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# Get started

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## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

The Partner Center SDK includes a managed API and a REST API for partners to use to manage customer, subscription, and order data.

## Get the code

[Download the Partner Center SDK](#)

### NOTE

API access to Partner Center for indirect resellers isn't a supported scenario.

## Determine your version of Partner Center

Some versions of Partner Center do not have the entire SDK available. For more information, see [Developing for Partner Center for Microsoft National Cloud](#).

## Get the samples

For more information about C# snippets, REST samples, and the sample app, see [Partner Center samples](#).

## Test vs. production

While you are initially writing and testing your code, you should use your integration sandbox account (and the corresponding tokens) so that you don't accidentally incur new charges that your company is responsible for paying. For more information about this testing environment, see [Set up API access in Partner Center](#).

When your solution is tested and ready to use on real customer accounts, you'll have to update your tokens so that you're using an Azure AD client app and secret that correspond to your Primary Partner Center account.

For tips and suggestions about testing and debugging, including more information about Test-in-Production (TiP) and the Integration Sandbox, see [Test and debug](#).

## Configure your authentication

To configure your Azure AD authentication so that you can use the Partner Center APIs, see [Partner Center authentication](#).

#### **IMPORTANT**

Microsoft is introducing a secure, scalable framework for authenticating cloud solution provider (CSP) partners and control panel vendors (CPV) through the Microsoft Azure multi-factor authentication (MFA) architecture. Partner Center uses Azure AD for authentication, and to use the Partner Center APIs you must configure your authentication settings correctly.

For more information, see [Enable secure application model](#).

## Get help

Partners can get support at the [Partner Center SDK Yammer group](#). To get more personalized help, developers can use their MPN support benefits or Premier Support.

## Join the Partner Center API and SDK Early Adopter Program

To find out how you can collaborate with Microsoft on the development of Partner features and capabilities, see [Join the Partner Center API and SDK Early Adopter Program](#).

# Developing for Partner Center for Microsoft National Clouds

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## Applies to:

- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Partner Center has one set of SDK documentation. However, some functionality might not be available in the versions of Partner Center for Microsoft National Clouds.

Developers need to consider changes to the SDK for the following versions of Partner Center:

- [Partner Center operated by 21Vianet](#)
- [Partner Center for Microsoft Cloud Germany](#)
- [Partner Center for Microsoft Cloud for US Government](#)

Each Partner Center SDK article lists applicable Partner Center versions. Each managed reference article also lists applicable Partner Center versions in the **Requirements** section.

## Partner Center operated by 21Vianet

The differences for partners between *Partner Center* and *Partner Center operated by 21Vianet* are:

- You can't programmatically reset a password for a customer user or full partner user.
- Subscriptions to Azure aren't available.
- You can't manage the licenses for your customer's user. Instead, your customers must use the Office 365 admin center to manage their licenses.
- All support requests are managed through Partner Center operated by 21Vianet. Service requests and service updates don't apply.

## Partner Center for Microsoft Cloud Germany

### IMPORTANT

Based on the evolution in customers' needs, our cloud strategy for Germany will focus on delivery of the new cloud regions in Germany that are consistent with our global cloud offering. With this focus, we will no longer be accepting new customers or deploying any new services from the currently available Microsoft Cloud Germany. Existing customers can continue to use the current cloud services available today, which we'll maintain with necessary security updates.

Moving forward, new customers have the option to use the currently available European regions or the new regions in Germany when they become available. For more information, see [Microsoft to deliver cloud services from new datacenters in Germany](#).

The differences for partners between *Partner Center* and *Partner Center for Microsoft Cloud Germany* are:

- Partners can't create users for their customer's organization or assign roles.

- Partners can read fields, but can't write or update them.
  - Partners must manually create or update their customers' users in the Office 365 admin center or through the Azure portal. See [Azure Active Directory Documentation](#).
- You can't manage the licenses for your customer's users using the Partner Center for Microsoft Cloud Germany portal or APIs. Instead, you must use the Office 365 admin center or Azure Active Directly Group license management (coming soon) to manage their licenses.
  - (Optional) you can use Azure AD Graph API. See [Add or Remove Licenses from a user](#). For Partner Center for Microsoft Cloud Germany, be sure to use the Graph endpoint `https://graph.cloudapi.de` instead of `https://graph.windows.net`.
- You can't programmatically reset a password for a customer user or full partner user. Use the Office 365 admin center or Azure portal. See [Reset the password for a user in Azure Active Directory](#). For step 1, you must sign in to the Azure portal for Microsoft Cloud Germany.
- Developers must register their app ID manually to integrate Partner Center API/SDK functionality in their app for Partner Center for Microsoft Cloud Germany. For more information, see [Register app details for Partner Center for Microsoft National Cloud](#).

## Partner Center for Microsoft Cloud for US Government

The differences for partners between *Partner Center* and *Partner Center for Microsoft Cloud for US Government* are:

- Office 365 subscriptions aren't currently available for Partner Center for Microsoft Cloud for US Government.
- Existing partners supporting Microsoft Cloud for US Government must create new accounts in Partner Center for Microsoft Cloud for US Government.
- Microsoft Cloud for US Government customers must transact with a single partner.
  - Multichannel and multipartner and request relationship with an existing customer within Microsoft Cloud for US Government scenarios don't apply. This limitation is because Office 365 isn't currently available.
- Partners can't create users for their customer's organization or assign roles.
  - Partners can read fields, but can't write or update them. Partners must manually create or update their customers' users in the Azure portal. See [Azure Active Directory Documentation](#).
- You can't programmatically reset a password for a customer user or full partner user. Use the Azure portal. See [Reset the password for a user in Azure Active Directory](#). For step 1, you must sign in to the Azure portal for Microsoft Cloud for US Government.
- REST endpoints for Partner Center for Microsoft Cloud for US Government are the same as for Partner Center: `https://api.partnercenter.microsoft.com`.
- Developers must register their app ID manually to integrate Partner Center API/SDK functionality in their app for Partner Center for Microsoft Cloud for US Government. For more information, see [Register app details for Partner Center for Microsoft National Cloud](#).

# Register app details for Partner Center for Microsoft National Cloud

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## Applies to:

- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Developers must register details about their app with Azure AD through the Azure portal. This helps ensure that only specified apps are able to connect to partner and customer data.

For Partner Center for Microsoft Cloud for US Government, you currently must manage apps through PowerShell. For more information, see the [Azure PowerShell reference documentation](#).

The [Partner Center PowerShell module](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

Be aware of the following additional requirements when you create an app for Partner Center for Microsoft Cloud Germany or Partner Center for Microsoft Cloud for US Government.

## Web apps

For web apps, use the following procedures to register your application ID.

### Create or update web app

1. Navigate to the [Azure portal - App registrations](#) page to register your app. Sign in to the Azure portal using either a work or school account or a personal Microsoft account.
2. Select **New registration**. For more information, see [Quickstart: Register an application with the Microsoft identity platform](#).

### Configure API access permissions for web app

1. Choose your app. Go to **Settings** of the Web app.
2. In **API Access** section, choose **Required permissions**
3. For Windows Azure Active directory permissions:
  - a. Choose **Windows Azure Active Directory permissions**.
  - b. In **Applications permissions**, select Read directory data.
  - c. Save the permissions.
4. Note the application ID in the **Properties** section of your web app.

### Add a secret key to your app

1. Go to the **Keys** section of your web app.
2. Enter key description and select duration as 1 or 2 years, as you need.

3. Save and copy the secret key value. This value will not be shown again once you leave this page.

You should have the following details from the web app configuration:

- Application ID
- Application secret

#### Register the Web app in Partner Center

1. Log in to <https://partnercenter.microsoft.com>.
2. Choose **Dashboard**, then choose **Account Settings**, then choose **App Management**.
3. In the **Web App** section, choose **Register existing app**.
4. Select the web app you created in Azure portal.
5. Choose **register your app**.

## Native apps

Native apps do not need to be registered to Partner Center. But these apps need to be configured to provide access to Partner Center APIs.

#### NOTE

Before creating a native app in the Azure portal, log in into Partner Center using the admin user credentials from the partner tenant. This creates the settings on the tenant to enable app permissions.

#### Create native app

1. Navigate to the [Azure portal - App registrations](#) page to register your app. Sign in to the Azure portal using either a work or school account or a personal Microsoft account.
2. Select **New registration**. For more information, see [Quickstart: Register an application with the Microsoft identity platform](#).

#### Configure API access permissions for native app

1. Choose your app. Go to **Settings**.
2. In **API Access**, choose **Required permissions**.
3. Choose **Windows Azure Active Directory permissions**. In **Delegated permissions**, select these permissions:
  - **Sign in and read user profile**
  - **Read directory data**
  - **Access the directory as the signed-in user**
  - **Read all groups**
4. Save the permissions.
5. Choose **Add in Required permissions**.
6. Choose **Select an API**.
  - a. In the search box, enter **Microsoft Partner Center** and select it from the results list.
  - b. Choose **Select**.
7. Choose **Select permissions**.

- a. Select **Access Partner Center PPE**.
  - b. Choose **Select**.
8. Choose **Done**.

**IMPORTANT**

Note the application ID in the Properties of your app.

You do not need to register native apps in Partner Center, however the native app must be admin consented . Note the application ID of your native app.

# Partner Center samples

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## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

To help you get up and running quickly with the Partner Center APIs, we provide a sample program, C# managed code snippets, and REST sample requests and responses.

The [Partner Center Java SDK](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

The [Partner Center PowerShell module](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

SAMPLE	DETAILS
Code snippets	For pointers and .NET, Java, and PowerShell code snippets that show how to use the Partner Center managed API to manage customer accounts, get analytics, place orders, manage billing and subscriptions, provide support, and manage accounts and profiles, see <a href="#">Scenarios</a> .
REST samples	For sample requests and responses that show how to use the Partner Center REST API to manage customer accounts, get analytics, place orders, manage billing and subscriptions, provide support, and manage accounts and profiles, see <a href="#">Scenarios</a> .
Console test app	This app is available in C# and Java, it provides code and some error handling for all of the scenarios listed in the scenarios section.
CSP customer web storefront	This site shows a working online store that your customers could use to buy subscriptions to Microsoft products. You can easily create a website for your company with the <a href="#">CSP Customer Storefront Builder Quickstart Guide</a> .

SAMPLE	DETAILS
Store web site	<p><b>Description:</b></p> <p>This application shows how to build a web store based on the catalog of offers available to Cloud Solution Provider partners. Customers can create a store account and order software subscriptions through your site.</p> <p><b>Get the code:</b></p> <p><a href="#">Download the sample code</a></p> <p><b>What to configure before release:</b></p> <ul style="list-style-type: none"><li>• Authentication: App ID &amp; secret.</li><li>• Branding: logo and company name.</li><li>• Welcome message.</li><li>• Offers, including descriptions and prices. The app assumes that the list prices include any applicable taxes. Alternatively, you can add additional logic to calculate tax during checkout.</li><li>• Payment information: provide your own credit card options, PayPal, or other payment types. Before you configure this part, please read the guide <a href="#">Non-payment, fraud, or misuse</a>.</li></ul>

# CSP customer web storefront

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## Applies to:

- Partner Center

### NOTE

This sample app applies only to the global instance of Partner Center. It does not apply to Partner Center for Microsoft Cloud Germany or to Partner Center for Microsoft Cloud for US Government.

The [Partner Center storefront](#) is a [sample website](#) for an online store that customers can use to buy subscriptions to Microsoft products. You can modify this [sample code](#) for your own use to [configure the offers](#), [add branding](#) and [add a payment method](#).

## Sample code

Download the [Partner Center storefront sample code](#) from GitHub.

## Configure authentication

Before you build the application, update the following values in the Web.config file to reflect the Azure AD authentication information you created in [Partner Center authentication](#). You should use your integration sandbox account settings during early development or for testing in production (TiP).

- `partnerCenter.applicationId`
- `partnerCenter.applicationSecret`
- `partnerCenter.domain`
- `webPortal.clientId`
- `webPortal.clientSecret`
- `webPortal.domain`
- `webPortal.azureStorageConnectionString`

## Configure offers

You can configure the set of offers ([MicrosoftOffer](#)) in the [OfferCatalogViewModel](#).

## Configure branding

This sample website tracks the following company and brand information in `BrandingConfiguration.cs` and `PortalBranding.cs`:

- Organization name
- Organization logo
- Header image
- Privacy agreement
- Contact email
- Contact phone number

- Support email
- Support phone number

### Configure payment types

The app currently uses a PayPal gateway, implemented in *PayPalGateway.cs*.

# CSP Customer Storefront Builder Quick Start Guide

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## Applies to:

- Partner Center

Create an online marketplace to sell cloud solution provider (CSP) offers by using the CSP Customer Storefront Builder.

## Introduction to the CSP Customer Storefront Builder

The CSP Customer Storefront Builder helps partners easily create an online marketplace to sell CSP offers to their customers. Most partners and small sales organizations want to focus on selling rather than developing an online marketplace. The Partner Center SDK sample app requires software development skills to create and deploy a website. With the CSP Customer Storefront Builder, you can quickly and easily create your own website. You can also download the website as sample code or deploy directly to your Azure subscription with a Ready to Transact website.

This website is fully owned, supported, and maintained by partners, and Microsoft does not collect any data or telemetry from the website. The CSP Customer Storefront Builder creates a website for the partner that is fully compliant with the [Payment Card Industry Data Security Standard](#) (PCI DSS).

The CSP Customer Storefront Builder code is subject to the license available in the [Partner Center SDK EULA](#).

### NOTE

You are responsible for the storefront website management, maintenance, and any issues that might result from website creation. Read and understand the terms in the [Partner Center SDK EULA](#).

For additional information, also see the following articles: [CSP customer web storefront](#) and [console test app](#).

