speed request	true	[WritingSpeedRe quest](#)	

Consumes

- application/json

Produces

- application/json

Activate FPolicy for ransomeware files.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
PUT /vsa/working-environments/{workingEnvironmentId}/activate-fpolicy
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironm entId		true	string	

Consumes

- application/json

Produces

- application/json

Activate snapshot policy assignment to all not protected rw volumes.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
PUT /vsa/working-environments/{workingEnvironmentId}/activate-snapshot-
policy
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironm entId	Public Id of working environment	true	string	

Consumes

- application/json

Produces

- application/json

Modify the svm name of the Cloud Volumes ONTAP.Operation may only be performed on working environments whose status is: ON

```
PUT /vsa/working-environments/{workingEnvironmentId}/svm
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironm entId	Public Id of working environment	true	string	
BodyParameter	body	Svm name modification request	true	SvmNameModifi cationRequest	

Consumes

- application/json

Produces

- application/json

Sets the cluster password of a specific Cloud Volumes ONTAP.

```
PUT /vsa/working-environments/{workingEnvironmentId}/set-password
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironm entId	Public Id of working environment	true	string	

Type	Name	Description	Required	Schema	Default
QueryParameter	occmOnly		false	boolean	
BodyParameter	body	Set password request	true	PasswordWrapper	

Consumes

- application/json

Produces

- application/json

Modify the net port broadcast domain mtu of the Cloud Volumes ONTAP.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
PUT /vsa/working-environments/{workingEnvironmentId}/networkOptimization
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Use optimization	true	ChangeNetworkOptimizationRequest	

Consumes

- application/json

Produces

- application/json

Updates Cloud Manager password of a specific Cloud Volumes ONTAP.Operation may only be performed on working environments whose status is: ON

```
PUT /vsa/working-environments/{workingEnvironmentId}/update-credentials
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Update Cloud Manager password request	true	[UpdateCredentialsRequest](#)	

Consumes

- application/json

Produces

- application/json

Change serial number of Cloud Volumes ONTAP.Operation may only be performed on working environments whose status is: ON

```
POST /vsa/working-environments/{workingEnvironmentId}/change-serial
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Change serial number request	true	[ChangeSerialNumberRequest](#)	

Consumes

- application/json

Produces

- application/json

Setup a new CIFS using workgroup configuration to an existing Cloud Volumes ONTAP working environment.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST /vsa/working-environments/{workingEnvironmentId}/cifs-workgroup
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironm entId	Public Id of working environment	true	string	
BodyParameter	body	CIFS Configuration request	true	CIFSWorkgroup ConfigurationRe quest	

Consumes

- application/json

Produces

- application/json

Parses an uploaded Cloud license file.

```
POST /vsa/working-environments/parse-license-file
```

Parameters

Type	Name	Description	Required	Schema	Default
HeaderParamete r	filename	Cloud license file name	false	string	
BodyParameter	license	license	false	string	

Responses

HTTP Code	Description	Schema
default	success	ProvidedLicenseResponse

Consumes

- multipart/form-data

Produces

- application/json

Activate offbox configuration.Operation may only be performed on working environments whose status is: ON

```
PUT /vsa/working-environments/{workingEnvironmentId}/offbox
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Consumes

- application/json

Produces

- application/json

Updates default vscan file operation profile. Profile on existing CIFS shares will change only on writes-only mode.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
PUT /vsa/working-environments/{workingEnvironmentId}/vscan-file-op
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Vscan file-operation Request	true	[VscanFileOpRequest](#)	

Consumes

- application/json

Produces

- application/json

Change tier level.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
POST /vsa/working-environments/{workingEnvironmentId}/change-tier-level
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Change tier level request	true	ChangeTierLevel Request	

Consumes

- application/json

Produces

- application/json

Working Environment Ontap Saving.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
GET /vsa/working-environments/{workingEnvironmentId}/ontap-saving
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
default	success	WorkingEnvironmentOntapSavingResponse

Consumes

- application/json

Produces

- application/json

Uploads a Cloud license file on the provided Cloud Volumes ONTAP.Operation may only be performed on working environments whose status is: ON

```
POST /vsa/working-environments/{workingEnvironmentId}/upload-license-file
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
HeaderParameter	filename	Cloud license file name	false	string	
BodyParameter	license	license	false	string	

Consumes

- multipart/form-data

Produces

- application/json

Manually triggers subscription sync for all Cloud Volumes ONTAP working environments.Operation may only be performed on working environments whose status is: ON

```
POST /vsa/working-environments/sync-subscription
```

Consumes

- application/json

Produces

- application/json

Delete FPolicy for ransomeware files.Operation may only be performed on working environments whose status is: ON, DEGRADED

```
DELETE /vsa/working-environments/{workingEnvironmentId}/fpolicy
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId		true	string	

Consumes

- application/json

Produces

- application/json

Working Environment Cost And Usage.

```
GET /vsa/working-environments/{workingEnvironmentId}/cost-and-usage
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
QueryParameter	start	cost and usage start period	false	string	
QueryParameter	end	cost and usage end period	false	string	

Responses

HTTP Code	Description	Schema
default	success	WorkingEnvironmentCostAndUsageResponse

Consumes

- application/json

Produces

- application/json

Retrieves eligibility support status of a Cloud Volumes ONTAP system. Valid values - NSS_NOT_VALID, NOT_REGISTERED, IPA_PROBLEM, VALID, NSS_NOT_EXISTS, LICENSE_EXPIRED.Operation may only be performed on working environments whose status is: ON, UPDATING

```
GET /vsa/working-environments/{workingEnvironmentId}/update-eligibility
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	

Responses

HTTP Code	Description	Schema
200	success	EligibilityResponse
400	Working Environment must be ON or UPDATING in order to check eligibility	No Content

Consumes

- application/json

Produces

- application/json

Performs a complete image update operation on the single node of the specified Cloud Volumes ONTAP.Operation may only be performed on working environments whose status is: ON

```
POST /vsa/working-environments/{workingEnvironmentId}/update-image
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	Update system image request	true	UpdateSystemImageRequest	

Consumes

- application/json

Produces

- application/json

Uploads a Cloud license file content on the provided Cloud Volumes ONTAP.Operation may only be performed on working environments whose status is: ON

```
POST /vsa/working-environments/{workingEnvironmentId}/upload-licenses
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentId	Public Id of working environment	true	string	
BodyParameter	body	license file content request	true	LicenseFileContent	

Consumes

- application/json

Produces

- application/json

Working-environments

Retrieves an Cloud Volumes ONTAP working environment.

```
GET /working-environments/{workingEnvironmentId}
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	fields		false	string	
PathParameter	workingEnvironmentId		true	string	

Responses

HTTP Code	Description	Schema
default	success	GenericVsaWorkingEnvironmentResponse

Consumes

- application/json

Produces

- application/json

Returns true if working environment with that name already exists, false otherwise.

```
GET /working-environments/exists/{workingEnvironmentName}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	workingEnvironmentName	Working environment name	true	string	

Responses

HTTP Code	Description	Schema
default	success	boolean

Consumes

- application/json

Produces

- application/json

Retrieves all working environments.

```
GET /working-environments
```

Parameters

Type	Name	Description	Required	Schema	Default
QueryParameter	tenantId	Filter working environments by tenantId. Required for Oncloud Admin if performing operation requesting specific fields	false	string	
QueryParameter	fields		false	string	

Responses

HTTP Code	Description	Schema
default	success	WorkingEnvironments

Consumes

- application/json

Produces

- application/json

Returns all non prem working environment actions required in a given tenant.

