Cloudmore API

Introduction

The Cloudmore API is a REST API that Cloudmore Cloud Service Brokers and Sellers in Cloudmore can use to order and manage services and subscriptions and retrieve billing information.

The Cloudmore API enables the automation of routine tasks such as:

- Retrieve service and product information to display in their online portals.
- Create customers and users in Cloudmore and external cloud services.
- Create subscriptions for different services and assign subscriptions to users.
- Suspend, cancel, and delete subscriptions.
- Configure and update pricing for products and set customer specific prices.
- Retrieve billing information to integrate with external ERP and financial reporting systems.

This API documentation explains how to access the Cloudmore API and includes examples to help you get started. For detailed and updated information about each API call, please see our Swagger document: https://api.cloudmore.com/swagger/.

Document Versions

Version	Comment	Updated by	Updated
1.0	Initial document	@ Niklas Högset	15 May 2020

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Key Terms

Here are some of the key terms used in the Cloudmore API and this document:

Seller - A Seller in Cloudmore is a tenant that wants to offers services to Cloud Service Brokers (Brokers). A seller is typically a Service Provider, ISV, Distributor, Managed Service Provider(MSP), or an Enterprise. The Seller will create and publish services to the Marketplace where a broker can resell to end-users.

Cloud Service Broker (Broker) - A Broker is a tenant that wants to offer services to end-users. A Broker can be an MSP, Reseller, Telco, or larger Enterprise organizations. A Broker can provide services from Sellers or add their own services.

Organization - An organization is a tenant that consumes services. An Organization can be a company, business unit, or department. An Organization purchase services that the Broker is offering to them.

User - A User is a person in an organization that is using a service. Users can also be used for administrative access at all levels in Cloudmore.

Services - A service is a wrapper that contains the general service marketing information and provisioning action. In Cloudmore, services are either provided from a Seller, set up at the Cloud Service Broker level, or provided by Cloudmore as a "pre-integrated" service. Any service set up by the Seller or Cloud Service Broker is known as a Custom Service.

Product / Service Plan - A Product / Service Plan is the actual item the organization buys. A product has a name, item code, price, and subscription and cancellation rules. A service may have one or several products.

Addons - Addons are products offered together with another product. An addon will have a name, item code, and price details. An addon will follow the same subscription and cancelation rules as the product.

Product Custom Properties - A product may have unlimited custom properties. These properties allow for additional structured data to be stored together with the product. Custom properties can be hidden data used to provide additional data to an external API or used to collect information from the user and store it with the subscription.

Subscription - A subscription is created under a service. The subscription will contain one (1) product and optionally addons. The subscription terms will be based on the product, if the product is an annual subscription with monthly payment, those properties will make up the terms of the subscription.

Marketplace - The Marketplace is where a Cloud Service Broker finds new services that they want to resell. Services are presented with marketing information and may also have an associated agreement. After adding a service from the Marketplace, the service will be shown in the Services and is ready for resell.

E-store - The E-store is where organizations find new services to buy. After adding the service from the E-store, the organization can start to create subscriptions and use the service.

Approval Process (AP) - Approval Process can be enabled per organization. When active, any purchase, either new or change of an existing subscription, will generate an approval request that needs to be approved by the Cloud Service Broker. An approval trigger amount may also be specified to allow purchases below a certain threshold while purchases above the threshold would trigger the Approval Process.

Organization Custom Properties - Organizations and users may have custom properties. Custom properties are created by the Cloud Service Broker and can be used to capture or store additional information. Custom properties can be text fields, dropdowns, or checkboxes and can be marked as mandatory.

Subscription Period - The subscription period is the agreement length of a subscription that the customer commits to buying the service. Cloudmore supports both the Pay-As-You-Go (1-month subscriptions) model and long term subscription periods. Renewal rules are set on the product if it is a custom product, otherwise defined by the service provider.

Payment Frequency and Billing Interval - The payment frequency defines how often payment should happen. The frequency can either be monthly, quarterly, or yearly. The payment frequency can be aligned with the subscription period or a shorter value. For instance, an annual subscription may be paid monthly. In billing reports, the payment frequency may be referred to as a billing interval.

Billing Date - The date when billing data is generated. Each service has its billing date either set in Cloudmore or decided by the vendor. On the billing date, billing data for the service will be generated and stored.

Common Use Cases

Cloudmore API supports many different use cases. In this section, we will highlight a few with API calls that are relevant for the use case. More details and examples on how to make API calls also shown later in this document.

Frontend portal

This use case applies to Cloud Service Brokers who want to create an online portal or e-commerce shop that sits in front of Cloudmore. In this scenario, Cloudmore is the backend vehicle that provision services, manage subscriptions, and keep track of billing. This can be used for onboarding new customers, manage the initial sell, or provide full subscription management.

This use case will cover these steps:

1. Onboarding of new customers
2. List all available services with service details
3. Add a service
4. Create a subscription

1 - Onboarding of new customers

All customers need to have a tenant in Cloudmore. In Cloudmore, customer tenants are named organizations. There are several API calls to manage organizations in Cloudmore.

- Create a new organization - **POST** /api/resellers/{resellerId}/Organizations
- Update an existing organization - **PUT** /api/resellers/{resellerId}/Organizations/{id}
- Delete an organization - **DELETE** /api/resellers/{resellerId}/Organizations/{id}
- List all organizations - **GET** /api/resellers/{resellerId}/Organizations
- List details about an organization - **GET** /api/resellers/{resellerId}/Organizations/{id}

Users can be created under an organization. This is not a requirement but can be used to assign subscriptions to individual users or to allow self-service in Cloudmore. Not all services use Cloudmore user directory but instead have their own user management.

When a new user is created, a role needs to be specified. The role defines what permission the user will have in Cloudmore.

- Get available user roles - **GET** /api/resellers/{resellerId}/organizations/{organizationId}/OrganizationRoles
- Create a new user - **POST** /api/resellers/{resellerId}/organizations/{organizationId}/Users
- Update an existing user - **PUT** /api/resellers/{resellerId}/organizations/{organizationId}/Users/{id}
- Delete a user - **DELETE** /api/resellers/{resellerId}/organizations/{organizationId}/Users/{id}
- List all users under an organization - **GET** /api/resellers/{resellerId}/organizations/{organizationId}/Users
- List details about an user - **GET** /api/resellers/{resellerId}/organizations/{organizationId}/Users/{id}

2 - List all available services with service details

New services for organisations are listed in the E-store. Use the E-store API calls to list and get service details that are available for a specific organization.

- List all available services for an organization - **GET** /api/resellers/{resellerId}/organizations/{organizationId}/Estore
- Get service details - **GET** /api/resellers/{resellerId}/organizations/{organizationId}/Estore/{serviceId}

3 - Add a service

Before subscriptions can be created, the service needs to be added to the organization. In this step, a tenant may be created with the external cloud service. The steps to add service and create subscriptions can be done as a one-step action from the external online portal.