## Considerations

The CSP Customer Storefront Builder is intended as a quick way to create a website. Be aware of the following considerations during your planning:

- Once deployed, Microsoft and Partner Center does not maintain a copy of the partner website or any information added into the CSP Customer Storefront Builder.
- Partner Center can only deploy a CSP Customer Storefront website to a partner's Azure subscriptions.
- This website, once deployed, is fully owned and managed by the partner. Microsoft does not have access to this website, or any data related to the website. Partners are responsible for maintenance and management of the website. Microsoft will not provide any live website or other support related to the CSP Customer Storefront Builder or any website created by using the CSP Customer Storefront Builder.
- Partner Center cannot directly access or upgrade this website with new or changed SDK or API features. Any new features or enhancements must be owned, developed, and managed by partners, including adding new Partner Center SDK or API features.
- This CSP Customer Storefront Builder currently provides the ability to configure payment to a PayPal Pro/PayU Money (for India) account. If partners need to change the payment processor, they will need to

change the code to support their preferred payment method.

- Any payment related information added in the CSP Customer Storefront Builder isn't stored or maintained in Partner Center.
- PayPal payment configuration will work in any geographies where PayPal is available. PayPal availability and support is solely controlled by PayPal, and may be discontinued at any time by PayPal.
- PayU payment configuration will work only in India currently. PayU availability and support is solely controlled by PayU and may be discontinued at any time by PayU.
- Read and understand the terms in the [Partner Center SDK EULA](#).

## Using the CSP Customer Storefront Builder

CSP partner admins on Partner Center can deploy a CSP Customer Storefront directly from Partner Center. With minimal effort, a new website can be deployed on the partner's tenant. Once deployed, partners can use the website to configure branding, offers, and payment-related information, and then share the website URL address with customers.

The process for creating a storefront website is to:

1. [Deploy the website](#)
2. [Configure the storefront](#)
3. [Transact on the storefront](#)

### Deploy

Deployment options:

- Download the [Partner Center storefront sample code](#) from GitHub
- Integrate with Azure to deploy the configured website
- Deploy on an existing subscription or bring your own subscription

### Configure

No development skills are required to customize a storefront.

Log in with your Partner Center admin credentials to configure:

- **Branding:** company name, logo, contacts, and more.
- **Offers:** view all CSP offers. You can select which offers your customers can view and purchase. You can also personalize offer information and add your price.
- **PayPal payment configuration:** add your PayPal payment account information. If you don't have a PayPal account, you can visit <https://www.paypal.com> and create a new account. This account will be used for PayPal to credit the payments made by customers. *Microsoft is not responsible for the relationship between partners and PayPal. Use of PayPal may require the partner or partner's customers to agree to additional terms.*
- **(For India) PayU Payment configuration:** add your PayU Money payment account information. If you don't have a PayU Money account, you can visit <https://www.payumoney.com/> and create a new account. This account will be used for PayU to credit the payments made by customers. *Microsoft is not responsible for the relationship between partners and PayU. Use of PayU may require the partner or partner's customers to agree to additional terms.*

### Transact

- After deployment, customers can immediately purchase and transact.

- Customers can buy directly from the partner portal integrated with the Partner Center SDK.

#### **Customer countries**

Customers can belong to these countries:

COUNTRY CODE	COUNTRY NAME
AU	Australia
AT	Austria
BE	Belgium
BG	Bulgaria
CA	Canada
HR	Croatia
CY	Cyprus
CZ	Czech Republic
DK	Denmark
EE	Estonia
FI	Finland
FR	France
DE	Germany
GR	Greece
HU	Hungary
IS	Iceland
IN	India
IE	Ireland
IT	Italy
JP	Japan
LV	Latvia
LI	Liechtenstein
LT	Lithuania

COUNTRY CODE	COUNTRY NAME
LU	Luxembourg
MT	Malta
MC	Monaco
NL	Netherlands
NZ	New Zealand
NO	Norway
PO	Poland
PT	Portugal
RO	Romania
SK	Slovakia
SL	Slovenia
ES	Spain
SE	Sweden
CH	Switzerland
GB	United Kingdom
US	United States

## Partner experience scenarios

### Deployment scenario

To deploy an enhanced or customized CSP Customer Storefront:

- Download the [Partner Center storefront sample code](#) to make additional customizations.
- Use Microsoft Visual Studio 2015 (or later) to develop.
- Build for additional changes and enhancements (including authorizations, certifications, manifest changes, and other items).

### Configuration scenario

- The newly created website is linked to a partner tenant and has access to all admin accounts of this partner tenant.
  - Partners can log in to this new website using their Partner Center admin credentials.
- The storefront application currently supports French, Spanish, Dutch, German, Japanese and English. (English serves as the fallback language.)

- The storefront configures the locale by using the partner's default locale from the partner's profile in the Partner Center. This locale is used to configure currencies, date formats, and localized offers in the repository.
- Partners can configure branding, offers and PayPal or PayU (for India) payment information.
- Partners can update the company name, company logo, header image, sales and support contacts and more.
- Partners can see all CSP offers available based on their territory.
  - Partners can choose which offers they want to show to all of their customers.
  - A CSP partner can select one or more offers and update the name, quantity, feature description, and price.
  - The price is the annual price. Customers subscribe annually.
- Partners can at any time configure pre-approved transactions for (a) all current and future customers OR (b) specific customers.
  - Pre-approved customers are not required to pay on the portal when they add new subscriptions, purchase additional seats to existing subscriptions, or renew a subscription.
  - Pre-approved customers will not be redirected to PayPal or PayU (for India) for payment during these transactions.
  - Pre-approved customer transactions allow a partner to perform offline billing and invoicing to their pre-approved customers.
- A CSP partner can input their PayPal account information such as PayPal Client ID and secret. A CSP partner can also select whether they want to test using a sandbox or a live account.
  - Partners can find this information on <https://developer.paypal.com/> in my apps & credentials. You can also get this information from a current app or by creating a new app in PayPal.
  - Create a new PayPal account if you don't already have one. This account will be used for PayPal to credit the payments made by customers.
    - To open a PayPal business account, see <https://developer.paypal.com/docs/classic/lifecycle/goingLive/#register>.
    - To create a PayPal sandbox account see [https://developer.paypal.com/docs/classic/lifecycle/ug\\_sandbox/](https://developer.paypal.com/docs/classic/lifecycle/ug_sandbox/).
- (For India) a CSP partner can input their PayU Money account information such as PayU Client ID and password. Partners can find more information on <https://developer.payumoney.com/>.
  - Create a new PayU Money account if you don't already have one. To open a PayU Money account, visit <https://www.payumoney.com/merchant-account/#/>. This account will be used for PayU to credit the payments made by customers.

## Customer experience scenarios

### New customer sign up scenario

- By default, the website is publicly available and shows the partner's catalog on the homepage.
- Customers can now belong to a large number of **customer countries**.
- The focus has been on the European Free Trade Association (EFTA) countries, North America, Japan, India, Australia, and New Zealand regions.

- This feature uses the regional authorization support in the Partner Center SDK.
- Customers can select an offer from the catalog to purchase.
  - They can add their customer name, address, and domain related information.
- Customers will be directed to the PayPal or PayU (for India) checkout experience. Customers can provide payment using either:
  - Their existing PayPal or PayU (for India) account
  - Funding instruments supported in their country by PayPal or PayU (for India). These may include credit cards, debit cards and bank accounts as applicable.
- A customer tenant is created for this customer. After successful creation of the tenant order, customers are provided the account username, password and subscription details.
  - Customers can save the username and password to stay logged in for further purchases.
  - Each subscription is purchased for a year and customers can renew in the 30 days prior to the subscription end date.

#### **View prior purchases scenario**

- Customer signs in with Customer tenant username and password and goes to the **My Orders** section.
- Customers can navigate to the **My Orders** page where they can view purchased subscriptions and make updates if required.
- Customers can navigate to the **My Subscriptions** page where they can view all subscriptions (license-based as well as usage-based), including those maintained in Partner Center.

#### **Add seats to existing subscriptions scenario**

- From the **My Orders** section, customers can add more seats to existing subscriptions. Customers can add more seats anytime during a subscription year.
- Each added seat does not change the end date of the subscription. However, the price of the subscription changes based on the date on which you add the seat, and where that date is in the year. Pricing is prorated on a daily basis to only charge for the remaining days of the year.

#### **Add more subscriptions scenario**

- Customers can buy any number of subscriptions at any time from the **Add subscriptions** section under **My Orders**.
- A customer can select a subscription, add a quantity, and pay to complete the transaction and start using the subscription immediately. If a customer is a pre-approved customer, the subscription is available for use immediately and an invoice will be sent to the customer for payment.

#### **Renew subscription scenario**

- A customer can renew a subscription during the last 30 days prior to the subscription end date.
- This is available only in the last 30 days.
- If not renewed in last 30 days, the subscription will be removed from the list of subscriptions for this Customer tenant.
- You cannot update the quantity during renewal.

#### **Payments scenario**

- If the customer is pre-approved for transactions by the admin, the payment experience is not presented for the above scenarios. Instead, the partner can send the invoice for payment to the pre-approved customer.
- For all new purchases, you can add more seats, add subscriptions and renew. A customer can pay a partner

using this website through PayPal or PayU (for India).

- This website is integrated with PayPal or PayU (for India) and allows partners to accept payments from their customers. PayPal or PayU (for India) credits this amount in a partner's account. PayPal or PayU (for India) Bank account management is outside of this website and is managed on PayPal.com or PayUmoney.com respectively.
- This is dependent on partners configuring their PayPal orPayU (for India) payment configuration at PayPal.com or PayUmoney.com. Microsoft does not save this information or actual payment transactions resulting from the use of this option.

#### **Prorated pricing scenario**

- This website supports prorated pricing in cases when customers add more seats to an existing subscription.
- Each subscription expires after one year and cannot be changed after the subscription is purchased.
- The end date of the subscription will not change by adding additional seats. Customers will be charged for the remaining number of days until the end date. For example, if on day one the subscription cost is \$365, and you add one more seat on day two, the price for the new seat will be \$364. If you add one more seat 10 days later, the price will be \$354.

# Console test app

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

The console test app is provided in C# and Java, it provides sample codes for all of the scenarios supported by the Partner Center APIs. You can also use it for testing.

## Get the code

Download the sample code for the console test app.

### .NET

[Download the sample code](#) and modify it as necessary.

#### IMPORTANT

Before you build the application, update the values in the *App.config* file to reflect the Azure AD authentication information you created in [Partner Center authentication](#). Specifically, you should use your integration sandbox account settings during early development or for testing in production.

Under **ScenarioSettings** in the *App.config* file, you can set parameters that will be automatically passed into the scenarios that you run.

To modify the list of scenarios that are run, comment out lines in **IPartnerScenario[] mainScenarios** or in an individual **Get Scenarios** method found in the *Program.cs* file.

### Java

The [Partner Center Java SDK](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

[Download the sample code](#) and modify it as necessary.

#### IMPORTANT

Before you build the application, update the values in the *SamplesConfigurations.json* file to reflect the Azure AD authentication information you created in [Partner Center authentication](#). Specifically, you should use your integration sandbox account settings during early development or for testing in production.

Under **ScenarioSettings** in the *SamplesConfiguration.json* file, you can set parameters that will be automatically passed into the scenarios that you run.

To modify the list of scenarios that are run, comment out lines in `IPartnerScenario[] mainScenarios` or in an individual `Get Scenarios` method found in the `Program.java` file.

## What to change

Use the following lists to determine what to change or not change in the sample code.

### **PartnerServiceSettings**

For `PartnerServiceSettings`, don't change:

- `PartnerServiceApiEndpoint`
- `AuthenticationAuthorityEndpoint`
- `GraphEndpoint`
- `CommonDomain`

All of these settings are necessary for the sample API calls to properly function.

### **UserAuthentication**

For `UserAuthentication`, you're required to change:

- `ApplicationId` (your Azure Active Directory application ID used for login)
- `UserName` (your active directory username)
- `Password` (your active directory password).

Don't change:

- `ResourceUrl`
- `RedirectUrl`

### **AppAuthentication**

For `AppAuthentication`, you're required to change:

- `ApplicationId` (your active directory application ID used for application login)
- `ApplicationSecret` (your active directory application secret used for application login)
- `Domain` (your active directory domain on which the application is hosted)

### **ScenarioSettings**

For `ScenarioSettings`, don't change:

- `CustomerDomainSuffix` (the domain suffix used when creating a new customer)

Optional settings. If left blank, this information will need to be inputted when running a scenario where necessary:

- `CustomerIdToDelete` (the ID of the customer used for deletion)
- `DefaultCustomerId` (the customer ID to use in customer-related scenarios)
- `DefaultInvoiceID` (the invoice ID to use in invoice scenarios)
- `PartnerMpnId` (the partner MPN ID to use in indirect partner scenarios)
- `DefaultServiceRequestId` (the service request ID to use in service request scenarios)
- `DefaultSupportTopicID` (the support topic ID to use in service request scenarios)
- `DefaultOfferID` (the offer ID to use in offer scenarios)
- `DefaultOrderID` (the order ID to use in order scenarios)
- `DefaultSubscriptionID` (the subscription ID to use in subscription scenarios)

Optional to change. All of these settings specify the amount of entries per page when retrieving

paged content:

- `CustomerPageSize`
- `InvoicePageSize`
- `ServiceRequestPageSize`
- `DefaultOfferPageSize`
- `SubscriptionPageSize`

# Set up API access in Partner Center

4/25/2020 • 3 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud for US Government
- Partner Center for Microsoft Cloud Germany

This article describes the accounts you need to develop against the Partner Center SDK. This article also explains how to create an [integration sandbox account](#) and test in the integration sandbox.

## Account definitions

To help you integrate and test your API integration, Partner Center supports two kinds of accounts:

### **Primary Partner account**

This account is where you create real orders for real customers. If you make any changes or transactions when you are signed in to the primary account, by using either the Partner Center SDK or the Partner Dashboard UI, they will be treated as official orders for real customers. They will be reflected in your invoice, and your company is responsible for paying for them.

### **Integration sandbox account**

This account is for testing your code and its integration with the Partner Center APIs before you deploy it broadly. Changes and transactions you make when you are signed into the integration sandbox account will not appear in your invoice.

The integration sandbox account and the primary account act independently, and do not share admin accounts, user accounts, customers, orders, subscriptions, or other data.