```
GET /working-environments/actionRequired/{tenantId}
```

Parameters

Type	Name	Description	Required	Schema	Default
PathParameter	tenantId	Public Id of tenant	true	string	

Responses

HTTP Code	Description	Schema
default	success	TenantActionsRequiredResponse

Consumes

- application/json

Produces

- application/json

Definitions

This section describes existing data format definitions.

About

Name	Description	Required	Schema	Default
version		true	string	
build		true	string	
buildTimestamp		true	integer (int64)	
systemId		true	string	
environment		true	string	
siteIdentifier		true	SiteIdentifier	
serverTimeZone		true	ServerTimeZone	
beta		true	boolean	
releaseNumber		true	integer (int32)	
simplicatorUrl		true	string	

Name	Description	Required	Schema	Default
migrationPerformed		true	boolean	
demoMode		true	boolean	
usingDockerInfra		true	boolean	
privateIp		true	string	

AccountWorkingEnvironmentResponse

Name	Description	Required	Schema	Default
publicId		true	string	
name		true	string	
workingEnvironment Type		true	string	

ActionRequired

Name	Description	Required	Schema	Default
actionType	The type of the Action	true	string	
parameters	The relevant parameters of the action	true	ActionRequiredParameters	
severity	Action Severity	true	string	

ActionRequiredParameters

Name	Description	Required	Schema	Default
aggregateName	Aggregate name	true	string	
numOfDisks	Number of disks relevant to the action	true	integer (int32)	
diskSize	The size of the disks needed	true	Capacity	
volumeNames	A limited list of volumes on the aggregate	true	string array	
maxCapacity	The maximum capacity of the Cloud Volumes ONTAP instance	true	Capacity	
licenseExpiryDate	License expiry date	true	integer (int64)	
serialNumber	Platform Serial number	true	string	

Name	Description	Required	Schema	Default
volumeMoveParameters	Volume Move Parameters	false	VolumeMoveParameters	
workingEnvironmentId	Working environment public id	true	string	
licenseParameters	License and instance parameters	false	ChangeLicenseParameters	
resourcesToDelete	Resources to delete if not been utilized	false	ResourcesToDelete	
instances	Instances info	true	InstanceNameIdAndType array	
moreInfo	More info	false	string	
providerVolumeType	Provider volume type	false	string	
volumeInfo	volume Information	false	VolumeInfo	
currentInstanceType	Current instance type	false	string	
composite		true	boolean	

AddAwsRegionsRequest

Name	Description	Required	Schema	Default
newRegions		true	[List[Region]]	

AddDisksToAggregateRequest

Name	Description	Required	Schema	Default
numberOfDisks	Number of Disks	true	integer (int32)	

AddInstanceTypesRequest

Name	Description	Required	Schema	Default
newInstanceTypes		true	string array	

AddPortalUserRequest

Name	Description	Required	Schema	Default
email	User email address	true	string	
roleId	Role ID of the user	true	string	
tenantId	Tenant ID of the user	false	string	

AddTenantRequest

Name	Description	Required	Schema	Default
name	Tenant name	true	string	
description	Tenant description	false	string	
costCenter	Tenant cost center	false	string	
nssKeys	NSS keys	false	SetNssKeysRequest	

AggregateResponse

Name	Description	Required	Schema	Default
name	Aggregate name	true	string	
availableCapacity	Available capacity	true	Capacity	
totalCapacity	Total capacity	true	Capacity	
usedCapacity	Used capacity	true	Capacity	
volumes	Volumes	true	Volume array	
providerVolumes	Provider volumes	true	ProviderVolumeResponse array	
disks	Disks	true	Disk array	
state	State	true	string	
encryptionType	Encryption Type	true	string	
encryptionKeyId	Encryption Key	false	string	
homeNode	Home node	true	string	
ownerNode	Owner node	true	string	
capacityTier	Capacity tier	false	enum (S3, Blob, cloudStorage)	
capacityTierUsed	Object store used	false	Capacity	
sidlEnabled	SIDL enabled	true	boolean	
snaplockType	Snaplock type	true	enum (non_snaplock, compliance, enterprise)	
root		true	boolean	

AllRelationships

Name	Description	Required	Schema	Default
relationships		true	SourceTarget array	

AllowedValuesForVolumesListFilter

Name	Description	Required	Schema	Default
volumeTypes		true	string array	
diskTypes		true	string array	
svmNames		true	string array	
volumeStatus		true	string array	

AssociatedSubscription

Name	Description	Required	Schema	Default
subscriptionId		true	string	
name		true	string	
default		true	boolean	
saasSubscriptionId		false	string	
highAvailabilityEnabled		false	boolean	

AssumeRole

Name	Description	Required	Schema	Default
roleName		true	string	
accountId		true	string	
gov		true	boolean	

AsupConfiguration

Name	Description	Required	Schema	Default
enabled		true	boolean	
site		true	string	
company		true	string	
hostName		true	string	
os		true	string	
schedule		true	[AsupSchedule](#)	
url		true	string	

AsupConfigurationRequest

Name	Description	Required	Schema	Default
enabled		true	boolean	

Name	Description	Required	Schema	Default
schedule		false	AsupSchedule	

AsupInterval

Name	Description	Required	Schema	Default
length		true	integer (int32)	
unit		true	string	

AsupSchedule

Name	Description	Required	Schema	Default
dayOfWeek		true	integer (int32)	
hourOfDay		true	integer (int32)	
interval		true	AsupInterval	
minuteOfHour		true	integer (int32)	

AuditGroupSummary

Name	Description	Required	Schema	Default
_id		false	integer (int32)	
id	Audit group public ID	false	string	
requestId	Request ID of action associated with audit group	false	string	
startDate	Start date	false	integer (int64)	
endDate	End date	false	integer (int64)	
actionName	Audit group name	false	string	
status	Audit group status	false	string	
userName	Name of user who performed the action	false	string	
tenantName	Name of tenant	false	string	
workingEnvironmentName	Name of working environment related to the user action	false	string	
actionParameters	Parameters of the user action	false	string	
records	List of audit records	false	AuditGroupSummary Record array	

Name	Description	Required	Schema	Default
errorMessage	Audit failure information (if relevant)	false	string	
version	Version of Cloud Manager used to create this audit	false	string	
parentId		false	integer (int32)	
userId		false	string	
workingEnvironmentId		false	string	
containsFailedRecords		false	boolean	
containsRecords		false	boolean	

AuditGroupSummaryRecord

Name	Description	Required	Schema	Default
id	Audit record public ID	false	string	
date	Date	false	integer (int64)	
actionName	Action	false	string	
status	Status	false	string	
parameters	Action parameters	false	string	
errorMessage	Audit failure information (if relevant)	false	string	
count	Aggregated count of similar records	false	integer (int32)	

Auth0Information

Name	Description	Required	Schema	Default
domain		true	string	
audience		true	string	
clientId		true	string	

AuthRequest

Name	Description	Required	Schema	Default
email		true	string	

Name	Description	Required	Schema	Default
password		true	string	

AvailableIpsResponse

Name	Description	Required	Schema	Default
availableIps		true	integer (int32)	

AwsAccessKeys

Name	Description	Required	Schema	Default
accessKey		false	string	
secretKey		false	string	

AwsAccountRequest

Name	Description	Required	Schema	Default
accountName		true	string	
providerKeys		true	AwsKeysRequest	
subscriptionId		false	string	

AwsAccountResponse

Name	Description	Required	Schema	Default
publicId		true	string	
accountName		true	string	
accountType		true	string	
accountId		true	string	
accessKey		true	string	
assumeRole		false	AssumeRole	
occmRole		false	string	
vsaList		true	AccountWorkingEnvironmentResponse array	
subscriptionId		false	string	

AwsCloudBackupSetupRequest

Name	Description	Required	Schema	Default
awsAccessKeys	AWS credentials to used by S3 Bucket	true	AwsAccessKeys	

413

Name	Description	Required	Schema	Default
ipSpace	Ip Space	false	string	

AwsDisksConstraints

Name	Description	Required	Schema	Default
numReservedDisksSingleNode		true	integer (int32)	
numReservedDisksHa		true	integer (int32)	
maxDisksSingleNode		true	integer (int32)	
maxDisksHa		true	integer (int32)	
numDisksWarnSingleNode		true	integer (int32)	
numDisksWarnHa		true	integer (int32)	
aggregatesNumToDiskSize		true	AggregateNumToDiskSize array	
maxDisksSingleNodeKvm		true	integer (int32)	
maxDisksHaKvm		true	integer (int32)	
deltaDiskWarn		true	integer (int32)	

AggregateNumToDiskSize

Name	Description	Required	Schema	Default
from		false	integer (int32)	
to		true	integer (int32)	
stepsUp		true	integer (int32)	

AwsEncryption

Name	Description	Required	Schema	Default
kmsKeyId		false	string	
kmsKeyArn		false	string	

AwsEncryptionKey

Name	Description	Required	Schema	Default
alias		false	string	
keyId		true	string	

Name	Description	Required	Schema	Default
status		true	string	
validTo		false	integer (int64)	
origin		false	string	
default		true	boolean	

AwsHaFloatingIpValidationData

Name	Description	Required	Schema	Default
floatingIps		true	AwsHaFloatingIpVali dationData:FloatingI ps	
routeTablesIds		true	string array	
vpcId		true	string	
region		true	string	
roleArn		false	string	
cloudProviderAccou ntId		false	string	

AwsHaFloatingIpValidationResponse

Name	Description	Required	Schema	Default
result		true	boolean	
reasons		true	string array	

AwsKeysRequest

Name	Description	Required	Schema	Default
awsAccessKeys		false	AwsAccessKeys	
assumeRoleArn		false	string	

AwsProperties

Name	Description	Required	Schema	Default
regionName		true	string	
availabilityZones		true	string array	
instances		true	InstanceResponse array	
vpc		true	VpcBasicResponse	
accountId		true	string	

Name	Description	Required	Schema	Default
roleArn		false	string	
cloudProviderAccountId		false	string	
bootDiskSize		false	integer (int32)	
outpostArn		false	string	
coreDiskExists		false	boolean	

AwsTag

Name	Description	Required	Schema	Default
tagKey		true	string	
tagValue		false	string	

AwsValidateSubscribedToOntapCloudRequest

Name	Description	Required	Schema	Default
region		true	string	
subnetId		true	string	
vsaMetadata		true	VsaMetadataRequest	
roleArn		false	string	
cloudProviderAccount		false	string	
securityGroupId		false	string	

AwsValidateSubscribedToOntapCloudResponse

Name	Description	Required	Schema	Default
failureInfo		false	string	
subscribed		true	boolean	

AzureAccountRequest

Name	Description	Required	Schema	Default
accountName		true	string	
providerKeys		true	AzureKeys	

AzureAccountResponse

Name	Description	Required	Schema	Default
publicId		true	string	
accountName		true	string	
accountType		true	string	
tenantId		true	string	
applicationId		true	string	
occmRole		false	string	
vsaList		true	AccountWorkingEnvironmentResponse array	

AzureAvailabilitySet

Name	Description	Required	Schema	Default
faultDomain		true	integer (int32)	
updateDomain		true	integer (int32)	

AzureAvailabilityZoneResponse

Name	Description	Required	Schema	Default
region	region value	true	string	
zones	zone values	true	integer (int32) array	

AzureBlobContainer

Name	Description	Required	Schema	Default
id		true	string	
name		true	string	

AzureCloudBackupSetupRequest

Name	Description	Required	Schema	Default
rgName	Azure Resource Group Name -by default will create new rg	false	string	
ipSpace	Ip Space	false	string	
region	Region -by default Cloud Manager region	false	string	

Name	Description	Required	Schema	Default
subscriptionId	Subscription Id -by default Cloud Manager azure subscription	false	string	

AzureDataDiskResponse

Name	Description	Required	Schema	Default
name		true	string	
diskSizeGB		true	integer (int32)	
lun		true	integer (int32)	
id		true	string	
caching		true	string	
accountType		true	string	
managed		true	boolean	
encryptionSet		false	string	

AzureDiskSize

Name	Description	Required	Schema	Default
size		true	Capacity	
description		true	string	
supportedOccmLicenses		true	string array	
default		true	boolean	

AzureDisksConstraints

Name	Description	Required	Schema	Default
numReservedDisksSingleNode		true	integer (int32)	

AzureEncryption

Name	Description	Required	Schema	Default
key		true	string	
vaultName		true	string	

AzureHaNodeInfo

Name	Description	Required	Schema	Default
instanceName		true	string	
instanceId		true	string	
primaryIp		true	string	
state		true	string	
serialNumber		true	string	
availabilitySet		true	[AzureAvailabilitySet](#)	

AzureHaParameters

Name	Description	Required	Schema	Default
platformSerialNumberNode1		false	string	
platformSerialNumberNode2		false	string	
enableHttps		true	boolean	

AzureHaProperties

Name	Description	Required	Schema	Default
loadBalancerName		true	string	
haEnabledOnLbRules		true	boolean	
node1Info		true	[AzureHaNodeInfo](#)	
node2Info		true	[AzureHaNodeInfo](#)	
applicationSecurityGroupName		false	string	

AzureKey

Name	Description	Required	Schema	Default
keyName	key name	true	string	
kid	key id	true	string	

AzureKeyVault

Name	Description	Required	Schema	Default
name	vault name	true	string	
resourceGroup	resource group	true	string	
location	location	true	string	

Name	Description	Required	Schema	Default
vaultUri	vault uri	true	string	

AzureKeys

Name	Description	Required	Schema	Default
tenantId		true	string	
applicationId		true	string	
applicationKey		true	string	

AzureNetworkExtendedResponse

Name	Description	Required	Schema	Default
virtualNetworks		true	AzureVirtualNetwork Response array	
securityGroups		true	AzureSecurityGroup Response array	

AzureNetworkRequirementsResponse

Name	Description	Required	Schema	Default
vsaMinimumRequiredIps		true	integer (int32)	
haVsaMinimumRequiredIps		true	integer (int32)	

AzureRegionResponse

Name	Description	Required	Schema	Default
displayName		true	string	
name		true	string	
vnets		false	AzureNetworkExtendedResponse	

AzureResourceGroupByRegionResponse

Name	Description	Required	Schema	Default
name		true	string	
id		true	string	

AzureResourceGroupResponse

Name	Description	Required	Schema	Default
name		true	string	
location		true	string	
tags		true	Map[string,string]	

AzureSecurityGroupResponse

Name	Description	Required	Schema	Default
id	Security Group Id	true	string	
name	Security Group Name	true	string	
resourceGroup	Resource Group	true	string	

AzureStorageAccountTypeResponse

Name	Description	Required	Schema	Default
diskType		true	string	
availabilityTypes		true	string array	
sizes		true	AzureDiskSize array	

AzureSubnetResponse

Name	Description	Required	Schema	Default
id	Subnet Id	true	string	
cidr	CIDR	true	string	
name	Subnet name	true	string	
availableIps	The number of available IPs on the subnet	true	integer (int32)	
minimumRequiredIps	The minimum needed IP addresses for the Cloud Volumes ONTAP creation	true	integer (int32)	

AzureTag

Name	Description	Required	Schema	Default
tagKey		true	string	
tagValue		false	string	

AzureValidateSubscribedToOntapCloudRequest

Name	Description	Required	Schema	Default
region		true	string	
vsaMetadata		true	VsaMetadataRequest	
subscriptionId		false	string	
cloudProviderAccount		false	string	

AzureValidateSubscribedToOntapCloudResponse

Name	Description	Required	Schema	Default
failureInfo		false	string	
subscribed		true	boolean	

AzureVirtualNetworkCidrData

Name	Description	Required	Schema	Default
cidr	CIDR	true	string	
subnets	Subnets	true	AzureSubnetResponse array	

AzureVirtualNetworkResponse

Name	Description	Required	Schema	Default
name	Virtual Network Name	true	string	
id	Virtual Network ID	true	string	
cidrs	CIDRs	true	AzureVirtualNetworkCidrData array	
resourceGroup	Resource Group	true	string	
tags	Tags	true	TagResponse array	

AzureVsaWorkingEnvironmentResponse

Name	Description	Required	Schema	Default
publicId		true	string	
name		true	string	
tenantId		true	string	
svmName		false	string	

Name	Description	Required	Schema	Default
creatorUserEmail		true	string	
status		false	StatusProperties	
providerProperties		false	ProviderProperties	
reservedSize		false	Capacity	
clusterProperties		false	VsaClusterPropertie s	
ontapClusterProperti es		false	OntapClusterPropert ies	
cloudProviderName		true	string	
snapshotPolicies		false	SnapshotPolicy array	
actionsRequired		false	ActionRequired array	
activeActions	Actions currently being performed on this working environment	false	string array	
replicationProperties		false	ReplicationPropertie s	
schedules		false	VsaSchedule array	
svms		false	Svm array	
workingEnvironment Type		true	string	
supportRegistrationP roperties		false	SupportRegistration Properties	
supportRegistrationI nformation		false	SupportRegistrationI nformation array	
capacityFeatures		false	CapacityFeatures	
encryptionProperties		false	EncryptionProperties	
supportedFeatures		false	SupportedFeatures	
haProperties		false	AzureHaProperties	
fpolicyProperties		false	FpolicyProperties	
saasProperties		false	CvoSaasProperties	
cbsProperties		false	CbsPropertiesWithR eason	
complianceProperties		false	CloudComplianceSt atusResponse	

Name	Description	Required	Schema	Default
monitoringProperties		false	MonitoringStatusResponse	
licensesInformation		false	LicenseInformation array	
hA		true	boolean	

BroadcastDomainInfo

Name	Description	Required	Schema	Default
broadcastDomain		true	string	
ipSpace		true	string	
mtu		true	integer (int32)	

BucketAdditionalData

Name	Description	Required	Schema	Default
bucketName		true	string	
tieringLevel		true	string	
accessData		true	string	

BucketInformation

Name	Description	Required	Schema	Default
bucketName	Bucket's name	true	string	
fullPath	Object's full path	true	string	

BucketsPolicyAndTieringInfoRequest

Name	Description	Required	Schema	Default
buckets		true	string array	

CIFSConfigurationRequest

Name	Description	Required	Schema	Default
dnsDomain	DNS domain name	true	string	
ipAddresses	DNS server ip addresses	true	string array	
netBIOS	CIFS server NetBIOS name	true	string	

Name	Description	Required	Schema	Default
organizationalUnit	Organizational Unit to register in	true	string	
activeDirectoryDomain	Active Directory domain name	true	string	
activeDirectoryUsername	Active Directory username	true	string	
activeDirectoryPassword	Active Directory password	true	string	
svmName	SVM name	false	string	

CIFSConfigurationResponse

Name	Description	Required	Schema	Default
dnsDomain	DNS domain name	true	string	
activeDirectoryDomain	Active Directory domain name	true	string	
ipAddresses	DNS server ip addresses	true	string array	
netBIOS	CIFS server NetBIOS name	true	string	
organizationalUnit	Organizational Unit to register in	true	string	
authenticationType	Authentication type	true	string	

CIFSDeleteRequest

Name	Description	Required	Schema	Default
activeDirectoryUsername	Active Directory username	false	string	
activeDirectoryPassword	Active Directory password	false	string	
svmName	SVM name	false	string	

CIFSWorkgroupConfigurationRequest

Name	Description	Required	Schema	Default
serverName	Workgroup name	true	string	
workgroupName	Workgroup name	true	string	
svmName	SVM name	false	string	

Capacity

Name	Description	Required	Schema	Default
size	Size	true	number (double)	
unit	Unit	true	enum (Byte, KB, MB, GB, TB)	

CapacityFeatures

Name	Description	Required	Schema	Default
providerVolumesType		true	ProviderVolumeType Response array	
defaultProviderVolumeType		true	DefaultProviderVolume me	
supportedCapacityTiers		true	SupportedCapacityTiers	
maxDisksPerAggregate		true	integer (int32)	
existingIops		true	integer (int32) array	

CapacityTierInfo

Name	Description	Required	Schema	Default
capacityTierUsedSize		true	Capacity	
s3BucketName		true	string	
tierLevel		true	string	

CbsPropertiesWithReason

Name	Description	Required	Schema	Default
cbsBackupStatus		true	string	
cbsRules		true	CbsSchedule array	
numberOfBackedUpVolumes		true	integer (int32)	
objectStoreName		false	string	
providerSpecific		false	ProviderSpecific	
cbsPolicyName		false	string	
usedCapacity		false	Capacity	
ipSpace		false	string	
region		false	string	

Name	Description	Required	Schema	Default
providerAccountName		false	string	
exclusionReason		false	string	

CbsSchedule

Name	Description	Required	Schema	Default
snapmirrorLabel		true	string	
snapshotsToKeep		true	integer (int32)	

CertificateResponse

Name	Description	Required	Schema	Default
publicId		true	string	
directIssuerName		true	string	
subjectName		true	string	
startDate		true	integer (int64)	
endDate		true	integer (int64)	
serialNumber		true	string	
certificate		true	string	
certificateType		true	string	

CertificateSigningRequest

Name	Description	Required	Schema	Default
commonName		true	string	

ChangeLicenseParameters

Name	Description	Required	Schema	Default
newLicenseType		true	[OntapLicenseType](#)	
newInstanceType		true	string	

ChangeNetworkOptimizationRequest

Name	Description	Required	Schema	Default
optimize		true	boolean	

ChangeSerialNumberRequest

Name	Description	Required	Schema	Default
nodeOne		true	string	
nodeTwo		false	string	

ChangeTierLevelRequest

Name	Description	Required	Schema	Default
level	Change tier level	true	enum (normal, ia, ia-single, intelligent, cool, nearline, coldline, standard)	

ChangeVolumeTierRequest

Name	Description	Required	Schema	Default
aggregateName	Target aggregate name	true	string	
numOfDisks	Number of new disks needed	true	integer (int32)	
newAggregate	Is it a newly created aggregate	true	boolean	
newDiskTypeName	New disk type name	true	string	
newCapacityTier	New capacity tier	false	enum (S3, Blob, cloudStorage)	
iops	Provisioned IOPS	false	integer (int32)	
throughput	Provisioned Throughput	false	integer (int32)	
newTieringPolicy	New tiering policy	false	enum (none, snapshot_only, auto, all)	

CifsShareInfo

Name	Description	Required	Schema	Default
shareName	Share name	true	string	
accessControlList	List of CIFS share permissions	true	CifsShareUserPermissions array	
vscanFileOpPolicy	Vscan file operations profile	false	string	

CifsShareUserPermissions

Name	Description	Required	Schema	Default
permission	CIFS share permission type	true	string	
users	List of users with the permission	true	string array	

CloudAccountResponse

Name	Description	Required	Schema	Default
cloudAccountId		true	string	
provider		true	string	
subscriptionId		false	string	

CloudCentralAuditGroupResponse

Name	Description	Required	Schema	Default
accountId		true	string	
principalId		true	string	
agentId		true	string	
agentName		true	string	
resourceId		false	string	
resourceName		false	string	
action		true	string	
startTime		true	integer (int64)	
endTime		false	integer (int64)	
status		true	string	
requestId		true	string	
service		true	string	
errors		false	string array	
requestData		false	string	
hasRecords		true	boolean	
hasFailedRecords		true	boolean	
lastModified		true	integer (int64)	

CloudCentralAuditOptionsEntryResponse

Name	Description	Required	Schema	Default
column		true	string	
identifier		true	string	
label		false	string	

CloudCentralAuditOptionsResponse

Name	Description	Required	Schema	Default
service		true	CloudCentralAuditOptionsEntryResponse array	
action		true	CloudCentralAuditOptionsEntryResponse array	
agent		true	CloudCentralAuditOptionsEntryResponse array	
resource		true	CloudCentralAuditOptionsEntryResponse array	
user		true	CloudCentralAuditOptionsEntryResponse array	

CloudCentralAuditRecordResponse

Name	Description	Required	Schema	Default
creationTime		false	integer (int64)	
action		false	string	
status		false	string	
data		false	string	
errors		false	string array	
recordId		false	integer (int64)	
count		false	integer (int64)	

CloudComplianceInfoResponse

Name	Description	Required	Schema	Default
status		true	enum (ACTIVE, DEPLOYING, NOT_ACTIVE, DISABLED)	

Name	Description	Required	Schema	Default
widgetUrl		false	string	
privateIp		false	string	
healthy		true	boolean	
lastDeploymentError		false	string	
containerActive		true	boolean	

CloudComplianceStatusResponse

Name	Description	Required	Schema	Default
scanStatus		true	enum (SCAN_ENABLED, SCAN_DISABLED, DEPLOYING, FEATURE_DISABLED, UNKNOWN)	
complianceStatus		false	[ComplianceExtendedStatusResponse](#)	
lastDeploymentError		false	string	
complianceBackupStatus		false	string	

CloudOntapManifest

Name	Description	Required	Schema	Default
ontap_version		true	string	
ontap_image_versions_allowed_to_upgrade_from		true	string array	
encryption_enabled_instance_types		true	string array	
license_to_ami_mapping		true	[LicenseToAmis](#) array	

CloudProviderAccountResponse

Name	Description	Required	Schema	Default
awsAccounts		true	[AwsAccountResponse](#) array	
azureAccounts		true	[AzureAccountResponse](#) array	
gcpStorageAccounts		true	[GcpAccountResponse](#) array	

Name	Description	Required	Schema	Default
nssAccounts		true	NssAccountResponse array	

CloudResourceTag

Name	Description	Required	Schema	Default
tagKey		true	string	
tagValue		false	string	

CloudSyncConstants

Name	Description	Required	Schema	Default
reminderPeriod		true	integer (int32)	
warningPeriod		true	integer (int32)	

CloudSyncLicenseInformation

Name	Description	Required	Schema	Default
cloudSyncLicenseTypes	Cloud Sync License types	true	string array	
licenseExpirationDate	Cloud Sync License Expiration Date	false	integer (int64)	

CloudSyncProperties

Name	Description	Required	Schema	Default
status		false	CloudSyncStatus	
dataBrokerProperties		false	DataBrokerProperties	
s3Location		false	string	
relationships		true	CloudSyncRelationship array	
synced		true	boolean	

CloudSyncRelationship

Name	Description	Required	Schema	Default
volumeName		true	string	
svmName		true	string	
relationshipStatus		true	string	

Name	Description	Required	Schema	Default
s3Location		true	string	
id		true	string	
progress		true	integer (int32)	
failureMessage		false	string	

CloudSyncStatus

Name	Description	Required	Schema	Default
status		true	string	
failureMessage		false	string	

ClusterCredentialsRequest

Name	Description	Required	Schema	Default
userName		true	string	
password		true	string	

ClusterInfo

Name	Description	Required	Schema	Default
serialNumber		true	string	
clusterName		true	string	
clusterUuid		true	string	

ClusterInfoResponse

Name	Description	Required	Schema	Default
serialNumber		true	string	
clusterName		true	string	
clusterUuid		true	string	
ontapVersion		true	string	
nodeModels		true	string array	
clusterIp		true	string	
admin		true	boolean	

ComplianceExtendedStatusResponse

Name	Description	Required	Schema	Default
sensitivePersonalHits		true	integer (int32)	
personalHits		true	integer (int32)	
nonSensitiveHits		true	integer (int32)	
scanStatus		false	ComplianceScanStatusResponse	

ComplianceScanStatusResponse

Name	Description	Required	Schema	Default
scanned		true	integer (int32)	
notScanned		true	integer (int32)	
volumes		true	ComplianceScanStatusVolumeResponse array	

ComplianceScanStatusVolumeResponse

Name	Description	Required	Schema	Default
name		true	string	
status		true	string	
error		false	string	
scopeId		false	integer (int32)	

ConfigResponse

Name	Description	Required	Schema	Default
uri		true	string	
status		true	Status	
redirected		true	boolean	
pollingIntervalSeconds		true	integer (int64)	
debugLogLevel		true	string	
cacheConfig		true	string	
startInstanceDelaySeconds		true	integer (int64)	

ConfigValuesResponse

Name	Description	Required	Schema	Default
simplicatorUri		true	string	
proxyUri		true	string	
debugLogLevel		true	string	
cacheConfig		true	string	
keyManagerPort		true	integer (int32)	
ipaManualUrl		true	string	
certificateValidityPeriod		true	integer (int32)	
maxAggregateFreeSpacePercentage		true	integer (int32)	
asupSite		true	string	
asupCompany		true	string	
maxVolumeGrowSizePercentage		true	integer (int32)	
autoVsaCapacityManagement		true	boolean	
useVolumeViewAsDefault		true	boolean	
proxyUserName		true	string	
proxyPassword		true	string	
proxyDomain		true	string	
autoUpgrade		true	boolean	
cotRollback		true	boolean	
cloudSyncConstants		true	CloudSyncConstants	
licenseMaxCapacityUsedPercentage		true	integer (int32)	
s3EbsRatio		true	integer (int32)	
ebsSizeToPiopsRatio		true	integer (int32)	
autoOntapUpgrade		true	boolean	
overrideCifsLocks		true	boolean	
usePrivateLink		true	boolean	
directApiTraffic		true	boolean	
useAccelerationForImageDownload		true	boolean	

Name	Description	Required	Schema	Default
maxDownloadSessions		true	integer (int32)	

ConfigValuesUpdateRequest

Name	Description	Required	Schema	Default
simplicatorUri		false	string	
proxyUri		false	string	
debugLogLevel		false	string	
cacheConfig		false	string	
keyManagerPort		false	integer (int32)	
maxAggregateFreeSpacePercentage		false	integer (int32)	
maxVolumeGrowSizePercentage		false	integer (int32)	
autoVsaCapacityManagement		false	boolean	
proxyUserName		false	string	
proxyPassword		false	string	
proxyDomain		false	string	
autoUpgrade		false	boolean	
cotRollback		false	boolean	
s3EbsRatio		false	integer (int32)	
autoOntapUpgrade		false	boolean	
overrideCifsLocks		false	boolean	
usePrivateLink		false	boolean	
directApiTraffic		false	boolean	
useAccelerationForImageDownload		false	boolean	
maxDownloadSessions		false	integer (int32)	

Configuration

Name	Description	Required	Schema	Default
ontapVersion		true	string	
license		true	OntapLicenseType	

Name	Description	Required	Schema	Default
instanceType		true	string	
region		true	[Region](#)	
defaultInstance		true	boolean	
features		true	string array	
upgradeableFrom		true	string array	

ConfigureS3Request

Name	Description	Required	Schema	Default
bucketName		true	string	
bucketPrefix		true	string	

CostByService

Name	Description	Required	Schema	Default
name	Name of the cost domain (compute, disk/blob storage, object storage, data transfer	false	string	
total	Saving for this month for that cost domain	false	[Money](#)	
costByUsage	Cost domain breakdown	false	[CostByUsage](#) array	

CostByTime

Name	Description	Required	Schema	Default
start	Cost period start date	false	string	
end	Cost period end date	false	string	
estimated	Is the cost estimated	false	boolean	
total	Total money saved	false	[Money](#)	
costByService	Month cost and usage details	false	[CostByService](#) array	

CostByUsage

Name	Description	Required	Schema	Default
name	Breakdown element name	false	string	
cost	Saving for that breakdown element	false	Money	
usage	Usage details for that breakdown element	false	Usage	

CreateAwsHaWorkingEnvironmentRequest

Name	Description	Required	Schema	Default
name		true	string	
svmPassword		true	string	
username		false	string	
vpcId		true	string	
description		false	string	
region		true	string	
tenantId		true	string	
volume	Optionally create a volume with this working environment	false	VsaVolumeOnNewVsaCreateRequest	
ebsVolumeSize	EBS volume size	true	Capacity	
ebsVolumeType	EBS volume type	true	enum (gp2, st1, io1, gp3)	
vsaMetadata		true	VsaMetadataRequest	
dataEncryptionType	Type of encryption to use for this working environment	true	enum (NONE, AWS, ONTAP)	
ontapEncryptionParameters	Parameters required if using ontap encryption	false	OntapEncryption	
awsEncryptionParameters	Parameters required if using aws encryption	false	AwsEncryption	
haParams		true	HaParameters	
securityGroupId		false	string	

Name	Description	Required	Schema	Default
awsTags	Optionally provide up to four key-value pairs with which to tag all AWS entities created by Cloud Manager	false	AwsTag array	
cifsConfigurationRequest		false	CIFSConfigurationRequest	
optimizedNetworkUtilization	Use optimized network utilization	false	boolean	
clusterKeyPairName	Support SSH using key-pair	false	string	
instanceTenancy	Instance tenancy	false	enum (default, dedicated)	
failedToCreateWorkingEnvironmentId	Public ID of failed-to-create working environment	false	string	
capacityTier	Capacity tier	false	enum (S3)	
iops	Provisioned IOPS	false	integer (int32)	
throughput	Provisioned Throughput	false	integer (int32)	
packageName	Pre-configured package name	false	string	
instanceProfileName	Instance profile name	false	string	
svmName	Svm name	false	string	
wormRequest	WORM request	false	WormRequest	
cloudProviderAccount	Cloud Provider Account	false	string	
nssAccount	Nss Account	false	string	
saasSubscriptionId	SaaS Subscription ID	false	string	
backupVolumesToCbs	Automatically backup all volumes to S3	false	boolean	
tierLevel	Tier Level	false	enum (normal, ia, ia-single, intelligent)	
enableMonitoring	Enable monitoring	true	boolean	
enableServices	Enable services	false	string array	
writingSpeedState	Writing speed state	false	string	

Name	Description	Required	Schema	Default
ontapEncryptionDefined		true	boolean	

CreateAzureVSAWorkingEnvironmentRequest

Name	Description	Required	Schema	Default
name		true	string	
svmPassword		true	string	
username		false	string	
vnetId		true	string	
cidr		true	string	
description		false	string	
volume	Optionally create a volume with this working environment	false	VsaVolumeOnNewVsaCreateRequest	
region		true	string	
tenantId		true	string	
subnetId	Subnet ID for a single node cluster	true	string	
dataEncryptionType	Type of encryption to use for this working environment	true	enum (NONE, AZURE, ONTAP)	
ontapEncryptionParameters	Parameters required if using ontap encryption	false	OntapEncryption	
securityGroupId		false	string	
serialNumber		false	string	
cifsConfigurationRequest		false	CIFSConfigurationRequest	
diskSize	Disk size	true	Capacity	
storageType	Storage type	true	enum (Standard_LRS, Premium_LRS , StandardSSD_LRS)	
azureTags	Optionally provide up to four key-value pairs with which to tag the Resource group created by Cloud Manager	false	AzureTag array	

Name	Description	Required	Schema	Default
writingSpeedState	Writing speed state	false	string	
vsaMetadata		true	VsaMetadataRequest	
failedToCreateWorkingEnvironmentId	Public ID of failed-to-create working environment	false	string	
packageName	Pre-configured package name	false	string	
vhdImageRequest	Optionally provide parameters for VHD image deployment	false	VhdImageRequest	
resourceGroup	Custom resource group name	false	string	
subscriptionId	Subscription Id	false	string	
capacityTier	Capacity tier	false	enum (Blob)	
haParams		false	AzureHaParameters	
allowDeployInExistingRg	Allow Deploy In Existing Resource Group	false	boolean	
svmName	Svm name	false	string	
wormRequest	WORM request	false	WormRequest	
cloudProviderAccount	Cloud Provider Account	false	string	
nssAccount	Nss Account	false	string	
saasSubscriptionId	SaaS Subscription ID	false	string	
enableCompliance	Enable compliance	true	boolean	
storageAccountPrefix	Storage Account prefix	false	string	
backupVolumesToCbs	Automatically backup all volumes to cloud	false	boolean	
tierLevel	Tier Level	false	enum (normal, cool)	
availabilityZone	Availability Zone	false	[Object]	
azureEncryptionParameters	Parameters required if using azure encryption with custom key	false	AzureEncryption	
enableServices	Enable services	false	string array	

CreateBlobContainerRequest

Name	Description	Required	Schema	Default
subscriptionId		false	string	
cloudProviderAccountId		false	string	
resourceGroupName		true	string	
storageAccountName		true	string	
containerName		true	string	

CreateBucketRequest

Name	Description	Required	Schema	Default
projectId		false	string	
bucketName		true	string	
location		true	string	
storageClass		true	string	
kmsKeyName		false	string	

CreateCifsShareInfoRequest

Name	Description	Required	Schema	Default
shareName	Share name	true	string	
accessControl	CIFS share permissions	true	[CifsShareUserPermissions](#)	

CreateCloudComplianceByWesRequest

Name	Description	Required	Schema	Default
workingEnvironmentIds		true	string array	
enableAnf		true	boolean	

CreateFilesystemRequest

Name	Description	Required	Schema	Default
name		true	string	
svmPassword		false	string	
fsxAdminPassword		true	string	
vpcId		true	string	

Name	Description	Required	Schema	Default
region		true	string	
ebsVolumeSize	EBS volume size	true	Capacity	
ebsVolumeType	EBS volume type	true	enum (gp2, st1, io1, io2)	
instanceType	Instance Type	true	string	
haParams		true	HaParameters	
node1CustomerData Eni		true	NetworkInterfaceInfo	
node2CustomerData Eni		true	NetworkInterfaceInfo	
node1SerialNumber		true	string	
node2SerialNumber		true	string	
awsEncryptionPara meters	Parameters required if using aws encryption - system	false	AwsEncryption	
dataAwsEncryptionP arameters	Parameters required if using aws encryption - data	false	AwsEncryption	
securityGroupId		false	string	
internalSecurityGrou pId		false	string	
externalSecurityGro upId		false	string	
iops	Provisioned IOPS	false	integer (int32)	
instanceProfileName	Instance profile name	false	string	
tierLevel	Tier Level	false	enum (normal, ia, ia-single, intelligent)	
customOntapVersion	Custom Ontap Version	false	string	
svmAdminPassword	SVM admin password	false	string	
awsTags	Optionally provide up to four key-value pairs with which to tag all AWS entities created by Cloud Manager	false	AwsTag array	
tieringBucketName	Tiering bucket name	false	string	
mediatorPassword	Mediator password	false	string	

CreateGcpVsaWorkingEnvironmentRequest

Name	Description	Required	Schema	Default
name		true	string	
svmPassword		true	string	
username		false	string	
vpcId		true	string	
volume	Optionally create a volume with this working environment	false	VsaVolumeOnNewVsaCreateRequest	
region		true	string	
tenantId		true	string	
subnetPath	Subnet path for a single node cluster	false	string	
subnetId	Subnet ID for a single node cluster	true	string	
firewallRule	Firewall name for a single node cluster	false	string	
firewallTagNameRule	Firewall tag name for a single node cluster	false	string	
dataEncryptionType	Type of encryption to use for this working environment	true	enum (GCP)	
securityGroupId		false	string	
vsaMetadata		true	VsaMetadataRequest	
cifsConfigurationRequest		false	CIFSConfigurationRequest	
serialNumber	Serial number for BYOL	false	string	
gcpVolumeSize	GCP volume size	true	Capacity	
gcpVolumeType	GCP volume type	true	enum (pd-standard, pd-ssd, pd-balanced)	
gcpLabels	Optionally provide up to four key-value pairs with which to all GCP entities created by Cloud Manager	false	GcpLabel array	
writingSpeedState	Writing speed state	false	string	

Name	Description	Required	Schema	Default
failedToCreateWorkingEnvironmentId	Public ID of failed-to-create working environment	false	string	
capacityTier	Capacity tier	false	enum (cloudStorage)	
packageName	Pre-configured package name	false	string	
svmName	Svm name	false	string	
wormRequest	WORM request	false	WormRequest	
nssAccount	NSS account	false	string	
gcpStorageAccount	Gcp Storage account	false	string	
gcpServiceAccount	Gcp Service account	false	string	
tierLevel	Gcp Available storage classes	false	enum (standard, nearline, coldline)	
saasSubscriptionId	SaaS Subscription ID	false	string	
cloudProviderAccount		false	string	
project	Gcp Optional Project	false	string	
gcpEncryptionParameters	Parameters required if using gcp encryption with custom key	false	GcpEncryption	
providedImage	Provided external CVO image	false	string	
providedMediatorImage	Provided external mediator image	false	string	
enableServices	Enable services	false	string array	
backupVolumesToCbs	Automatically backup all volumes to cloud	false	boolean	
haParams	Optional HA parameters for HA deployment	false	GcpHaParameters	
skipSvmManagementLif	SVM management Lif flag	true	boolean	

CreateIscsiInfoRequest

Name	Description	Required	Schema	Default
osName	Operating system	true	enum (windows, linux, vmware, windows_2008, windows_gpt)	
igroupCreationRequest	Igroup creation request	false	[IgroupCreationRequest](#)	
igroups	Igroups	false	string array	

CreateReplicationRequestToFsx

Name	Description	Required	Schema	Default
replicationRequest	Replication Request	true	[ReplicationToFsxRequest](#)	
replicationVolume	Replication volume	true	[FsxVolumeRequest](#)	

CreateReplicationRequestToOnPrem

Name	Description	Required	Schema	Default
replicationRequest	Replication Request	true	[ReplicationRequest](#)	
replicationVolume	Replication volume	true	[OnPremVolumeRequest](#)	

CreateReplicationRequestToVsa

Name	Description	Required	Schema	Default
replicationRequest	Replication Request	true	[ReplicationRequest](#)	
replicationVolume	Replication volume	true	[VsaVolumeRequest](#)	

CreateRequestParametersResponse

Name	Description	Required	Schema	Default
parameters		false	Map[string,any]	

CreateSvmHaRequest

Name	Description	Required	Schema	Default
svmName		true	string	
svmPassword		false	string	
subnet1Cidr		true	string	
subnet2Cidr		true	string	
dataFloatingIp		false	string	

Name	Description	Required	Schema	Default
svmMgmtFloatingIp		false	string	

CreateSyncRequest

Name	Description	Required	Schema	Default
volumeNames	Volume's name	true	string array	
s3Location	S3 path location (i.e. s3://BucketName/Folder1/Folder11), maximum length - 255 characters	true	string	
dataBrokerNetworkInformation	Data Broker Network information	true	DataBrokerNetworkInformation	

CreateVSAWorkingEnvironmentRequest

Name	Description	Required	Schema	Default
name		true	string	
svmPassword		true	string	
username		false	string	
vpcId		true	string	
description		false	string	
volume	Optionally create a volume with this working environment	false	VsaVolumeOnNewVsaCreateRequest	
region		true	string	
tenantId		true	string	
subnetId	Subnet ID for a single node cluster	true	string	
dataEncryptionType	Type of encryption to use for this working environment	true	enum (NONE, AWS, ONTAP)	
ontapEncryptionParameters	Parameters required if using ontap encryption	false	OntapEncryption	
awsEncryptionParameters	Parameters required if using aws encryption	false	AwsEncryption	
securityGroupId		false	string	
vsaMetadata		true	VsaMetadataRequest	

Name	Description	Required	Schema	Default
cifsConfigurationRequest		false	CIFSConfigurationRequest	
ebsVolumeSize	EBS volume size	true	Capacity	
ebsVolumeType	EBS volume type	true	enum (gp2, gp3, st1, sc1, io1)	
awsTags	Optionally provide up to four key-value pairs with which to tag all AWS entities created by Cloud Manager	false	AwsTag array	
writingSpeedState	Writing speed state	false	string	
optimizedNetworkUtilization	Use optimized network utilization	false	boolean	
clusterKeyPairName	Support SSH using key-pair	false	string	
instanceTenancy	Instance tenancy	false	enum (default, dedicated)	
failedToCreateWorkingEnvironmentId	Public ID of failed-to-create working environment	false	string	
capacityTier	Capacity tier	false	enum (S3)	
iops	Provisioned IOPS	false	integer (int32)	
throughput	Provisioned Throughput	false	integer (int32)	
packageName	Pre-configured package name	false	string	
instanceProfileName	Instance profile name	false	string	
svmName	Svm name	false	string	
wormRequest	WORM request	false	WormRequest	
cloudProviderAccount	Cloud Provider Account	false	string	
nssAccount	Nss Account	false	string	
saasSubscriptionId	SaaS Subscription ID	false	string	
backupVolumesToCbs	Automatically backup all volumes to S3	false	boolean	

Name	Description	Required	Schema	Default
tierLevel	Tier Level	false	enum (normal, ia, ia-single, intelligent)	
enableMonitoring	Enable monitoring	true	boolean	
enableServices	Enable services	false	string array	
ontapEncryptionDefined		true	boolean	

CronJobSchedule

Name	Description	Required	Schema	Default
name		true	string	
description		true	string	
months		true	integer (int32) array	
days		true	integer (int32) array	
weekDays		true	integer (int32) array	
hours		true	integer (int32) array	
minutes		true	integer (int32) array	

CronJobScheduleResponse

Name	Description	Required	Schema	Default
months	List of months	true	integer (int32) array	
days	List of days of the month	true	integer (int32) array	
weekDays	List of week days	true	integer (int32) array	
hours	List of hours	true	integer (int32) array	
minutes	List of minutes	true	integer (int32) array	

CsrResponse

Name	Description	Required	Schema	Default
csr		true	string	

CvoSaasProperties

Name	Description	Required	Schema	Default
subscription		false	SaasSubscription	
freeTrialExpiry		false	integer (int64)	
saasEnabled		false	boolean	

Name	Description	Required	Schema	Default
capacityLicensePackage		false	string	

CvsRegion

Name	Description	Required	Schema	Default
name		true	string	
code		true	string	
location		true	string	

DataBrokerNetworkInformation

Name	Description	Required	Schema	Default
vpcId	Data Broker Vpc Id	true	string	
subnetId	Data Broker Subnet Id	true	string	
keyPair	Data Broker Key pair	true	string	
region	Data Broker Region	true	string	

DataBrokerPlacement

Name	Description	Required	Schema	Default
vpcId		true	string	
subnetId		true	string	
instanceType		true	string	
instanceId		true	string	
keyPair		true	string	

DataBrokerProperties

Name	Description	Required	Schema	Default
id		true	string	
name		true	string	
dataBrokerPlacement		false	DataBrokerPlacement	

DefaultProviderVolume

Name	Description	Required	Schema	Default
size		true	Capacity	

450

Name	Description	Required	Schema	Default
diskType		true	string	
capacityTier		false	string	
iops		false	integer (int32)	

DescribeCvoSubscriptionResponse

Name	Description	Required	Schema	Default
subscription		false	[SubscriptionRespon se](#)	
freeTrialExpiry		false	integer (int64)	

DiscoveredAwsHaResponse

Name	Description	Required	Schema	Default
name		true	string	
publicId		true	string	
region		true	string	
vpcName		true	string	
vpcId		true	string	
availabilityZones		true	string array	
subnetIds		true	string array	
stackName		true	string	
stackId		true	string	
clusterAddress		true	string	
recoverable		true	boolean	
byol		true	boolean	
registered		true	boolean	

DiscoveredAzureHaResponse

Name	Description	Required	Schema	Default
name		true	string	
publicId		true	string	
region		true	string	
vnetName		true	string	
vnetId		true	string	
subnetId		true	string	

Name	Description	Required	Schema	Default
subnetName		true	string	
resourceGroup		true	string	
clusterAddress		true	string	
recoverable		true	boolean	
byol		true	boolean	
registered		true	boolean	

DiscoveredAzureVSAResponse

Name	Description	Required	Schema	Default
name		true	string	
id		true	string	
publicId		true	string	
region		true	string	
vnetName		true	string	
vnetId		true	string	
subnetId		true	string	
subnetName		true	string	
resourceGroup		true	string	
clusterAddress		true	string	
recoverable		true	boolean	
byol		true	boolean	
registered		true	boolean	

DiscoveredGcpHaResponse

Name	Description	Required	Schema	Default
name		true	string	
id		true	string	
publicId		true	string	
zones		true	string array	
vpcs		true	string array	
subnetIds		true	string array	
projectName		true	string	
clusterAddress		true	string	

Name	Description	Required	Schema	Default
recoverable		true	boolean	

DiscoveredGcpVsaResponse

Name	Description	Required	Schema	Default
name		true	string	
id		true	string	
publicId		true	string	
zone		true	string	
vnetName		true	string	
vnetId		true	string	
projectName		true	string	
subnetName		true	string	
clusterAddress		true	string	
recoverable		true	boolean	

DiscoveredVsaResponse

Name	Description	Required	Schema	Default
name		true	string	
publicId		true	string	
region		true	string	
vpcName		true	string	
vpcId		true	string	
availabilityZone		true	string	
subnetId		true	string	
stackName		true	string	
stackId		true	string	
clusterAddress		true	string	
recoverable		true	boolean	
registered		true	boolean	
byol		true	boolean	

Disk

Name	Description	Required	Schema	Default
name	Name	true	string	
position	Position	true	string	
ownerNode	Owner node	true	string	
device	Device	true	string	
vmDiskProperties	VmDiskProperties	false	[VmDiskProperties](#)	

DisksConfiguration

Name	Description	Required	Schema	Default
aws		true	[AwsDisksConstraints](#)	
azure		true	[AzureDisksConstraints](#)	
gcp		true	[GcpDisksConstraints](#)	

DisksDetails

Name	Description	Required	Schema	Default
numberOfDisks	Number of disks	true	integer (int32)	
diskSize	Disk size	true	[Capacity](#)	
diskType	Disk type	true	string	

Duration

Name	Description	Required	Schema	Default
length	Length	true	integer (int64)	
unit	Unit	true	enum (DAYS, HOURS, MINUTES, SECONDS, MILLISECONDS, MICROSECONDS, NANOSECONDS)	

EbsVolumeType

Name	Description	Required	Schema	Default
description		true	string	
size		true	[Capacity](#)	
supportedVolumeTypes		true	string array	

Name	Description	Required	Schema	Default
supportedOccmLicenses		true	string array	
default		true	boolean	

EligibilityResponse

Name	Description	Required	Schema	Default
eligibilityResponse		true	string	

EnableCapacityTieringRequest

Name	Description	Required	Schema	Default
instanceProfileName		false	string	
gcpStorageAccountId		false	string	
storageAccountPrefix		false	string	

EnableMonitoringRequest

Name	Description	Required	Schema	Default
workingEnvironmentIds		true	string array	

EnableServiceScanRequest

Name	Description	Required	Schema	Default
instanceProfileName	Instance profile name	false	string	

EncryptionProperties

Name	Description	Required	Schema	Default
ontapEncryption		true	boolean	
awsVolumeEncryption		true	boolean	
azureVolumeEncryption		true	boolean	
gcpVolumeEncryption		true	boolean	
keyManagers		true	KeyManagerResponse array	

Name	Description	Required	Schema	Default
encryptionCertificates		true	CertificateResponse array	
awsEncryptionKey		false	AwsEncryptionKey	

EvaluationOntapLicenses

Name	Description	Required	Schema	Default
worm		true	string	

EvaluationSerialNumbers

Name	Description	Required	Schema	Default
single_aws		true	string	
single_azure		true	string	
ha_aws_node1		true	string	
ha_aws_node2		true	string	
ha_azure_node1		true	string	
ha_azure_node2		true	string	
gcp_single		true	string	
ha_gcp_node1		true	string	
ha_gcp_node2		true	string	

Expand

Name	Description	Required	Schema	Default
name		false	string	
expands		false	Expand array	

Expands

Name	Description	Required	Schema	Default
raw		false	string	
expands		false	Expand array	

ExportPolicyInfo

Name	Description	Required	Schema	Default
policyType	Export policy type	true	string	

Name	Description	Required	Schema	Default
ips	Custom export policy list of IPs	false	string array	
nfsVersion	Export policy protocol	false	string array	
rules	Export policy rules	false	[ExportPolicyRule] array	

ExtendedObjectStoreConfigInfo

Name	Description	Required	Schema	Default
objectStoreConfig		false	ObjectStoreConfigInfo	
tierLevel		false	string	

FailureCauses

Name	Description	Required	Schema	Default
invalidOntapCredentials		true	boolean	
noCloudProviderConnection		true	boolean	
invalidCloudProviderCredentials		true	boolean	

FeatureFlag

Name	Description	Required	Schema	Default
azure		true	boolean	

FeatureProperties

Name	Description	Required	Schema	Default
start		false	string	
end		false	string	
excludedRegions		false	string array	
excludedLicenseTypes		false	string array	

FloatingIps

Name	Description	Required	Schema	Default
clusterFloatingIP		true	string	
dataFloatingIP		true	string	
dataFloatingIP2		true	string	

AwsHaFloatingIpValidationData:FloatingIps

Name	Description	Required	Schema	Default
clusterFloatingIP		false	string	
dataFloatingIP		false	string	
dataFloatingIP2		false	string	
svmFloatingIP		false	string	

FpolicyProperties

Name	Description	Required	Schema	Default
status		true	integer (int32)	
fPolicyProtocolStatus		true	FpolicyProtocolStatus	
fileExtensions		true	string array	

FpolicyProtocolStatus

Name	Description	Required	Schema	Default
nfsv3		true	integer (int32)	
nfsv4		true	integer (int32)	
cifs		true	integer (int32)	

FsxCredentialsStatusResponse

Name	Description	Required	Schema	Default
valid		true	boolean	
clusterInfo		false	ClusterInfo	
failureReason		false	enum (no_credentials, invalid_credentials, no_connectivity)	

FsxVolumeCreateRequest

Name	Description	Required	Schema	Default
fileSystemId	Target file system ID	true	string	
svmName	SVM name	true	string	
name	Volume name, unique within the SVM	true	string	
size	Size as Capacity	true	[PositiveCapacity](#)	
initialSize	Initial size as Capacity. Relevant for thin provisioned volumes only. Default to 0.	false	[Capacity](#)	
snapshotPolicyNam e	Snapshot policy name	true	string	
exportPolicyInfo	NFS protocol parameters	false	[ExportPolicyInfo](#)	
shareInfo	CIFS protocol parameters	false	[CreateCifsShareInfo Request](#)	
enableStorageEfficie ncy	Storage efficiency	true	boolean	
tieringPolicy	Tiering policy	false	enum (none, snapshot_only, auto, all)	

FsxVolumeModifyRequest

Name	Description	Required	Schema	Default
snapshotPolicyNam e	Snapshot Policy name	false	string	
exportPolicyInfo	Export policy info for NFS	false	[NamedExportPolicyI nfo](#)	
tieringPolicy	Tiering policy	false	enum (none, snapshot_only, auto, backup, all)	

FsxVolumeRequest

Name	Description	Required	Schema	Default
sourceSvmName	Source SVM name	true	string	
sourceVolumeName	Source volume name	true	string	
destinationVolumeN ame	Destination volume name	true	string	

Name	Description	Required	Schema	Default
destinationSvmName	Destination SVM name	true	string	
tieringPolicy	Tiering policy	false	enum (none, snapshot_only, auto, all)	

GcpAccountResponse

Name	Description	Required	Schema	Default
publicId		true	string	
accountName		true	string	
accountType		true	string	
accessKey		true	string	
vsaList		true	AccountWorkingEnvironmentResponse array	
occmRole		false	string	

GcpBucket

Name	Description	Required	Schema	Default
name		true	string	
location		true	string	
storageClass		true	string	

GcpCloudBackupSetupRequest

Name	Description	Required	Schema	Default
project	GCP project id - by default Cloud Manager project	false	string	
region	Region - by default Cloud Manager region	false	string	
accessKey	GCP access Key to used by Cloud Backup Service	true	string	
secretKey	GCP secret key used by Cloud Backup Service	true	string	
ipSpace	Ip Space	false	string	

GcpConnectivityResponse

Name	Description	Required	Schema	Default
name	Virtual Network Name	true	string	
vpcPath	Virtual Network path	true	string	
subnets	Subnets	true	[GcpSubnetRespons e](#) array	
firewalls	Firewalls	true	[GcpFirewallRespons e](#) array	
isShared	isShared	true	boolean	

GcpDiskTypeResponse

Name	Description	Required	Schema	Default
size		true	[Capacity](#)	
supportedDiskTypes		true	string array	
supportedOccmLice nses		true	string array	

GcpDisksConstraints

Name	Description	Required	Schema	Default
numReservedDisksS ingleNode		true	integer (int32)	
maxDisksSingleNod e		true	integer (int32)	
numDisksWarnSingl eNode		true	integer (int32)	
deltaDiskWarn		true	integer (int32)	

GcpEncryption

Name	Description	Required	Schema	Default
key		false	string	

GcpEncryptionKey

Name	Description	Required	Schema	Default
name		true	string	
id		true	string	
keyRing		true	string	

Name	Description	Required	Schema	Default
location		true	string	

GcpFirewallResponse

Name	Description	Required	Schema	Default
name	Firewall Name	true	string	
vpc	VPC	true	string	

GcpHaMediatorInfo

Name	Description	Required	Schema	Default
mediatorInstanceName		true	string	
zone		true	string	
instanceType		true	string	
primaryIp		true	string	
instanceStatus		true	string	
version		true	string	

GcpHaNodeInfo

Name	Description	Required	Schema	Default
instanceName		true	string	
zone		true	string	
instanceType		true	string	
primaryIp		true	string	
instanceStatus		true	string	
numOfNics		true	integer (int32)	
labels		true	Map[string,string]	

GcpHaParameters

Name	Description	Required	Schema	Default
platformSerialNumberNode1	Platform serial number for node 1	false	string	
platformSerialNumberNode2	Platform serial number for node 2	false	string	
node1Zone	Zone for node 1	true	string	
node2Zone	Zone for node 2	true	string	

Name	Description	Required	Schema	Default
mediatorZone	Zone for mediator	true	string	
vpc0NodeAndDataConnectivity	VPC path for nic1, requered for node and data connectivity	true	string	
vpc1ClusterConnectivity	VPC path for nic2, required for cluster connectiviry	true	string	
vpc2HAConnectivity	VPC path for nic3, required for HA connectivity	true	string	
vpc3DataReplication	VPC path for nic4, required for data replication	true	string	
subnet0NodeAndDataConnectivity	Subnet path for nic1, requered for node and data connectivity	true	string	
subnet1ClusterConnectivity	Subnet path for nic2, required for cluster connectiviry	true	string	
subnet2HAConnectivity	Subnet path for nic3, required for HA connectivity	true	string	
subnet3DataReplication	Subnet path for nic4, required for data replication	true	string	
vpc0FirewallRuleName	Optional firewall rule name for vpc1	false	string	
vpc1FirewallRuleName	Optional firewall rule name for vpc2	false	string	
vpc2FirewallRuleName	Optional firewall rule name for vpc3	false	string	
vpc3FirewallRuleName	Optional firewall rule name for vpc4	false	string	
vpc0FirewallRuleTagName	Optional firewall tag name for vpc1	false	string	
vpc1FirewallRuleTagName	Optional firewall tag name for vpc2	false	string	
vpc2FirewallRuleTagName	Optional firewall tag name for vpc3	false	string	
vpc3FirewallRuleTagName	Optional firewall tag name for vpc4	false	string	

GcpHaProperties

Name	Description	Required	Schema	Default
mediatorInfo		true	[GcpHaMediatorInfo](#)	
node1Info		true	[GcpHaNodeInfo](#)	
node2Info		true	[GcpHaNodeInfo](#)	
projectName		true	string	

GcpKeysForCloudStorageWithValidation

Name	Description	Required	Schema	Default
accessKey		true	string	
secretKey		true	string	

GcpLabel

Name	Description	Required	Schema	Default
labelKey		true	string	
labelValue		true	string	

GcpNetworkRequirementsResponse

Name	Description	Required	Schema	Default
vsaMinimumRequiredIps		true	integer (int32)	
haVsaMinimumRequiredIps		true	integer (int32)	

GcpProjectResponse

Name	Description	Required	Schema	Default
projectNumber		true	string	
projectId		true	string	
lifecycleState		true	string	
name		true	string	
createTime		true	string	
parent		true	Map[string,string]	
subscriptionId		false	string	
default		true	boolean	

GcpProjectsResponse

Name	Description	Required	Schema	Default
projects		true	GcpProjectResponse array	

GcpProperties

Name	Description	Required	Schema	Default
name		true	string	
regionName		true	string	
zoneName		true	string array	
instanceType		true	string	
subnetCidr		true	string	
numOfNics		true	integer (int32)	
labels		true	Map[string,string]	
projectName		true	string	
deploymentName		true	string	

GcpRegionResponse

Name	Description	Required	Schema	Default
displayName		true	string	
name		true	string	
zones		true	GcpZoneResponse array	
vpcs		true	GcpVirtualNetworkResponse array	

GcpServiceAccountResponse

Name	Description	Required	Schema	Default
name		true	string	
projectId		true	string	
email		true	string	
displayName		true	string	
enabled		true	boolean	

GcpServiceAccountsResponse

Name	Description	Required	Schema	Default
accounts		true	GcpServiceAccount Response array	

GcpStorageAccountRequest

Name	Description	Required	Schema	Default
accountName		true	string	
providerKeys		true	GcpKeysForCloudSt orageWithValidation	

GcpSubnetResponse

Name	Description	Required	Schema	Default
ipCidrRange	CIDR	true	string	
name	Subnet name	true	string	
path	Subnet path	true	string	
availableIps	The number of available IPs on the subnet	true	integer (int32)	
minimumRequiredIp s	The minimum needed IP addresses for the Cloud Volumes ONTAP creation	true	integer (int32)	

GcpVirtualNetworkResponse

Name	Description	Required	Schema	Default
name	Virtual Network Name	true	string	
subnets	Subnets	true	GcpSubnetRespons e array	
firewalls	Firewalls	true	GcpFirewallRespons e array	

GcpVsaWorkingEnvironmentResponse

Name	Description	Required	Schema	Default
publicId		true	string	
name		true	string	
tenantId		true	string	
svmName		false	string	

Name	Description	Required	Schema	Default
creatorUserEmail		true	string	
status		false	StatusProperties	
providerProperties		false	GcpProperties	
reservedSize		false	Capacity	
clusterProperties		false	VsaClusterProperties	
ontapClusterProperties		false	OntapClusterProperties	
cloudProviderName		true	string	
snapshotPolicies		false	SnapshotPolicy array	
actionsRequired		false	ActionRequired array	
activeActions	Actions currently being performed on this working environment	false	string array	
replicationProperties		false	ReplicationProperties	
schedules		false	VsaSchedule array	
svms		false	Svm array	
workingEnvironmentType		true	string	
supportRegistrationProperties		false	SupportRegistrationProperties	
supportRegistrationInformation		false	SupportRegistrationInformation array	
capacityFeatures		false	CapacityFeatures	
encryptionProperties		false	EncryptionProperties	
supportedFeatures		false	SupportedFeatures	
haProperties		false	GcpHaProperties	
fpolicyProperties		false	FpolicyProperties	
saasProperties		false	CvoSaasProperties	
cbsProperties		false	CbsPropertiesWithReason	
complianceProperties		false	CloudComplianceStatusResponse	

Name	Description	Required	Schema	Default
monitoringProperties		false	[MonitoringStatusResponse](#)	
licensesInformation		false	[LicenseInformation](#) array	
hA		true	boolean	

GcpZoneResponse

Name	Description	Required	Schema	Default
name	Zone Name	true	string	

GcpZonesAndRegionResponse

Name	Description	Required	Schema	Default
displayName		true	string	
name		true	string	
location		true	string	
zones		true	[GcpZoneResponse](#) array	

GenericVsaWorkingEnvironmentResponse

Name	Description	Required	Schema	Default
publicId		true	string	
name		true	string	
status		false	[StatusProperties](#)	
ontapClusterProperties		false	[OntapClusterProperties](#)	
cloudProviderName		true	string	
workingEnvironmentType		true	string	
userTags		true	Map[string,string]	
hA		true	boolean	

GlobalManifest

Name	Description	Required	Schema	Default
license_types		true	[OntapLicenseType](#) array	
regions		true	[Region](#) array	

Name	Description	Required	Schema	Default
azureRegions		true	[Region](#) array	
gcpRegions		true	[Region](#) array	
cot_versions		true	Map[string,Map[string,string array]]	
cot_versions_to_upgrade_to		true	Map[string,Map[string,string array]]	
supportedFeatures		true	Map[string,Map[string,[FeatureProperties](#)]]	

GrantPermission

Name	Description	Required	Schema	Default
addWorkingEnvironments	List of working environment public IDs for which permissions should be added	true	string array	
removeWorkingEnvironments	List of working environment public IDs for which permissions should be removed	true	string array	

HaParameters

Name	Description	Required	Schema	Default
node1SubnetId		true	string	
node2SubnetId		true	string	
mediatorSubnetId		true	string	
clusterFloatingIP		false	string	
dataFloatingIP		false	string	
dataFloatingIP2		false	string	
svmFloatingIP		false	string	
mediatorKeyPairName		false	string	
routeTableIds		false	string array	
platformSerialNumberNode1		false	string	
platformSerialNumberNode2		false	string	

Name	Description	Required	Schema	Default
providedLicenseNode1		false	string	
providedLicenseNode2		false	string	
failoverMode	HA failover mode	false	enum (FloatingIP, PrivateIP)	
mediatorProxy		false	MediatorProxy	
mediatorAssignPublicIP		false	boolean	
mediatorInstanceProfileName		false	string	
mediatorSecurityGroupId		false	string	

HaProperties

Name	Description	Required	Schema	Default
mediatorVersionInfo		true	MediatorVersionInfo	
mediatorStatus		true	MediatorStatus	
routeTables		true	string array	
mediatorVersionsToUpdate		true	MediatorUpdateVersionMetadata array	
failoverMode		true	string	

Id

Name	Description	Required	Schema	Default
id		true	string	

IGroup

Name	Description	Required	Schema	Default
igroupName	Igroup name	true	string	
osType	osType	true	string	
portsetName	portsetName	true	string	
igroupType	igroupType	true	string	
initiators	Initiators	true	string array	

IgroupCreationRequest

Name	Description	Required	Schema	Default
initiators	Initiators	true	string array	
igroupName	Igroup name	true	string	

InitialSetupResponse

Name	Description	Required	Schema	Default
upgradeToVersion		false	string	

Initiator

Name	Description	Required	Schema	Default
aliasName	Initiator alias	true	string	
iqn	Initiator IQN	true	string	

InitiatorEntry

Name	Description	Required	Schema	Default
aliasName		false	string	
iqn		false	string	
publicId		false	string	
id		false	integer (int32)	

InstallCertificatesAndPrivateKeyRequest

Name	Description	Required	Schema	Default
occmCertificate		true	string	
privateKey		true	string	
algorithm		false	string	

InstallCertificatesRequest

Name	Description	Required	Schema	Default
occmCertificate		true	string	

InstanceConfiguration

Name	Description	Required	Schema	Default
mediator		true	Map[string,InstanceConfigurationMapping]	
probes		true	Map[string,InstanceConfigurationMapping]	

InstanceConfigurationMapping

Name	Description	Required	Schema	Default
regular		true	string	
dedicated		true	string	

InstanceNameIdAndType

Name	Description	Required	Schema	Default
instanceName	Instance name	true	string	
instanceType	Instance type	true	string	
instanceId	Instance Id	true	string	

InstancePlacementResponse

Name	Description	Required	Schema	Default
region	Region	true	string	
vpcId	VPC	false	string	
subnetId	Subnet	false	string	
keyPair	KeyPair	false	string	
installLocation	Install Location	true	string	
role	Role	false	string	
providerRoleType	Provider Role Type	false	string	
publicIp	Public IP	false	string	
account	Account	false	string	
govCloud	Gov cloud	true	boolean	
china	China	true	boolean	
instanceType	instanceType	false	string	
darkSite	is dark site	true	boolean	
legacyOs		true	boolean	
legacyInstance		true	boolean	

InstanceProfileResponse

Name	Description	Required	Schema	Default
instanceProfileId		true	string	
name		true	string	

InstanceResponse

Name	Description	Required	Schema	Default
id	Instance Id	true	string	
name	Instance name	true	string	
instanceType	Instance type	true	string	
state	Instance state	true	string	
publicIpAddress	Public IP address that is assigned to the instance	true	string	
privateIpAddress	Private IP address that is assigned to the instance	true	string	
publicDnsName	Public DNS	true	string	
privateDnsName	Private DNS name	true	string	
imageId	Image Id	true	string	
subnetId	Subnet Id	true	string	
availabilityZone	Availability Zone	true	string	
tags	Instance tags	true	Map[string,string]	
productCode	Product code	true	string	
tenancy	Instance Tenancy	true	string	
placementGroup	Placement Group	true	string	
keyPairName	Key Pair	true	string	
instanceProfileId	Instance profile ID	false	string	
vsaInstance		true	boolean	
oCCMInstance		true	boolean	

InstanceTypeInfo

Name	Description	Required	Schema	Default
instanceType		true	string	
supportsEncryption		true	boolean	
supportedFeatures		true	string array	

Name	Description	Required	Schema	Default
default		true	boolean	

InstanceTypeRegionMapping

Name	Description	Required	Schema	Default
region		true	string	
instanceType		true	string	

InstanceTypeResponse

Name	Description	Required	Schema	Default
instanceType		true	string	

InstanceTypesNotSupportingAccelerationAndCapacityTieringResponse

Name	Description	Required	Schema	Default
instanceTypes		true	InstanceTypeResponse array	

InterClusterLif

Name	Description	Required	Schema	Default
name		true	string	
address		true	string	
port		true	string	
node		true	string	
status		true	string	
peered		true	boolean	

IpSpaceResponse

Name	Description	Required	Schema	Default
ipSpace		true	string	
vservers		true	string array	

IpaServiceInformation

Name	Description	Required	Schema	Default
url		true	string	

KeyManagerCaCertificateRequest

Name	Description	Required	Schema	Default
certificate		true	string	

KeyManagerRequest

Name	Description	Required	Schema	Default
name		true	string	
address		true	string	
usernameField		false	string	
usernameValue		false	string	

KeyManagerResponse

Name	Description	Required	Schema	Default
publicId		true	string	
name		true	string	
address		true	string	
usernameField		true	string	
usernameValue		true	string	
status		true	string	

KeyPairsByRegionResponse

Name	Description	Required	Schema	Default
regionToKeyPairs		true	Map[string,string array]	

KpiUnitValue

Name	Description	Required	Schema	Default
value		true	number (double)	
unit		true	string	

LegacyInstanceTypes

Name	Description	Required	Schema	Default
instanceTypes		true	ProviderLegacyInstanceTypes	

LicenseAndInstanceType

Name	Description	Required	Schema	Default
licenseType		true	string	
name		true	string	
description		true	string	
capacityLimit		true	Capacity	
instanceTypes		true	InstanceTypeInfo array	

LicenseAndInstanceTypeModificationRequest

Name	Description	Required	Schema	Default
instanceType	New instance type	true	string	
licenseType	New license type	true	string	

LicenseFileContent

Name	Description	Required	Schema	Default
licenseOne		true	string	
licenseTwo		false	string	

LicenseInformation

Name	Description	Required	Schema	Default
type		true	string	
useType		false	string	
package		false	string	
serialNumbers		true	string array	
capacityLimit		true	Capacity	
expirations		true	integer (int64) array	

LicenseServiceInformation

Name	Description	Required	Schema	Default
url		true	string	

LicenseToAmis

Name	Description	Required	Schema	Default
license_type		true	string	

Name	Description	Required	Schema	Default
instance_types		true	string array	
amis		true	RegionalAmi array	

LicensesContent

Name	Description	Required	Schema	Default
licencesContent		true	string array	

LicensesSerials

Name	Description	Required	Schema	Default
serials		true	string array	

LifResponse

Name	Description	Required	Schema	Default
ip	Lif ip	true	string	
netmask	Lif netmask	true	string	
lifType	Lif type	true	string	
dataProtocols	List of supported protocols	true	string array	
nodeName	Node name	true	string	
privateIp	Whether this Lif ip is a private address	true	boolean	

LocalAuthSetupRequest

Name	Description	Required	Schema	Default
adminUser		true	LocalAuthSetupUser Request	
site		true	string	
company		true	string	

LocalAuthSetupUserRequest

Name	Description	Required	Schema	Default
email		true	string	
password		true	string	
fullName		true	string	

MaxDisksAllow

Name	Description	Required	Schema	Default
numOfDisks		true	integer (int32)	
reason		false	string	

MediatorProxy

Name	Description	Required	Schema	Default
url		false	string	
userName		false	string	
password		false	string	

MediatorStatus

Name	Description	Required	Schema	Default
statusCode		true	integer (int32)	
statusMessage		true	string	

MediatorUpdateVersionMetadata

Name	Description	Required	Schema	Default
mediatorVersion		true	string	
timeStamp		true	integer (int64)	
metadataFileName		true	string	
major		true	boolean	
manifestFileName		false	string	

MediatorUpgradeConfiguration

Name	Description	Required	Schema	Default
dependencies		true	Map[string,string array]	

MediatorVersionInfo

Name	Description	Required	Schema	Default
version		true	string	
description		true	string	
state		true	string	
bootVolumeId		true	string	

MetadataResponse

Name	Description	Required	Schema	Default
globalManifest	Global Manifest	true	GlobalManifest	
ontapManifests	ONTAP manifests	true	CloudOntapManifest array	

ModifyMappingRequest

Name	Description	Required	Schema	Default
newMapping		true	string]	

ModifyUserTagsRequest

Name	Description	Required	Schema	Default
tags		true	CloudResourceTag array	

Money

Name	Description	Required	Schema	Default
amount	Amount	false	number (double)	
currency	Currency	false	string	

MonitoringInfo

Name	Description	Required	Schema	Default
averageIops		true	number (double)	
averageLatency		false	KpiUnitValue	
storageAverageThroughput		false	KpiUnitValue	
node1AverageThroughput		false	KpiUnitValue	
node2AverageThroughput		false	KpiUnitValue	

MonitoringInfoResponse

Name	Description	Required	Schema	Default
status		true	enum (ACTIVE, DEPLOYING, NOT_ACTIVE, DISABLED, TRIAL_EXPIRED)	

Name	Description	Required	Schema	Default
healthy		true	boolean	
url		false	string	
lastDeploymentError		false	string	
id		false	string	

MonitoringStatusResponse

Name	Description	Required	Schema	Default
monitoringStatus		true	enum (MONITORING_ENABLED, MONITORING_DISABLED, DEPLOYING, FEATURE_DISABLED, UNKNOWN, TRIAL_EXPIRED)	
monitoringInfo		false	MonitoringInfo	
tenantUrl		false	string	

NTPConfigurationRequest

Name	Description	Required	Schema	Default
ntpServer	NTPS server	true	string	

NamedExportPolicyInfo

Name	Description	Required	Schema	Default
name	Export policy name	false	string	
policyType	Export policy type	true	string	
ips	Custom export policy list of IPs	true	string array	
nfsVersion	Export policy protocol	false	string array	
rules	Export policy rules	false	[ExportPolicyRule] array	

NetworkInterfaceInfo

Name	Description	Required	Schema	Default
id		true	string	
primaryIpAddress		true	string	

Name	Description	Required	Schema	Default
secondaryIpAddresses		true	string array	
subnetCidrBlock		true	string	

NetworkRequirementsResponse

Name	Description	Required	Schema	Default
nonHaNodeMinimumRequiredIps		true	integer (int32)	
haNodeMinimumRequiredIps		true	integer (int32)	
haMediatorMinimumRequiredIps		true	integer (int32)	

NotificationServiceInformation

Name	Description	Required	Schema	Default
wsUrl		true	string	

NssAccountCredentials

Name	Description	Required	Schema	Default
nssUserName		true	string	
nssPassword		true	string	

NssAccountRequest

Name	Description	Required	Schema	Default
accountName		false	string	
providerKeys		true	NssAccountCredentials	
vsaList		true	string array	

NssAccountResponse

Name	Description	Required	Schema	Default
publicId		true	string	
accountName		true	string	
accountType		true	string	
nssUserName		true	string	

Name	Description	Required	Schema	Default
vsaList		true	AccountWorkingEnvironmentResponse array	

NssAccountVsaListRequest

Name	Description	Required	Schema	Default
vsaList		true	string array	

ObjectStoreConfigInfo

Name	Description	Required	Schema	Default
objectStoreName		true	string	
s3Name		true	string	
usedSpace		true	Capacity	
server		true	string	
providerType		true	string	

OccmExternalConfiguration

Name	Description	Required	Schema	Default
email		true	string	
aws_product_page		true	string	
cot_aws_product_page		true	string	
ha_cot_aws_product_page		true	string	
intercom_prod_app_id		true	string	
intercom_test_app_id		true	string	
livechat_license		true	string	
features		true	OccmFeaturesFlags	
upgrade_path		true	OnCloudUpgradePath array	
occm_release_notes_url		true	string	
evaluation_serial_numbers		true	EvaluationSerialNumbers	

Name	Description	Required	Schema	Default
legacyInstanceTypes		true	LegacyInstanceTypes	
aws_cross_account_tutorial_url		true	string	
disksConfiguration		true	DisksConfiguration	
migration		true	OccmMigration	
evaluation_ontap_licenses		true	EvaluationOntapLicenses	
mediatorUpgradeConfiguration		true	MediatorUpgradeConfiguration	
instanceConfiguration		true	InstanceConfiguration	
cvsRegions		true	CvsRegion array	
regions		true	Map[string,string array]	
servicesInformation		true	Map[string,ServiceInfo]	
ontapBackupTokenCreds		true	OntapBackupTokenCreds	

OccmFeaturesFlags

Name	Description	Required	Schema	Default
intercom		true	boolean	
aws_environment_collector		true	boolean	

OccmMigration

Name	Description	Required	Schema	Default
migrateAll		true	boolean	
blackList		true	string array	

OnCloudUpgradePath

Name	Description	Required	Schema	Default
version		true	string	
path		true	string array	

OnPremAggregateResponse

Name	Description	Required	Schema	Default
name		true	string	
totalCapacity		true	Capacity	
availableCapacity		true	Capacity	
state		true	string	
objectStoreName		false	string	
usedCapacity		true	Capacity	
tieringRestriction		false	TieringRestriction	
availabilityState		false	string	
inactiveDataReportingEnabled		true	boolean	
objectStoreAttachEligible		true	boolean	

OnPremCapacityFeatures

Name	Description	Required	Schema	Default
objectStoreConfigExtended		false	ExtendedObjectStoreConfigInfo	
performanceTierUsedCapacity		true	Capacity	
inactiveUserData		false	Capacity	
rawCapacity		true	Capacity	
fiveYearSavings		true	number (double)	

OnPremClusterProperties

Name	Description	Required	Schema	Default
clusterAddress		true	string	
ontapVersion		true	string	
clusterName		true	string	
serialNumber		true	string	
systemId		true	string	
licenses		true	string array	
systemManagerUrl		true	string	

Name	Description	Required	Schema	Default
location		true	enum (ON_PREM, AZURE, AWS, SOFTLAYER, GOOGLE, CLOUD_TIERING)	
clusterUuid		true	string	
nodeModels		true	string array	
lifs		true	[LifResponse](#) array	
snapmirrorLicenseExists		true	boolean	

OnPremVolumeCreateRequest

Name	Description	Required	Schema	Default
workingEnvironmentId	Target working environment ID	true	string	
svmName	SVM name	true	string	
aggregateName	Aggregate in which to create the volume	true	string	
name	Volume name, unique within the SVM	true	string	
size	Size as Capacity	true	[PositiveCapacity](#)	
initialSize	Initial size as Capacity. Relevant for thin provisioned volumes only. Default to 0.	false	[Capacity](#)	
snapshotPolicyName	Snapshot policy name	true	string	
exportPolicyInfo	NFS protocol parameters	false	[ExportPolicyInfo](#)	
shareInfo	CIFS protocol parameters	false	[CreateCifsShareInfoRequest](#)	
enableThinProvisioning	Enable thin provisioning	true	boolean	
enableCompression	Enable compression	true	boolean	
enableDeduplication	Enable deduplication	true	boolean	
syncToS3	Add Cloud Sync relationship	true	boolean	

Name	Description	Required	Schema	Default
volumeTags	Optionally provide key-value pairs with which to tag the ONTAP volume using App Template service	false	VolumeTags array	
iscsiInfo		true	CreateIscsiInfoRequest	

OnPremVolumeModifyRequest

Name	Description	Required	Schema	Default
snapshotPolicyName	Snapshot Policy name	false	string	
shareInfo	Share names, permissions and users for CIFS	false	CifsShareInfo	
exportPolicyInfo	Export policy info for NFS	false	NamedExportPolicyInfo	
tieringPolicy	Tiering policy	false	enum (none, snapshot_only, auto, backup, all)	
minimumCoolingDays	Tiering minimum cooling days	false	integer (int32)	

OnPremVolumeRequest

Name	Description	Required	Schema	Default
sourceSvmName	Source SVM name	true	string	
sourceVolumeName	Source volume name	true	string	
destinationVolumeName	Destination volume name	true	string	
destinationAggregateName	Destination aggregate name	true	string	
destinationSvmName	Destination SVM name	true	string	
destinationCapacityTier	Destination aggregate capacity tier	false	enum (S3, Blob)	
tieringPolicy	Tiering policy	false	enum (none, auto, all)	

OnPremWorkingEnvironmentDiscoverRequest

Name	Description	Required	Schema	Default
tenantId		true	string	
description		false	string	
name		true	string	
clusterAddress		true	string	
clusterUserName		true	string	
clusterPassword		true	string	
location		true	enum (ON_PREM, AZURE, AWS, SOFTLAYER, GOOGLE, CLOUD_TIERING)	

OnPremWorkingEnvironmentResponse

Name	Description	Required	Schema	Default
publicId		true	string	
tenantId		true	string	
description		true	string	
name		true	string	
discoverUserEmail		true	string	
location		true	string	
reservedSize		false	Capacity	
status		false	StatusProperties	
interClusterLifs		false	InterClusterLif array	
cronJobSchedules		false	CronJobSchedule array	
svms		false	Svm array	
snapshotPolicies		false	SnapshotPolicy array	
replicationProperties	Working environments in which a SnapMirror relationship exists between volumes on this working environment	false	ReplicationProperties	
clusterProperties		false	OnPremClusterProperties	

Name	Description	Required	Schema	Default
ontapClusterProperties		false	OnPremClusterProperties	
workingEnvironmentType		true	string	
cloudSyncProperties		false	CloudSyncProperties	
actionsRequired		false	ActionRequired array	
capacityFeatures		false	OnPremCapacityFeatures	
aff		true	boolean	
cbsProperties		false	CbsPropertiesWithReason	
complianceProperties		false	CloudComplianceStatusResponse	
monitoringProperties		false	MonitoringStatusResponse	

OntapBackupTokenCreds

Name	Description	Required	Schema	Default
id		true	string	
secret		true	string	

OntapClusterProperties

Name	Description	Required	Schema	Default
nodes		true	OntapNodeProperties array	
clusterName		true	string	
clusterUuid		true	string	
ontapVersion		true	string	
systemManagerUrl		true	string	
creationTime		true	integer (int64)	
licenseType		true	VsaLicense	
licensePackageName		false	string	
lastModifiedOffbox		false	integer (int64)	
offboxTarget		true	boolean	

Name	Description	Required	Schema	Default
upgradeVersions		false	OntapUpdateImage Metadata array	
writingSpeedState		false	string	
broadcastDomainInf os		true	BroadcastDomainInf o array	
evaluation		true	boolean	
capacityTierInfo		false	CapacityTierInfo	
canConfigureCapacit yTier		true	boolean	
usedCapacity		true	Capacity	
userName		true	string	
wormEnabled		true	boolean	
vscanFileOperationD efaultProfile		true	string	
spaceReportingLogi cal		true	boolean	
keystoneSubscriptio n		true	boolean	

OntapEncryption

Name	Description	Required	Schema	Default
keyManagerIds		true	string array	
keyManagerCaCertif icateId		true	string	

OntapLicenseType

Name	Description	Required	Schema	Default
type		true	string	
name		true	string	
description		true	string	
subName		true	string	
subDescription		true	string	
capacity_limit		true	string	
platformLicenseReq uired		true	boolean	
default		true	boolean	

Name	Description	Required	Schema	Default
capacityLimit		true	Capacity	

OntapNodeProperties

Name	Description	Required	Schema	Default
name		true	string	
lifs		true	LifResponse array	
serialNumber		true	string	
systemId		true	string	
platformLicense		false	string	
platformSerialNumber		false	string	
cloudProviderId		true	string	
healthy		true	boolean	
inTakeover		true	boolean	

OntapUpdateImageMetadata

Name	Description	Required	Schema	Default
imageVersion		true	string	
lastModified		true	integer (int64)	
autoUpdateAllowed		true	boolean	

PackageInfoResponse

Name	Description	Required	Schema	Default
name		true	string	
displayName		true	string	
description		true	string	
licenseType		true	string	
instanceTypeMapping		true	InstanceTypeRegionMapping array	
diskType		true	string	
diskSize		true	Capacity	
capacityTier		false	string	
instanceTenancy		false	string	
writingSpeedState		true	string	

PasswordWrapper

Name	Description	Required	Schema	Default
password		true	string	

PolicySchedule

Name	Description	Required	Schema	Default
frequency	Frequency	true	string	
retention	Retention	true	integer (int32)	

PortalInformation

Name	Description	Required	Schema	Default
edit_user_url		true	string	
portalBackEnd		true	string	
portalFrontEnd		true	string	

PortalService

Name	Description	Required	Schema	Default
usePortalAuthentication		true	boolean	
auth0Information		false	Auth0Information	
portalInformation		false	PortalInformation	
saasFrontEnd		true	string	

PortalSetupAsServiceConnectorRequest

Name	Description	Required	Schema	Default
site	Site	true	string	
company	Company	true	string	
tenancyAccountId	Tenancy account Id	false	string	

PositiveCapacity

Name	Description	Required	Schema	Default
size	Size	true	number (double)	
unit	Unit	true	string	

ProvidedLicenseResponse

Name	Description	Required	Schema	Default
license		true	string	
serialNumber		true	string	
contractEndDate		false	integer (int64)	

ProviderLegacyInstanceTypes

Name	Description	Required	Schema	Default
aws		true	string array	
azure		true	string array	

ProviderProperties

Name	Description	Required	Schema	Default
regionName		true	string	
resourceGroup	Resource group	true	[AzureResourceGroupResponse](#)	
vnetCidr		true	string	
tags		true	Map[string,string]	
subscriptionId		true	string	
deploymentId		true	string	
creationTime		true	integer (int64)	
instanceType		true	string	
numOfNics		true	integer (int32)	
singleNetworkInterface		true	boolean	
subscriptionName		true	string	
cloudProviderAccountId		false	string	
availabilityZone		false	integer (int32)	
dataDisks		false	[AzureDataDiskResponse](#) array	

ProviderSpecific

Name	Description	Required	Schema	Default
azureRgName		false	string	
gcpProjectId		false	string	

Name	Description	Required	Schema	Default
gcpRegion		false	string	

ProviderSupportedRegions

Name	Description	Required	Schema	Default
aws		true	[Region](#) array	
azure		true	[Region](#) array	

ProviderVolumeResponse

Name	Description	Required	Schema	Default
id	Id	true	string	
name	Name	true	string	
size	Size	true	[Capacity](#)	
state	State	true	string	
device	Device	true	string	
instanceId	InstanceId	true	string	
diskType	Type	true	string	
encrypted	Encrypted	true	boolean	
iops	Provisioned IOPS	false	integer (int32)	
throughput	Provisioned Throughput	false	integer (int32)	

ProviderVolumeTypeResponse

Name	Description	Required	Schema	Default
size		true	[Capacity](#)	
supportedVolumeTypes		true	string array	
maxDisksAllow		true	[MaxDisksAllow](#)	

ProxyUri

Name	Description	Required	Schema	Default
uri		false	string	
proxyUserName		false	string	
proxyPassword		false	string	
proxyDomain		false	string	

RecoverAzureHARequest

Name	Description	Required	Schema	Default
region		true	string	
resourceGroupName		true	string	
clusterCredentials		true	[ClusterCredentialsRequest](#)	
tenantId		true	string	
providerAccount	ID of subscription where VSA is located	false	string	
cloudProviderAccount	Cloud Provider Account	false	string	
nssAccountId	Nss Account	false	string	

RecoverAzureVSARequest

Name	Description	Required	Schema	Default
region		true	string	
id		true	string	
resourceGroupName		true	string	
instanceName		true	string	
clusterCredentials		true	[ClusterCredentialsRequest](#)	
tenantId		true	string	
providerAccount	ID of subscription where VSA is located	false	string	
cloudProviderAccount	Cloud Provider Account	false	string	
nssAccountId	Nss Account	false	string	

RecoverGcpHaRequest

Name	Description	Required	Schema	Default
region		true	string	
name		true	string	
clusterCredentials		true	[ClusterCredentialsRequest](#)	
tenantId		true	string	

Name	Description	Required	Schema	Default
projectId		false	string	
nssAccountId	Nss Account	false	string	

RecoverGcpVsaRequest

Name	Description	Required	Schema	Default
zone		true	string	
instanceName		true	string	
clusterCredentials		true	ClusterCredentialsRequest	
tenantId		true	string	
projectId		false	string	
nssAccountId	Nss Account	false	string	

RecoverVsaRequest

Name	Description	Required	Schema	Default
region		true	string	
stackId		true	string	
clusterCredentials		true	ClusterCredentialsRequest	
tenantId		true	string	
cloudProviderAccount	Cloud Provider Account	false	string	
nssAccountId	Nss Account	false	string	

Region

Name	Description	Required	Schema	Default
name		true	string	
code		true	string	
location		true	string	
s3Region		false	string	

RegionalAmi

Name	Description	Required	Schema	Default
region		true	string	
ami_id		true	string	

Name	Description	Required	Schema	Default
saas_mp		true	boolean	

RegistrationResponse

Name	Description	Required	Schema	Default
clientId		true	string	

ReplicationInterClusterLif

Name	Description	Required	Schema	Default
name	Name	true	string	
address	Address	true	string	
netmaskLength	Netmask Length	true	integer (int32)	
port	Port	true	string	
node	Node	true	string	
status	Status	true	string	
peered		true	boolean	

ReplicationInterClusterLifs

Name	Description	Required	Schema	Default
interClusterLifs	Working Environment Intercluster Lifs	true	ReplicationInterClusterLif array	
peerInterClusterLifs	Peer Working Environment Intercluster Lifs	true	ReplicationInterClusterLif array	

ReplicationProperties

Name	Description	Required	Schema	Default
peers		true	string array	
replicationTargets		true	string array	

ReplicationRequest

Name	Description	Required	Schema	Default
sourceWorkingEnvironmentId	Source working environment Id	true	string	
destinationWorkingEnvironmentId	Destination working environment Id	true	string	

Name	Description	Required	Schema	Default
sourceInterclusterLifIps	Source intercluster LIF IPs	true	string array	
destinationInterclusterLifIps	Destination intercluster LIF IPs	true	string array	
policyName	SnapMirror policy name	true	string	
scheduleName	Schedule name	false	string	
maxTransferRate	Maximum transfer rate limit (KB/s). Use 0 for no limit, otherwise use number between 1024 and 2,147,482,624	false	integer (int32)	

ReplicationSchedule

Name	Description	Required	Schema	Default
name	Name	true	string	
description	Description	false	string	
cronJobSchedule	Cron jobs schedule	true	[CronJobScheduleResponse](#)	

ReplicationStatusCurrentTransferInfo

Name	Description	Required	Schema	Default
transferType	Current transfer type	true	enum (initialize, update, resync, restore, check, file_restore)	
transferPriority	Current transfer priority	true	enum (low, normal)	
transferError	Current transfer error	true	string	

ReplicationStatusLastTransferInfo

Name	Description	Required	Schema	Default
transferType	Last transfer type	true	enum (initialize, update, resync, restore, check, file_restore)	
transferSize	Last transfer size	true	[Capacity](#)	

Name	Description	Required	Schema	Default
transferDuration	Last transfer duration	true	Duration	
transferEnded	Last transfer end time	true	string (date-time)	
transferError	Last transfer error	true	string	

ReplicationStatusResponse

Name	Description	Required	Schema	Default
source	Source Details	true	ReplicationStatusSide	
destination	Destination Details	true	ReplicationStatusSide	
mirrorState	SnapMirror status	true	enum (uninitialized, snapmirrored, brokenoff, undefined)	
relationshipType	SnapMirror relationship type	true	enum (data_protection, load_sharing, vault, restore, transition_data_protection, extended_data_protection)	
relationshipStatus	SnapMirror relationship status	true	enum (idle, transferring, checking, quiescing, quiesced, queued, preparing, finalizing, aborting, breaking)	
relationshipProgress	SnapMirror relationship progress	true	Capacity	
policy	Policy name	true	string	
policyType	Policy type	true	enum (vault, async_mirror, mirror_vault, sync_mirror)	
schedule	Schedule name	true	string	
maxTransferRate	Maximum transfer rate limit	true	Capacity	
networkCompressionRatio	Network compression ratio	true	string	

Name	Description	Required	Schema	Default
healthy	SnapMirror healthiness	true	boolean	
unhealthyReason	SnapMirror un-healthiness reason	true	string	
lagTime	Replication lag time	true	Duration	
newestSnapshotName	Newest snapshot name	true	string	
newestSnapshotCreated	Newest snapshot creation time	true	string (date-time)	
lastTransferInfo	Last transfer Information	true	ReplicationStatusLastTransferInfo	
currentTransferInfo	Current transfer Information	true	ReplicationStatusCurrentTransferInfo	
totalTransferTime	Total transfer time	true	Duration	
totalTransferSize	Total transfer size	true	Capacity	
volumeUsedSize	Volume used size	true	Capacity	
volumeCapacityTier	Volume capacity tier	true	Capacity	

ReplicationStatusSide

Name	Description	Required	Schema	Default
workingEnvironmentId	Working environment ID	true	string	
workingEnvironmentType	Working environment type	true	string	
workingEnvironmentStatus	Working environment status	true	string	
clusterName	Cluster name	true	string	
region	AWS region name	false	string	
availabilityZone	AWS availability zone name	false	string	
svmName	Svm name	true	string	
nodeName	Node name	false	string	
volumeName	Volume name	true	string	

ReplicationToFsxRequest

Name	Description	Required	Schema	Default
sourceWorkingEnvironmentId	Source working environment Id	true	string	
destinationFsxId	Destination FSx working environment fileSystemId	true	string	
sourceInterclusterLifIps	Source intercluster LIF IPs	true	string array	
policyName	SnapMirror policy name	true	string	
scheduleName	Schedule name	false	string	
maxTransferRate	Maximum transfer rate limit (KB/s). Use 0 for no limit, otherwise use number between 1024 and 2,147,482,624	false	integer (int32)	

ReplicationUpdateRequest

Name	Description	Required	Schema	Default
schedule	New replication schedule name	false	string	
maxTransferRate	New maximum transfer rate limit (KB/s). Use 0 for no limit, otherwise use number between 1024 and 2,147,482,624	false	integer (int32)	

ResetPassword

Name	Description	Required	Schema	Default
oldPassword	User's current password	true	string	
newPassword	User's new password	true	string	

ResetUserPasswordRequest

Name	Description	Required	Schema	Default
password	New password	true	string	

ResourcesToDelete

Name	Description	Required	Schema	Default
instanceNameAndType		true	InstanceNameIdAndType array	
numberOfDisksAndDiskSize		true	DisksDetails array	

RouteTableResponse

Name	Description	Required	Schema	Default
id		true	string	
main		true	boolean	
subnets		true	string array	
tags		true	RouteTableTag array	

RouteTableTag

Name	Description	Required	Schema	Default
key		true	string	
value		true	string	

S3BucketInfoDetails

Name	Description	Required	Schema	Default
bucketName		true	string	
region		true	string	
tags		true	Map[string,string]	
tieringTarget		true	boolean	
backupTarget		true	boolean	

S3BucketsSummary

Name	Description	Required	Schema	Default
s3Buckets		true	S3BucketInfoDetails array	
totalBuckets		true	integer (int32)	
totalRegions		true	integer (int32)	
totalTieringTargets		true	integer (int32)	
totalBackupTargets		true	integer (int32)	

S3Summary

Name	Description	Required	Schema	Default
numOfBuckets		true	integer (int32)	
numOfRegions		true	integer (int32)	
supportable		true	boolean	

SaasMpAccountResponse

Name	Description	Required	Schema	Default
awsSubscriptions	AWS Subscriptions	true	SubscriptionResponse array	
azureSubscriptions	Azure Subscriptions	true	SubscriptionResponse array	
gcpSubscriptions	Gcp Subscriptions	true	SubscriptionResponse array	
eligibleForFreeTrialAws	Eligible For Free Trial AWS	true	boolean	
eligibleForFreeTrialGcp	Eligible For Free Trial Gcp	true	boolean	
eligibleForFreeTrialAzure	Eligible For Free Trial Azure	true	boolean	
cloudAccounts	Cloud accounts	true	CloudAccountResponse array	

SaasMpServiceInformation

Name	Description	Required	Schema	Default
productUrlAws		true	string	
productUrlGcp		true	string	
url		true	string	
productUrlAzure		true	string	
productUrlAwsContract		true	string	

SaasSubscription

Name	Description	Required	Schema	Default
id		true	string	
name		true	string	
active		true	boolean	

SavingsInfo

Name	Description	Required	Schema	Default
name	Name of saving element	false	string	
monthlySaving	Savings for that element	false	Money	

SecurityGroupResponse

Name	Description	Required	Schema	Default
securityGroupId	Security group ID	true	string	
description	Description	true	string	
name	Name	true	string	

ServerTimeZone

Name	Description	Required	Schema	Default
timeZoneName		true	string	
formattedTimeZone		true	string	

ServiceInfo

Name	Description	Required	Schema	Default
enabled		true	boolean	
requireClientInfra		true	boolean	
cloudProvider		false	string array	
metadata		false	Map[string, string]	

ServiceUrl

Name	Description	Required	Schema	Default
url	url	true	string	

SetNssKeysRequest

Name	Description	Required	Schema	Default
nssUserName	NSS username	false	string	
nssPassword	NSS password	false	string	

SetProxyRequest

Name	Description	Required	Schema	Default
uri		true	string	
proxyUserName		false	string	
proxyPassword		false	string	
proxyDomain		false	string	

SetupInfo

Name	Description	Required	Schema	Default
needCertificate		true	boolean	
runningInDocker		true	boolean	
setup		true	boolean	
pendingConnectivity Set		true	boolean	

SgwsCloudBackupSetupRequest

Name	Description	Required	Schema	Default
sgwsCredentials	StorageGRID credentials	true	SgwsCredentialsRequest	
ipSpace	Ip Space	false	string	

SgwsCredentialsRequest

Name	Description	Required	Schema	Default
accessKey	StorageGRID Access Key	true	string	
secretKey	StorageGRID Secret Key	true	string	
serviceUrl	StorageGRID Endpoint - protocol, FQDN and Port	true	string	

SiteIdentifier

Name	Description	Required	Schema	Default
company		true	string	
host		true	string	
site		true	string	

SnapMirrorPolicyResponse

Name	Description	Required	Schema	Default
name		true	string	
comment		true	string	
policyType		true	string	
rules		true	SnapMirrorRuleResponse array	
reason		false	string	
default		true	boolean	
supported		true	boolean	

SnapMirrorRuleResponse

Name	Description	Required	Schema	Default
snapMirrorLabel		true	string	
retention		true	integer (int32)	

SnapshotCreateRequest

Name	Description	Required	Schema	Default
snapshotName	Snapshot name	true	string	

SnapshotDeleteRequest

Name	Description	Required	Schema	Default
snapshotName	Snapshot name	true	string array	

SnapshotPolicy

Name	Description	Required	Schema	Default
name	Name	true	string	
schedules	Schedules	true	PolicySchedule array	
description	Description	true	string	

SnapshotPolicyCreateRequest

Name	Description	Required	Schema	Default
snapshotPolicyName	Snapshot policy name	true	string	

Name	Description	Required	Schema	Default
schedules	Snapshot policy schedules	true	SnapshotPolicyScheduleRequest array	

SnapshotPolicyScheduleRequest

Name	Description	Required	Schema	Default
scheduleType	Snapshot policy schedule type	true	enum (5min, 8hour, hourly, daily, weekly, monthly)	
retention	Snapshot policy retention	true	integer (int32)	

SoftwareVersionAmisResponse

Name	Description	Required	Schema	Default
regionToAmi		true	string]	

SoftwareVersionsResponse

Name	Description	Required	Schema	Default
versions		true	string array	

SourceSnapmirrorEndpoint

Name	Description	Required	Schema	Default
sourceWorkingEnvironmentId	working environment Id	true	string	
sourceSvmName	SVM name	true	string	
sourceVolumeName	volume name	true	string	

SourceTarget

Name	Description	Required	Schema	Default
source		true	Id	
target		true	Id	

StartStopRange

Name	Description	Required	Schema	Default
stop		true	TimePoint	
start		true	TimePoint	

Status

Name	Description	Required	Schema	Default
status		false	string	

StatusProperties

Name	Description	Required	Schema	Default
status		true	string	
message		true	string	
failureCauses		true	FailureCauses	
extendedFailureReason		false	string	

SubnetResponse

Name	Description	Required	Schema	Default
subnetId	Subnet ID	true	string	
cidr	CIDR	true	string	
subnetName	Subnet name	false	string	
availabilityZone	availability zone	true	string	
availableIps	The number of available IPs on the subnet	true	integer (int32)	
minimumRequiredIps	The minimum needed IP addresses for the Cloud Volumes ONTAP creation	true	integer (int32)	
outpostArn	Outpost Arn	false	string	

SubscriptionResponse

Name	Description	Required	Schema	Default
id	Id	true	string	
name	Name	true	string	
provider		true	enum (aws, azure, gcp)	
active	Active	true	boolean	
contract	contract	true	boolean	
byNodeMode	By node mode	true	boolean	

SupportRegistrationInformation

Name	Description	Required	Schema	Default
supportRegistrationStatus		true	string	
serialNumber		true	string	
licenseExpiryDate		false	integer (int64)	
cloudLicenseExists		true	boolean	
nssAccountId		false	string	

SupportRegistrationProperties

Name	Description	Required	Schema	Default
supportRegistrationStatus		true	string	
licenseExpiryDate		true	integer (int64)	

SupportRegistrationResponse

Name	Description	Required	Schema	Default
status		true	string	
licenseExpiryDate		false	integer (int64)	
licenseStartDate		false	integer (int64)	
nssAccountId		false	string	

SupportServices

Name	Description	Required	Schema	Default
asupEnabled		true	boolean	
cognitoEnabled		true	boolean	
kinesisEnabled		true	boolean	
intercomEnabled		true	boolean	
liveChatEnabled		true	boolean	
volumeViewEnabled		true	boolean	
portalService		true	PortalService	
intercomAppId		true	string	
tenancyServiceInformation		false	TenancyServiceInformation	
saasMpServiceInformation		false	SaasMpServiceInformation	

Name	Description	Required	Schema	Default
cvsInformation		true	string	
complianceEnabled		true	boolean	
ipaServiceInformation		false	[IpaServiceInformation](#)	
licenseServiceInformation		false	[LicenseServiceInformation](#)	
servicesInformation		true	Map[string,Map[string,Any]]	
setupInfo		true	[SetupInfo](#)	
useCompliancePrivateIpContainerMode		true	boolean	
notificationServiceInformation		false	[NotificationServiceInformation](#)	

SupportedCapacityTiers

Name	Description	Required	Schema	Default
supportedCapacityTiersPerVolumeType		true	[SupportedCapacityTiersResponse](#) array	
capacityTiersDisableReasons		true	string array	
compositeSupported		true	boolean	
forceCompositeVersion		true	boolean	

SupportedCapacityTiersResponse

Name	Description	Required	Schema	Default
volumeType		true	string	
supportedCapacityTiers		true	string array	
availableTieringPolicies		true	string array	

SupportedFeatures

Name	Description	Required	Schema	Default
supportsMixedAggregates		true	boolean	
supportsTieringWithServiceAccount		true	boolean	

Name	Description	Required	Schema	Default
supportsGp3Disk		true	boolean	

SupportedFeaturesResponse

Name	Description	Required	Schema	Default
wormSupportedVersion		true	boolean	
cbsSupportedVersion		true	boolean	
httpsStorageAccountSupportedVersion		true	boolean	
tieringWithServiceAccount		true	boolean	
s3CmkEncryptionSupportedVersion		true	boolean	
gp3SupportedVersion		true	boolean	

Svm

Name	Description	Required	Schema	Default
name		true	string	
state		true	string	
language		true	string	
allowedAggregates		true	string array	
ver3Enabled	NFS Version 3 enabled	true	boolean	
ver4Enabled	NFS Version 4 enabled	true	boolean	

SvmNameModificationRequest

Name	Description	Required	Schema	Default
svmNewName		true	string	
svmName		false	string	

TagKeyResponse

Name	Description	Required	Schema	Default
key		true	string	

Name	Description	Required	Schema	Default
values		true	string array	

TagResponse

Name	Description	Required	Schema	Default
key	tag key	true	string	
value	tag value	true	string	

TaskCacheEntry

Name	Description	Required	Schema	Default
status		true	integer (int32)	
closeTime		true	integer (int64)	
actionName		true	string	
error		false	string	

TenancyServiceInformation

Name	Description	Required	Schema	Default
accountId		true	string	
url		true	string	
accountWidgetUrl		true	string	
agentsMgmtUrl		true	string	
forwarderUrlOverride		true	string	

TenantActionsRequiredResponse

Name	Description	Required	Schema	Default
weActions		true	WeActionRequiredResponse array	

TenantResponse

Name	Description	Required	Schema	Default
name		true	string	
publicId		true	string	
workingEnvironmentsInformation		false	WorkingEnvironmentsInformation	

TieringRestriction

Name	Description	Required	Schema	Default
restrictionReason		false	string	
tieringRestricted		true	boolean	

TimePoint

Name	Description	Required	Schema	Default
day		true	integer (int32)	
hour		true	integer (int32)	
minute		true	integer (int32)	

TrustedCertificateResponse

Name	Description	Required	Schema	Default
id	ID	true	string	
status	Status	true	enum (ACTIVE, PENDING_DELETED, PENDING_INSTALLED)	
certificateInfo	Certificate Info	true	CertificateResponse	

UpdateCredentialsRequest

Name	Description	Required	Schema	Default
username	Username	true	string	
password	Password	true	string	

UpdateInfo

Name	Description	Required	Schema	Default
name		true	string	
date		true	integer (int64)	
releaseNumber		true	integer (int32)	

UpdateKeyManagerCaCertificateRequest

Name	Description	Required	Schema	Default
keyManagerCaCertificateId		true	string	

UpdateLocalImage

Name	Description	Required	Schema	Default
name		true	string	
version		true	string	
current		true	boolean	

UpdateRouteTablesRequest

Name	Description	Required	Schema	Default
routeTableIds		true	string array	

UpdateServiceUser

Name	Description	Required	Schema	Default
cloudManagerNotificationsOptIn		true	boolean	

UpdateSubscriptionRequest

Name	Description	Required	Schema	Default
subscriptionId	SaaS Marketplace subscription id	true	string	

UpdateSystemImageRequest

Name	Description	Required	Schema	Default
updateType	System update type. System update can be performed by providing either: an external URL from which ONTAP will download the image file, a local image already in ONTAP or a name of an image provided by Cloud Manager	true	enum (EXTERNAL_FILE, LOCAL_IMAGE, OCCM_PROVIDED)	
updateParameter	Parameter specific to the specified update type. External file URL, local image name or Cloud Manager provided image name	true	string	

UpdateTenantRequest

Name	Description	Required	Schema	Default
name	Tenant name	true	string	
description	Tenant description	false	string	
costCenter	Tenant cost center	false	string	

UpdateUserRequest

Name	Description	Required	Schema	Default
firstName	User first name	true	string	
lastName	User last name	true	string	
email	User email	true	string	
ldapUserName	AD user name	false	string	
notificationsOptIn	Email notifications opt-in	false	boolean	

Usage

Name	Description	Required	Schema	Default
amount	Amount	false	number (double)	
units	Units	false	string	

UserPasswordRequest

Name	Description	Required	Schema	Default
email	Email address of the user attempting to login	true	string	
password	Password of the user attempting to login	true	string	

UserRequest

Name	Description	Required	Schema	Default
firstName	User first name	true	string	
lastName	User last name	true	string	
email	User email	true	string	
roleId	Role ID of the user	true	string	
tenantId	Tenant ID of the user	false	string	

Name	Description	Required	Schema	Default
password	User password	true	string	
ldapUserName	LDAP User Name	false	string	
notificationsOptIn	Email notifications opt-in	false	boolean	
ldap		true	boolean	

UserResponse

Name	Description	Required	Schema	Default
publicId	User public ID	true	string	
assignedWorkingEnvironments	List of public IDs of all of the working environments visible to the user	true	string array	
firstName	User first name	true	string	
lastName	User last name	true	string	
email	User email	true	string	
roleId	Role ID of the user	true	string	
tenantId	Tenant ID of the user	true	string	
createdWorkingEnvironments	List of all working environments created by the user	true	UserWorkingEnvironmentResponse array	
cloudSyncLicenseInformation	Cloud Sync license information	false	CloudSyncLicenseInformation	
ldapUserName	LDAP User Name	true	string	
notificationsOptIn	Notification OptIn	true	boolean	
permissions	Permissions	true	string array	
ldap		true	boolean	

UserTagsResponse

Name	Description	Required	Schema	Default
tags		true	CloudResourceTag array	

UserWorkingEnvironmentResponse

Name	Description	Required	Schema	Default
publicId	Working environment public ID	true	string	
name	Working environment name	true	string	
workingEnvironment Type	Working environment Type	true	string	

VersionWrapper

Name	Description	Required	Schema	Default
name		true	string	
date		true	integer (int64)	
releaseNumber		true	integer (int32)	

VhdImageRequest

Name	Description	Required	Schema	Default
blobUrl		true	string	

VmDiskProperties

Name	Description	Required	Schema	Default
objectName		true	string	
storageAccountNam e		true	string	
containerName		true	string	

Volume

Name	Description	Required	Schema	Default
name	Name	true	string	
totalSize	Volume total size	true	Capacity	
usedSize	Volume used size	true	Capacity	
thinProvisioned	Is volume thin-provisioned	true	boolean	
rootVolume	Is volume the root volume of the SVM	true	boolean	
clone		true	boolean	

VolumeCbsInfo

Name	Description	Required	Schema	Default
totalBackups		true	integer (int32)	

VolumeCloneRequest

Name	Description	Required	Schema	Default
newVolumeName	New volume name	true	string	
parentSnapshot	Snapshot name to use for clone	false	string	

VolumeForBackupResponse

Name	Description	Required	Schema	Default
name		true	string	
uuid		true	string	
svmName		true	string	
size		true	Capacity	
usedSize		true	Capacity	
state		true	string	
providerVolumeType		false	string	
volumeType		true	string	
disableReasonBackup		true	string array	
backupOn		true	boolean	

VolumeInfo

Name	Description	Required	Schema	Default
volumeName		true	string	
svmName		true	string	
newCapacity		true	Capacity	

VolumeModifyRequest

Name	Description	Required	Schema	Default
snapshotPolicyName	Snapshot Policy name	false	string	

Name	Description	Required	Schema	Default
shareInfo	Share names, permissions and users for CIFS	false	CifsShareInfo	
exportPolicyInfo	Export policy info for NFS	false	NamedExportPolicyInfo	
qualityOfService	Quality of service	false	VolumeQualityOfService	
tieringPolicy	Tiering policy	false	enum (none, snapshot_only, auto, all)	
minimumCoolingDays	Tiering minimum cooling days	false	integer (int32)	

VolumeMoveParameters

Name	Description	Required	Schema	Default
volumeName		true	string	
svmName		true	string	
targetAggregateName		true	string	
homeNode		false	string	
newTargetAggregate		true	boolean	

VolumeMoveRequest

Name	Description	Required	Schema	Default
targetAggregateName	Target aggregate name	true	string	
numOfDisksToAdd	Target aggregate number of disks to add	true	integer (int32)	
createTargetAggregate	Is new Target aggregate	true	boolean	
newDiskTypeName	Volume's new Disk type	false	string	
newCapacityTier	New capacity tier	false	enum (S3, Blob, cloudStorage)	
newTieringPolicy	New tiering policy	false	enum (none, snapshot_only, auto, all)	

VolumeQualityOfService

Name	Description	Required	Schema	Default
maxIops		false	integer (int32)	
maxDataRate	Max Data rate per second	false	Capacity	

VolumeResponse

Name	Description	Required	Schema	Default
name	Volume name	true	string	
uuid	Volume uuid	true	string	
svmName	Volume SVM name	true	string	
size	Volume total size	true	Capacity	
usedSize	Volume used size	true	Capacity	
junctionPath	The junction path at which this volume is mounted	true	string	
volumeTotalInodes	Total volume inodes size	false	integer (int32)	
volumeUsedInodes	Used volume inodes size	false	integer (int32)	
mountPoint	Mount Point	false	string	
compressionSpaceSaved	The total disk capacity that is saved by compressing blocks	true	Capacity	
deduplicationSpaceSaved	The disk space capacity that is saved by deduplication and file cloning	true	Capacity	
thinProvisioning	Whether thin provisioning is enabled	true	boolean	
compression	Whether compression is enabled	true	boolean	
deduplication	Whether deduplication is enabled	true	boolean	
snapshotPolicy	The name of the Snapshot policy	true	string	

Name	Description	Required	Schema	Default
securityStyle	The type of the Security style	true	string	
exportPolicyInfo	The export policy info for NFS	true	NamedExportPolicyInfo	
shareNames	The share names for CIFS	true	string array	
shareInfo	The share names, permissions and users for CIFS	true	CifsShareInfo array	
parentVolumeName	Name of the parent flexible volume for the clone	true	string	
rootVolume	Flag to indicate if the volume is a SVM root	true	boolean	
state	Volume state	true	string	
volumeType	Volume type	true	string	
aggregateName	Aggregate name	true	string	
parentSnapshot	The snapshot name the volume is based on	false	string	
autoSizeMode	The operating mode of autosize	true	string	
maxGrowSize	The maximum size to which the volume will grow automatically	true	Capacity	
providerVolumeType	Cloud provider volume type	false	string	
cloneNames	Names of cloned copies of the volume	true	string array	
moving	Is Volume during move process	true	boolean	
primaryNoFailoverMountPoint	Primary mount point without failover	false	string	
secondaryNoFailoverMountPoint	Secondary mount point without failover	false	string	
capacityTier	Capacity tier	false	enum ([S3, Blob])	
capacityTierUsedSize	Capacity tier used size	false	Capacity	

Name	Description	Required	Schema	Default
cifsShareAccessPoint	CIFS share access point	false	string	
primaryCifsShareAccessPoint	Primary CIFS share access point	false	string	
secondaryCifsShareAccessPoint	Secondary CIFS share access point	false	string	
tieringPolicy	Tiering policy	false	string	
tierInactiveUserData	Tier inactive user data	false	Capacity	
tierInactiveUserDataPercent	Tier inactive user data percent	false	integer (int32)	
comment	Volume comment	false	string	
qosPolicyGroupName	Quality of service policy group name	false	string	
snaplockType	Snaplock type	false	enum (non_snaplock, compliance, enterprise)	
constituentsAggregates	Aggregates which are used for FlexGroup constituents	true	string array	
snapshotsUsedSize	The size that is used by snapshots in the volume	false	Capacity	
cbsBackupsInfo	Backup to Cloud Service info	false	VolumeCbsInfo	
minimumCoolingDays	Tiering minimum cooling days	false	integer (int32)	
targetName	ISCSI target IQN	true	string	
iscsiEnabled		true	boolean	
flexGroupVolume		true	boolean	

VolumeTags

Name	Description	Required	Schema	Default
tagKey		true	string	
tagValue		true	string	

VolumesListForBackup

Name	Description	Required	Schema	Default
volumes		true	VolumeForBackupResponse array	
totalNumberOfVolumes		true	integer (int32)	
filteredNumberOfVolumes		false	integer (int32)	
hasNextPage		false	boolean	
allowedValuesForVolumesListFilter		false	AllowedValuesForVolumesListFilter	

VpcBasicResponse

Name	Description	Required	Schema	Default
vpcId	VPC ID	true	string	
state	VPC state	true	string	
cidrBlock	VPC CIDR block	true	string	
tags	VPC tags	true	VpcTagResponse array	
default	Is the VPC a default one	true	boolean	

VpcExtendedResponse

Name	Description	Required	Schema	Default
vpcId	VPC ID	true	string	
state	VPC state	true	string	
cidrBlock	VPC CIDR block	true	string	
tags	VPC tags	true	VpcTagResponse array	
default	Is the VPC a default one	true	boolean	
subnets	Subnets associated with vpc	true	SubnetResponse array	
securityGroups	Security groups associated with vpc	true	SecurityGroupResponse array	
tenancy	VPC Tenancy	true	string	

VpcTagResponse

Name	Description	Required	Schema	Default
key	VPC tag key	true	string	
value	VPC tag value	true	string	

VsaAggregateCreateRequest

Name	Description	Required	Schema	Default
name		true	string	
workingEnvironmentId		true	string	
numberOfDisks		true	integer (int32)	
diskSize		true	Capacity	
homeNode		false	string	
providerVolumeType		false	string	
capacityTier		false	enum (S3, Blob, cloudStorage)	
iops	Provisioned IOPS	false	integer (int32)	
throughput	Provisioned Throughput	false	integer (int32)	

VsaClusterProperties

Name	Description	Required	Schema	Default
lifs		true	LifResponse array	
serialNumber		true	string	
systemId		true	string	
clusterName		true	string	
ontapVersion		true	string	
accountId		true	string	
productCode		true	string	
amiId		true	string	
systemManagerUrl		true	string	
creationTime		true	integer (int64)	
instanceId		true	string	
platformLicense		true	string	
licenseExpiryDate		true	integer (int64)	

Name	Description	Required	Schema	Default
instanceType		true	string	
publicIp		false	string	
publicDnsName		false	string	
licenseType		true	VsaLicense	
lastModifiedOffbox		false	integer (int64)	
offboxTarget		true	boolean	
upgradeVersions		false	OntapUpdateImage Metadata array	
writingSpeedState		false	string	

VsaLicense

Name	Description	Required	Schema	Default
name	License name	true	string	
capacityLimit	Capacity limit	true	Capacity	

VsaMetadataRequest

Name	Description	Required	Schema	Default
ontapVersion	Ontap Version	true	string	
licenseType	License Type	true	string	
instanceType	Instance Type	true	string	
platformSerialNumber	Optional platform Serial Number	false	string	
providedLicense	Optional provided License	false	string	
capacityPackageName	Optional Capacity Based Package	false	enum (Professional, Essential, Freemium)	
keyStoneSubscription	Keystone Subscription Id	false	string	
useLatestVersion	Use Latest Version	false	boolean	

VsaSchedule

Name	Description	Required	Schema	Default
name		true	string	
schedule		true	StartStopRange array	

Name	Description	Required	Schema	Default
enabled		true	boolean	

VsaSchedulesRequest

Name	Description	Required	Schema	Default
schedules		true	VsaSchedule array	

VsaVolumeCreateRequest

Name	Description	Required	Schema	Default
workingEnvironmentId	Cloud Volumes ONTAP Working Environment ID	true	string	
svmName	SVM name	true	string	
aggregateName	Aggregate in which the volume will be created	true	string	
name	Volume name, unique within the SVM	true	string	
size	Size as Capacity	true	PositiveCapacity	
initialSize	Initial size as Capacity. Relevant for thin provisioned volumes only	false	Capacity	
snapshotPolicyName	Snapshot Policy name	true	string	
exportPolicyInfo	NFS protocol parameters	false	ExportPolicyInfo	
shareInfo	CIFS protocol parameters	false	CreateCifsShareInfoRequest	
enableThinProvisioning	Enable thin provisioning	true	boolean	
enableCompression	Enable compression	true	boolean	
enableDeduplication	Enable deduplication	true	boolean	
maxNumOfDisksApprovedToAdd	Maximum number of disks approved to allocate	true	integer (int32)	
providerVolumeType	Provider volume type	false	string	
syncToS3	Add Cloud Sync relationship	true	boolean	

Name	Description	Required	Schema	Default
capacityTier	Capacity tier	false	enum (S3, Blob, cloudStorage)	
iops	Provisioned IOPS	false	integer (int32)	
throughput	Provisioned Throughput	false	integer (int32)	
tieringPolicy	Tiering policy	false	enum (none, snapshot_only, auto, all)	
junctionPath	Junction path	false	string	
qualityOfService	Quality of service	false	VolumeQualityOfService	
minimumCoolingDays	Cooling Days	false	integer (int32)	
volumeTags	Optionally provide key-value pairs with which to tag the ONTAP volume using App Template service	false	VolumeTags array	
iscsiInfo		true	CreateIscsiInfoRequest	

VsaVolumeOnNewVsaCreateRequest

Name	Description	Required	Schema	Default
name	Volume name, unique within the SVM	true	string	
size	Size as Capacity	true	PositiveCapacity	
initialSize	Initial size as Capacity. Relevant for thin provisioned volumes only.	false	Capacity	
snapshotPolicyName		true	string	
exportPolicyInfo	NFS protocol parameters	false	ExportPolicyInfo	
shareInfo	CIFS protocol parameters	false	CreateCifsShareInfoRequest	
enableThinProvisioning	Enable thin provisioning	true	boolean	
enableCompression	Enable compression	true	boolean	

Name	Description	Required	Schema	Default
enableDeduplication	Enable deduplication	true	boolean	
tieringPolicy	Tiering policy	false	enum (none, snapshot_only, auto, all)	
junctionPath	Junction path	false	string	
qualityOfService	Quality of service	false	VolumeQualityOfService	
iscsiInfo		true	CreateIscsiInfoRequest	

VsaVolumeQuoteRequest

Name	Description	Required	Schema	Default
workingEnvironmentId	Cloud Volumes ONTAP Working Environment ID	true	string	
svmName	SVM name	true	string	
aggregateName	Optionally choose in which aggregate to create the volume	false	string	
name	Volume name, unique within the SVM	true	string	
size	Size as Capacity	true	PositiveCapacity	
initialSize	Initial size as Capacity. Relevant for thin provisioned volumes only	false	Capacity	
enableThinProvisioning	Enable thin provisioning	true	boolean	
providerVolumeType	Provider volume type	false	string	
verifyNameUniqueness	Verify volume name uniqueness within the SVM	true	boolean	
capacityTier	Capacity tier	false	enum (S3, Blob, cloudStorage)	
iops	Provisioned IOPS	false	integer (int32)	
throughput	Provisioned Throughput	false	integer (int32)	

Name	Description	Required	Schema	Default
tieringPolicy	Tiering policy	false	enum (none, snapshot_only, auto, all)	
replicationFlow		true	boolean	

VsaVolumeQuoteResponse

Name	Description	Required	Schema	Default
numOfDisks	Number of new disks needed	true	integer (int32)	
diskSize	New disks size	true	Capacity	
aggregateName	The aggregate on which the requested volume will be created	true	string	
newAggregate	Is it a newly created aggregate	true	boolean	
autoVsaCapacityMa nagement	Is auto Cloud Volumes ONTAP capacity management enabled	true	boolean	

VsaVolumeRequest

Name	Description	Required	Schema	Default
sourceSvmName	Source SVM name	true	string	
sourceVolumeName	Source volume name	true	string	
destinationVolumeN ame	Destination volume name	true	string	
destinationAggregat eName	Destination aggregate name	true	string	
numOfDisksApprove dToAdd	Maximum number of disks approved to add	true	integer (int32)	
advancedMode	Use advanced allocation for destination volume	true	boolean	
destinationProviderV olumeType	Destination provider volume type	false	string	

Name	Description	Required	Schema	Default
destinationCapacityTier	Destination aggregate capacity tier	false	enum (S3, Blob, cloudStorage)	
destinationSvmName	Destination SVM name	false	string	
iops	Provisioned IOPS	false	integer (int32)	
throughput	Provisioned Throughput	false	integer (int32)	
tieringPolicy	Tiering policy	false	enum (none, auto, all)	

VsaWorkingEnvironmentResponse

Name	Description	Required	Schema	Default
publicId		true	string	
name		true	string	
tenantId		true	string	
svmName		false	string	
creatorUserEmail		true	string	
status		false	[StatusProperties](#)	
awsProperties		false	[AwsProperties](#)	
reservedSize		false	[Capacity](#)	
encryptionProperties		false	[EncryptionProperties](#)	
clusterProperties		false	[VsaClusterProperties](#)	
ontapClusterProperties		false	[OntapClusterProperties](#)	
actionsRequired		false	[ActionRequired](#) array	
interClusterLifs		false	[InterClusterLif](#) array	
cronJobSchedules		false	[CronJobSchedule](#) array	
snapshotPolicies		false	[SnapshotPolicy](#) array	
svms		false	[Svm](#) array	
activeActions	Actions currently being performed on this working environment	false	string array	

Name	Description	Required	Schema	Default
replicationProperties	Working environments in which a SnapMirror relationship exists between volumes on this working environment	false	ReplicationProperties	
schedules		false	VsaSchedule array	
cloudProviderName		true	string	
workingEnvironment Type		true	string	
supportRegistrationP roperties		false	SupportRegistration Properties	
supportRegistrationI nformation		false	SupportRegistrationI nformation array	
haProperties		false	HaProperties	
capacityFeatures		false	CapacityFeatures	
cloudSyncProperties		false	CloudSyncProperties	
supportedFeatures		false	SupportedFeatures	
fpolicyProperties		false	FpolicyProperties	
saasProperties		false	CvoSaasProperties	
cbsProperties		false	CbsPropertiesWithR eason	
complianceProperties s		false	CloudComplianceSt atusResponse	
monitoringProperties		false	MonitoringStatusRes ponse	
licensesInformation		false	LicenseInformation array	
hA		true	boolean	

VscanFileOpRequest

Name	Description	Required	Schema	Default
vscanFileOp	Vscan file-operation	true	enum (writes_only, standard)	

WeActionRequiredResponse

Name	Description	Required	Schema	Default
publicId		true	string	
actions		true	ActionRequired array	

WorkingEnvironmentCostAndUsageResponse

Name	Description	Required	Schema	Default
hasPermissions	Has permissions to view cost and usage details	true	boolean	
costByTime	Working environment cost and usage details	true	CostByTime array	

WorkingEnvironmentOntapSavingResponse

Name	Description	Required	Schema	Default
savings	list of savings	true	SavingsInfo array	

WorkingEnvironments

Name	Description	Required	Schema	Default
vsaWorkingEnvironments		true	VsaWorkingEnvironmentResponse array	
onPremWorkingEnvironments		true	OnPremWorkingEnvironmentResponse array	
azureVsaWorkingEnvironments		true	AzureVsaWorkingEnvironmentResponse array	
gcpVsaWorkingEnvironments		true	GcpVsaWorkingEnvironmentResponse array	

WorkingEnvironmentsInformation

Name	Description	Required	Schema	Default
regionsCount	Number of regions for which working environments exist over this tenant	true	integer (int32)	

Name	Description	Required	Schema	Default
totalReservedSize	Total reserved size of all working environments created over this tenant	true	Capacity	
workingEnvironmentsCount	Number of working environments created over this tenant	true	integer (int32)	

WorkspaceResponse

Name	Description	Required	Schema	Default
workspacePublicId		true	string	
workspaceName		true	string	
associatedToAgent		true	boolean	

WormRequest

Name	Description	Required	Schema	Default
retentionPeriod	WORM Retention period	true	WormRetentionPeriod	

WormRetentionPeriod

Name	Description	Required	Schema	Default
length	Length	true	integer (int32)	
unit	Unit	true	enum (years, months, days, hours, minutes, seconds)	

WritingSpeedRequest

Name	Description	Required	Schema	Default
writingSpeedState	Writing speed state	true	enum (NORMAL, HIGH)	

ZapiCredentials

Name	Description	Required	Schema	Default
ip		true	string	
userName		true	string	
password		true	string	

Storage workflows

AWS workflows

Workflows for Amazon Web Services

There are several workflows you can use with the Amazon Web Services public cloud.

ⓘ   Review the Get started section before using any of the Cloud Manager REST API workflows.

Workflow categories

The AWS workflows are organized into the following functional categories:

- Working environments
- Aggregates
- Volumes
- Metadata
- Miscellaneous

See Understanding the workflow processes for more information on these categories.

Connector setup

You must have a **Connector** for the cloud environment before creating a working environment and performing other activities using the workflows. You can create a Connector using the Cloud Manager web UI. When you create a Connector, Cloud Manager adds the AWS cloud provider account that you deployed the Connector in to your list of available accounts. Your AWS account needs to have the right permissions in order to create a Connector.

Review Learn about AWS Connectors to know how to create and deploy an AWS Connector.

Working environments

Create a working environment with PAYGO

You can create a new Cloud Volumes ONTAP working environment using pay-as-you-go (PAYGO) subscription. You can add new volumes when creating the working environment.

> **Note the following when using PAYGO**:
>
> - A marketplace subscription is required.
> - A NetApp Support Site (NSS) key is recommended to register the system for support, but it's not required.
> - You can add more volumes after creating the working environment. You can add volumes using the NFS, CIFS or the iSCSI protocol.

Choose the correct workflow depending on the type of the Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Create working environment for single node

You can use this workflow to create an single node Cloud Volumes ONTAP working environment.

1. Select the region

Perform the workflow Get regions and choose the `code` value for the `region` parameter in step 9.

2. Select the workspace

Perform the workflow Get tenants and choose the `workspacePublicId` value for the `tenantId` parameter in step 9.

3. Select the permutations configuration

Perform the workflow Get permutations and choose the `ontapVersion` and `license: type` and `instanceType` values for the `vsaMetadata` parameter in step 9.

4. Select the VPC

Perform the workflow Get VPCs and do the following:

- Choose the `vpcId` value for the `vpcId` parameter in step 9.
- Choose the `cidrBlock` values for the `ips` value of the volume parameter in step 9.

5. Select the EBS volume configuration

Perform the workflow Get EBS volume types and choose the `size` and `supportedVolumeTypes` values for the `ebsVolumeSize` and `ebsVolumeType` parameters in step 9.

> ⓘ You need to choose one of the allowed values for the required `ebsVolumeType` parameter. We have used `gp2` value for this parameter in step 9.

6. Attach a marketplace subscription

Perform the workflow Attach SaaS subscription.

7. (Optional) Obtain an NSS key

An NSS key is optional when using PAYGO licensing. If needed, you can create a key or select an existing key, and include the NSS key in the `nssAccount` parameter in step 9.

- To create a new NSS key using the Cloud Manager web user interface, perform the task Generate NSS user ID and choose the NSS ID.
- To select an existing NSS key, perform the workflow Get NSS keys and choose the `id` of the required NSS user.

8. (Optional) Create a new volume

You can optionally add a new volume while creating a working environment.

- Choose the `name` and `size` values for the corresponding `name` and `size:size` input parameters in step 9. The `size:unit` must be one of the following: TB, GB, MB, KB, or Byte.
- Choose the `policyType`, `ips`, and the `nfsVersion` parameters in the `exportPolicyInfo` input parameter in step 9 if you choose to create a volume using the NFS protocol. The `ips` parameter signifies the client IP address (could be multiple addresses) that can access the volume over the network. The `nfsVersion` parameter signifies the version of the NFS protocol that a client will use for data transmission over a network.

> ⓘ   If you choose to create a volume using CIFS protocol, you will need to set the `shareInfo` parameter. If you choose to create a volume using iSCSI protocol, you will need to set the `iscsiInfo` parameter accordingly.

9. Create the working environment

HTTP method	Path
POST	/occm/api/vsa/working-environments

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/vsa/working-environments'
--header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer
<ACCESS_TOKEN>' --header 'Content-Type: application/json' --d @JSONinput
```