For Microsoft O365 CSP, you also need to check the domain availability before you add the service.

- Add standard service from E-store to organization - **POST** /api/resellers/{resellerId}/organizations/{organizationId}/services
- Check Microsoft O365 domain availability - **GET** /api/resellers/{resellerId}/services/csp/domainvalidation
- Add Microsoft O365 from E-store to organization - **POST** /api/resellers/{resellerId}/organizations/{organizationId}/services/Csp

4 - Create a subscription

A product needs to be specified when you create a subscription. The product determines subscriptions length, payment frequency, and price.

- List available products - **GET** /api/resellers/{resellerId}/organizations/{organizationId}/services/{serviceId}/products

Once a suitable product has been found, a subscription can be created.

- Create a new subscription - **POST** /api/resellers/{resellerId}/organizations/{organizationId}/services/{serviceId}/subscriptions

After a subscription has been created, you can list all subscriptions or cancel subscriptions.

- List all subscriptions - **GET** /api/resellers/{resellerId}/organizations/{organizationId}/services/{serviceId}/subscriptions
- Delete / Cancel subscription - **DELETE** /api/resellers/{resellerId}/organizations/{organizationId}/services/{serviceId}/subscriptions/{subscriptionId}

Billing integration

Cloudmore will generate billing information that can be used by Cloud Service Brokers to invoice their customers. To get billing data out of Cloudmore, you can either schedule a report in Cloudmore or use the API if you want to connect it to an ERP or other financial system.

This use case will cover these steps:

1. Get all billing data for all services
2. Get Microsoft O365 billing report
3. Get Microsoft Azure billing report
4. Set prices

1 - Get all billing data for all services

The general billing report is the recommended billing report to use as it contains billing data for all services. The billing data can be grouped either per organization or per service. Note that each service may have different billing dates. When you pull the report you define a start and end date and it is recommended to set the dates for a full month.

- Get billing data per organisation - **GET** /api/resellers/{resellerId}/billing/reports/MonthlyBillingPerOrganization
- Get billing data per service - **GET** /api/resellers/{resellerId}/billing/reports/MonthlyBillingPerService

2 - Get Microsoft O365 billing report

We recommend using the general billing report for Microsoft O365 billing as it will suit most uses cases. The Microsoft O365 billing report can be used to get additional billing data as it contains more granular information like pro-rata and cycle fee details.

- Get Microsoft O365 billing report - **GET** /api/resellers/{resellerId}/billing/cspreports/MonthlyBillingPerOrganization

3 - Get Microsoft Azure billing report

Microsoft Azure billing data is also included in the general billing report. If you want to get more in-depth details of Azure consumption and break down billing based on tags and service names you may want to use the Azure billing report instead.

Microsoft Azure billing report is aligned with Microsoft invoices for easy reconciliation. An invoice Id needs to be specified when billing data is retrieved.

- Get list of available invoices - **GET** /api/resellers/{resellerId}/billing/azurereports/InvoiceList

After that a separate call will get all details for the specified invoice:

- Get invoice details - **GET** /api/resellers/{resellerId}/billing/azurereports/Invoice

The ongoing period billing data can be retrieved with the below API call. Keep in mind that ongoing billing data has not been finalized by Microsoft and may be changed by Microsoft when invoice data is generated.

- Get ongoing period - **GET** /api/resellers/{resellerId}/billing/azurereports/OngoingPeriod

4 - Set prices

Cloudmores price management tools allow for Cloud Service Broker to set specific prices per organization. When billing reports are generated, cost and sales price will reflect the corresponding price for the specific organization and subscription. Note that some services lock the cost and sales price for the subscription period.

Get default prices and organization-specific prices:

- Get default prices for a service - **GET** /api/resellers/{resellerId}/services/{serviceId}/pricelist
- Get organization-specific prices for a service - **GET** /api/resellers/{resellerId}/organizations/{organizationId}/services/{serviceId}/pricelist

Prices can only be updated per organization and are done product by product. To update all products under a service a loop can be used in the external application.

- Update product price - **PUT** /api/resellers/{resellerId}/organizations/{organizationId}/services/{serviceId}/pricelist

Getting Started

This section describes how to get started with Cloudmore API.

Authentication

Cloudmore API uses the Open Authorization (OAuth) 2.0 authorization framework for token-based authentication. OAuth is an open standard that provides secure access to protected resources.

To request an access token, you send a request to the Cloudmore Authentication API. The request must include the API access credentials and a client secret.

After you received an access token, include the access token in the header of all requests to the Cloudmore API.

Request API Access

To be able to access the Cloudmore API, a request must be sent to platformsupport@cloudmore.com. The Cloudmore support team will establish that the requestor is a valid customer and will approve the request. Please note that additional costs may apply.

The Cloudmore support team will supply the client secret and the requestors resellerId / sellerId. The client secret is used as an extra security measure and must be submitted with the authentication request. The resellerId / sellerId is the unique identifier of a Cloud Service Broker or Seller and must be submitted in all API calls after authentication.

Create API Credentials

The API credentials consist of a valid admin account in Cloudmore, where API access has been enabled. This step is done by the Cloud Service Broker or Seller themselves.

Cloudmore strongly recommends that a separate account is created for API access and that each account is only used for one integrated application to improve security. By following this recommendation, each account can easily be disabled, and Cloudmore API logs are easier to troubleshoot.

To create an admin account with API access:

1. Login to Cloudmore.
2. In the left-hand menu, go to **Cloud Service Broker** and click on **Administrators**.
3. Click the **New administrator** button.
4. Fill out a user name, first name, last name, display name, job title, email address, and cell phone.
5. In the **Role** dropdown, please select **Reseller Admin**.
6. Select to generate a password or fill out a password in the password fields. We recommend that you use a complex password of at least 20 characters for an API account.
7. Click the **More** button.
8. Scroll to the bottom and select **Allow REST API access**.
9. Click on create.

Request an Access Token

To get an access token from Cloudmore Authentication API, make a request to the /connect/token endpoint.

Request Headers

Content-Type string required	application/x-www-form-urlencoded
Authorization string required	The text "Basic" followed by a space and the API access credentials in the format **client_id: client_secret** encoded into base64. Example: Basic cm7iy4MZeH8tZxIpY3xpZW60OkBsb4VkWGg5cmvPUT2TZWMyMzc= **Note**: Most programming languages include functions to encode base64 strings. You can also use online tools to encode text to base64.

Request Body

grant_type string required	The grant type value for the client credentials grant mechanism. The value must be **password&username** and the credentials for the API accounts need to be submitted.
scope string required	The scope of the access request. The value must be **api**.