The integration sandbox supports transactions with a limited number of customers, orders, subscriptions, seats, etc.

By policy, integration sandbox accounts are for integration testing purposes only.

By default, there is no integration sandbox account. You must create one yourself if you plan to use the Partner Center SDK.

## Set up your accounts

This section describes how to set up a primary Partner account and an integration sandbox account for the Partner Center SDK.

### **Create an integration sandbox**

1. Sign in to Partner Dashboard with a global admin account (your primary Partner account.)
2. From the **Settings** menu (gear icon), choose **Partner settings**.
3. On the **Account settings** page, choose **Integration sandbox**.

**NOTE**

If you don't see an Integration sandbox option, you might not have a global admin account. You also might be using an integration sandbox account and an integration sandbox has already been set up.

4. Enter the contact information for the integration sandbox admin account. Then, choose **Create account**. Wait a few minutes for a confirmation message that the account has been created.
5. After you see the confirmation message, sign out of Partner Dashboard.
6. Sign back in with your new integration sandbox admin account. Be sure to use the format **\*\*username@domain\*\*** for your credentials along with the password that you just specified.
7. Choose **Set Up Account** above **Current Tasks** to complete the sandbox account setup.

**Enable API access**

After your account is set up, you must enable API access before you can use the Partner Center SDK with the integration sandbox. You need to enable access to the API separately for both your primary Partner account and your integration sandbox account.

1. Sign into Partner Dashboard using a global admin account.
2. From the **Settings** menu (gear icon), select **Partner settings**.
3. On the **Account settings** page, choose **App management**.
4. If you do not already have an existing app, add a new web app. If you have an existing web app, choose the **Add key** button.
5. Copy the app registration information, especially the **Key** if you're creating a web app, and store it in a safe place.
6. Sign out of Partner Dashboard.
7. Sign back in with your integration sandbox account. Repeat steps 2-5 to enable API access in the integration sandbox.

## Write and test code

You can write code and test code in the integration sandbox. You'll need the following information to [set up Partner Center authentication](#) with Azure AD.

ITEM NAME	ITEM LOCATION
App ID / Client ID	From the <b>Settings</b> menu (gear icon), select <b>Partner settings</b> . On the <b>Account settings</b> page, select <b>App Management</b> . The App ID/Client ID is listed as the <b>Registered application App ID</b> .
Key	If you created a web app in the section <a href="#">Enable API access</a> , this is the key that you saved in step 5.
Domain	The domain for the integration sandbox.

## Run tested code

To use your solution with real customer data, you must change from your integration sandbox credentials to your

primary Partner account credentials.

When you're ready to use your tested code in your primary Partner account, you must get an Azure AD security token. This security token is based on your Partner Center app, key and domain (instead of your integration sandbox app, key and domain).

1. Follow the steps in [Partner Center authentication](#) to get an Azure AD security token using your primary Partner Center credentials. (You previously followed these steps to get an Azure AD security token for your integration sandbox.)
2. Replace the integration security token in your code with the new security token for your primary Partner account.

# Partner Center authentication

4/25/2020 • 15 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Partner Center uses Azure Active Directory for authentication. When interacting with the Partner Center API, SDK, or PowerShell module you must correctly configure an Azure AD application and then request an access token. Access tokens obtained using app only or app + user authentication can be used with the Partner Center. However, there are two important items that need to be considered

- Use multi-factor authentication when accessing the Partner Center API using app + user authentication. For more information regarding this change, see [Enable secure application model](#).
- Not all of the operations the Partner Center API support app only authentication. There are certain scenarios where you'll be required to use app + user authentication. Under the *Prerequisites* heading on each [Scenario](#) article, you'll find documentation that states whether app only authentication, app + user authentication, or both are supported.

## Initial setup

1. To begin, you need to make sure that you have both a primary Partner Center account, and an integration sandbox Partner Center account. For more information, see [Set up Partner Center accounts for API access](#). Make note of the Azure AAD App registration ID and Secret (client secret is required for App only identification) for both your primary account and your integration sandbox account.
2. Sign in to Azure AD from the Azure portal. In **permissions to other applications**, set permissions for **Windows Azure Active Directory** to **Delegated Permissions**, and select both **Access the directory as the signed-in user** and **Sign in and read user profile**.
3. In the Azure portal, **Add application**. Search for "Microsoft Partner Center", which is the Microsoft Partner Center application. Set the **Delegated Permissions to Access Partner Center API**. If you are using Partner Center for Microsoft Cloud Germany or Partner Center for Microsoft Cloud for US Government, this step is mandatory. If you are using Partner Center global instance, this step is optional. CSP Partners can use the App Management feature in the Partner Center portal to bypass this step for Partner Center global instance.

## App-only authentication

If you would like to use app-only authentication to access the Partner Center REST API,

.NET API, Java API, or PowerShell module then you can do so by leveraging the following instructions.

## .NET (app-only authentication)

```
public static IAggregatePartner GetPartnerCenterTokenUsingAppCredentials()
{
    IPartnerCredentials partnerCredentials =
        PartnerCredentials.Instance.GenerateByApplicationCredentials(
            PartnerApplicationConfiguration.ApplicationId,
            PartnerApplicationConfiguration.ApplicationSecret,
            PartnerApplicationConfiguration.ApplicationDomain);

    // Create operations instance with partnerCredentials.
    return PartnerService.Instance.CreatePartnerOperations(partnerCredentials);
}
```

## Java (app-only authentication)

The [Partner Center Java SDK](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

```
public IAggregatePartner getAppPartnerOperations()
{
    IPartnerCredentials appCredentials =
        PartnerCredentials.getInstance().generateByApplicationCredentials(
            PartnerApplicationConfiguration.getApplicationId(),
            PartnerApplicationConfiguration.getApplicationSecret(),
            PartnerApplicationConfiguration.getApplicationDomain());

    return PartnerService.getInstance().createPartnerOperations( appCredentials );
}
```

## REST (app-only authentication)

### REST request

```
POST https://login.microsoftonline.com/{tenantId}/oauth2/token HTTP/1.1
Accept: application/json
return-client-request-id: true
Content-Type: application/x-www-form-urlencoded; charset=utf-8
Host: login.microsoftonline.com
Content-Length: 194
Expect: 100-continue

resource=https%3A%2F%2Fgraph.windows.net&client_id={client-id-here}&client_secret=
{client-secret-here}&grant_type=client_credentials
```

### REST response

```
HTTP/1.1 200 OK
Cache-Control: no-cache, no-store
Pragma: no-cache
Content-Type: application/json; charset=utf-8
Expires: -1
Content-Length: 1406

{"token_type":"Bearer","expires_in":"3600","ext_expires_in":"3600","expires_on":1546469802,"not_before":1546465902,"resource":"https://graph.windows.net","access_token":"value-has-been-removed"}
```

## App + User authentication

Historically the [resource owner password credentials grant](#) has been used to request an access token for use with the Partner Center REST API, .NET API, Java API, or PowerShell module. That method was used to request an access token from Azure Active Directory using a client identifier and user credentials. However, this approach will no longer work because Partner Center requires multi-factor authentication, when using app + user authentication. To comply with this requirement Microsoft has introduced a secure, scalable framework for authenticating Cloud Solution Provider (CSP) partners and control panel vendors (CPV) using multi-factor authentication. This framework is known as the Secure Application Model, and it is composed of a consent process and a request for an access token using a refresh token.

### Partner consent

The partner consent process is an interactive process where the partner authenticates using multi-factor authentication, consents to the application, and a refresh token is stored in a secure repository such as Azure Key Vault. We recommend that a dedicated account for integration purposes be used for this process.

#### IMPORTANT

The appropriate multi-factor authentication solution should be enabled for the service account used in the partner consent process. If it isn't then the resulting refresh token will not be compliant with security requirements.

### Samples for App + User authentication

The partner consent process can be performed in a number of ways. To help partners understand how to perform each required operation, we have developed the following samples. When you implement the appropriate solution in your environment, it is important that you develop a solution that is complaint with your coding standards and security policies.

## .NET (app+user authentication)

The [partner consent](#) sample project demonstrates how to utilize a website developed using ASP.NET to capture consent, request a refresh token, and securely store it in Azure Key Vault. Perform the following steps to create the required prerequisites for this sample.

1. Create an instance of Azure Key Vault using the Azure portal or the following PowerShell commands. Before executing the command, be sure to modify the parameter values accordingly. The vault name must be unique.

```

Login-AzureRmAccount

# Create a new resource group
New-AzureRmResourceGroup -Name ContosoResourceGroup -Location EastUS

New-AzureRmKeyVault -Name 'Contoso-Vault' -ResourceGroupName
'ContosoResourceGroup' -Location 'East US'

```

For more information about creating an Azure Key Vault, see [Quickstart: Set and retrieve a secret from Azure Key Vault using the Azure portal](#) or [Quickstart: Set and retrieve a secret from Azure Key Vault using PowerShell](#). Then set and retrieve a secret.

2. Create an Azure AD Application and a key using the Azure portal or the following commands.

```

Connect-AzureAD

$SessionInfo = Get-AzureADCurrentSessionInfo

$app = New-AzureADApplication -DisplayName 'My Vault Access App' -
IdentifierUris 'https://$(($SessionInfo.TenantDomain)/$((New-Guid).ToString()))'
$password = New-AzureADApplicationPasswordCredential -ObjectId $app.ObjectId

Write-Host "ApplicationId      = $($app.AppId)"
Write-Host "ApplicationSecret    = $($password.Value)"

```

Be sure to make note of the application identifier and secret values because they'll be used in the steps below.

3. Grant the newly created Azure AD application the read secrets permissions using the Azure portal or the following commands.

```

$app = Get-AzureADApplication -Filter {AppId -eq 'ENTER-APP-ID-HERE'}

Set-AzureRmKeyVaultAccessPolicy -VaultName ContosoVault -ObjectId
$app.ObjectId -PermissionsToSecrets get

```

4. Create an Azure AD application that is configured for Partner Center. Perform the following actions to complete this step.

- Browse to the [App management](#) feature of the Partner Center Dashboard
- Click *Add new web app* to create a new Azure AD application.

Be sure to document the *App ID*, *Account ID\**, and *Key* values because they'll be used in the steps below.

5. Clone the [Partner-Center-DotNet-Samples](#) repository using Visual Studio or the following command.

```
git clone https://github.com/Microsoft/Partner-Center-DotNet-Samples.git
```

6. Open the *PartnerConsent* project found in the `Partner-Center-DotNet-Samples\secure-app-model\keyvault` directory.
7. Populate the application settings found in the [web.config](#)

```

<!-- AppID that represents CSP application -->
<add key="ida:CSPApplicationId" value="" />
<!--
    Please use certificate as your client secret and deploy the certificate to
    your environment.

    The following application secret is for sample application only. please do
    not use secret directly from the config file.
-->
<add key="ida:CSPApplicationSecret" value="" />

<!--
    Endpoint address for the instance of Azure KeyVault. This is
    the DNS Name for the instance of Key Vault that you provisioned.
-->
<add key="KeyVaultEndpoint" value="" />

<!-- App ID that is given access for KeyVault to store refresh tokens -->
<add key="ida:KeyVaultClientId" value="" />

<!--
    Please use certificate as your client secret and deploy the certificate
    to your environment. The following application secret is for sample
    application only. please do not use secret directly from the config file.
-->
<add key="ida:KeyVaultClientSecret" value="" />

```

#### IMPORTANT

Sensitive information such as application secrets should not be stored in configuration files. It was done here because this is a sample application. With your production application we strongly recommend that you use certificate-based authentication. For more information, see [Certificate credentials for application authentication](#).

- When you run this sample project, it will prompt you for authentication. After successfully authenticating, an access token is requested from Azure AD. The information returned from Azure AD includes a refresh token that is stored in the configured instance of Azure Key Vault.

## Java (app+user authentication)

The [partner consent](#) sample project demonstrates how to utilize a website developed using JSP to capture consent, request a refresh token, and secure store in Azure Key Vault. Perform the following to create the required prerequisites for this sample.

- Create an instance of Azure Key Vault using the Azure portal or the following PowerShell commands. Before executing the command, be sure to modify the parameter values accordingly. The vault name must be unique.

```

Login-AzureRmAccount

# Create a new resource group
New-AzureRmResourceGroup -Name ContosoResourceGroup -Location EastUS

New-AzureRmKeyVault -Name 'Contoso-Vault' -ResourceGroupName
'ContosoResourceGroup' -Location 'East US'

```

For more information about creating an Azure Key Vault, see [Quickstart: Set and retrieve a secret from Azure Key Vault using the Azure portal](#) or [Quickstart: Set](#)

and retrieve a secret from Azure Key Vault using PowerShell.

2. Create an Azure AD Application and a key using the Azure portal or the following commands.

```
Connect-AzureAD

$SessionInfo = Get-AzureADCurrentSessionInfo

$app = New-AzureADApplication -DisplayName 'My Vault Access App' -
IdentifierUris 'https://$(SessionInfo.TenantDomain)/$((New-Guid).ToString())'
$password = New-AzureADApplicationPasswordCredential -ObjectId $app.ObjectId

Write-Host "ApplicationId      = $($app.AppId)"
Write-Host "ApplicationSecret   = $($password.Value)"
```

Be sure to document the application identifier and secret values because they'll be used in the steps below.

3. Grant the newly created Azure AD application the read secrets permissions using the Azure portal or the following commands.

```
$app = Get-AzureADApplication -Filter {AppId -eq 'ENTER-APP-ID-HERE'}

Set-AzureRmKeyVaultAccessPolicy -VaultName ContosoVault -ObjectId
$app.ObjectId -PermissionsToSecrets get
```

4. Create an Azure AD application that is configured for Partner Center. Perform the following to complete this step.

- Browse to the [App management](#) feature of the Partner Center Dashboard
- Click *Add new web app* to create a new Azure AD application.

Be sure to document the *App ID*, *Account ID\**, and *Key* values because they'll be used in the steps below.

5. Clone the [Partner-Center-Java-Samples](#) repository using the following command

```
git clone https://github.com/Microsoft/Partner-Center-Java-Samples.git
```

6. Open the *PartnerConsent* project found in the

`Partner-Center-Java-Samples\secure-app-model\keyvault` directory.