Input

The JSON input example includes the minimum list of parameters.

> ⓘ   This request uses PAYGO subscription as indicated in the `licenseType` parameter.

JSON input example

```json
{
    "name": "ziv01we02",
    "svmPassword": "user_password",
    "vpcId": "vpc-b16c90d4",
    "region": "us-east-1",
    "tenantId": "tenantIDgoeshere",
    "subnetId": "subnet-f4da95ac",
    "dataEncryptionType": "AWS",
    "vsaMetadata": {
        "ontapVersion": "ONTAP-9.9.0.T1",
        "licenseType": "cot-explore-paygo",
        "instanceType": "m5.xlarge"
        },
    "ebsVolumeSize": {
        "size": 100,
        "unit": "GB"
    },
    "ebsVolumeType": "gp2",
    "volume": {
      "name": "ziv02vol01",
      "size": {
        "size": 200,
        "unit": "GB"
      },
      "exportPolicyInfo": {
        "policyType": "custom",
        "ips": [
          "172.31.0.0/16"
        ],
       "nfsVersion": [
          "nfs3",
          "nfs4"
        ]
      },
      "snapshotPolicyName": "default",
      "enableThinProvisioning": true,
      "enableCompression": true,
      "enableDeduplication": true
    },
    "writingSpeedState": "NORMAL"
}
```

Output

The JSON output example includes an example of the `VsaWorkingEnvironmentRresponse`.

JSON output example

```
{
    "publicId": "VsaWorkingEnvironment-0NWsb1aX",
    "name": "ziv01we02",
    "tenantId": "tenantIDgoeshere",
    "svmName": "svm_ziv01we02",
    "creatorUserEmail": "user_email",
    "status": null,
    "awsProperties": null,
    "reservedSize": null,
    "encryptionProperties": null,
    "clusterProperties": null,
    "ontapClusterProperties": null,
    "actionsRequired": null,
    "interClusterLifs": null,
    "cronJobSchedules": null,
    "snapshotPolicies": null,
    "svms": null,
    "activeActions": null,
    "replicationProperties": null,
    "schedules": null,
    "cloudProviderName": "Amazon",
    "isHA": false,
    "workingEnvironmentType": "VSA",
    "supportRegistrationProperties": null,
    "supportRegistrationInformation": null,
    "haProperties": null,
    "capacityFeatures": null,
    "cloudSyncProperties": null,
    "supportedFeatures": null,
    "k8sProperties": null,
    "fpolicyProperties": null,
    "saasProperties": null,
    "cbsProperties": null,
    "complianceProperties": null,
    "monitoringProperties": null
}
```

Create working environment for high availability pair

You can use this workflow to create an HA Cloud Volumes ONTAP working environment.

1. Select the region

Perform the workflow Get regions and choose the `code` value for the `region` parameter in step 11.

2. Select the cloud provider account

Perform the workflow Get cloud provider accounts and choose the `publicId` value of the required account for the `cloudProviderAccount` parameter.

3. Select the workspace

Perform the workflow Get tenants and choose the `workspacePublicId` value for the `tenantId` parameter in step 12.

4. Select the permutations configuration

Perform the workflow Get permutations and choose the `ontapVersion` and `license: type` and `instanceType` values for the `vsaMetadata` parameter in step 12.

5. Select the packages configuration

Perform the Get Packages and choose the `packageName, instanceTenancy` and `writingSpeedState` values for the corresponding parameters in step 12.

6. Select the VPC

Perform the workflow Get VPCs and do the following:

- Choose the `vpcId` value for the `vpcId` parameter in step 12.
- Choose three subnets and choose the `subnetId` value for the `haParams:mediatorSubnetId, haParams:node1SubnetId, haParams:node2SubnetId` in step 12.
- Select the IPs for the `clusterFloatingIP, dataFloatingIP, dataFloatingIP2` values for the corresponding parameters in step 12.

7. Select route table

Perform the workflow Get route tables and choose the `id` value of the required route table for `haParams:routeTableIds` parameter is step 12.

8. Select the EBS volume configuration

Perform the workflow Get EBS volume types and choose the `size` and `supportedVolumeTypes` values for the `ebsVolumeSize` and `ebsVolumeType` parameters in step 12.

> ⓘ You need to choose one of the allowed values for the required `ebsVolumeType` parameter. We have used `gp2` value for this parameter in step 12.

9. Attach a marketplace subscription

Perform the workflow Attach SaaS subscription.

10. (Optional) Obtain an NSS key

An NSS key is optional when using PAYGO licensing. If needed, you can create a key or select an existing key, and include the NSS key in the `nssAccount` parameter in step 12.

- To create a new NSS key using the Cloud Manager web user interface, perform the task Generate NSS user ID and choose the NSS ID.

- To select an existing NSS key, perform the workflow Get NSS keys and choose the `id` of the required NSS user.

11. (Optional) Create a new volume

You can optionally add a new volume while creating a working environment.

- Choose the `name` and `size` values for the corresponding `name` and `size:size` input parameters in step 12. The `size:unit` must be one of the following: TB, GB, MB, KB, or Byte.

- Choose the `policyType`, `ips`, and the `nfsVersion` parameters in the `exportPolicyInfo` input parameter in step 12 if you choose to create a volume using the NFS protocol. The `ips` parameter signifies the client IP address (could be multiple addresses) that can access the volume over the network. The `nfsVersion` parameter signifies the version of the NFS protocol that a client will use for data transmission over a network.

> (i) If you choose to create a volume using CIFS protocol, you will need to set the `shareInfo` parameter. If you choose to create a volume using iSCSI protocol, you will need to set the `iscsiInfo` parameter accordingly.

12. Create the working environment

HTTP method	Path
POST	/occm/api/aws/ha/working-environments

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/aws/ha/working-
environments' --header 'x-agent-id: <AGENT_ID>' --header 'Authorization:
Bearer <ACCESS_TOKEN>' --header 'Content-Type: application/json' --d
@JSONinput
```

Input

The JSON input example includes the minimum list of parameters.

> (i) This request uses PAYGO licensing as indicated in the `licenseType` parameter.

JSON input example

```
{
  "name": "ziv04we02ha",
  "svmPassword": "password",
  "vpcId": "vpc-b16c90d4",
  "region": "us-east-1",
  "tenantId": "tenantIDgoeshere",
```

```
    "ebsVolumeSize": {
      "size": 100,
      "unit": "GB"
    },
    "ebsVolumeType": "gp2",
    "vsaMetadata": {
      "ontapVersion": "ONTAP-9.9.0X6.T1.ha",
      "licenseType": "ha-cot-explore-paygo",
      "instanceType": "m5.xlarge"
    },
    "dataEncryptionType": "AWS",
    "ontapEncryptionParameters": null,
    "haParams": {
      "node1SubnetId": "subnet-f4da95ac",
      "node2SubnetId": "subnet-b4387a9e",
      "mediatorSubnetId": "subnet-76e6d400",
      "clusterFloatingIP": "4.4.4.4",
      "dataFloatingIP": "5.5.5.5",
      "dataFloatingIP2": "6.6.6.6",
      "mediatorKeyPairName": "Developers_Virginia",
      "routeTableIds": [
        "rtb-02a45467"
      ],
      "failoverMode": "FloatingIP",
      "mediatorAssignPublicIP": true
    },
    "volume": {
      "name": "ziv02vol01",
      "size": {
        "size": 200,
        "unit": "GB"
      },
      "exportPolicyInfo": {
        "policyType": "custom",
        "ips": [
          "172.31.0.0/16"
        ],
        "nfsVersion": [
          "nfs3",
          "nfs4"
        ]
      },
      "snapshotPolicyName": "default",
      "enableThinProvisioning": true,
      "enableCompression": true,
      "enableDeduplication": true
```

```
    },
    "optimizedNetworkUtilization": false,
    "instanceTenancy": "default",
    "packageName": "aws_ha_poc",
    "cloudProviderAccount": "InstanceProfile",
    "backupVolumesToCbs": false,
    "enableMonitoring": "false",
    "writingSpeedState": "NORMAL"
  }
```

Output

The JSON output example includes an example of the HA working environment details.

JSON output example

```
{
    "publicId": "VsaWorkingEnvironment-sQ9AELDS",
    "name": "ziv04we02ha",
    "tenantId": "tenantIDshownhere",
    "svmName": "svm_ziv04we02ha",
    "creatorUserEmail": "user_email",
    "status": null,
    "awsProperties": null,
    "reservedSize": null,
    "encryptionProperties": null,
    "clusterProperties": null,
    "ontapClusterProperties": null,
    "actionsRequired": null,
    "interClusterLifs": null,
    "cronJobSchedules": null,
    "snapshotPolicies": null,
    "svms": null,
    "activeActions": null,
    "replicationProperties": null,
    "schedules": null,
    "cloudProviderName": "Amazon",
    "isHA": true,
    "workingEnvironmentType": "VSA",
    "supportRegistrationProperties": null,
    "supportRegistrationInformation": null,
    "haProperties": null,
    "capacityFeatures": null,
    "cloudSyncProperties": null,
    "supportedFeatures": null,
    "k8sProperties": null,
    "fpolicyProperties": null,
    "saasProperties": null,
    "cbsProperties": null,
    "complianceProperties": null,
    "monitoringProperties": null
}
```

Create a working environment with BYOL licensing

You can use this workflow to create a new Cloud Volumes ONTAP working environment using bring-your-own-license (BYOL) licensing.

> **Note the following when using BYOL licensing**:
>
> - A marketplace subscription is not required.
> - A NetApp Support Site (NSS) key is required to register the system for support.
> - You can add a volume after creating the working environment.

To optionally create a new volume with the working environment, you must modify the JSON input provided on the REST API call. See Create a working environment with PAYGO licensing for an example.

Choose the correct workflow depending on the type of the Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Create working environment for single node

You can use this workflow to create a single node Cloud Volumes ONTAP working environment.

1. Select the region

Perform the workflow Get regions and choose the `code` value for the `region` parameter in step 7.

2. Select the workspace

Perform the workflow Get tenants and choose the `workspacePublicId` value for the `tenantId` parameter in step 7.

3. Select the permutations configuration

Perform the workflow Get permutations and choose the `ontapVersion` and `license: type` and `instanceType` values for the `vsaMetadata` parameter in step 7.

You will also need to include the `platformSerialNumber` value in `vsaMetadata` parameter in the REST API call.

4. Select the VPC

Perform the workflow Get VPCs and choose the `vpcId` value for the `vpcId` parameter in step 7.

5. Select the EBS volume configuration

Perform the workflow Get EBS volume types and choose the `size` and `supportedVolumeTypes` values for the `ebsVolumeSize` and `ebsVolumeType` parameters in step 7.

> ⓘ You need to choose one of the allowed values for the required `ebsVolumeType` parameter. We have used `gp2` value for this parameter in step 7.

6. Obtain the required NSS key

An NSS key is required when using BYOL licensing. You can create a key or select an existing key, and include the NSS key in the `nssAccount` parameter in step 7.

- To create a new NSS key using the Cloud Manager web user interface, perform the task Generate NSS user ID and choose the NSS ID.

- To select an existing NSS key, perform the workflow Get NSS keys and choose the `id` of the required NSS user.

7. Create the working environment

HTTP method	Path
POST	/occm/api/vsa/working-environments

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/vsa/working-environments'
--header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer
<ACCESS_TOKEN>' --header 'Content-Type: application/json' --d @JSONinput
```

Input

The JSON input example includes the minimum list of parameters. This request uses BYOL licensing as indicated in the `licenseType` parameter. The `platformSerialNumber` is required.

JSON input example

```json
{
    "name": "ziv02we03",
    "svmPassword": "password",
    "vpcId": "vpc-b16c90d4",
    "region": "us-east-1",
    "tenantId": "workspace-cxxx123",
    "subnetId": "subnet-f4da95ac",
    "dataEncryptionType": "AWS",
    "nssAccount": "xxx332ce3-xxxx-4000-xx00-000a0601c682",
    "vsaMetadata": {
        "ontapVersion": "ONTAP-9.9.0.T1",
        "licenseType": "cot-premium-byol",
        "instanceType": "m5.xlarge",
        "platformSerialNumber": "001001000000000000020"
        },
        "ebsVolumeSize": {
            "size": 100,
            "unit": "GB"
            },
            "ebsVolumeType": "gp2"
}
```

Output

The JSON output example includes an example of the `VsaWorkingEnvironmentRresponse` response.

JSON output example

```
{
    "publicId": "VsaWorkingEnvironment-wL2MaBJs",
    "name": "username",
    "tenantId": "tenantIDgoeshere",
    "svmName": "svm_ziv02we03",
    "creatorUserEmail": "user_email",
    "status": null,
    "awsProperties": null,
    "reservedSize": null,
    "encryptionProperties": null,
    "clusterProperties": null,
    "ontapClusterProperties": null,
    "actionsRequired": null,
    "interClusterLifs": null,
    "cronJobSchedules": null,
    "snapshotPolicies": null,
    "svms": null,
    "activeActions": null,
    "replicationProperties": null,
    "schedules": null,
    "cloudProviderName": "Amazon",
    "isHA": false,
    "workingEnvironmentType": "VSA",
    "supportRegistrationProperties": null,
    "supportRegistrationInformation": null,
    "haProperties": null,
    "capacityFeatures": null,
    "cloudSyncProperties": null,
    "supportedFeatures": null,
    "k8sProperties": null,
    "fpolicyProperties": null,
    "saasProperties": null,
    "cbsProperties": null,
    "complianceProperties": null,
    "monitoringProperties": null
}
```

Create working environment for high availability pair

You can use this workflow to create an HA Cloud Volumes ONTAP working environment.

1. Select the region

Perform the workflow Get regions and choose the `code` value for the `region` parameter in step 11.

2. Select the cloud provider account

Perform the workflow Get cloud provider accounts and choose the `publicId` value of the required account for the `cloudProviderAccount` parameter.

3. Select the workspace

Perform the workflow Get tenants and choose the `workspacePublicId` value for the `tenantId` parameter in step 11.

4. Select the permutations configuration

Perform the workflow Get permutations and choose the `ontapVersion` and `license: type` and `instanceType` values for the `vsaMetadata` parameter in step 11.

5. Select the packages configuration

Perform the Get Packages and choose the `packageName`, `instanceTenancy` and `writingSpeedState` values for the corresponding parameters in step 11.

6. Select the VPC

Perform the workflow Get VPCs and do the following:

- Choose the `vpcId` value for the `vpcId` parameter in step 11.
- Choose three subnets and choose the `subnetId` value for the `haParams:mediatorSubnetId`, `haParams:node1SubnetId, haParams:node2SubnetId`.
- Attach the licenses serial number to `platformSerialNumberNode1` and `platformSerialNumberNode2` parameters.
- Select the IPs for the `clusterFloatingIP, dataFloatingIP, dataFloatingIP2` values for the corresponding parameters in step 11.

7. Select the route table

Perform the workflow Get route tables and choose the `id` value of the required route table for `haParams:routeTableIds` parameter in step 11.

8. Select the EBS volume configuration

Perform the workflow Get EBS volume types and choose the `size` and `supportedVolumeTypes` values for the `ebsVolumeSize` and `ebsVolumeType` parameters in step 11.

> (i) You need to choose one of the allowed values for the required `ebsVolumeType` parameter. We have used `gp2` value for this parameter in step 11.

9. Get key pairs

Perform the Get key pairs workflow and select the required key for `haParam: mediatorKeyPairName` parameter in step 11.

10. Obtain the required NSS key

An NSS key is required when using BYOL licensing. You can create a key or select an existing key, and include the NSS key in the `nssAccount` parameter.

- To create a new NSS key using the Cloud Manager web user interface, perform the task Generate NSS user ID and choose the NSS ID.

- To select an existing NSS key, perform the workflow Get NSS keys and choose the `id` of the required NSS user.

11. Create the working environment

HTTP method	Path
POST	/occm/api/aws/ha/working-environments

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/aws/ha/working-
environments' --header 'x-agent-id: <AGENT_ID>' --header 'Authorization:
Bearer <ACCESS_TOKEN>' --header 'Content-Type: application/json' --d
@JSONinput
```

Input

The JSON input example includes the minimum list of parameters. This request uses BYOL licensing as indicated in the `licenseType` parameter. The `platformSerialNumberNode1` and `platformSerialNumberNode2` parameters are required.

JSON input example

```json
{
  "name": "ziv04we02ha",
  "svmPassword": "password",
  "vpcId": "vpc-b16c90d4",
  "region": "us-east-1",
  "tenantId": "tenantIDgoeshere",
  "ebsVolumeSize": {
    "size": 100,
    "unit": "GB"
  },
  "ebsVolumeType": "gp2",
  "vsaMetadata": {
    "ontapVersion": "ONTAP-9.9.0.T1.ha",
    "licenseType": "ha-cot-premium-byol",
    "instanceType": "m5.xlarge"
  },
  "dataEncryptionType": "AWS",
  "ontapEncryptionParameters": null,
  "haParams": {
    "node1SubnetId": "subnet-f4da95ac",
    "node2SubnetId": "subnet-b4387a9e",
    "mediatorSubnetId": "subnet-76e6d400",
    "clusterFloatingIP": "4.4.4.4",
    "dataFloatingIP": "5.5.5.5",
    "dataFloatingIP2": "6.6.6.6",
    "platformSerialNumberNode1": "90120140000000000023",
    "platformSerialNumberNode2": "90120140000000000024",
    "mediatorKeyPairName": "Developers_Virginia",
    "routeTableIds": [
      "rtb-02a45467"
    ],
    "failoverMode": "FloatingIP",
    "mediatorAssignPublicIP": true
  },
  "nssAccount": "54ab5c0d-xx23-xxxd-bcef-6eeda79e747d",
  "optimizedNetworkUtilization": false,
  "instanceTenancy": "default",
  "packageName": "aws_ha_poc",
  "cloudProviderAccount": "InstanceProfile",
  "backupVolumesToCbs": false,
  "enableMonitoring": "false",
  "writingSpeedState": "NORMAL"
}
```

Output

The JSON output example includes an example of the HA working environment details.

JSON output example

```
{
    "publicId": "VsaWorkingEnvironment-XxCZibxz",
    "name": "ziv04we02ha",
    "tenantId": "tenantIDshownhere",
    "svmName": "svm_ziv04we02ha",
    "creatorUserEmail": "user_email",
    "status": null,
    "awsProperties": null,
    "reservedSize": null,
    "encryptionProperties": null,
    "clusterProperties": null,
    "ontapClusterProperties": null,
    "actionsRequired": null,
    "interClusterLifs": null,
    "cronJobSchedules": null,
    "snapshotPolicies": null,
    "svms": null,
    "activeActions": null,
    "replicationProperties": null,
    "schedules": null,
    "cloudProviderName": "Amazon",
    "isHA": true,
    "workingEnvironmentType": "VSA",
    "supportRegistrationProperties": null,
    "supportRegistrationInformation": null,
    "haProperties": null,
    "capacityFeatures": null,
    "cloudSyncProperties": null,
    "supportedFeatures": null,
    "k8sProperties": null,
    "fpolicyProperties": null,
    "saasProperties": null,
    "cbsProperties": null,
    "complianceProperties": null,
    "monitoringProperties": null
}
```

Get working environments

You can retrieve the public identifier, working environment identifier and the storage virtual machine name for Cloud Volumes ONTAP working environments (visible to

currently logged in user) which would be used in other workflows.

Choose the correct workflow depending on the type of the Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Get working environments for single node

You can use this workflow to retrieve the working environments' details for a single node system.

1. Get the working environments

HTTP method	Path
GET	occm/api/vsa/working-environments

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/vsa/working-environments'
--header 'Content-Type: application/json' --header 'x-agent-id:
<AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

Optional query parameters:

- fields
- tenantId

Output

The JSON output example includes an array of VSA working environments and their details.

JSON output example

```
[
    {
        "publicId": "VsaWorkingEnvironment-79VKenHW",
        "name": "ziv01we02",
        "tenantId": "tenantIDshownhere",
        "svmName": "svm_ziv01we02",
        "creatorUserEmail": "user_email",
        "status": null,
        "awsProperties": null,
        "reservedSize": null,
        "encryptionProperties": null,
        "clusterProperties": null,
        "ontapClusterProperties": null,
        "actionsRequired": null,
```

```json
        "interClusterLifs": null,
        "cronJobSchedules": null,
        "snapshotPolicies": null,
        "svms": null,
        "activeActions": null,
        "replicationProperties": null,
        "schedules": null,
        "cloudProviderName": "Amazon",
        "isHA": false,
        "workingEnvironmentType": "VSA",
        "supportRegistrationProperties": null,
        "supportRegistrationInformation": [],
        "haProperties": null,
        "capacityFeatures": null,
        "cloudSyncProperties": null,
        "supportedFeatures": null,
        "k8sProperties": null,
        "fpolicyProperties": null,
        "saasProperties": null,
        "cbsProperties": null,
        "complianceProperties": null,
        "monitoringProperties": null
    },
    {
        "publicId": "VsaWorkingEnvironment-61kN4p5P",
        "name": "ziv01we03",
        "tenantId": "tenantIDshownhere",
        "svmName": "svm_ziv01we03",
        "creatorUserEmail": "user_email",
        "status": null,
        "awsProperties": null,
        "reservedSize": null,
        "encryptionProperties": null,
        "clusterProperties": null,
        "ontapClusterProperties": null,
        "actionsRequired": null,
        "interClusterLifs": null,
        "cronJobSchedules": null,
        "snapshotPolicies": null,
        "svms": null,
        "activeActions": null,
        "replicationProperties": null,
        "schedules": null,
        "cloudProviderName": "Amazon",
        "isHA": false,
        "workingEnvironmentType": "VSA",
```

```
        "supportRegistrationProperties": null,
        "supportRegistrationInformation": [],
        "haProperties": null,
        "capacityFeatures": null,
        "cloudSyncProperties": null,
        "supportedFeatures": null,
        "k8sProperties": null,
        "fpolicyProperties": null,
        "saasProperties": null,
        "cbsProperties": null,
        "complianceProperties": null,
        "monitoringProperties": null
    },
    {

        "publicId": "VsaWorkingEnvironment-E9WanX81",
        "name": "ziv01we04",
        "tenantId": "tenantIDshownhere",
        "svmName": "svm_ziv01we04",
        "creatorUserEmail": "user_email",
        "status": null,
        "awsProperties": null,
        "reservedSize": null,
        "encryptionProperties": null,
        "clusterProperties": null,
        "ontapClusterProperties": null,
        "actionsRequired": null,
        "interClusterLifs": null,
        "cronJobSchedules": null,
        "snapshotPolicies": null,
        "svms": null,
        "activeActions": null,
        "replicationProperties": null,
        "schedules": null,
        "cloudProviderName": "Amazon",
        "isHA": false,
        "workingEnvironmentType": "VSA",
        "supportRegistrationProperties": null,
        "supportRegistrationInformation": [],
        "haProperties": null,
        "capacityFeatures": null,
        "cloudSyncProperties": null,
        "supportedFeatures": null,
        "k8sProperties": null,
        "fpolicyProperties": null,
        "saasProperties": null,
        "cbsProperties": null,
```

```
        "complianceProperties": null,
        "monitoringProperties": null
    }
]
```

Get working environment for high availability pair

You can use this workflow to get the working environment details for an HA pair.

1. Select the working environment to use

Perform the workflow Get working environments for single node and choose the `publicId` of the required working environment for the `workingEnvironmentId` path parameter.

2. Get the working environment

HTTP method	Path
GET	occm/api/aws/ha/working-environments/<WORKING_ENV_ID>

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/aws/ha/working-
environments/<WORKING_ENV_ID>' --header 'Content-Type: application/json'
--header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer
<ACCESS_TOKEN>'
```

Input
    Path parameter:

<WORKING_ENV_ID> `workingEnvironmentId`

Optional query parameter:

`fields`

Output
    The JSON output example includes an HA Cloud Volumes ONTAP working environment.

JSON output example

```
[
{
    "publicId": "VsaWorkingEnvironment-N6BPfglr",
    "name": "ziv04we01ha",
    "tenantId": "tenantIDshownhere",
    "svmName": "svm_ziv04we01ha",
    "creatorUserEmail": "user_email",
    "status": null,
    "awsProperties": null,
    "reservedSize": null,
    "encryptionProperties": null,
    "clusterProperties": null,
    "ontapClusterProperties": null,
    "actionsRequired": null,
    "interClusterLifs": null,
    "cronJobSchedules": null,
    "snapshotPolicies": null,
    "svms": null,
    "activeActions": null,
    "replicationProperties": null,
    "schedules": null,
    "cloudProviderName": "Amazon",
    "isHA": true,
    "workingEnvironmentType": "VSA",
    "supportRegistrationProperties": null,
    "supportRegistrationInformation": [],
    "haProperties": null,
    "capacityFeatures": null,
    "cloudSyncProperties": null,
    "supportedFeatures": null,
    "k8sProperties": null,
    "fpolicyProperties": null,
    "saasProperties": null,
    "cbsProperties": null,
    "complianceProperties": null,
    "monitoringProperties": null
}
```

Delete a working environment

You can delete an existing Cloud Volumes ONTAP working environment.

Choose the correct workflow depending on the type of the Cloud Volumes ONTAP deployment:

- Single Node

- [HA pair](#)

Delete working environment for single node

You can use this workflow to delete a working environment for a single node system.

1. Select the working environment to use

Perform the workflow [Get working environments](#) and choose the `publicId` value of the working environment for the `workingEnvironmentId` path parameter.

2. Delete the working environment

HTTP method	Path
DELETE	/occm/api/vsa/working-environments/{workingEnvironmentId}

curl example

```
curl --location --request DELETE
'https://cloudmanager.cloud.netapp.com/occm/api/vsa/working-
environments/<WORKING_ENV_ID>' --header 'Content-Type: application/json'
--header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer
<ACCESS_TOKEN>'
```

Input

   Path parameter <WORKING_ENV_ID> `workingEnvironmentId`

Optional query parameters:

- `localDelete`

  If `true` the Cloud Volumes ONTAP instance in the cloud is not terminated, but Cloud Manager no longer manages it (default is `false`).

- `forceDelete`

  If `true` the working environment is deleted even if it is part of one or more SnapMirror relationships (default is `false`).

  Output
     None

Delete working environment for high availability pair

You can use this workflow to delete a working environment for an HA pair.

1. Select the working environment to use

Perform the workflow [Get working environments](#) and choose the `publicId` value of the working environment for the `workingEnvironmentId` path parameter.

2. Delete the working environment

HTTP method	Path
DELETE	/occm/api/aws/ha/working-environments/{workingEnvironmentId}

curl example

```
curl --location --request DELETE
'https://cloudmanager.cloud.netapp.com/occm/api/aws/ha/working-
environments/<WORKING_ENV_ID>' --header 'Content-Type: application/json'
--header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer
<ACCESS_TOKEN>'
```

Input

Path parameter <WORKING_ENV_ID> `workingEnvironmentId`

Optional query parameters:

- `localDelete`

    If `true` the Cloud Volumes ONTAP instance in the cloud is not terminated, but Cloud Manager no longer manages it (default is `false`).

- `forceDelete`

    If `true` the working environment is deleted even if it is part of one or more SnapMirror relationships (default is `false`).

    Output
    None

Create CIFS server configuration

If you want to create CIFS volumes on your Cloud Volumes ONTAP system, you first need to configure the CIFS server. You can choose to set up the CIFS server in a workgroup or in an Active Directory domain. Review the NetApp docs for more information.

Choose the correct workflow depending on the type of the Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Create CIFS server configuration for single node

You can use this workflow to create a CIFS server configuration for a single node system.

Choose the workflow that is specific to your goal:

Set up a CIFS server in a workgroup

You can configure a CIFS server in a workgroup when the Microsoft Active Directory domain infrastructure is not available.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` value of the working environment for the `workingEnvironmentId` path parameter.

2. Create the CIFS configuration

Create the CIFS server configuration.

HTTP method	Path
POST	/occm/api/vsa/working-environments/{workingEnvironmentId}/cifs-workgroup

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/vsa/working-
environments/<WORKING_ENV_ID>/cifs-workgroup' --header 'Content-Type:
application/json' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input

- Path parameter <WORKING_ENV_ID> `workingEnvironmentId`

JSON input example

```
{
  "serverName": "SMB_SERVER02",
  "workgroupName": "workgroup02",
  "svmName": "svm_ziv01we01"
}
```

Output

None.

Set up a CIFS server in an Active Directory domain

You can create a CIFS server on the SVM and specify the Active Directory (AD) domain to which it belongs.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` value of the working environment for the `workingEnvironmentId` path parameter.

2. Determine the Active Directory configuration

You need the following configuration parameters for an Active Directory server.

Input parameter	Description
dnsDomain	Use the Active Directory domain as the DNS name.
ipAddresses	Define the primary DNS IP address and optionally add a secondary IP address.
netBIOS	Use the CIFS server NetBIOS name.
organizationalUnit	Include the organizational unit as appropriate.
activeDirectoryDomain	Set the Active Directory domain to join.
activeDirectoryUsername	A username with authorization to join the domain.
activeDirectoryPassword	The password for the authorized username.

3. Create the CIFS configuration

Create the CIFS server configuration.

HTTP method	Path
POST	/occm/api/vsa/working-environments/{workingEnvironmentId}/cifs

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/vsa/working-
environments/<WORKING_ENV_ID>/cifs' --header 'Content-Type:
application/json' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input

- Path parameter <WORKING_ENV_ID> `workingEnvironmentId`

JSON input example

```
{
  "dnsDomain": "zivh.netapp.com",
  "ipAddresses": [
    "172.31.5.241"
  ],
  "netBIOS": "zivaws02we03",
  "organizationalUnit": "CN=Computers",
  "activeDirectoryDomain": "zivh.netapp.com",
  "activeDirectoryUsername": "administrator",
  "activeDirectoryPassword": "password"
}
```

Output

   None.

Create CIFS server configuration for high availability pair

You can use this workflow to create a CIFS server configuration for an HA working environment.

Choose the workflow that is specific to your goal:

- Set up a CIFS server in a workgroup
- Set up a CIFS server in an Active Directory domain

Set up a CIFS server in a workgroup

You can configure a CIFS server in a workgroup when the Microsoft Active Directory domain infrastructure is not available.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` value of the working environment for the `workingEnvironmentId` path parameter.

2. Create the CIFS configuration

Create the CIFS server configuration.

HTTP method	Path
POST	/occm/api/aws/ha/working-environments/{workingEnvironmentId}/cifs-workgroup

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/aws/ha/working-
environments/<WORKING_ENV_ID>/cifs-workgroup' --header 'Content-Type:
application/json' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input

- Path parameter <WORKING_ENV_ID> `workingEnvironmentId`

JSON input example

```
{
  "serverName": "SMB_SERVER02",
  "workgroupName": "workgroup02",
  "svmName": "svm_ziv01we01"
}
```

Output

  None.

Set up a CIFS server in an Active Directory domain

You can create a CIFS server on the SVM and specify the Active Directory (AD) domain to which it belongs.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` value of the working environment for the `workingEnvironmentId` path parameter.

2. Determine the Active Directory configuration

You need the following configuration parameters for an Active Directory server.

Input parameter	Description
dnsDomain	Use the Active Directory domain as the DNS name.
ipAddresses	Define the primary DNS IP address and optionally add a secondary IP address.
netBIOS	Use the CIFS server NetBIOS name.
organizationalUnit	Include the organizational unit as appropriate.
activeDirectoryDomain	Set the Active Directory domain to join.
activeDirectoryUsername	A username with authorization to join the domain.
activeDirectoryPassword	The password for the authorized username.

3. Create the CIFS configuration

Create the CIFS server configuration.

HTTP method	Path
POST	/occm/api/aws/ha/working-environments/{workingEnvironmentId}/cifs

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/aws/ha/working-
environments/<WORKING_ENV_ID>/cifs' --header 'Content-Type:
application/json' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input

- Path parameter <WORKING_ENV_ID> `workingEnvironmentId`

JSON input example

```
{
  "dnsDomain": "zivh.netapp.com",
  "ipAddresses": [
    "172.31.5.241"
  ],
  "netBIOS": "zivaws02we03",
  "organizationalUnit": "CN=Computers",
  "activeDirectoryDomain": "zivh.netapp.com",
  "activeDirectoryUsername": "administrator",
  "activeDirectoryPassword": "password"
}
```

Output

None.

Get CIFS server configurations

You can use this workflow to retrieve the CIFS server configurations for an existing Cloud Volumes ONTAP working environment.

Choose the correct workflow depending on the type of the Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Get CIFS server configuration for single node

You can use this workflow to retrieve a CIFS server configuration for a single node system.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` value of the working environment for the `workingEnvironmentId` path parameter.

2. Get the CIFS configurations

HTTP method	Path
GET	/occm/api/vsa/working-environments/{workingEnvironmentId}/cifs

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/vsa/working-
environments/<WORKING_ENV_ID>/cifs' --header 'Content-Type:
application/json' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

- Path parameter <WORKING_ENV_ID> `workingEnvironmentId`

- Optional query parameter `svm`

Output

The JSON output example includes the CIFS configurations for an existing Cloud Volumes ONTAP working environment.

JSON output example

```
[
    {
        "dnsDomain": "zivh.netapp.com",
        "activeDirectoryDomain": "zivh.netapp.com",
        "ipAddresses": [
            "172.31.5.241"
        ],
        "netBIOS": "zivaws02we01",
        "organizationalUnit": "CN=Computers",
        "authenticationType": "domain"
    }
]
```

Get CIFS server configuration for high availability pair

You can use this workflow to retrieve a CIFS server configuration for an HA working environment.

1. Select the working environment

Perform the workflow [Get working environments](#) and choose the `publicId` value of the working environment for the `workingEnvironmentId` path parameter.

2. Get the CIFS configurations

HTTP method	Path
GET	/occm/api/aws/ha/working-environments/{workingEnvironmentId}/cifs

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/aws/ha/working-
environments/<WORKING_ENV_ID>/cifs' --header 'Content-Type:
application/json' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

- Path parameter <WORKING_ENV_ID> `workingEnvironmentId`

- Optional query parameter `svm`

Output

The JSON output example includes the CIFS configurations for an existing Cloud Volumes ONTAP working environment.

JSON output example

```
[
    {
        "dnsDomain": "zivh.netapp.com",
        "activeDirectoryDomain": "zivh.netapp.com",
        "ipAddresses": [
            "172.31.5.241"
        ],
        "netBIOS": "zivaws02we01",
        "organizationalUnit": "CN=Computers",
        "authenticationType": "domain"
    }
]
```

Delete CIFS server configuration

You can use this workflow to delete a CIFS server configuration for an existing Cloud Volumes ONTAP working environment.

Choose the correct workflow depending on the type of the Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Delete CIFS server configuration for single node

You can use this workflow to delete a CIFS server configuration for a single node system.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` value of the working environment for the `workingEnvironmentId` path parameter.

2. Delete the CIFS configurations

HTTP method	Path
POST	/occm/api/vsa/working-environments/{workingEnvironmentId}/delete-cifs

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/vsa/working-
environments/<WORKING_ENV_ID>/delete-cifs' --header 'Content-Type:
application/json' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

- Path parameter <WORKING_ENV_ID> `workingEnvironmentId`
- Optional JSON body

```
{
  "activeDirectoryUsername": "string",
  "activeDirectoryPassword": "string",
  "svmName": "string"
}
```

Output

None.

Delete CIFS server configuration for high availability pair

You can use this workflow to delete a CIFS server configuration for an HA working environment.

1. Select the working environment

Perform the workflow [Get working environments](#) and choose the `publicId` value of the working environment for the `workingEnvironmentId` path parameter.

2. Delete the CIFS configurations

HTTP method	Path
POST	/occm/api/aws/ha/working-environments/{workingEnvironmentId}/delete-cifs

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/aws/ha/working-
environments/<WORKING_ENV_ID>/delete-cifs' --header 'Content-Type:
application/json' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

- Path parameter <WORKING_ENV_ID> `workingEnvironmentId`
- Optional JSON body

```
{
  "activeDirectoryUsername": "string",
  "activeDirectoryPassword": "string",
  "svmName": "string"
}
```

Output

None.

Aggregates

Get aggregates

You can retrieve a list of available disk aggregates.

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- [Single Node](#)
- [HA pair](#)

Get aggregates for single node

You can use this workflow to retrieve the aggregates for a single node working environment.

1. Select the working environment to use

Perform the workflow Get working environments and choose the `publicId` value of the working environment for the `workingEnvironmentId` path parameter.

2. Get the list of aggregates

HTTP method	Path
GET	/occm/api/vsa/aggregates/{workingEnvironmentId}

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/vsa/aggregates/<WORKING_EN
V_ID>' --header 'Content-Type: application/json' --header 'x-agent-id:
<AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

Path parameter <WORKING_ENV_ID> (`workingEnvironmentId`)

Output

An array of aggregates for the indicated working environment is returned as shown in the JSON output example.

JSON output example

```
[
    {
        "name": "aggr1",
        "availableCapacity": {
            "size": 87.55,
            "unit": "GB"
        },
        "totalCapacity": {
            "size": 88.57,
            "unit": "GB"
        },
        "usedCapacity": {
            "size": 1.02,
            "unit": "GB"
        },
        "volumes": [
            {
                "name": "svm_ziv01we01_root",
```

```
            "totalSize": {
                "size": 1.0,
                "unit": "GB"
            },
            "usedSize": {
                "size": 0.00115203857421875,
                "unit": "GB"
            },
            "thinProvisioned": false,
            "isClone": false,
            "rootVolume": true
        }
    ],
    "providerVolumes": [
        {
            "id": "vol-066fea889cbc6a65c",
            "name": "vol-066fea889cbc6a65c",
            "size": {
                "size": 100.0,
                "unit": "GB"
            },
            "state": "in-use",
            "device": "/dev/xvdg",
            "instanceId": "i-0fa9a2879e67a8829",
            "diskType": "gp2",
            "encrypted": true,
            "iops": null
        }
    ],
    "disks": [
        {
            "name": "NET-1.3",
            "position": "data",
            "ownerNode": "ziv01we01-01",
            "device": "xvdg vol066fea889cbc6a65c",
            "vmDiskProperties": null
        }
    ],
    "state": "online",
    "encryptionType": "cloudEncrypted",
    "encryptionKeyId": null,
    "isRoot": false,
    "homeNode": "ziv01we01-01",
    "ownerNode": "ziv01we01-01",
    "capacityTier": null,
    "capacityTierUsed": null,
```

```
            "sidlEnabled": true,
            "snaplockType": "non_snaplock"
        }
    ]
```

Get aggregates for high availability pair

You can use this workflow to retrieve the aggregates for an HA working environment.

1. Select the working environment to use

Perform the workflow Get working environments and choose the `publicId` value of the working environment for the `workingEnvironmentId` path parameter.

2. Get the list of aggregates

HTTP method	Path
GET	/occm/api/aws/ha/aggregates/{workingEnvironmentId}

curl example

```
 curl --location --request GET
 'https://cloudmanager.cloud.netapp.com/occm/api/aws/ha/aggregates/<WORKING
 _ENV_ID>' --header 'Content-Type: application/json' --header 'x-agent-id:
 <AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

Path parameter <WORKING_ENV_ID> (`workingEnvironmentId`)

Output

An array of aggregates for the indicated working environment is returned as shown in the JSON output example.

JSON output example

```
[
    {
        "name": "aggr1",
        "availableCapacity": {
            "size": 83.13,
            "unit": "GB"
        },
        "totalCapacity": {
            "size": 84.14,
            "unit": "GB"
        },
        "usedCapacity": {
```

```json
            "size": 1.02,
            "unit": "GB"
        },
        "volumes": [
            {
                "name": "svm_ziv04we01ha_root",
                "totalSize": {
                    "size": 1.0,
                    "unit": "GB"
                },
                "usedSize": {
                    "size": 7.0953369140625E-4,
                    "unit": "GB"
                },
                "thinProvisioned": false,
                "isClone": false,
                "rootVolume": true
            }
        ],
        "providerVolumes": [
            {
                "id": "vol-0d5d1983432218cec",
                "name": "vol-0d5d1983432218cec",
                "size": {
                    "size": 100.0,
                    "unit": "GB"
                },
                "state": "in-use",
                "device": "/dev/xvdh",
                "instanceId": "i-053d9d1bce8121c43",
                "diskType": "gp2",
                "encrypted": true,
                "iops": null
            },
            {
                "id": "vol-0a3fe8eaed2af69de",
                "name": "vol-0a3fe8eaed2af69de",
                "size": {
                    "size": 100.0,
                    "unit": "GB"
                },
                "state": "in-use",
                "device": "/dev/xvdh",
                "instanceId": "i-0392f55ca4bc06322",
                "diskType": "gp2",
                "encrypted": true,
```

```json
                "iops": null
            }
        ],
        "disks": [
            {
                "name": "NET-1.4",
                "position": "data",
                "ownerNode": "ziv04we01ha-01",
                "device": "xvdh vol0d5d1983432218cec",
                "vmDiskProperties": null
            },
            {
                "name": "NET-2.4",
                "position": "data",
                "ownerNode": "ziv04we01ha-01",
                "device": "xvdh vol0a3fe8eaed2af69de",
                "vmDiskProperties": null
            }
        ],
        "state": "online",
        "encryptionType": "cloudEncrypted",
        "encryptionKeyId": null,
        "isRoot": false,
        "homeNode": "ziv04we01ha-01",
        "ownerNode": "ziv04we01ha-01",
        "capacityTier": null,
        "capacityTierUsed": null,
        "sidlEnabled": true,
        "snaplockType": "non_snaplock"
    },
    {
        "name": "ziv04we01haagg01",
        "availableCapacity": {
            "size": 84.14,
            "unit": "GB"
        },
        "totalCapacity": {
            "size": 84.14,
            "unit": "GB"
        },
        "usedCapacity": {
            "size": 156.0,
            "unit": "KB"
        },
        "volumes": [],
        "providerVolumes": [
```

```
            {
                "id": "vol-0149ffa06bb4e92ad",
                "name": "vol-0149ffa06bb4e92ad",
                "size": {
                    "size": 100.0,
                    "unit": "GB"
                },
                "state": "in-use",
                "device": "/dev/xvdi",
                "instanceId": "i-0392f55ca4bc06322",
                "diskType": "gp2",
                "encrypted": true,
                "iops": null
            },
            {
                "id": "vol-03e6ada9e893b1196",
                "name": "vol-03e6ada9e893b1196",
                "size": {
                    "size": 100.0,
                    "unit": "GB"
                },
                "state": "in-use",
                "device": "/dev/xvdi",
                "instanceId": "i-053d9d1bce8121c43",
                "diskType": "gp2",
                "encrypted": true,
                "iops": null
            }
        ],
        "disks": [
            {
                "name": "NET-2.5",
                "position": "data",
                "ownerNode": "ziv04we01ha-01",
                "device": "xvdi vol0149ffa06bb4e92ad",
                "vmDiskProperties": null
            },
            {
                "name": "NET-1.5",
                "position": "data",
                "ownerNode": "ziv04we01ha-01",
                "device": "xvdi vol03e6ada9e893b1196",
                "vmDiskProperties": null
            }
        ],
        "state": "online",
```

```
        "encryptionType": "cloudEncrypted",
        "encryptionKeyId": null,
        "isRoot": false,
        "homeNode": "ziv04we01ha-01",
        "ownerNode": "ziv04we01ha-01",
        "capacityTier": null,
        "capacityTierUsed": null,
        "sidlEnabled": true,
        "snaplockType": "non_snaplock"
    }
]
```

Create aggregate

You can create a new aggregate within a working environment using this workflow. Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Create aggregate for single node

You can use this workflow to create an aggregate for a single node working environment.

1. Select the working environment to use

Perform the workflow Get working environments and choose the `publicId` value for the `workingEnvironmentId` parameter.

2. Create the aggregate

HTTP method	Path
POST	occm/api/vsa/aggregates

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/vsa/aggregates' --header
'Content-Type: application/json' --header 'x-agent-id: <AGENT_ID>'
--header 'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input

The JSON input example includes the minimum list of input parameters.

JSON input example

```
{
  "name": "ziv01agg04",
  "workingEnvironmentId": "VsaWorkingEnvironment-9e6p8LuF",
  "numberOfDisks": 1,
  "diskSize": {
    "size": 100,
    "unit": "GB"
  },
  "providerVolumeType": "gp2"
}
```

Output

None

Create aggregate for high availability pair

You can use this workflow to create an aggregate for an HA working environment.

1. Select the working environment to use

Perform the workflow Get working environments and choose the `publicId` value for the `workingEnvironmentId` parameter.

2. Create the aggregate

HTTP method	Path
POST	occm/api/aws/ha/aggregates

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/aws/ha/aggregates'
--header 'Content-Type: application/json' --header 'x-agent-id:
<AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input

The JSON input example includes the minimum list of input parameters.

JSON input example

```
{
  "name": "ziv01agg04",
  "workingEnvironmentId": "VsaWorkingEnvironment-9e6p8LuF",
  "numberOfDisks": 1,
  "diskSize": {
    "size": 100,
    "unit": "GB"
  },
  "providerVolumeType": "gp2"
}
```

Output

None

Add disks to aggregate

You can add disks to an existing aggregate.

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Add disks to an aggregate for single node

You can use this workflow to add disks to an aggregate for a single node working environment.

1. Select the working environment to use

Perform the workflow Get working environments and choose the `publicId` value for the `workingEnvironmentId` path parameter.

2. Select the aggregate

Perform the workflow Get aggregates and choose the `name` value for the `aggregateName` path parameter.

3. Add the disks

HTTP method	Path
POST	/occm/api/vsa/aggregates/{workingEnvironmentId}/{aggregateName}/disks

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/vsa/aggregates/<WORKING_EN
V_ID>/<AGGR_NAME>/disks' --header 'Content-Type: application/json'
--header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer
<ACCESS_TOKEN>' --d @JSONinput
```

Input

You must include the following path parameters:

- <WORKING_ENV_ID> (`workingEnvironmentId`)
- <AGGR_NAME> (`aggregateName`)

Also, the JSON input example includes an input parameter as shown.

JSON input example

```
{
    "numberOfDisks": "1"
}
```

Output

None

Add disks to an aggregate for high availability pair

You can use this workflow to add disks to an aggregate for HA working environment.

1. Select the working environment to use

Perform the workflow Get working environments and choose the `publicId` value for the
`workingEnvironmentId` path parameter.

2. Select the aggregate

Perform the workflow Get aggregates and choose the `name` value for the `aggregateName` path parameter.

3. Add the disks

HTTP method	Path
POST	/occm/api/aws/ha/aggregates/{workingEnvironmentId}/{aggregateName}/disks

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/aws/ha/aggregates/<WORKING
_ENV_ID>/<AGGR_NAME>/disks' --header 'Content-Type: application/json'
--header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer
<ACCESS_TOKEN>' --d @JSONinput
```

Input

You must include the following path parameters:

- <WORKING_ENV_ID> (`workingEnvironmentId`)
- <AGGR_NAME> (`aggregateName`)

Also, the JSON input example includes an input parameter as shown.

JSON input example

```
{
    "numberOfDisks": "1"
}
```

Output

None

Delete aggregate

You can delete an existing disk aggregate. Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Delete aggregate for single node

You can use this workflow to delete an aggregate for a single node working environment.

1. Select the working environment to use

Perform the workflow Get working environments and choose the `publicId` value for the `workingEnvironmentId` path parameter.

2. Select the aggregate to delete

Perform the workflow Get aggregates and choose the `name` value of the required for the `aggregateName` path parameter.

3. Delete the aggregate

HTTP method	Path
DELETE	/occm/api/vsa/aggregates/{workingEnvironmentId}/{aggregateName}

curl example

```
curl --location --request DELETE
'https://cloudmanager.cloud.netapp.com/occm/api/vsa/aggregates/<WORKING_EN
V_ID>/<AGGR_NAME>' --header 'Content-Type: application/json' --header 'x-
agent-id: <AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

Path parameters:

<WORKING_ENV_ID> (`workingEnvironmentId`)
<AGGR_NAME> (`aggregateName`)

Output

None

Delete aggregate for high availability pair

You can use this workflow to delete an aggregate for an HA working environment.

1. Select the working environment to use

Perform the workflow [Get working environments]{.link} and choose the `publicId` value for the
`workingEnvironmentId` path parameter.

2. Select the aggregate to delete

Perform the workflow [Get aggregates]{.link} and choose the `name` value of the required for the `aggregateName`
path parameter.