Example Request

In the following request the Authorization base64 string and {username} and {password} need to be updated with actual values.

```
curl -X POST https://api.cloudmore.com/connect/token \
-H 'Content-Type: application/x-www-form-urlencoded' \
-H 'Authorization: Basic
cm7iy4MZeH8tZxIpY3xpZW60OkBsb4VkWGg5cmvPUT2TZWMyMzc=' \
-d 'grant_type=password&username={username}&password={password}&scope=api'
```

Example response

```
{
    "access_token":"eyJhbGciOiJSUzI1NiIsImtpZCI6IkMzRERCQTEzNkU4MzFDN...",
    "expires_in":86400,
    "token_type":"Bearer"
}
```

The response contains this information:

access_token	The generated access token that is used to authorize your API requests.
string	To prove your identity, you must include an access token in the header of all requests you make to the Cloudmore API. Use the token as the value of the **Authorization** parameter in the API request header.
token_type	The type of token generated.
string	The value is always **Bearer**.
expires_in	The amount of time until the access token expires, in seconds.
integer	The value is always **86400**.

When you make an API request, include your access token in the Authorization header parameter. For example:

```
curl -X GET https://api.cloudmore.com/api/resellers/{resellerId}
/Organizations \
-H 'Authorization: Bearer
eyJhbGciOiJSUzI1NiIsImtpZCI6IkMzRERCQTEzNkU4MzFDN...'
```

Access Token Expiration

When you generate an access token, the token is valid for 86400 seconds (24 hours).

You can reuse the same token in API requests until it expires, then you must request a new token. If you use an expired token in a request, the response contains the 401 Unauthorized status code.

Use one of these methods to determine when to request a new access token:

- Keep track of the time since you received a token, and request a new token before the number of seconds in the **expires_in** field for the current token reaches zero.
- Request a new token after you receive the **401 Unauthorized** status code that indicates the current token is expired.

HTTP Requests

Use these components to construct HTTP requests to the Cloudmore API.

Component	Description
HTTP Method	• GET - Request data from the API
	• POST - Submits data to the API
	• PUT - Updates data in a resource
	• DELETE - Deletes data in a resource

Base API URL	Live environment: http://api.cloudmore.com/api/ Staging environment: http://api-staging.cloudmore.com/api/
Path Parameters	A Cloud Service Broker or a Seller unique identifier needs to be provided as a path parameters: {baseApiUrl}/api/resellers/**{resellerId}**/organizations/ Other ids are also provided as path parameters.
Query Parameters	Some API calls allow for query parameters to filter or limit the request data. For example: ?startDate=2020-01-01&endDate=2020-02-01 Each endpoint supports different query parameters.

Request Headers	Each API request needs to include the following headers:
	
	• Authorization - The access token that was received from the Cloudmore Authentication API.
	
	Additional headers can be used to specify, for instance, content-type and accept.
	
	In curl, you specify custom headers with the -H command. For example:
	
	<pre>curl -X GET https://api.cloudmore.com/api
	/resellers/{resellerId}/Organizations \
	-H 'Authorization: Bearer
	eyJhbGciOiJSUzI1NiIsImtpZCI6IkMzRERCQTEzNkU4MzFDN...
	.' \
	-H 'Accept: application/json' \
	-H 'Content-Type: application/json'</pre>

Request Body	The request body is the data to submit with the API request.
	
	Some API endpoints require that you include data in JSON format in the request body. In curl, you specify the data to submit with the -d command. For example:
	
	<pre>-d '{
	  "name": "string",
	  "password": "string",
	  "firstName": "string",
	  "lastName": "string",
	  "displayName": "string",
	  },
	  "customProperties": [
	    {
	      "id": "string",
	      "value": "string"
	    }
	  ]
	}'</pre>

Example Requests

This request gets all Organizations under a Cloud Service Broker:

```
curl -X GET https://api.cloudmore.com/api/resellers/{resellerId}
/Organizations \
-H 'Authorization: Bearer {token}' \
-H 'Accept: application/json' \
-H 'Content-Type: application/json'
```

This request creates a new Organization under a Cloud Service Broker:

```
curl -X POST https://api.cloudmore.com/api/resellers/{resellerId}
/Organizations \
-H 'Authorization: Bearer {token}' \
-H 'Accept: application/json' \
-H 'Content-Type: application/json' \
-d '{
  "name": "My Test Organization",
  "registrationNumber": "123456789",
  "vat": "123456789",
  "contact": {
    "name": "John Doe",
    "email": "john.doe@mytestorganization.com",
    "phone": "123456789",
    "cellPhone": "123456789"
  },
  "customerNumber": "123456789",
  "notificationEmail": "john.doe@mytestorganization.com",
  "address": {
    "street": "street 1",
    "postalCode": "12345",
    "city": "stockholm",
    "countryCode": "SE"
  },
  "primaryDomain": "mytestorganization.com"
}'
```

Status and Error Codes

Cloudmore API uses HTTP status codes to indicate the success or failure of a request:

Status Code	Description
200 Success	The request succeeded.
201 Created	The request succeeded, and the resource was created.
204 No Content	The server processed the request successfully but did not return a response.
400 Bad Request	The API does not understand the request because of bad syntax. This could be because: • The request did not include a required parameter • Request parameter data was not in the correct format • Request parameters do not match the expected data types
401 Unauthorized	Authentication failed because credentials are missing or invalid.
403 Forbidden	The request failed because you do not have permission to perform the action or access the resource.
404 Not Found	The resource specified in the request does not exist. To resolve this error, make sure that the request includes a valid resource.

405 Method Not Allowed	The method is not allowed for the resource specified in the request.
500 Server Error	An error occurred on the server.

API Responses

Some calls to the Cloudmore API return data in the response body in JSON format.

For example, if you make a GET request to the /api/resellers/{{resellerId}}/Organizations endpoint, the response body includes details listing the organizations under a broker:

```
[
  {
        "id": "ff0eb40d-26f9-4cbb-b431-10fe66bc838e",
        "name": "My Test Organization 1",
        "displayName": "My Test Organization 1",
        "services": 2,
        "users": 1
    },
    {
        "id": "d0b55801-6cac-4221-a911-0712e78615c7",
        "name": "My Test Organization 2",
        "displayName": "My Test Organization 2",
        "services": 1,
        "users": 0
    },
    {
        "id": "a57a8428-80e6-4666-b549-c39873eef2ea",
        "name": "My Test Organization 3",
        "displayName": "My Test Organization 3",
        "services": 0,
        "users": 1
    }
]
```

For detailed information about responses for each endpoint, see API specification or https://api.cloudmore.com/swagger/.

Swagger document

Swagger is an open-source tool that automatically writes API documentation based on the available calls and parameters. In Swagger you can see:

- All API calls that are available in Cloudmore API.
- All available parameters for each API call.
- Detailed information about each parameter like type and if it is required.
- Example response and status codes.
- Detailed model information.