7. Populate the application settings found in the [web.xml](#) file

```

<filter>
    <filter-name>AuthenticationFilter</filter-name>
    <filter-
class>com.microsoft.store.samples.partnerconsent.security.AuthenticationFilter
</filter-class>
    <init-param>
        <param-name>client_id</param-name>
        <param-value></param-value>
    </init-param>
    <init-param>
        <param-name>client_secret</param-name>
        <param-value></param-value>
    </init-param>
    <init-param>
        <param-name>keyvault_base_url</param-name>
        <param-value></param-value>
    </init-param>
    <init-param>
        <param-name>keyvault_client_id</param-name>
        <param-value></param-value>
    </init-param>
    <init-param>
        <param-name>keyvault_client_secret</param-name>
        <param-value></param-value>
    </init-param>
    <init-param>
        <param-name>keyvault_certificate_path</param-name>
        <param-value></param-value>
    </init-param>
</filter>

```

#### **IMPORTANT**

Sensitive information such as application secrets should not be stored in configurations files. It was done here because this is a sample application. With your production application, we strongly recommend that you use certificate based authenticate. For more information, see [Key Vault Certificate authentication](#).

- When you run this sample project, it will prompt you for authentication. After successfully authenticating, an access token is requested from Azure AD. The information returned from Azure AD includes a refresh token that is stored in the configured instance of Azure Key Vault.

## Cloud Solution Provider authentication

Cloud Solution Provider partners can use the refresh token obtained through the [partner consent](#) process.

### **Samples for Cloud Solution Provider authentication**

To help partners understand how to perform each required operation, we have developed the following samples. When you implement the appropriate solution in your environment, it is important that you develop a solution that is complaint with your coding standards and security policies.

## .NET (CSP authentication)

- If you have not already done so, perform the [partner consent process](#).
- Clone the [Partner-Center-DotNet-Samples](#) repository using Visual Studio or the

following command

```
git clone https://github.com/Microsoft/Partner-Center-DotNet-Samples.git
```

3. Open the `CSPApplication` project found in the `Partner-Center-DotNet-Samples\secure-app-model\keyvault` directory.

4. Update the application settings found in the `App.config` file.

```
<!-- AppID that represents CSP application -->
<add key="ida:CSPApplicationId" value="" />
<!--
    Please use certificate as your client secret and deploy the certificate to
    your environment.

    The following application secret is for sample application only. please do
    not use secret directly from the config file.
-->
<add key="ida:CSPApplicationSecret" value="" />

<!-- Endpoint address for the instance of Azure KeyVault -->
<add key="KeyVaultEndpoint" value="" />

<!-- AppID that is given access for keyvault to store the refresh tokens -->
<add key="ida:KeyVaultClientId" value="" />

<!--
    Please use certificate as your client secret and deploy the certificate to
    your environment.

    The following application secret is for sample application only. please do
    not use secret directly from the config file.
-->
<add key="ida:KeyVaultClientSecret" value="" />
```

5. Set the appropriate values for the `PartnerId` and `CustomerId` variables found in the `Program.cs` file.

```
// The following properties indicate which partner and customer context the
// calls are going to be made.
string PartnerId = "<Partner tenant id>";
string CustomerId = "<Customer tenant id>";
```

6. When you run this sample project, it obtains the refresh token obtained during the partner consent process. Then, it requests an access token to interact with the Partner Center SDK on the partner's behalf. Finally, it requests an access token to interact with Microsoft Graph on behalf of the specified customer.

## Java (CSP authentication)

1. If you have not done so already, perform the [partner consent process](#).
2. Clone the [Partner-Center-Java-Samples](#) repository using Visual Studio or the following command

```
git clone https://github.com/Microsoft/Partner-Center-Java-Samples.git
```

3. Open the `cspsample` project found in the `Partner-Center-Java-Samples\secure-app-model\keyvault` directory.

4. Update the application settings found in the [application.properties](#) file.

```
azuread.authority=https://login.microsoftonline.com  
keyvault.baseurl=  
keyvault.clientId=  
keyvault.clientSecret=  
partnercenter.accountId=  
partnercenter.clientId=  
partnercenter.clientSecret=
```

5. When you run this sample project, it obtains the refresh token obtained during the partner consent process. Then, it requests an access token to interact with the Partner Center SDK on the partner's behalf.
6. Optional - uncomment the *RunAzureTask* and *RunGraphTask* function calls if you want to see how to interact with Azure Resource Manager and Microsoft Graph on behalf of the customer.

## Control Panel Provider authentication

Control panel vendors need to have each partner they support perform the [partner consent](#) process. Once that is completed the refresh token obtained through that process is used to access the Partner Center REST API and .NET API.

### Samples for Cloud Panel Provider authentication

To help control panel vendors understand how to perform each required operation, we have developed the following samples. When you implement the appropriate solution in your environment, it is important that you develop a solution that is complaint with your coding standards and security policies.

### .NET (CPV authentication)

1. Develop and deploy a process for Cloud Solution Provider partners to provide the appropriate consent. For more information an example, see [partner consent](#).

#### IMPORTANT

User credentials from a Cloud Solution Provider partner should not be stored. The refresh token obtained through the partner consent process should be stored and used to request access tokens for interacting with any Microsoft API.

2. Clone the [Partner-Center-DotNet-Samples](#) repository using Visual Studio or the following command

```
git clone https://github.com/Microsoft/Partner-Center-DotNet-Samples.git
```

3. Open the `CPVApplication` project found in the `Partner-Center-DotNet-Samples\secure-app-model\keyvault` directory.
4. Update the application settings found in the [App.config](#) file.

```

<!-- AppID that represents Control panel vendor application -->
<add key="ida:CPVApplicationId" value="" />

<!--
    Please use certificate as your client secret and deploy the certificate to
    your environment.
    The following application secret is for sample application only. please do
    not use secret directly from the config file.
-->
<add key="ida:CPVApplicationSecret" value="" />

<!-- Endpoint address for the instance of Azure KeyVault -->
<add key="KeyVaultEndpoint" value="" />

<!-- AppID that is given access for keyvault to store the refresh tokens -->
<add key="ida:KeyVaultClientId" value="" />

<!--
    Please use certificate as your client secret and deploy the certificate to
    your environment.
    The following application secret is for sample application only. please do
    not use secret directly from the config file.
-->
<add key="ida:KeyVaultClientSecret" value="" />

```

5. Set the appropriate values for the **PartnerId** and **CustomerId** variables found in the [Program.cs](#) file.

```

// The following properties indicate which partner and customer context the
calls are going to be made.
string PartnerId = "<Partner tenant id>";
string CustomerId = "<Customer tenant id>";

```

6. When you run this sample project, it obtains the refresh token for the specified partner. Then, it requests an access token to access Partner Center and Azure AD Graph on behalf of the partner. The next task it performs is the deletion and creation of permission grants into the customer tenant. Since there's no relationship between the control panel vendor and the customer, these permissions need to be added using the Partner Center API. The following example shows how to accomplish that.

```

JObject contents = new JObject
{
    // Provide your application display name
    ["displayName"] = "CPV Marketplace",

    // Provide your application id
    ["applicationId"] = CPVApplicationId,

    // Provide your application grants
    ["applicationGrants"] = new JArray(
        JObject.Parse("{\"enterpriseApplicationId\": \"00000002-0000-0000-
        c000-000000000000\",",
        "\"scope\":\"Domain.ReadWrite.All,User.ReadWrite.All,Directory.Read.All\"}"),
        // for Azure AD Graph access, Directory.Read.All
        JObject.Parse("{\"enterpriseApplicationId\": \"797f4846-ba00-4fd7-
        ba43-dac1f8f63013\", \"scope\":\"user_impersonation\"}")) // for Azure
    Resource Manager access
};

<*/
 * The following steps have to be performed once per customer tenant if your
application is
 * a control panel vendor application and requires customer tenant Azure AD
Graph access.
*/>

// delete the previous grant into customer tenant
JObject consentDeletion = await ApiCalls.DeleteAsync(
    tokenPartnerResult.Item1,

string.Format("https://api.partnercenter.microsoft.com/v1/customers/{0}/applic
ationconsents/{1}", CustomerId, CPVApplicationId));

// create new grants for the application given the setting in application
grants payload.
JObject consentCreation = await ApiCalls.PostAsync(
    tokenPartnerResult.Item1,

string.Format("https://api.partnercenter.microsoft.com/v1/customers/{0}/applic
ationconsents", CustomerId),
    contents.ToString()));

```

After these permissions have been established, the sample performs operations using Azure AD Graph on behalf of the customer.

## Java (CPV authentication)

1. Develop and deploy a process for Cloud Solution Provider partners to provide the appropriate consent. For more information and an example, see the [partner consent](#).

### IMPORTANT

User credentials from a Cloud Solution Provider partner should not be stored. The refresh token obtained through the partner consent process should be stored and used to request access tokens for interacting with any Microsoft API.

2. Clone the [Partner-Center-Java-Samples](#) repository using the following command

```
git clone https://github.com/Microsoft/Partner-Center-Java-Samples.git
```

3. Open the `cpvsample` project found in the  
`Partner-Center-Java-Samples\secure-app-model\keyvault` directory.
4. Update the application settings found in the `application.properties` file.

```
azuread.authority=https://login.microsoftonline.com
keyvault.baseurl=
keyvault.clientId=
keyvault.clientSecret=
partnercenter.accountId=
partnercenter.clientId=
partnercenter.clientSecret=
partnercenter.displayName=
```

The value for the `partnercenter.displayName` should be the display name of your marketplace application.

5. Set the appropriate values for the `partnerId` and `customerId` variables found in the [Program.java](#) file.

```
partnerId = "SPECIFY-THE-PARTNER-TENANT-ID-HERE";
customerId = "SPECIFY-THE-CUSTOMER-TENANT-ID-HERE";
```

6. When you run this sample project, it obtains the refresh token for the specified partner. Then, it requests an access token to access Partner Center on behalf of the partner. The next task it performs is the deletion and creation of permission grants into the customer tenant. Since there's no relationship between the control panel vendor and the customer, these permissions need to be added using the Partner Center API. The following example shows how to grant the permissions.

```

ApplicationGrant azureAppGrant = new ApplicationGrant();

azureAppGrant.setEnterpriseApplication("797f4846-ba00-4fd7-ba43-
dac1f8f63013");
azureAppGrant.setScope("user_impersonation");

ApplicationGrant graphAppGrant = new ApplicationGrant();

graphAppGrant.setEnterpriseApplication("00000002-0000-0000-c000-
000000000000");
graphAppGrant.setScope("Domain.ReadWrite.All,User.ReadWrite.All,Directory.Read
.All");

ApplicationConsent consent = new ApplicationConsent();

consent.setApplicationGrants(Arrays.asList(azureAppGrant, graphAppGrant));
consent.setApplicationId(properties.getProperty(PropertyName.PARTNER_CENTER_CL
IENT_ID));
consent.setDisplayName(properties.getProperty(PropertyName.PARTNER_CENTER_DISP
LAY_NAME));

// Deletes the existing grant into the customer it is present.
partnerOperations.getServiceClient().delete(
    partnerOperations,
    new TypeReference<ApplicationConsent>(){},
    MessageFormat.format(
        "customers/{0}/applicationconsents/{1}",
        customerId,
        properties.getProperty(PropertyName.PARTNER_CENTER_CLIENT_ID)));

// Consent to the defined applications and the respective scopes.
partnerOperations.getServiceClient().post(
    partnerOperations,
    new TypeReference<ApplicationConsent>(){},
    MessageFormat.format(
        "customers/{0}/applicationconsents",
        customerId),
    consent);

```

Uncomment the *RunAzureTask* and *RunGraphTask* function calls if you want to see how to interact with Azure Resource Manager and Microsoft Graph on behalf of the customer.

# Enabling the Secure Application Model framework

4/25/2020 • 6 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center

Microsoft is introducing a secure, scalable framework for authenticating cloud solution provider (CSP) partners and control panel vendors (CPV) through the Microsoft Azure multi-factor authentication (MFA) architecture.

You can use the new model to elevate security for Partner Center API integration calls. This will help all parties (including Microsoft, CSP partners, and CPVs) to protect their infrastructure and customer data from security risks.

## Scope

This article concerns the following actors:

- CPVs
  - A CPV is an independent software vendor that develops apps for use by CSP partners to integrate with Partner Center APIs.
  - A CPV isn't a CSP partner with direct access to the Partner Center dashboard or APIs.
- CSP indirect providers and CSP direct partners who are using app ID + user authentication and directly integrate with Partner Center APIs.

## Security requirements

For details on security requirements, see [Partner Security Requirements](#).

## Secure Application Model

Marketplace applications need to impersonate CSP partner privileges to call Microsoft APIs. Security attacks on these sensitive applications can lead to the compromise of customer data.

For an overview and details of the new authentication framework, download the [Secure Application Model framework](#) document. This document covers principles and best practices to make marketplace applications sustainable and robust from security compromises.

## Samples

The following overview documents and sample code describe how partners can implement the Secure Application Model framework:

- [CPV overview document](#)
- [CSP overview document](#)
- [.NET Samples](#)
- [Java Samples](#)

The [Partner Center Java SDK](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open](#)

an issue on [GitHub](#) if you experience a problem.

- [REST instructions and samples](#)
- [PowerShell instructions and samples](#)

## REST

To make REST calls with the Secure Application Model framework with sample code, follow these steps:

1. [Create a web app](#)
2. [Get an authorization code](#)
3. [Get a refresh token](#)
4. [Get an access token](#)
5. [Make a Partner Center API call](#)

### TIP

You can use the Partner Center PowerShell module to get an authorization code and a refresh token. You can choose this option in place of steps 2 and 3. For more information, see the [PowerShell section and examples](#).

### Create a web app

You must create and register a web app in Partner Center before making REST calls.

