



# Metadata

## Cloud Manager Automation

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# Metadata

## Get regions

This workflow retrieves the AWS regions in which an Cloud Volumes ONTAP working environment may be created.

### 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 permutations

You can use the permutations endpoint to retrieve the Cloud Volumes ONTAP configuration information.

### 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 list of virtual private clouds

You can use this workflow to retrieve a list of the available virtual private clouds.

## 1. Select the region to use

Perform the workflow [Get regions](#) and choose the `code` value for the region.

## 2. Get the VPCs

HTTP method	Path
GET	/occm/api/vsa/metadata/vpcs?region=us-east-1

### Curl example

```
curl --location --request GET
'https://cloudmanager.cloud.netapp.com/occm/api/vsa/metadata/vpcs?region=us-east-1' --header 'Content-Type: application/json' --header 'x-agent-id: <AGENT_ID>' --header 'Authorization: Bearer <ACCESS_TOKEN>'
```

### Input

Query parameters:

- `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": "sg-000a2be93c8668b1b",
      "description": "NetApp OCCM Instance External Security
Group",
      "name": "lilush2000OCCM1590415972561-OCCMSecurityGroup-
JDB72N6W90UG"
    },
    {
      "securityGroupId": "sg-0017cf49544fbb31e",
      "description": "Enable HTTP and NFS for Cloud Restore
Instance",
      "name": "Cloud-Restore-Instance-account-TgPvchSk-
CloudRestoreInstanceSecurityGroup-ZH4GN8E8AU1K"
    }
  ],
  "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": "sg-0ccb5855f56acd419",
        "description": "ONTAP Cloud firewall rules for management
and data interface",
        "name": "SG-Version10-duahpJbS-
NetAppExternalSecurityGroup-EB0BZTI536LE"
      },
      {
        "securityGroupId": "sg-1911fa66",
        "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.

### 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
  }
}
```

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