The Swagger document is automatically updated with every Cloudmore release therefore the document is always up to date and with the recent changes. This document will be updated occasionally and is more intended to give an overview of the different calls. For the latest information, the Swagger should always be used.

How to use Swagger

All available API calls are grouped in containers that can be minimized or expanded. Under each group are the available calls listed with HTTP Method, endpoint, and a short description.

Organizations

GET `/api/resellers/{resellerId}/Organizations` Returns all reseller organizations.

POST `/api/resellers/{resellerId}/Organizations` Creates new organization for the reseller.

GET `/api/resellers/{resellerId}/Organizations/{id}` Returns organization details.

PUT `/api/resellers/{resellerId}/Organizations/{id}` Updates reseller organization.

DELETE `/api/resellers/{resellerId}/Organizations/{id}` Deletes reseller organization.

Clicking on an endpoint will show the details of that API call. Where you can see:

- Endpoint address with example
- Description of the API call
- Required and available parameters
- Example body requests
- Detailed model information about each property with types, required, max and minimum values, and description of each field:

Example Value	**Model**

```
OrganizationCreateViewModel ∨ {
    description:              Organization create view model
    name*                    string
                             maxLength: 512
                             Organization name
    registrationNumber*      string
                             maxLength: 50
                             Organization registration number
    vat                      string
                             maxLength: 50
                             Organization Vat
    homePage                 string
                             maxLength: 75
                             Organization home page
    contact*                 OrganizationContactCreateViewModel > {...}
    customerNumber           string
                             maxLength: 25
                             Organization customer number
    notificationEmail*       string
                             Organization notification email address
    economicId               string
                             Organization Economic id
    address*                 OrganizationAddressCreateViewModel > {...}
    approvalTriggeredOn      number($double)
                             minimum: 0
                             Approval process activation limit in reseller currency per
                             year.
                             NULL - approval pocess is not enforced
                             0 - approval process is always active regardless of the
                             monetary value involved
                             Any value greater than 0 means the limit exceeding which the
                             approval process is enforced

    primaryDomain*           string
                             maxLength: 50
                             Organization primary domain
    customProperties
                             > [...]
}
```

Link to Swagger: https://api.cloudmore.com/swagger/

Common API calls for Cloud Service Brokers

All API endpoints will start with "/api/resellers/{resellerId}" where the parameter {resellerId} needs to be replaced with the Cloud Service Brokers reseller ID given out by Cloudmore support. The resellerId is a unique identifier of each Cloud Service Brokers in the GUID format XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX.

Example: /api/resellers/3c913dd6-f094-4bf7-9c71-e1716ae34d50/

Organizations

An organization is a tenant that buys and consumes service from a Cloud Service Broker. Normally an organization represents a company but can also represent a business unit or department.

List all organizations under a Cloud Service Broker

Endpoint	…/Organizations
HTTP Method	**GET**

Path Parameters	none
Query Parameters	none
Body	none
Example Request	```curl -X GET https://api.cloudmore.com/api/resellers/{resellerId}/Organizations \
-H 'Authorization: Bearer {token}' \
-H 'Content-Type: application/json'```
Example Response	```[
{
"id": "96381c60-2f01-4042-9746-66c8b8e7bef9",
"name": "My Test Organization 1",
"displayName": "My Test Organization 1",
"services": 2,
"users": 1
}
]``` • id - The organization unique identifier. • name - The name of the organization. The name is always unique and cant be updated. • displayname - A friendly name of the organization that can be updated. • services - The total amount of services the organization has active. • users - The total amount of users that exist in the organization.

Create a new organization

Endpoint	…/Organizations
HTTP Method	POST
Path Parameters	none
Query Parameters	none

Body	• name - The name of the organization.
	• registrationNumber - The organization registration number.
	• vat - The organization VAT number.
	• homePage - The organization web site address.
	• contact
	• name - First and last name of a contact person within the organization.
	• email - The email address of the contact person.
	• phone - The phone number of the contact person.
	• cellPhone - The cell phone number of the contact person.
	• customerNumber - The customer number field can be used to store a unique identifier of the organization that may correlate with customer identifiers in other systems.
	• notificationEmail - The default notification email address. Important information may be sent to this address. The address should be a working email address.
	• address
	• street - The street name of the organization.
	• postalCode - The postal code of the organization. The postal code needs to be a valid postal code for the country.
	• city - The city of the organization.
	• countryCode - The country code as two-letter uppercase according to the ISO 3166 standard.
	• approvalTriggeredOn - Property that controls the approval process. The following values are allowed:
	• 0 (zero) - Approval is disabled for the organization.
	• 1 (one) - Approval Process will trigger to all changes.
	• Any integer above one would enable the Approval Process and set the provided integer as the trigger Approval Process amount.
	• primaryDomain - A primary domain in the format "companyname.com" The primary domain needs to be a unique domain as it is used to separate organizations from each other. Generic domains like gmail.com , hotmail.com, aol.com, etc. are not allowed.
	• customProperties
	• id - The unique identifier of a custom property. To get a list of all available Custom Properties, please see the /settings/CustomProperties API call.
	• value - The given value for the custom property.

Example Request	
| | ```
curl -X POST https://api.cloudmore.com/api/resellers/
{resellerId}/Organizations \
-H 'Authorization: Bearer {token}' \
-H 'Content-Type: application/json' \
-d '{
  "name": "My Test Organization 1",
  "registrationNumber": "123456789",
  "vat": "123456789",
  "homePage": "www.mytextorganization.com",
  "contact": {
    "name": "John Doe",
    "email": "john.doe@mytextorganization.com",
    "phone": "123456789",
    "cellPhone": "123456789"
  },
  "customerNumber": "123456789",
  "notificationEmail": "john.doe@mytextorganization.
com",
  "address": {
    "street": "Stree 1",
    "postalCode": "111 11",
    "city": "Stockholm",
    "countryCode": "SE"
  },
  "approvalTriggeredOn": 0,
  "primaryDomain": "mytextorganization.com",
  "customProperties": [
    {
      "id": "e5301751-f9a3-4a2d-8a88-34f8441760f0",
      "value": "Some extra information"
    },
    {
      "id": "d63a4053-ee92-49a0-a447-5d05cf596346",
      "value": "1"
    }
  ]
}'
``` |
| Example Response | |
| | ```
201 Created
``` |

Organization Services

Services that are available to an organization can be found in the E-store. Services available to an organization are dependant on their Cloud Service Broker. Adding a service to an organization only enables the service for the organization and may create tenants in the external system. To purchase and start using the service, a subscription needs to be created. A subscription always consists of one product that also dictates subscription length, payment frequency, and a price.