1. Sign in to the [Azure portal](#).
2. Create an Azure Active Directory (Azure AD) app.
3. Give delegated application permissions to the following resources, *depending on your application's requirements*. If necessary, you can add more delegated permissions for application resources.
  - a. **Microsoft Partner Center** (some tenants show this as **SampleBECApp**)
  - b. **Azure Management APIs** (if you are planning to call Azure APIs)
  - c. **Windows Azure Active Directory**
4. Make sure that the home URL of your app is set to an endpoint where a live web app is running. This app will need to accept the [authorization code](#) from the Azure AD login call. For example, in the example code in [the following section](#), the web app is running at `https://localhost:44395/`.
5. Note the following information from your web app's settings in Azure AD:
  - Application ID
  - Application secret

### NOTE

It is recommended to [use a certificate as your application secret](#). However, you can also create an application key in the Azure portal. The sample code in [the following section](#) uses an application key.

### Get authorization code

You must get an authorization code for your web app to accept from the Azure AD login call:

1. Log in to Azure AD at the following URL: <https://login.microsoftonline.com/common/oauth2/authorize?>

`client_id=Application-Id&response_mode=form_post&response_type=code%20id_token&scope=openid%20profile&nonce=1.`  
Be sure to log in with the user account from which you will make Partner Center API calls (such as an admin agent or sales agent account).

2. Replace **Application-Id** with your Azure AD app ID (GUID).
3. When prompted, log in with your user account with MFA configured.
4. When prompted, enter additional MFA information (phone number or email address) to verify your login.
5. After you are logged in, the browser will redirect the call to your web app endpoint with your authorization code. For example, the following sample code redirects to `https://localhost:44395/`.

#### Authorization code call trace

```
POST https://localhost:44395/ HTTP/1.1
Origin: https://login.microsoftonline.com
Upgrade-Insecure-Requests: 1
Content-Type: application/x-www-form-urlencoded
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,image/apng,*/*;q=0.8
Referer: https://login.microsoftonline.com/kmsi
Accept-Encoding: gzip, deflate, br
Accept-Language: en-US,en;q=0.9
Cookie:
OpenIdConnect.nonce.h0Mjjr1vcxzuI4YqAw4uYC%2F%2BILFk4%2FCx3kHTHP31BvA%3D=dHVyRXd1bk9WVUZFdlF0NVdiY01nNEpUc0JRR
0RiYWFLThQY1RGN19VeXJqNjdLTGv3cFpIWFG1YmpnWdQUURTN0dvMkdHS2kzTm02NGdQS09veVNEbTZJMDk1TVVNYkczyMstQmlKUzFQaTB
FMEhdNVJGVH1ES2d3WG1CS1V1N1c2UE9sd2kzckNrVGn2RFNULwdHY2JET3RDQuXSaXRfLXZQdG00Rn1UM0E1TUo1YWNKOwvQXRwSkhRYk1Qb
mZUV3d3eHvfNEpMUUthMF1QUFgzS01RS2NvMXYtbvV4UVJOYk14TTN0cw%3D%3D

code=AuthorizationCodeValue&id_token=IdTokenValue&<rest of properties for state>
```

#### Get refresh token

You must then use your authorization code to get a refresh token:

1. Make a POST call to the Azure AD login endpoint  
`https://login.microsoftonline.com/CSPTenantID/oauth2/token` with the authorization code. For an example, see the following [sample call](#).
2. Note the refresh token that is returned.
3. Store the refresh token in Azure Key Vault. For more information, see the [Key Vault API documentation](#).

#### IMPORTANT

The refresh token must be [stored as a secret](#) in Key Vault.

#### Sample refresh call

Placeholder request:

```
POST https://login.microsoftonline.com/CSPTenantID/oauth2/token HTTP/1.1
Content-Type: application/x-www-form-urlencoded
Host: login.microsoftonline.com
Content-Length: 966
Expect: 100-continue
```

Request body:

```
resource=https%3a%2f%2fapi.partnercenter.microsoft.com&client_id=Application-Id&client_secret=Application-Secret&grant_type=authorization_code&code=AuthorizationCodeValue
```

Placeholder response:

```
HTTP/1.1 200 OK
Cache-Control: no-cache, no-store
Content-Type: application/json; charset=utf-8
```

Response body:

```
{"token_type": "Bearer", "scope": "user_impersonation", "expires_in": "3599", "ext_expires_in": "3599", "expires_on": "1547579127", "not_before": "1547575227", "resource": "https://api.partnercenter.microsoft.com", "access_token": "Access
```

## Get access token

You must obtain an access token before you can make calls to the Partner Center APIs. You must use a refresh token to obtain an access token because access token generally have a very limited lifetime (for example, less than an hour).

Placeholder request:

```
POST https://login.microsoftonline.com/CSPTenantID/oauth2/token HTTP/1.1
Content-Type: application/x-www-form-urlencoded
Host: login.microsoftonline.com
Content-Length: 1212
Expect: 100-continue
```

Request body:

```
resource=https%3a%2f%2fapi.partnercenter.microsoft.com&client_id=Application-Id &client_secret= Application-Secret&grant_type=refresh_token&refresh_token=RefreshTokenValue&scope=openid
```

Placeholder response:

```
HTTP/1.1 200 OK
Cache-Control: no-cache, no-store
Content-Type: application/json; charset=utf-8
```

Response body:

```
{"token_type": "Bearer", "scope": "user_impersonation", "expires_in": "3600", "ext_expires_in": "3600", "expires_on": "1547581389", "not_before": "1547577489", "resource": "https://api.partnercenter.microsoft.com", "access_token": "AccessTokenValue", "id_token": "IDTokenValue"}
```

## Make Partner Center API calls

You must use your access token to call the Partner Center APIs. See the following example call.

### Example Partner Center API call

```
GET https://api.partnercenter.microsoft.com/v1/customers/CustomerTenantId/users HTTP/1.1
Authorization: Bearer AccessTokenValue
Accept: application/json
X-Locale: en-US
Host: api.partnercenter.microsoft.com
```

## PowerShell

The [Partner Center PowerShell module](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

You can use the [Partner Center PowerShell module](#) to reduce the required infrastructure to exchange an authorization code for an access token. This method is optional for making [Partner Center REST calls](#).

For more information on this process, see [Secure App Model](#) PowerShell documentation.

1. Install the Azure AD and Partner Center PowerShell modules.

```
Install-Module AzureAD
```

```
Install-Module PartnerCenter
```

2. Use the [New-PartnerAccessToken](#) command to perform the consent process and capture the required refresh token.

```
$credential = Get-Credential

New-PartnerAccessToken -ApplicationId 'xxxx-xxxx-xxxx-xxxx' -Scopes
'https://api.partnercenter.microsoft.com/user_impersonation' -ServicePrincipal -Credential $credential
-Tenant 'yyyy-yyyy-yyyy-yyyy' -UseAuthorizationCode
```

### NOTE

The **ServicePrincipal** parameter is used with the [New-PartnerAccessToken](#) command because an Azure AD app with a type of **Web/API** is being used. This type of app requires that a client identifier and secret be included in the access token request. When the **Get-Credential** command is invoked, you will be prompted to enter a username and password. Enter the application identifier as the username. Enter the application secret as the password. When the [New-PartnerAccessToken](#) command is invoked, you will be prompted to enter credentials again. Enter the credentials for the service account that you are using. This service account should be a partner account with appropriate permissions.

3. Copy the refresh token value.

```
$token.RefreshToken | clip
```

You should store the refresh token value in a secure repository, such as Azure Key Vault. For more information on how to leverage the secure application module with PowerShell, see the [multi-factor authentication](#) article.

# Test and debug

5/7/2020 • 5 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

To test your code, you should use your integration sandbox account in Partner Center (and the corresponding tokens) so that you don't accidentally incur new charges that your company is responsible for paying. For more information about this test-in-production (TiP) environment, see [Set up API access in Partner Center](#).

## Integration sandbox constraints

If you run automated build verification tests, conduct testing in production, or perform manual testing in the integration sandbox, you may reach the maximum limits for the integration sandbox. These limits are 75 customers, 5 subscriptions per customer, and 25 seats per subscription.

- The 25-seats limit means you cannot acquire an offer in the sandbox that has a minimum seat requirement that exceeds 25 seats. This limitation includes trials.
- Usage summary can't be obtained on sandbox accounts, as those accounts are for testing purposes.
- APIs related to billing and invoice will not work in the sandbox, as no invoices are generated for the test account.

## Azure plan

By default, partners cannot provision Azure plans using their sandbox accounts. Partners who need to do so with their sandbox account must apply for access. To apply for access, reach out to your Microsoft account manager or business contact. Partners who have previously applied for access to provision Microsoft Azure (MS-AZR-0145P) subscriptions in their sandbox accounts do not need to apply for access again. They will be granted access to provision Azure plans automatically.

For partners whose sandbox accounts have been approved to provision Azure plans, the following limits apply:

- Each sandbox partner account can have up to 10 Azure plans across all customer tenants (no matter how the plans are distributed among the customers).
- A direct bill partner can create up to one Azure plan per customer tenant.
- An indirect provider can create up to three Azure plans per customer tenant (for different indirect resellers specified as the Partner-of-Record).
- Each Azure plan can have up to three Azure subscriptions.
- Each CSP Azure subscription under your sandbox account is limited to four virtual machine (VM) cores per data center. Therefore, you cannot provision VM SKUs that require more than four VM cores. Certain specialized VM SKUs such as GPU cores are also excluded.
- Each sandbox partner account has a spending limit of \$2000 (USD) per billing cycle across all Azure plans. Once a partner reaches the spend limit, all Azure plans will be temporarily disabled until the next billing cycle.

## Cloud Solution Provider (CSP) Azure subscription offers

CSP Azure subscription offers are no longer available by default to sandbox accounts. These include MS-AZR-0146P, MS-AZR-DE-0146P and MS-AZR-USGOV-0146P for CSP Azure subscriptions in Microsoft Public Cloud, German Cloud, and Government Cloud respectively. Partners who need access to these offers with their sandbox account must apply for access. To apply for access, discuss with your Microsoft account manager or business contact.

For partners whose sandbox accounts have been approved for CSP Azure subscription offers, the following limits apply:

- You can have up to a maximum of 375 active subscriptions (75 customers x 5 subscriptions per customer). However, only 10 of which can be CSP Azure subscriptions.
- When a CSP Azure subscription reaches \$200 of Azure usage, its resources are temporarily disabled until its next billing cycle. It is still considered an active subscription and is counted towards the 10 active Azure subscriptions limit.
- Each CSP Azure subscription under your sandbox account is limited to four virtual machine (VM) cores per data center. Therefore, you cannot provision VM SKUs that require more than four VM cores. Certain specialized VM SKUs such as GPU cores are also excluded.

### IMPORTANT

All existing CSP Azure subscriptions provisioned with sandbox accounts prior to August 1, 2018 are no longer supported and will be deprovisioned by Microsoft between October 16 - October 31, 2018. After the subscriptions have been deprovisioned, they cannot be re-enabled, and associated data are no longer accessible. Partners who have valuable data stored under these subscriptions must back up the data before October 16, 2018.

## Azure Reserved VM instance

If you are [purchasing an Azure Reserved VM instance](#) with your sandbox account, you are limited to two VM instances per customer. You are also limited to selecting only from the following Azure Reserved VM instance product SKUs:

PRODUCT TITLE	EFFECTIVE DATE	SKU TITLE	REGION [ARMREGION NAME]	INSTANCE KEY [ARMSKUNAME]	DURATION	CONSUMPTION METER ID
B Series	12/1/2017 0:00	Reserved VM instance, Standard_B1s, KR South, 1 year	KoreaSouth	Standard_B1s	1Year	3f913071-0dd7-4258-8ec4-6fad05bd976d
B Series	12/1/2017 0:00	Reserved VM instance, Standard_B1s, US East, 1 year	eastus	Standard_B1s	1Year	f4d7a5a5-1b67-45ea-b1a0-282fbdd34b05
B Series	12/1/2017 0:00	Reserved VM instance, Standard_B1s, US West 2, 1 year	westus2	Standard_B1s	1Year	222e39f5-e99f-4fa3-a323-f46402977888

Product Title	Effective Date	SKU Title	Region [ARM Region Name]	Instance Key [ARMSKUNAME]	Duration	Consumption Meter ID
B Series	12/1/2017 0:00	Reserved VM instance, Standard_B1s, US North Central, 1 year	northcentralus	Standard_B1s	1Year	4e1716fc-4842-43f1-aa96-7c1b1b1395a7
B Series	12/1/2017 0:00	Reserved VM instance, Standard_B1s, CA East, 1 year	CanadaEast	Standard_B1s	1Year	ab8a5993-5db7-47c8-b3b1-2e1365b353fb

### Subscriptions for commercial marketplace products

In production, after you have [created a subscription to commercial marketplace SaaS products](#), you need to retrieve a personalized activation link from Partner Center and visit the publisher's site to complete the setup process. Subscription billing will begin only after setup is complete.

In the CSP sandbox environment, there is no integration with ISVs. If you try to retrieve an activation link from Partner Center, a dummy link will be returned. You cannot use this dummy link to complete the setup process at the publisher's site. To use the integration sandbox account to test billing for subscriptions to commercial marketplace SaaS products, see [Activate a sandbox subscription for commercial marketplace products](#) instead. Subscription billing will begin after successful activation.

To clean up at the end of your test run so there's space for the next round of testing, see the following articles:

- [Delete a customer account from the integration sandbox](#)
- [Decrease the quantity of a subscription](#)
- [Suspend a subscription so that you can remove it.](#)

### Best practices for REST development

- Use a network trace tool so that you can see your request, the response, and if there were any errors in the HTTP status code in the response. For more information about error handling, see [Partner Center REST error codes](#).
- Use a new Correlation ID for each call made to the Partner Center REST API. This practice ensures better logging and will help during debugging. For more information, see [Partner Center REST headers](#).