3. Delete the aggregate

HTTP method	Path
DELETE	/occm/api/aws/ha/aggregates/{workingEnvironmentId}/{aggregateName}

curl example

```
curl --location --request DELETE
'https://cloudmanager.cloud.netapp.com/occm/api/aws/ha/aggregates/<WORKING
_ENV_ID>/<AGGR_NAME>' --header 'Content-Type: application/json' --header
'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

Path parameters:

```
<WORKING_ENV_ID> (workingEnvironmentId)
<AGGR_NAME> (aggregateName)
```

Output

None

Volumes

Create volume using NFS

You can use this workflow to create a volume accessed through NFS protocol.

> ⓘ If the properties `aggregateName` and `maxNumOfDisksApprovedToAdd` are not provided on
> the REST API call, the response will fail with a suggested name for the aggregate and the
> number of disks needed to fulfill the request.

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Create volume using NFS for single node

You can use this workflow to create volume using NFS for a single node system.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` and the `svmName` values for the
`workingEnvironmentId` and the `svmName` parameters.

2. Select the aggregate

Perform the workflow Get aggregates and choose the `name` value of the aggregate for the `name` parameter.

> ⓘ If aggregate name does not exist and the `createAggregateIfNotFound` query parameter is
> set `true`, the create volume request is allowed if the named aggregate is not found.

3. Select the virtual private cloud

Perform the workflow Get virtual private clouds and choose the `cidrBlock` value of the required VPC for the
`ips` parameter or fill in the desired `exportPolicyInfo` value manually.

4. Choose the size for the disk

Choose the size value for the `size:size` parameter. The `size:unit` must be one of the following: `TB`, `GB`,
`MB`, `KB`, or `Byte`.

5. Create the quote

Perform the workflow Create quote. This is a recommended step but is not mandatory.

6. Create the volume

HTTP method	Path
POST	/occm/api/vsa/volumes

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/vsa/volumes' --header
'Content-Type: application/json' --header 'x-agent-id: <AGENT_ID>'
--header 'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input

The JSON input example includes the minimum list of input parameters, including:

- <WORKING_ENV_ID> (`workingEnvironmentId`)

- <SVM_NAME> (`svmName`)

- <AGGR_NAME> (`aggregateName`)

If aggregate name does not exist, you can set the `createAggregateIfNotFound` query parameter to `true` which allows the aggregate not-found condition.

JSON input example

```
{
  "workingEnvironmentId": "VsaWorkingEnvironment-5dZfyKS5",
  "svmName": "svm_ziv01we01",
  "aggregateName": "ziv01agg01",
  "name": "ziv01vol04",
  "size": {
    "size": 100,
    "unit": "GB"
  },
  "exportPolicyInfo": {
    "policyType": "custom",
    "ips": [
      "172.31.0.0/16"
    ],
    "nfsVersion": [
      "nfs3",
      "nfs4"
    ]
  },
  "snapshotPolicyName": "default",
  "enableThinProvisioning": true,
  "enableCompression": true,
  "enableDeduplication": true,
  "maxNumOfDisksApprovedToAdd": 0
}
```

Output

None

Create volume using NFS for high availability pair

You can use this workflow to create volume using NFS for an HA working environment.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` and the `svmName` values for the `workingEnvironmentId` and the `svmName` parameters.

2. Select the aggregate

Perform the workflow Get aggregates and choose the `name` value of the aggregate for the `name` parameter.

> ⓘ If aggregate name does not exist and the `createAggregateIfNotFound` query parameter is set `true`, the create volume request is allowed if the named aggregate is not found.

3. Select the virtual private cloud

Perform the workflow Get virtual private clouds and choose the `cidrBlock` value of the required VPC for the `ips` parameter or fill in the desired `exportPolicyInfo` value manually.

4. Choose the size for the disk

Choose the size value for the `size:size` parameter. The `size:unit` must be one of the following: `TB`, `GB`, `MB`, `KB`, or `Byte`.

5. Create the quote

Perform the workflow Create quote. This is a recommended step but is not mandatory.

6. Create the volume

HTTP method	Path
POST	/occm/api/aws/ha/volumes

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/aws/ha/volumes' --header
'Content-Type: application/json' --header 'x-agent-id: <AGENT_ID>'
--header 'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input

The JSON input example includes the minimum list of input parameters, including:

- <WORKING_ENV_ID> (`workingEnvironmentId`)
- <SVM_NAME> (`svmName`)
- <AGGR_NAME> (`aggregateName`)

If aggregate name does not exist, you can set the `createAggregateIfNotFound` query parameter to `true` which allows the aggregate not-found condition.

JSON input example

```
{
  "workingEnvironmentId": "VsaWorkingEnvironment-5dZfyKS5",
  "svmName": "svm_ziv01we01",
  "aggregateName": "ziv01agg01",
  "name": "ziv01vol04",
  "size": {
    "size": 100,
    "unit": "GB"
  },
  "exportPolicyInfo": {
    "policyType": "custom",
    "ips": [
      "172.31.0.0/16"
    ],
    "nfsVersion": [
      "nfs3",
      "nfs4"
    ]
  },
  "snapshotPolicyName": "default",
  "enableThinProvisioning": true,
  "enableCompression": true,
  "enableDeduplication": true,
  "maxNumOfDisksApprovedToAdd": 0
}
```

Output

None

Create volume using CIFS

You can use this workflow to create a volume accessed through CIFS.

> ⓘ If the properties `aggregateName` and `maxNumOfDisksApprovedToAdd` are not provided on the REST API call, the response will fail with a suggested name for the aggregate and the number of disks needed to fulfill the request.

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Create volume using CIFS for single node

You can use this workflow to create volume using CIFS protocol for a single node system.

1. Choose the CIFS configuration

A CIFS server configuration must be defined for your working environment. You can do one of the following:

- If a CIFS configuration already exists, perform the workflow Get CIFS server configurations to access the configuration parameters.
- If a CIFS configuration does not exist, perform the workflow Create CIFS server configuration to create one.

2. Select the working environment

Perform the workflow Get working environments and choose the `publicId` and the `svmName` values for the `workingEnvironmentId` (working environment) and the `svmName` (SVM name) parameters.

3. Select the aggregate

Perform the workflow Get aggregates and choose the `name` for the `aggregateName` value.

> ⓘ If aggregate name does not exist and the `createAggregateIfNotFound` query parameter is set `true`, the create volume request is allowed if the named aggregate is not found.

4. Choose the size for the disk

Choose the size value for the `size:size` parameter. The `size:unit` must be one of the following: `TB`, `GB`, `MB`, `KB`, or `Byte`.

5. Create the quote

Perform the workflow Create quote. This is a recommended step but is not mandatory.

6. Create the volume

HTTP method	Path
POST	/occm/api/vsa/volumes

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/vsa/volumes' --header
'Content-Type: application/json' --header 'x-agent-id: <AGENT_ID>'
--header 'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input

The JSON input example includes the minimum list of input parameters, including:

- <WORKING_ENV_ID> (`workingEnvironmentId`)
- <SVM_NAME> (`svmName`)
- <AGGR_NAME> (`aggregateName`)

If an aggregate name does not exist, you can set the `createAggregateIfNotFound` query parameter to `true` which allows the aggregate not-found condition.

JSON input example

```
{
  "workingEnvironmentId": "VsaWorkingEnvironment-SfpVUZSc",
  "svmName": "svm_zivaws02we01",
  "aggregateName": "aggr1",
  "name": "zivaws02we02vol02Cifs",
  "size": {
    "size": 100,
    "unit": "GB"
  },
  "shareInfo": {
    "accessControl": {
        "permission": "full_control",
        "users": [
            "Everyone"
        ],
        "users": "Everyone;"
    },
    "shareName": "zivaws02we01vol02Cifs_share"
  },
  "snapshotPolicyName": "default",
  "enableThinProvisioning": true,
  "enableCompression": true,
  "enableDeduplication": true,
  "maxNumOfDisksApprovedToAdd": 0
}
```

Output

None

Create volume using CIFS for high availability pair

You can use this workflow to create volume using CIFS for an HA working environment.

1. Choose the CIFS configuration

A CIFS server configuration must be defined for your working environment. You can do one of the following:

- If a CIFS configuration already exists, perform the workflow Get CIFS server configurations to access the configuration parameters.

- If a CIFS configuration does not exist, perform the workflow Create CIFS server configuration to create one.

2. Select the working environment

Perform the workflow Get working environments and choose the `publicId` and the `svmName` values for the `workingEnvironmentId` (working environment) and the `svmName` (SVM name) parameters.

3. Select the aggregate

Perform the workflow Get aggregates and choose the `name` for the `aggregateName` value.

> ⓘ   If aggregate name does not exist and the `createAggregateIfNotFound` query parameter is set `true`, the create volume request is allowed if the named aggregate is not found.

4. Choose the size for the disk

Choose the size value for the `size:size` parameter. The `size:unit` must be one of the following: `TB`, `GB`, `MB`, `KB`, or `Byte`.

5. Create the quote

Perform the workflow Create quote. This is a recommended step but is not mandatory.

6. Create the volume

HTTP method	Path
POST	/occm/api/aws/ha/volumes

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/aws/ha/volumes' --header
'Content-Type: application/json' --header 'x-agent-id: <AGENT_ID>'
--header 'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input

    The JSON input example includes the minimum list of input parameters, including:

- <WORKING_ENV_ID> (`workingEnvironmentId`)
- <SVM_NAME> (`svmName`)
- <AGGR_NAME> (`aggregateName`)

If an aggregate name does not exist, you can set the `createAggregateIfNotFound` query parameter to `true` which allows the aggregate not-found condition.

JSON input example

```
{
  "workingEnvironmentId": "VsaWorkingEnvironment-SfpVUZSc",
  "svmName": "svm_zivaws02we01",
  "aggregateName": "aggr1",
  "name": "zivaws02we02vol02Cifs",
  "size": {
    "size": 100,
    "unit": "GB"
  },
  "shareInfo": {
    "accessControl": {
        "permission": "full_control",
        "users": [
            "Everyone"
        ],
        "users": "Everyone;"
    },
    "shareName": "zivaws02we01vol02Cifs_share"
  },
  "snapshotPolicyName": "default",
  "enableThinProvisioning": true,
  "enableCompression": true,
  "enableDeduplication": true,
  "maxNumOfDisksApprovedToAdd": 0
}
```

Output

None

Create volume using iSCSI

You can use this workflow to create a volume accessed through iSCSI protocol.

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Create volume using iSCSI for single node

You can use this workflow to create volume using iSCSI for a single node system.

There are two workflows available depending on whether a new or existing iGroup is used. You need to select the correct workflow:

- Create volume using iSCSI with a new iGroup
- Create volume using iSCSI with an existing iGroup

Create volume using iSCSI with a new iGroup

ⓘ If the properties `aggregateName` and `maxNumOfDisksApprovedToAdd` are not provided on the REST API call, the response will fail with a suggested name for the aggregate and the number of disks needed to fulfill the request.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` value for the `workingEnvironmentId` parameter and the `svmName` value for the `svmName` parameter.

2. Select the aggregate

Perform the workflow Get aggregates and choose the `name` for the `aggregateName` value.

3. Choose the size for the disk

Choose the size value for the `size:size` parameter. The `size:unit` must be one of the following: `TB`, `GB`, `MB`, `KB`, or `Byte`.

4. Choose the iscasiInfo parameters

You must choose the following values for the REST API call:

- A unique igroup name for `igroupCreationRequest → igroupName` parameter
- The required iqn's to `igroupCreationRequest → initiators` parameter.
- The required operating system for the `osName` parameter from one of the following:
  - windows
  - linux
  - vmware
  - windows_2008
  - windows_gpt

5. Create the quote

Perform the workflow Create quote. This is a recommended step but is not mandatory.

6. Create the volume

HTTP method	Path
POST	/occm/api/vsa/volumes

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/vsa/volumes' --header
'Content-Type: application/json' --header 'x-agent-id: <AGENT_ID>'
--header 'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input

The JSON input example includes the minimum list of input parameters, including:

- <WORKING_ENV_ID> (`workingEnvironmentId`)

- <SVM_NAME> (`svmName`)

- <AGGR_NAME> (`aggregateName`)

If aggregate name does not exist, you can set the `createAggregateIfNotFound` query parameter to `true` which allows the aggregate not-found condition.

JSON input example

```
{
  "workingEnvironmentId": "VsaWorkingEnvironment-SfpVUZSc",
  "svmName": "svm_zivaws02we01",
  "aggregateName": "aggr1",
  "name": "zivaws02we01vol01Iscsi",
  "size": {
    "size": 100,
    "unit": "GB"
  },
  "iscsiInfo": {
    "igroupCreationRequest": {
        "igroupName": "zivIgroup",
        "initiators": [
            "iqn.1994-05.com.redhat:96de86825216",
            "iqn.1994-05.com.redhat:96de86823426"
        ]
    },
    "osName": "linux"
  },
  "snapshotPolicyName": "default",
  "enableThinProvisioning": true,
  "enableCompression": true,
  "enableDeduplication": true,
  "maxNumOfDisksApprovedToAdd": 0
}
```

Output

None

Create volume using iSCSI with an existing iGroup

ⓘ If the properties `aggregateName` and `maxNumOfDisksApprovedToAdd` are not provided on the REST API call, the response will fail with a suggested name for the aggregate and the number of disks needed to fulfill the request.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` value for the `workingEnvironmentId` parameter and the `svmName` value for the `svmName` parameter.

2. Select the aggregate

Perform the workflow Get aggregates and choose the `name` for the `aggregateName` parameter.

3. Choose the size for the disk

Choose the size value for the `size:size` parameter. The `size:unit` must be one of the following: `TB`, `GB`, `MB`, `KB`, or `Byte`.

4. Choose the iGroup

Perform the workflow Get iGroups and choose the igroups for the `iscasiInfo → igroups` value. Also select the `osType` value for the `iscasiInfo → osName`.

5. Create the quote

Perform the workflow Create quote. This is a recommended step but is not mandatory.

6. Create the volume

HTTP method	Path
POST	/occm/api/vsa/volumes

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/vsa/volumes' --header
'Content-Type: application/json' --header 'x-agent-id: <AGENT_ID>'
--header 'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input

The JSON input example includes the minimum list of input parameters, including:

- <WORKING_ENV_ID> (`workingEnvironmentId`)

- <SVM_NAME> (`svmName`)

- <AGGR_NAME> (aggregateName)

If an aggregate name does not exist, you can set the `createAggregateIfNotFound` query parameter to `true` which allows the aggregate not-found condition.

JSON input example

```
{
  "workingEnvironmentId": "VsaWorkingEnvironment-UvFmWXoD",
  "svmName": "svm_zivaws01we01",
  "aggregateName": "aggr1",
  "name": "zivaws01we01vol05Iscsi",
  "size": {
    "size": 100,
    "unit": "GB"
  },
  "iscsiInfo": {
    "igroups": ["zivIgroup1"],
    "osName": "linux"
  },
  "snapshotPolicyName": "default",
  "enableThinProvisioning": true,
  "enableCompression": true,
  "enableDeduplication": true,
  "maxNumOfDisksApprovedToAdd": 0
}
```

Output

None

Create volume using iSCSI for high availability pair

You can use this workflow to create volume using iSCSI for an HA working environment.

There are two workflows available depending on whether a new or existing iGroup is used. You need to select the correct workflow:

- Create volume using iSCSI with a new iGroup
- Create volume using iSCSI with an existing iGroup

Create volume using iSCSI with a new iGroup

ⓘ   If the properties `aggregateName` and `maxNumOfDisksApprovedToAdd` are not provided on the REST API call, the response will fail with a suggested name for the aggregate and the number of disks needed to fulfill the request.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` value for the `workingEnvironmentId` parameter and the `svmName` value for the `svmName` parameter.

2. Select the aggregate

Perform the workflow Get aggregates and choose the `name` for the `aggregateName` parameter.

3. Choose the size for the disk

Choose the size value for the `size:size` parameter. The `size:unit` must be one of the following: `TB`, `GB`, `MB`, `KB`, or `Byte`.

4. Choose the iscasiInfo parameters

You must choose the following values for the REST API call:

- A unique igroup name for `igroupCreationRequest → igroupName` parameter
- The required iqn's to `igroupCreationRequest → initiators` parameter.
- The required operating system for the `osName` parameter from one of the following:
  - windows
  - linux
  - vmware
  - windows_2008
  - windows_gpt

5. Create the quote

Perform the workflow Create quote.This is a recommended step but is not mandatory.

6. Create the volume

HTTP method	Path
POST	/occm/api/aws/ha/volumes

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/aws/ha/volumes' --header
'Content-Type: application/json' --header 'x-agent-id: <AGENT_ID>'
--header 'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input

The JSON input example includes the minimum list of input parameters, including:

- <WORKING_ENV_ID> (`workingEnvironmentId`)

- <SVM_NAME> (svmName)

- <AGGR_NAME> (aggregateName)

If aggregate name does not exist, you can set the `createAggregateIfNotFound` query parameter to `true` which allows the aggregate not-found condition.

JSON input example

```json
{
  "workingEnvironmentId": "VsaWorkingEnvironment-SfpVUZSc",
  "svmName": "svm_zivaws02we01",
  "aggregateName": "aggr1",
  "name": "zivaws02we01vol01Iscsi",
  "size": {
    "size": 100,
    "unit": "GB"
  },
  "iscsiInfo": {
    "igroupCreationRequest": {
        "igroupName": "zivIgroup",
        "initiators": [
            "iqn.1994-05.com.redhat:96de86825216",
            "iqn.1994-05.com.redhat:96de86823426"
        ]
    },
    "osName": "linux"
  },
  "snapshotPolicyName": "default",
  "enableThinProvisioning": true,
  "enableCompression": true,
  "enableDeduplication": true,
  "maxNumOfDisksApprovedToAdd": 0
}
```

Output

None

Create volume using iSCSI with an existing iGroup

> ⓘ If the properties `aggregateName` and `maxNumOfDisksApprovedToAdd` are not provided on the REST API call, the response will fail with a suggested name for the aggregate and the number of disks needed to fulfill the request.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` value for the `workingEnvironmentId` parameter and the `svmName` value for the `svmName` parameter.

2. Select the aggregate

Perform the workflow Get aggregates and choose the `name` for the `aggregateName` parameter.

3. Choose the size for the disk

Choose the size value for the `size:size` parameter. The `size:unit` must be one of the following: `TB`, `GB`, `MB`, `KB`, or `Byte`.

4. Choose the iGroup

Perform the workflow Get iGroups and choose the igroups for the `iscasiInfo → igroups` value. Also select the `osType` value for the `iscasiInfo → osName`.

5. Create the quote

Perform the workflow Create quote. This is a recommended step but is not mandatory.

6. Create the volume

HTTP method	Path
POST	/occm/api/vsa/volumes

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/vsa/volumes' --header
'Content-Type: application/json' --header 'x-agent-id: <AGENT_ID>'
--header 'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input

    The JSON input example includes the minimum list of input parameters, including:

- <WORKING_ENV_ID> (`workingEnvironmentId`)
- <SVM_NAME> (`svmName`)
- <AGGR_NAME> (`aggregateName`)

If an aggregate name does not exist, you can set the `createAggregateIfNotFound` query parameter to `true` which allows the aggregate not-found condition.

JSON input example

```
{
  "workingEnvironmentId": "VsaWorkingEnvironment-UvFmWXoD",
  "svmName": "svm_zivaws01we01",
  "aggregateName": "aggr1",
  "name": "zivaws01we01vol05Iscsi",
  "size": {
    "size": 100,
    "unit": "GB"
  },
  "iscsiInfo": {
    "igroups": ["zivIgroup1"],
    "osName": "linux"
  },
  "snapshotPolicyName": "default",
  "enableThinProvisioning": true,
  "enableCompression": true,
  "enableDeduplication": true,
  "maxNumOfDisksApprovedToAdd": 0
}
```

Output

None

Get volumes

You can retrieve the list of volumes.

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Get volumes for single node

You can use this workflow to retrieve a list of volumes for a single node working environment.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` value of the working environment for the `workingEnvironmentId` query parameter.

2. Get the volumes

HTTP method	Path
GET	/occm/api/vsa/volumes

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/vsa/volumes?workingEnviron
mentId=<WORKING_ENV_ID>' --header 'Content-Type: application/json'
--header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer
<ACCESS_TOKEN>'
```

Input

Query parameter <WORKING_ENV_ID> (`workingEnvironmentId`)

Output

The JSON output example includes the list of volumes for the working environment.

JSON output example

```
[
    {
        "name": "ziv02vol01",
        "uuid": "cb488216-5bd1-11eb-8a9b-615eb82c79d8",
        "svmName": "svm_ziv01we02",
        "size": {
            "size": 100.0,
            "unit": "GB"
        },
        "usedSize": {
            "size": 5.18798828125E-4,
            "unit": "GB"
        },
        "junctionPath": "/ziv02vol01",
        "volumeTotalInodes": 3112959,
        "volumeUsedInodes": 96,
        "mountPoint": "172.31.1.199:/ziv02vol01",
        "compressionSpaceSaved": {
            "size": 0.0,
            "unit": "GB"
        },
        "deduplicationSpaceSaved": {
            "size": 0.0,
            "unit": "GB"
        },
        "thinProvisioning": true,
        "compression": true,
        "deduplication": true,
        "snapshotPolicy": "default",
        "securityStyle": "unix",
        "exportPolicyInfo": {
```

```
        "name": "export-svm_ziv01we02-ziv02vol01",
        "policyType": "custom",
        "ips": [
            "172.31.0.0/16"
        ],
        "nfsVersion": [
            "nfs3"
        ]
    },
    "shareNames": [],
    "shareInfo": [],
    "parentVolumeName": "",
    "rootVolume": false,
    "state": "online",
    "volumeType": "rw",
    "aggregateName": "aggr1",
    "parentSnapshot": null,
    "autoSizeMode": "grow",
    "maxGrowSize": {
        "size": 1100.0,
        "unit": "GB"
    },
    "providerVolumeType": "gp2",
    "cloneNames": [],
    "moving": false,
    "primaryNoFailoverMountPoint": null,
    "secondaryNoFailoverMountPoint": null,
    "capacityTier": null,
    "capacityTierUsedSize": null,
    "cifsShareAccessPoint": null,
    "primaryCifsShareAccessPoint": null,
    "secondaryCifsShareAccessPoint": null,
    "tieringPolicy": "none",
    "tierInactiveUserData": {
        "size": 0.0,
        "unit": "GB"
    },
    "tierInactiveUserDataPercent": 0,
    "comment": null,
    "qosPolicyGroupName": null,
    "snaplockType": "non_snaplock",
    "constituentsAggregates": [],
    "snapshotsUsedSize": {
        "size": 1597440.0,
        "unit": "Byte"
    },
```

```
          "cbsBackupsInfo": null,
          "minimumCoolingDays": null,
          "targetName": "iqn.1992-
  08.com.netapp:sn.7d147b755bd011ebb076ef46475a0933:vs.2",
          "iscsiEnabled": false,
          "isFlexGroupVolume": false
      }
  ]
```

Get volumes for high availability pair

You can use this workflow to retrieve a list of volumes for an HA working environment.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` value of the working environment for the `workingEnvironmentId` query parameter.

2. Get the volumes

HTTP method	Path
GET	/occm/api/aws/ha/volumes

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/aws/ha/volumes?workingEnvi
ronmentId=<WORKING_ENV_ID>' --header 'Content-Type: application/json'
--header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer
<ACCESS_TOKEN>'
```

Input

   Query parameter <WORKING_ENV_ID> (`workingEnvironmentId`)

Output

   The JSON output example includes the list of volumes for the working environment.

```
[
{
        "name": "ziv04we01haagg01vol01",
        "uuid": "728ad225-61ca-11eb-81ba-637783e50391",
        "svmName": "svm_ziv04we01ha",
        "size": {
            "size": 100.0,
            "unit": "GB"
        },
```

```json
        "usedSize": {
            "size": 2.93731689453125E-4,
            "unit": "GB"
        },
        "junctionPath": "/ziv04we01haagg01vol01",
        "volumeTotalInodes": 3112959,
        "volumeUsedInodes": 96,
        "mountPoint": "2.2.2.2:/ziv04we01haagg01vol01",
        "compressionSpaceSaved": {
            "size": 0.0,
            "unit": "GB"
        },
        "deduplicationSpaceSaved": {
            "size": 0.0,
            "unit": "GB"
        },
        "thinProvisioning": true,
        "compression": true,
        "deduplication": true,
        "snapshotPolicy": "default",
        "securityStyle": "unix",
        "exportPolicyInfo": {
            "name": "export-svm_ziv04we01ha-ziv04we01haagg01vol01",
            "policyType": "custom",
            "ips": [
                "172.31.0.0/16"
            ],
            "nfsVersion": [
                "nfs3",
                "nfs4"
            ]
        },
        "shareNames": [],
        "shareInfo": [],
        "parentVolumeName": "",
        "rootVolume": false,
        "state": "online",
        "volumeType": "rw",
        "aggregateName": "aggr1",
        "parentSnapshot": null,
        "autoSizeMode": "grow",
        "maxGrowSize": {
            "size": 1100.0,
            "unit": "GB"
        },
        "providerVolumeType": "gp2",
```

```
        "cloneNames": [],
        "moving": false,
        "primaryNoFailoverMountPoint":
"172.31.1.36:/ziv04we01haagg01vol01",
        "secondaryNoFailoverMountPoint":
"172.31.2.210:/ziv04we01haagg01vol01",
        "capacityTier": null,
        "capacityTierUsedSize": null,
        "cifsShareAccessPoint": null,
        "primaryCifsShareAccessPoint": null,
        "secondaryCifsShareAccessPoint": null,
        "tieringPolicy": "none",
        "tierInactiveUserData": {
            "size": 0.0,
            "unit": "GB"
        },
        "tierInactiveUserDataPercent": 0,
        "comment": null,
        "qosPolicyGroupName": null,
        "snaplockType": "non_snaplock",
        "constituentsAggregates": [],
        "snapshotsUsedSize": {
            "size": 0.0,
            "unit": "Byte"
        },
        "cbsBackupsInfo": null,
        "minimumCoolingDays": null,
        "targetName": "iqn.1992-
08.com.netapp:sn.c4a88d8c618511eba2c7672081bef253:vs.3",
        "iscsiEnabled": false,
        "isFlexGroupVolume": false
    }
]
```

Modify volume

You can modify the configuration of an existing volume.

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Modify volume for single node

You can use this workflow to modify the configuration of an existing volume for a single node working environment.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` and `svmName` values for the `workingEnvironmentId` and `svmName` path parameters.

2. Select the volume

Perform the workflow Get volumes and choose the `name` for the `volumeName` path parameter.

3. Modify the volume

HTTP method	Path
PUT	/occm/api/vsa/volumes/{workingEnvironmentId}/{svmName}/{volumeName}

curl example

```
curl --location --request PUT
'https://cloudmanager.cloud.netapp.com/occm/api/vsa/volumes/<WORKING_ENV_I
D>/<SVM_NAME>/<VOLUME_NAME>' --header 'Content-Type: application/json'
--header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer
<ACCESS_TOKEN>' --d @JSONinput
```

Input

Path parameters:

- <WORKING_ENV_ID> (workingEnvironmentId)
- <SVM_NAME> (svmName)
- <VOLUME_NAME> (volumeName)

The JSON input example includes the minimum list of input parameters.

JSON input example

```
{
  "exportPolicyInfo": {
    "policyType": "custom",
    "ips": [
      "172.31.0.0/16"
    ],
    "nfsVersion": [
      "nfs3"
    ]
  }
}
```

Output

None

Modify volume for high availability pair

You can use this workflow to modify the configuration of an existing volume for an HA working environment.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` and `svmName` values for the `workingEnvironmentId` and `svmName` path parameters.

2. Select the volume

Perform the workflow Get volumes and choose the `name` for the `volumeName` path parameter.

3. Modify the volume

HTTP method	Path
PUT	/occm/api/aws/ha/volumes/{workingEnvironmentId}/{svmName}/{volumeName}

curl example

```
curl --location --request PUT
'https://cloudmanager.cloud.netapp.com/occm/api/aws/ha/volumes/<WORKING_EN
V_ID>/<SVM_NAME>/<VOLUME_NAME>' --header 'Content-Type: application/json'
--header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer
<ACCESS_TOKEN>' --d @JSONinput
```

Input

Path parameters:

- <WORKING_ENV_ID> (`workingEnvironmentId`)
- <SVM_NAME> (`svmName`)
- <VOLUME_NAME> (`volumeName`)

The JSON input example includes the minimum list of input parameters.

JSON input example

```
{
  "exportPolicyInfo": {
    "policyType": "custom",
    "ips": [
      "172.31.0.0/16"
    ],
    "nfsVersion": [
      "nfs3"
    ]
  }
}
```

Output

  None

Delete volume

You can delete an existing volume.

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Delete volume for single node

You can use this workflow to delete a volume for a single node working environment.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` and `svmName` values of the working environment for the `workingEnvironmentId` and `svmName` path parameters.

2. Select the volume

Perform the workflow Get volumes and choose the `name` of the required volume for the `volumeName` path parameter.

3. Delete the volume

HTTP method	Path
DELETE	/occm/api/vsa/volumes/{workingEnvironmentId}/{svmName}/{volumeName}

curl example

```
curl --location --request DELETE
'https://cloudmanager.cloud.netapp.com/occm/api/vsa/volumes/<WORKING_ENV_I
D>/<SVM_NAME>/<VOLUME_NAME>' --header 'Content-Type: application/json'
--header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer
<ACCESS_TOKEN>'
```

Input

Path parameters:

- <WORKING_ENV_ID> (`workingEnvironmentId`)

- <SVM_NAME> (`svmName`)

- <VOLUME_NAME> (`volumeName`)

Output

None

Delete volume for high availability pair

You can use this workflow to delete a volume for an HA working environment.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` and `svmName` values of the working environment for the `workingEnvironmentId` and `svmName` path parameters.

2. Select the volume

Perform the workflow Get volumes and choose the `name` of teh required volume for `volumeName` path parameter.

3. Delete the volume

HTTP method	Path
DELETE	/occm/api/aws/ha/volumes/{workingEnvironmentId}/{svmName}/{volumeName}

curl example

```
curl --location --request DELETE
'https://cloudmanager.cloud.netapp.com/occm/api/aws/ha/volumes/<WORKING_EN
V_ID>/<SVM_NAME>/<VOLUME_NAME>' --header 'Content-Type: application/json'
--header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer
<ACCESS_TOKEN>'
```

Input

Path parameters:

- <WORKING_ENV_ID> (`workingEnvironmentId`)

- `<SVM_NAME>` `(svmName)`
- `<VOLUME_NAME>` `(volumeName)`

Output

None

Create quote

You can create a quote for a new volume which returns a resource quote needed to satisfy the request. The resource quote contains aggregate information where the volume will be created and confirms if the space is available. This is a recommended step but is not mandatory.

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Create quote for single node

You can use this workflow to retrieve quote details for a single node working environment.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` and `svmName` values of the working environment for the `workingEnvironmentId` and `svmName` parameters.

2. Select the aggregate

Perform the workflow Get aggregates and choose the `name` value for the `name` parameter.

3. Select the permutations configuration

Perform the workflow Get permutations and choose the `size` and `diskType` values for step 4.

4. Generate the volume quote

HTTP method	Path
POST	/occm/api/vsa/quote

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/vsa/volumes/quote'
--header 'Content-Type: application/json' --header 'x-agent-id: <AGENT_ID>
--header 'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input

The JSON input example includes the list of input parameters.

JSON input example

```json
{
   "workingEnvironmentId": "VsaWorkingEnvironment-5dZfyKS5",
   "svmName": "svm_ziv01we01",
   "aggregateName": "ziv01agg01",
   "name": "ziv1vol02",
   "size": {
     "size": "100",
     "unit": "GB"
   },
   "enableThinProvisioning": "true",
   "providerVolumeType": "gp2",
   "verifyNameUniqueness": "true"
}
```

Output

The JSON output example includes an example of the quote details.

JSON output example

```json
{
    "numOfDisks": 0,
    "diskSize": {
        "size": 100.0,
        "unit": "GB"
    },
    "aggregateName": "ziv01agg01",
    "newAggregate": false,
    "autoVsaCapacityManagement": true
}
```

Create quote for high availability pair

You can use this workflow to retrieve quote details for an HA working environment.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` and `svmName` values of the working environment for the `workingEnvironmentId` and `svmName` parameters.

2. Select the aggregate

Perform the workflow Get aggregates and choose the `name` value for step 4.

3. Select the package

Perform the Get packages workflow and select the `size` and `diskType` values of the required package for `diskSize` and `providerVolumeType` values.

4. Generate the volume quote

HTTP method	Path
POST	/occm/api/aws/ha/quote

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/aws/ha/volumes/quote'
--header 'Content-Type: application/json' --header 'x-agent-id: <AGENT_ID>
--header 'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input

The JSON input example includes the list of input parameters.

JSON input example

```json
{
  "workingEnvironmentId": "VsaWorkingEnvironment-N6BPfglr",
  "svmName": "svm_ziv04we01ha",
  "aggregateName": "aggr1",
  "name": "ziv04we01haagg01vol01",
  "size": {
    "size": "100",
    "unit": "GB"
  },
  "enableThinProvisioning": "true",
  "providerVolumeType": "gp2",
  "verifyNameUniqueness": "true"
}
```

Output

The JSON output example includes an example of the quote details.

JSON output example

```
{
    "numOfDisks": 0,
    "diskSize": {
        "size": 100.0,
        "unit": "GB"
    },
    "aggregateName": "ziv04we01haagg01",
    "newAggregate": false,
    "autoVsaCapacityManagement": true
}
```

Get iGroups

You can use this workflow to retrieve all the initiator groups (iGroups).

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Get iGroups for single node

You can use this workflow to retrieve the iGroups for a single node system.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` and `svmName` values of the working environment for the `workingEnvironmentId` and `svmName` path parameters.

2. Get the CIFS configurations

HTTP method	Path
GET	/occm/api/vsa/volumes/igroups/{workingEnvironmentId}/{svmName}

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/vsa/volumes/igroups/<WORKI
NG_ENV_ID>/<SVM_NAME>' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>' --header 'Content-Type:
application/json'
```

Input

- Path parameter <WORKING_ENV_ID>
- Path parameter <SVM_NAME>

Output

The JSON output example includes a list of iGroups.

JSON output example

```
[
    {
        "igroupName": "zivIgroup1",
        "osType": "linux",
        "portsetName": "",
        "igroupType": "iscsi",
        "initiators": [
            "iqn.1994-05.com.redhat:1d9ac633937c"
        ]
    },
    {
        "igroupName": "zivIgroup2",
        "osType": "linux",
        "portsetName": "",
        "igroupType": "iscsi",
        "initiators": [
            "iqn.1994-05.com.redhat:96de86825216"
        ]
    }
]
```

Get iGroups for high availability pair

You can use this workflow to retrieve the iGroups for an HA working environment.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` and `svmName` values of the working environment for the `workingEnvironmentId` and `svmName` path parameters.

2. Get the CIFS configurations

HTTP method	Path
GET	/occm/api/aws/ha/volumes/igroups/{workingEnvironmentId}/{svmName}

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/aws/ha/volumes/igroups/<WO
RKING_ENV_ID>/<SVM_NAME>' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>' --header 'Content-Type:
application/json'
```

Input

- Path parameter <WORKING_ENV_ID>
- Path parameter <SVM_NAME>

Output

The JSON output example includes a list of iGroups.

JSON output example

```
[
    {
        "igroupName": "zivIgroup1",
        "osType": "linux",
        "portsetName": "",
        "igroupType": "iscsi",
        "initiators": [
            "iqn.1994-05.com.redhat:1d9ac633937c"
        ]
    },
    {
        "igroupName": "zivIgroup2",
        "osType": "linux",
        "portsetName": "",
        "igroupType": "iscsi",
        "initiators": [
            "iqn.1994-05.com.redhat:96de86825216"
        ]
    }
]
```

Metadata

Get regions

This workflow retrieves the AWS regions in which an Cloud Volumes ONTAP working environment may be created.

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Get regions for single node

You can use this workflow to retrieve the regions for a single node system.

1. Get the list of regions

HTTP method	Path
GET	/occm/api/vsa/metadata/regions

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/vsa/metadata/regions'
--header 'Content-Type: application/json' --header 'x-agent-id:
<AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

None

Output

The JSON output provides an example of a list of AWS regions.

JSON output example

```
[
    {
        "name": "US East",
        "code": "us-east-1",
        "location": "N. Virginia",
        "s3Region": "US"
    },
    {
        "name": "US West",
        "code": "us-west-1",
        "location": "N. California",
        "s3Region": "us-west-1"
    },
    {
        "name": "EU",
        "code": "eu-central-1",
        "location": "Frankfurt",
        "s3Region": "eu-central-1"
    },
    {
        "name": "Asia Pacific",
        "code": "ap-south-1",
        "location": "Mumbai",
        "s3Region": "ap-south-1"
    },
]
```

Get regions for high availability pair

You can use this workflow to retrieve the regions for an HA pair.

1. Get the list of regions

HTTP method	Path
GET	/occm/api/aws/ha/metadata/regions

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/aws/ha/metadata/regions'
--header 'Content-Type: application/json' --header 'x-agent-id:
<AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

None

Output

The JSON output provides an example of a list of AWS regions.

JSON output example

```
[
    {
        "name": "US East",
        "code": "us-east-1",
        "location": "N. Virginia",
        "s3Region": "US"
    },
    {
        "name": "US East",
        "code": "us-east-2",
        "location": "Ohio",
        "s3Region": "us-east-2"
    },
    {
        "name": "US West",
        "code": "us-west-1",
        "location": "N. California",
        "s3Region": "us-west-1"
    }
]
```

Get permutations

You can use the permutations endpoint to retrieve the Cloud Volumes ONTAP configuration information.

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Get permutations for single node

You can use this workflow to retrieve the configuration information for a single node working environment.

1. Get the permutations

HTTP method	Path
GET	/occm/api/vsa/metadata/permutations

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/vsa/metadata/permutations'
--header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer
<ACCESS_TOKEN>' --header 'Content-Type: application/json'
```

Input

There are several optional query parameters you can use:

- region
- version
- license
- instance_type
- default_instance_type
- feature
- latest_only
- ami

Output

The JSON output example includes the list of Cloud Volumes ONTAP configurations.

JSON output example

```
[
    {
        "ontapVersion": "ONTAP-9.9.0X4.T1",
        "license": {
            "type": "cot-explore-paygo",
            "name": "Cloud Volumes ONTAP Explore",
            "description": "Suitable for smaller capacity applications.
Supports up to 2 TB of underlying AWS storage.",
            "subName": "",
            "subDescription":"Support of tiering to object storage is not
included.",
            "capacity_limit": "2TB",
            "platformLicenseRequired": false,
            "default":false,
            "capacityLimit": {"size":2.0, "unit": "TB"}
        },
        "instanceType": "m5.xlarge",
        "region": {
            "name": "EU",
            "code": "eu-central-1",
            "location": "Frankfurt",
            "s3Region": "eu-central-1"
        },
        "defaultInstance":true,
        "features": ["ena","kvm","network-utilization"],
        "upgradeableFrom": ["9.8","9.9.0"]
    }
]
```

Get permutations for high availability pair

You can use this workflow to retrieve the configuration information for an HA working environment.

1. Get the permutations

HTTP method	Path
GET	/occm/api/aws/ha/metadata/permutations

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/aws/ha/metadata/permutatio
ns?latest_only=true' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>' --header 'Content-Type:
application/json'
```

Input

There are several optional query parameters you can use:

- region

- version

- license

- instance_type

- default_instance_type

- feature

- latest_only

- ami

Output

The JSON output example includes the list of Cloud Volumes ONTAP configurations.

JSON output example

```
[
    {
        "ontapVersion": "ONTAP-9.9.0X6.T1.ha",
        "license": {
            "type": "ha-cot-explore-paygo",
            "name": "Cloud Volumes ONTAP Explore",
            "description": "Suitable for smaller capacity applications.
Supports up to 2 TB of underlying AWS storage.",
            "subName": "",
            "subDescription": "Support of tiering to object storage is not
included.",
            "capacity_limit": "2TB",
            "platformLicenseRequired": false,
            "default": false,
            "capacityLimit": {
                "size": 2.0,
                "unit": "TB"
            }
        },
        "instanceType": "m5.xlarge",
        "region": {
            "name": "EU",
            "code": "eu-central-1",
            "location": "Frankfurt",
            "s3Region": "eu-central-1"
        },
        "defaultInstance": true,
        "features": [
            "ena",
```

```
            "kvm",
            "network-utilization"
        ],
        "upgradeableFrom": [
            "9.8",
            "9.9.0"
        ]
    },
    {
        "ontapVersion": "ONTAP-9.9.0X6.T1.ha",
        "license": {
            "type": "ha-cot-explore-paygo",
            "name": "Cloud Volumes ONTAP Explore",
            "description": "Suitable for smaller capacity applications.
Supports up to 2 TB of underlying AWS storage.",
            "subName": "",
            "subDescription": "Support of tiering to object storage is not
included.",
            "capacity_limit": "2TB",
            "platformLicenseRequired": false,
            "default": false,
            "capacityLimit": {
                "size": 2.0,
                "unit": "TB"
            }
        },
        "instanceType": "m5.xlarge",
        "region": {
            "name": "EU",
            "code": "eu-west-1",
            "location": "Ireland",
            "s3Region": "eu-west-1"
        },
        "defaultInstance": true,
        "features": [
            "ena",
            "kvm",
            "network-utilization"
        ],
        "upgradeableFrom": [
            "9.8",
            "9.9.0"
        ]
    }
]
```

Get list of virtual private clouds

You can use this workflow to retrieve a list of the available virtual private clouds (VPCs).

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Get VPCs for single node

You can use this workflow to retrieve the VPCs for a single node working environment.

1. Select the region to use

Perform the workflow Get regions and choose the `code` value for the `region` query parameter.

2. Get the VPCs

HTTP method	Path
GET	/occm/api/vsa/metadata/vpcs?region=<REGION>

Curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/vsa/metadata/vpcs?region=<
REGION>' --header 'Content-Type: application/json' --header 'x-agent-id:
<AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

Query parameters:

- <REGION> `region`

Output

The JSON output example includes the list of virtual private clouds.

JSON output example

```
[
    {
        "vpcId": "vpc-b16c90d4",
        "state": "available",
        "cidrBlock": "172.31.0.0/16",
        "tags": [
            {
                "key": "Name",
                "value": "VPC for VSA"
            },
```

```
                {
                    "key": "last",
                    "value": "ioio"
                }
            ],
            "default": true,
            "subnets": [
                {
                    "subnetId": "subnet-c1d99699",
                    "cidr": "172.31.5.0/24",
                    "subnetName": "subnet5",
                    "availabilityZone": "us-east-1a",
                    "availableIps": 247,
                    "minimumRequiredIps": 8,
                    "outpostArn": null
                },
                {
                    "subnetId": "subnet-deebdbe3",
                    "cidr": "172.31.6.0/24",
                    "subnetName": "Proxy Subnet",
                    "availabilityZone": "us-east-1e",
                    "availableIps": 248,
                    "minimumRequiredIps": 8,
                    "outpostArn": null
                }
            ],
            "securityGroups": [
                {
                    "securityGroupId": "xx-xxxa1ne9xxx67xcvf",
                    "description": "NetApp OCCM Instance External Security
Group",
                    "name": "hguyiuukOCCM1590415972561-OCCMSecurityGroup-
yryrytt"
                },
                {
                    "securityGroupId": "xx-xxxa1ne9xxx67xcvf",
                    "description": "Enable HTTP and NFS for Cloud Restore
Instance",
                    "name": "Cloud-Restore-Instance-account-xxxxxx-
CloudRestoreInstanceSecurityGroup-sdweretttrrt"
                }
            ],
            "tenancy": "default"
        },
        {
            "vpcId": "vpc-fe5c1f98",
```

```
        "state": "available",
        "cidrBlock": "140.30.0.0/16",
        "tags": [
            {
                "key": "Name",
                "value": "VPCWIthNOS3"
            }
        ],
        "default": false,
        "subnets": [
            {
                "subnetId": "subnet-e84722d4",
                "cidr": "140.30.5.0/24",
                "subnetName": "subnet1",
                "availabilityZone": "us-east-1e",
                "availableIps": 250,
                "minimumRequiredIps": 8,
                "outpostArn": null
            }
        ],
        "securityGroups": [
            {
                "securityGroupId": "xx-xxxa1ne9xxx67xcvf",
                "description": "ONTAP Cloud firewall rules for management
and data interface",
                "name": "xx-Version10-duahpJbS-
NetAppExternalSecurityGroup-rtyunht"
            },
            {
                "securityGroupId": "xx-xxxa1ne9xxx67xcvf",
                "description": "default VPC security group",
                "name": "default"
            }
        ],
        "tenancy": "default"
    }
]
```

Get VPCs for high availability pair

You can use this workflow to retrieve the VPCs for an HA working environment.

1. Select the region to use

Perform the workflow Get regions and choose the `code` value for the `region` query parameter.

2. Get the VPCs

HTTP method	Path
GET	/occm/api/aws/ha/metadata/vpcs?region=<REGION>

Curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/aws/ha/metadata/vpcs?regio
n=<REGION>' --header 'Content-Type: application/json' --header 'x-agent-
id: <AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

Query parameters:

- <REGION> region

Output

The JSON output example includes the list of virtual private clouds.

JSON output example

```
[
    {
        "vpcId": "vpc-b16c90d4",
        "state": "available",
        "cidrBlock": "172.31.0.0/16",
        "tags": [
            {
                "key": "Name",
                "value": "VPC for VSA"
            },
            {
                "key": "last",
                "value": "ioio"
            }
        ],
        "default": true,
        "subnets": [
            {
                "subnetId": "subnet-c1d99699",
                "cidr": "172.31.5.0/24",
                "subnetName": "subnet5",
                "availabilityZone": "us-east-1a",
                "availableIps": 247,
                "minimumRequiredIps": 8,
                "outpostArn": null
```

```
            },
            {
                "subnetId": "subnet-deebdbe3",
                "cidr": "172.31.6.0/24",
                "subnetName": "Proxy Subnet",
                "availabilityZone": "us-east-1e",
                "availableIps": 248,
                "minimumRequiredIps": 8,
                "outpostArn": null
            }
        ],
        "securityGroups": [
            {
                "securityGroupId": "xx-xxxa1ne9xxx67xcvf",
                "description": "NetApp OCCM Instance External Security
Group",
                "name": "lilush2000OCCM1590415972561-OCCMSecurityGroup-
JDB72N6W90UG"
            },
            {
                "securityGroupId": "xx-xxxa1ne9xxx67xcvf",
                "description": "Enable HTTP and NFS for Cloud Restore
Instance",
                "name": "Cloud-Restore-Instance-account-xxxxxx-
CloudRestoreInstanceSecurityGroup-sdweretttrrt"
            }
        ],
        "tenancy": "default"
    },
    {
        "vpcId": "vpc-fe5c1f98",
        "state": "available",
        "cidrBlock": "140.30.0.0/16",
        "tags": [
            {
                "key": "Name",
                "value": "VPCWIthNOS3"
            }
        ],
        "default": false,
        "subnets": [
            {
                "subnetId": "subnet-e84722d4",
                "cidr": "140.30.5.0/24",
                "subnetName": "subnet1",
                "availabilityZone": "us-east-1e",
```

```
                "availableIps": 250,
                "minimumRequiredIps": 8,
                "outpostArn": null
            }
        ],
        "securityGroups": [
            {
                "securityGroupId": "xx-xxxa1ne9xxx67xcvf",
                "description": "ONTAP Cloud firewall rules for management
 and data interface",
                "name": "XX-Version10-yuiloJbS-
 NetAppExternalSecurityGroup-TYUOPR"
            },
            {
                "securityGroupId": "xx-xxxa1ne9xxx67xcvf",
                "description": "default VPC security group",
                "name": "default"
            }
        ],
        "tenancy": "default"
    }
]
```

Get EBS volume types

You can use this workflow to retrieve the supported EBS volume types.

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Get EBS volume types for single node

You can use this workflow to get the EBS volume types for a single node working environment.

1. Get the EBS volume types

HTTP method	Path
GET	/occm/api/vsa/metadata/ebs-volume-types

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/vsa/metadata/ebs-volume-
types' --header 'Content-Type: application/json' --header 'x-agent-id:
<AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

None

Output

The JSON output example includes the list of EBS volume types.

JSON output example

```
[
    {
        "description": "",
        "size": {
            "size": 100.0,
            "unit": "GB"
        },
        "supportedVolumeTypes": [
            "standard",
            "io1",
            "io2",
            "gp2"
        ],
        "supportedOccmLicenses": [
            "Explore (hourly)",
            "Standard (hourly)",
            "Standard (BYOL)",
            "Cloud Volumes ONTAP Explore",
            "Cloud Volumes ONTAP Standard",
            "Cloud Volumes ONTAP Premium",
            "Cloud Volumes ONTAP BYOL",
            "Cloud Volumes ONTAP Explore",
            "Cloud Volumes ONTAP Standard",
            "Cloud Volumes ONTAP Premium",
            "Cloud Volumes ONTAP BYOL"
        ],
        "isDefault": false
    },
    {
        "description": "",
        "size": {
            "size": 500.0,
            "unit": "GB"
```

```
        },
        "supportedVolumeTypes": [
            "standard",
            "io1",
            "io2",
            "gp2",
            "st1"
        ],
        "supportedOccmLicenses": [
            "Explore (hourly)",
            "Standard (hourly)",
            "Standard (BYOL)",
            "Cloud Volumes ONTAP Explore",
            "Cloud Volumes ONTAP Standard",
            "Cloud Volumes ONTAP Premium",
            "Cloud Volumes ONTAP BYOL",
            "Cloud Volumes ONTAP Explore",
            "Cloud Volumes ONTAP Standard",
            "Cloud Volumes ONTAP Premium",
            "Cloud Volumes ONTAP BYOL"
        ],
        "isDefault": false
    }
]
```

Get EBS volume types for high availability pair

You can use this workflow to get the EBS volume types for an HA working environment.

1. Get the EBS volume types

HTTP method	Path
GET	/occm/api/aws/ha/metadata/ebs-volume-types

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/aws/ha/metadata/ebs-
volume-types' --header 'Content-Type: application/json' --header 'x-agent-
id: <AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

   None

Output

   The JSON output example includes the list of EBS volume types.

JSON output example

```
[
    {
        "description": "",
        "size": {
            "size": 100.0,
            "unit": "GB"
        },
        "supportedVolumeTypes": [
            "standard",
            "io1",
            "io2",
            "gp2",
            "gp3"
        ],
        "supportedOccmLicenses": [
            "Explore (hourly)",
            "Standard (hourly)",
            "Standard (BYOL)",
            "Cloud Volumes ONTAP Explore",
            "Cloud Volumes ONTAP Standard",
            "Cloud Volumes ONTAP Premium",
            "Cloud Volumes ONTAP BYOL",
            "Cloud Volumes ONTAP Explore",
            "Cloud Volumes ONTAP Standard",
            "Cloud Volumes ONTAP Premium",
            "Cloud Volumes ONTAP BYOL",
            "Cloud Volumes ONTAP Explore",
            "Cloud Volumes ONTAP Standard",
            "Cloud Volumes ONTAP Premium",
            "Cloud Volumes ONTAP BYOL",
            "Cloud Volumes ONTAP Standard",
            "Cloud Volumes ONTAP Premium",
            "Cloud Volumes ONTAP BYOL",
            "Cloud Volumes ONTAP Explore",
            "Cloud Volumes ONTAP Standard",
            "Cloud Volumes ONTAP Premium",
            "Cloud Volumes ONTAP BYOL",
            "Cloud Volumes ONTAP Explore",
            "Cloud Volumes ONTAP Standard",
            "Cloud Volumes ONTAP Premium",
            "Cloud Volumes ONTAP BYOL"
        ],
        "isDefault": false
    },
```

```
    {
        "description": "",
        "size": {
            "size": 500.0,
            "unit": "GB"
        },
        "supportedVolumeTypes": [
            "standard",
            "io1",
            "io2",
            "gp2",
            "gp3",
            "st1"
        ],
        "supportedOccmLicenses": [
            "Explore (hourly)",
            "Standard (hourly)",
            "Standard (BYOL)",
            "Cloud Volumes ONTAP Explore",
            "Cloud Volumes ONTAP Standard",
            "Cloud Volumes ONTAP Premium",
            "Cloud Volumes ONTAP BYOL",
            "Cloud Volumes ONTAP Explore",
            "Cloud Volumes ONTAP Standard",
            "Cloud Volumes ONTAP Premium",
            "Cloud Volumes ONTAP BYOL",
            "Cloud Volumes ONTAP Explore",
            "Cloud Volumes ONTAP Standard",
            "Cloud Volumes ONTAP Premium",
            "Cloud Volumes ONTAP BYOL",
            "Cloud Volumes ONTAP Standard",
            "Cloud Volumes ONTAP Premium",
            "Cloud Volumes ONTAP BYOL",
            "Cloud Volumes ONTAP Explore",
            "Cloud Volumes ONTAP Standard",
            "Cloud Volumes ONTAP Premium",
            "Cloud Volumes ONTAP BYOL",
            "Cloud Volumes ONTAP Explore",
            "Cloud Volumes ONTAP Standard",
            "Cloud Volumes ONTAP Premium",
            "Cloud Volumes ONTAP BYOL"
        ],
        "isDefault": false
    }
]
```

Get packages

You can use the packages endpoint to retrieve the Cloud Volumes ONTAP packages configuration information.

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Get packages for single node

You can use this workflow to retrieve the packages information for a single node system.

1. Get the packages

HTTP method	Path
GET	/occm/api/vsa/metadata/packages

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/vsa/metadata/packages'
--header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer
<ACCESS_TOKEN>' --header 'Content-Type: application/json'
```

Input

None

Output

The JSON output example includes the list of Cloud Volumes ONTAP packages.

JSON output example

```json
[
    {
        "name": "aws_ha_poc",
        "displayName": "POC and small workloads",
        "description": "No description yet",
        "licenseType": "ha-cot-explore-paygo",
        "instanceTypeMapping": [
            {
                "region": "default",
                "instanceType": "m5.xlarge"
            }
        ],
        "diskType": "gp2",
        "diskSize": {
            "size": 100.0,
            "unit": "GB"
        },
        "capacityTier": null,
        "instanceTenancy": "default",
        "writingSpeedState": "NORMAL"
    },
    {
        "name": "aws_ha_standard",
        "displayName": "Database and application data production
workloads",
        "description": "No description yet",
        "licenseType": "ha-cot-standard-paygo",
        "instanceTypeMapping": [
            {
                "region": "default",
                "instanceType": "m5.2xlarge"
            }
        ],
        "diskType": "gp2",
        "diskSize": {
            "size": 100.0,
            "unit": "GB"
        },
        "capacityTier": null,
        "instanceTenancy": "default",
        "writingSpeedState": "NORMAL"
    }
]
```

Get packages for high availability pair

You can use this workflow to retrieve the packages information for an HA working environment.

1. Get the packages

HTTP method	Path
GET	/occm/api/aws/ha/metadata/packages

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/aws/ha/metadata/packages'
--header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer
<ACCESS_TOKEN>' --header 'Content-Type: application/json'
```

Input

None

Output

The JSON output example includes the list of Cloud Volumes ONTAP packages.

JSON output example

```
[
    {
        "name": "aws_ha_poc",
        "displayName": "POC and small workloads",
        "description": "No description yet",
        "licenseType": "ha-cot-explore-paygo",
        "instanceTypeMapping": [
            {
                "region": "default",
                "instanceType": "m5.xlarge"
            }
        ],
        "diskType": "gp2",
        "diskSize": {
            "size": 100.0,
            "unit": "GB"
        },
        "capacityTier": null,
        "instanceTenancy": "default",
        "writingSpeedState": "NORMAL"
    },
    {
        "name": "aws_ha_standard",
        "displayName": "Database and application data production
workloads",
        "description": "No description yet",
        "licenseType": "ha-cot-standard-paygo",
        "instanceTypeMapping": [
            {
                "region": "default",
                "instanceType": "m5.2xlarge"
            }
        ],
        "diskType": "gp2",
        "diskSize": {
            "size": 100.0,
            "unit": "GB"
        },
        "capacityTier": null,
        "instanceTenancy": "default",
        "writingSpeedState": "NORMAL"
    }
]
```

Get route tables

You can use the route tables endpoint to retrieve the route tables labels for each VPC and their subnet association information.

> ℹ️ We use the Get route tables workflow only for the high availability pair.

1. Get the region

Perform the workflow Get regions and choose the `code` value of the required region for the `region` query parameter.

2. Get the VPC

Perform the workflow Get VPCs and choose the `vpcId` value of the required VPC for the `vpcId` query parameter.

3. Get the route tables

HTTP method	Path
GET	/occm/api/aws/ha/metadata/route-tables

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/aws/ha/metadata/route-
tables?region=<REGION>&vpcId=<VPC_ID>' --header 'x-agent-id: <AGENT_ID>'
--header 'Authorization: Bearer <ACCESS_TOKEN>' --header 'Content-Type:
application/json'
```

Input

Query parameters:

- <REGION> `region`
- <VPCID> `vpcId`

Optional parameters:

- `roleArn`: String
- `cloudProviderAccountId`: String

  Output

  The output includes an array of route tables.

  JSON output example

  ```
  [
      {
  ```

```json
        "id": "rtb-3338784b",
        "main": false,
        "subnets": [],
        "tags": [
            {
                "key": "Name",
                "value": "route3"
            }
        ]
    },
    {
        "id": "rtb-e13a7a99",
        "main": false,
        "subnets": [],
        "tags": [
            {
                "key": "Name",
                "value": "route2"
            }
        ]
    },
    {
        "id": "rtb-7a3b7b02",
        "main": false,
        "subnets": [],
        "tags": [
            {
                "key": "Name",
                "value": "route4"
            }
        ]
    },
    {
        "id": "rtb-0a41155f5c924872e",
        "main": false,
        "subnets": [],
        "tags": [
            {
                "key": "Name",
                "value": "long"
            }
        ]
    },
    {
        "id": "rtb-d0e847b6",
        "main": false,
```

```
        "subnets": [],
        "tags": [
            {
                "key": "Name",
                "value": "IC Route"
            }
        ]
    },
    {
        "id": "rtb-3333734b",
        "main": false,
        "subnets": [],
        "tags": [
            {
                "key": "Name",
                "value": "route1"
            }
        ]
    },
    {
        "id": "rtb-02a45467",
        "main": true,
        "subnets": [],
        "tags": [
            {
                "key": "Name",
                "value": "main"
            }
        ]
    }
]
```

Get key pairs

You can use the key pairs endpoint to retrieve the AWS key pairs for specific regions.

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Get key pairs for single node

You can use this workflow to retrieve the key pairs for a single node working environment.

1. Get the region

Perform the workflow Get regions and choose the `code` value of the required region for the `region` query parameter.

2. Get the key pairs

HTTP method	Path
GET	/occm/api/vsa/metadata/key-pairs

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/vsa/metadata/key-
pairs?region=<REGION>' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>' --header 'Content-Type:
application/json'
```

Input

Query parameter:

- <REGION> `region`

Optional parameters for filter:

- `roleArn`: String

- `cloudProviderAccountId`: String

Output

The output shows the AWS user key pairs for a specific region.

JSON output example

```
[
    "Developers_Virginia",
    "gfcqa",
    "kubernetes-net6vbp8sd",
    "kubernetes-netpn77b32",
    "occm_qa"
]
```

Get key pairs for high availability pair

You can use this workflow to retrieve the key pairs for an HA working environment.

1. Get the region

Perform the workflow Get regions and choose the `code` value of the required region for the `region` query

parameter.

> ⓘ Ensure that you choose the path value for the HA pair while performing the Get Regions workflow.

2. Get the key pairs

HTTP method	Path
GET	/occm/api/aws/ha/metadata/key-pairs

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/aws/ha/metadata/key-
pairs?region=<REGION>' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>' --header 'Content-Type:
application/json'
```

Input
Query parameter:

- <REGION> `region`

Optional parameters for filter:

- `roleArn`: String

- `cloudProviderAccountId`: String

  Output
  The output shows the AWS user key pairs for a specific region.

  JSON output example

```
[
    "Developers_Virginia",
    "gfcqa",
    "kubernetes-net6vbp8sd",
    "kubernetes-netpn77b32",
    "occm_qa"
]
```

Miscellaneous

Create AWS cloud provider account

You can use this workflow to create an AWS cloud provider account.

Before you begin

You must have AWS credentials.

1. Get the SaaS marketplace account

Perform the workflow Get SaaS marketplace account and choose the `id` value for the required subscription for `subscriptionId` parameter.

2. Create the account

HTTP method	Path
POST	/occm/api/accounts/aws

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/accounts/aws' --header 'x-
agent-id: <AGENT_ID>' --header 'Authorization: Bearer <TOKEN>' --header
'Content-Type: application/json' --d JSONinput
```

Input

The JSON input example includes the list of parameters.

JSON input example

```
{
  "accountName": "zivAccountTest2",
  "providerKeys": {
    "awsAccessKeys": {
      "accessKey": "accesskeystring",
      "secretKey": "secretkeystring"
    }
  },
  "subscriptionId": "subscriptionIDgoeshere"
}
```

Output

The JSON output provides an example of the cloud provider details.

JSON output example

```
{
    "publicId": "CloudProviderAccount-LCwgVOy7",
    "accountName": "zivAccountTest2",
    "accountType": "AWS_KEYS",
    "accountId": "accountIDshownhere",
    "accessKey": " accesskeyshownhere",
    "assumeRole": null,
    "occmRole": null,
    "vsaList": [],
    "subscriptionId": "subscriptionIDshownhere"
}
```

Azure workflows

Before you begin

There are several workflows you can use with the Azure public cloud.

ⓘ   Review the Get started section before using any of the Cloud Manager REST API workflows.

Workflow categories

The Azure workflows are organized into the following categories:

- Working environments
- Aggregates
- Volumes
- Metadata
- Miscellaneous

See Understanding the workflow processes for more information on these categories.

Azure credentials

Before beginning to use the Azure workflows, you will need to create an Azure account through the Microsoft Azure portal and obtain the Azure credentials and the subscription ID.

Connector setup

You must have a **Connector** for the cloud environment before creating a working environment and performing other activities using the workflows. You can create a Connector using the Cloud Manager web UI. When you create a Connector, Cloud Manager adds the Azure cloud provider account that you deployed the Connector in to your list of available accounts. Your Azure account needs to have the right permissions in order to create a Connector.

Review Learn about Azure Connectors to know how to create and deploy an Azure Connector.

Working environments

Create a working environment with PAYGO

You can use this workflow to create a new Azure Cloud Volumes ONTAP working environment using pay-as-you-go (PAYGO) subscription.

> **Note the following when using PAYGO**:
>
> - A marketplace subscription is required.
> - A NetApp Support Site (NSS) key is recommended to register the system for support, but it's not required.
> - You can add more volumes after creating the working environment. You can choose to create a volume using either NFS, CIFS, or iSCSI protocol.

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Create working environment for single node

You can use this workflow to create single node working environment with PAYGO.

1. Select the region

Perform the workflow Get regions and choose the `name` value of the required region for the `region` parameter in step 11.

2. Select the workspace

Perform the workflow Get tenants and choose the `workspacePublicId` value for the `tenantId` parameter in step 11.

3. Select the VNets

Perform the workflow Get VNets and do the following:

- Choose the `id` value of the desired vnet from the `virtualNetworks` for the `vnetId` parameter in step 11.
- Choose the `cidr` value of the desired cidr from the `virtualNetworks` for the `cidr` parameter in step 11.
- Choose the `id` of the desired subnet from the `virtualNetworks`→ `cidrs`→ `subnets` for the `subnetId` parameter in step 11.
- Choose the `id` of the desired security group from the `securityGroups` field for the `securityGroupId` parameter in step 11.

4. Select the Azure availability zone

Perform the workflow Get Azure Availability Zones and choose the number from `zones` for the

`availabilityZone` parameter in step 11.

5. Get the Azure packages configuration

Perform the Get Azure Packages workflow and choose the `name` of the desired package item for the `packageName` parameter.

6. Attach a marketplace subscription

Perform the workflow Attach SaaS subscription.

7. (Optional) Obtain an NSS key

An NSS key is **optional** when using PAYGO licensing. If needed, you can create a key or select an existing key, and include the NSS key in the `nssAccount` parameter in step 11.

- To create a new NSS key using the Cloud Manager web user interface, perform the task Generate NSS user ID and choose the `id`.

- To select an existing NSS key, perform the workflow Get NSS keys and choose the `id` of the required NSS user.

8. Select the Azure cloud provider accounts

Perform the Create Azure cloud provider accounts workflow and choose the `publicId` of the desired cloud provider account item from the `azureAccounts` for the `cloudProviderAccount` parameter.

9. Select the Azure permutations

Perform the Get Azure Permutations workflow and pick the desired permutation:

- Choose the `ontapVersion` of the desired permutation for the `ontapVersion` field inside the `vsaMetadata` parameter in step 11.

- Choose the `type` of the desired license item from the `license` parameter for the `licenseType` field inside the `vsaMetadata` parameter in step 11.

- Choose the `instanceType` of the desired permutation for the `instanceType` field inside the `vsaMetadata` parameter in step 11.

10. Select the Azure storage account types

Perform the Get Azure Storage Account Types workflow and pick the desired storage type.

- Choose the `diskType` of the desired storage type item for the `storageType` parameter in step 11.

- Choose the `size` of the desired disk size from the `sizes` → `size` field for the `size` field inside the `diskSize` parameter in step 11.

- Choose the `unit` of the desired disk size from the `sizes` → `size` field for the `unit` field inside the `diskSize` parameter in step 11.

11. Create the working environment

HTTP method	Path
POST	/occm/api/azure/vsa/working-environments

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/azure/vsa/working-
environments' --header 'x-agent-id: <AGENT_ID>' //<1> --header
'Authorization: Bearer <ACCESS_TOKEN>' //<2> ---header 'Content-Type:
application/json' --d @JSONinput
```

(1) Replace <AGENT_ID> with your agent ID.
(2) Replace <ACCESS_TOKEN> with your obtained access bearer token.

Input

The JSON input example includes the minimum list of parameters.

ⓘ   This request uses PAYGO licensing as indicated in the `licenseType` parameter.