List services that are available to an organization from the E-store

Endpoint	…/organizations/{organizationId}/services/Estore
HTTP Method	GET

Path Parameters	• organizationId - This the unique identifier of an organization. Use /Organizations to get a list of available organizations and their organizationId.
Query Parameters	none
Body	none
| Example Request | ```
curl -X GET https://api.cloudmore.com/api/resellers/
{resellerId}/organizations/{organizationId}/Estore \
-H 'Authorization: Bearer {token}' \
-H 'Content-Type: application/json'
``` |
| Example Response | ```
[
    {
        "id": "5ed98348-a0cf-4b70-a178-a893400239ed",
        "name": "Box.com",
        "isResellerCustomService": true,
        "isSellerCustomService": false
    }
]
```<br><br>• id - The unique identifier of the service.<br>• name - The name of the service.<br>• isResellerCustomService - A boolean value that indicates if this is a custom service under a Cloud Service Broker.<br>• isSellerCustomService - A boolean value that indicates if this is a custom service from a Seller.<br><br>NOTE! If isResellerCustomService and isSellerCustomService are both false indicates that the service is provided by Cloudmore. |

Add service from E-store to an organization

Endpoint	…/organizations/{organizationId}/services
HTTP Method	**POST**
Path Parameters	none
Query Parameters	none
Body	• id - The unique identifier of a service that is available in the E-store for an organization. Use the GET /organizations/{organizationId}/services/Estore to get available services. • currencyCode - A valid currency code according to the ISO 4217 standard. For example, "USD". The currency code should normally match the currency of the country of the organization.
| Example Request | ```
curl -X POST https://api.cloudmore.com/api/resellers/
{resellerId}/Organizations/{organizationId}/services \
-H 'Authorization: Bearer {token}' \
-H 'Content-Type: application/json' \
-d '{
  "id": "9341fbc2-e567-4a9d-a2a0-f9016e970ff2",
  "currencyCode": "SEK"
}'
``` |
| Example Response | ```
201 Created
``` |

List all active services for an organization

Endpoint	…/organizations/{organizationId}/services
HTTP Method	GET
Path Parameters	• organizationId - This the unique identifier of an organization. Use /Organizations to get a list of available organizations and their organizationId.
Query Parameters	none
Body	none
| Example Request | ```
curl -X GET https://api.cloudmore.com/api/resellers/
{resellerId}/organizations/{organizationId}/services \
-H 'Authorization: Bearer {token}' \
-H 'Content-Type: application/json'
``` |
| Example Response | ```
[
    {
        "id": "5ed98348-a0cf-4b70-a178-a893400239ed",
        "name": "Box.com",
        "isResellerCustomService": true,
        "isSellerCustomService": false
    }
]
```<br><br>• id - The unique identifier of the service.<br>• name - The name of the service.<br>• isResellerCustomService - A boolean value that indicates if this is a custom service under a Cloud Service Broker.<br>• isSellerCustomService - A boolean value that indicates if this is a custom service from a Seller.<br><br>NOTE! If isResellerCustomService and isSellerCustomService are both false indicates that the service is provided by Cloudmore. |

Get available products under a service

Endpoint	…/organizations/{organizationId}/services/{serviceId}/products
HTTP Method	GET
Path Parameters	• organizationId - This the unique identifier of an organization. Use /Organizations to get a list of available organizations and their organizationId. • serviceId - This is a unique identifier of a service.
Query Parameters	none
Body	none
| Example Request | ```
curl -X GET https://api.cloudmore.com/api/resellers/
{resellerId}/organizations/{organizationId}/services/
{serviceId}/products \
-H 'Authorization: Bearer {token}' \
-H 'Content-Type: application/json'
``` |
| Example Response | |