### Troubleshooting tips for common REST problems

- Review all header properties, including the URL and API version.
- Ensure properties are included if necessary, and correctly formatted.
- Incorrect array formatting is a common error.
- ETags are temporary and as result, should not be stored. When a function call requires an ETags, use the latest ETags value by getting the resource again. ETags values should be included in double quotation marks, like a string:

```
If-Match : "eyJpZCI6IjUwMWE4NjbjLTE20TgtNDQyYi04MDhjLTRiNjEyY2NmMzMmMiIsInZlcnPpb24i0f9"
```



# Join the Partner Center API and SDK Early Adopter Program

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Partners can collaborate with Microsoft on the development of Partner Center API and SDK features and capabilities.

## Program features

The following features are available to partners who join the Partner Center API and SDK Early Adopter Program:

- **Access to prerelease versions of the Partner Center APIs and SDK:** we will announce new features and capabilities to the private Partner Center Early Adopter Program Yammer group.
- **Monthly webinars:** a monthly webinar for early adopters will be conducted to answer questions, gather feedback, share schedules and timelines, and provide support for new features.
- **Support from subject matter experts:** participants can provide feedback and communicate with subject matter experts (SMEs) in the private Yammer group.

## Join the program

You must be an **existing CSP partner** or an **approved platform vendor** to join the program.

1. **Join the Yammer group** [Partner Center Early Adopter Program](#). It will take us some time to review your application. We'll email you when you've been approved to join the group.

### NOTE

You may be required to join the Microsoft Cloud Yammer Community network before you can join the Partner Center Early Adopter Program Yammer group.

2. **Send an email to** [pctap@microsoft.com](mailto:pctap@microsoft.com) with your Microsoft ID or your TiP (Testing in Production) sandbox account, and your primary domain.

### TIP

You can find your Microsoft ID on the [Organization Profile](#) page in the [Account Settings](#) menu.

3. **Participate actively** in the program by test-driving new features early, engaging with Microsoft, and providing feedback. Be engaged with others in the early adopter community.

**IMPORTANT**

Microsoft reserves the right to remove inactive partners from the program.

# Scenarios

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## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

This section describes the ways that partners in the Cloud Solution Provider program can use the Partner Center API to programmatically manage customer accounts, partner accounts, orders, subscriptions, support, and billing.

There are different versions of Partner Center available that include different capabilities. Not all scenarios are supported in all versions of Partner Center. To learn more, see [Developing for Partner Center for Microsoft National Cloud](#).

## Scenarios supported by the Partner Center SDK

All of the following scenarios can be completed three different ways:

- Manually in the [Partner Center](#) dashboard.
- Programmatically using the Partner Center managed API.
- Programmatically using the Partner Center REST API.

<a href="#">Analytics</a>	<p>Retrieve analytics</p> <ul style="list-style-type: none"><li>• <a href="#">Partner Center Analytics - Resources</a></li><li>• <a href="#">Get all Azure usage analytics information</a></li><li>• <a href="#">Get all indirect resellers analytics information</a></li><li>• <a href="#">Get all referrals analytics information</a></li><li>• <a href="#">Get all search analytics information</a></li><li>• <a href="#">Get all subscription analytics information</a></li><li>• <a href="#">Get subscription analytics information filtered by a search query</a></li><li>• <a href="#">Get subscription analytics information grouped by dates or terms</a></li><li>• <a href="#">Get licenses deployment information</a></li><li>• <a href="#">Get licenses usage information</a></li><li>• <a href="#">Get customer licenses deployment information</a></li><li>• <a href="#">Get customer licenses usage information</a></li><li>• <a href="#">Get partner licenses deployment information</a></li><li>• <a href="#">Get partner licenses usage information</a></li></ul>
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<p><a href="#">Device Deployment</a></p>	<p>Configuration policies</p> <p>Add, delete, update and retrieve device configuration policies.</p> <ul style="list-style-type: none"> <li>• <a href="#">Create a new configuration policy for the specified customer</a></li> <li>• <a href="#">Delete a configuration policy for the specified customer</a></li> <li>• <a href="#">Get a list of a customer's policies</a></li> <li>• <a href="#">Retrieve a customer's configuration policy</a></li> <li>• <a href="#">Update a configuration policy for the specified customer</a></li> </ul> <p>Devices</p> <p>Work with and upload device batches and device metadata.</p> <ul style="list-style-type: none"> <li>• <a href="#">Get the status of a device batch upload</a></li> <li>• <a href="#">Get a list of device batches for the specified customer</a></li> <li>• <a href="#">Get a list of devices for the specified batch and customer</a></li> <li>• <a href="#">Upload a list of devices to create a new batch for the specified customer</a></li> <li>• <a href="#">Upload a list of devices to an existing batch for the specified customer</a></li> <li>• <a href="#">Delete a device for the specified customer</a></li> </ul>
<p><a href="#">Manage accounts and profiles</a></p>	<p>Work with accounts and profiles</p> <ul style="list-style-type: none"> <li>• <a href="#">Get the partner legal business profile</a></li> <li>• <a href="#">Get an organization profile</a></li> <li>• <a href="#">Get partner billing profile</a></li> <li>• <a href="#">Get Microsoft Partner Network profile</a></li> <li>• <a href="#">Get support profile</a></li> <li>• <a href="#">Update the partner legal business profile</a></li> <li>• <a href="#">Update the partner billing profile</a></li> <li>• <a href="#">Update support profile</a></li> <li>• <a href="#">Update an organization profile</a></li> <li>• <a href="#">Verify a partner MPN ID</a></li> <li>• <a href="#">Get a customer's subscriptions by partner MPN ID</a></li> <li>• <a href="#">Get customers of an indirect reseller</a></li> <li>• <a href="#">Get indirect resellers of a customer</a></li> <li>• <a href="#">Retrieve a list of indirect resellers</a></li> </ul>

## Manage billing

### Billing cycle

- [Change the billing cycle](#)

### Azure rates and utilization records

- [Get prices for Microsoft Azure](#)
- [Get a customer's utilization records for Azure](#)

### Invoices

- [Get a collection of invoices](#)
- [Get invoice estimate links](#)
- [Get invoice billed commercial marketplace consumption line items](#)
- [Get an invoice by ID](#)
- [Get invoice line items](#)
- [Get invoice receipt statement](#)
- [Get invoice statement](#)
- [Get invoice summaries](#)
- [Get invoice unbilled commercial marketplace consumption line items](#)
- [Get invoice unbilled recon line items](#)
- [Get the partner's current account balance](#)

### Azure spending budget

- [Get usage data for a subscription](#)
- [Get a usage summary for all of a customer's subscriptions](#)

### Service costs

- [Get a customer's service costs summary](#)
- [Get a customer's service costs line items](#)

## Manage customer accounts

### Create a customer

- [Create a customer](#)
- [Create a customer for an indirect reseller](#)
- [Retrieve a relationship request URL](#)
- [Remove a reseller relationship with a customer](#)

### Look up a customer

- [Get a customer by ID](#)
- [Get a list of customers filtered by a search field](#)
- [Get a list of customers](#)

### Manage customer orders and subscriptions

- [Get all of a customer's orders](#)
- [Get a list of orders by customer and billing cycle type](#)
- [Get a collection of entitlements](#)

	<ul style="list-style-type: none"> <li>• <a href="#">Get a customer's subscriptions</a></li> <li>• <a href="#">Update the nickname for a subscription</a></li> </ul> <p>Manage customer account details</p> <ul style="list-style-type: none"> <li>• <a href="#">Get a customer's billing profile</a></li> <li>• <a href="#">Update a customer's billing profile</a></li> <li>• <a href="#">Get a customer's company profile</a></li> <li>• <a href="#">Update a customer's usage spending budget</a></li> <li>• <a href="#">Add a verified domain for a customer</a></li> <li>• <a href="#">Confirm customer acceptance of Microsoft Customer Agreement</a></li> <li>• <a href="#">Get agreement metadata for Microsoft Cloud Agreement</a></li> <li>• <a href="#">Get confirmation of customer acceptance of Microsoft Cloud agreement</a></li> <li>• <a href="#">Get direct signing (direct acceptance) status of Microsoft Customer Agreement</a></li> <li>• <a href="#">Get agreement metadata for the Microsoft Customer Agreement</a></li> <li>• <a href="#">Get a partner's validation codes</a></li> <li>• <a href="#">Get a customer's qualification</a></li> <li>• <a href="#">Update a customer's qualification</a></li> </ul> <p>Manage user accounts and assign licenses</p> <ul style="list-style-type: none"> <li>• <a href="#">Get a user account by ID</a></li> <li>• <a href="#">Create user accounts for a customer</a></li> <li>• <a href="#">Delete a user account for a customer</a></li> <li>• <a href="#">Update user accounts for a customer</a></li> <li>• <a href="#">View deleted users for a customer</a></li> <li>• <a href="#">Restore a deleted user for a customer</a></li> <li>• <a href="#">Get a list of all user accounts for a customer</a></li> <li>• <a href="#">Reset user password for a customer</a></li> <li>• <a href="#">Get user roles for a customer</a></li> <li>• <a href="#">Set user roles for a customer</a></li> <li>• <a href="#">Remove a customer user from a role</a></li> <li>• <a href="#">Get a list of available licenses</a></li> <li>• <a href="#">Assign licenses to a user</a></li> <li>• <a href="#">Get licenses assigned to a user</a></li> <li>• <a href="#">Get licenses assigned to a user by license group</a></li> <li>• <a href="#">Get a list of available licenses by license group</a></li> </ul>
<a href="#">Manage orders</a>	<p>Purchase Azure Reserved VM Instances</p> <ul style="list-style-type: none"> <li>• <a href="#">Purchase Azure reservations</a></li> </ul> <p>Make a one-time purchase</p> <ul style="list-style-type: none"> <li>• <a href="#">Make a one-time purchase</a></li> </ul>

Get offers from the catalog

- [Get a list of offer categories by market](#)
- [Get a list of offers for a market](#)
- [Get an offer by ID](#)
- [Get add-ons for an offer ID](#)
- [Get a list of products](#)
- [Get a product by ID](#)
- [Get a list of SKUs for a product](#)
- [Get a list of availabilities for a SKU](#)
- [Get an availability by ID](#)
- [Check Inventory](#)

Manage an order

- [Cancel an order from the integration sandbox](#)
- [Checkout a cart](#)
- [Create a cart](#)
- [Create a cart with add-ons](#)
- [Create an order](#)
- [Create an order for a customer of an indirect reseller](#)
- [Get activation link by order line item](#)
- [Get an order by ID](#)
- [Purchase an add-on to a subscription](#)
- [Purchase catalog items](#)
- [Update a cart](#)

Enable a subscription for Azure Reserved VM Instance purchases

- [Register a subscription](#)
- [Get subscription registration status](#)

Trial conversions

- [Get a list of trial conversion offers](#)
- [Convert a trial subscription to paid](#)

Get subscription details

- [Get a subscription by ID](#)
- [Get a list of subscriptions by order](#)
- [Get a list of add-ons for a subscription](#)
- [Get subscription provisioning status](#)

Manage a subscription

- [Change the quantity of a subscription](#)
- [Update autorenew for a commercial marketplace subscription](#)
- [Suspend a subscription](#)
- [Reactivate a suspended subscription](#)

	<ul style="list-style-type: none"> <li>• <a href="#">Transition a subscription</a></li> <li>• <a href="#">Cancel a commercial marketplace subscription</a></li> </ul>
Provide support	<p>Administer services for a customer</p> <ul style="list-style-type: none"> <li>• <a href="#">Get the managed services for a customer by ID</a></li> </ul> <p>Manage support contacts</p> <ul style="list-style-type: none"> <li>• <a href="#">Get a subscription's support contact</a></li> <li>• <a href="#">Update a subscription's support contact</a></li> </ul> <p>Manage service requests</p> <ul style="list-style-type: none"> <li>• <a href="#">Create a service request</a></li> <li>• <a href="#">Get service request support topics</a></li> <li>• <a href="#">Get all service requests for a customer</a></li> <li>• <a href="#">Get service request details by ID</a></li> <li>• <a href="#">Update a service request</a></li> </ul>
Referrals	<p>Referrals</p> <ul style="list-style-type: none"> <li>• <a href="#">Create a referral</a></li> <li>• <a href="#">Get a list of referrals</a></li> <li>• <a href="#">Get a referral by ID</a></li> <li>• <a href="#">Update a referral</a></li> </ul>
Utilities	<p>Utilities</p> <ul style="list-style-type: none"> <li>• <a href="#">Validate an address</a></li> <li>• <a href="#">Get address formatting rules by market</a></li> <li>• <a href="#">Verify domain availability</a></li> <li>• <a href="#">Delete a customer account from the integration sandbox</a></li> <li>• <a href="#">Get a record of Partner Center activity</a></li> </ul>

## Background

### Who is involved in the order process?

Microsoft, distributors, resellers, and customers. The distributors and resellers are often referred to as **partners**.

Sometimes, Microsoft works directly with resellers who sell to customers. Alternately, Microsoft also works with distributors, and those distributors work with their own set or channel of resellers who sell to customers.

### What's getting sold?

Microsoft provides a list of **offers**. These are specific SKUs of products like Office 365 or Intune. Offers are either **license-based** (the cost depends on the number of machines they get installed on) or **usage-based** (the cost depends on the amount of memory and computation used). For more information, see [Partner offers in the Cloud Solution Provider program](#).

CSP partners are resellers who have customers and sell them Microsoft products from the current offer list. After the customers sign their agreement, the reseller places an **order** for one or more offers. Some offers include **add-ons** like more space or extra features, which are tracked together with the parent offer. The orders are processed, and then the customer is able to use their **subscriptions**. Microsoft bills the reseller or distributor each month based on the number of licenses and the usage for each customer.

Subscriptions can be added, and the number of seats or add-ons can be increased or decreased. If a customer fails to pay, misuses the subscription, or engages in fraud, then Microsoft, the distributor, or the reseller are all able to suspend the subscription. It will be permanent if it's not reactivated within the limits of the CSP program.

You can check which subscriptions a customer is **entitled** to use (ie, which ones are currently paid for, not suspended, and not replaced by a newer order).