JSON input example

```json
{
    "name":"Azure123",
    "tenantId":"tenantID",
    "region":"westeurope",
    "packageName":"azure_poc",
    "dataEncryptionType":"AZURE",
    "vsaMetadata":{
        "ontapVersion":"ONTAP-9.10.0.T1.azure",
        "licenseType":"azure-cot-explore-paygo",
        "instanceType":"Standard_DS3_v2"
    },
    "writingSpeedState":"NORMAL",
    "subnetId":"/subscriptions/x000xx00-0x00-0000-
000x/resourceGroups/occm_group_westeurope/providers/Microsoft.Network/virt
ualNetworks/Vnet1/subnets/Subnet2",
    "svmPassword":"Netapp123",
    "vnetId":"/subscriptions/x000xx00-0x00-0000-
000x/resourceGroups/occm_group_westeurope/providers/Microsoft.Network/virt
ualNetworks/Vnet1",
    "cidr":"10.0.0.0/16",
    "ontapEncryptionParameters":null,
    "securityGroupId":"/subscriptions/x000xx00-0x00-0000-
000x/resourceGroups/Cloud-Compliance-1nThiJkG05ZgcyucIJvCSbtBdpVnK-
2020894989899/providers/Microsoft.Network/networkSecurityGroups/Cloud-
Compliance-1nTxxxtkG05ZgcxxxxxxXXXXX-2000000000000000",
    "skipSnapshots":false,
    "diskSize":{
        "size":500,
        "unit":"GB",
        "_identifier":"500 GB"
    },
    "storageType":"Premium_LRS",
    "azureTags":[],
    "subscriptionId":"x000xx00-0x00-0000-000x",
    "cloudProviderAccount":"ManagedServiceIdentity",
    "backupVolumesToCbs":false,
    "enableCompliance":false,
    "enableMonitoring":false,
    "availabilityZone":1,
    "allowDeployInExistingRg":true,
    "resourceGroup":"occm_group_westeurope"
}
```

Output

The JSON output example includes an example of the `VsaWorkingEnvironmentResponse`.

JSON output example

```json
{
    "publicId": "VsaWorkingEnvironment-uFPaNkrv",
    "name": "Azure123",
    "tenantId": "tenantID",
    "svmName": "svm_Azure123",
    "creatorUserEmail": "user_mail",
    "status": null,
    "providerProperties": null,
    "reservedSize": null,
    "clusterProperties": null,
    "ontapClusterProperties": null,
    "cloudProviderName": "Azure",
    "snapshotPolicies": null,
    "actionsRequired": null,
    "activeActions": null,
    "replicationProperties": null,
    "schedules": null,
    "svms": null,
    "workingEnvironmentType": "VSA",
    "supportRegistrationProperties": null,
    "supportRegistrationInformation": null,
    "capacityFeatures": null,
    "encryptionProperties": null,
    "supportedFeatures": null,
    "isHA": false,
    "haProperties": null,
    "k8sProperties": null,
    "fpolicyProperties": null,
    "saasProperties": null,
    "cbsProperties": null,
    "complianceProperties": null,
    "monitoringProperties": null
}
```

Create working environment for high availability pair

You can use this workflow to create an HA working environment with PAYGO.

1. Select the region

Perform the workflow Get regions and choose the `name` value of the required region for the `region` parameter in step 11.

2. Select the workspace

Perform the workflow Get tenants and choose the `workspacePublicId` value for the `tenantId` parameter in step 11.

3. Select the VNets

Perform the workflow Get VNets and do the following:

- Choose the `id` value of the desired vnet from the `virtualNetworks` for the `vnetId` parameter in step 11.

- Choose the `cidr` value of the desired cidr from the `virtualNetworks` for the `cidr` parameter in step 11.

- Choose the `id` of the desired subnet from the `virtualNetworks`→ `cidrs`→ `subnets` for the `subnetId` parameter in step 11.

- Choose the `id` of the desired security group from the `securityGroups` field for the `securityGroupId` parameter in step 11.

4. Select the Azure availability zone

Perform the workflow Get Azure Availability Zones and choose the number from `zones` for the `availabilityZone` parameter in step 11.

5. Get Azure packages configuration

Perform the Get Azure Packages workflow and choose the `name` of the desired package item for the `packageName` parameter.

6. Attach a marketplace subscription

Perform the workflow Attach SaaS subscription.

7. (Optional) Obtain an NSS key

An NSS key is **optional** when using PAYGO licensing. If needed, you can create a key or select an existing key, and include the NSS key in the `nssAccount` parameter in step 11.

- To create a new NSS key using the Cloud Manager web user interface, perform the task Generate NSS user ID and choose the `id`.

- To select an existing NSS key, perform the workflow Get NSS keys and choose the `id` of the required NSS user.

8. Select Azure cloud provider accounts

Perform the Create Azure Cloud Provider Accounts workflow and choose the `publicId` of the desired cloud provider account item from the `azureAccounts` for the `cloudProviderAccount` parameter.

9. Select Azure permutations

Perform the Get Azure Permutations workflow and pick the desired permutation:

- Choose the `ontapVersion` of the desired permutation for the `ontapVersion` field inside the

vsaMetadata parameter in step 11.

- Choose the `type` of the desired license item from the `license` parameter for the `licenseType` field inside the `vsaMetadata` parameter in step 11.

- Choose the `instanceType` of the desired permutation for the `instanceType` field inside the `vsaMetadata` parameter in step 11.

10. Select Azure storage account types

Perform the Get Azure Storage Account Types workflow and pick the desired storage type.

- Choose the `diskType` of the desired storage type item for the `storageType` parameter in step 11.

- Choose the `size` of the desired disk size from the `sizes` → `size` field for the `size` field inside the `diskSize` parameter in step 11.

- Choose the `unit` of the desired disk size from the `sizes` → `size` field for the `unit` field inside the `diskSize` parameter in step 11.

11. Create the working environment

HTTP method	Path
POST	/occm/api/azure/ha/working-environments

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/azure/ha/working-
environments' --header 'x-agent-id: <AGENT_ID>' //<1> --header
'Authorization: Bearer <ACCESS_TOKEN>' //<2> ---header 'Content-Type:
application/json' --d @JSONinput
```

(1) Replace <AGENT_ID> with your agent ID.
(2) Replace <ACCESS_TOKEN> with your obtained access bearer token.

Input

The JSON input example includes the minimum list of parameters.

ⓘ   This request uses PAYGO licensing as indicated in the `licenseType` parameter.

JSON input example

```
{
   "name":"ranukazure12",
   "volume":{
      "exportPolicyInfo":{
         "policyType":"custom",
         "ips":[
```

```
                    "10.0.0.0/16"
                ],
                "nfsVersion":[
                    "nfs3",
                    "nfs4"
                ]
            },
            "snapshotPolicyName":"default",
            "name":"ranukvol12",
            "enableThinProvisioning":true,
            "enableDeduplication":true,
            "enableCompression":true,
            "size":{
                "size":100,
                "unit":"GB"
            },
            "tieringPolicy":"auto"
        },
        "tenantId":"tenantIDgoeshere",
        "region":"westeurope",
        "packageName":"azure_ha_standard",
        "dataEncryptionType":"AZURE",
        "capacityTier":"Blob",
        "vsaMetadata":{
            "ontapVersion":"ONTAP-9.10.1X7.T1.azureha",
            "licenseType":"azure-ha-cot-standard-paygo",
            "instanceType":"Standard_DS4_v2"
        },
        "writingSpeedState":"NORMAL",
        "subnetId":"/subscriptions/x000xx00-0x00-0000-000x
/resourceGroups/occm_group_westeurope/providers/Microsoft.Network/virtualN
etworks/Vnet1/subnets/Subnet2",
        "svmPassword":"password",
        "vnetId":"/subscriptions/x000xx00-0x00-0000-000x/resourceGroups
/occm_group_westeurope/providers/Microsoft.Network/virtualNetworks/Vnet1",
        "cidr":"10.0.0.0/16",
        "ontapEncryptionParameters":null,
        "skipSnapshots":false,
        "diskSize":{
            "size":1,
            "unit":"TB",
            "_identifier":"1 TB"
        },
        "storageType":"Premium_LRS",
        "azureTags":[],
        "subscriptionId":"x000xx00-0x00-0000-000x",
```

```
    "cloudProviderAccount":"ManagedServiceIdentity",
    "backupVolumesToCbs":true,
    "enableCompliance":true,
    "enableMonitoring":true,
    "availabilityZone":null,
    "resourceGroup":"ranukazure12-rg"
}
```

Output

The JSON output example includes an example of the `VsaWorkingEnvironmentResponse`.

JSON output example

```json
{
    "publicId":"VsaWorkingEnvironment-1m76JaRt",
    "name":"ranukazure12",
    "tenantId":"tenantID",
    "svmName":"svm_ranukazure12",
    "creatorUserEmail":"user_email",
    "status":null,
    "providerProperties":null,
    "reservedSize":null,
    "clusterProperties":null,
    "ontapClusterProperties":null,
    "cloudProviderName":"Azure",
    "snapshotPolicies":null,
    "actionsRequired":null,
    "activeActions":null,
    "replicationProperties":null,
    "schedules":null,
    "svms":null,
    "workingEnvironmentType":"VSA",
    "supportRegistrationProperties":null,
    "supportRegistrationInformation":null,
    "capacityFeatures":null,
    "encryptionProperties":null,
    "supportedFeatures":null,
    "isHA":true,
    "haProperties":null,
    "fpolicyProperties":null,
    "saasProperties":null,
    "cbsProperties":null,
    "complianceProperties":null,
    "monitoringProperties":null,
    "licensesInformation":null
}
```

Create a working environment with BYOL licensing

You can use this workflow to create a new Cloud Volumes ONTAP working environment using bring-your-own-license (BYOL) licensing.

> **Note the following when using BYOL licensing**:
>
> - A marketplace subscription is not required.
> - A NetApp Support Site (NSS) key is required to register the system for support.
> - You can add more volumes after creating the working environment. You can choose to create a volume using either NFS, CIFS, or iSCSI protocol.

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Create working environment for single node

You can use this workflow to create single node working environment with BYOL licensing.

1. Select the region

Perform the workflow Get regions and choose the `name` value of the required region for the `region` parameter in step 10.

2. Select the workspace

Perform the workflow Get tenants and choose the `workspacePublicId` value for the `tenantId` parameter in step 10.

3. Select the VNets

Perform the workflow Get VNets and do the following:

- Choose the `id` value of the desired vnet from the `virtualNetworks` for the `vnetId` parameter in step 10.
- Choose the `cidr` value of the desired cidr from the `virtualNetworks` for the `cidr` parameter in step 10.
- Choose the `id` of the desired subnet from the `virtualNetworks→ cidrs→ subnets` for the `subnetId` parameter in step 10.
- Choose the `id` of the desired security group from the `securityGroups` field for the `securityGroupId` parameter in step 10.

4. Select the Azure availability zone

Perform the workflow Get Availability Zones and choose the number from `zones` for the `availabilityZone` parameter in step 10.

5. Select Azure packages configuration

Perform the Get Azure Packages workflow and choose the `name` of the desired package item for the `packageName` parameter.

6. Obtain the required NSS key

An NSS key is **required** when using BYOL licensing. You can create a key or select an existing key, and include the NSS key in the `nssAccount` parameter in step 10.

- To create a new NSS key using the Cloud Manager web user interface, perform the task Generate NSS user ID and choose the `id`.

- To select an existing NSS key, perform the workflow Get NSS keys and choose the `id` of the required NSS user.

7. Select the Azure cloud provider accounts

Perform the Get Azure Cloud Provider Accounts workflow and choose the `publicId` of the desired cloud provider account item from the `azureAccounts` for the `cloudProviderAccount` parameter.

8. Select the Azure permutations

Perform the Get Azure Permutations workflow and pick the desired permutation:

- Choose the `ontapVersion` of the desired permutation for the `ontapVersion` field inside the `vsaMetadata` parameter in step 10.

- Choose the `type` of the desired license item from the `license` parameter for the `licenseType` field inside the `vsaMetadata` parameter in step 10.

- Choose the `instanceType` of the desired permutation for the `instanceType` field inside the `vsaMetadata` parameter in step 10.

You will also need to include the `serialNumber` value in the REST API call.
=== 9. Select the Azure storage account types

Perform the Get Azure Storage Account Types workflow and pick the desired storage type.

- Choose the `diskType` of the desired storage type item for the `storageType` parameter in step 10.

- Choose the `size` of the desired disk size from the `sizes → size` field for the `size` field inside the `diskSize` parameter in step 10.

- Choose the `unit` of the desired disk size from the `sizes → size` field for the `unit` field inside the `diskSize` parameter in step 10.

10. Create the working environment

HTTP method	Path
POST	/occm/api/azure/vsa/working-environments

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/azure/vsa/working-
environments' --header 'x-agent-id: <AGENT_ID>' --header 'Authorization:
Bearer <ACCESS_TOKEN>' --header 'Content-Type: application/json' --d
@JSONinput
```

Input

The JSON input example includes the minimum list of parameters. This request uses BYOL licensing as
indicated in the `licenseType` parameter. The `serialNumber` is required.

JSON input example

```
{
  "name": "Azure123",
  "tenantId": "tenantID",
  "region": "eastus2",
  "packageName": "azure_custom",
  "dataEncryptionType": "AZURE",
  "vsaMetadata": {
    "ontapVersion": "ONTAP-9.9.0X5.T1.azure",
    "licenseType": "azure-cot-premium-byol",
    "instanceType": "Standard_DS3_v2"
  },
  "nssAccount": "x0x0x000-0000-000x-00xx-x0000cx0000xx",
  "subnetId": "/subscriptions/x000xx00-0x00-0000-
000x/resourceGroups/occm_group_eastus2/providers/Microsoft.Network/virtual
Networks/Vnet1/subnets/ProxySubnet",
  "svmPassword": "password",
  "vnetId": "/subscriptions/x000xx00-0x00-0000-
000x/resourceGroups/occm_group_eastus2/providers/Microsoft.Network/virtual
Networks/Vnet1",
  "cidr": "10.0.0.0/16",
  "diskSize": {
    "size": 1,
    "unit": "TB"
  },
  "storageType": "Premium_LRS",
  "resourceGroup": "Azure000-xx",
  "serialNumber": "00000110000000000001",
  "subscriptionId": "x000xx00-0x00-0000-000x",
  "cloudProviderAccount": "ManagedServiceIdentity",
  "availabilityZone": 2
}
```

Output

The JSON output example includes an example of the `VsaWorkingEnvironmentRresponse` response.

JSON output example

```json
{
    "publicId": "VsaWorkingEnvironment-uFPaNkrv",
    "name": "Azure123",
    "tenantId": "tenantID",
    "svmName": "svm_Azure123",
    "creatorUserEmail": "user_mail",
    "status": null,
    "providerProperties": null,
    "reservedSize": null,
    "clusterProperties": null,
    "ontapClusterProperties": null,
    "cloudProviderName": "Azure",
    "snapshotPolicies": null,
    "actionsRequired": null,
    "activeActions": null,
    "replicationProperties": null,
    "schedules": null,
    "svms": null,
    "workingEnvironmentType": "VSA",
    "supportRegistrationProperties": null,
    "supportRegistrationInformation": null,
    "capacityFeatures": null,
    "encryptionProperties": null,
    "supportedFeatures": null,
    "isHA": false,
    "haProperties": null,
    "k8sProperties": null,
    "fpolicyProperties": null,
    "saasProperties": null,
    "cbsProperties": null,
    "complianceProperties": null,
    "monitoringProperties": null
}
```

Create working environment for high availability pair

You can use this workflow to create an HA working environment with BYOL licensing.

1. Select the region

Perform the workflow Get regions and choose the `name` value of the required region for the `region` parameter in step 10.

2. Select the workspace

Perform the workflow Get tenants and choose the `workspacePublicId` value for the `tenantId` parameter in step 10.

3. Select the VNets

Perform the workflow Get VNets and do the following:

- Choose the `id` value of the desired vnet from the `virtualNetworks` for the `vnetId` parameter in step 10.

- Choose the `cidr` value of the desired cidr from the `virtualNetworks` for the `cidr` parameter in step 10.

- Choose the `id` of the desired subnet from the `virtualNetworks`→ `cidrs`→ `subnets` for the `subnetId` parameter in step 10.

- Choose the `id` of the desired security group from the `securityGroups` field for the `securityGroupId` parameter in step 10.

4. Select the Azure availability zone

Perform the workflow Get Availability Zones and choose the number from `zones` for the `availabilityZone` parameter in step 10.

5. Select Azure packages configuration

Perform the Get Azure Packages workflow and choose the `name` of the desired package item for the `packageName` parameter.

6. Obtain the required NSS key

An NSS key is **required** when using BYOL licensing. You can create a key or select an existing key, and include the NSS key in the `nssAccount` parameter in step 10.

- To create a new NSS key using the Cloud Manager web user interface, perform the task Generate NSS user ID and choose the `id`.

- To select an existing NSS key, perform the workflow Get NSS keys and choose the `id` of the required NSS user.

7. Select Azure cloud provider accounts

Perform the Get Azure Cloud Provider Accounts workflow and choose the `publicId` of the desired cloud provider account item from the `azureAccounts` for the `cloudProviderAccount` parameter.

8. Select the Azure permutations

Perform the Get Azure Permutations workflow and pick the desired permutation:

- Choose the `ontapVersion` of the desired permutation for the `ontapVersion` field inside the `vsaMetadata` parameter in step 10.

- Choose the `type` of the desired license item from the `license` parameter for the `licenseType` field inside the `vsaMetadata` parameter in step 10.

- Choose the `instanceType` of the desired permutation for the `instanceType` field inside the `vsaMetadata` parameter in step 10.

You will also need to include the `serialNumber` value in the REST API call.
=== 9. Select the Azure storage account types

Perform the Get Azure Storage Account Types workflow and pick the desired storage type.

- Choose the `diskType` of the desired storage type item for the `storageType` parameter in step 10.

- Choose the `size` of the desired disk size from the `sizes → size` field for the `size` field inside the `diskSize` parameter in step 10.

- Choose the `unit` of the desired disk size from the `sizes → size` field for the `unit` field inside the `diskSize` parameter in step 10.

10. Create the working environment

HTTP method	Path
POST	/occm/api/azure/ha/working-environments

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/azure/ha/working-
environments' --header 'x-agent-id: <AGENT_ID>' --header 'Authorization:
Bearer <ACCESS_TOKEN>' --header 'Content-Type: application/json' --d
@JSONinput
```

Input

The JSON input example includes the minimum list of parameters. This request uses BYOL licensing as indicated in the `licenseType` parameter. The `platformSerialNumberNode1` and `platformSerialNumberNode2` parameters are required.

JSON input example

```
{
  "name": "ShirleyHa2701",
  "tenantId": "tenantID",
  "region": "eastus2",
  "packageName": "azure_ha_standard",
  "dataEncryptionType": "AZURE",
  "capacityTier": "Blob",
  "vsaMetadata": {
    "ontapVersion": "ONTAP-9.9.0X5.T1.azureha",
    "licenseType": "azure-ha-cot-premium-byol",
    "instanceType": "Standard_DS4_v2"
  },
  "nssAccount": "x0x0x000-0000-000x-00xx-x0000cx0000xx",
  "writingSpeedState": "NORMAL",
  "subnetId": "/subscriptions/x000xx00-0x00-0000-
000x/resourceGroups/occm_group_eastus2/providers/Microsoft.Network/virtual
Networks/Vnet1/subnets/Subnet1",
  "svmPassword": "password",
  "vnetId": "/subscriptions/x000xx00-0x00-0000-
000x/resourceGroups/occm_group_eastus2/providers/Microsoft.Network/virtual
Networks/Vnet1",
  "cidr": "10.0.0.0/16",
  "ontapEncryptionParameters": null,
  "skipSnapshots": false,
  "diskSize": {
    "size": 500,
    "unit": "GB",
    "_identifier": "500 GB"
  },
  "storageType": "Premium_LRS",
  "azureTags": [],
  "resourceGroup": "ShirleyHa2701-rg",
  "subscriptionId": "x000xx00-0x00-0000-000x,
  "cloudProviderAccount": "ManagedServiceIdentity",
  "backupVolumesToCbs": false,
  "enableCompliance": false,
  "enableMonitoring": false,
  "availabilityZone": null,
  "haParams": {
    "platformSerialNumberNode1": "00000110000000000001",
    "platformSerialNumberNode2": "00000110000000000002"
  }
}
```

Output

The JSON output example includes an example of the `VsaWorkingEnvironmentRresponse` response.

JSON output example

```json
{
    "publicId": "VsaWorkingEnvironment-Kms14Nkv",
    "name": "ShirleyHa2701",
    "tenantId": "tenantID",
    "svmName": "svm_ShirleyHa2701",
    "creatorUserEmail": "user_email",
    "status": null,
    "providerProperties": null,
    "reservedSize": null,
    "clusterProperties": null,
    "ontapClusterProperties": null,
    "cloudProviderName": "Azure",
    "snapshotPolicies": null,
    "actionsRequired": null,
    "activeActions": null,
    "replicationProperties": null,
    "schedules": null,
    "svms": null,
    "workingEnvironmentType": "VSA",
    "supportRegistrationProperties": null,
    "supportRegistrationInformation": null,
    "capacityFeatures": null,
    "encryptionProperties": null,
    "supportedFeatures": null,
    "isHA": true,
    "haProperties": null,
    "k8sProperties": null,
    "fpolicyProperties": null,
    "saasProperties": null,
    "cbsProperties": null,
    "complianceProperties": null,
    "monitoringProperties": null
}
```

Get working environment

You can retrieve the public identifier, working environment ID, the storage virtual machine name for Cloud Volumes ONTAP working environments and other Cloud Volumes ONTAP related details (visible to currently logged in user) which would be used in other workflows.

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Get working environment for single node

You can use this workflow to retrieve the working environments' details of a single node system.

1. Create the working environment

Perform the Create Azure single node working environment workflow and select the `publicId` from the output for the `workingEnvironmentId` path parameter.

2. Get the working environment

HTTP method	Path
GET	/occm/api/azure/vsa/working-environments/{workingEnvironmentId}

curl

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/azure/vsa/working-
environments/<WORKING_ENV_ID>?fields=status,ontapClusterProperties.fields(
upgradeVersions,nodes),reservedSize,saasProperties,complianceProperties,mo
nitoringProperties,providerProperties' --header 'Content-Type:
application/json' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

Path parameters:

- <WORKING_ENV_ID> `workingEnvironmentId` string
- (Optional) `fields` string

Output

The JSON output example includes details of a single node Azure working environment.

JSON output example

```
{
    "publicId": "VsaWorkingEnvironment-zGQWVOyo",
    "name": "pradipm",
    "tenantId": "tenantID",
    "svmName": "svm_pradipm",
    "creatorUserEmail": "user_email",
    "status": {
        "status": "OFF",
```

```
        "message": "",
        "failureCauses": {
            "invalidOntapCredentials": false,
            "noCloudProviderConnection": false,
            "invalidCloudProviderCredentials": false
        },
        "extendedFailureReason": null
    },
    "providerProperties": {
        "regionName": "westeurope",
        "resourceGroup": {
            "name": "occm_group_westeurope",
            "location": "westeurope",
            "tags": {
                "KeepMe": "true"
            }
        },
        "vnetCidr": "10.0.0.0/16",
        "tags": {
            "KeepMe": "true"
        },
        "subscriptionId": "x000xx00-0x00-0000-000x",
        "deploymentId": "",
        "creationTime": 1631783479373,
        "instanceType": "Standard_DS3_v2",
        "numOfNics": 3,
        "singleNetworkInterface": true,
        "subscriptionName": "OCCM Dev",
        "cloudProviderAccountId": null,
        "availabilityZone": null,
        "dataDisks": [
            {
                "name": "pradipm-disk-root",
                "diskSizeGB": 0,
                "lun": 0,
                "id": "/subscriptions/x000xx00-0x00-0000-
000x/resourceGroups/OCCM_GROUP_WESTEUROPE/providers/Microsoft.Compute/disk
s/pradipm-disk-root",
                "caching": "ReadOnly",
                "accountType": "NA",
                "managed": true,
                "encryptionSet": null
            },
            {
                "name": "pradipm-disk-nvram",
                "diskSizeGB": 0,
```

```
                "lun": 1,
                "id": "/subscriptions/dx000xx00-0x00-0000-
000x/resourceGroups/occm_group_westeurope/providers/Microsoft.Compute/disk
s/pradipm-disk-nvram",
                "caching": "None",
                "accountType": "NA",
                "managed": true,
                "encryptionSet": null
            },
            {
                "name": "pradipm-disk-core",
                "diskSizeGB": 0,
                "lun": 2,
                "id": "/subscriptions/x000xx00-0x00-0000-
000x/resourceGroups/occm_group_westeurope/providers/Microsoft.Compute/disk
s/pradipm-disk-core",
                "caching": "ReadOnly",
                "accountType": "NA",
                "managed": true,
                "encryptionSet": null
            },
            {
                "name": "pradipmdatadisk3",
                "diskSizeGB": 0,
                "lun": 3,
                "id": "/subscriptions/x000xx00-0x00-0000-
000xfbbce1b18/resourceGroups/OCCM_GROUP_WESTEUROPE/providers/Microsoft.Com
pute/disks/pradipmdatadisk3",
                "caching": "None",
                "accountType": "NA",
                "managed": true,
                "encryptionSet": null
            }
        ]
    },
    "reservedSize": {
        "size": 0.0,
        "unit": "GB"
    },
    "clusterProperties": null,
    "ontapClusterProperties": {
        "nodes": [],
        "clusterName": "",
        "clusterUuid": "xxxxx0000000000x00x0x00x0x0x0",
        "ontapVersion": "",
        "systemManagerUrl": "https://10.0.1.5/sysmgr/SysMgr.html",
```

```
        "creationTime": 1631783479373,
        "licenseType": {
            "name": "Cloud Volumes ONTAP Capacity Based Charging",
            "capacityLimit": {
                "size": 500.0,
                "unit": "GB"
            }
        },
        "licensePackageName": null,
        "lastModifiedOffbox": 1632392140549,
        "offboxTarget": false,
        "upgradeVersions": null,
        "writingSpeedState": null,
        "broadcastDomainInfos": [],
        "evaluation": false,
        "capacityTierInfo": null,
        "canConfigureCapacityTier": false,
        "usedCapacity": {
            "size": 0.0,
            "unit": "GB"
        },
        "userName": "admin",
        "wormEnabled": false,
        "isSpaceReportingLogical": false
    },
    "cloudProviderName": "Azure",
    "snapshotPolicies": null,
    "actionsRequired": null,
    "activeActions": null,
    "replicationProperties": null,
    "schedules": null,
    "svms": null,
    "workingEnvironmentType": "VSA",
    "supportRegistrationProperties": null,
    "supportRegistrationInformation": [],
    "capacityFeatures": null,
    "encryptionProperties": null,
    "supportedFeatures": null,
    "isHA": false,
    "haProperties": null,
    "fpolicyProperties": null,
    "saasProperties": {
        "subscription": null,
        "freeTrialExpiry": null,
        "saasEnabled": null,
        "capacityLicensePackage": null
```

```
        },
        "cbsProperties": null,
        "complianceProperties": {
            "scanStatus": "SCAN_DISABLED",
            "complianceStatus": null,
            "lastDeploymentError": null,
            "complianceBackupStatus": null
        },
        "monitoringProperties": {
            "monitoringStatus": "MONITORING_DISABLED",
            "monitoringInfo": null,
            "tenantUrl": null
        },
        "licensesInformation": null
    }
```

Get working environment for high availability pair

You can use this workflow to retrieve the working environments' details of an HA working environment.

1. Create an Azure HA working environment

Perform the Create Azure dual node working environment workflow and select the `publicId` from the output for the `workingEnvironmentId` path parameter.

2. Get the working environment

HTTP method	Path
GET	/occm/api/azure/ha/working-environments/{workingEnvironmentId}

curl

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/azure/ha/working-
environments/<WORKING_ENV_ID>?fields=status,ontapClusterProperties.fields(
upgradeVersions,nodes),reservedSize,saasProperties,complianceProperties,mo
nitoringProperties,providerProperties' --header 'Content-Type:
application/json' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>'
```

Input
  Path parameters:

  - <WORKING_ENV_ID> `workingEnvironmentId` string

  - (Optional) `fields` string

Output

The JSON output example includes details of a single node Azure working environment.

JSON output example

```
{
    "publicId": "VsaWorkingEnvironment-Kms14Nkv",
    "name": "ShirleyHa2701",
    "tenantId": "Tenant-c6wmZaze",
    "svmName": "svm_ShirleyHa2701",
    "creatorUserEmail": "useremail",
    "status": {
        "status": "ON",
        "message": "",
        "failureCauses": {
            "invalidOntapCredentials": false,
            "noCloudProviderConnection": false,
            "invalidCloudProviderCredentials": false
        },
        "extendedFailureReason": null
    },
    "providerProperties": {
        "regionName": "eastus2",
        "resourceGroup": {
            "name": "ShirleyHa2701-rg",
            "location": "eastus2",
            "tags": {}
        },
        "vnetCidr": "10.0.0.0/16",
        "tags": {},
        "subscriptionId": "x000xx00-0x00-0000-000x",
        "deploymentId": "",
        "creationTime": 1611698774849,
        "instanceType": "Standard_DS4_v2",
        "numOfNics": 8,
        "singleNetworkInterface": false,
        "subscriptionName": "OCCM Dev",
        "cloudProviderAccountId": null,
        "availabilityZone": null,
        "dataDisks": [
            {
                "name": "ShirleyHa2701-vm1-disk-nvram",
                "diskSizeGB": 128,
                "lun": 1,
                "id": "/subscriptions/x000xx00-0x00-0000-
000x/resourceGroups/ShirleyHa2701-
rg/providers/Microsoft.Compute/disks/ShirleyHa2701-vm1-disk-nvram",
```

```
                "caching": "None",
                "accountType": "Premium_LRS",
                "managed": true,
                "encryptionSet": null
            },
            {
                "name": "ShirleyHa2701-vm1-disk-core",
                "diskSizeGB": 1024,
                "lun": 2,
                "id": "/subscriptions/x000xx00-0x00-0000-
000x/resourceGroups/ShirleyHa2701-
rg/providers/Microsoft.Compute/disks/ShirleyHa2701-vm1-disk-core",
                "caching": "ReadOnly",
                "accountType": "Standard_LRS",
                "managed": true,
                "encryptionSet": null
            },
            {
                "name": "ShirleyHa2701-vm2-disk-nvram",
                "diskSizeGB": 128,
                "lun": 1,
                "id": "/subscriptions/x000xx00-0x00-0000-
000x/resourceGroups/ShirleyHa2701-
rg/providers/Microsoft.Compute/disks/ShirleyHa2701-vm2-disk-nvram",
                "caching": "None",
                "accountType": "Premium_LRS",
                "managed": true,
                "encryptionSet": null
            },
            {
                "name": "ShirleyHa2701-vm2-disk-core",
                "diskSizeGB": 1024,
                "lun": 2,
                "id": "/subscriptions/x000xx00-0x00-0000-
000x/resourceGroups/ShirleyHa2701-
rg/providers/Microsoft.Compute/disks/ShirleyHa2701-vm2-disk-core",
                "caching": "ReadOnly",
                "accountType": "Standard_LRS",
                "managed": true,
                "encryptionSet": null
            }
        ]
    },
    "reservedSize": {
        "size": 1.0,
        "unit": "GB"
```

```json
        },
        "clusterProperties": {
            "lifs": [],
            "serialNumber": "",
            "systemId": "",
            "clusterName": "",
            "ontapVersion": "",
            "accountId": "",
            "productCode": "",
            "amiId": "",
            "systemManagerUrl": "",
            "creationTime": 0,
            "instanceId": "",
            "platformLicense": "",
            "licenseExpiryDate": 0,
            "instanceType": "",
            "publicIp": null,
            "publicDnsName": null,
            "licenseType": {
                "name": "",
                "capacityLimit": {
                    "size": 0.0,
                    "unit": "GB"
                }
            },
            "lastModifiedOffbox": null,
            "offboxTarget": false,
            "upgradeVersions": null,
            "writingSpeedState": null
        },
        "ontapClusterProperties": {
            "nodes": [
                {
                    "name": "ShirleyHa2701-01",
                    "lifs": [
                        {
                            "ip": "10.0.0.29",
                            "netmask": "255.255.255.0",
                            "lifType": "Cluster",
                            "dataProtocols": [],
                            "nodeName": "ShirleyHa2701-01",
                            "privateIp": true
                        },
                        {
                            "ip": "10.0.0.26",
                            "netmask": "255.255.255.0",
```

```
                    "lifType": "Node Management",
                    "dataProtocols": [],
                    "nodeName": "ShirleyHa2701-01",
                    "privateIp": true
                },
                {

                    "ip": "10.0.0.13",
                    "netmask": "255.255.255.0",
                    "lifType": "Cluster Management",
                    "dataProtocols": [],
                    "nodeName": "ShirleyHa2701-01",
                    "privateIp": true
                },
                {

                    "ip": "10.0.0.27",
                    "netmask": "255.255.255.0",
                    "lifType": "Intercluster",
                    "dataProtocols": [],
                    "nodeName": "ShirleyHa2701-01",
                    "privateIp": true
                },
                {

                    "ip": "10.0.0.14",
                    "netmask": "255.255.255.0",
                    "lifType": "Data",
                    "dataProtocols": [
                        "nfs",
                        "cifs"
                    ],
                    "nodeName": "ShirleyHa2701-01",
                    "privateIp": true
                },
                {

                    "ip": "10.0.0.28",
                    "netmask": "255.255.255.0",
                    "lifType": "Data",
                    "dataProtocols": [
                        "iscsi"
                    ],
                    "nodeName": "ShirleyHa2701-01",
                    "privateIp": true
                },
                {

                    "ip": "10.0.0.16",
                    "netmask": "255.255.255.0",
                    "lifType": "SVM Management",
```

```json
                "dataProtocols": [],
                "nodeName": "ShirleyHa2701-01",
                "privateIp": true
            }
        ],
        "serialNumber": "0000000000000000",
        "systemId": "2315255834",
        "platformLicense": null,
        "platformSerialNumber": null,
        "cloudProviderId": "",
        "healthy": true,
        "inTakeover": false
    },
    {
        "name": "ShirleyHa2701-02",
        "lifs": [
            {
                "ip": "10.0.0.24",
                "netmask": "255.255.255.0",
                "lifType": "Cluster",
                "dataProtocols": [],
                "nodeName": "ShirleyHa2701-02",
                "privateIp": true
            },
            {
                "ip": "10.0.0.18",
                "netmask": "255.255.255.0",
                "lifType": "Node Management",
                "dataProtocols": [],
                "nodeName": "ShirleyHa2701-02",
                "privateIp": true
            },
            {
                "ip": "10.0.0.19",
                "netmask": "255.255.255.0",
                "lifType": "Intercluster",
                "dataProtocols": [],
                "nodeName": "ShirleyHa2701-02",
                "privateIp": true
            },
            {
                "ip": "10.0.0.15",
                "netmask": "255.255.255.0",
                "lifType": "Data",
                "dataProtocols": [
                    "nfs",
```

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```
                    "cifs"
                ],
                "nodeName": "ShirleyHa2701-02",
                "privateIp": true
            },
            {
                "ip": "10.0.0.20",
                "netmask": "255.255.255.0",
                "lifType": "Data",
                "dataProtocols": [
                    "iscsi"
                ],
                "nodeName": "ShirleyHa2701-02",
                "privateIp": true
            }
        ],
        "serialNumber": "0000000000000000",
        "systemId": "2315255826",
        "platformLicense": null,
        "platformSerialNumber": null,
        "cloudProviderId": "",
        "healthy": true,
        "inTakeover": false
    }
],
"clusterName": "ShirleyHa2701",
"clusterUuid": "xxx000000e-xxx00-xxx00-xxx00-xxx00xxx00",
"ontapVersion": "9.9.0X5",
"systemManagerUrl": "https://10.0.0.13/sysmgr/SysMgr.html",
"creationTime": 1611698774849,
"licenseType": {
    "name": "Cloud Volumes ONTAP BYOL",
    "capacityLimit": {
        "size": 368.0,
        "unit": "TB"
    }
},
"lastModifiedOffbox": null,
"offboxTarget": true,
"upgradeVersions": null,
"writingSpeedState": null,
"broadcastDomainInfos": [
    {
        "broadcastDomain": "Cluster",
        "ipSpace": "Cluster",
        "mtu": 1500
```

```json
            },
            {
                "broadcastDomain": "Default",
                "ipSpace": "Default",
                "mtu": 1500
            }
        ],
        "evaluation": false,
        "capacityTierInfo": {
            "capacityTierUsedSize": {
                "size": 0.0,
                "unit": "GB"
            },
            "s3BucketName": "qxtj1b4zpsieeen.blob.core.windows.net",
            "tierLevel": "normal"
        },
        "canConfigureCapacityTier": false,
        "usedCapacity": {
            "size": 9.863281247817213E-4,
            "unit": "TB"
        },
        "userName": "admin",
        "wormEnabled": false
    },
    "cloudProviderName": "Azure",
    "snapshotPolicies": [
        {
            "name": "default",
            "schedules": [
                {
                    "frequency": "hourly",
                    "retention": 6
                },
                {
                    "frequency": "daily",
                    "retention": 2
                },
                {
                    "frequency": "weekly",
                    "retention": 2
                }
            ],
            "description": "Default policy with hourly, daily & weekly schedules."
        },
        {
```

```json
            "name": "default-1weekly",
            "schedules": [
                {
                    "frequency": "hourly",
                    "retention": 6
                },
                {
                    "frequency": "daily",
                    "retention": 2
                },
                {
                    "frequency": "weekly",
                    "retention": 1
                }
            ],
            "description": "Default policy with 6 hourly, 2 daily & 1 weekly schedule."
        },
        {
            "name": "none",
            "schedules": [],
            "description": "Policy for no automatic snapshots."
        }
    ],
    "actionsRequired": [
        {
            "actionType": "licenseGracePeriod",
            "parameters": {
                "aggregateName": "",
                "numOfDisks": 0,
                "diskSize": null,
                "volumeNames": null,
                "maxCapacity": null,
                "licenseExpiryDate": 1611698969000,
                "serialNumber": "000000000000000000",
                "volumeMoveParameters": null,
                "workingEnvironmentId": "",
                "licenseParameters": null,
                "resourcesToDelete": null,
                "instances": [],
                "moreInfo": null,
                "providerVolumeType": null,
                "volumeInfo": null,
                "currentInstanceType": null
            },
            "severity": "error"
```

```
        },
        {
            "actionType": "licenseGracePeriod",
            "parameters": {
                "aggregateName": "",
                "numOfDisks": 0,
                "diskSize": null,
                "volumeNames": null,
                "maxCapacity": null,
                "licenseExpiryDate": 1611699072000,
                "serialNumber": "00000000000000000000000",
                "volumeMoveParameters": null,
                "workingEnvironmentId": "",
                "licenseParameters": null,
                "resourcesToDelete": null,
                "instances": [],
                "moreInfo": null,
                "providerVolumeType": null,
                "volumeInfo": null,
                "currentInstanceType": null
            },
            "severity": "error"
        }
    ],
    "activeActions": [],
    "replicationProperties": {
        "peers": [],
        "replicationTargets": []
    },
    "schedules": [
        {
            "name": "day",
            "schedule": [
                {
                    "stop": {
                        "day": 0,
                        "hour": 20,
                        "minute": 0
                    },
                    "start": {
                        "day": 1,
                        "hour": 8,
                        "minute": 0
                    }
                },
                {
```

```
            "stop": {
                "day": 1,
                "hour": 20,
                "minute": 0
            },
            "start": {
                "day": 2,
                "hour": 8,
                "minute": 0
            }
        },
        {
            "stop": {
                "day": 2,
                "hour": 20,
                "minute": 0
            },
            "start": {
                "day": 3,
                "hour": 8,
                "minute": 0
            }
        },
        {
            "stop": {
                "day": 3,
                "hour": 20,
                "minute": 0
            },
            "start": {
                "day": 4,
                "hour": 8,
                "minute": 0
            }
        },
        {
            "stop": {
                "day": 4,
                "hour": 20,
                "minute": 0
            },
            "start": {
                "day": 5,
                "hour": 8,
                "minute": 0
            }
```

```json
                },
                {
                    "stop": {
                        "day": 5,
                        "hour": 20,
                        "minute": 0
                    },
                    "start": {
                        "day": 6,
                        "hour": 8,
                        "minute": 0
                    }
                },
                {
                    "stop": {
                        "day": 6,
                        "hour": 20,
                        "minute": 0
                    },
                    "start": {
                        "day": 0,
                        "hour": 8,
                        "minute": 0
                    }
                }
            ],
            "enabled": false
        },
        {
            "name": "Weekend",
            "schedule": [
                {
                    "stop": {
                        "day": 6,
                        "hour": 8,
                        "minute": 0
                    },
                    "start": {
                        "day": 1,
                        "hour": 8,
                        "minute": 0
                    }
                }
            ],
            "enabled": false
        },
```

```json
        {
            "name": "Weekdays",
            "schedule": [
                {
                    "stop": {
                        "day": 1,
                        "hour": 20,
                        "minute": 0
                    },
                    "start": {
                        "day": 2,
                        "hour": 8,
                        "minute": 0
                    }
                },
                {
                    "stop": {
                        "day": 2,
                        "hour": 20,
                        "minute": 0
                    },
                    "start": {
                        "day": 3,
                        "hour": 8,
                        "minute": 0
                    }
                },
                {
                    "stop": {
                        "day": 3,
                        "hour": 20,
                        "minute": 0
                    },
                    "start": {
                        "day": 4,
                        "hour": 8,
                        "minute": 0
                    }
                },
                {
                    "stop": {
                        "day": 4,
                        "hour": 20,
                        "minute": 0
                    },
                    "start": {
```

```json
                    "day": 5,
                    "hour": 8,
                    "minute": 0
                }
            },
            {
                "stop": {
                    "day": 5,
                    "hour": 20,
                    "minute": 0
                },
                "start": {
                    "day": 6,
                    "hour": 8,
                    "minute": 0
                }
            }
        ],
        "enabled": false
    }
],
"svms": [
    {
        "name": "svm_ShirleyHa2701",
        "state": "running",
        "language": "c.utf_8",
        "allowedAggregates": [
            "aggr1"
        ],
        "ver3Enabled": true,
        "ver4Enabled": true
    }
],
"workingEnvironmentType": "VSA",
"supportRegistrationProperties": {
    "supportRegistrationStatus": "registered",
    "licenseExpiryDate": 1604102400000
},
"supportRegistrationInformation": [
    {
        "supportRegistrationStatus": "registered",
        "serialNumber": "00000000000000",
        "licenseExpiryDate": 1611698969000,
        "cloudLicenseExists": true,
        "nssAccountId": "x0x0x000-0000-0000x-00de-x000xxxx00000"
    },
```

```
            {
                "supportRegistrationStatus": "registered",
                "serialNumber": "0000000001111",
                "licenseExpiryDate": 1611699072000,
                "cloudLicenseExists": true,
                "nssAccountId": "x0x0x000-0000-0000x-00de-x000xxxx00000"
            }
        ],
        "capacityFeatures": {
            "providerVolumesType": [
                {
                    "size": {
                        "size": 500.0,
                        "unit": "GB"
                    },
                    "supportedVolumeTypes": [
                        "Premium_LRS"
                    ],
                    "maxDisksAllow": {
                        "numOfDisks": 12,
                        "reason": null
                    }
                },
                {
                    "size": {
                        "size": 1.0,
                        "unit": "TB"
                    },
                    "supportedVolumeTypes": [
                        "Premium_LRS"
                    ],
                    "maxDisksAllow": {
                        "numOfDisks": 12,
                        "reason": null
                    }
                },
                {
                    "size": {
                        "size": 2.0,
                        "unit": "TB"
                    },
                    "supportedVolumeTypes": [
                        "Premium_LRS"
                    ],
                    "maxDisksAllow": {
                        "numOfDisks": 12,
```

```
                "reason": null
            }
        },
        {
            "size": {
                "size": 4.0,
                "unit": "TB"
            },
            "supportedVolumeTypes": [
                "Premium_LRS"
            ],
            "maxDisksAllow": {
                "numOfDisks": 12,
                "reason": null
            }
        },
        {
            "size": {
                "size": 8.0,
                "unit": "TB"
            },
            "supportedVolumeTypes": [
                "Premium_LRS"
            ],
            "maxDisksAllow": {
                "numOfDisks": 12,
                "reason": null
            }
        }
    ],
    "defaultProviderVolumeType": {
        "size": {
            "size": 500.0,
            "unit": "GB"
        },
        "diskType": "Premium_LRS",
        "capacityTier": "Blob",
        "iops": null
    },
    "supportedCapacityTiers": {
        "supportedCapacityTiersPerVolumeType": [
            {
                "volumeType": "Premium_LRS",
                "supportedCapacityTiers": [
                    "Blob"
                ],
```

```json
                    "availableTieringPolicies": [
                        "none",
                        "snapshot_only",
                        "auto",
                        "all"
                    ]
                }
            ],
            "capacityTiersDisableReasons": [],
            "compositeSupported": true,
            "forceCompositeVersion": true
        },
        "maxDisksPerAggregate": 12,
        "existingIops": []
    },
    "encryptionProperties": {
        "ontapEncryption": false,
        "awsVolumeEncryption": false,
        "azureVolumeEncryption": true,
        "gcpVolumeEncryption": false,
        "keyManagers": [],
        "encryptionCertificates": [],
        "awsEncryptionKey": null
    },
    "supportedFeatures": {
        "supportsMixedAggregates": false,
        "supportsTieringWithServiceAccount": false
    },
    "isHA": true,
    "haProperties": {
        "loadBalancerName": "ShirleyHa2701-rg-lb",
        "node1Info": {
            "instanceName": "ShirleyHa2701-vm1",
            "instanceId": null,
            "primaryIp": "10.0.0.26",
            "state": "running",
            "serialNumber": "000000000000000",
            "availabilitySet": {
                "faultDomain": 0,
                "updateDomain": 0
            }
        },
        "node2Info": {
            "instanceName": "ShirleyHa2701-vm2",
            "instanceId": null,
            "primaryIp": "10.0.0.18",
```

```json
            "state": "running",
            "serialNumber": "00000000000000000000000000",
            "availabilitySet": {
                "faultDomain": 1,
                "updateDomain": 1
            }
        }
    },
    "k8sProperties": {
        "isConnected": false,
        "mainClusterIds": [],
        "connectedClusterIds": []
    },
    "fpolicyProperties": {
        "status": 0,
        "fPolicyProtocolStatus": {
            "nfsv3": 0,
            "nfsv4": 0,
            "cifs": -1
        },
        "fileExtensions": [
            "micro",
            "encrypted",
            "locked",
            "crypto",
            "crypt",
            "crinf",
            "r5a",
            "XRNT",
            "XTBL",
            "R16M01D05",
            "pzdc",
            "good",
            "LOL!",
            "OMG!",
            "RDM",
            "RRK",
            "encryptedRS",
            "crjoker",
            "EnCiPhErEd",
            "LeChiffre"
        ]
    },
    "saasProperties": {
        "subscription": null,
        "freeTrialExpiry": null,
```

```
        "saasEnabled": false
    },
    "cbsProperties": {
        "cbsBackupStatus": "off",
        "cbsRules": [],
        "numberOfBackedUpVolumes": 0,
        "objectStoreName": null,
        "providerSpecific": null,
        "cbsPolicyName": null,
        "usedCapacity": null,
        "ipSpace": null,
        "region": null,
        "providerAccountName": null,
        "exclusionReason": null
    },
    "complianceProperties": {
        "scanStatus": "SCAN_DISABLED",
        "complianceStatus": null,
        "lastDeploymentError": null,
        "complianceBackupStatus": null
    },
    "monitoringProperties": {
        "monitoringStatus": "MONITORING_DISABLED",
        "monitoringInfo": null,
        "tenantUrl": null
    }
}
```

Delete a working environment

You can delete an existing Azure Cloud Volumes ONTAP working environment.

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Delete working environment for single node

You can use this workflow to delete a single node working environment.

1. Create the working environment to use

Perform the workflow Create Azure single node working environment and choose the `publicId` value of the working environment for the `workingEnvironmentId` path parameter.

2. Delete the working environment

HTTP method	Path
DELETE	/occm/api/azure/vsa/working-environments/{workingEnvironmentId}

curl example

```
curl --location --request DELETE
'https://cloudmanager.cloud.netapp.com/occm/api/azure/vsa/working-
environments/<WORKING_ENV_ID>' --header 'Content-Type: application/json'
--header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer
<ACCESS_TOKEN>'
```

Input

Path parameter <WORKING_ENV_ID> (`workingEnvironmentId`) string

(Optional) Query parameters:

- `localDelete` boolean

  If `true` the Cloud Volumes ONTAP instance in the cloud is not terminated, but Cloud Manager no longer manages it (default is `false`).

- `forceDelete` boolean

  If `true` the working environment is deleted even if it is part of one or more SnapMirror relationships (default is `false`).

  Output

  None

Delete working environment for high availability pair

You can use this workflow to delete an HA working environment.

1. Create the working environment to use

Perform the workflow Create Azure HA working environment and choose the `publicId` value of the working environment for the `workingEnvironmentId` path parameter.

2. Delete the working environment

HTTP method	Path
DELETE	/occm/api/azure/ha/working-environments/{workingEnvironmentId}

curl example

```
curl --location --request DELETE
'https://cloudmanager.cloud.netapp.com/occm/api/azure/ha/working-
environments/<WORKING_ENV_ID>' --header 'Content-Type: application/json'
--header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer
<ACCESS_TOKEN>'
```

Input

  Path parameter <WORKING_ENV_ID> `(workingEnvironmentId)` string

(Optional) Query parameters:

- `localDelete` boolean

  If `true` the Cloud Volumes ONTAP instance in the cloud is not terminated, but Cloud Manager no longer manages it (default is `false`).

- `forceDelete` boolean

  If `true` the working environment is deleted even if it is part of one or more SnapMirror relationships (default is `false`).

  Output
    None

Create CIFS server configuration

If you want to create CIFS volumes on your Cloud Volumes ONTAP system, you first need to configure the CIFS server. You can choose to set up the CIFS server in a workgroup or in an Active Directory domain. Review the ONTAP documentation for more information.

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Create CIFS server configuration for single node

You can use this workflow to create CIFS server configuration for single node system.

Choose the workflow that is specific to your goal:

- Set up a CIFS server in a workgroup
- Set up a CIFS server in an Active Directory domain

Set up a CIFS server in a workgroup

You can configure a CIFS server in a workgroup when the Microsoft Active Directory domain infrastructure is not available.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` value for the working environment used in the `workingEnvironmentId` path parameter.

2. Create the CIFS configuration

Create the CIFS server configuration.

HTTP method	Path
POST	/occm/api/azure/vsa/working-environments/{workingEnvironmentId}/cifs-workgroup

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/azure/vsa/working-
environments/<WORKING_ENV_ID>/cifs-workgroup' --header 'Content-Type:
application/json' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input
- Path parameter <WORKING_ENV_ID> `workingEnvironmentId` string

JSON input example

```
{
  "serverName": "SMB_SERVER02",
  "workgroupName": "workgroup02",
  "svmName": "svm_ziv01we01"
}
```

Output
  None.

Set up a CIFS server in an Active Directory domain

You can create a CIFS server on the SVM and specify the Active Directory (AD) domain to which it belongs.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` value for the working environment used in the `workingEnvironmentId` path parameter.

2. Determine the Active Directory configuration

You need the following configuration parameters for an Active Directory server.

Input parameter	Description
dnsDomain	Use the Active Directory domain as the DNS name.
ipAddresses	Define the primary DNS IP address and optionally add a secondary IP address.
netBIOS	Use the CIFS server NetBIOS name.
organizationalUnit	Include the organizational unit as appropriate.
activeDirectoryDomain	Set the Active Directory domain to join.
activeDirectoryUsername	A username with authorization to join the domain.
activeDirectoryPassword	The password for the authorized username.

3. Create the CIFS configuration

Create the CIFS server configuration.

HTTP method	Path
POST	/occm/api/azure/vsa/working-environments/{workingEnvironmentId}/cifs

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/azure/vsa/working-
environments/<WORKING_ENV_ID>/cifs' --header 'Content-Type:
application/json' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input

- Path parameter <WORKING_ENV_ID> `workingEnvironmentId` string

JSON input example

```
{
  "dnsDomain": "zivh.netapp.com",
  "ipAddresses": [
    "172.31.5.241"
  ],
  "netBIOS": "zivaws02we03",
  "organizationalUnit": "CN=Computers",
  "activeDirectoryDomain": "zivh.netapp.com",
  "activeDirectoryUsername": "administrator",
  "activeDirectoryPassword": "password"
}
```

Output

None.

Create CIFS server configuration for high availability pair

You can use this workflow to create to create CIFS server configuration for an HA working environment.

Choose the workflow that is specific to your goal:

- Set up a CIFS server in a workgroup
- Set up a CIFS server in an Active Directory domain

Set up a CIFS server in a workgroup

You can configure a CIFS server in a workgroup when the Microsoft Active Directory domain infrastructure is not available.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` value for the working environment used in the `workingEnvironmentId` path parameter.

2. Create the CIFS configuration

Create the CIFS server configuration.

HTTP method	Path
POST	/occm/api/azure/ha/working-environments/{workingEnvironmentId}/cifs-workgroup

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/azure/ha/working-
environments/<WORKING_ENV_ID>/cifs-workgroup' --header 'Content-Type:
application/json' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input

- Path parameter <WORKING_ENV_ID> `workingEnvironmentId` string

JSON input example

```
{
  "serverName": "SMB_SERVER02",
  "workgroupName": "workgroup02",
  "svmName": "svm_ziv01we01"
}
```

Output

None.

Set up a CIFS server in an Active Directory domain

You can create a CIFS server on the SVM and specify the Active Directory (AD) domain to which it belongs.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` value for the working environment used in the `workingEnvironmentId` path parameter.

2. Determine the Active Directory configuration

You need the following configuration parameters for an Active Directory server.

Input parameter	Description
dnsDomain	Use the Active Directory domain as the DNS name.
ipAddresses	Define the primary DNS IP address and optionally add a secondary IP address.
netBIOS	Use the CIFS server NetBIOS name.
organizationalUnit	Include the organizational unit as appropriate.
activeDirectoryDomain	Set the Active Directory domain to join.
activeDirectoryUsername	A username with authorization to join the domain.
activeDirectoryPassword	The password for the authorized username.

3. Create the CIFS configuration

Create the CIFS server configuration.

HTTP method	Path
POST	/occm/api/azure/ha/working-environments/{workingEnvironmentId}/cifs

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/azure/ha/working-
environments/<WORKING_ENV_ID>/cifs' --header 'Content-Type:
application/json' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input

- Path parameter <WORKING_ENV_ID> `workingEnvironmentId` string

JSON input example

```json
{
    "dnsDomain": "mydomain.com",
    "activeDirectoryDomain": "mydomain.com",
    "ipAddresses": ["10.10.10.20", "172.xx.yy.xx"],
    "netBIOS": "azureHAPayGo",
    "organizationalUnit": "CN=Computers",
    "activeDirectoryUsername": "administrator",
    "activeDirectoryPassword": "password",
    "svmName": "svm_azureHAPayGo"
}
```

Output

  None.

Get CIFS server configurations

You can use this workflow to retrieve the CIFS server configurations for an existing Cloud Volumes ONTAP working environment.

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Get CIFS server configuration for single node

You can use this workflow to retrieve CIFS server configuration for a single node system.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` value for the working environment used in the `workingEnvironmentId` path parameter.

2. Get the CIFS configurations

HTTP method	Path
GET	/occm/api/azure/vsa/working-environments/{workingEnvironmentId}/cifs

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/azure/vsa/working-
environments/<WORKING_ENV_ID>/cifs' --header 'Content-Type:
application/json' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

- Path parameter <WORKING_ENV_ID> `workingEnvironmentId` string

- (Optional) Query parameter `svm` string

Output

The JSON output example includes the CIFS configurations for an existing Cloud Volumes ONTAP ONTAP working environment.

JSON output example

```
[
    {
        "dnsDomain": "zivh.netapp.com",
        "activeDirectoryDomain": "zivh.netapp.com",
        "ipAddresses": [
            "172.31.5.241"
        ],
        "netBIOS": "zivaws02we01",
        "organizationalUnit": "CN=Computers",
        "authenticationType": "domain"
    }
]
```

Get CIFS server configuration for high availability pair

You can use this workflow to retrieve CIFS server configuration for an HA working environment.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` value for the working environment used in the `workingEnvironmentId` path parameter.

2. Get the CIFS configurations

HTTP method	Path
GET	/occm/api/azure/ha/working-environments/{workingEnvironmentId}/cifs

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/azure/ha/working-
environments/<WORKING_ENV_ID>/cifs' --header 'Content-Type:
application/json' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

- Path parameter <WORKING_ENV_ID> `workingEnvironmentId` string

- (Optional) Query parameter `svm` string

Output

The JSON output example includes the CIFS configurations for an existing Cloud Volumes ONTAP working environment.

JSON output example

```
[
  {
    "dnsDomain": "mydomain.com",
    "activeDirectoryDomain": "mydomain.com",
    "ipAddresses": ["10.10.10.20", "172.xx.yy.xx"],
    "netBIOS": "azureHAPayGo",
    "organizationalUnit": "CN=Computers",
    "activeDirectoryUsername": "administrator",
    "activeDirectoryPassword": "password",
    "svmName": "svm_azureHAPayGo"
  }
]
```

Delete CIFS server configuration

You can use this workflow to delete a CIFS server configuration for an existing Cloud Volumes ONTAP working environment.

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node

- HA pair

Delete CIFS server configuration for single node

You can use this workflow to delete CIFS server configuration for a single node system.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` value for the working environment used in the `workingEnvironmentId` path parameter.

2. Delete the CIFS configurations

HTTP method	Path
POST	/occm/api/azure/vsa/working-environments/{workingEnvironmentId}/delete-cifs

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/azure/vsa/working-
environments/<WORKING_ENV_ID>/delete-cifs' --header 'Content-Type:
application/json' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

- Path parameter <WORKING_ENV_ID> `workingEnvironmentId` string
- Optional JSON body

```
{
  "activeDirectoryUsername": "string",
  "activeDirectoryPassword": "string",
  "svmName": "string"
}
```

Output

None.

Delete CIFS server configuration for high availability pair

You can use this workflow to delete CIFS server configuration for an HA working environment.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` value for the working environment used in the `workingEnvironmentId` path parameter.

2. Delete the CIFS configurations

HTTP method	Path
POST	/occm/api/azure/ha/working-environments/{workingEnvironmentId}/delete-cifs

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/azure/ha/working-
environments/<WORKING_ENV_ID>/delete-cifs' --header 'Content-Type:
application/json' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

- Path parameter <WORKING_ENV_ID> `workingEnvironmentId` string

- Optional JSON body

```
{
  "activeDirectoryUsername": "string",
  "activeDirectoryPassword": "string",
  "svmName": "string"
}
```

Output

None.

Aggregates

Get aggregates

You can retrieve a list of available disk aggregates of an Azure working environment.

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Get aggregates for single node

You can use this workflow to retrieve the aggregates for a single node working environment.

1. Create the working environment

Perform the workflow Create Azure single node working environment and choose the `publicId` value of the working environment for the `workingEnvironmentId` path parameter.

2. Get the list of aggregates

HTTP method	Path
GET	/occm/api/azure/vsa/aggregates/{workingEnvironmentId}

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/azure/vsa/aggregates/<WORK
ING_ENV_ID>' --header 'Content-Type: application/json' --header 'x-agent-
id: <AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

Path parameter:

- <WORKING_ENV_ID> (workingEnvironmentId) string

Output

An array of aggregates for the indicated working environment is returned as shown in the JSON output example.

> ⓘ The capacity (sizes) in the output are in MB/GB/TB (1000th order) because these are ONTAP aggregates, whereas in Cloud Manager the capacity is specified as MiB, GiB (1024 order).

JSON output example

```
[
    {
        "name": "aggr1",
        "availableCapacity": {
            "size": 905.27,
            "unit": "GB"
        },
        "totalCapacity": {
            "size": 906.29,
            "unit": "GB"
        },
        "usedCapacity": {
            "size": 1.02,
            "unit": "GB"
        },
        "volumes": [
            {
                "name": "svm_ShirleyAzureVsa2601_root",
                "totalSize": {
                    "size": 1.0,
                    "unit": "GB"
                },
                "usedSize": {
                    "size": 3.62396240234375E-4,
                    "unit": "GB"
                },
                "thinProvisioned": false,
                "isClone": false,
                "rootVolume": true
            }
        ],
        "providerVolumes": [
            {
                "id": "/subscriptions/x000xx00-0x00-0000-
000x/resourceGroups/ShirleyAzureVsa2601-
rg/providers/Microsoft.Compute/disks/ShirleyAzureVsa2601datadisk3",
                "name": "ShirleyAzureVsa2601datadisk3",
                "size": {
```

```json
                "size": 1.0,
                "unit": "TB"
            },
            "state": "available",
            "device": "3",
            "instanceId": "/subscriptions/x000xx00-0x00-0000-
000x/resourceGroups/ShirleyAzureVsa2601-
rg/providers/Microsoft.Compute/virtualMachines/ShirleyAzureVsa2601",
            "diskType": "Premium_LRS",
            "encrypted": false,
            "iops": null
        }
    ],
    "disks": [
        {
            "name": "NET-1.2",
            "position": "data",
            "ownerNode": "ShirleyAzureVsa2601-01",
            "device": "LUN 5.3",
            "vmDiskProperties": null
        }
    ],
    "state": "online",
    "encryptionType": "notEncrypted",
    "encryptionKeyId": null,
    "isRoot": false,
    "homeNode": "ShirleyAzureVsa2601-01",
    "ownerNode": "ShirleyAzureVsa2601-01",
    "capacityTier": null,
    "capacityTierUsed": null,
    "sidlEnabled": false,
    "snaplockType": "non_snaplock"
},
{
    "name": "aggr2",
    "availableCapacity": {
        "size": 906.29,
        "unit": "GB"
    },
    "totalCapacity": {
        "size": 906.29,
        "unit": "GB"
    },
    "usedCapacity": {
        "size": 3.48,
        "unit": "MB"
```

```
            },
        "volumes": [],
        "providerVolumes": [
                {
                    "id": "/subscriptions/x000xx00-0x00-0000-
000x/resourceGroups/ShirleyAzureVsa2601-
rg/providers/Microsoft.Compute/disks/ShirleyAzureVsa2601datadisk4",
                    "name": "ShirleyAzureVsa2601datadisk4",
                    "size": {
                        "size": 1.0,
                        "unit": "TB"
                    },
                    "state": "available",
                    "device": "4",
                    "instanceId": "/subscriptions/x000xx00-0x00-0000-
000x/resourceGroups/ShirleyAzureVsa2601-
rg/providers/Microsoft.Compute/virtualMachines/ShirleyAzureVsa2601",
                    "diskType": "Premium_LRS",
                    "encrypted": false,
                    "iops": null
                }
        ],
        "disks": [
                {
                    "name": "NET-1.3",
                    "position": "data",
                    "ownerNode": "ShirleyAzureVsa2601-01",
                    "device": "LUN 5.4",
                    "vmDiskProperties": null
                }
        ],
        "state": "online",
        "encryptionType": "notEncrypted",
        "encryptionKeyId": null,
        "isRoot": false,
        "homeNode": "ShirleyAzureVsa2601-01",
        "ownerNode": "ShirleyAzureVsa2601-01",
        "capacityTier": null,
        "capacityTierUsed": null,
        "sidlEnabled": false,
        "snaplockType": "non_snaplock"
    },
    {
        "name": "aggr3",
        "availableCapacity": {
            "size": 1.77,
```

```
                "unit": "TB"
        },
        "totalCapacity": {
            "size": 1.77,
            "unit": "TB"
        },
        "usedCapacity": {
            "size": 5.78,
            "unit": "MB"
        },
        "volumes": [],
        "providerVolumes": [
            {
                "id": "/subscriptions/x000xx00-0x00-0000-
000x/resourceGroups/ShirleyAzureVsa2601-
rg/providers/Microsoft.Compute/disks/ShirleyAzureVsa2601datadisk5",
                "name": "ShirleyAzureVsa2601datadisk5",
                "size": {
                    "size": 1.0,
                    "unit": "TB"
                },
                "state": "available",
                "device": "5",
                "instanceId": "/subscriptions/x000xx00-0x00-0000-
000x/resourceGroups/ShirleyAzureVsa2601-
rg/providers/Microsoft.Compute/virtualMachines/ShirleyAzureVsa2601",
                "diskType": "Premium_LRS",
                "encrypted": false,
                "iops": null
            },
            {
                "id": "/subscriptions/x000xx00-0x00-0000-
000x/resourceGroups/ShirleyAzureVsa2601-
rg/providers/Microsoft.Compute/disks/ShirleyAzureVsa2601datadisk6",
                "name": "ShirleyAzureVsa2601datadisk6",
                "size": {
                    "size": 1.0,
                    "unit": "TB"
                },
                "state": "available",
                "device": "6",
                "instanceId": "/subscriptions/x000xx00-0x00-0000-
000x/resourceGroups/ShirleyAzureVsa2601-
rg/providers/Microsoft.Compute/virtualMachines/ShirleyAzureVsa2601",
                "diskType": "Premium_LRS",
                "encrypted": false,
```

```
                "iops": null
            }
        ],
        "disks": [
            {
                "name": "NET-1.4",
                "position": "data",
                "ownerNode": "ShirleyAzureVsa2601-01",
                "device": "LUN 5.5",
                "vmDiskProperties": null
            },
            {
                "name": "NET-1.5",
                "position": "data",
                "ownerNode": "ShirleyAzureVsa2601-01",
                "device": "LUN 5.6",
                "vmDiskProperties": null
            }
        ],
        "state": "online",
        "encryptionType": "notEncrypted",
        "encryptionKeyId": null,
        "isRoot": false,
        "homeNode": "ShirleyAzureVsa2601-01",
        "ownerNode": "ShirleyAzureVsa2601-01",
        "capacityTier": null,
        "capacityTierUsed": null,
        "sidlEnabled": false,
        "snaplockType": "non_snaplock"
    }
]
```

Get aggregates for high availability pair

You can use this workflow to retrieve the aggregates for an HA working environment.

1. Create the working environment

Perform the workflow Create Azure HA working environment and choose the `publicId` value of the working environment for the `workingEnvironmentId` path parameter.

2. Get the list of aggregates

HTTP method	Path
GET	/occm/api/azure/ha/aggregates/{workingEnvironmentId}

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/azure/ha/aggregates/<WORKI
NG_ENV_ID>' --header 'Content-Type: application/json' --header 'x-agent-
id: <AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

Path parameter:

- <WORKING_ENV_ID> (workingEnvironmentId) string

Output

An array of aggregates for the indicated working environment is returned as shown in the JSON output example.

ⓘ The capacity (sizes) in the output are in MB/GB/TB (1000th order) because these are ONTAP aggregates, whereas in Cloud Manager the capacity is specified as MiB, GiB (1024 order).

JSON output example

```
[
    {
        "name": "aggr1",
        "availableCapacity": {
            "size": 906.16,
            "unit": "GB"
        },
        "totalCapacity": {
            "size": 907.18,
            "unit": "GB"
        },
        "usedCapacity": {
            "size": 1.01,
            "unit": "GB"
        },
        "volumes": [
            {
                "name": "svm_ShirleyHa2801_root",
                "totalSize": {
                    "size": 1.0,
                    "unit": "GB"
                },
                "usedSize": {
                    "size": 3.24249267578125E-4,
                    "unit": "GB"
                },
```

```json
                "thinProvisioned": false,
                "isClone": false,
                "rootVolume": true
            }
        ],
        "providerVolumes": [
            {
                "id": "ki4cw3n3oyha",
                "name": "ki4cw3n3oyha",
                "size": {
                    "size": 1.0,
                    "unit": "TB"
                },
                "state": "available",
                "device": "",
                "instanceId": "",
                "diskType": "Premium_LRS",
                "encrypted": true,
                "iops": null
            }
        ],
        "disks": [
            {
                "name": "NET-1.3",
                "position": "data",
                "ownerNode": "ShirleyHa2801-01",
                "device": "",
                "vmDiskProperties": {
                    "objectName": "ki4cw3n3oyha",
                    "storageAccountName": "rootsacnqfypfg",
                    "containerName": "blobcontainer"
                }
            }
        ],
        "state": "online",
        "encryptionType": "cloudEncrypted",
        "encryptionKeyId": null,
        "isRoot": false,
        "homeNode": "ShirleyHa2801-01",
        "ownerNode": "ShirleyHa2801-01",
        "capacityTier": "Blob",
        "capacityTierUsed": {
            "size": 0.0,
            "unit": "GB"
        },
        "sidlEnabled": true,
```

```
            "snaplockType": "non_snaplock"
        },
        {
            "name": "aggr2",
            "availableCapacity": {
                "size": 907.18,
                "unit": "GB"
            },
            "totalCapacity": {
                "size": 907.18,
                "unit": "GB"
            },
            "usedCapacity": {
                "size": 500.0,
                "unit": "KB"
            },
            "volumes": [],
            "providerVolumes": [
                {
                    "id": "1102qyj51rwt",
                    "name": "1102qyj51rwt",
                    "size": {
                        "size": 1.0,
                        "unit": "TB"
                    },
                    "state": "available",
                    "device": "",
                    "instanceId": "",
                    "diskType": "Premium_LRS",
                    "encrypted": true,
                    "iops": null
                }
            ],
            "disks": [
                {
                    "name": "NET-1.4",
                    "position": "data",
                    "ownerNode": "ShirleyHa2801-01",
                    "device": "",
                    "vmDiskProperties": {
                        "objectName": "1102qyj51rwt",
                        "storageAccountName": "rootsacnqfypfg",
                        "containerName": "blobcontainer"
                    }
                }
            ],
```

```
        "state": "online",
        "encryptionType": "cloudEncrypted",
        "encryptionKeyId": null,
        "isRoot": false,
        "homeNode": "ShirleyHa2801-01",
        "ownerNode": "ShirleyHa2801-01",
        "capacityTier": "Blob",
        "capacityTierUsed": {
            "size": 0.0,
            "unit": "GB"
        },
        "sidlEnabled": true,
        "snaplockType": "non_snaplock"
    }
]
```

Create aggregate

You can create a new aggregate within an Azure working environment using this workflow.

1. Create the working environment

Perform the workflow Create Azure single node working environment and choose the `publicId` value for the `workingEnvironmentId` parameter in the JSON input.

2. Select the Azure Storage Account Types

Perform the Get Azure Storage Account Types workflow and choose the desired storage type:

- Choose the `diskType` of the desired storage type item for the `providerVolumeType` parameter in the JSON input.

- Choose the `size` value of the desired disk from the `sizes → size` field for the `size` field inside `diskSize` parameter in the JSON input.

- Choose the `unit` value of the desired disk from the `sizes → size` field for the `unit` field inside `diskSize` parameter in the JSON input.

3. Create the aggregate

HTTP method	Path
POST	occm/api/azure/vsa/aggregates

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/azure/vsa/aggregates'
--header 'Content-Type: application/json' --header 'x-agent-id:
<AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input

The JSON input example includes the minimum list of input parameters.

JSON input example

```
{
  "name": "aggr3",
  "workingEnvironmentId": "VsaWorkingEnvironment-IsDYFJf8",
  "numberOfDisks": "2",
  "diskSize": {
    "size": "1",
    "unit": "TB"
  },
  "providerVolumeType": "Premium_LRS"
}
```

Output

None

Add disks to aggregate

You can add disks to an existing aggregate.

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Add disks to an aggregate for single node

You can use this workflow to add disks to an aggregate for a single node working environment.

1. Create the working environment

Perform the workflow Create Azure single node working environment and choose the `publicId` value for the `workingEnvironmentId` path parameter.

2. Create the aggregate

Perform the workflow Create aggregate to create an aggregate with the name `aggr2` and choose `aggr2` for the `aggregateName` path parameter.

3. Add the disks to the aggregate

HTTP method	Path
POST	/occm/api/azure/vsa/aggregates/{workingEnvironmentId}/{aggregateName}/disks

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/azure/vsa/aggregates/<WORK
ING_ENV_ID>/<AGGR_NAME>/disks' --header 'Content-Type: application/json'
--header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer
<ACCESS_TOKEN>' --d @JSONinput
```

Input

You must include the following path parameters:

- <WORKING_ENV_ID> (workingEnvironmentId) string

- <AGGR_NAME> (aggregateName) string

Also, the JSON input example includes an input parameter as shown.