```
[
    {
        "resellerId": "8f595f5e-23d7-489d-8843-
d123a24f979d",
        "organizationId": "8d061500-8c70-4fd8-8e34-
829fbe5c6795",
        "serviceId": "a65727d5-3d23-455d-9ee6-
9c843e13dd0a",
        "productId": "bf5f9d65-bdf7-4f99-9415-
0fa642453554",
        "name": "Gold",
        "description": "Box yearly subscription",
        "itemCode": "BOX1copy",
        "subscriptionPeriod": 12,
        "paymentFrequency": 1,
        "minimumQuantity": 1,
        "trialPeriod": 0,
        "cost": "50.00",
        "price": "100.00",
        "currencyCode": "GBP",
        "customProperties": [
            {
                "type": "textbox",
                "id": "CS0001",
                "name": "Custom 1",
                "visible": true
            },
            {
                "type": "dropdown",
                "id": "CS0002",
                "name": "Custom 2 dropdown",
                "visible": true
            },
            {
                "type": "checkbox",
                "id": "CS003",
                "name": "Custom3",
                "visible": true
            }
        ]
    }
]
```

- resellerId - A unique identifier of the Cloud Service Broker
- organizationId - A unique identifier of the organization
- serviceId - A unique identifier of a service.
- productId - A unique identifier of a product.
- name - The name of the product.
- description - The description of the product.
- itemCode - The item code of the product.
- subscriptionPeriod - The subscription period in months.
- paymentFrequency - The payment frequency in months.
- minimumQuantity - The minimum quantity that must be purchased with each subscription for this product.
- trialPeriod - The trial period in months. 0 (zero) means no trial period.
- cost - The cost price of a product for the Cloud Service Broker.
- price - The sales price of a product from the Cloud Service Broker to the organization specified in the path parameter. Note that different organizations may have different prices.
- currencyCode - The currency code for the cost and sales prices. Currency code is defined by organizations when the services are added.
- customProperties - Custom properties for the product if any has been defined.

    - type - The type of custom. property.
    - id - The identifier specified for the custom property.
    - name - The name of the custom property.
    - visible - A boolean value that indicates if the custom property should be visible to users.

Create a new subscription

Endpoint	…/organizations/{organizationId}/services/{serviceId}/subscriptions
HTTP Method	**POST**
Path Parameters	• organizationId - This the unique identifier of an organization. Use /Organizations to get a list of available organizations and their organizationId. • serviceId - This is a unique identifier of a service.
Query Parameters	none
Body	• name - The friendly name of the subscription. • productId - A unique identifier of an existing product under the service. Use the /organizations/{organizationId}/services/{serviceId}/products API call to get available products. • poNumber - A Purchase Order (PO) number. This field is optional. • isTrial - A boolean value that defines if the subscription should have trial activated. The actual trial period is defined by the product. • quantity - An integer that defines the number of licenses for the subscription.
Example Request	```curl -X POST https://api.cloudmore.com/api/resellers/{resellerId}/Organizations/{organizationId}/services{serviceId}/subscriptions \ -H 'Authorization: Bearer {token}' \ -H 'Content-Type: application/json' \ -d '{ "name": "This is my subscription", "productId": "bf5f9d65-bdf7-4f99-9415-0fa642453554", "poNumber": "123456789", "isTrial": false, "quantity": 10 }'```
Example Response	```201 Created```

Get all subscriptions for an organization for a service

Endpoint	…/organizations/{organizationId}/services/{serviceId}/subscriptions
HTTP Method	GET
Path Parameters	• organizationId - This the unique identifier of an organization. Use /Organizations to get a list of available organizations and their organizationId. • serviceId - This is a unique identifier of a service.
Query Parameters	none
Body	none
Example Request	```curl -X GET https://api.cloudmore.com/api/resellers/{resellerId}/organizations/{organizationId}/services/{serviceId}/subscriptions \ -H 'Authorization: Bearer {token}' \ -H 'Content-Type: application/json'```
Example Response	```[{ "id": "28c427f5-2c6c-40a0-8f40-343c724f576a", "name": "This is my subscription", "productName": "Gold", "itemCode": "BOX1copy", "poNumber": "123456789", "quantity": 10, "period": 12, "billingInterval": 12, "startDate": "2020-01-17T00:00:00", "endDate": "2021-01-17T00:00:00", "isTrial": false, "isAutoRenew": true, "isCancelled": false }]``` • id - The unique identifier of the subscription. • name - The friendly name of the subscription. • productName - The name of the product. • itemCode - Item code of the product. • poNumber - The Purchase Order number associated with this subscription. • quantity - The number of licenses bought with this subscription. • period - The subscription period in months. • billingInterval - The billing interval in months. • startDate - The start date of the subscription. • endDate - The end date or the renewal date of the subscription. • isTrial - A boolean value that indicates if the subscription is in the trial period. • isAutoRenew - A boolean value that indicates if the subscription will automatically renew. • isCancelled - A boolean value that indicates if the subscription has been marked as canceled.

Billing Reports

Cloudmore provides several billing reports that represent the billing report that can be found in the user interface.

General Billing Report
API call: …/billing/reports/MonthlyBillingPerService & /MonthlyBillingPerOrganization

The general billing report contains billing information related to all services and is the recommended billing report to use if a Cloud Service Brokers offer several services. For Cloud Service Brokers with larger volumes of billing data, we recommend the asynchronous call where you send one call to initiate the creation of the report and a second call to get the result.

Microsoft O365 CSP Direct Billing Report
API call: …/billing/cspreports/MonthlyBillingPerOrganization

The Microsoft O356 CSP billing report provides some detailed information in regards to Microsoft O365 CSP billing.

Microsoft Azure CSP Direct Billing Report
API call: …/billing/azurereports/MonthlyBillingPerOrganization

The Microsoft Azure CSP billing report provides some detailed information in regards to Microsoft Azure CSP.

Get general billing report per organization

Endpoint	…/billing/reports/MonthlyBillingPerOrganization
HTTP Method	**GET**
Path Parameters	none
Query Parameters	• startDate - First date when a billing report was generated. • endDate - Last date, when a billing report was generated. • currencyCode - Optional parameter to specify a currency that they will be used for currency conversion. CurrencyCode should be entered in the ISO 4217 standard. Note! Any billing reports between the start and end date will be included in the result and grouped by the billing date.
Body	none
Example Request	```curl -X GET https://api.cloudmore.com/api/resellers/ {resellerId}/billing/reports /MonthlyBillingPerOrganization?startDate=2020-04- 01&endDate=2020-04-30&currencyCode=SEK \ -H 'Authorization: Bearer {token}' \ -H 'Content-Type: application/json' \```
Example Response	```[{ "billingDate": "2020-04-29T23:59:59", "organizations": [{ "name": "Ermantest0110", "customerNumber": "", "orgId": "91465f52-dabc-4b5e-8027- 991539ad7066", "services": [{ "serviceName": "Box.com", "serviceId": "a65727d5-3d23-455d-9ee6- 9c843e13dd0a", "totalResellerPrice": "919.93", "totalCustomerPrice": "1994.95", "currencyCode": "SEK", "items": [{ "itemName": "Box for Sales Department ",```

```
                              "quantity": 10.0000,
                              "totalResellerPrice": "473.58",
                              "totalCustomerPrice": "710.37",
                              "resellerPricePerUnit": "47.36",
                              "customerPricePerUnit": "71.04",
                              "products": [
                                {
                                   "productName": "Box Enterprise ",
                                   "productId": "587c84f5-820c-4673-
97e5-dd99e3e17623",
                                   "itemCode": "BOXENT001",
                                   "quantity": 10.0000,
                                   "resellerPricePerUnit": "47.36",
                                   "customerPricePerUnit": "71.04",
                                   "totalResellerPrice": "473.58",
                                   "totalCustomerPrice": "710.37",
                                   "itemDetails": null
                                }
                              ]
                            },
                            {
                              "itemName": "Box subscription - Mark ",
                              "quantity": 10.0000,
                              "totalResellerPrice": "355.18",
                              "totalCustomerPrice": "414.38",
                              "resellerPricePerUnit": "35.52",
                              "customerPricePerUnit": "41.44",
                              "products": [
                                {
                                   "productName": "Box Starter ",
                                   "productId": "573b0152-805e-428e-
bab2-ee8e573f51a1",
                                   "itemCode": "BOXST001",
                                   "quantity": 10.0000,
                                   "resellerPricePerUnit": "35.52",
                                   "customerPricePerUnit": "41.44",
                                   "totalResellerPrice": "355.18",
                                   "totalCustomerPrice": "414.38",
                                   "itemDetails": null
                                }
                              ]
                            }
                         ]
                      }
                   ]
                }
             ]
          }
       ]
```

- billingDate - The date when the billing data was generated.
- organizations - JSON Object for each organization.
  - name - The name of the organization.
  - customerNumber - The customer number of the organization.
  - orgId - The unique identifier of the organization.
  - services - JSON object for each service.
    - serviceName - The name of the service.
    - serviceId - The unique identifier of the service.
    - totalResellerPrice - The total cost for the service.
    - totalCustomerPrice - The total customer sales price for the service.
    - currencyCode - The currency code.
    - items - JSON object for each subscription.
      - itemName - The name of the subscription.
      - quantity - Number of licenses for the subscription.
      - totalResellerPrice - The total cost for the subscription.
      - totalCustomerPrice - The total customer sales price for the subscription.
      - resellerPricePerUnit - The cost price per unit for the subscription.
      - customerPricePerUnit - The sale price per unit for the subscription.
      - products - JSON object for each product in the subscription.
        - productName - The name of the product.
        - productId - The unique identifier of the product.
        - itemCode - The item code of the product.
        - quantity - The number of licenses for the product.
        - resellerPricePerUnit - The cost price per unit for the product.
        - customerPricePerUnit - The sale price per unit for the product.
        - totalResellerPrice - The total cost for the product.
        - totalCustomerPrice - The total customer sales price for the product.

Microsoft O365 CSP Direct Management

Cloudmore has a rich Microsoft O365 CSP Direct integration and API capabilities that allow a Cloud Service Broker to do a full integration into an external portal or backend system.

Check domain availability

This call will check the availability of domain prefix on the onmicrosoft.com. Each Microsoft Tenant needs to have a unique prefix on the onmicrosoft.com domain. The customers own domain can be added later through the Microsoft Admin Center and set to primary.

Endpoint	…/services/csp/domainvalidation
HTTP Method	**GET**
Path Parameters	none
Query Parameters	• domainPrefix - The domain prefix to be checked for availability. The domain prefix is the part that comes before the onmicrosoft.com. For example, customerA.onmicrosoft.com. In this case, the domain prefix to submit is customerA.
Body	none
| Example Request | ```
curl -X GET https://api.cloudmore.com/api/resellers/
{resellerId}/services/csp/domainvalidation \
-H 'Authorization: Bearer {token}' \
-H 'Content-Type: application/json' \
``` |