# Analytics

4/24/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

You can use the Partner Center SDK and APIs to programmatically retrieve analytic information. For more information, see the articles listed here:

- [Partner Center Analytics - Resources](#)
- [Get all Azure usage analytics information](#)
- [Get all indirect resellers analytics information](#)
- [Get all referrals analytics information](#)
- [Get all search analytics information](#)
- [Get all subscription analytics information](#)
- [Get subscription analytics information filtered by a search query](#)
- [Get subscription analytics information grouped by dates or terms](#)
- [Get customer licenses deployment information](#)
- [Get customer licenses usage information](#)
- [Get partner licenses deployment information](#)
- [Get partner licenses usage information](#)

# Partner Center Analytics - Resources

4/24/2020 • 7 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

The Analytics API allows you to programmatically access data that is being presented in the User Experience.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). These scenarios support authentication with User credentials only.

## CSP program: Azure usage analytics

The following scenario shows you how to use the Analytics API to retrieve all your Partner Center Azure usage analytics information.

- [Get all Azure usage analytics information](#)

This scenario returns your analytics information in a collection of [Azure usage](#) resources.

## Azure usage resource

Represents all of the analytical data for Azure usage.

PROPERTY	TYPE	DESCRIPTION
CustomerTenantId	string	The customer tenant identifier.
customerName	string	The customer name.
subscriptionId	string	The subscription identifier.
subscriptionName	string	The subscription name.
usageDate	string	The usage date.
resourceLocation	string	The location of the data center, Western Europe, for example.
meterCategory	string	The meter category, data management, for example.
meterSubcategory	string	The meter subcategory, for example, geo redundant.

PROPERTY	TYPE	DESCRIPTION
meterUnit	string	The meter unit, such as gigabytes or hours.
reservationOrderId	string	The reservation order for an Azure VM Reserved Instance.
reservationId	string	Reserved instances under a specific RI order.
serviceType	string	Indicates the virtual machine type. For example, Standard_E4s_v3.
quantity	long	Indicates the numbers used in the meter unit.

## CSP program: indirect resellers analytics

The following scenario shows you how to use the Analytics API to retrieve all your Partner Center indirect resellers analytics information.

- [Get all indirect resellers analytics information](#)

This scenario returns your analytics information in a collection of [indirect resellers](#) resources.

## Indirect resellers resource

Represents all of the analytical data for indirect resellers.

PROPERTY	TYPE	DESCRIPTION
partnerTenantId	string	The Tenant ID of the partner for which you want to retrieve indirect resellers data.
id	string	Indirect reseller ID.
name	string	The Name of the partner for which you want to retrieve indirect resellers data.
market	string	The Market of the partner for which you want to retrieve indirect resellers data.
firstSubscriptionCreationDate	string in UTC date time format	The creation date of the first subscription based on which you want to retrieve indirect resellers data.
latestSubscriptionCreationDate	string in UTC date time format	The creation date of the latest subscription.
firstSubscriptionEndDate	string in UTC date time format	First time any subscription was ended.

PROPERTY	TYPE	DESCRIPTION
latestSubscriptionEndDate	string in UTC date time format	Latest date when any subscription was ended.
firstSubscriptionSuspendedDate	string in UTC date time format	First time any subscription was suspended.
latestSubscriptionSuspendedDate	string in UTC date time format	Latest date when any subscription was suspended.
firstSubscriptionDeprovisionedDate	string in UTC date time format	First time any subscription was deprovisioned.
latestSubscriptionDeprovisionedDate	string in UTC date time format	Latest date when any subscription was deprovisioned.
subscriptionCount	double	Subscription count for all value added resellers
licenseCount	double	License count for all value added resellers
indirectResellerCount	double	Indirect resellers count

## CSP program: subscription analytics

The following scenarios show you how to use the Analytics API to retrieve all your Partner Center subscription analytics information, filter it with a search query, or group it by dates or terms.

- [Get all subscription analytics information](#)
- [Get subscription analytics information filtered by a search query](#)
- [Get subscription analytics information grouped by dates or terms](#)

All of these scenarios return your analytics information in a collection of [Subscription](#) resources.

## Subscription resource

Represents all of the analytical data for a subscription.

PROPERTY	TYPE	DESCRIPTION
customerTenantId	string	A GUID-formatted string that identifies the customer tenant.
customerName	string	The name of the customer.
customerMarket	string	The country/region that the customer does business in.
id	string	The subscription identifier.
status	string	The subscription status: "ACTIVE", "SUSPENDED", or "DEPROVISIONED".

PROPERTY	TYPE	DESCRIPTION
productName	string	The name of the product.
subscriptionType	string	The subscription type. <b>Note:</b> This field is case sensitive. Supported values are: "Office", "Azure", "Microsoft365", "Dynamics", "EMS".
autoRenewEnabled	boolean	A value indicating whether the subscription is renewed automatically.
partnerId	string	The MPN ID. For a direct reseller, this parameter will be the MPN ID of the partner. For an indirect reseller, this parameter will be the MPN ID of the indirect reseller.
friendlyName	string	The name of the subscription.
partnerName	string	Name of the partner for whom the subscription was purchased
providerName	string	When subscription transaction is for the indirect reseller, provider name is the indirect provider who bought the subscription.
effectiveStartDate	string in UTC date time format	The date the subscription starts.
commitmentEndDate	string in UTC date time format	The date the subscription ends.
currentStateEndDate	string in UTC date time format	The date that the current status of the subscription will change.
trialToPaidConversionDate	string in UTC date time format	The date that the subscription converts from trial to paid. The default value is null.
trialStartDate	string in UTC date time format	The date that the trial period for the subscription started. The default value is null.
trialEndDate	string in UTC date time format	The date that the trial period for the subscription ends. The default value is null.
lastUsageDate	string in UTC date time format	The date that the subscription was last used. The default value is null.
deprovisionedDate	string in UTC date time format	The date that the subscription was deprovisioned. The default value is null.
lastRenewalDate	string in UTC date time format	The date that the subscription was last renewed. The default value is null.

PROPERTY	TYPE	DESCRIPTION
licenseCount	number	The total number of licenses.
subscriptionCount	number	The number of subscriptions. Note: This value will only appear in the response of an aggregation query.

## Search analytics

### NOTE

CSP program membership isn't required to get search analytics.

The following scenario shows you how to use the Analytics API to retrieve all your Partner Center search analytics information.

- [Get all search analytics information](#)

This scenario returns your analytics information in a collection of [Search](#) resources.

## Search resource

Represents all of the analytical data for a search.

PROPERTY	TYPE	DESCRIPTION
companyName	string	The billing company name.
contactButtonClicked	Boolean	Indicates if the contact button was clicked.
keywordCountry	string	The country specified in the search.
detailsViewed	Boolean	Indicates if search details were viewed.
keywordIndustryFocus	string	The industry to search within, for example, healthcare.
mpnId	string	The Microsoft Partner Network (MPN) ID. For a direct reseller, this parameter will be the MPN ID of the partner. For an indirect reseller, this parameter will be the MPN ID of the indirect reseller.
partnerMarket	string	Locale where the partner conducts business.
keywordProduct	string	The product specified in the search.
referralSubmitted	Boolean	Indicates if a referral was submitted.
searchDate	string in UTC date time format	Date when the search query occurred.

PROPERTY	TYPE	DESCRIPTION
keywordSearchText	string	The text specified in the search.
searchResultPageViews	long	Number of times the partner came up in the search result. Part of a response only on aggregation.
contactClicks	long	Number of times the contact button was clicked. Part of a response only on aggregation.
referralCount	long	Number of referrals generated from the search. Part of a response only on aggregation.
profileViews	long	Number of times the partner profile was viewed. Part of a response only on aggregation.

## Referrals analytics

### NOTE

CSP program membership isn't required to get referrals analytics.

The following scenario shows you how to use the Analytics API to retrieve all your Partner Center referrals analytics information.

- [Get all referrals analytics information](#)

This scenario returns your analytics information in a collection of [Referrals](#) resources.

### NOTE

Referrals analytics are not available to the Partner Center operated by 21Vianet.

## Referrals resource

Represents all of the analytical data for a referral.

PROPERTY	TYPE	DESCRIPTION
id	string	The customer tenant identifier.
status	string	Indicates if the referral led to a customer.
customerMarket	string	The country/region that the customer does business in.
customerName	string	The name of the customer.

PROPERTY	TYPE	DESCRIPTION
customerOrgSize	string	A range indicating the number of employees in the customer's organization. For example, "10to50employees".
acceptedDate	string in UTC date time format	The date that the referral was accepted.
acknowledgedDate	string in UTC date time format	The date that the referral was acknowledged.
archivedDate	string in UTC date time format	The date that the referral was archived.
declinedDate	string in UTC date time format	The date that the referral was declined.
expiredDate	string in UTC date time format	The date that the referral expired.
lostDate	string in UTC date time format	The date that the referral was lost.
missedDate	string in UTC date time format	The date that the referral was missed.
createdDate	string in UTC date time format	The date that the referral was created.
skippedDate	string in UTC date time format	The date that the referral was skipped.
wonDate	string in UTC date time format	The date that the referral was won.
partnerMarket	string	The country/region that the partner does business in.

# Get all Azure usage analytics information

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

How to get all the Azure usage analytics information for your customers.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with User credentials only.

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<a href="#"><code>{baseUrl}/partner/v1/analytics/usage/azure</code></a> HTTP/1.1

### URI parameters

PARAMETER	TYPE	DESCRIPTION
top	string	The number of rows of data to return in the request. The maximum value and the default value if not specified is 10000. If there are more rows in the query, the response body includes a next link that you can use to request the next page of data.
skip	int	The number of rows to skip in the query. Use this parameter to page through large data sets. For example, <code>top=10000 and skip=0</code> retrieves the first 10000 rows of data, <code>top=10000 and skip=10000</code> retrieves the next 10000 rows of data, and so on.

filter	string	<p>The <code>filter</code> parameter of the request contains one or more statements that filter the rows in the response. Each statement contains a field and value that are associated with the <code>eq</code> or <code>ne</code> operators, and statements can be combined using <code>and</code> or <code>or</code>. You can specify the following fields:</p> <ul style="list-style-type: none"> <li>• <code>customerTenantId</code></li> <li>• <code>customerName</code></li> <li>• <code>subscriptionId</code></li> <li>• <code>subscriptionName</code></li> <li>• <code>usageDate</code></li> <li>• <code>resourceLocation</code></li> <li>• <code>meterCategory</code></li> <li>• <code>meterSubcategory</code></li> <li>• <code>meterUnit</code></li> <li>• <code>reservationOrderId</code></li> <li>• <code>reservationId</code></li> <li>• <code>consumptionMeterId</code></li> <li>• <code>serviceType</code></li> </ul> <p><b>Example:</b></p> <pre>.../usage/azure? filter=meterCategory eq 'Data Management'</pre> <p><b>Example:</b></p> <pre>.../usage/azure? filter=meterCategory eq 'Data Management' or (usageDate le cast('2018-01-01', Edm.DateTimeOffset) and usageDate le cast('2018-04-01', Edm.DateTimeOffset))</pre>
aggregationLevel	string	<p>Specifies the time range for which to retrieve aggregate data. Can be one of the following strings: <code>day</code>, <code>week</code>, or <code>month</code>. If unspecified, the default is <code>day</code>.</p> <p>The <code>aggregationLevel</code> parameter isn't supported without a <code>groupby</code>. The <code>aggregationLevel</code> parameter applies to all date fields present in the <code>groupby</code>.</p>

orderby	string	<p>A statement that orders the result data values for each install. The syntax is</p> <pre>...&amp;orderby=field [order],field [order],...</pre> <p>The <code>field</code> parameter can be one of the following strings:</p> <ul style="list-style-type: none"> <li>● <code>customerTenantId</code></li> <li>● <code>customerName</code></li> <li>● <code>subscriptionId</code></li> <li>● <code>subscriptionName</code></li> <li>● <code>usageDate</code></li> <li>● <code>resourceLocation</code></li> <li>● <code>meterCategory</code></li> <li>● <code>meterSubcategory</code></li> <li>● <code>meterUnit</code></li> <li>● <code>reservationOrderId</code></li> <li>● <code>reservationId</code></li> <li>● <code>consumptionMeterId</code></li> <li>● <code>serviceType</code></li> </ul> <p>The <i>order</i> parameter is optional and can be <code>asc</code> or <code>desc</code>; to specify ascending or descending order for each field, respectively. The default is <code>asc</code>.</p> <p><b>Example:</b></p> <pre>...&amp;orderby=meterCategory,meterUnit</pre>
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<code>groupby</code>	string	<p>A statement that applies data aggregation only to the specified fields. You can specify the following fields:</p> <ul style="list-style-type: none"> <li>● <code>customerTenantId</code></li> <li>● <code>customerName</code></li> <li>● <code>subscriptionId</code></li> <li>● <code>subscriptionName</code></li> <li>● <code>usageDate</code></li> <li>● <code>resourceLocation</code></li> <li>● <code>meterCategory</code></li> <li>● <code>meterSubcategory</code></li> <li>● <code>meterUnit</code></li> <li>● <code>reservationOrderId</code></li> <li>● <code>reservationId</code></li> <li>● <code>consumptionMeterId</code></li> <li>● <code>serviceType</code></li> </ul> <p>The returned data rows will contain the fields specified in the <code>groupby</code> parameter as well as the <i>Quantity</i>.</p> <p>The <code>groupby</code> parameter can be used with the <code>aggregationLevel</code> parameter.</p> <p><b>Example:</b>  <code>...&amp;groupby=meterCategory,meterUnit</code></p>

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/partner/v1/analytics/usage/azure HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
Content-Type: application/json
Content-Length: 0
```

## REST response

If successful, the response body contains a collection of [Azure usage](#) resources.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

## Response example