JSON input example

```
{
    "numberOfDisks": "1"
}
```

Output

None

Add disks to an aggregate for high availability pair

You can use this workflow to add disks to an aggregate for HA working environment.

1. Create the working environment

Perform the workflow Create Azure HA working environment and choose the `publicId` value for the `workingEnvironmentId` path parameter.

2. Create the aggregate

Perform the workflow Create aggregate to create an aggregate with the name `aggr2` and choose `aggr2` for the `aggregateName` path parameter.

3. Add the disks to the aggregate

HTTP method	Path
POST	/occm/api/azure/ha/aggregates/{workingEnvironmentId}/{aggregateName}/disks

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/azure/ha/aggregates/<WORKI
NG_ENV_ID>/<AGGR_NAME>/disks' --header 'Content-Type: application/json'
--header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer
<ACCESS_TOKEN>' --d @JSONinput
```

Input

You must include the following path parameters:

- <WORKING_ENV_ID> (`workingEnvironmentId`) string
- <AGGR_NAME> (`aggregateName`) string

Also, the JSON input example includes an input parameter as shown.

JSON input example

```
{
    "numberOfDisks": "2"
}
```

Output

None

Delete aggregate

You can delete an existing disk aggregate in an Azure working environment.

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Delete aggregate for single node

You can use this workflow to delete an aggregate for a single node working environment.

1. Create the working environment

Perform the workflow Create Azure single node working environment and choose the `publicId` value of the working environment for the `workingEnvironmentId` path parameter.

2. Create an aggregate to delete

Perform the workflow Create aggregate to create an aggregate with the name `aggr2`. Use `aggr2` value for the `aggregateName` path parameter.

3. Delete the aggregate

HTTP method	Path
DELETE	/occm/api/azure/vsa/aggregates/{workingEnvironmentId}/{aggregateName}

curl example

```
curl --location --request DELETE
'https://cloudmanager.cloud.netapp.com/occm/api/azure/vsa/aggregates/<WORK
ING_ENV_ID>/<AGGR_NAME>' --header 'Content-Type: application/json'
--header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer
<ACCESS_TOKEN>'
```

Input

Path parameters:

- <WORKING_ENV_ID> (`workingEnvironmentId`) string
- <AGGR_NAME> (`aggregateName`) string

Output

None

Delete aggregate for high availability pair

You can use this workflow to delete an aggregate for an HA working environment.

1. Create the working environment

Perform the workflow Create Azure HA working environment and choose the `publicId` value of the working environment for the `workingEnvironmentId` path parameter.

2. Create an aggregate to delete

Perform the workflow Create aggregate to create an aggregate with the name `aggr2`. Use `aggr2` value for the `aggregateName` path parameter.

3. Delete the aggregate

HTTP method	Path
DELETE	/occm/api/azure/ha/aggregates/{workingEnvironmentId}/{aggregateName}

curl example

```
curl --location --request DELETE
'https://cloudmanager.cloud.netapp.com/occm/api/azure/ha/aggregates/<WORKI
NG_ENV_ID>/<AGGR_NAME>' --header 'Content-Type: application/json' --header
'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

    Path parameters:

- <WORKING_ENV_ID> (`workingEnvironmentId`) string
- <AGGR_NAME> (`aggregateName`) string

Output

    None

Delete aggregate for high availability pair

You can use this workflow to delete an aggregate for an HA working environment.

1. Create the working environment

Perform the workflow Create Azure HA working environment and choose the `publicId` value of the working environment for the `workingEnvironmentId` path parameter.

2. Create an aggregate to delete

Perform the workflow Create aggregate to create an aggregate with the name `aggr2`. Use `aggr2` value for the `aggregateName` path parameter.

3. Delete the aggregate

HTTP method	Path
DELETE	/occm/api/azure/ha/aggregates/{workingEnvironmentId}/{aggregateName}

curl example

```
curl --location --request DELETE
'https://cloudmanager.cloud.netapp.com/occm/api/azure/ha/aggregates/<WORKI
NG_ENV_ID>/aggr2' --header 'Content-Type: application/json' --header 'x-
agent-id: <AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

    Path parameters:

- <WORKING_ENV_ID> (`workingEnvironmentId`) string
- <AGGR_NAME> (`aggregateName`) string

Output

    None

Volumes

Create a volume using NFS

You can use this workflow to create a volume accessed through NFS protocol.

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Create volume using NFS for single node

You can use this workflow to create a volume using NFS protocol for a single node working environment.

1. Select the working environment

Perform the workflow Create working environments and choose the `publicId` value for the `workingEnvironmentId` parameter in the JSON input.

2. Create the volume

HTTP method	Path
POST	/occm/api/azure/vsa/volumes

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/azure/vsa/volumes'
--header 'Content-Type: application/json' --header 'x-agent-id:
<AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input

The JSON input example includes the minimum list of input parameters.

JSON input example

```
{
  "providerVolumeType": "Premium_LRS",
  "verifyNameUniqueness": true,
  "name": "vol2",
  "size": {
    "size": 10,
    "unit": "GB"
  },
  "enableCompression": true,
  "enableDeduplication": true,
  "createAggregateIfNotFound": "true",
  "enableThinProvisioning": true,
  "aggregateName": "aggr1",
  "maxNumOfDisksApprovedToAdd": 0,
  "svmName": "svm_ShirleyAzureVsa2601",
  "iops": null,
  "snapshotPolicyName": "default",
  "autoVsaCapacityManagementEnabled": true,
  "exportPolicyInfo": {
    "_ips": "10.0.0.0/16",
    "ips": [
      "10.0.0.0/16"
    ],
    "nfsVersion": [
      "nfs3",
      "nfs4"
    ],
    "policyType": "custom"
  },
  "workingEnvironmentId": "VsaWorkingEnvironment-IsDYFJf8"
}
```

Output

None

Create volume using NFS for high availability pair

You can use this workflow to create a volume using NFS protocol for an HA working environment.

1. Select the working environment

Perform the workflow Create working environments and choose the `publicId` value for the `workingEnvironmentId` parameter in the JSON input.

2. Create the volume

HTTP method	Path
POST	/occm/api/azure/ha/volumes

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/azure/ha/volumes' --header
'Content-Type: application/json' --header 'x-agent-id: <AGENT_ID>'
--header 'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input

The JSON input example includes the minimum list of input parameters.

JSON input example

```
{
  "providerVolumeType": "Premium_LRS",
  "verifyNameUniqueness": true,
  "name": "vol3",
  "size": {
    "size": 100,
    "unit": "GB"
  },
  "enableCompression": true,
  "enableDeduplication": true,
  "createAggregateIfNotFound": "true",
  "enableThinProvisioning": true,
  "aggregateName": "aggr1",
  "maxNumOfDisksApprovedToAdd": 0,
  "svmName": "svm_ShirleyHa2901",
  "iops": null,
  "snapshotPolicyName": "default",
  "autoVsaCapacityManagementEnabled": true,
  "exportPolicyInfo": {
    "_ips": "10.0.0.0/16",
    "ips": [
      "10.0.0.0/16"
    ],
    "nfsVersion": [
      "nfs3",
      "nfs4"
    ],
    "policyType": "custom"
  },
  "workingEnvironmentId": "VsaWorkingEnvironment-LUeyohBV"
}
```

Output

None

Create a volume using CIFS

You can use this workflow to create a volume accessed through CIFS protocol.

> ℹ️ If the properties `aggregateName` and `maxNumOfDisksApprovedToAdd` are not provided on the REST API call, the response will fail with a suggested name for the aggregate and the number of disks needed to fulfill the request.

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node

- HA pair

Create volume using CIFS for single node

You can use this workflow to create a volume using CIFS protocol for a single node working environment.

1. Choose the CIFS configuration

A CIFS server configuration must be defined for your working environment. You can do one of the following:

- If a CIFS configuration already exists, perform the workflow Get CIFS server configurations to access the configuration parameters.
- If a CIFS configuration does not exist, perform the workflow Create CIFS server configuration to create one.

2. Select the working environment

Perform the workflow Get working environments and choose the `publicId` value for the `workingEnvironmentId` (working environment) and the `svmName` (SVM name).

3. Select the aggregate

Perform the workflow Get aggregates and choose the `name` for the `aggregateName` value.

> ℹ️ If aggregate name does not exist and the `createAggregateIfNotFound` query parameter is set `true`, the create volume request is allowed if the named aggregate is not found.

4. Choose the size for the disk

Choose the size value for the `size:size` parameter. The `size:unit` must be one of the following: `TB`, `GB`, `MB`, `KB`, or `Byte`.

5. Create the quote

Perform the workflow Create quote. This is a recommended step but is not mandatory.

6. Create the volume

HTTP method	Path
POST	/occm/api/azure/vsa/volumes

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/azure/vsa/volumes'
--header 'Content-Type: application/json' --header 'x-agent-id:
<AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input

The JSON input example includes the minimum list of input parameters, including:

- <WORKING_ENV_ID> (`workingEnvironmentId`) string

- <SVM_NAME> (`svmName`) string

- <AGGR_NAME> (`aggregateName`) string

If an aggregate name does not exist, you can set the `createAggregateIfNotFound` query parameter to `true` which allows the aggregate not-found condition.

JSON input example

```
{
  "workingEnvironmentId": "VsaWorkingEnvironment-SfpVUZSc",
  "svmName": "svm_zivaws02we01",
  "aggregateName": "aggr1",
  "name": "zivaws02we02vol02Cifs",
  "size": {
    "size": 100,
    "unit": "GB"
  },
  "shareInfo": {
    "accessControl": {
        "permission": "full_control",
        "users": [
            "Everyone"
        ],
        "users": "Everyone;"
    },
    "shareName": "zivaws02we01vol02Cifs_share"
  },
  "snapshotPolicyName": "default",
  "enableThinProvisioning": true,
  "enableCompression": true,
  "enableDeduplication": true,
  "maxNumOfDisksApprovedToAdd": 0
}
```

Output

None

Create volume using CIFS for high availability pair

You can use this workflow to create a volume using CIFS protocol for an HA working environment.

1. Choose the CIFS configuration

A CIFS server configuration must be defined for your working environment. You can do one of the following:

- If a CIFS configuration already exists, perform the workflow Get CIFS server configurations to access the configuration parameters.
- If a CIFS configuration does not exist, perform the workflow Create CIFS server configuration to create one.

2. Select the working environment

Perform the workflow Get working environments and choose the `publicId` value for the `workingEnvironmentId` (working environment) and the `svmName` (SVM name).

3. Select the aggregate

Perform the workflow Get aggregates and choose the `name` for the `aggregateName` value.

> ⓘ If aggregate name does not exist and the `createAggregateIfNotFound` query parameter is set `true`, the create volume request is allowed if the named aggregate is not found.

4. Choose the size for the disk

Choose the size value for the `size:size` parameter. The `size:unit` must be one of the following: `TB`, `GB`, `MB`, `KB`, or `byte`.

5. Create the quote

Perform the workflow Create quote. This is a recommended step but is not mandatory.

6. Create the volume

HTTP method	Path
POST	/occm/api/azure/ha/volumes

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/azure/ha/volumes' --header
'Content-Type: application/json' --header 'x-agent-id: <AGENT_ID>'
--header 'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input

The JSON input example includes the minimum list of input parameters, including:

- <WORKING_ENV_ID> (`workingEnvironmentId`) string
- <SVM_NAME> (`svmName`) string
- <AGGR_NAME> (`aggregateName`) string

If an aggregate name does not exist, you can set the `createAggregateIfNotFound` query parameter to `true` which allows the aggregate not-found condition.

JSON input example

```
{
  "workingEnvironmentId": "VsaWorkingEnvironment-SfpVUZSc",
  "svmName": "svm_zivaws02we01",
  "aggregateName": "aggr1",
  "name": "zivaws02we02vol02Cifs",
  "size": {
    "size": 100,
    "unit": "GB"
  },
  "shareInfo": {
    "accessControl": {
        "permission": "full_control",
        "users": [
            "Everyone"
        ],
        "users": "Everyone;"
    },
    "shareName": "zivaws02we01vol02Cifs_share"
  },
  "snapshotPolicyName": "default",
  "enableThinProvisioning": true,
  "enableCompression": true,
  "enableDeduplication": true,
  "maxNumOfDisksApprovedToAdd": 0
}
```

Output

None

Create a volume using iSCSI

You can use this workflow to create a volume accessed through iSCSI.

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Create volume using iSCSI for single node

You can use this workflow to create a volume using iSCSI protocol for a single node working environment.

There are two workflows available depending on whether a new or existing iGroup is used. You need to select

the correct workflow:

- Create volume using iSCSI with a new iGroup
- Create volume using iSCSI with an existing iGroup

Create volume using iSCSI with a new iGroup

> ⓘ If the properties `aggregateName` and `maxNumOfDisksApprovedToAdd` are not provided on the REST API call, the response will fail with a suggested name for the aggregate and the number of disks needed to fulfill the request.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` value for the `workingEnvironmentId` parameter and the `svmName` value for the `svmName` parameter.

2. Select the aggregate

Perform the workflow Get aggregates and choose the `name` for the `aggregateName` value.

3. Choose the size for the disk

Choose the size value for the `size:size` parameter. The `size:unit` must be one of the following: `TB`, `GB`, `MB`, `KB`, or `Byte`.

4. Choose the iscsiInfo parameters

You must choose the following values for the REST API call:

- A unique igroup name for `igroupCreationRequest → igroupName` parameter
- The required iqn's to `igroupCreationRequest → initiators` parameter.
- The required operating system for the `osName` parameter from one of the following:
  - windows
  - linux
  - vmware
  - windows_2008
  - windows_gpt

5. Create the quote

Perform the workflow Create quote.This is a recommended step but is not mandatory.

6. Create the volume

HTTP method	Path
POST	/occm/api/azure/vsa/volumes

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/azure/vsa/volumes'
--header 'Content-Type: application/json' --header 'x-agent-id:
<AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input

The JSON input example includes the minimum list of input parameters, including:

- <WORKING_ENV_ID> (workingEnvironmentId) string

- <SVM_NAME> (svmName) string

- <AGGR_NAME> (aggregateName) string

If aggregate name does not exist, you can set the `createAggregateIfNotFound` query parameter to `true` which allows the aggregate not-found condition.

JSON input example

```
{
  "workingEnvironmentId": "VsaWorkingEnvironment-SfpVUZSc",
  "svmName": "svm_zivaws02we01",
  "aggregateName": "aggr1",
  "name": "zivaws02we01vol01Iscsi",
  "size": {
    "size": 100,
    "unit": "GB"
  },
  "iscsiInfo": {
    "igroupCreationRequest": {
        "igroupName": "zivIgroup",
        "initiators": [
            "iqn.1994-05.com.redhat:00xx00000000",
            "iqn.1994-05.com.redhat:00xx00000000"
        ]
    },
    "osName": "linux"
  },
  "snapshotPolicyName": "default",
  "enableThinProvisioning": true,
  "enableCompression": true,
  "enableDeduplication": true,
  "maxNumOfDisksApprovedToAdd": 0
}
```

Output

   None

Create volume using iSCSI with an existing iGroup

> ⓘ If the properties `aggregateName` and `maxNumOfDisksApprovedToAdd` are not provided on the REST API call, the response will fail with a suggested name for the aggregate and the number of disks needed to fulfill the request.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` value for the `workingEnvironmentId` parameter and the `svmName` value for the `svmName` parameter.

2. Select the aggregate

Perform the workflow Get aggregates and choose the `name` for the `aggregateName` value.

3. Choose the size for the disk

Choose the size value for the `size:size` parameter. The `size:unit` must be one of the following: `TB`, `GB`, `MB`, `KB`, or `byte`.

4. Choose the iGroup

Perform the workflow Get iGroups and choose the igroups for the `iscasiInfo → igroups` value. Also select the `osType` value for the `iscasiInfo → osName`.

5. Create the quote

Perform the workflow Create quote. This is a recommended step but is not mandatory.

6. Create the volume

HTTP method	Path
POST	/occm/api/azure/vsa/volumes

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/azure/vsa/volumes'
--header 'Content-Type: application/json' --header 'x-agent-id:
<AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input

   The JSON input example includes the minimum list of input parameters, including:

   • <WORKING_ENV_ID> (`workingEnvironmentId`) string

   • <SVM_NAME> (`svmName`) string

- <AGGR_NAME> (aggregateName) string

If an aggregate name does not exist, you can set the `createAggregateIfNotFound` query parameter to `true` which allows the aggregate not-found condition.

JSON input exmaple

```json
{
  "workingEnvironmentId": "VsaWorkingEnvironment-UvFmWXoD",
  "svmName": "svm_zivaws01we01",
  "aggregateName": "aggr1",
  "name": "zivaws01we01vol05Iscsi",
  "size": {
    "size": 100,
    "unit": "GB"
  },
  "iscsiInfo": {
    "igroups": ["zivIgroup1"],
    "osName": "linux"
  },
  "snapshotPolicyName": "default",
  "enableThinProvisioning": true,
  "enableCompression": true,
  "enableDeduplication": true,
  "maxNumOfDisksApprovedToAdd": 0
}
```

Output

None

Create volume using iSCSI for high availability

You can use this workflow to create a volume using iSCSI protocol for an HA working environment.

There are two workflows available depending on whether a new or existing iGroup is used. You need to select the correct workflow:

- Create volume using iSCSI with a new iGroup
- Create volume using iSCSI with an existing iGroup

Create volume using iSCSI with a new iGroup

ⓘ   If the properties `aggregateName` and `maxNumOfDisksApprovedToAdd` are not provided on the REST API call, the response will fail with a suggested name for the aggregate and the number of disks needed to fulfill the request.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` value for the `workingEnvironmentId` parameter and the `svmName` value for the `svmName` parameter.

2. Select the aggregate

Perform the workflow Get aggregates and choose the `name` for the `aggregateName` value.

3. Choose the size for the disk

Choose the size value for the `size:size` parameter. The `size:unit` must be one of the following: `TB`, `GB`, `MB`, `KB`, or `byte`.

4. Choose the iscsiInfo parameters

You must choose the following values for the REST API call:

* A unique igroup name for `igroupCreationRequest` → `igroupName` parameter
* The required iqn's to `igroupCreationRequest` → `initiators` parameter.
* The required operating system for the `osName` parameter from one of the following:
    ◦ windows
    ◦ linux
    ◦ vmware
    ◦ windows_2008
    ◦ windows_gpt

5. Create the quote

Perform the workflow Create quote.This is a recommended step but is not mandatory.

6. Create the volume

HTTP method	Path
POST	/occm/api/azure/ha/volumes

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/azure/ha/volumes' --header
'Content-Type: application/json' --header 'x-agent-id: <AGENT_ID>'
--header 'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input

The JSON input example includes the minimum list of input parameters, including:

* <WORKING_ENV_ID> (`workingEnvironmentId`) string

- <SVM_NAME> (`svmName`) string

- <AGGR_NAME> (`aggregateName`) string

If aggregate name does not exist, you can set the `createAggregateIfNotFound` query parameter to `true` which allows the aggregate not-found condition.

JSON input example

```
{
    "workingEnvironmentId":"VsaWorkingEnvironment-1m76JaRt",
    "svmName":"svm_ranukazure12",
    "snapshotPolicyName":"default",
    "name":"ranukvoliscsi",
    "iops":null,
    "throughput":null,
    "providerVolumeType":"Premium_LRS",
    "capacityTier":"Blob",
    "tieringPolicy":"auto",
    "verifyNameUniqueness":true,
    "iscsiInfo":{
        "igroupCreationRequest":{
            "igroupName":"ig1",
            "initiators":[
                "iqn.1991-05.com.microsoft:pradipm02-pc"
            ]
        },
        "osName":"windows"
    },
    "size":{
        "size":200,
        "unit":"GB"
    },
    "enableThinProvisioning":true,
    "enableDeduplication":true,
    "enableCompression":true,
    "maxNumOfDisksApprovedToAdd":0,
    "aggregateName":"aggr1"
}
```

Output

None

Create volume using iSCSI with an existing iGroup

(i) If the properties `aggregateName` and `maxNumOfDisksApprovedToAdd` are not provided on the REST API call, the response will fail with a suggested name for the aggregate and the number of disks needed to fulfill the request.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` value for the `workingEnvironmentId` parameter and the `svmName` value for the `svmName` parameter.

2. Select the aggregate

Perform the workflow Get aggregates and choose the `name` for the `aggregateName` value.

3. Choose the size for the disk

Choose the size value for the `size:size` parameter. The `size:unit` must be one of the following: `TB`, `GB`, `MB`, `KB`, or `byte`.

4. Choose the iGroup

Perform the workflow Get iGroups and choose the igroups for the `iscasiInfo → igroups` value. Also select the `osType` value for the `iscasiInfo → osName`.

5. Create the quote

Perform the workflow Create quote. This is a recommended step but is not mandatory.

6. Create the volume

HTTP method	Path
POST	/occm/api/azure/ha/volumes

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/azure/ha/volumes' --header
'Content-Type: application/json' --header 'x-agent-id: <AGENT_ID>'
--header 'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input
The JSON input example includes the minimum list of input parameters, including:

- <WORKING_ENV_ID> (`workingEnvironmentId`) string
- <SVM_NAME> (`svmName`) string
- <AGGR_NAME> (`aggregateName`) string

If an aggregate name does not exist, you can set the `createAggregateIfNotFound` query parameter to `true` which allows the aggregate not-found condition.

```json
{
  "workingEnvironmentId": "VsaWorkingEnvironment-UvFmWXoD",
  "svmName": "svm_zivaws01we01",
  "aggregateName": "aggr1",
  "name": "zivaws01we01vol05Iscsi",
  "size": {
    "size": 100,
    "unit": "GB"
  },
  "iscsiInfo": {
    "igroups": ["zivIgroup1"],
    "osName": "linux"
  },
  "snapshotPolicyName": "default",
  "enableThinProvisioning": true,
  "enableCompression": true,
  "enableDeduplication": true,
  "maxNumOfDisksApprovedToAdd": 0
}
```

Output

None

Get volumes

You can retrieve the list of volumes of an Azure working environment.

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Get volume for single node

You can use this workflow to retrieve volumes for a single node working environment.

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Get volume for single node

You can use this workflow to retrieve volume for a single node working environment.

1. Create the working environment

Perform the workflow Create Azure single node working environment and choose the `publicId` value of the working environment for the `workingEnvironmentId` query parameter.

2. Get the volumes

HTTP method	Path
GET	/occm/api/azure/vsa/volumes

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/azure/vsa/volumes?workingE
nvironmentId=<WORKING_ENV_ID>' --header 'Content-Type: application/json'
--header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer
<ACCESS_TOKEN>'
```

Input

Query parameter <WORKING_ENV_ID> (`workingEnvironmentId`) string

Output

The JSON output example includes the list of volumes for the working environment.

JSON output example

```
[
    {
        "name": "vol1",
        "uuid": "x0000x00-0000-xx00-x000-000x0x0xxxxx",
        "svmName": "svm_ShirleyAzureVsa2601",
        "size": {
            "size": 10.0,
            "unit": "GB"
        },
        "usedSize": {
            "size": 2.74658203125E-4,
            "unit": "GB"
        },
        "junctionPath": "/vol1",
        "volumeTotalInodes": 311287,
        "volumeUsedInodes": 96,
        "mountPoint": "10.0.0.10:/vol1",
        "compressionSpaceSaved": {
            "size": 0.0,
            "unit": "GB"
        },
```

```json
        "deduplicationSpaceSaved": {
            "size": 0.0,
            "unit": "GB"
        },
        "thinProvisioning": true,
        "compression": true,
        "deduplication": true,
        "snapshotPolicy": "default",
        "securityStyle": "unix",
        "exportPolicyInfo": {
            "name": "export-svm_ShirleyAzureVsa2601-vol1",
            "policyType": "custom",
            "ips": [
                "10.0.0.0/16"
            ],
            "nfsVersion": [
                "nfs3",
                "nfs4"
            ]
        },
        "shareNames": [],
        "shareInfo": [],
        "parentVolumeName": "",
        "rootVolume": false,
        "state": "online",
        "volumeType": "rw",
        "aggregateName": "aggr1",
        "parentSnapshot": null,
        "autoSizeMode": "grow",
        "maxGrowSize": {
            "size": 110.0,
            "unit": "GB"
        },
        "providerVolumeType": "Premium_LRS",
        "cloneNames": [],
        "moving": false,
        "primaryNoFailoverMountPoint": null,
        "secondaryNoFailoverMountPoint": null,
        "capacityTier": null,
        "capacityTierUsedSize": null,
        "cifsShareAccessPoint": null,
        "primaryCifsShareAccessPoint": null,
        "secondaryCifsShareAccessPoint": null,
        "tieringPolicy": "none",
        "tierInactiveUserData": {
            "size": 0.0,
```

```
            "unit": "GB"
        },
        "tierInactiveUserDataPercent": 0,
        "comment": null,
        "qosPolicyGroupName": null,
        "snaplockType": "non_snaplock",
        "constituentsAggregates": [],
        "snapshotsUsedSize": {
            "size": 0.0,
            "unit": "Byte"
        },
        "cbsBackupsInfo": null,
        "minimumCoolingDays": null,
        "targetName": "iqn.1992-
08.com.netapp:sn.65c7e1cc600d11eb8ca3000d3a7e6f7c:vs.2",
        "iscsiEnabled": false,
        "isFlexGroupVolume": false
    }
]
```

Get volume for high availability pair

You can use this workflow to retrieve volume for an HA working environment.

1. Create the working environment

Perform the workflow Create Azure HA working environment and choose the `publicId` value of the working environment for the `workingEnvironmentId` query parameter.

2. Get the volumes

HTTP method	Path
GET	/occm/api/azure/ha/volumes

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/azure/ha/volumes?workingEn
vironmentId=<WORKING_ENV_ID>' --header 'Content-Type: application/json'
--header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer
<ACCESS_TOKEN>'
```

Input

Query parameter <WORKING_ENV_ID> (`workingEnvironmentId`) string

Output

The JSON output example includes the list of volumes for the working environment.

JSON output example

```json
[
    {
        "name": "vol1",
        "uuid": "x0000x00-0000-xx00-x000-000x0x0xxxxx",
        "svmName": "svm_ShirleyHa2901",
        "size": {
            "size": 100.0,
            "unit": "GB"
        },
        "usedSize": {
            "size": 2.93731689453125E-4,
            "unit": "GB"
        },
        "junctionPath": "/vol1",
        "volumeTotalInodes": 3112959,
        "volumeUsedInodes": 96,
        "mountPoint": "10.0.0.9:/vol1",
        "compressionSpaceSaved": {
            "size": 0.0,
            "unit": "GB"
        },
        "deduplicationSpaceSaved": {
            "size": 0.0,
            "unit": "GB"
        },
        "thinProvisioning": true,
        "compression": true,
        "deduplication": true,
        "snapshotPolicy": "default",
        "securityStyle": "unix",
        "exportPolicyInfo": {
            "name": "export-svm_ShirleyHa2901-vol1",
            "policyType": "custom",
            "ips": [
                "10.0.0.0/16"
            ],
            "nfsVersion": [
                "nfs3",
                "nfs4"
            ]
        },
        "shareNames": [],
```

```json
        "shareInfo": [],
        "parentVolumeName": "",
        "rootVolume": false,
        "state": "online",
        "volumeType": "rw",
        "aggregateName": "aggr1",
        "parentSnapshot": null,
        "autoSizeMode": "grow",
        "maxGrowSize": {
            "size": 1100.0,
            "unit": "GB"
        },
        "providerVolumeType": "Premium_LRS",
        "cloneNames": [],
        "moving": false,
        "primaryNoFailoverMountPoint": null,
        "secondaryNoFailoverMountPoint": null,
        "capacityTier": null,
        "capacityTierUsedSize": null,
        "cifsShareAccessPoint": null,
        "primaryCifsShareAccessPoint": null,
        "secondaryCifsShareAccessPoint": null,
        "tieringPolicy": "none",
        "tierInactiveUserData": {
            "size": 0.0,
            "unit": "GB"
        },
        "tierInactiveUserDataPercent": 0,
        "comment": null,
        "qosPolicyGroupName": null,
        "snaplockType": "non_snaplock",
        "constituentsAggregates": [],
        "snapshotsUsedSize": {
            "size": 0.0,
            "unit": "Byte"
        },
        "cbsBackupsInfo": null,
        "minimumCoolingDays": null,
        "targetName": "iqn.1992-
08.com.netapp:sn.fc000x0000000xx0x000000xae000005:vs.3",
        "iscsiEnabled": false,
        "isFlexGroupVolume": false
    },
    {
        "name": "vol2",
        "uuid": "x0000x00-0000-xx00-x000-000x0x0xxxxx",
```

```json
        "svmName": "svm_ShirleyHa2901",
        "size": {
            "size": 30.0,
            "unit": "GB"
        },
        "usedSize": {
            "size": 2.6702880859375E-4,
            "unit": "GB"
        },
        "junctionPath": "/vol2",
        "volumeTotalInodes": 933887,
        "volumeUsedInodes": 96,
        "mountPoint": "10.0.0.9:/vol2",
        "compressionSpaceSaved": {
            "size": 0.0,
            "unit": "GB"
        },
        "deduplicationSpaceSaved": {
            "size": 0.0,
            "unit": "GB"
        },
        "thinProvisioning": false,
        "compression": false,
        "deduplication": false,
        "snapshotPolicy": "default",
        "securityStyle": "unix",
        "exportPolicyInfo": {
            "name": "export-svm_ShirleyHa2901-vol2",
            "policyType": "custom",
            "ips": [
                "10.0.0.0/16"
            ],
            "nfsVersion": [
                "nfs3",
                "nfs4"
            ]
        },
        "shareNames": [],
        "shareInfo": [],
        "parentVolumeName": "",
        "rootVolume": false,
        "state": "online",
        "volumeType": "rw",
        "aggregateName": "aggr1",
        "parentSnapshot": null,
        "autoSizeMode": "grow",
```

```
        "maxGrowSize": {
            "size": 330.0,
            "unit": "GB"
        },
        "providerVolumeType": "Premium_LRS",
        "cloneNames": [],
        "moving": false,
        "primaryNoFailoverMountPoint": null,
        "secondaryNoFailoverMountPoint": null,
        "capacityTier": null,
        "capacityTierUsedSize": null,
        "cifsShareAccessPoint": null,
        "primaryCifsShareAccessPoint": null,
        "secondaryCifsShareAccessPoint": null,
        "tieringPolicy": "none",
        "tierInactiveUserData": {
            "size": 0.0,
            "unit": "GB"
        },
        "tierInactiveUserDataPercent": 0,
        "comment": null,
        "qosPolicyGroupName": null,
        "snaplockType": "non_snaplock",
        "constituentsAggregates": [],
        "snapshotsUsedSize": {
            "size": 0.0,
            "unit": "Byte"
        },
        "cbsBackupsInfo": null,
        "minimumCoolingDays": null,
        "targetName": "iqn.1992-
08.com.netapp:sn.fc000x0000000xx0x000000xae000005:vs.3",
        "iscsiEnabled": false,
        "isFlexGroupVolume": false
    }
]
```

Modify volume

You can modify the configuration of an existing volume.

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Modify volume for single node

You can use this workflow to modify the volume configuration for a single node working environment.

1. Create the working environment

Perform the workflow Create Azure single node working environment and choose the `publicId` value of the working environment to be used as the `workingEnvironmentId` path parameter.

2. Select the volume

Perform the workflow Get volumes and choose the `name` and the `svmName` values of the volume to modify and use them for the `volumeName` and `svmName` path parameters.

3. Modify the volume

HTTP method	Path
PUT	/occm/api/azure/vsa/volumes/{workingEnvironmentId}/{svmName}/{volumeName}

curl example

```
curl --location --request PUT
'https://cloudmanager.cloud.netapp.com/occm/api/azure/vsa/volumes/<WORKING
_ENV_ID>/<SVM_NAME>/<VOLUME_NAME>' --header 'Content-Type:
application/json' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input

Path parameters:

- <WORKING_ENV_ID> (`workingEnvironmentId`) string
- <SVM_NAME> (`svmName`) string
- <VOLUME_NAME> (`volumeName`) string

The JSON input example includes the minimum list of input parameters.

JSON input example

```
{
    "volumeName": "vol5",
    "svmName": "svm_ShirleyAzureVsa2601",
    "originalVolumeInfo": {
      "exportPolicyInfo": {
        "ips": [
          "10.0.0.0/16"
        ],
        "name": "export-svm_ShirleyAzureVsa2601-vol5",
        "nfsVersion": [
          "nfs3",
          "nfs4"
        ],
        "policyType": "custom"
      },
      "shareInfo": [],
      "snapshotPolicyName": "default"
    },
    "workingEnvironmentName": "ShirleyAzureVsa2601",
    "snapshotPolicyName": "default",
    "exportPolicyInfo": {
      "ips": [],
      "policyType": "none"
    },
    "workingEnvironmentId": "VsaWorkingEnvironment-IsDYFJf8"
}
```

Output

None

Modify volume for high availability pair

You can use this workflow to modify the volume configuration for an HA working environment.

1. Create the working environment

Perform the workflow Create Azure HA working environment and choose the `publicId` value of the working environment to be used as the `workingEnvironmentId` path parameter.

2. Select the volume

Perform the workflow Get volumes and choose the `name` and the `svmName` values of the volume to modify and use them for the `volumeName` and `svmName` path parameters.

3. Modify the volume

HTTP method	Path
PUT	/occm/api/azure/ha/volumes/{workingEnvironmentId}/{svmName}/{volumeName}

curl example

```
curl --location --request PUT
'https://cloudmanager.cloud.netapp.com/occm/api/azure/ha/volumes/<WORKING_
ENV_ID>/<SVM_NAME>/<VOLUME_NAME>' --header 'Content-Type:
application/json' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input

Path parameters:

- <WORKING_ENV_ID> (workingEnvironmentId) string

- <SVM_NAME> (svmName) string

- <VOLUME_NAME> (volumeName) string

The JSON input example includes the minimum list of input parameters.

JSON input example

```
{
  "volumeName": "vol2",
  "svmName": "svm_ShirleyHa2901",
  "originalVolumeInfo": {
    "exportPolicyInfo": {
      "ips": [
        "10.0.0.0/16"
      ],
      "name": "export-svm_ShirleyHa2901-vol2",
      "nfsVersion": [
        "nfs3",
        "nfs4"
      ],
      "policyType": "custom"
    },
    "shareInfo": [],
    "snapshotPolicyName": "default"
  },
  "workingEnvironmentName": "ShirleyHa2901",
  "snapshotPolicyName": "default",
  "exportPolicyInfo": {
    "ips": [
      "20.0.0.0/16"
    ],
    "nfsVersion": [
      "nfs4"
    ],
    "policyType": "custom"
  },
  "workingEnvironmentId": "VsaWorkingEnvironment-LUeyohBV"
}
```

Output

None

Delete volume

You can delete an existing volume.

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Delete volume for single node

You can use this workflow to delete volume for a single node working environment.

1. Create the working environment

Perform the Create Azure single node working environment workflow and choose the `publicId` value for the working environment field in the input parameter.

2. Select the volume

Perform the workflow Get volumes and choose the `name` and the `svmName` values of the volume to delete and use them for the `volumeName` and `svmName` path parameters.

3. Delete the volume

HTTP method	Path
DELETE	/occm/api/azure/vsa/volumes/{workingEnvironmentId}/{svmName}/{volumeName}

curl example

```
curl --location --request DELETE
'https://cloudmanager.cloud.netapp.com/occm/api/azure/vsa/volumes/<WORKING
_ENV_ID>/<SVM_NAME>/<VOLUME_NAME>' --header 'Content-Type:
application/json' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

Path parameters:

- <WORKING_ENV_ID> (`workingEnvironmentId`) string

- <SVM_NAME> (`svmName`) string

- <VOLUME_NAME> (`volumeName`) string

Output

None

Delete volume for high availability pair

You can use this workflow to delete volume for an HA working environment.

1. Create the working environment

Perform the Create Azure HA working environment workflow and choose the `publicId` value for the working environment field in the input parameter.

2. Select the volume

Perform the workflow Get volumes and choose the `name` and the `svmName` values of the volume to delete and use them for the `volumeName` and `svmName` path parameters.

3. Delete the volume

HTTP method	Path
DELETE	/occm/api/azure/ha/volumes/{workingEnvironmentId}/{svmName}/{volumeName}

curl example

```
curl --location --request DELETE
'https://cloudmanager.cloud.netapp.com/occm/api/azure/ha/volumes/<WORKING_
ENV_ID>/<SVM_NAME>/<VOLUME_NAME>' --header 'Content-Type:
application/json' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

Path parameters:

- <WORKING_ENV_ID> `(workingEnvironmentId)` string

- <SVM_NAME> `(svmName)` string

- <VOLUME_NAME> `(volumeName)` string

Output

None

Create quote

You can create a quote for a new volume which returns a resource quote needed to satisfy the request. The resource quote contains aggregate information where the volume will be created and confirms if the space is available. This is a recommended step but is not mandatory.

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Create quote for single node

You can perform this workflow to create a volume quote for a single node working environment.

1. Select the working environment

Perform the workflow Create Azure single node working environment and choose the `publicId` value for the working environment field in the input parameter.

2. Generate the volume quote

HTTP method	Path
POST	/occm/api/azure/vsa/quote

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/azure/vsa/volumes/quote'
--header 'Content-Type: application/json' --header 'x-agent-id: <AGENT_ID>
--header 'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input

The JSON input example includes the list of input parameters.

JSON input example

```
{
  "providerVolumeType": "Premium_LRS",
  "verifyNameUniqueness": true,
  "name": "vol3",
  "size": {
    "size": 10,
    "unit": "GB"
  },
  "enableCompression": true,
  "enableDeduplication": true,
  "enableThinProvisioning": true,
  "svmName": "svm_ShirleyAzureVsa2601",
  "iops": null,
  "snapshotPolicyName": "default",
  "autoVsaCapacityManagementEnabled": true,
  "exportPolicyInfo": {
    "_ips": "10.0.0.0/16",
    "ips": [
      "10.0.0.0/16"
    ],
    "policyType": "custom"
  },
  "workingEnvironmentId": "VsaWorkingEnvironment-IsDYFJf8"
}
```

Output

The JSON output example includes an example of the quote details.

JSON output example

```
{
    "numOfDisks": 0,
    "diskSize": {
        "size": 1.0,
        "unit": "TB"
    },
    "aggregateName": "aggr1",
    "newAggregate": false,
    "autoVsaCapacityManagement": true
}
```

Create quote for high availability pair

You can use this workflow to create a volume quote for an HA working environment.

1. Create the working environment

Perform the workflow Create Azure HA working environment and choose the `publicId` value for the working environment field in the input parameter.

2. Generate the volume quote

HTTP method	Path
POST	/occm/api/azure/ha/quote

curl example

```
 curl --location --request POST
 'https://cloudmanager.cloud.netapp.com/occm/api/azure/ha/volumes/quote'
 --header 'Content-Type: application/json' --header 'x-agent-id: <AGENT_ID>
 --header 'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input
   The JSON input example includes the list of input parameters.

JSON input example

```
{
  "providerVolumeType": "Premium_LRS",
  "verifyNameUniqueness": true,
  "name": "vol3",
  "size": {
    "size": 10,
    "unit": "GB"
  },
  "enableCompression": true,
  "enableDeduplication": true,
  "enableThinProvisioning": true,
  "svmName": "svm_ShirleyAzureVsa2601",
  "iops": null,
  "snapshotPolicyName": "default",
  "autoVsaCapacityManagementEnabled": true,
  "exportPolicyInfo": {
    "_ips": "10.0.0.0/16",
    "ips": [
      "10.0.0.0/16"
    ],
    "policyType": "custom"
  },
  "workingEnvironmentId": "VsaWorkingEnvironment-IsDYFJf8"
}
```

Output

The JSON output example includes an example of the quote details.

JSON output example

```
{
    "numOfDisks": 0,
    "diskSize": {
        "size": 1.0,
        "unit": "TB"
    },
    "aggregateName": "aggr1",
    "newAggregate": false,
    "autoVsaCapacityManagement": true
}
```

Get iGroups

You can use this workflow to retrieve all the initiator groups (iGroups).

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node

- HA pair

Get iGroups for single node

You can use this workflow to retrieve iGroups for a single node working environment.

1. Select the working environment

Perform the workflow Create Azure single node working environment and choose the `publicId` and `svmName` values for the working environment `workingEnvironmentId` and `svmName` path parameters.

2. Get the CIFS configurations

HTTP method	Path
GET	/occm/api/azure/vsa/volumes/igroups/{workingEnvironmentId}/{svmName}

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/azure/vsa/volumes/igroups/
<WORKING_ENV_ID>/<SVM_NAME>' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>' --header 'Content-Type:
application/json'
```

Input

- Path parameter <WORKING_ENV_ID> `workingEnvironmentId` string

- Path parameter <SVM_NAME> `svmName` string

Output

The JSON output example includes a list of iGroups.

JSON output example

```
[
    {
        "igroupName": "zivIgroup1",
        "osType": "linux",
        "portsetName": "",
        "igroupType": "iscsi",
        "initiators": [
            "iqn.1994-05.com.redhat:0x0xx000000x"
        ]
    },
    {
        "igroupName": "zivIgroup2",
        "osType": "linux",
        "portsetName": "",
        "igroupType": "iscsi",
        "initiators": [
            "iqn.1994-05.com.redhat:0x0xx000000x"
        ]
    }
]
```

Get iGroups for high availability pair

You can use this workflow to retrieve iGroups for an HA working environment.

1. Select the working environment

Perform the workflow Create Azure single node working environment and choose the `publicId` and `svmName` values for the working environment `workingEnvironmentId` and `svmName` path parameters.

2. Get the CIFS configurations

HTTP method	Path
GET	/occm/api/azure/ha/volumes/igroups/{workingEnvironmentId}/{svmName}

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/azure/ha/volumes/igroups/<
WORKING_ENV_ID>/<SVM_NAME>' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>' --header 'Content-Type:
application/json'
```

Input

- Path parameter <WORKING_ENV_ID> `workingEnvironmentId` string

- Path parameter <SVM_NAME> `svmName` string

Output

The JSON output example includes a list of iGroups.

JSON output example

```
[
    {
        "igroupName": "zivIgroup1",
        "osType": "linux",
        "portsetName": "",
        "igroupType": "iscsi",
        "initiators": [
            "iqn.1994-05.com.redhat:0x0xx000000x"
        ]
    },
    {
        "igroupName": "zivIgroup2",
        "osType": "linux",
        "portsetName": "",
        "igroupType": "iscsi",
        "initiators": [
            "iqn.1994-05.com.redhat:0x0xx000000x"
        ]
    }
]
```

Metadata

Get Azure regions

This workflow retrieves the Azure regions in which an Cloud Volumes ONTAP working environment may be created.

ⓘ Ensure that you've the Azure subscription ID. You can easily obtain the ID from the Azure portal.

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Get Azure regions for single node

You can perform this workflow to retrieve the Azure regions for a single node working environment.

1. Get the list of regions

HTTP method	Path
GET	/occm/api/azure/vsa/metadata/regions

Curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/azure/vsa/metadata/regions
?subscriptionId=<SUBSCRIPTION_ID>' --header 'Content-Type:
application/json' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

Query parameters (Optional):

- `fields`, string

- `subscriptionId`, string

- `cloudProviderAccountId`, string

Output

The JSON output provides an example of a list of Azure regions.

JSON output example

```
[
    {
        "displayName": "Central US",
        "name": "centralus",
        "vnets": null
    },
    {
        "displayName": "East US",
        "name": "eastus",
        "vnets": null
    },
    {
        "displayName": "East US 2",
        "name": "eastus2",
        "vnets": null
    },
    {
        "displayName": "West US 2",
        "name": "westus2",
        "vnets": null
    }
]
```

Get Azure regions for high availability pair

You can perform this workflow to retrieve the Azure regions for an HA working environment.

1. Get the list of regions

HTTP method	Path
GET	/occm/api/azure/ha/metadata/regions

Curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/azure/ha/metadata/regions?
subscriptionId=<SUBSCRIPTION_ID>' --header 'Content-Type:
application/json' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

(Optional) Query parameters:

- `fields`, string

- `subscriptionId`, string

- `cloudProviderAccountId`, string

Output

The JSON output provides an example of a list of Azure regions.

JSON output example

```
[
    {
        "displayName": "Central US",
        "name": "centralus",
        "vnets": null
    },
    {
        "displayName": "East US",
        "name": "eastus",
        "vnets": null
    },
    {
        "displayName": "East US 2",
        "name": "eastus2",
        "vnets": null
    },
    {
        "displayName": "West US 2",
        "name": "westus2",
        "vnets": null
    }
]
```

Get Azure permutations

You can use the permutations endpoint to retrieve the Cloud Volumes ONTAP configuration information.

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Get permutations for single node

You can use this workflow to retrieve the Cloud Volumes ONTAP configurations information for a single node working environment.

1. Get the permutations

HTTP method	Path
GET	/occm/api/azure/vsa/metadata/permutations

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/azure/vsa/metadata/permuta
tions' --header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer
<ACCESS_TOKEN>' --header 'Content-Type: application/json'
```

Input

There are several optional query parameters you can use:

- `region` string

- `version` string

- `license` string

- `instance_type` string

- `default_instance_type` string

- `feature` string

- `latest_only` string

- `marketplace_version` string

- `marketplace_sku` string

Output

The JSON output example includes the list of Cloud Volumes ONTAP configurations.

JSON output example

```
[
    {
        "ontapVersion": "ONTAP-9.9.0X5.T1.azure",
        "license": {
            "type": "azure-cot-explore-paygo",
            "name": "Cloud Volumes ONTAP Explore",
            "description": "Suitable for smaller capacity applications.
Supports up to 2 TB of underlying Azure storage.",
            "subName": "",
            "subDescription": "Support of tiering to object storage is not
included.",
            "capacity_limit": "2TB",
            "platformLicenseRequired": false,
            "default": false,
            "capacityLimit": {
```

```
                    "size": 2.0,
                    "unit": "TB"
                }
            },
            "instanceType": "Standard_DS3_v2",
            "region": {
                "name": "East US 2",
                "code": "eastus2",
                "location": "Virginia",
                "s3Region": null
            },
            "defaultInstance": true,
            "features": [
                "four-nics",
                "no-sidl"
            ],
            "upgradeableFrom": [
                "9.8",
                "9.9"
            ]
        },
        {
            "ontapVersion": "ONTAP-9.9.0X5.T1.azure",
            "license": {
                "type": "azure-cot-explore-paygo",
                "name": "Cloud Volumes ONTAP Explore",
                "description": "Suitable for smaller capacity applications.
Supports up to 2 TB of underlying Azure storage.",
                "subName": "",
                "subDescription": "Support of tiering to object storage is not
included.",
                "capacity_limit": "2TB",
                "platformLicenseRequired": false,
                "default": false,
                "capacityLimit": {
                    "size": 2.0,
                    "unit": "TB"
                }
            },
            "instanceType": "Standard_DS3_v2",
            "region": {
                "name": "East US 2",
                "code": "eastus2",
                "location": "Virginia",
                "s3Region": null
            },
```

```
        "defaultInstance": true,
        "features": [
            "four-nics",
            "no-sidl"
        ],
        "upgradeableFrom": [
            "9.8",
            "9.9"
        ]
    }
]
```

Get permutations for high availability pair

You can use this workflow to retrieve the Cloud Volumes ONTAP configurations information for an HA working environment.

1. Get the permutations

HTTP method	Path
GET	/occm/api/azure/ha/metadata/permutations

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/azure/ha/metadata/permutat
ions' --header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer
<ACCESS_TOKEN>' --header 'Content-Type: application/json'
```

Input

There are several optional query parameters you can use:

- `region` string

- `version` string

- `license` string

- `instance_type` string

- `default_instance_type` string

- `feature` string

- `latest_only` string

- `marketplace_version` string

- `marketplace_sku` string

Output

The JSON output example includes the list of Cloud Volumes ONTAP configurations.

JSON output example

```
[
    {
        "ontapVersion": "ONTAP-9.9.0X5.T1.azureha",
        "license": {
            "type": "azure-ha-cot-standard-paygo",
            "name": "Cloud Volumes ONTAP Standard",
            "description": "Flexible performance and larger capacity for a
wider range of applications. Supports up to 10 TB of underlying Azure
storage.",
            "subName": "",
            "subDescription": "Supports tiering to object storage of
replicated volumes and snapshots.",
            "capacity_limit": "10TB",
            "platformLicenseRequired": false,
            "default": true,
            "capacityLimit": {
                "size": 10.0,
                "unit": "TB"
            }
        },
        "instanceType": "Standard_DS4_v2",
        "region": {
            "name": "Southeast Asia",
            "code": "southeastasia",
            "location": "Singapore",
            "s3Region": null
        },
        "defaultInstance": true,
        "features": [],
        "upgradeableFrom": [
            "9.8",
            "9.9"
        ]
    },
    {
        "ontapVersion": "ONTAP-9.9.0X5.T1.azureha",
        "license": {
            "type": "azure-ha-cot-standard-paygo",
            "name": "Cloud Volumes ONTAP Standard",
            "description": "Flexible performance and larger capacity for a
wider range of applications. Supports up to 10 TB of underlying Azure
storage.",
```

```
            "subName": "",
            "subDescription": "Supports tiering to object storage of
 replicated volumes and snapshots.",
            "capacity_limit": "10TB",
            "platformLicenseRequired": false,
            "default": true,
            "capacityLimit": {
                "size": 10.0,
                "unit": "TB"
            }
        },
        "instanceType": "Standard_DS4_v2",
        "region": {
            "name": "Southeast Asia",
            "code": "southeastasia",
            "location": "Singapore",
            "s3Region": null
        },
        "defaultInstance": true,
        "features": [],
        "upgradeableFrom": [
            "9.8",
            "9.9"
        ]
    }
]
```

Get Azure storage account types

You can retrieve the supported Azure storage account types.

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Get Azure storage account types for single node

You can perform this workflow to retrieve the Azure storage account types for a single node working environment.

1. Get the storage account types

HTTP method	Path
GET	/occm/api/azure/vsa/metadata/storage-account-types

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/azure/vsa/metadata/storage
-account-types' --header 'x-agent-id: <AGENT_ID>' --header 'Authorization:
Bearer <ACCESS_TOKEN>' --header 'Content-Type: application/json'
```

Input

None

Output

The JSON output example includes the list of Azure storage account types.

JSON output example

```
[{
        "diskType": "Premium",
        "availabilityTypes": ["Premium_LRS"],
        "sizes": [{
                "size": {
                        "size": 500.0,
                        "unit": "GB"
                },
                "description": "",
                "supportedOccmLicenses": ["Explore (hourly)", "Standard
(hourly)", "Standard (BYOL)", "Cloud Volumes ONTAP Explore", "Cloud
Volumes ONTAP Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes
ONTAP BYOL", "Cloud Volumes ONTAP Explore", "Cloud Volumes ONTAP
Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP BYOL",
"Cloud Volumes ONTAP Capacity Based Charging", "Cloud Volumes ONTAP
Capacity Based Charging", "Cloud Volumes ONTAP Explore", "Cloud Volumes
ONTAP Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP
BYOL", "Cloud Volumes ONTAP Standard", "Cloud Volumes ONTAP Premium",
"Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Explore", "Cloud Volumes
ONTAP Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP
BYOL", "Cloud Volumes ONTAP Explore", "Cloud Volumes ONTAP Standard",
"Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP BYOL"],
                "isDefault": false
        }, {
                "size": {
                        "size": 1.0,
                        "unit": "TB"
                },
                "description": "",
                "supportedOccmLicenses": ["Explore (hourly)", "Standard
(hourly)", "Standard (BYOL)", "Cloud Volumes ONTAP Explore", "Cloud
Volumes ONTAP Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes
```

ONTAP BYOL", "Cloud Volumes ONTAP Explore", "Cloud Volumes ONTAP
Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP BYOL",
"Cloud Volumes ONTAP Capacity Based Charging", "Cloud Volumes ONTAP
Capacity Based Charging", "Cloud Volumes ONTAP Explore", "Cloud Volumes
ONTAP Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP
BYOL", "Cloud Volumes ONTAP Standard", "Cloud Volumes ONTAP Premium",
"Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Explore", "Cloud Volumes
ONTAP Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP
BYOL", "Cloud Volumes ONTAP Explore", "Cloud Volumes ONTAP Standard",
"Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP BYOL"],
                "isDefault": true
            }, {
                "size": {
                    "size": 2.0,
                    "unit": "TB"
                },
                "description": "",
                "supportedOccmLicenses": ["Explore (hourly)", "Standard
(hourly)", "Standard (BYOL)", "Cloud Volumes ONTAP Explore", "Cloud
Volumes ONTAP Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes
ONTAP BYOL", "Cloud Volumes ONTAP Explore", "Cloud Volumes ONTAP
Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP BYOL",
"Cloud Volumes ONTAP Capacity Based Charging", "Cloud Volumes ONTAP
Capacity Based Charging", "Cloud Volumes ONTAP Explore", "Cloud Volumes
ONTAP Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP
BYOL", "Cloud Volumes ONTAP Standard", "Cloud Volumes ONTAP Premium",
"Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Explore", "Cloud Volumes
ONTAP Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP
BYOL", "Cloud Volumes ONTAP Explore", "Cloud Volumes ONTAP Standard",
"Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP BYOL"],
                "isDefault": false
            }, {
                "size": {
                    "size": 4.0,
                    "unit": "TB"
                },
                "description": "",
                "supportedOccmLicenses": ["Standard (hourly)", "Standard
(BYOL)", "Cloud Volumes ONTAP Standard", "Cloud Volumes ONTAP Premium",
"Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Standard", "Cloud Volumes
ONTAP Premium", "Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Capacity
Based Charging", "Cloud Volumes ONTAP Capacity Based Charging", "Cloud
Volumes ONTAP Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes
ONTAP BYOL", "Cloud Volumes ONTAP Standard", "Cloud Volumes ONTAP
Premium", "Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Standard",
"Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP BYOL", "Cloud Volumes

ONTAP Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP
BYOL"],
                "isDefault": **false**
            }, {
                "size": {
                    "size": **8.0**,
                    "unit": "TB"
                },
                "description": "",
                "supportedOccmLicenses": ["Standard (hourly)", "Standard
(BYOL)", "Cloud Volumes ONTAP Standard", "Cloud Volumes ONTAP Premium",
"Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Standard", "Cloud Volumes
ONTAP Premium", "Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Capacity
Based Charging", "Cloud Volumes ONTAP Capacity Based Charging", "Cloud
Volumes ONTAP Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes
ONTAP BYOL", "Cloud Volumes ONTAP Standard", "Cloud Volumes ONTAP
Premium", "Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Standard",
"Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP BYOL", "Cloud Volumes
ONTAP Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP
BYOL"],
                "isDefault": **false**
            }, {
                "size": {
                    "size": **16.0**,
                    "unit": "TB"
                },
                "description": "",
                "supportedOccmLicenses": ["Standard (BYOL)", "Cloud
Volumes ONTAP Premium", "Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP
Premium", "Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Capacity Based
Charging", "Cloud Volumes ONTAP Capacity Based Charging", "Cloud Volumes
ONTAP Premium", "Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Premium",
"Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Premium", "Cloud Volumes
ONTAP BYOL", "Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP BYOL"],
                "isDefault": **false**
            }, {
                "size": {
                    "size": **32.0**,
                    "unit": "TB"
                },
                "description": "",
                "supportedOccmLicenses": ["Standard (BYOL)", "Cloud
Volumes ONTAP Premium", "Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP
Premium", "Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Capacity Based
Charging", "Cloud Volumes ONTAP Capacity Based Charging", "Cloud Volumes
ONTAP Premium", "Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Premium",

```
"Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Premium", "Cloud Volumes
ONTAP BYOL", "Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP BYOL"],
                    "isDefault": false
            }
        ]
    }, {
        "diskType": "Standard",
        "availabilityTypes": ["Standard_LRS"],
        "sizes": [{
                "size": {
                    "size": 100.0,
                    "unit": "GB"
                },
                "description": "",
                "supportedOccmLicenses": ["Explore (hourly)", "Standard
(hourly)", "Standard (BYOL)", "Cloud Volumes ONTAP Explore", "Cloud
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]
```

Get Azure storage account types for high availability pair

You can perform this workflow to retrieve the Azure storage account types for an HA working environment.

1. Get the storage account types

HTTP method	Path
GET	/occm/api/azure/ha/metadata/storage-account-types

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/azure/ha/metadata/storage-
account-types' --header 'x-agent-id: <AGENT_ID>' --header 'Authorization:
Bearer <ACCESS_TOKEN>' --header 'Content-Type: application/json'
```

Input

None

Output

The JSON output example includes the list of Azure storage account types.