| Example Response | ```
[
  {
    "isValid": true
  }
]
``` |
|---|---|
| | • isValid - Boolean value to indicate if the domain prefix is available with Microsoft. |

Add the Microsoft O365 CSP Direct service to an organization

This API call will add the Microsoft O365 CSP Direct service from the E-store to an organization.

Endpoint	…/organizations/{organizationId}/services/Csp
HTTP Method	POST
Path Parameters	• organizationId - This the unique identifier of an organization. Use /Organizations to get a list of available organizations and their organizationId.
Query Parameters	none

Body	• id - The unique identifier of the Microsoft O365 CSP Direct service. The id can be obtained from the GET E-store API call.
	• currencyCode - A valid currency code according to the ISO 4217 standard. For example, "USD". The currency code should normally match the currency of the country of the organization.
	• contactEmail - Email address of the Microsoft CSP related contact in the organization.
	• contactFirstName - First name of the Microsoft CSP related contact in the organization.
	• contactLastName - Last name of the Microsoft CSP related contact in the organization.
	• contactPhone - The phone number of the Microsoft CSP related contact in the organization.
	• domainPrefix - The domain prefix for the customer. Domain prefix availability should first be checked with the …/services/csp/domainvalidation API call.
	• cloudAgreement - JSON object to capture the Microsoft Customer Agreement details. This information is required by Microsoft.
	  • primaryContact - JSON object to capture the person within the organization that has approved the Microsoft Customer Agreement.
	    • firstName - First name of the person who accepted the Microsoft Customer Agreement.
	    • lastName - Last name of the person who accepted the Microsoft Customer Agreement.
	    • email - Email address of the person who accepted the Microsoft Customer Agreement.
	    • phoneNumber - Phone number of the person who accepted the Microsoft Customer Agreement.
	  • dateAgreed - The time and date when the person accepted the Microsoft Customer Agreement. If not set, the current date and time will be used.

| Example Request | ```
curl -X GET https://api.cloudmore.com/api/resellers/
{resellerId}/organizations/{organizationId}/services
/Csp \
-H 'Authorization: Bearer {token}' \
-H 'Content-Type: application/json' \
-d '{
  "id": "881ae94a-b03a-4da5-8e67-21ea8d77dfb5",
  "currencyCode": "SEK",
  "contactEmail": "john.doe@company.com",
  "contactFirstName": "john",
  "contactLastName": "doe",
  "contactPhone": "123456789",
  "domainPrefix": "customerA",
  "cloudAgreement": {
    "primaryContact": {
      "firstName": "john",
      "lastName": "doe",
      "email": "john.doe@company.com",
      "phoneNumber": "123456789"
    },
    "dateAgreed": "2020-05-25T11:53:06.526Z"
  }
}'
``` |
|---|---|
| Example Response | ```
201 Created
``` |

Get all Microsoft O365 CSP Direct products available to an organization

Products under the Microsoft O365 CSP Direct program may vary between organizations. To check what products are available and to retrieve the Microsoft Offer ID, the following API call can be used.

Endpoint	…/organizations/{organizationId}/services/Csp/products
HTTP Method	GET
Path Parameters	• organizationId - This the unique identifier of an organization. Use the …/Organizations API call to get a list of available organizations and their organizationId.
Query Parameters	none
Body	none
| Example Request | ```
curl -X GET https://api.cloudmore.com/api/resellers/
{resellerId}/organizations/{organizationId}/services
/Csp/products \
-H 'Authorization: Bearer {token}' \
-H 'Content-Type: application/json' \
``` |
| Example Response | |

```json
[
  {
        "resellerId": "612d8146-4a5c-4d75-85ea-
9b1d902e9d62",
        "organizationId": "90ccbd6c-1a41-40ed-8302-
48d2fcd2cfb2",
        "serviceId": "881ae94a-b03a-4da5-8e67-
21ea8d77dfb5",
        "offerId": "7779A4BA-BD21-457C-8B3F-
B3BAA74FC99C",
        "productId": "D2DEA78B-507C-4E56-B400-
39447F4738F8",
        "productCategoryName": "Enterprise",
        "name": "AI Builder Capacity add-on",
        "unitType": "Add-On Licenses",
        "maximumQuantity": 10000000,
        "minimumQuantity": 1,
        "description": "AI Builder empowers creation
and consumption of insights to improve business
processes. Each license offers 1M service credits per
month.",
        "itemCode": "CM-O1TIER-7779A4BA-BD21-457C-8B3F-
B3BAA74FC99C",
        "cost": "282.80",
        "price": "377.10",
        "currencyCode": "GBP",
        "supportedBillingCycles": [
            2,
            1
        ]
  }
]
```

- resellerId - A unique identifier of the Cloud Service Broker.
- organizationId - A unique identifier of the organization.
- serviceId - A unique identifier of a service.
- offerId - The Microsoft Offer identifier.
- productId - The Microsoft Product identifier.
- productCategoryName - The Microsoft product category name.
- name - The name of the Microsoft product.
- unitType - The unit type of the Microsoft product.
- maximumQuantity - The maximum number of quantity that can be bought with one subscription.
- minimumQuantity - The minimum number of quantity that can be bought with one subscription.
- description - The Microsoft product description.
- itemCode - The Microsoft item code.
- cost - The cost price of a product for the Cloud Service Broker.
- price - The sales price of a product from the Cloud Service Broker to the organization specified in the path parameter. Note that different organizations may have different prices.
- currencyCode - The currency code for the cost and sales prices. Currency code is defined by organizations when the services are added.
- supportedBillingCycles - Supported billing cycles for this SKU. Possible values are:

  - 0 - Unknown
  - 1 - Monthly
  - 2 - Annual
  - 3 - None
  - 4 - OneTime

Create a Microsoft O365 CSP Direct subscription

A Microsoft O365 CSP Direct subscription can be created for an organization. Important information about available products and product properties must first be retrieved with the …/organizations/{organizationId}/services/csp/subscriptions API call.

Endpoint	…/organizations/{organizationId}/services/csp/subscriptions
HTTP Method	**POST**
Path Parameters	• organizationId - This the unique identifier of an organization. Use /Organizations to get a list of available organizations and their organizationId.
Query Parameters	none
Body	• friendlyName - A friendly name for the subscription • offerId - The Microsoft Offer ID of the product that can be retrieved with the …/organizations/{organizationId}/services/Csp/products API call. • poNumber - A Purchase Order (PO) number. This field is optional. • billingCycle - A billing cycle for the subscription. A valid billing cycle must be entered. To get valid billing cycles the …/organizations/{organizationId}/services/csp/subscriptions API call should be used. Possible values are: 0 - Unknown 1 - Monthly 2 - Annual 3 - None 4 - OneTime • quantity - An integer that defines the number of licenses for the subscription.

| Example Request | ```
curl -X GET https://api.cloudmore.com/api/resellers/
{resellerId}/organizations/{organizationId}/services
/Csp \
-H 'Authorization: Bearer {token}' \
-H 'Content-Type: application/json' \
-d '{
  "friendlyName": "This is my subscription",
  "offerId": "7779A4BA-BD21-457C-8B3F-B3BAA74FC99C",
  "poNumber": "My Purchase Order Number",
  "billingCycle": "1",
  "quantity": 10
}'
``` |
|---|---|
| Example Response | ```
201 Created
``` |

Manage prices

The Cloudmore API can be used to retrieve the current price list for all organizations or to set new prices per organization. Price lists are managed by service and organization.

Get Cloud Service Broker price list for a service

This call will list all products and associated prices for a service.

Endpoint	…/services/{serviceId}/pricelist
HTTP Method	GET
Path Parameters	• serviceId - The unique identifier of a service.
Query Parameters	• currencyCode - The currency code for the cost and sales prices according to the ISO 4117 standard.
Body	none
| Example Request | ```
curl -X GET https://api.cloudmore.com/api/resellers/
{resellerId}/services/{serviceId}/pricelist \
-H 'Authorization: Bearer {token}' \
-H 'Content-Type: application/json' \
``` |

| Example Response | ```json
[
  {
        "service": "Microsoft O365 CSP Direct",
        "productId": "00000000-0000-0000-0000-
000000000000",
        "name": "Dynamics 365 Customer Engagement Plan
for Students Add-On for CRM Pro (Qualified Offer)",
        "itemCode": "CM-O1TIER-00282A15-250D-4E01-8534-
AA9866C3F252",
        "cost": "11.20",
        "recommendedPrice": "15.00",
        "salesPrice": "14.99",
        "margin": "3.79",
        "marginPercentage":
"25.2835223482321547698465643380",
        "currencyCode": "GBP",
        "addons": []
  }
]
``` |
| | • service - The name of the service
• productId - The unique identifier of a product.
• name - The name of the product.
• itemCode - The item code of the product.
• cost - The cost price of a product for the Cloud Service Broker.
• recommendedPrice - The recommended end customer price normally set by the vendor.
• salesPrice - The sales price of a product from the Cloud Service Broker, an organization.
• margin - The margin between cost and sales price.
• marginPercentage - The margin in percentage.
• currencyCode - The currency code for the cost and sales prices according to the ISO 4117 standard.
• addons - Possible addons for the product. |

Get organization prices

This API call will list all products under a service with price details for an organization.

Endpoint	…/organizations/{organizationId}/services/{serviceId}/pricelist
HTTP Method	**GET**
Path Parameters	• organizationId - This the unique identifier of an organization. Use /Organizations to get a list of available organizations and their organizationId.
• serviceId - The unique identifier of a service.
Query Parameters	none
Body	none
| Example Request | ```
curl -X GET https://api.cloudmore.com/api/resellers/
{resellerId}/organizations/{organizationId}/services/
{serviceId}/pricelist \
-H 'Authorization: Bearer {token}' \
-H 'Content-Type: application/json' \
``` |

Example Response	
| | ```
[
  {
        "service": "Microsoft O365 CSP Direct",
        "productId": "00000000-0000-0000-0000-
000000000000",
        "name": "Dynamics 365 Customer Engagement Plan
for Students Add-On for CRM Pro (Qualified Offer)",
        "itemCode": "CM-O1TIER-00282A15-250D-4E01-8534-
AA9866C3F252",
        "cost": "11.20",
        "recommendedPrice": "15.00",
        "salesPrice": "14.99",
        "margin": "3.79",
        "marginPercentage":
"25.2835223482321547698465564380",
        "currencyCode": "GBP",
        "customServiceProduct", "false",
        "priceListType",
        "addons": []
    }
]
``` |
| | service - The name of the service productId - The unique identifier of a product. name - The name of the product. itemCode - The item code of the product. cost - The cost price of a product for the Cloud Service Broker. recommendedPrice - The recommended end customer price normally set by the vendor. salesPrice - The sales price of a product from the Cloud Service Broker, an organization. margin - The margin between cost and sales price. marginPercentage - The margin in percentage. currencyCode - The currency code for the cost and sales prices according to the ISO 4117 standard. customServiceProduct - Indicates if the service is a custom service. priceListType - Only used for Microsoft Azure CSP Direct service, otherwise null. addons - Possible addons for the product. |

Update a product price for an organization

This API call can be used to update a price for a specific product for an organization.

Endpoint	…/organizations/{organizationId}/services/csp/subscriptions
HTTP Method	**PUT**
Path Parameters	- organizationId - This the unique identifier of an organization. Use /Organizations to get a list of available organizations and their organizationId. - serviceId - The unique identifier of a service.
Query Parameters	none
Body	- productId - The unique identifier of the product. - itemCode - The item code of the product. - currencyCode - The currency code for the prices defined by the ISO 4117 standard. - salesPrice - The new sales price. - startupFee - The associated startup fee if applicable. - customServiceProduct - Boolean value to indicate if the products are a custom service.

| Example Request | ```
curl -X GET https://api.cloudmore.com/api/resellers/
{resellerId}/organizations/{organizationId}/services
/Csp \
-H 'Authorization: Bearer {token}' \
-H 'Content-Type: application/json' \
-d '{
  "productId": "00000000-0000-0000-0000-000000000000",
  "itemCode": "CM-O1TIER-00282A15-250D-4E01-8534-
AA9866C3F252",
  "currencyCode": "GBP",
  "salesPrice": 18.50,
  "startupFee": 0,
  "customServiceProduct": false
}'
``` |
| --- | --- |
| Example Response | ```
201 Created
``` |