JSON output example

```
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                    "supportedOccmLicenses": ["Explore (hourly)", "Standard
(hourly)", "Standard (BYOL)", "Cloud Volumes ONTAP Explore", "Cloud
Volumes ONTAP Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes
ONTAP BYOL", "Cloud Volumes ONTAP Explore", "Cloud Volumes ONTAP
Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP BYOL",
"Cloud Volumes ONTAP Capacity Based Charging", "Cloud Volumes ONTAP
Capacity Based Charging", "Cloud Volumes ONTAP Explore", "Cloud Volumes
ONTAP Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP
BYOL", "Cloud Volumes ONTAP Standard", "Cloud Volumes ONTAP Premium",
"Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Explore", "Cloud Volumes
ONTAP Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP
BYOL", "Cloud Volumes ONTAP Explore", "Cloud Volumes ONTAP Standard",
"Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP BYOL"],
                    "isDefault": false
                }, {
                    "size": {
                        "size": 4.0,
                        "unit": "TB"
                    },
                    "description": "",
                    "supportedOccmLicenses": ["Standard (hourly)", "Standard
(BYOL)", "Cloud Volumes ONTAP Standard", "Cloud Volumes ONTAP Premium",
"Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Standard", "Cloud Volumes
ONTAP Premium", "Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Capacity
Based Charging", "Cloud Volumes ONTAP Capacity Based Charging", "Cloud

Volumes ONTAP Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes
ONTAP BYOL", "Cloud Volumes ONTAP Standard", "Cloud Volumes ONTAP
Premium", "Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Standard",
"Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP BYOL", "Cloud Volumes
ONTAP Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP
BYOL"],
                    "isDefault": false
                }, {
                    "size": {
                        "size": 8.0,
                        "unit": "TB"
                    },
                    "description": "",
                    "supportedOccmLicenses": ["Standard (hourly)", "Standard
(BYOL)", "Cloud Volumes ONTAP Standard", "Cloud Volumes ONTAP Premium",
"Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Standard", "Cloud Volumes
ONTAP Premium", "Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Capacity
Based Charging", "Cloud Volumes ONTAP Capacity Based Charging", "Cloud
Volumes ONTAP Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes
ONTAP BYOL", "Cloud Volumes ONTAP Standard", "Cloud Volumes ONTAP
Premium", "Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Standard",
"Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP BYOL", "Cloud Volumes
ONTAP Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP
BYOL"],
                    "isDefault": false
                }, {
                    "size": {
                        "size": 16.0,
                        "unit": "TB"
                    },
                    "description": "",
                    "supportedOccmLicenses": ["Standard (BYOL)", "Cloud
Volumes ONTAP Premium", "Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP
Premium", "Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Capacity Based
Charging", "Cloud Volumes ONTAP Capacity Based Charging", "Cloud Volumes
ONTAP Premium", "Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Premium",
"Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Premium", "Cloud Volumes
ONTAP BYOL", "Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP BYOL"],
                    "isDefault": false
                }, {
                    "size": {
                        "size": 32.0,
                        "unit": "TB"
                    },
                    "description": "",
                    "supportedOccmLicenses": ["Standard (BYOL)", "Cloud

Volumes ONTAP Premium", "Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP
Premium", "Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Capacity Based
Charging", "Cloud Volumes ONTAP Capacity Based Charging", "Cloud Volumes
ONTAP Premium", "Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Premium",
"Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Premium", "Cloud Volumes
ONTAP BYOL", "Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP BYOL"],
                "isDefault": false
            }
        ]
    }, {
        "diskType": "StandardSSD",
        "availabilityTypes": ["StandardSSD_LRS"],
        "sizes": [{
                "size": {
                    "size": 100.0,
                    "unit": "GB"
                },
                "description": "",
                "supportedOccmLicenses": ["Explore (hourly)", "Standard
(hourly)", "Standard (BYOL)", "Cloud Volumes ONTAP Explore", "Cloud
Volumes ONTAP Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes
ONTAP BYOL", "Cloud Volumes ONTAP Explore", "Cloud Volumes ONTAP
Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP BYOL",
"Cloud Volumes ONTAP Capacity Based Charging", "Cloud Volumes ONTAP
Capacity Based Charging", "Cloud Volumes ONTAP Explore", "Cloud Volumes
ONTAP Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP
BYOL", "Cloud Volumes ONTAP Standard", "Cloud Volumes ONTAP Premium",
"Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Explore", "Cloud Volumes
ONTAP Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP
BYOL", "Cloud Volumes ONTAP Explore", "Cloud Volumes ONTAP Standard",
"Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP BYOL"],
                "isDefault": false
            }, {
                "size": {
                    "size": 500.0,
                    "unit": "GB"
                },
                "description": "",
                "supportedOccmLicenses": ["Explore (hourly)", "Standard
(hourly)", "Standard (BYOL)", "Cloud Volumes ONTAP Explore", "Cloud
Volumes ONTAP Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes
ONTAP BYOL", "Cloud Volumes ONTAP Explore", "Cloud Volumes ONTAP
Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP BYOL",
"Cloud Volumes ONTAP Capacity Based Charging", "Cloud Volumes ONTAP
Capacity Based Charging", "Cloud Volumes ONTAP Explore", "Cloud Volumes
ONTAP Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP

BYOL", "Cloud Volumes ONTAP Standard", "Cloud Volumes ONTAP Premium",
"Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Explore", "Cloud Volumes
ONTAP Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP
BYOL", "Cloud Volumes ONTAP Explore", "Cloud Volumes ONTAP Standard",
"Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP BYOL"],
                "isDefault": false
            }, {
                "size": {
                    "size": 1.0,
                    "unit": "TB"
                },
                "description": "",
                "supportedOccmLicenses": ["Explore (hourly)", "Standard
(hourly)", "Standard (BYOL)", "Cloud Volumes ONTAP Explore", "Cloud
Volumes ONTAP Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes
ONTAP BYOL", "Cloud Volumes ONTAP Explore", "Cloud Volumes ONTAP
Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP BYOL",
"Cloud Volumes ONTAP Capacity Based Charging", "Cloud Volumes ONTAP
Capacity Based Charging", "Cloud Volumes ONTAP Explore", "Cloud Volumes
ONTAP Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP
BYOL", "Cloud Volumes ONTAP Standard", "Cloud Volumes ONTAP Premium",
"Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Explore", "Cloud Volumes
ONTAP Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP
BYOL", "Cloud Volumes ONTAP Explore", "Cloud Volumes ONTAP Standard",
"Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP BYOL"],
                "isDefault": true
            }, {
                "size": {
                    "size": 2.0,
                    "unit": "TB"
                },
                "description": "",
                "supportedOccmLicenses": ["Explore (hourly)", "Standard
(hourly)", "Standard (BYOL)", "Cloud Volumes ONTAP Explore", "Cloud
Volumes ONTAP Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes
ONTAP BYOL", "Cloud Volumes ONTAP Explore", "Cloud Volumes ONTAP
Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP BYOL",
"Cloud Volumes ONTAP Capacity Based Charging", "Cloud Volumes ONTAP
Capacity Based Charging", "Cloud Volumes ONTAP Explore", "Cloud Volumes
ONTAP Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP
BYOL", "Cloud Volumes ONTAP Standard", "Cloud Volumes ONTAP Premium",
"Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Explore", "Cloud Volumes
ONTAP Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP
BYOL", "Cloud Volumes ONTAP Explore", "Cloud Volumes ONTAP Standard",
"Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP BYOL"],
                "isDefault": false

```
            }, {
                "size": {
                    "size": 4.0,
                    "unit": "TB"
                },
                "description": "",
                "supportedOccmLicenses": ["Standard (hourly)", "Standard
(BYOL)", "Cloud Volumes ONTAP Standard", "Cloud Volumes ONTAP Premium",
"Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Standard", "Cloud Volumes
ONTAP Premium", "Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Capacity
Based Charging", "Cloud Volumes ONTAP Capacity Based Charging", "Cloud
Volumes ONTAP Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes
ONTAP BYOL", "Cloud Volumes ONTAP Standard", "Cloud Volumes ONTAP
Premium", "Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Standard",
"Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP BYOL", "Cloud Volumes
ONTAP Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP
BYOL"],
                "isDefault": false
            }, {
                "size": {
                    "size": 8.0,
                    "unit": "TB"
                },
                "description": "",
                "supportedOccmLicenses": ["Standard (hourly)", "Standard
(BYOL)", "Cloud Volumes ONTAP Standard", "Cloud Volumes ONTAP Premium",
"Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Standard", "Cloud Volumes
ONTAP Premium", "Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Capacity
Based Charging", "Cloud Volumes ONTAP Capacity Based Charging", "Cloud
Volumes ONTAP Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes
ONTAP BYOL", "Cloud Volumes ONTAP Standard", "Cloud Volumes ONTAP
Premium", "Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Standard",
"Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP BYOL", "Cloud Volumes
ONTAP Standard", "Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP
BYOL"],
                "isDefault": false
            }, {
                "size": {
                    "size": 16.0,
                    "unit": "TB"
                },
                "description": "",
                "supportedOccmLicenses": ["Standard (BYOL)", "Cloud
Volumes ONTAP Premium", "Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP
Premium", "Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Capacity Based
Charging", "Cloud Volumes ONTAP Capacity Based Charging", "Cloud Volumes
```

```
ONTAP Premium", "Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Premium",
 "Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Premium", "Cloud Volumes
 ONTAP BYOL", "Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP BYOL"],
                "isDefault": false
            }, {
                "size": {
                    "size": 32.0,
                    "unit": "TB"
                },
                "description": "",
                "supportedOccmLicenses": ["Standard (BYOL)", "Cloud
 Volumes ONTAP Premium", "Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP
 Premium", "Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Capacity Based
 Charging", "Cloud Volumes ONTAP Capacity Based Charging", "Cloud Volumes
 ONTAP Premium", "Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Premium",
 "Cloud Volumes ONTAP BYOL", "Cloud Volumes ONTAP Premium", "Cloud Volumes
 ONTAP BYOL", "Cloud Volumes ONTAP Premium", "Cloud Volumes ONTAP BYOL"],
                "isDefault": false
            }
        ]
    }
]
```

Get Azure VNets

You can perform this workflow to retrieve the network extended information.

ⓘ Ensure that you've the Azure subscription ID. You can easily obtain the ID from the Azure portal.

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Get Azure VNets for single node

You can perform this workflow to retrieve the Azure VNets for a single node working environment.

1. Get the VNets

HTTP method	Path
GET	/occm/api/azure/vsa/metadata/vnets

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/azure/vsa/metadata/vnets?r
egion=<REGION>&subscriptionId=<SUBSCRIPTION_ID>' --header 'x-agent-id:
<AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>' --header
'Content-Type: application/json'
```

Input

Query parameters:

- <REGION> `region` string

- <SUBSCRIPTION_ID> `subscriptionId` string

- (Optional) `cloudProviderAccountId` string

Output

The JSON output example includes the list of Azure storage account types.

JSON output example

```
{
    "virtualNetworks": [
        {
            "name": "Vnet1",
            "id":
"/subscriptions/xxxxxxxx00000000000000/resourceGroups/occm_group_eastus2/p
roviders/Microsoft.Network/virtualNetworks/Vnet1",
            "cidrs": [
                {
                    "cidr": "10.0.0.0/16",
                    "subnets": [
                        {
                            "id":
"/subscriptions/xxxxxxxx00000000000000/resourceGroups/occm_group_eastus2/p
roviders/Microsoft.Network/virtualNetworks/Vnet1/subnets/Subnet1",
                            "cidr": "10.0.0.0/24",
                            "name": "Subnet1",
                            "availableIps": 250,
                            "minimumRequiredIps": 6
                        },
                        {
                            "id":
"/subscriptions/xxxxxxxx00000000000000/resourceGroups/occm_group_eastus2/p
roviders/Microsoft.Network/virtualNetworks/Vnet1/subnets/Subnet2",
                            "cidr": "10.0.1.0/24",
                            "name": "Subnet2",
                            "availableIps": 251,
```

```
                              "minimumRequiredIps": 6
                            },
                            {
                              "id":
"/subscriptions/xxxxxxxx00000000000000/resourceGroups/occm_group_eastus2/p
roviders/Microsoft.Network/virtualNetworks/Vnet1/subnets/ProxySubnet",
                              "cidr": "10.0.2.0/24",
                              "name": "ProxySubnet",
                              "availableIps": 245,
                              "minimumRequiredIps": 6
                            }
                        ]
                    }
                ],
                "resourceGroup": "occm_group_eastus2",
                "tags": []
            },
            {
                "name": "Vnet2",
                "id":
"/subscriptions/xxxxxxxx00000000000000/resourceGroups/occm_group_eastus2/p
roviders/Microsoft.Network/virtualNetworks/Vnet2",
                "cidrs": [
                    {
                        "cidr": "10.1.0.0/16",
                        "subnets": [
                            {
                              "id":
"/subscriptions/xxxxxxxx00000000000000/resourceGroups/occm_group_eastus2/p
roviders/Microsoft.Network/virtualNetworks/Vnet2/subnets/Subnet1",
                              "cidr": "10.1.0.0/24",
                              "name": "Subnet1",
                              "availableIps": 251,
                              "minimumRequiredIps": 6
                            },
                            {
                              "id":
"/subscriptions/xxxxxxxx00000000000000/resourceGroups/occm_group_eastus2/p
roviders/Microsoft.Network/virtualNetworks/Vnet2/subnets/Subnet2",
                              "cidr": "10.1.1.0/24",
                              "name": "Subnet2",
                              "availableIps": 251,
                              "minimumRequiredIps": 6
                            },
                            {
                              "id":
```

```
"/subscriptions/xxxxxxx00000000000000/resourceGroups/occm_group_eastus2/p
roviders/Microsoft.Network/virtualNetworks/Vnet2/subnets/ProxySubnet",
                          "cidr": "10.1.2.0/24",
                          "name": "ProxySubnet",
                          "availableIps": 251,
                          "minimumRequiredIps": 6
                    }
              ]
          }
      ],
      "resourceGroup": "occm_group_eastus2",
      "tags": []
  }
],
"securityGroups": [
    {
        "id":
"/subscriptions/xxxxxxx00000000000000/resourceGroups/occm_group_eastus2/p
roviders/Microsoft.Network/networkSecurityGroups/OCCM-SG-467",
        "name": "OCCM-SG-467",
        "resourceGroup": "occm_group_eastus2"
    },
    {
        "id":
"/subscriptions/xxxxxxx00000000000000/resourceGroups/occm_group_eastus2/p
roviders/Microsoft.Network/networkSecurityGroups/OCCM-SG-491",
        "name": "OCCM-SG-491",
        "resourceGroup": "occm_group_eastus2"
    },
    {
        "id":
"/subscriptions/xxxxxxx00000000000000/resourceGroups/occm_group_eastus2/p
roviders/Microsoft.Network/networkSecurityGroups/OCCM-SG-589",
        "name": "OCCM-SG-589",
        "resourceGroup": "occm_group_eastus2"
    }
]
}
```

Get Azure VNets for high availability pair

You can perform this workflow to retrieve the Azure network extended information for an HA working environment.

1. Get the VNets

HTTP method	Path
GET	/occm/api/azure/ha/metadata/vnets

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/azure/ha/metadata/vnets?re
gion=<REGION>&subscriptionId=<SUBSCRIPTION_ID>' --header 'x-agent-id:
<AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>' --header
'Content-Type: application/json'
```

Input

Query parameters:

- <REGION> `region` string

- <SUBSCRIPTION_ID> `subscriptionId` string

- (Optional) `cloudProviderAccountId` string

Output

The JSON output example includes the list of Azure storage account types.

JSON output example

```
{
    "virtualNetworks": [
        {
            "name": "Vnet1",
            "id":
"/subscriptions/xxxxxxxx00000000000000/resourceGroups/occm_group_eastus2/p
roviders/Microsoft.Network/virtualNetworks/Vnet1",
            "cidrs": [
                {
                    "cidr": "10.0.0.0/16",
                    "subnets": [
                        {
                            "id":
"/subscriptions/xxxxxxxx00000000000000/resourceGroups/occm_group_eastus2/p
roviders/Microsoft.Network/virtualNetworks/Vnet1/subnets/Subnet1",
                            "cidr": "10.0.0.0/24",
                            "name": "Subnet1",
                            "availableIps": 250,
                            "minimumRequiredIps": 6
                        },
                        {
                            "id":
"/subscriptions/xxxxxxxx00000000000000/resourceGroups/occm_group_eastus2/p
```

```
roviders/Microsoft.Network/virtualNetworks/Vnet1/subnets/Subnet2",
                        "cidr": "10.0.1.0/24",
                        "name": "Subnet2",
                        "availableIps": 251,
                        "minimumRequiredIps": 6
                    },
                    {
                        "id":
"/subscriptions/xxxxxxxx00000000000000/resourceGroups/occm_group_eastus2/p
roviders/Microsoft.Network/virtualNetworks/Vnet1/subnets/ProxySubnet",
                        "cidr": "10.0.2.0/24",
                        "name": "ProxySubnet",
                        "availableIps": 245,
                        "minimumRequiredIps": 6
                    }
                ]
            }
        ],
        "resourceGroup": "occm_group_eastus2",
        "tags": []
    },
    {
        "name": "Vnet2",
        "id":
"/subscriptions/xxxxxxxx00000000000000/resourceGroups/occm_group_eastus2/p
roviders/Microsoft.Network/virtualNetworks/Vnet2",
        "cidrs": [
            {
                "cidr": "10.1.0.0/16",
                "subnets": [
                    {
                        "id":
"/subscriptions/dxxxxxxxx000000000000008/resourceGroups/occm_group_eastus2
/providers/Microsoft.Network/virtualNetworks/Vnet2/subnets/Subnet1",
                        "cidr": "10.1.0.0/24",
                        "name": "Subnet1",
                        "availableIps": 251,
                        "minimumRequiredIps": 6
                    },
                    {
                        "id":
"/subscriptions/xxxxxxxx00000000000000/resourceGroups/occm_group_eastus2/p
roviders/Microsoft.Network/virtualNetworks/Vnet2/subnets/Subnet2",
                        "cidr": "10.1.1.0/24",
                        "name": "Subnet2",
                        "availableIps": 251,
```

```
                            "minimumRequiredIps": 6
                },
                {
                        "id":
"/subscriptions/xxxxxxxx00000000000000/resourceGroups/occm_group_eastus2/p
roviders/Microsoft.Network/virtualNetworks/Vnet2/subnets/ProxySubnet",
                        "cidr": "10.1.2.0/24",
                        "name": "ProxySubnet",
                        "availableIps": 251,
                        "minimumRequiredIps": 6
                }
            ]
        }
    ],
    "resourceGroup": "occm_group_eastus2",
    "tags": []
}
],
"securityGroups": [
    {
        "id":
"/subscriptions/dxxxxxxxx00000000000000/resourceGroups/occm_group_eastus2/
providers/Microsoft.Network/networkSecurityGroups/OCCM-SG-467",
        "name": "OCCM-SG-467",
        "resourceGroup": "occm_group_eastus2"
    },
    {
        "id":
"/subscriptions/xxxxxxxx00000000000000/resourceGroups/occm_group_eastus2/p
roviders/Microsoft.Network/networkSecurityGroups/OCCM-SG-491",
        "name": "OCCM-SG-491",
        "resourceGroup": "occm_group_eastus2"
    },
    {
        "id":
"/subscriptions/xxxxxxxx00000000000000/resourceGroups/occm_group_eastus2/p
roviders/Microsoft.Network/networkSecurityGroups/OCCM-SG-589",
        "name": "OCCM-SG-589",
        "resourceGroup": "occm_group_eastus2"
    }
]
}
```

Get Azure availability zones

You can perform this workflow to retrieve the Azure availability zones by region.

Ensure that you've the Azure subscription ID. You can easily obtain the ID from the Azure portal.

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node
- HA pair

Get availability zones for single node

You can use this workflow to retrieve the availability zones by region for a single node working environment.

1. Get the availability zones

HTTP method	Path
GET	/occm/api/azure/vsa/metadata/availability-zones

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/azure/vsa/metadata/availab
ility-zones?region=<REGION>&subscriptionId=<SUBSCRIPTION_ID>' --header 'x-
agent-id: <AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
--header 'Content-Type: application/json'
```

Input

Query parameters:

- <REGION> `region` string
- (Optional) <SUBSCRIPTION_ID> `subscriptionId` string
- (Optional) `cloudProviderAccountId` string

Output

The JSON output example includes the list of Azure availability zones.

JSON output example

```
{
    "region": "eastus2",
    "zones": [
        1,
        3,
        2
    ]
}
```

Get availability zones for high availability pair

You can use this workflow to retrieve the availability zones by region for a high availability pair working environment.

1. Get the availability zones

HTTP method	Path
GET	/occm/api/azure/ha/metadata/availability-zones

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/azure/ha/metadata/availabi
lity-zones?region=<REGION>&subscriptionId=<SUBSCRIPTION_ID>' --header 'x-
agent-id: <AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
--header 'Content-Type: application/json'
```

Input

Query parameters:

- <REGION> `region` string

- (Optional) <SUBSCRIPTION_ID> `subscriptionId` string

- (Optional) `cloudProviderAccountId` string

Output

The JSON output example includes the list of Azure availability zones.

JSON output example

```
{
    "region": "eastus2",
    "zones": [
        1,
        3,
        2
    ]
}
```

HTTP method	Path
GET	/occm/api/azure/ha/metadata/availability-zones

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/azure/ha/metadata/availabi
lity-zones?region=<REGION>&subscriptionId=<SUBSCRIPTION_ID>' --header 'x-
agent-id: <AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
--header 'Content-Type: application/json'
```

Input

Query parameters:

- <REGION> `region` string

- (Optional) <SUBSCRIPTION_ID> `subscriptionId` string

- (Optional) `cloudProviderAccountId` string

Output

The JSON output example includes the list of Azure storage account types.

JSON output example

```
{
    "region": "eastus2",
    "zones": [
        1,
        3,
        2
    ]
}
```

Get Azure packages

You can perform this workflow to retrieve the pre-defined packages configuration.

Choose the correct workflow depending on the type of Cloud Volumes ONTAP deployment:

- Single Node

- HA pair

Get packages for single node

You can use this workflow to retrieve the packages information for a single node working environment.

1. Get the packages

HTTP method	Path
GET	/occm/api/azure/vsa/metadata/packages

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/azure/vsa/metadata/package
s' --header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer
<ACCESS_TOKEN>' --header 'Content-Type: application/json'
```

Input

None

Output

The JSON output example includes the packages information.

JSON output example

```
Output example  [
    {
        "name": "azure_poc",
        "displayName": "POC and small workloads",
        "description": "No description yet",
        "licenseType": "azure-cot-explore-paygo",
        "instanceTypeMapping": [
            {
                "region": "default",
                "instanceType": "Standard_DS3_v2"
            }
        ],
        "diskType": "Premium_LRS",
        "diskSize": {
            "size": 100.0,
            "unit": "GB"
        },
        "capacityTier": null,
        "instanceTenancy": null,
        "writingSpeedState": "NORMAL"
    },
    {
        "name": "azure_standard",
        "displayName": "Database and application data production
workloads",
        "description": "No description yet",
        "licenseType": "azure-cot-standard-paygo",
```

```json
    "instanceTypeMapping": [
        {
            "region": "default",
            "instanceType": "Standard_DS4_v2"
        }
    ],
    "diskType": "Premium_LRS",
    "diskSize": {
        "size": 100.0,
        "unit": "GB"
    },
    "capacityTier": null,
    "instanceTenancy": null,
    "writingSpeedState": "NORMAL"
},
{

    "name": "azure_dr",
    "displayName": "Cost effective DR",
    "description": "No description yet",
    "licenseType": "azure-cot-standard-paygo",
    "instanceTypeMapping": [
        {
            "region": "default",
            "instanceType": "Standard_DS4_v2"
        }
    ],
    "diskType": "Standard_LRS",
    "diskSize": {
        "size": 100.0,
        "unit": "GB"
    },
    "capacityTier": null,
    "instanceTenancy": null,
    "writingSpeedState": "NORMAL"
},
{

    "name": "azure_fastest",
    "displayName": "Highest performance production workloads",
    "description": "No description yet",
    "licenseType": "azure-cot-premium-paygo",
    "instanceTypeMapping": [
        {
            "region": "default",
            "instanceType": "Standard_DS5_v2"
        }
    ],
```

```
        "diskType": "Premium_LRS",
        "diskSize": {
            "size": 100.0,
            "unit": "GB"
        },
        "capacityTier": null,
        "instanceTenancy": null,
        "writingSpeedState": "NORMAL"
    }
]
```

Get packages for high availability pair

You can use this workflow to retrieve the packages information for an HA working environment.

1. Get the packages

HTTP method	Path
GET	/occm/api/azure/ha/metadata/packages

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/azure/ha/metadata/packages
' --header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer
<ACCESS_TOKEN>' --header 'Content-Type: application/json'
```

Input

None

Output

The JSON output example includes the packages information.

JSON output example

```
Output example   [
    {
        "name": "azure_poc",
        "displayName": "POC and small workloads",
        "description": "No description yet",
        "licenseType": "azure-cot-explore-paygo",
        "instanceTypeMapping": [
            {
                "region": "default",
                "instanceType": "Standard_DS3_v2"
            }
        ],
```

```
        "diskType": "Premium_LRS",
        "diskSize": {
            "size": 100.0,
            "unit": "GB"
        },
        "capacityTier": null,
        "instanceTenancy": null,
        "writingSpeedState": "NORMAL"
    },
    {
        "name": "azure_standard",
        "displayName": "Database and application data production
workloads",
        "description": "No description yet",
        "licenseType": "azure-cot-standard-paygo",
        "instanceTypeMapping": [
            {
                "region": "default",
                "instanceType": "Standard_DS4_v2"
            }
        ],
        "diskType": "Premium_LRS",
        "diskSize": {
            "size": 100.0,
            "unit": "GB"
        },
        "capacityTier": null,
        "instanceTenancy": null,
        "writingSpeedState": "NORMAL"
    },
    {
        "name": "azure_dr",
        "displayName": "Cost effective DR",
        "description": "No description yet",
        "licenseType": "azure-cot-standard-paygo",
        "instanceTypeMapping": [
            {
                "region": "default",
                "instanceType": "Standard_DS4_v2"
            }
        ],
        "diskType": "Standard_LRS",
        "diskSize": {
            "size": 100.0,
            "unit": "GB"
        },
```

```
        "capacityTier": null,
        "instanceTenancy": null,
        "writingSpeedState": "NORMAL"
    },
    {

        "name": "azure_fastest",
        "displayName": "Highest performance production workloads",
        "description": "No description yet",
        "licenseType": "azure-cot-premium-paygo",
        "instanceTypeMapping": [
            {
                "region": "default",
                "instanceType": "Standard_DS5_v2"
            }
        ],
        "diskType": "Premium_LRS",
        "diskSize": {
            "size": 100.0,
            "unit": "GB"
        },
        "capacityTier": null,
        "instanceTenancy": null,
        "writingSpeedState": "NORMAL"
    }
]
```

Get packages for high availability pair

You can use this workflow to retrieve the packages for an HA working environment.

1. Get the packages

HTTP method	Path
GET	/occm/api/azure/ha/metadata/packages

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/azure/ha/metadata/packages
' --header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer
<ACCESS_TOKEN>' --header 'Content-Type: application/json'
```

Input

None

Output

The JSON output example includes the list of Azure storage account types.

JSON output example

```
Output example  [
    {
        "name": "azure_poc",
        "displayName": "POC and small workloads",
        "description": "No description yet",
        "licenseType": "azure-cot-explore-paygo",
        "instanceTypeMapping": [
            {
                "region": "default",
                "instanceType": "Standard_DS3_v2"
            }
        ],
        "diskType": "Premium_LRS",
        "diskSize": {
            "size": 100.0,
            "unit": "GB"
        },
        "capacityTier": null,
        "instanceTenancy": null,
        "writingSpeedState": "NORMAL"
    },
    {
        "name": "azure_standard",
        "displayName": "Database and application data production
workloads",
        "description": "No description yet",
        "licenseType": "azure-cot-standard-paygo",
        "instanceTypeMapping": [
            {
                "region": "default",
                "instanceType": "Standard_DS4_v2"
            }
        ],
        "diskType": "Premium_LRS",
        "diskSize": {
            "size": 100.0,
            "unit": "GB"
        },
        "capacityTier": null,
        "instanceTenancy": null,
        "writingSpeedState": "NORMAL"
    },
```

```
    {
        "name": "azure_dr",
        "displayName": "Cost effective DR",
        "description": "No description yet",
        "licenseType": "azure-cot-standard-paygo",
        "instanceTypeMapping": [
            {
                "region": "default",
                "instanceType": "Standard_DS4_v2"
            }
        ],
        "diskType": "Standard_LRS",
        "diskSize": {
            "size": 100.0,
            "unit": "GB"
        },
        "capacityTier": null,
        "instanceTenancy": null,
        "writingSpeedState": "NORMAL"
    },
    {
        "name": "azure_fastest",
        "displayName": "Highest performance production workloads",
        "description": "No description yet",
        "licenseType": "azure-cot-premium-paygo",
        "instanceTypeMapping": [
            {
                "region": "default",
                "instanceType": "Standard_DS5_v2"
            }
        ],
        "diskType": "Premium_LRS",
        "diskSize": {
            "size": 100.0,
            "unit": "GB"
        },
        "capacityTier": null,
        "instanceTenancy": null,
        "writingSpeedState": "NORMAL"
    }
]
```

Miscellaneous

Create Azure cloud provider account

You can use this workflow to create an Azure cloud provider account. An Azure cloud provider account holds Azure access keys required to perform actions in Azure.

Before you begin

You must have Azure credentials.

1. Get the account

HTTP method	Path
GET	/occm/api/accounts?providerType=AZURE

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/accounts?providerType=AZUR
E' --header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer
<ACCESS_TOKEN>' --header 'Content-Type: application/json'
```

Input

   Query parameter (Optional):

`providerType` string

Output

   The JSON output provides an example of the cloud provider details.

JSON output example

```
{
    "awsAccounts": [],
    "azureAccounts": [
        {
            "publicId": "ManagedServiceIdentity",
            "accountName": "Managed Service Identity",
            "accountType": "SERVICE_IDENTITY",
            "tenantId": "",
            "applicationId": "",
            "occmRole": "Azure",
            "vsaList": [
                {
                    "publicId": "VsaWorkingEnvironment-uFPaNkrv",
                    "name": "Azure123",
                    "workingEnvironmentType": "AZURE"
                }
            ]
        }
    ],
    "gcpStorageAccounts": [],
    "nssAccounts": []
}
```

GCP workflows

Before you begin

There are several workflows that you can use to deploy and manage Cloud Volumes ONTAP in Google Cloud.

> Review the Get started section before using any of the Cloud Manager REST API workflows.

Workflow categories

The GCP workflows are organized into the following categories:

- Working environments
- Aggregates
- Volumes
- Metadata

See Understanding the workflow processes for more information on these categories.

(i) Cloud Volumes ONTAP requires a Google Cloud service account to run several background automation tasks such as data tiering and backup service. Learn more about GCP service accounts.

Connector setup

You must have a **Connector** for the cloud environment before creating a working environment and performing other activities using the workflows. You can create a Connector using the Cloud Manager web UI. When you create a Connector, Cloud Manager adds the GCP cloud provider account that you deployed the Connector in to your list of available accounts. Your GCP account needs to have the right permissions in order to create a Connector.

Review Learn about GCP Connectors to know how to create and deploy a GCP Connector.

Working environments

Create a working environment with PAYGO

You can use this workflow to create a new GCP Cloud Volumes ONTAP working environment using pay-as-you-go (PAYGO) subscription.

> **Note the following when using PAYGO**:
>
> - A marketplace subscription is required.
> - A NetApp Support Site (NSS) key is recommended to register the system for support, but it's not required.
> - You can add more volumes after creating the working environment. You can choose to create a volume using either NFS, CIFS, or iSCSI protocol.

1. Select the region

Perform the workflow Get regions and do the following:

- Choose the `name` value of the required region for the `region` parameter in step 8.
- Choose one of the VPCs. Choose `name` for `vpcId` parameter and `subnets: path` for `subnetId` and `subnetPath` parameters in step 8.

2. Select the workspace

Perform the workflow Get tenants and choose the `workspacePublicId` value for the `tenantId` parameter in step 8.

3. Select the projects

Perform the workflow Get projects and choose the `projectId` value of the required project for `project` parameter in step 8.

4. Select the permutations

Perform the workflow Get permutations and choose the `ontapVersion`, `license: type`, and `instanceType` values of the required `vsaMetadata` parameter in step 8.

5. Select the packages configuration

Perform the workflow Get packages and search the `licenseType` from permutations:

- Choose the `name` for `packageName` parameter.

- Choose the `diskSize` for `gcpVolumeSize`.

- Choose the `diskType` and `writingSpeedState` for the `gcpVolumeType` and `writingSpeedState` parameters.

6. Select the service account

Perform the workflow Get service accounts workflow and choose the `email` value of the required service accounts for the `gcpServiceAccount` parameter in step 8.

7. (Optional) Obtain an NSS key

An NSS key is **optional** when using PAYGO subscription. If needed, you can create a key or select an existing key, and include the NSS key in the `nssAccount` parameter in step 8.

- To create a new NSS key using the Cloud Manager web user interface, perform the task Generate NSS user ID and choose the `id`.

- To select an existing NSS key, perform the Get NSS keys workflow and choose the `id` value of the required NSS user.

8. Create the working environment

HTTP method	Path
POST	/occm/api/gcp/vsa/working-environments

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/gcp/vsa/working-
environments' --header 'x-agent-id: <AGENT_ID>' //<1> --header
'Authorization: Bearer <ACCESS_TOKEN>' //<2> ---header 'Content-Type:
application/json' --d @JSONinput
```

(1) Replace <AGENT_ID> with your agent ID.
(2) Replace <ACCESS_TOKEN> with your obtained bearer access token.

Input

The JSON input example includes the minimum list of parameters.

This request uses PAYGO as indicated in the `licenseType` parameter.

JSON input example

```json
{
  "name": "zivgcp01we03",
  "svmPassword": "password",
  "vpcId": "default",
  "region": "us-west1-b",
  "tenantId": "tenantID",
  "subnetPath": "projects/occm-dev/regions/us-west1/subnetworks/default",
  "subnetId": "projects/occm-dev/regions/us-west1/subnetworks/default",
  "dataEncryptionType": "GCP",
  "vsaMetadata": {
    "ontapVersion": "ONTAP-9.9.0X4.T1.gcp",
    "licenseType": "gcp-cot-explore-paygo",
    "instanceType": "custom-4-16384"
  },
  "gcpVolumeSize": {
    "size": 100,
    "unit": "GB"
  },
  "gcpVolumeType": "pd-ssd",
  "gcpLabels": [],
  "writingSpeedState": "NORMAL",
  "packageName": "gcp_poc",
  "gcpServiceAccount": "xxxxx@occm-dev.iam.xxx.com",
  "project": "occm-dev",
  "backupVolumesToCbs": false
}
```

JSON output example

```
{
    "publicId": "vsaworkingenvironment-2qkd75xv",
    "name": "zivgcp01we03",
    "tenantId": "tenantIDshownhere",
    "svmName": "svm_zivgcp01we03",
    "creatorUserEmail": "user_email",
    "status": null,
    "providerProperties": null,
    "reservedSize": null,
    "clusterProperties": null,
    "ontapClusterProperties": null,
    "cloudProviderName": "GCP",
    "snapshotPolicies": null,
    "actionsRequired": null,
    "activeActions": null,
    "replicationProperties": null,
    "schedules": null,
    "svms": null,
    "workingEnvironmentType": "VSA",
    "supportRegistrationProperties": null,
    "supportRegistrationInformation": null,
    "capacityFeatures": null,
    "encryptionProperties": null,
    "supportedFeatures": null,
    "isHA": false,
    "haProperties": null,
    "k8sProperties": null,
    "fpolicyProperties": null,
    "saasProperties": null,
    "cbsProperties": null,
    "complianceProperties": null,
    "monitoringProperties": null
}
```

Create a working environment with BYOL

You can use this workflow to create a new Cloud Volumes ONTAP working environment using bring your own license (BYOL) licensing.

> **Note the following when using BYOL licensing**:
>
> - A marketplace subscription is not required.
>
> - A NetApp Support Site (NSS) key is required to register the system for support.
>
> - You can add more volumes after creating the working environment. You can choose to create a volume using either NFS, CIFS, or iSCSI protocol.

1. Select the region

Perform the workflow Get regions and do the following:

- Choose the `name` value of the required region for the `region` parameter in step 8.

- Choose one of the VPCs. Choose `name` for `vpcId` parameter and `subnets: path` for `subnetId` and `subnetPath` parameters in step 8.

2. Select the workspace

Perform the workflow Get tenants and choose the `workspacePublicId` value for the `tenantId` parameter in step 8.

3. Select the project

Perform the workflow Get projects and choose the `projectId` value of the required project for `project` parameter in step 8.

4. Select the permutations

Perform the workflow Get permutations and choose the `ontapVersion`, `license: type`, and `instanceType` values of the required `vsaMetadata` parameter in step 8.

5. Select the packages configuration

Perform the workflow Get packages and search the `licenseType` from permutations:

- Choose the `name` for `packageName` parameter.

- Choose the `diskSize` for `gcpVolumeSize`.

- Choose the `diskType` and `writingSpeedState` for the `gcpVolumeType` and `writingSpeedState` parameters.

6. Select the service account

Perform the workflow Get service accounts workflow and choose the `email` value of the required service accounts for the `gcpServiceAccount` parameter in step 8.

7. Obtain an NSS key

An NSS key is **required** when using BYOL subscription. If needed, you can create a key or select an existing key, and include the NSS key in the `nssAccount` parameter in step 8.

- To create a new NSS key using the Cloud Manager web user interface, perform the task Generate NSS user ID and choose the `id`.

- To select an existing NSS key, perform the Get NSS keys workflow and choose the `id` value of the required NSS user.

8. Create the working environment

HTTP method	Path
POST	/occm/api/gcp/vsa/working-environments

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/gcp/vsa/working-
environments' --header 'x-agent-id: <AGENT_ID>' //<1> --header
'Authorization: Bearer <ACCESS_TOKEN>' //<2> ---header 'Content-Type:
application/json' --d @JSONinput
```

(1) Replace <AGENT_ID> with your agent ID.
(2) Replace <ACCESS_TOKEN> with your obtained bearer access token.

Input

The JSON input example includes the minimum list of parameters. This request uses BYOL licensing as indicated in the `licenseType` parameter. The `serialNumber` is required.

JSON input example

```
{
name: "gcpwe123"
backupVolumesToCbs: true
capacityTier: "cloudStorage"
dataEncryptionType: "GCP"
enableCompliance: true
gcpLabels: []
gcpServiceAccount: "fabric-pool@occm-dev.iam.gserviceaccount.com"
gcpVolumeSize: {size: 500, unit: "GB", _identifier: "500 GB"}
gcpVolumeType: "pd-ssd"
name: "gcpwe123"
nssAccount: "0xxx-000-4c70-9cee-304f36b74db6"
packageName: "gcp_poc"
project: "occm-dev"
region: "europe-west3-c"
serialNumber: "00000108000000000000"
subnetId: "projects/occm-dev/regions/europe-west3/subnetworks/vpc4qa-2-
europe-west3"
subnetPath: "projects/occm-dev/regions/europe-west3/subnetworks/vpc4qa-2-
europe-west3"
svmPassword: "Netapp123"
tenantId: "workspaceNqaJyVMz"
tierLevel: "standard"
volume: {
  exportPolicyInfo: {
    policyType: "custom",
    ips: ["172.22.13.0/24"],
    nfsVersion: ["nfs3", "nfs4"]
  }
}
vpcId: "vpc4qa-2"
vsaMetadata: {
  ontapVersion: "ONTAP-9.10.1RC1.T1.gcp",
  licenseType: "gcp-cot-premium-byol"
}
instanceType: "n2-standard-4"
licenseType: "gcp-cot-premium-byol"
ontapVersion: "ONTAP-9.10.1RC1.T1.gcp"
writingSpeedState: "NORMAL"
}
```

Output

The JSON output example includes an example of the `VsaWorkingEnvironmentRresponse` response.

JSON output example

En

```
{
  "publicId": "vsaworkingenvironment-9nhkrtu0",
  "name": "yuvalbyol3101",
  "tenantId": "tenantIDshownhere",
  "svmName": "svm_yuvalbyol3101",
  "creatorUserEmail": "user_email",
  "status": null,
  "providerProperties": null,
  "reservedSize": null,
  "clusterProperties": null,
  "ontapClusterProperties": null,
  "cloudProviderName": "GCP",
  "snapshotPolicies": null,
  "actionsRequired": null,
  "activeActions": null,
  "replicationProperties": null,
  "schedules": null,
  "svms": null,
  "workingEnvironmentType": "VSA",
  "supportRegistrationProperties": null, "supportRegistrationInformation":
 null,
  "capacityFeatures": null,
  "encryptionProperties": null,
  "supportedFeatures": null,
  "isHA": false,
  "haProperties": null,
  "fpolicyProperties": null,
  "saasProperties": null,
  "cbsProperties": null,
  "complianceProperties": null,
  "monitoringProperties": null,
  "licensesInformation": null
}
```

Get working environment

You can retrieve the public identifier, working environment ID, the storage virtual machine name for Cloud Volumes ONTAP working environments and other Cloud Volumes ONTAP related details (visible to currently logged in user) which would be used in other workflows.

1. Get the working environments

HTTP method	Path
GET	/occm/api/gcp/vsa/working-environments/{workingEnvironmentId}

curl

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/gcp/vsa/working-
environments' --header 'Content-Type: application/json' --header 'x-agent-
id: <AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

(Optional) Query parameters:

- `fields` string

- `tenantId` string

Output

The JSON output example includes details of a single node Google Cloud working environment.

JSON output example

```
[
    {
        "publicId": "vsaworkingenvironment-sfrf3wvj",
        "name": "zivgcp01we02",
        "tenantId": "tenantIDshownhere",
        "svmName": "svm_zivgcp01we02",
        "creatorUserEmail": "user_email",
        "status": null,
        "providerProperties": null,
        "reservedSize": null,
        "clusterProperties": null,
        "ontapClusterProperties": null,
        "cloudProviderName": "GCP",
        "snapshotPolicies": null,
        "actionsRequired": null,
        "activeActions": null,
        "replicationProperties": null,
        "schedules": null,
        "svms": null,
        "workingEnvironmentType": "VSA",
        "supportRegistrationProperties": null,
        "supportRegistrationInformation": [],
        "capacityFeatures": null,
        "encryptionProperties": null,
        "supportedFeatures": null,
        "isHA": false,
        "haProperties": null,
        "k8sProperties": null,
        "fpolicyProperties": null,
```

```
        "saasProperties": null,
        "cbsProperties": null,
        "complianceProperties": null,
        "monitoringProperties": null
    },
    {

        "publicId": "vsaworkingenvironment-2qkd75xv",
        "name": "zivgcp01we03",
        "tenantId": "tenantIdshownhere",
        "svmName": "svm_zivgcp01we03",
        "creatorUserEmail": "user_email",
        "status": null,
        "providerProperties": null,
        "reservedSize": null,
        "clusterProperties": null,
        "ontapClusterProperties": null,
        "cloudProviderName": "GCP",
        "snapshotPolicies": null,
        "actionsRequired": null,
        "activeActions": null,
        "replicationProperties": null,
        "schedules": null,
        "svms": null,
        "workingEnvironmentType": "VSA",
        "supportRegistrationProperties": null,
        "supportRegistrationInformation": [],
        "capacityFeatures": null,
        "encryptionProperties": null,
        "supportedFeatures": null,
        "isHA": false,
        "haProperties": null,
        "k8sProperties": null,
        "fpolicyProperties": null,
        "saasProperties": null,
        "cbsProperties": null,
        "complianceProperties": null,
        "monitoringProperties": null
    }
]
```

Delete a working environment

You can delete an existing GCP Cloud Volumes ONTAP working environment.

1. Select the working environment

Perform the workflow Get working environment and choose the `publicId` value of the working environment for the `workingEnvironmentId` path parameter.

2. Delete the working environment

HTTP method	Path
DELETE	/occm/api/gcp/vsa/working-environments/{workingEnvironmentId}

Curl example

```
curl --location --request DELETE
'https://cloudmanager.cloud.netapp.com/occm/api/gcp/vsa/working-
environments/<WORKING_ENV_ID>' --header 'Content-Type: application/json'
--header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer
<ACCESS_TOKEN>'
```

Input

Path parameter <WORKING_ENV_ID> (`workingEnvironmentId`) string

(Optional) Query parameters:

* `localDelete` boolean

  If `true` the Cloud Volumes ONTAP instance in the cloud is not terminated, but Cloud Manager no longer manages it (default is `false`). If `false` the Cloud Volumes ONTAP instance is deleted including all the cloud resources created for this working environment.

* `forceDelete` boolean

  If `true` the working environment is deleted even if it is part of one or more SnapMirror relationships (default is `false`).

  Output
  None

Create CIFS server configuration

If you want to create CIFS volumes on your Cloud Volumes ONTAP system, you first need to configure the CIFS server. You can choose to set up the CIFS server in a workgroup or in an Active Directory domain. Review the ONTAP documentation for more information.

Choose the workflow that is specific to your goal:

* Set up a CIFS server in a workgroup
* Set up a CIFS server in an Active Directory domain

Set up a CIFS server in a workgroup

You can configure a CIFS server in a workgroup when the Microsoft Active Directory domain infrastructure is not available.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` value for the working environment used in the `workingEnvironmentId` path parameter.

2. Create the CIFS configuration

Create the CIFS server configuration.

HTTP method	Path
POST	/occm/api/gcp/vsa/working-environments/{workingEnvironmentId}/cifs-workgroup

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/gcp/vsa/working-
environments/<WORKING_ENV_ID>/cifs-workgroup' --header 'Content-Type:
application/json' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input
- Path parameter <WORKING_ENV_ID> `workingEnvironmentId` string

JSON input example

```
{
  "serverName": "SMB_SERVER02",
  "workgroupName": "workgroup02",
  "svmName": "svm_ziv01we01"
}
```

Output
    None.

Set up a CIFS server in an Active Directory domain

You can create a CIFS server on the SVM and specify the Active Directory (AD) domain to which it belongs.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` value for the working environment used in the `workingEnvironmentId` path parameter.

2. Determine the Active Directory configuration

You need the following configuration parameters for an Active Directory server.

Input parameter	Description
dnsDomain	Use the Active Directory domain as the DNS name.
ipAddresses	Define the primary DNS IP address and optionally add a secondary IP address.
netBIOS	Use the CIFS server NetBIOS name.
organizationalUnit	Include the organizational unit as appropriate.
activeDirectoryDomain	Set the Active Directory domain to join.
activeDirectoryUsername	A username with authorization to join the domain.
activeDirectoryPassword	The password for the authorized username.

3. Create the CIFS configuration

Create the CIFS server configuration.

HTTP method	Path
POST	/occm/api/gcp/vsa/working-environments/{workingEnvironmentId}/cifs

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/gcp/vsa/working-
environments/<WORKING_ENV_ID>/cifs' --header 'Content-Type:
application/json' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input

- Path parameter <WORKING_ENV_ID> `workingEnvironmentId` string

JSON input example

```
{
  "dnsDomain": "zivh.netapp.com",
  "ipAddresses": [
    "172.31.5.241"
  ],
  "netBIOS": "zivaws02we03",
  "organizationalUnit": "CN=Computers",
  "activeDirectoryDomain": "zivh.netapp.com",
  "activeDirectoryUsername": "administrator",
  "activeDirectoryPassword": "password"
}
```

Output

   None.

Get CIFS server configurations

You can use this workflow to retrieve the CIFS server configurations for an existing Cloud Volumes ONTAP working environment.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` value for the working environment used in the `workingEnvironmentId` path parameter.

2. Get the CIFS configurations

HTTP method	Path
GET	/occm/api/gcp/vsa/working-environments/{workingEnvironmentId}/cifs

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/gcp/vsa/working-
environments/<WORKING_ENV_ID>/cifs' --header 'Content-Type:
application/json' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

   • Path parameter <WORKING_ENV_ID> `workingEnvironmentId` string

   • (Optional) Query parameter `svm` string

Output

   The JSON output example includes the CIFS configurations for an existing Cloud Volumes ONTAP ONTAP working environment.

JSON output example

```
[
    {
        "dnsDomain": "zivh.netapp.com",
        "activeDirectoryDomain": "zivh.netapp.com",
        "ipAddresses": [
            "172.31.5.241"
        ],
        "netBIOS": "zivaws02we01",
        "organizationalUnit": "CN=Computers",
        "authenticationType": "domain"
    }
]
```

Delete CIFS server configuration

You can use this workflow to delete a CIFS server configuration for an existing Cloud Volumes ONTAP working environment.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` value for the working environment used in the `workingEnvironmentId` path parameter.

2. Delete the CIFS configurations

HTTP method	Path
POST	/occm/api/gcp/vsa/working-environments/{workingEnvironmentId}/delete-cifs

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/gcp/vsa/working-
environments/<WORKING_ENV_ID>/delete-cifs' --header 'Content-Type:
application/json' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

- Path parameter <WORKING_ENV_ID> `workingEnvironmentId` string
- Optional JSON body

```
{
  "activeDirectoryUsername": "string",
  "activeDirectoryPassword": "string",
  "svmName": "string"
}
```

Output

None.

Aggregates

Get aggregates

You can retrieve a list of available disk aggregates for Cloud Volumes ONTAP in Google Cloud.

1. Select the working environment

Perform the workflow [Get working environment](#) and choose the `publicId` value of the working environment for the `workingEnvironmentId` path parameter.

2. Get the list of aggregates

HTTP method	Path
GET	/occm/api/gcp/vsa/aggregates/{workingEnvironmentId}

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/gcp/vsa/aggregates/<WORKIN
G_ENV_ID>' --header 'Content-Type: application/json' --header 'x-agent-id:
<AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

Path parameter:

- <WORKING_ENV_ID> (`workingEnvironmentId`) string

Output

An array of aggregates for the indicated working environment is returned as shown in the JSON output example.

ⓘ   The capacity (sizes) in the output are in MB/GB/TB (1000th order) because these are ONTAP aggregates, whereas in Cloud Manager the capacity is specified as MiB, GiB (1024 order).

JSON output example

```
[
    {
        "name": "aggr1",
        "availableCapacity": {
            "size": 87.55,
            "unit": "GB"
        },
        "totalCapacity": {
            "size": 88.57,
            "unit": "GB"
        },
        "usedCapacity": {
            "size": 1.02,
            "unit": "GB"
        },
        "volumes": [
            {
                "name": "svm_zivgcp01we02_root",
                "totalSize": {
                    "size": 1.0,
                    "unit": "GB"
                },
                "usedSize": {
                    "size": 7.59124755859375E-4,
                    "unit": "GB"
                },
                "thinProvisioned": false,
                "isClone": false,
                "rootVolume": true
            }
        ],
        "providerVolumes": [
            {
                "id": "00000000000000000",
                "name": "zivgcp01we02datadisk1",
                "size": {
                    "size": 100.0,
                    "unit": "GB"
                },
                "state": "READY",
                "device": "zivgcp01we02datadisk1",
                "instanceId": "zivgcp01we02",
                "diskType": "pd-ssd",
                "encrypted": true,
```

```
                "iops": null
            }
        ],
        "disks": [
            {
                "name": "NET-1.2",
                "position": "data",
                "ownerNode": "zivgcp01we02-01",
                "device": "zivgcp01we02datadisk1",
                "vmDiskProperties": null
            }
        ],
        "state": "online",
        "encryptionType": "cloudEncrypted",
        "encryptionKeyId": null,
        "isRoot": false,
        "homeNode": "zivgcp01we02-01",
        "ownerNode": "zivgcp01we02-01",
        "capacityTier": null,
        "capacityTierUsed": null,
        "sidlEnabled": true,
        "snaplockType": "non_snaplock"
    }
]
```

Create aggregate

You can create new aggregate within a Cloud Volumes ONTAP working environment using this workflow.

1. Select the working environment

Perform the workflow Get working environment and choose the `publicId` value for the `workingEnvironmentId` parameter in the JSON input.

2. Select the GCP disk types

Perform the Get GCP disk types workflow and choose the `size` and `supportedDiskType` values of the required `diskSize` and `providerVolumeType` parameters in the JSON input.

3. Create the aggregate

HTTP method	Path
POST	occm/api/gcp/vsa/aggregates

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/gcp/vsa/aggregates'
--header 'Content-Type: application/json' --header 'x-agent-id:
<AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input

The JSON input example includes the minimum list of input parameters.

JSON input example

```
{
  "name": "ziv01agg01",
  "workingEnvironmentId": "vsaworkingenvironment-sfrf3wvj",
  "numberOfDisks": 1,
  "diskSize": {
    "size": 100,
    "unit": "GB"
  },
  "providerVolumeType": "pd-ssd"
}
```

Output

None

Add disks to aggregate

You can add disks to an existing aggregate.

1. Select the working environment

Perform the workflow Get GCP single node working environment and choose the `publicId` value for the `workingEnvironmentId` path parameter.

2. Select the aggregate

Perform the workflow Get aggregates and choose `name` of the required aggregate for the `aggregateName` path parameter.

3. Add the disks to the aggregate

HTTP method	Path
POST	/occm/api/gcp/vsa/aggregates/{workingEnvironmentId}/{aggregateName}/disks

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/gcp/vsa/aggregates/<WORKIN
G_ENV_ID>/<AGGR_NAME>/disks' --header 'Content-Type: application/json'
--header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer
<ACCESS_TOKEN>' --d @JSONinput
```

Input

You must include the following path parameters:

- <WORKING_ENV_ID> (`workingEnvironmentId`) string

- <AGGR_NAME> (`aggregateName`) string

Also, the JSON input example includes an input parameter as shown.

JSON input example

```
{
    "numberOfDisks": "1"
}
```

Output

None

Delete aggregate

You can delete an existing disk aggregate in a Cloud Volumes ONTAP working environment.

1. Select the working environment

Perform the workflow Get working environment and choose the `publicId` value of the working environment for the `workingEnvironmentId` path parameter.

2. Select the aggregate

Perform the workflow Get aggregates and choose the `name` value of the required aggregate for the `aggregateName` path parameter.

3. Delete the aggregate

HTTP method	Path
DELETE	/occm/api/gcp/vsa/aggregates/{workingEnvironmentId}/{aggregateName}

curl example

```
curl --location --request DELETE
'https://cloudmanager.cloud.netapp.com/occm/api/gcp/vsa/aggregates/<WORKIN
G_ENV_ID>/<AGGR_NAME>' --header 'Content-Type: application/json' --header
'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

Path parameters:

- <WORKING_ENV_ID> (`workingEnvironmentId`) string
- <AGGR_NAME> (`aggregateName`) string

Output

None

Volumes

Create a volume using NFS

You can use this workflow to create a volume accessed through NFS protocol.

> ⓘ If the properties `aggregateName` and `maxNumOfDisksApprovedToAdd` are not provided on
> the REST API call, the response will fail with a suggested name for the aggregate and the
> number of disks needed to fulfill the request.

1. Select the working environment

Perform the workflow Get working environement and choose the `publicId` and the `svmName` values for the
`workingEnvironmentId` and the `svmName` parameters.

2. Select the aggregate

Perform the workflow Get aggregates and choose the `name` value of the aggregate for the `name` parameter.

> ⓘ If aggregate name does not exist and the `createAggregateIfNotFound` query parameter is
> set `true`, the create volume request is allowed if the named aggregate is not found.

3. Choose the size for the disk

Choose the size value for the `size:size` parameter. The `size:unit` must be one of the following: `TB`, `GB`,
`MB`, `KB`, or `Byte`.

4. Select the region

Perform the workflow Get regions workflow and pick `ipCidrRange` value of the required `region→ subnets`
for `exportPolicy→ips` value.

5. Create the quote

Perform the workflow [Create quote](#). This is a recommended step but is not mandatory.

6. Create the volume

HTTP method	Path
POST	/occm/api/gcp/vsa/volumes

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/gcp/vsa/volumes' --header
'Content-Type: application/json' --header 'x-agent-id: <AGENT_ID>'
--header 'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input

The JSON input example includes the minimum list of input parameters, including:

- <WORKING_ENV_ID> (`workingEnvironmentId`)
- <SVM_NAME> (`svmName`)
- <AGGR_NAME> (`aggregateName`)

If aggregate name does not exist, you can set the `createAggregateIfNotFound` query parameter to `true` which allows the aggregate not-found condition.

JSON input example

```json
{
  "workingEnvironmentId": "vsaworkingenvironment-sfrf3wvj",
  "svmName": "svm_zivgcp01we02",
  "aggregateName": "ziv01agg01",
  "name": "zivagg01vol01",
  "size": {
    "size": 100,
    "unit": "GB"
  },
  "snapshotPolicyName": "default",
  "enableThinProvisioning": true,
  "enableCompression": true,
  "enableDeduplication": true,
  "maxNumOfDisksApprovedToAdd": 0,
  "exportPolicyInfo": {
    "ips": [
      "10.138.0.0/20"
    ],
    "nfsVersion": [
      "nfs3", "nfs4"
    ],
    "policyType": "custom"
  }
}
```

Output

None

Create a volume using CIFS

You can use this workflow to create a volume accessed through CIFS.

(i) If the properties `aggregateName` and `maxNumOfDisksApprovedToAdd` are not provided on the REST API call, the response will fail with a suggested name for the aggregate and the number of disks needed to fulfill the request.

1. Choose the CIFS configuration

A CIFS server configuration must be defined for your working environment. You can do one of the following:

- If a CIFS configuration already exists, perform the workflow Get CIFS server configurations to access the configuration parameters.
- If a CIFS configuration does not exist, perform the workflow Create CIFS server configuration to create one.

2. Select the working environment

Perform the workflow Get working environments and choose the `publicId` value for the `workingEnvironmentId` (working environment) and the `svmName` (SVM name).

3. Select the aggregate

Perform the workflow Get aggregates and choose the `name` for the `aggregateName` value.

> ⓘ If aggregate name does not exist and the `createAggregateIfNotFound` query parameter is set `true`, the create volume request is allowed if the named aggregate is not found.

4. Choose the size for the disk

Choose the size value for the `size:size` parameter. The `size:unit` must be one of the following: `TB`, `GB`, `MB`, `KB`, or `Byte`.

5. Create the quote

Perform the workflow Create quote. This is a recommended step but is not mandatory.

6. Create the volume

HTTP method	Path
POST	/occm/api/gcp/vsa/volumes

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/gcp/vsa/volumes' --header
'Content-Type: application/json' --header 'x-agent-id: <AGENT_ID>'
--header 'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input

The JSON input example includes the minimum list of input parameters, including:

- <WORKING_ENV_ID> (`workingEnvironmentId`) string
- <SVM_NAME> (`svmName`) string
- <AGGR_NAME> (`aggregateName`) string

If an aggregate name does not exist, you can set the `createAggregateIfNotFound` query parameter to `true` which allows the aggregate not-found condition.

JSON input example

```
{
  "workingEnvironmentId": "VsaWorkingEnvironment-SfpVUZSc",
  "svmName": "svm_zivaws02we01",
  "aggregateName": "aggr1",
  "name": "zivaws02we02vol02Cifs",
  "size": {
    "size": 100,
    "unit": "GB"
  },
  "shareInfo": {
    "accessControl": {
        "permission": "full_control",
        "users": [
            "Everyone"
        ],
        "users": "Everyone;"
    },
    "shareName": "zivaws02we01vol02Cifs_share"
  },
  "snapshotPolicyName": "default",
  "enableThinProvisioning": true,
  "enableCompression": true,
  "enableDeduplication": true,
  "maxNumOfDisksApprovedToAdd": 0
}
```

Output

None

Create a volume using iSCSI

You can use this workflow to create a volume accessed through iSCSI. There are two workflows available depending on whether a new or existing iGroup is used. You need to select the correct workflow:

- Create volume using iSCSI with a new iGroup
- Create volume using iSCSI with an existing iGroup

Create volume using iSCSI with a new iGroup

> (i) If the properties `aggregateName` and `maxNumOfDisksApprovedToAdd` are not provided on the REST API call, the response will fail with a suggested name for the aggregate and the number of disks needed to fulfill the request.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` value for the `workingEnvironmentId` parameter and the `svmName` value for the `svmName` parameter.

2. Select the aggregate

Perform the workflow Get aggregates and choose the `name` for the `aggregateName` value.

3. Choose the size for the disk

Choose the size value for the `size:size` parameter. The `size:unit` must be one of the following: `TB`, `GB`, `MB`, `KB`, or `Byte`.

4. Choose the iscasiInfo parameters

You must choose the following values for the REST API call:

* A unique igroup name for `igroupCreationRequest` → `igroupName` parameter
* The required iqn's to `igroupCreationRequest` → `initiators` parameter.
* The required operating system for the `osName` parameter from one of the following:
    ◦ windows
    ◦ linux
    ◦ vmware
    ◦ windows_2008
    ◦ windows_gpt

5. Create the quote

Perform the workflow Create quote. This is a recommended step but is not mandatory.

6. Create the volume

HTTP method	Path
POST	/occm/api/gcp/vsa/volumes

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/gcp/vsa/volumes' --header
'Content-Type: application/json' --header 'x-agent-id: <AGENT_ID>'
--header 'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input

The JSON input example includes the minimum list of input parameters, including:

* <WORKING_ENV_ID> (`workingEnvironmentId`) string

- <SVM_NAME> (`svmName`) string

- <AGGR_NAME> (`aggregateName`) string

If aggregate name does not exist, you can set the `createAggregateIfNotFound` query parameter to `true` which allows the aggregate not-found condition.

JSON input example

```
{
  "workingEnvironmentId": "VsaWorkingEnvironment-SfpVUZSc",
  "svmName": "svm_zivaws02we01",
  "aggregateName": "aggr1",
  "name": "zivaws02we01vol01Iscsi",
  "size": {
    "size": 100,
    "unit": "GB"
  },
  "iscsiInfo": {
    "igroupCreationRequest": {
        "igroupName": "zivIgroup",
        "initiators": [
            "iqn.1994-05.com.redhat:96de86825216",
            "iqn.1994-05.com.redhat:96de86823426"
        ]
    },
    "osName": "linux"
  },
  "snapshotPolicyName": "default",
  "enableThinProvisioning": true,
  "enableCompression": true,
  "enableDeduplication": true,
  "maxNumOfDisksApprovedToAdd": 0
}
```

Output

None

Create volume using iSCSI with an existing iGroup

ⓘ   If the properties `aggregateName` and `maxNumOfDisksApprovedToAdd` are not provided on the REST API call, the response will fail with a suggested name for the aggregate and the number of disks needed to fulfill the request.

1. Select the working environment

Perform the workflow Get working environments and choose the `publicId` value for the `workingEnvironmentId` parameter and the `svmName` value for the `svmName` parameter.

2. Select the aggregate

Perform the workflow Get aggregates and choose the `name` for the `aggregateName` value.

3. Choose the size for the disk

Choose the size value for the `size:size` parameter. The `size:unit` must be one of the following: `TB`, `GB`, `MB`, `KB`, or `Byte`.

4. Choose the iGroup

Perform the workflow Get iGroups and choose the igroups for the `iscasiInfo → igroups` value. Also select the `osType` value for the `iscasiInfo → osName`.

5. Create the quote

Perform the workflow Create quote. This is a recommended step but is not mandatory.

6. Create the volume

HTTP method	Path
POST	/occm/api/gcp/vsa/volumes

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/gcp/vsa/volumes' --header
'Content-Type: application/json' --header 'x-agent-id: <AGENT_ID>'
--header 'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input

The JSON input example includes the minimum list of input parameters, including:

- <WORKING_ENV_ID> (`workingEnvironmentId`) string
- <SVM_NAME> (`svmName`) string
- <AGGR_NAME> (`aggregateName`) string

If an aggregate name does not exist, you can set the `createAggregateIfNotFound` query parameter to `true` which allows the aggregate not-found condition.

JSON input exmaple

```
{
    "workingEnvironmentId": "VsaWorkingEnvironment-UvFmWXoD",
    "svmName": "svm_zivaws01we01",
    "aggregateName": "aggr1",
    "name": "zivaws01we01vol05Iscsi",
    "size": {
        "size": 100,
        "unit": "GB"
    },
    "iscsiInfo": {
        "igroups": ["zivIgroup1"],
        "osName": "linux"
    },
    "snapshotPolicyName": "default",
    "enableThinProvisioning": true,
    "enableCompression": true,
    "enableDeduplication": true,
    "maxNumOfDisksApprovedToAdd": 0
}
```

Output

None

Get volumes

You can retrieve the list of volumes of a single node Azure working environment.

1. Select the working environment

Perform the workflow Get working environment and choose the `publicId` value of the working environment for the `workingEnvironmentId` query parameter.

2. Get the volumes

HTTP method	Path
GET	/occm/api/gcp/vsa/volumes

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/gcp/vsa/volumes?workingEnv
ironmentId=<WORKING_ENV_ID>' --header 'Content-Type: application/json'
--header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer
<ACCESS_TOKEN>'
```

Input

Query parameter <WORKING_ENV_ID> `(workingEnvironmentId)` string

Output

The JSON output example includes the list of volumes for the working environment.

JSON output example

```
[
    {
        "name": "zivagg01vol01",
        "uuid": "0x00000-0xx0-00xx-xx00-00xxxx000",
        "svmName": "svm_zivgcp01we02",
        "size": {
            "size": 100.0,
            "unit": "GB"
        },
        "usedSize": {
            "size": 2.93731689453125E-4,
            "unit": "GB"
        },
        "junctionPath": "/zivagg01vol01",
        "volumeTotalInodes": 3112959,
        "volumeUsedInodes": 96,
        "mountPoint": "10.138.0.150:/zivagg01vol01",
        "compressionSpaceSaved": {
            "size": 0.0,
            "unit": "GB"
        },
        "deduplicationSpaceSaved": {
            "size": 0.0,
            "unit": "GB"
        },
        "thinProvisioning": true,
        "compression": true,
        "deduplication": true,
        "snapshotPolicy": "default",
        "securityStyle": "unix",
        "exportPolicyInfo": {
            "name": "export-svm_zivgcp01we02-zivagg01vol01",
            "policyType": "custom",
            "ips": [
                "10.138.0.0/20"
            ],
            "nfsVersion": [
                "nfs3",
                "nfs4"
```

```
            ]
        },
        "shareNames": [],
        "shareInfo": [],
        "parentVolumeName": "",
        "rootVolume": false,
        "state": "online",
        "volumeType": "rw",
        "aggregateName": "ziv01agg01",
        "parentSnapshot": null,
        "autoSizeMode": "grow",
        "maxGrowSize": {
            "size": 1100.0,
            "unit": "GB"
        },
        "providerVolumeType": "pd-ssd",
        "cloneNames": [],
        "moving": false,
        "primaryNoFailoverMountPoint": null,
        "secondaryNoFailoverMountPoint": null,
        "capacityTier": null,
        "capacityTierUsedSize": null,
        "cifsShareAccessPoint": null,
        "primaryCifsShareAccessPoint": null,
        "secondaryCifsShareAccessPoint": null,
        "tieringPolicy": "none",
        "tierInactiveUserData": null,
        "tierInactiveUserDataPercent": null,
        "comment": null,
        "qosPolicyGroupName": null,
        "snaplockType": "non_snaplock",
        "constituentsAggregates": [],
        "snapshotsUsedSize": {
            "size": 0.0,
            "unit": "Byte"
        },
        "cbsBackupsInfo": null,
        "minimumCoolingDays": null,
        "targetName": "iqn.1992-
08.com.netapp:sn.986656ab5e3e11eb9cb735a0758d479a:vs.2",
        "iscsiEnabled": false,
        "isFlexGroupVolume": false
    }
]
```

Modify volume

You can modify the configuration of an existing volume.

1. Select the working environment

Perform the workflow Get working environment and choose the `publicId` and `svmName` values of the working environment for used as the `workingEnvironmentId` and `svmName` path parameters.

2. Select the volume

Perform the workflow Get volumes and choose the `name` for the `volumeName` path parameter.

3. Modify the volume

HTTP method	Path
PUT	/occm/api/gcp/vsa/volumes/{workingEnvironmentId}/{svmName}/{volumeName}

curl example

```
curl --location --request PUT
'https://cloudmanager.cloud.netapp.com/occm/api/gcp/vsa/volumes/<WORKING_E
NV_ID>/<SVM_NAME>/<VOLUME_NAME>' --header 'Content-Type: application/json'
--header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer
<ACCESS_TOKEN>' --d @JSONinput
```

Input

Path parameters:

- <WORKING_ENV_ID> (`workingEnvironmentId`) string

- <SVM_NAME> (`svmName`) string

- <VOLUME_NAME> (`volumeName`) string

The JSON input example includes the minimum list of input parameters.

JSON input example

```
{
  "exportPolicyInfo": {
    "policyType": "custom",
    "ips": [
      "10.000.0.0/20"
    ],
    "nfsVersion": [
      "nfs3"
    ]
  }
}
```

Output

None

Delete volume

You can delete an existing volume.

1. Select the working environment

Perform the Get working environment workflow and choose the `publicId` and `svmName` values of the required working environment for `workingEnvironmentId` and `svmName` path parameters.

2. Select the volume

Perform the workflow Get volumes and choose the `name` for the `volumeName` path parameter.

3. Delete the volume

HTTP method	Path
DELETE	/occm/api/gcp/vsa/volumes/{workingEnvironmentId}/{svmName}/{volumeName}

curl example

```
curl --location --request DELETE
'https://cloudmanager.cloud.netapp.com/occm/api/azure/vsa/volumes/<WORKING
_ENV_ID>/<SVM_NAME>/<VOLUME_NAME>' --header 'Content-Type:
application/json' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

Path parameters:

- <WORKING_ENV_ID> (`workingEnvironmentId`) string

- <SVM_NAME> (`svmName`) string

- <VOLUME_NAME> (volumeName) string

Output

None

Create quote

You can create a quote for a new volume which returns a resource quote needed to satisfy the request. The resource quote contains aggregate information where the volume will be created and confirms if the space is available. This is a recommended step but is not mandatory.

1. Select the working environment

Perform the workflow Get working environment and choose the `publicId` and 'svmName' values of the required working environment for `workingEnvironmentId` and `svmName` parameters in the JSON input.

2. Select the aggregate

Perform the Get aggregates workflow and choose the `name` value of the required aggregate for the `aggregateName` parameter in the JSON input.

3. Select the gcp disk type

Perform the Get gcp disk types workflow and choose the `size` and `supportedDiskType` values of the required disk type for the `diskSize` and `providerVolumeType` parameters in the JSON input.

4. Generate the volume quote

HTTP method	Path
POST	/occm/api/gcp/vsa/quote

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/gcp/vsa/volumes/quote'
--header 'Content-Type: application/json' --header 'x-agent-id: <AGENT_ID>
--header 'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input

The JSON input example includes the list of input parameters.

JSON input example

```
{
    "workingEnvironmentId": "vsaworkingenvironment-sfrf3wvj",
    "svmName": "svm_zivgcp01we02",
    "aggregateName": "ziv01agg01",
    "name": "zivagg01vol01",
    "size": {
      "size": "100",
      "unit": "GB"
    },
    "enableThinProvisioning": "true",
    "providerVolumeType": "pd-ssd",
    "verifyNameUniqueness": "true"
}
```

Output

The JSON output example includes an example of the quote details.

JSON output example

```
{
    "numOfDisks": 0,
    "diskSize": {
        "size": 100.0,
        "unit": "GB"
    },
    "aggregateName": "ziv01agg01",
    "newAggregate": false,
    "autoVsaCapacityManagement": true
}
```

Get iGroups

You can use this workflow to retrieve all the initiator groups (iGroups).

1. Create the working environment

Perform the workflow Create GCP single node working environment and choose the `publicId` and `svmName` values for the working environment `workingEnvironmentId` and `svmName` path parameters.

2. Get the CIFS configurations

HTTP method	Path
GET	/occm/api/gcp/vsa/volumes/igroups/{workingEnvironmentId}/{svmName}

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/gcp/vsa/volumes/igroups/<W
ORKING_ENV_ID>/<SVM_NAME>' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>' --header 'Content-Type:
application/json'
```

Input

- Path parameter <WORKING_ENV_ID> `workingEnvironmentId` string
- Path parameter <SVM_NAME> `svmName` string

Output

The JSON output example includes a list of iGroups.

JSON output example

```
[
    {
        "igroupName": "zivIgroup1",
        "osType": "linux",
        "portsetName": "",
        "igroupType": "iscsi",
        "initiators": [
            "iqn.1994-05.com.redhat:1d9ac633937c"
        ]
    },
    {
        "igroupName": "zivIgroup2",
        "osType": "linux",
        "portsetName": "",
        "igroupType": "iscsi",
        "initiators": [
            "iqn.1994-05.com.redhat:96de86825216"
        ]
    }
]
```

Metadata

Get GCP regions

This workflow retrieves the GCP regions in which a Cloud Volumes ONTAP working environment might be created.

1. Get the list of regions

HTTP method	Path
GET	/occm/api/gcp/vsa/metadata/regions

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/gcp/vsa/metadata/regions'
--header 'Content-Type: application/json' --header 'x-agent-id:
<AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

None

Output

The JSON output provides an example of a list of GCP regions.

JSON output example

```
[
    {
        "displayName": "asia-east1",
        "name": "asia-east1",
        "zones": [
            {
                "name": "asia-east1-a"
            },
            {
                "name": "asia-east1-b"
            },
            {
                "name": "asia-east1-c"
            }
        ],
        "vpcs": [
            {
                "name": "default",
                "subnets": [
                    {
                        "ipCidrRange": "10.140.0.0/20",
                        "name": "default",
                        "path": "projects/occm-dev/regions/asia-east1/subnetworks/default",
                        "availableIps": 4090,
                        "minimumRequiredIps": 6
                    }
```

```json
                ],
                "firewalls": [
                    {
                        "name": "allow-all",
                        "vpc": "default"
                    },
                    {
                        "name": "allow-ssh-netapp",
                        "vpc": "default"
                    }
                ]
            },
            {
                "name": "eli-vpc",
                "subnets": [
                    {
                        "ipCidrRange": "10.0.0.0/00",
                        "name": "eli-subnet",
                        "path": "projects/occm-dev/regions/asia-
east1/subnetworks/eli-subnet",
                        "availableIps": 250,
                        "minimumRequiredIps": 6
                    }
                ],
                "firewalls": [
                    {
                        "name": "eli-vpc-allow-http",
                        "vpc": "eli-vpc"
                    },
                    {
                        "name": "eli-vpc-allow-https",
                        "vpc": "eli-vpc"
                    }
                ]
            },
        ],
    },
    {
        "displayName": "asia-northeast1",
        "name": "asia-northeast1",
        "zones": [
            {
                "name": "asia-northeast1-a"
            },
            {
                "name": "asia-northeast1-b"
```

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```
                },
                {
                    "name": "asia-northeast1-c"
                }
            ],
            "vpcs": [
                {
                    "name": "default",
                    "subnets": [
                        {
                            "ipCidrRange": "00.000.0.0/20",
                            "name": "default",
                            "path": "projects/occm-dev/regions/asia-
northeast1/subnetworks/default",
                            "availableIps": 4090,
                            "minimumRequiredIps": 6
                        }
                    ],
                    "firewalls": [
                        {
                            "name": "allow-all",
                            "vpc": "default"
                        },
                        {
                            "name": "allow-ssh-netapp",
                            "vpc": "default"
                        }
                    ]
                }
            ]
        }
}
```

Get GCP permutations

You can use the permutations endpoint to retrieve the Cloud Volumes ONTAP configuration information such as `ontapVersion`, `license`, `instanceType`, `region` and more. You can check the possible permutations that can potentially be provided for the GCP workflows while provisioning a Cloud Volumes ONTAP instance.

1. Get the permutations

HTTP method	Path
GET	/occm/api/gcp/vsa/metadata/permutations

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/gcp/vsa/metadata/permutati
ons?latest_only=true' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>' --header 'Content-Type:
application/json'
```

Input

There are several **optional** query parameters you can use:

- `region` string

- `version` string

- `license` string

- `machine_type` string

- `latest_only` string

Output

The JSON output example includes the list of Cloud Volumes ONTAP configurations.

JSON output example

```
[
    {
        "ontapVersion": "ONTAP-9.9.0X4.T1.gcp",
        "license": {
            "type": "gcp-cot-explore-paygo",
            "name": "Cloud Volumes ONTAP Explore",
            "description": "Suitable for smaller capacity applications.
Supports up to 2 TB of underlying GCP storage.",
            "subName": "",
            "subDescription": "Support of tiering to object storage is not
included.",
            "capacity_limit": "2TB",
            "platformLicenseRequired": false,
            "default": false,
            "capacityLimit": {
                "size": 2.0,
                "unit": "TB"
            }
        },
        "instanceType": "custom-4-16384",
        "region": {
            "name": "asia east 1",
            "code": "asia-east1",
```

```json
            "location": "Changhua County, Taiwan",
            "s3Region": null
        },
        "defaultInstance": false,
        "features": [
            "cpu:Intel Skylake"
        ],
        "upgradeableFrom": [
            "9.8",
            "9.9.0"
        ]
    },
    {
        "ontapVersion": "ONTAP-9.9.0X4.T1.gcp",
        "license": {
            "type": "gcp-cot-explore-paygo",
            "name": "Cloud Volumes ONTAP Explore",
            "description": "Suitable for smaller capacity applications.
Supports up to 2 TB of underlying GCP storage.",
            "subName": "",
            "subDescription": "Support of tiering to object storage is not
included.",
            "capacity_limit": "2TB",
            "platformLicenseRequired": false,
            "default": false,
            "capacityLimit": {
                "size": 2.0,
                "unit": "TB"
            }
        },
        "instanceType": "custom-4-16384",
        "region": {
            "name": "asia east 2",
            "code": "asia-east2",
            "location": "Hong Kong",
            "s3Region": null
        },
        "defaultInstance": false,
        "features": [
            "cpu:Intel Skylake"
        ],
        "upgradeableFrom": [
            "9.8",
            "9.9.0"
        ]
    }
```

```
    ]
```

Get tag keys

You can perform this workflow to retrieve all the labels in the specified project and zone.

1. Select the project

Perform the workflow Get projects and choose `projectId` value of the required project for `projectId` query parameter.

2. Select the region

Perform the Get regions workflow and choose the `zone:  name` value of the required region for the `zone` query parameter.

3. Get the tag keys

HTTP method	Path
GET	/occm/api/gcp/vsa/metadata/tag-keys

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/gcp/vsa/metadata/tag-
keys?projectId=<PROJECT_ID>&zone=<ZONE>' --header 'x-agent-id: <AGENT_ID>'
--header 'Authorization: Bearer <ACCESS_TOKEN>' --header 'Content-Type:
application/json'
```

Input
   Query parameters:

   - <PROJECT_ID> `projectId` string

   - <ZONE> `zone` string

Output
   The JSON output example includes the list of Azure storage account types.

JSON output example

```
[
    {
        "key": "working-environment-id",
        "values": [
            "vsaworkingenvironment-sfrf3wvj",
            "vsaworkingenvironment-2qkd75xv"
        ]
    },
```

```
        {
            "key": "count-down",
            "values": [
                "3",
                "0",
                "2"
            ]
        },
        {
            "key": "username",
            "values": [
                "administrator"
            ]
        },
        {
            "key": "keepme",
            "values": [
                "10"
            ]
        },
        {
            "key": "cloud-ontap-version",
            "values": [
                "9_9_0x4"
            ]
        },
        {
            "key": "cloud-ontap-dm",
            "values": [
                "zivgcp01we02-deployment",
                "zivgcp01we03-deployment"
            ]
        },
        {
            "key": "platform-serial-number",
            "values": [
                "000000030000000000009",
                "000000000000000096011"
            ]
        }
    ]
    },
    {
        "key": "netapp:cloud-compliance:cloudManager:ClientId",
        "values": [
            "sNwn2FzHxFrucwz8j1huxNIYI7aRNqTC"
```

```
          ]
       }
    ]
```

Create Buckets

You can perform this workflow to create a new bucket. This is a GCP storage bucket (data container in GCP) required for data tiering and backup.

1. Create a bucket

HTTP method	Path
POST	/occm/api/gcp/vsa/metadata/create-bucket

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/gcp/vsa/metadata/create-
bucket' --header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer
<ACCESS_TOKEN>' --header 'Content-Type: application/json' --d JSONinput
```

JSON input example

```
{
   "projectId": "occm-dev",
   "bucketName": "zivgcpbucket02",
   "location": "us-west1",
   "storageClass": "standard"
}
```

Output
    None

Get buckets

You can perform this workflow to retrieve the S3 buckets. The S3 buckets are the GCP storage buckets (data containers in GCP) required for data tiering and backups.

1. Get the buckets

HTTP method	Path
GET	/occm/api/vsa/metadata/buckets

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/vsa/metadata/buckets'
--header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer
<ACCESS_TOKEN>' --header 'Content-Type: application/json'
```

Input

None

Output

The JSON output example includes the list of S3 buckets.

JSON output example

```
[
    {
        "bucketName": "3.9.0.bins.08112020",
        "region": "us-east-1",
        "tags": {}
    },
    {
        "bucketName": "0000000000-awsmacietrail-dataevent",
        "region": "us-east-1",
        "tags": {}
    }
]
```

Get GCP packages

You can perform this workflow to retrieve the pre-defined packages configuration.

1. Get the packages

HTTP method	Path
GET	/occm/api/gcp/vsa/metadata/packages

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/gcp/vsa/metadata/packages'
--header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer
<ACCESS_TOKEN>' --header 'Content-Type: application/json'
```

Input

None

Output

The JSON output example includes the list of GCP packages.

JSON output example

```json
[
    {
        "name": "gcp_poc",
        "displayName": "POC and small workloads",
        "description": "No description yet",
        "licenseType": "gcp-cot-explore-paygo",
        "instanceTypeMapping": [
            {
                "region": "default",
                "instanceType": "custom-4-16384"
            }
        ],
        "diskType": "pd-ssd",
        "diskSize": {
            "size": 100.0,
            "unit": "GB"
        },
        "capacityTier": null,
        "instanceTenancy": null,
        "writingSpeedState": "NORMAL"
    },
    {
        "name": "gcp_standard",
        "displayName": "Database and application data production
workloads",
        "description": "No description yet",
        "licenseType": "gcp-cot-standard-paygo",
        "instanceTypeMapping": [
            {
                "region": "default",
                "instanceType": "n1-standard-8"
            }
        ],
        "diskType": "pd-ssd",
        "diskSize": {
            "size": 100.0,
            "unit": "GB"
        },
        "capacityTier": "GCP",
        "instanceTenancy": null,
        "writingSpeedState": "NORMAL"
    },
```

```
    {
        "name": "gcp_dr",
        "displayName": "Cost effective DR",
        "description": "No description yet",
        "licenseType": "gcp-cot-standard-paygo",
        "instanceTypeMapping": [
            {
                "region": "default",
                "instanceType": "n1-standard-8"
            }
        ],
        "diskType": "pd-standard",
        "diskSize": {
            "size": 100.0,
            "unit": "GB"
        },
        "capacityTier": "GCP",
        "instanceTenancy": null,
        "writingSpeedState": "NORMAL"
    },
    {
        "name": "gcp_fastest",
        "displayName": "Highest performance production workloads",
        "description": "No description yet",
        "licenseType": "gcp-cot-premium-paygo",
        "instanceTypeMapping": [
            {
                "region": "default",
                "instanceType": "n1-standard-32"
            }
        ],
        "diskType": "pd-ssd",
        "diskSize": {
            "size": 100.0,
            "unit": "GB"
        },
        "capacityTier": "GCP",
        "instanceTenancy": null,
        "writingSpeedState": "NORMAL"
    }
]
```

Get Snapshot policies

You can perform this workflow to retrieve the default snapshot policies available on the cluster.

1. Get the snapshot policies

HTTP method	Path
GET	/occm/api/gcp/vsa/metadata/default-snapshot-policies

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/gcp/vsa/metadata/default-
snapshot-policies' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>' --header 'Content-Type:
application/json'
```

Input

None

Output

The JSON output example includes the list of default snapshot policies available on the cluster.

JSON output example

```
[
    {
        "name": "default",
        "schedules": [
            {
                "frequency": "hourly",
                "retention": 6
            },
            {
                "frequency": "daily",
                "retention": 2
            },
            {
                "frequency": "weekly",
                "retention": 2
            }
        ],
        "description": "Default policy with hourly, daily & weekly
schedules."
    },
    {
        "name": "none",
        "schedules": [],
        "description": "Policy for no automatic snapshots."
    }
]
```

Get supported features

You can perform this workflow to retrieve and check the supported features while provisioning a Cloud Volumes ONTAP instance.

1. Select the permutations

Perform the workflow Get permutations and choose the `ontapVersion`, `license: type`, `instanceType`, and `region: code` values of the required permutations for the query parameters of `supported features` request.

2. Get the supported features

HTTP method	Path
GET	/occm/api/gcp/vsa/metadata/supported-features

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/gcp/vsa/metadata/supported
-features?region=<REGION>&ontapVersion=<ONTAP_VERSION>&dataEncryptionType=
<ENCRP_TYPE>&licenseType=<LICENSE_TYPE>&instanceType=<INST_TYPE>' --header
'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
--header 'Content-Type: application/json'
```

Input

   Query parameters:

- <REGION> `region` string

- <ONTAP_VERSION> `ontapVersion` string

- <LICENSE_TYPE> `licenseType` string

- <INST_TYPE> `instanceType` string

- <ENCRP_TYPE> `dataEncryptionType` string

JSON output example

```
{
    "wormSupportedVersion": true,
    "cbsSupportedVersion": true,
    "httpsStorageAccountSupportedVersion": false,
    "tieringWithServiceAccount": true
}
```

Get supported capacity tiers

You can retrieve the supported capacity tiers for Google Cloud disk types.

1. Select the permutations

Perform the workflow Get permutations and choose the `ontapVersion`, `license: type`, `instanceType`, and `region: code` values of the required permutations for the query parameters of `supported capacity tiers` request.

2. Get the supported features

HTTP method	Path
GET	/occm/api/gcp/vsa/metadata/supported-capacity-tiers

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/gcp/vsa/metadata/supported
-capacity
-tiers?region=<REGION>&ontapVersion=<ONTAP_VERSION>&dataEncryptionType=<EN
CRP_TYPE>&licenseType=<LICENSE_TYPE>&instanceType=<INST_TYPE>' --header
'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
--header 'Content-Type: application/json'
```

Input

Query parameters:

- <REGION> `region` string

- <ONTAP_VERSION> `ontapVersion` string

- <LICENSE_TYPE> `licenseType` string

- <INST_TYPE> `instanceType` string

- <ENCRP_TYPE> `dataEncryptionType` string

Output

The output shows a list of supported capacity tiers for the GCP disk types.

JSON output example

```
{
    "supportedCapacityTiersPerVolumeType": [
        {
            "volumeType": "pd-standard",
            "supportedCapacityTiers": [
                "cloudStorage"
            ],
            "availableTieringPolicies": [
                "none",
                "snapshot_only"
            ]
        },
        {
            "volumeType": "pd-ssd",
            "supportedCapacityTiers": [
                "cloudStorage"
            ],
            "availableTieringPolicies": [
                "none",
                "snapshot_only"
            ]
        }
    ],
    "capacityTiersDisableReasons": [
        "Cannot create capacity tiered volume on Cloud Volumes ONTAP
 Explore license"
    ],
    "compositeSupported": true,
    "forceCompositeVersion": false
}
```

Get service accounts

This workflow retrieves a list of service accounts from the specified project.

1. Get the list of service accounts

HTTP method	Path
GET	/occm/api/gcp/vsa/metadata/service-accounts

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/gcp/vsa/metadata/service-
accounts' --header 'Content-Type: application/json' --header 'x-agent-id:
<AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

　None

Output

　The JSON output retrieves a list of service accounts from the project.

JSON output example

```
{
"accounts": [
    {
        "name": "projects/occm-dev/serviceAccounts/00000-
compute@serviceaccount.com",
        "projectId": "occm-dev",
        "email": "00000-compute@serviceaccount.com",
        "displayName": "Compute Engine default service account",
        "isEnabled": false
    },
    {
        "name": "projects/occm-dev/serviceAccounts/xxx-
000@occmaccount.com",
        "projectId": "occm-dev",
        "email": "xxxx-000@occmaccount.com",
        "displayName": "admin",
        "isEnabled": false
    }
]
}
```

Get projects

This workflow retrieves the list of projects that the caller has permission on.

1. Get the list of regions

HTTP method	Path
GET	/occm/api/gcp/vsa/metadata/projects

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/gcp/vsa/metadata/projects'
--header 'Content-Type: application/json' --header 'x-agent-id:
<AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

None

Output

The JSON output provides an example of a list of authorized projects.

JSON output example

```json
{
    "projects": [
        {
            "isDefault": false,
            "projectNumber": "958377592668",
            "projectId": "occm-host",
            "lifecycleState": "ACTIVE",
            "name": "OCCM-host",
            "createTime": "2019-07-24T14:36:32.472Z",
            "parent": {
                "type": "folder",
                "id": "339830134733"
            },
            "subscriptionId": null
        },
        {
            "isDefault": false,
            "projectNumber": "844924364732",
            "projectId": "occm-slave",
            "lifecycleState": "ACTIVE",
            "name": "OCCM-slave",
            "createTime": "2019-07-24T14:36:32.405Z",
            "parent": {
                "type": "folder",
                "id": "339830134733"
            },
            "subscriptionId": null
        },
        {
            "isDefault": true,
            "projectNumber": "92083494653",
            "projectId": "occm-dev",
            "lifecycleState": "ACTIVE",
            "name": "OCCM-Dev",
            "createTime": "2018-05-24T17:23:50.505Z",
            "parent": {
                "type": "folder",
                "id": "339830134733"
            },
            "subscriptionId": "gcp-saasMpIntegrationProductId-
saasMpCustomerIdentifier6"
        }
    ]
}
```

Get GCP encryption keys

This workflow retrieves the GCP encryption keys for a specific region.

1. Select the region

Perform the workflow Get regions and choose the `name` value of the required region for the `region` path parameter.

2. Select the project

Perform the get projects workflow and choose the `projectId` value of the required project for the `project` path parameter.

3. Get the encryption keys

HTTP method	Path
GET	/occm/api/gcp/vsa/metadata/gcp-encryption-keys

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/gcp/vsa/metadata/gcp-
encryption-keys?region=<REGION>&project=<PROJECT>' --header 'Content-Type:
application/json' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

Required query parameters:

- <REGION> `region`: string

- <PROJECT> `project`: string

Output

The JSON output provides an example of a list of GCP encryption keys for a specific region.

JSON output example

```
[
    {
        "name": "key1",
        "id": "projects/occm-
dev/locations/global/keyRings/test/cryptoKeys/key1",
        "keyRing": "test",
        "location": "global"
    },
    {
        "name": "key2",
        "id": "projects/occm-
dev/locations/global/keyRings/test/cryptoKeys/key2",
        "keyRing": "test",
        "location": "global"
    }
]
```

Get GCP disk types

This workflow retrieves the GCP supported disk types.

1. Get the disk types

HTTP method	Path
GET	/occm/api/gcp/vsa/metadata/gcp-disk-types

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/gcp/vsa/metadata/gcp-disk-
types' --header 'Content-Type: application/json' --header 'x-agent-id:
<AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

None

Output

The JSON output provides an example of a list of GCP supported disk types.

JSON output example

```
[
    {
        "size": {
            "size": 100.0,
            "unit": "GB"
        },
        "supportedDiskTypes": [
            "pd-standard",
            "pd-ssd"
        ],
        "supportedOccmLicenses": [
            "Standard (BYOL)",
            "Cloud Volumes ONTAP Standard",
            "Cloud Volumes ONTAP Explore",
            "Standard (hourly)",
            "Cloud Volumes ONTAP BYOL",
            "Explore (hourly)",
            "Cloud Volumes ONTAP Premium"
        ]
    },
    {
        "size": {
            "size": 500.0,
            "unit": "GB"
        },
        "supportedDiskTypes": [
            "pd-standard",
            "pd-ssd"
        ],
        "supportedOccmLicenses": [
            "Standard (BYOL)",
            "Cloud Volumes ONTAP Standard",
            "Cloud Volumes ONTAP Explore",
            "Standard (hourly)",
            "Cloud Volumes ONTAP BYOL",
            "Explore (hourly)",
            "Cloud Volumes ONTAP Premium"
        ]
    }
]
```

Get instance types not supporting acceleration and capacity tiering

This workflow retrieves the GCP instance types which do not support the acceleration and capacity tiering. This means that these kind instance types do not use any sort of

hardware accelerator. You can check the instance types while provisioning the Cloud Volumes ONTAP.

1. Get the instance types

HTTP method	Path
GET	occm/api/gcp/vsa/metadata/instance-types-not-supporting-acceleration-and-capacity-tiering

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/gcp/vsa/metadata/instance-
types-not-supporting-acceleration-and-capacity-tiering' --header 'Content-
Type: application/json' --header 'x-agent-id: <AGENT_ID>' --header
'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

None

Output

The JSON output provides an example of a list of instance types.

JSON output example

```
{
    "instanceTypes": []
}
```

Common workflows

Common workflows for all cloud providers

There are several workflows you can use with any of the public cloud providers.

ⓘ | Before using any of the Cloud Manager REST API workflows, review Get started section.

Workflow categories

The common workflows are organized into the following functional categories:

Identity and access

These workflows are typically used to obtain an access token to identify the API caller and manage authorized access to the resources.

SaaS marketplace

These workflows allow you to manage the subscription of a cloud provider account. You can attach a Cloud

Manager SaaS subscription to the cloud provider account or retrieve a list of subscriptions.

NetApp Support site

You can perform specific workflows to manage the NSS keys as part of registering a Cloud Manager REST resource for support. Specific NSS keys or all of the available keys can be retrieved. You can also create or delete an NSS key if needed.

Internal task

You can use these workflows to retrieve the information and status of a background task.

SnapMirror Replication

These workflows allow you to manage and monitor SnapMirror relationships to replicate data between source and destination working environments. This supports disaster recovery and backup which optimizes data availability.

Connector setup

You must have a **Connector** for the cloud environment before creating a working environment and performing other activities using the workflows. You can create a Connector using the Cloud Manager web UI. When you create a Connector, Cloud Manager adds the cloud provider account that you deployed the Connector in to your list of available accounts. Your cloud provider account needs to have the right permissions in order to create a Connector.

Review Learn about Connectors to know how to create and deploy a Connector.

Identity and access

Get supported services

You can use this workflow to retrieve information about the Cloud Manager supported services including the *client id* and *account id* values.

> ⓘ This workflow describes how to use the REST API to retrieve the two ID values. You can also use the Cloud Manager web UI to get these values. See Get the client and account identifiers for more information.

1. Get the supported services

This API returns information about the supported services.

HTTP method	Resource path
GET	/occm/api/occm/system/support-services

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/occm/system/support-
services' --header 'Content-Type: application/json' --header 'x-agent-Id:
<AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
```

Input parameters

None

Output

The JSON output example includes the supported services information. You can locate the `clientId` value under `auth0Information` and the `accountId` value under `tenancyServiceInformation`.

JSON output example

```
{
    "asupEnabled": true,
    "cognitoEnabled": true,
    "kinesisEnabled": true,
    "intercomEnabled": true,
    "liveChatEnabled": true,
    "volumeViewEnabled": true,
    "portalService": {
        "usePortalAuthentication": true,
        "auth0Information": {
            "domain": "netapp-cloud-account.auth0.com",
            "audience": "https://api.cloud.netapp.com",
            "clientId": "WsefXFuCJJvMKCMppR65jCktHAQBWFs4"
        },
        "portalInformation": {
            "edit_user_url":
"https://services.cloud.netapp.com/?userMenuOpen",
            "portalBackEnd": "https://api.services.cloud.netapp.com",
            "portalFrontEnd": "https://services.cloud.netapp.com"
        },
        "saasFrontEnd": "https://cloudmanager.netapp.com"
    },
    "intercomAppId": "brf2h510",
    "tenancyServiceInformation": {
        "accountId": "account-xxx1234",
        "url": "https://cloudmanager.cloud.netapp.com/tenancy",
        "accountWidgetUrl":
"https://services.cloud.netapp.com/accountWidgetLoader.js",
        "agentsMgmtUrl": "https://cloudmanager.cloud.netapp.com/agents-
mgmt",
        "forwarderUrlOverride": "https://cloudmanager.cloud.netapp.com"
    },
    "saasMpServiceInformation": {
        "productUrlAws":
"http://aws.amazon.com/marketplace/pp/B086BQCW8P",
        "productUrlGcp":
"https://console.cloud.google.com/marketplace/details/netapp-
cloudmanager/cloud-manager",
```

```
        "url": "https://cloudmanager.cloud.netapp.com/saas-mp",
        "productUrlAzure": "https://portal.azure.com/#create/netapp.test-
cloud-manager"
    },
    "cvsInformation": "https://services.cloud.netapp.com",
    "backupToS3Information": {
        "enabled": true,
        "disableReason": null,
        "notSubscribedReason": false,
        "cbsEnabled": true,
        "onpremSupported": true
    },
    "complianceEnabled": false,
    "ipaServiceInformation": {
        "url": "https://cloudmanager.cloud.netapp.com/ipa"
    },
    "servicesInformation": {
        "compliance": {
            "enabled": false,
            "govSupported": true,
            "iframeUrl": "https://dev-
components.cloudmanager.netapp.com/cloudmanager_compliance/index.html"
        },
        "cloudSync": {
            "iframeUrl": "https://dev.cloudsync.netapp.com",
            "url": "https://dev.cloudsync.netapp.com",
            "enabled": false,
            "apiUrl": "https://api.dev.cloudsync.netapp.com",
            "govSupported": false
        },
        "monitoring": {
            "enabled": false,
            "govSupported": true,
            "iframeUrl": "https://dev-
components.cloudmanager.netapp.com/monitoring/index.html",
            "apiUrl": "https://cloudmanager.cloud.netapp.com"
        },
        "astra": {
            "enabled": true,
            "govSupported": false,
            "iframeUrl": "https://engint.astra.netapp.io"
        },
        "gfc": {
            "iframeUrl": "https://dev-
components.cloudmanager.netapp.com/cloudmanager_gfc/index.html",
            "dashboardUrl": "https://dev-
```

```
components.cloudmanager.netapp.com/cloudmanager_gfc/index.html",
            "enabled": false,
            "apiUrl": "https://cloudmanager.cloud.netapp.com",
            "govSupported": false
        },
        "cloudTiering": {
            "iframeUrl": "https://tiering.cloud.netapp.com",
            "url": "https://tiering.cloud.netapp.com",
            "enabled": false,
            "apiUrl": "https://tiering.cloud.netapp.com",
            "govSupported": false
        },
        "snapCenter": {
            "enabled": false,
            "govSupported": false,
            "iframeUrl": "https://dev-
components.cloudmanager.netapp.com/cloudmanager_snapcenter/index.html",
            "apiUrl": "https://cloudmanager.cloud.netapp.com"
        },
        "k8s": {
            "enabled": false,
            "govSupported": false,
            "iframeUrl": "https://dev-
components.cloudmanager.netapp.com/cloudmanager_k8s/index.html",
            "apiUrl": "https://cloudmanager.cloud.netapp.com"
        },
        "spot": {
            "enabled": true,
            "govSupported": false,
            "iframeUrl": "https://dev-
components.cloudmanager.netapp.com/cloudmanager_spot/index.html",
            "apiUrl": "https://cloudmanager.cloud.netapp.com"
        },
        "sfr": {
            "enabled": false,
            "govSupported": true,
            "iframeUrl": "https://dev-
components.cloudmanager.netapp.com/cloudmanager_sfr/index.html",
            "dashboardUrl": "https://dev-
components.cloudmanager.netapp.com/cloudmanager_sfr/index.html"
        },
        "activeIq": {
            "enabled": true,
            "govSupported": false,
            "iframeUrl": "https://digitaladvisor.aws.techteam.netapp.com"
        }
```

```
    },
    "setupInfo": {
        "isSetup": true,
        "isPendingConnectivitySet": false,
        "needCertificate": false,
        "runningInDocker": false
    },
    "useCompliancePrivateIpContainerMode": false
}
```

Get cloud provider accounts

You can retrieve a list of the Cloud Manager accounts available for the supported cloud platforms.

1. Get the cloud provider accounts

HTTP method	Resource path
GET	/occm/api/accounts/cloud-providers

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/accounts/cloud-providers'
--header 'Content-Type: application/json' --header 'x-agent-id:
<AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
```

Input parameters
    None

Output
    The JSON output example shows the cloud provider accounts returned in separate named arrays.

JSON output example

```
{
    "awsAccounts": [
        {
            "publicId": "InstanceProfile",
            "accountName": "Instance Profile",
            "accountType": "INSTANCE_PROFILE",
            "accountId": "733004784675",
            "accessKey": "",
            "assumeRole": null,
            "occmRole": "occm",
            "vsaList": [
                {
                    "publicId": "VsaWorkingEnvironment-N6BPfglr",
                    "name": "ziv04we01ha",
                    "workingEnvironmentType": "AWSHA"
                }
            ],
            "subscriptionId": "subsctionIDshownhere"
        }
    ],
    "azureAccounts": [],
    "gcpStorageAccounts": [],
    "nssAccounts": []
}
```

Get tenants

You can retrieve a list of tenants visible to the user currently signed in through the account workspace.

1. Get the account identifier

Perform the workflow Get supported services to retrieve the account ID.

> ⓘ You can also get the account identifier through the Cloud Manager web UI. See Get the client and account identifers for more information.

2. Get the account workspace

HTTP method	Resource path
GET	/tenancy/account/{account_id}/workspace

curl example

```
curl --location --request GET
"https://cloudmanager.cloud.netapp.com/tenancy/account/<ACCOUNT_ID>/worksp
ace" --header 'Content-Type: application/json' --header 'Authorization:
Bearer <ACCESS_TOKEN>'
```

Input parameters

Path parameter with the account ID.

Output

The JSON output example shows the list of tenants.

JSON output example

```json
[
    {
        "workspacePublicId": "workspace-ced4x9X4",
        "workspaceName": "Workspace-1",
        "associatedAgents": []
    }
]
```

SaaS marketplace

Get SaaS marketplace account

You can use this workflow to retrieve the current marketplace account and subscriptions.

Before you begin

Every cloud account can *optionally* have a subscription associated with it. The subscription identifies how the various cloud services used by the account are charged. When retrieving the following SaaS accounts, notice that the `subscriptionId` values in the `cloudAccounts` array objects match the `id` values in the associated subscription arrays for the three cloud providers.

(i) Each cloud account can have exactly zero or one subscription. You must have a subscription when creating a working environment using PAYGO ("pay as you go").

1. Get the SaaS accounts

HTTP method	Resource path
GET	/occm/api/occm/saas-mp-service/account

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/occm/saas-mp-
service/account' --header 'Content-Type: application/json' --header 'x-
agent-id: <AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
```

Input parameters

None

Output

The JSON output example shows the subscriptions and in each case the account it is associated with.

JSON output example

```
{
    "awsSubscriptions": [
        {
            "id": "awsid00000",
            "name": "aws-sub-a2",
            "provider": "aws",
            "active": true
        }
    ],
    "azureSubscriptions": [],
    "gcpSubscriptions": [
        {
            "id": "gcp-xxxx0000",
            "name": "GCP subscription",
            "provider": "gcp",
            "active": true
        }
    ],
    "eligibleForFreeTrialAws": false,
    "eligibleForFreeTrialGcp": false,
    "eligibleForFreeTrialAzure": false,
    "cloudAccounts": [
        {
            "cloudAccountId": "000000",
            "provider": "aws",
            "subscriptionId": "aws-xxxxx000000xxxxxxx0000"
        },
        {
            "cloudAccountId": "occm-dev",
            "provider": "gcp",
            "subscriptionId": "gcp-xxx00000xxx0000"
        },
        {
            "cloudAccountId": "occm-host",
            "provider": "gcp",
            "subscriptionId": "gcp-xxxx000000xxx00000"
        }
    ]
}
```

Attach SaaS subscription

You can use this workflow to attach a Cloud Manager SaaS subscription to a cloud provider account.

1. Select the cloud provider path parameter

Select the cloud provider from the list of allowed values below. You will use this value as the *provider* path parameter in the curl example in step 4.

- aws
- azure
- gcp

2. Determine the account identifier path parameter

Perform the workflow Get cloud provider accounts and choose the `accountId` value for the account.

3. Get the SaaS marketplace account

Perform the workflow Get SaaS marketplace account and choose the `id` value for the `subscriptionId` pamater.

4. Attach the subscription

HTTP method	Resource path
POST	/occm/api/occm/saas-mp-service/attach-subscription/{provider}/{cloudAccountId}

curl example

```
curl --location --request PUT
'https://cloudmanager.cloud.netapp.com/occm/api/occm/saas-mp-
service/attach-subscription/<PROVIDER>/<CLOUD_ACC_ID>' --header 'x-agent-
id: <AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>' --header
'Content-Type: application/json' --d @JSONinput
```

Input parameters

The JSON input example includes the input parameter.

JSON input example

```
{
  "subscriptionId": "gcp-saasMpIntegrationProductId-
saasMpCustomerIdentifier0"
}
```

Output

None

NetApp Support Site

Get an NSS key

You can retrieve the key for a specific NetApp Support Site account.

1. Select the account

Perform the workflow Get supported services and choose the `accountId` value for the path parameter.

2. Select the NSS key to retrieve

Perform the workflow Get NSS keys and choose the `id` value for the `nssKeyId` path parameter.

3. Retrieve the NSS key

HTTP method	Resource path
GET	/ipa/account/{accountId}/nss-keys/{nssKeyId}

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/ipa/account/<ACCOUNT_ID>/nss-
key/<NSS_KEY_ID>' --header 'Content-Type: application/json' --header 'x-
agent-id: <AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
```

Input parameters
   Path parameters:

   • <ACCOUNT_ID> (accountId)

   • <NSS_KEY_ID> (nssKeyId)

Output
   The NSS key and related information is returned as shown in the JSON output example.

JSON output example

```
{
    "id": "d69a5214-7d61-486e-8750-8e1f68601c43",
    "username": "misterziv",
    "resources": [],
    "credentialType": "password"
}
```

Get NSS keys

You can retrieve all of the available NetApp Support Site credential keys.

1. Select the account to use

Perform the workflow Get cloud provider accounts and choose the `accountId` value for the path parameter.

2. Retrieve the NSS keys

HTTP method	Resource path
GET	/ipa/account/{accountId}/nss-keys

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/ipa/account/<ACCOUNT_ID>/nss-
keys?includeResources=true' --header 'Content-Type: application/json'
--header 'x-agent-id: <AGENT_ID> --header 'Authorization: Bearer
<ACCESS_TOKEN>'
```

Input parameters

- Path parameter <ACCOUNT_ID> (`accountId`)

- Query parameter `includeResources` is optional

Output

The JSON output example includes a list of the NSS keys.

JSON output example

```
[
    {
        "id": "d69a5214-7d61-486e-8750-8e1f68601c43",
        "username": "zivtest03",
        "resources": [VsaWorkingEnvironment-4UHd0x6l],
        "credentialType": "password"
    },
    {
        "id": "98f2c5db-af76-428f-ae81-08fdfa1e04ae",
        "username": "zivtest23",
        "resources": [],
        "credentialType": "password"
    }
]
```

Delete an NSS key

You can delete an NetApp Support Site (NSS) key.

1. Select the account to use

Perform the workflow Get supported services and choose the `accountId` value for the path parameter.

2. Select the NSS key to delete

Perform the workflow Get NSS keys and choose the `id` value for the `nssKeyID` parameter.

3. Delete the NSS keys

HTTP method	Resource path
DELETE	/ipa/account/{accountId}/nss-keys/{nssKeyId}

curl example

```
curl --location --request DELETE
'https://cloudmanager.cloud.netapp.com/ipa/account/<ACCOUNT_ID>/nss-
key/<NSS_KEY_ID>' --header 'Content-Type: application/json' --header 'x-
agent-id: <AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
```

Input parameters
- Path parameter <ACCOUNT_ID> (`accountId`)
- Path parameter <NSS_KEY_ID> (`nssKeyId`)

Output
  None

Internal tasks and support

Get active task

All of the requests made to the Cloud Manager REST API are processed asynchronously except those using the HTTP GET method. Each of these asynchronous requests is assigned a unique identifier which is returned to the caller in the response. You can use the request ID to retrieve information about the background task including its status.

1. Get the request identifier

After issuing any REST API call, the associated request identifier is returned in the `X-Response_Id` header. You must extract this value and use it in the path variable in the next step.

2. Get the task

HTTP method	Resource path
GET	/occm/api/audit/activeTask/{request_id}

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/audit/activeTask/<REQUEST_
ID>' --header 'Content-Type: application/json' --header 'x-agent-id:
<AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
```

Input parameters

Path parameter that contains the request identifier `<REQUEST_ID>` for the original task.

Output

The JSON output example includes the list of returned values. The `status` contains one of three values indicating the status of the task.

Status	Description
1	The asynchronous task completed successfully.
0	The background task is still running and has not completed.
-1	The asynchronous task completed but failed.

JSON output example

```
{
    "status": 0,
    "closeTime": -2147483648,
    "actionName": "Create Vsa Working Environment",
    "error": null
}
```

SnapMirror replication

Create a SnapMirror replication relationship

You can use this workflow to create a new SnapMirror replication relationship to an ONTAP working environment. You can replicate data between working environments by choosing a one-time data replication for data transfer, or a recurring schedule for disaster recovery or long-term retention.

ⓘ This workflow varies slightly depending on the cloud provider you are using.

1. Select the working environment

Based on the cloud provider, you need to perform a workflow to get the identifier for the working environment as shown in the following table.

Provider	Workflow
AWS	Perform the workflow Get working environments and choose the `publicId` and `svmName` values for the source and destination.

2. Select the LIFs

Perform the workflow Get intercluster LIFs and choose the `address` value for the source and destination.

3. Select the SnapMirror policy

Perform the workflow Get SnapMirror policies and choose the `name` value for the required schedule.

4. Select the SnapMirror schedule

Perform the workflow Get schedules and choose the `name` value for the required policy.

5. Select the volume names and related storage parameters

Based on the cloud provider, you need to perform a workflow to get the volume information.

Provider	Workflow
AWS	Perform the workflow Get volumes and choose the `name` and `svmName` and `aggregateName` values.

6. Create a quote

Based on the cloud provider, you need to perform a workflow to get the volume information.

Provider	Workflow
AWS	Perform the workflow Create quote and choose the `providerVolumeType` and `name` values.

7. Create the relationship

HTTP method	Path
POST	/occm/api/replication/vsa

curl example

```
curl --location --request POST
'https://cloudmanager.cloud.netapp.com/occm/api/replication/vsa' --header
'Content-Type: application/json' --header 'x-agent-id: <AGENT_ID>'
--header 'Authorization: Bearer <ACCESS_TOKEN>' --d @JSONinput
```

Input

The JSON input example includes the minimum list of input parameters. The `maxTransferRate` is maximum transfer rate limit in KB/s. Specify 0 to indicate no limit or an integer between `1024` and

2,147,482,624.

JSON input example

```json
{
  "replicationRequest": {
    "sourceWorkingEnvironmentId": "vsaworkingenvironment-sfrf3wvj",
    "destinationWorkingEnvironmentId": "vsaworkingenvironment-2qkd75xv",
    "sourceInterclusterLifIps": [
      "10.138.0.147"
    ],
    "destinationInterclusterLifIps": [
      "10.138.0.154"
    ],
    "policyName": "MirrorAllSnapshots",
    "scheduleName": "daily",
    "maxTransferRate": 102400
  },
  "replicationVolume": {
    "sourceSvmName": "svm_zivgcp01we02",
    "sourceVolumeName": "zivagg01vol01",
    "destinationVolumeName": "zivagg01vol03_copy",
    "destinationAggregateName": "aggr1",
    "numOfDisksApprovedToAdd": 0,
    "advancedMode": false,
    "destinationProviderVolumeType": "pd-ssd",
    "destinationSvmName": "svm_zivgcp01we03"
  }
}
```

Output

None

Update a SnapMirror replication relationship

You can use this workflow to update an existing SnapMirror replication relationship.

1. Select the working environment and related values

Perform the workflow Get relationships status and choose the `workingEnvironment` and `svmName` and `volumeName` values for the path parameters. All values are for the destination.

2. Update the relationship

HTTP method	Path
PUT	/occm/api/replication/{workingEnvironmentId}/{destinationSvmName}/{destination VolumeName}

curl example

```
curl --location --request PUT
'https://cloudmanager.cloud.netapp.com/occm/api/replication/<WORKING_ENV_I
D/<SVM_NAME/<VOLUME_NAME>' --header 'Content-Type: application/json'
--header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer
<ACCESS_TOKEN>' --d @JSONinput
```

Input

   Path parameters:

   - <WORKING_ENV_ID> (`workingEnvironmentId`)

   - <SVM_NAME> (`destinationSvmName`)

   - <VOLUME_NAME> (`destinationVolumeName`)

The JSON input example includes some of the parameters you can update.

JSON input example

```
{
   "maxTransferRate": 0
}
```

Output

   None

Delete a SnapMirror replication relationship

You can use this workflow to delete an existing SnapMirror replication relationship.

1. Select the working environment and related values

Perform the workflow Get relationships status. Choose the `workingEnvironmentId` and `svmName` and `volumeName` values for the path parameters. All values are for the destination.

2. Delete the relationship

HTTP method	Path
DELETE	/occm/api/replication/{destinationWorkingEnvironmentId}/{destinationSvmName}/{destinationVolumeName}

curl example

```
curl --location --request DELETE
'https://cloudmanager.cloud.netapp.com/occm/api/replication/<WORKING_ENV_I
D>/<SVM_NAME>/<VOLUME_NAME>' --header 'Content-Type: application/json'
--header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer
<ACCESS_TOKEN>'
```

Input

There are three path parameters, all of which apply to the destination:

- <WORKING_ENV_ID> (destinationWorkingEnvironmentId)

- <SVM_NAME> (destinationSvmName)

- <VOLUME_NAME> (destinationVolumeName)

Output

None

Get the SnapMirror relationships

You can retrieve all the SnapMirror relationship pairs.

1. Retrieve the relationships

HTTP method	Path
GET	/occm/api/replication/all-relationships

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/replication/all-
relationships' --header 'Content-Type: application/json' --header 'x-
agent-id: <AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
```

Input parameters

None

Output

An array of relationship pairs is returned as shown in the JSON output example.

JSON output example

```
{
    "relationships": [
        {
            "source": {
                "id": "vsaworkingenvironment-sfrf3wvj"
            },
            "target": {
                "id": "vsaworkingenvironment-2qkd75xv"
            }
        }
    ]
}
```

Get the status of the replication relationships

You can use this workflow to retrieve the status of all the SnapMirror replication relationships.

ⓘ   This workflow varies slightly depending on the cloud provider you are using.

1. Optionally select the tenant ID

Based on the cloud provider, you need to perform a workflow to get the tenant ID as shown in the following table.

Provider	Workflow
AWS	Perform the workflow Get working environments and choose the `tenantId` value.

2. Get the status of the relationships

HTTP method	Path
GET	/occm/api/replication/status

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/replication/status'
--header 'Content-Type: application/json' --header 'x-agent-id:
<AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

The query parameter `tenantId` is optional.

Output

The JSON output example includes the list of all the SnapMirror relationships with status.

JSON output example

```json
[
    {
        "source": {
            "workingEnvironmentId": "vsaworkingenvironment-sfrf3wvj",
            "workingEnvironmentType": "VSA",
            "workingEnvironmentStatus": "ON",
            "clusterName": "zivgcp01we02",
            "region": "us-west1-b",
            "availabilityZone": null,
            "svmName": "svm_zivgcp01we02",
            "nodeName": null,
            "volumeName": "zivagg01vol01"
        },
        "destination": {
            "workingEnvironmentId": "vsaworkingenvironment-2qkd75xv",
            "workingEnvironmentType": "VSA",
            "workingEnvironmentStatus": "ON",
            "clusterName": "zivgcp01we03",
            "region": "us-west1-b",
            "availabilityZone": null,
            "svmName": "svm_zivgcp01we03",
            "nodeName": "zivgcp01we03-01",
            "volumeName": "zivagg01vol01_copy"
        },
        "mirrorState": "snapmirrored",
        "relationshipType": "extended_data_protection",
        "relationshipStatus": "idle",
        "relationshipProgress": null,
        "policy": "MirrorAllSnapshots",
        "policyType": "async_mirror",
        "schedule": "daily",
        "maxTransferRate": {
            "size": 102400.0,
            "unit": "KB"
        },
        "networkCompressionRatio": "1:1",
        "healthy": true,
        "unhealthyReason": null,
        "lagTime": {
            "length": 14012,
            "unit": "SECONDS"
        },
```

```
            "newestSnapshotName": "snapmirror.e7179420-5e45-11eb-8f27-
    d7fea0402bd2_2150573386.2021-01-25_123451",
            "newestSnapshotCreated": 1611578092,
            "lastTransferInfo": {
                "transferType": "update",
                "transferSize": {
                     "size": 6240.0,
                     "unit": "Byte"
                },
                "transferDuration": {
                     "length": 4,
                     "unit": "SECONDS"
                },
                "transferEnded": 1611578097,
                "transferError": null
            },
            "currentTransferInfo": {
                "transferType": null,
                "transferPriority": null,
                "transferError": null
            },
            "totalTransferTime": {
                "length": 6,
                "unit": "SECONDS"
            },
            "totalTransferSize": {
                "size": 23792.0,
                "unit": "Byte"
            },
            "volumeUsedSize": {
                "size": 1032192.0,
                "unit": "Byte"
            },
            "volumeCapacityTier": {
                "size": 0.0,
                "unit": "Byte"
            }
        }
    }
]
```

Get status of the replication relationships for a working environment

You can use this workflow to retrieve the status of all the SnapMirror replication
relationships for a specific working environment.

> ⓘ   This workflow varies slightly depending on the cloud provider you are using.

1. Select the working environment

Based on the cloud provider, you need to perform a workflow to get the identifier for the working environment as shown in the following table.

Provider	Workflow
AWS	Perform the workflow Get working environments and choose the `publicId` value for the `workingEnvironmentId` query parameter.

2. Get the status of the relationships

HTTP method	Path
GET	/occm/api/replication/status/{workingEnvironmentId}

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/replication/status/<WORKIN
G_ENV_ID>' --header 'Content-Type: application/json' --header 'x-agent-id:
<AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

Path parameters:

- <WORKING_ENV_ID> (`workingEnvironmentId`)

Output

The JSON output example includes the list of all the SnapMirror relationships with status for a specific working environment.

JSON output example

```
[
    {
        "source": {
            "workingEnvironmentId": "vsaworkingenvironment-sfrf3wvj",
            "workingEnvironmentType": "VSA",
            "workingEnvironmentStatus": "ON",
            "clusterName": "zivgcp01we02",
            "region": "us-west1-b",
            "availabilityZone": null,
            "svmName": "svm_zivgcp01we02",
            "nodeName": null,
            "volumeName": "zivagg01vol01"
        },
        "destination": {
            "workingEnvironmentId": "vsaworkingenvironment-2qkd75xv",
```

```json
                "workingEnvironmentType": "VSA",
                "workingEnvironmentStatus": "ON",
                "clusterName": "zivgcp01we03",
                "region": "us-west1-b",
                "availabilityZone": null,
                "svmName": "svm_zivgcp01we03",
                "nodeName": "zivgcp01we03-01",
                "volumeName": "zivagg01vol01_copy"
        },
        "mirrorState": "snapmirrored",
        "relationshipType": "extended_data_protection",
        "relationshipStatus": "idle",
        "relationshipProgress": null,
        "policy": "MirrorAllSnapshots",
        "policyType": "async_mirror",
        "schedule": "daily",
        "maxTransferRate": {
            "size": 102400.0,
            "unit": "KB"
        },
        "networkCompressionRatio": "1:1",
        "healthy": true,
        "unhealthyReason": null,
        "lagTime": {
            "length": 14886,
            "unit": "SECONDS"
        },
        "newestSnapshotName": "snapmirror.e7179420-5e45-11eb-8f27-
d7fea0402bd2_2150573386.2021-01-25_123451",
        "newestSnapshotCreated": 1611578092,
        "lastTransferInfo": {
            "transferType": "update",
            "transferSize": {
                "size": 6240.0,
                "unit": "Byte"
            },
            "transferDuration": {
                "length": 4,
                "unit": "SECONDS"
            },
            "transferEnded": 1611578097,
            "transferError": null
        },
        "currentTransferInfo": {
            "transferType": null,
            "transferPriority": null,
```

```
            "transferError": null
        },
        "totalTransferTime": {
            "length": 6,
            "unit": "SECONDS"
        },
        "totalTransferSize": {
            "size": 23792.0,
            "unit": "Byte"
        },
        "volumeUsedSize": {
            "size": 1032192.0,
            "unit": "Byte"
        },
        "volumeCapacityTier": {
            "size": 0.0,
            "unit": "Byte"
        }
    }
]
```

Get the intercluster LIFs

You can use this workflow to retrieve the intercluster LIFs used in a cluster peering relationship.

ⓘ   This workflow varies slightly depending on the cloud provider you are using.

1. Select the working environment

Based on the cloud provider, you need to perform a workflow to get the identifier for the working environment as shown in the following table.

Provider	Workflow
AWS	Perform the workflow Get working environments and choose the `publicId` values for the working environment query parameters.

2. Get the intercluster LIFs

HTTP method	Path
GET	/occm/api/replication/intercluster-lifs

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/replication/interclusterli
fs?workingEnvironmentId=<WORKING_ENV_ID>&peerWorkingEnvironmentId=<WORKING
_ENV_ID>' --header 'Content-Type: application/json' --header 'x-agent-id:
<AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

Query parameters:

- <WORKING_ENV_ID> (`workingEnvironmentId`)

- <WORKING_ENV_ID> (`peerWorkingEnvironmentId`)

Output

The JSON output example includes the list of LIFs.

JSON output example

```
{
    "interClusterLifs": [
        {
            "name": "intercluster",
            "address": "10.138.0.154",
            "netmaskLength": 32,
            "port": "e0a",
            "node": "zivgcp01we03-01",
            "status": "up",
            "isPeered": true
        }
    ],
    "peerInterClusterLifs": [
        {
            "name": "intercluster",
            "address": "10.138.0.147",
            "netmaskLength": 32,
            "port": "e0a",
            "node": "zivgcp01we02-01",
            "status": "up",
            "isPeered": true
        }
    ]
}
```

Get the replication schedules

You can use this workflow to retrieve the replication schedules used for a specific working

environment.

ℹ️ This workflow varies slightly depending on the cloud provider you are using.

1. Select the working environment

Based on the cloud provider, you need to perform a workflow to get the identifier for the working environment as shown in the following table.

Provider	Workflow
AWS	Perform the workflow Get working environments and choose the `publicId` value for the working environment path parameter.

2. Get the schedules

HTTP method	Path
GET	/occm/api/replication/schedules/{workingEnvironmentId}

curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/replication/schedules/<WOR
KING_ENV_ID>' --header 'Content-Type: application/json' --header 'x-agent-
id:<AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
```

Input

Path parameter <WORKING_ENV_ID> (`workingEnvironment`)

Output

The JSON output example includes the list of replication schedules.

JSON output example

```
[
    {
        "name": "10min",
        "description": "@:00,:10,:20,:30,:40,:50",
        "cronJobSchedule": {
            "months": [],
            "days": [],
            "weekDays": [],
            "hours": [],
            "minutes": [
                0,
                10,
                20,
                30,
                40,
                50
            ]
        }
    },
    {
        "name": "5min",
        "description": "@:00,:05,:10,:15,:20,:25,:30,:35,:40,:45,:50,:55",
        "cronJobSchedule": {
            "months": [],
            "days": [],
            "weekDays": [],
            "hours": [],
            "minutes": [
                0,
                5,
                10,
                15,
                20,
                25,
                30,
                35,
                40,
                45,
                50,
                55
            ]
        }
    }
]
```

Knowledge and support

Additional resources

There are additional resources you can access to get help and find more information about NetApp cloud services and support, ONTAP 9, and general REST and cloud concepts.

NetApp cloud resources

- NetApp Cloud Solutions

  Central site for the NetApp cloud solutions.

- NetApp Cloud Central console

  NetApp Cloud Central service console with sign in.

- NetApp Support

  Access troubleshooting tools, documentation, and technical support assistance.

ONTAP 9 resources

- ONTAP 9 Documentation Center

  Provides all of the documentation for ONTAP 9.

- ONTAP and ONTAP System Manager Resources

  Provides documentation and other helpful links needed to plan, administer, and support ONTAP 9.

REST concepts and cloud technology

- PhD dissertation by Roy Fielding

  This publication introduced and established the REST application development model.

- Auth0

  This is the authentication platform service used by Cloud Manager.

- RFC editor

  Authoritative source for web and Internet standards as a collection of uniquely numbered RFC documents.

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