```
{  
  "customerTenantId": "39A1DFAC-4969-4F31-AF94-D76588189CFE",  
  "customerName": "A",  
  "subscriptionId": "EC649980-D623-49F5-B7C1-80CC772B83A8",  
  "subscriptionName": "AZURE PURCHASE SAMPLE APP",  
  "usageDate": "2018-05-27T00:00:00",  
  "resourceLocation": "useast",  
  "meterCategory": "Data Management",  
  "meterSubcategory": "None",  
  "meterUnit": "10,000s",  
  "reservationOrderId": "",  
  "reservationId": "",  
  "consumptionMeterId": "",  
  "serviceType": "",  
  "quantity": 20  
}
```

## See also

- [Partner Center Analytics - Resources](#)

# Get all indirect resellers analytics information

4/25/2020 • 3 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

How to get all the indirect resellers analytics information for your customers.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with User credentials only.

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseURL}/partner/v1/analytics/indirectresellers HTTP/1.1</code>

### URI parameters

PARAMETER	TYPE	DESCRIPTION
partnerTenantId	string	The Tenant ID of the partner for which you want to retrieve indirect resellers data.
id	string	Indirect reseller ID
name	string	The Name of the partner for which you want to retrieve indirect resellers data.
market	string	The Market of the partner for which you want to retrieve indirect resellers data.
firstSubscriptionCreationDate	string in UTC date time format	The creation date of the first subscription based on which you want to retrieve indirect resellers data.
latestSubscriptionCreationDate	string in UTC date time format	The creation date of the latest subscription.
firstSubscriptionEndDate	string in UTC date time format	First time any subscription was ended.
latestSubscriptionEndDate	string in UTC date time format	Latest date when any subscription was ended.
firstSubscriptionSuspendedDate	string in UTC date time format	First time any subscription was suspended.

PARAMETER	TYPE	DESCRIPTION
latestSubscriptionSuspendedDate	string in UTC date time format	Latest date when any subscription was suspended.
firstSubscriptionDeprovisionedDate	string in UTC date time format	First time any subscription was deprovisioned.
latestSubscriptionDeprovisionedDate	string in UTC date time format	Latest date when any subscription was deprovisioned.
subscriptionCount	double	Subscription count for all value added resellers
licenseCount	double	License count for all value added resellers
indirectResellerCount	double	Indirect resellers count
top	string	The number of rows of data to return in the request. The maximum value and the default value if not specified is 10000. If there are more rows in the query, the response body includes a next link that you can use to request the next page of data.
skip	int	The number of rows to skip in the query. Use this parameter to page through large data sets. For example, <code>top=10000 and skip=0</code> retrieves the first 10000 rows of data, <code>top=10000 and skip=10000</code> retrieves the next 10000 rows of data, and so on.

PARAMETER	TYPE	DESCRIPTION
filter	string	<p>The <code>filter</code> parameter of the request contains one or more statements that filter the rows in the response. Each statement contains a field and value that are associated with the <code>eq</code> or <code>ne</code> operators, and statements can be combined using <code>and</code> or <code>or</code>. You can specify the following fields:</p> <ul style="list-style-type: none"> <li>• <code>partnerTenantId</code></li> <li>• <code>id</code></li> <li>• <code>Name</code></li> <li>• <code>market</code></li> <li>• <code>firstSubscriptionCreationDate</code></li> <li>• <code>latestSubscriptionCreationDate</code></li> <li>• <code>firstSubscriptionEndDate</code></li> <li>• <code>latestSubscriptionEndDate</code></li> <li>• <code>firstSubscriptionSuspendedDate</code></li> <li>• <code>latestSubscriptionSuspendedDate</code></li> <li>• <code>firstSubscriptionDeprovisionedDate</code></li> <li>• <code>latestSubscriptionDeprovisionedDate</code></li> </ul> <p><b>Example:</b></p> <pre>.../indirectresellers? filter=market eq 'US'</pre> <p><b>Example:</b></p> <pre>.../indirectresellers? filter=market eq 'US' or (firstSubscriptionCreationDate le cast('2018-01- 01',Edm.DateTimeOffset) and firstSubscriptionCreationDate le cast('2018-04- 01',Edm.DateTimeOffset))</pre>
aggregationLevel	string	<p>Specifies the time range for which to retrieve aggregate data. Can be one of the following strings: "day", "week", or "month". If unspecified, the default is "day".</p> <p><code>aggregationLevel</code> isn't supported without a <code>aggregationLevel</code>.</p> <p><code>aggregationLevel</code> applies to all <code>datefields</code> present in the <code>aggregationLevel</code></p>

PARAMETER	TYPE	DESCRIPTION
orderby	string	<p>A statement that orders the result data values for each install. The syntax is</p> <pre>...&amp;orderby=field[order],field[order],...</pre> <p>The field parameter can be one of the following strings:</p> <ul style="list-style-type: none"> <li>• "partnerTenantId"</li> <li>• "id"</li> <li>• "name"</li> <li>• "market"</li> <li>• "firstSubscriptionCreationDate"</li> <li>• "latestSubscriptionCreationDate"</li> <li>• "firstSubscriptionEndDate"</li> <li>• "latestSubscriptionEndDate"</li> <li>• "firstSubscriptionSuspendedDate"</li> <li>• "latestSubscriptionSuspendedDate"</li> <li>• "firstSubscriptionDeprovisionedDate"</li> <li>• "latestSubscriptionDeprovisionedDate"</li> <li>• "subscriptionCount"</li> <li>• "licenseCount"</li> </ul> <p>The <i>order</i> parameter is optional, and can be <code>asc</code> or <code>desc</code>; to specify ascending or descending order for each field. The default is <code>asc</code>.</p> <p><b>Example:</b></p> <pre>...&amp;orderby=market,subscriptionCount</pre>

PARAMETER	TYPE	DESCRIPTION
groupby	string	<p>A statement that applies data aggregation only to the specified fields. You can specify the following fields:</p> <ul style="list-style-type: none"> <li>• <i>partnerTenantId</i></li> <li>• <i>id</i></li> <li>• <i>Name</i></li> <li>• <i>market</i></li> <li>• <i>firstSubscriptionCreationDate</i></li> <li>• <i>latestSubscriptionCreationDate</i></li> <li>• <i>firstSubscriptionEndDate</i></li> <li>• <i>latestSubscriptionEndDate</i></li> <li>• <i>firstSubscriptionSuspendedDate</i></li> <li>• <i>latestSubscriptionSuspendedDate</i></li> <li>• <i>firstSubscriptionDeprovisionedDate</i></li> <li>• <i>latestSubscriptionDeprovisionedDate</i></li> </ul> <p>The data rows returned contain the fields specified in the <code>groupby</code> clause, and the following fields:</p> <ul style="list-style-type: none"> <li>• <i>indirectResellerCount</i></li> <li>• <i>licenseCount</i></li> <li>• <i>subscriptionCount</i></li> </ul> <p>The <code>groupby</code> parameter can be used with the <code>aggregationLevel</code> parameter.</p> <p><b>Example:</b></p> <pre>...&amp;groupby=ageGroup,market&amp;aggregationLevel=</pre>

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/partner/v1/analytics/indirectresellers HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
Content-Type: application/json
Content-Length: 0
```

## REST response

If successful, the response body contains a collection of [indirect resellers](#) resources.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

### Response example

```
{  
    "partnerTenantId": "AAAAAAA-BBBB-CCCC-DDDD-EEEEEEEEEE",  
    "id": "1111111",  
    "name": "RESELLER NAME",  
    "market": "US",  
    "firstSubscriptionCreationDate": "2016-10-18T19:16:25.107",  
    "latestSubscriptionCreationDate": "2016-10-18T19:16:25.107",  
    "firstSubscriptionEndDate": "2018-11-07T00:00:00",  
    "latestSubscriptionEndDate": "2018-11-07T00:00:00",  
    "firstSubscriptionSuspendedDate": "0001-01-01T00:00:00",  
    "latestSubscriptionSuspendedDate": "0001-01-01T00:00:00",  
    "firstSubscriptionDeprovisionedDate": "0001-01-01T00:00:00",  
    "latestSubscriptionDeprovisionedEndDate": "0001-01-01T00:00:00",  
    "subscriptionCount": 10,  
    "licenseCount": 20  
}
```

## See also

- [Partner Center Analytics - Resources](#)

# Get all referrals analytics information

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

How to get all the referrals analytics information for your customers.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with User credentials only.

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>/baseURL/partner/v1/analytics/referrals</code> HTTP/1.1

### URI parameters

PARAMETER	TYPE	DESCRIPTION
filter	string	Returns data matching the filter condition. <b>Example:</b> <code>.../referrals?filter=field eq 'value'</code>
groupby	string	Supports both terms and dates. Short circuit logic to limit the number of buckets. <b>Example:</b> <code>.../referrals?groupby=termField1,dateField1,termField2</code>
aggregationLevel	string	The <code>aggregationLevel</code> parameter requires a <code>groupby</code> . The <code>aggregationLevel</code> parameter applies to all date fields present in the <code>groupby</code> . <b>Example:</b> <code>.../referrals?groupby=termField1,dateField1,termField2&amp;aggregat</code>
top	string	The page limit is 10000. Takes any value less than 10000. <b>Example:</b> <code>.../referrals?top=100</code>
skip	string	Number of rows to skip. <b>Example:</b> <code>.../referrals?top=100&amp;skip=100</code>

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

None.

### Request example

```
GET https://api.partnercenter.microsoft.com/partner/v1/analytics/referrals HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
Content-Type: application/json
Content-Length: 0
```

## REST response

If successful, the response body contains a collection of [Referrals](#) resources.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

### Response example

```
{
  "id": "112310",
  "status": "Accepted",
  "customerMarket": "US",
  "customerName": "Best Customer Ever",
  "customerOrgSize": "10to50employees",
  "acceptedDate": "2018-02-07T23:43:19",
  "acknowledgedDate": "2018-02-07T23:40:50",
  "archivedDate": null,
  "declinedDate": null,
  "expiredDate": null,
  "lostDate": null,
  "missedDate": null,
  "createdDate": "2018-02-04T23:08:59",
  "skippedDate": null,
  "wonDate": null,
  "partnerMarket": "US"
}
```

## See also

- [Partner Center Analytics - Resources](#)

# Get all search analytics information

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

How to get all the search analytics information for your customers.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with User credentials only.

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>/baseURL/partner/v1/analytics/search</code> HTTP/1.1

### URI parameters

PARAMETER	TYPE	DESCRIPTION
filter	string	Returns data matching the filter condition. <b>Example:</b> <code>.../search?filter=field eq 'value'</code>
groupby	string	Supports both terms and dates. Short circuit logic to limit the number of buckets. <b>Example:</b> <code>.../search?groupby=termField1,dateField1,termField2</code>
aggregationLevel	string	The <code>aggregationLevel</code> parameter requires a <code>groupby</code> . The <code>aggregationLevel</code> parameter applies to all date fields present in the <code>groupby</code> . <b>Example:</b> <code>.../search?groupby=termField1,dateField1,termField2&amp;aggregat</code>
top	string	The page limit is 10000. Takes any value less than 10000. <b>Example:</b> <code>.../search?top=100</code>
skip	string	Number of rows to skip. <b>Example:</b> <code>.../search?top=100&amp;skip=100</code>

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

None.

### Request example

```
GET https://api.partnercenter.microsoft.com/partner/v1/analytics/search HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
Content-Type: application/json
Content-Length: 0
```

## REST response

If successful, the response body contains a collection of [Search](#) resources.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

### Response example

```
{
  "companyName": "my company",
  "contactButtonClicked": false,
  "keywordCountry": null,
  "detailsViewed": true,
  "keywordIndustryFocus": null,
  "mpnId": 2604568,
  "partnerMarket": "CN",
  "keywordProduct": null,
  "referralsSubmitted": false,
  "searchDate": "2018-05-30",
  "keywordSearchText": " my company"
}
```

## See also

- [Partner Center Analytics - Resources](#)

# Get all subscription analytics information

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

This article describes how to get all the subscription analytics information for your customers.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with User credentials only.

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>/baseURL/partner/v1/analytics/subscriptions</code> HTTP/1.1

### URI parameters

The following table lists optional parameters and their descriptions:

PARAMETER	TYPE	DESCRIPTION
top	int	The number of rows of data to return in the request. If the value isn't specified, the maximum value and the default value are <code>10000</code> . If there are more rows in the query, the response body includes a next link that you can use to request the next page of data.
skip	int	The number of rows to skip in the query. Use this parameter to page through large data sets. For example, <code>top=10000</code> and <code>skip=0</code> retrieves the first 10000 rows of data, <code>top=10000</code> and <code>skip=10000</code> retrieves the next 10000 rows of data.

PARAMETER	TYPE	DESCRIPTION
filter	string	One or more statements that filter the rows in the response. Each filter statement contains a field name from the response body and a value that are associated with the <code>eq</code> , <code>ne</code> , or for certain fields, the <code>contains</code> operator. Statements can be combined using <code>and</code> or <code>or</code> . String values must be surrounded by single quotes in the <code>filter</code> parameter. See the following section for a list of fields that can be filtered and the operators that are supported with those fields.
aggregationLevel	string	Specifies the time range for which to retrieve aggregate data. Can be one of the following strings: <code>day</code> , <code>week</code> , or <code>month</code> . If the value isn't specified, the default is <code>dateRange</code> . This parameter applies only when a date field is passed as part of the <code>groupBy</code> parameter.
groupBy	string	A statement that applies data aggregation only to the specified fields.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/partner/v1/analytics/subscriptions
Authorization: Bearer <token>
Accept: application/json
Content-Type: application/json
Content-Length: 0
```

## REST response

If successful, the response body contains a collection of [Subscription](#) resources.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

### Response example

```
{  
    "customerTenantId": "76906668-27FC-4F5B-A35C-75A9823E13AF",  
    "customerName": "TESTORG65656565",  
    "customerMarket": "US",  
    "id": "4BF546B2-8998-4838-BEE2-5F1BBE65A04F",  
    "status": "ACTIVE",  
    "productName": "OFFICE 365 BUSINESS PREMIUM",  
    "subscriptionType": "Office",  
    "autoRenewEnabled": true,  
    "partnerId": "3B33E682-00C3-41EE-9DD2-A548ADF56438",  
    "friendlyName": "FULL OFFICE SUITE",  
    "partnerName": "Partner Name",  
    "providerName": "Provider Name",  
    "creationDate": "2016-02-04T19:29:38.037",  
    "effectiveStartDate": "2016-02-04T00:00:00",  
    "commitmentEndDate": "2019-02-10T00:00:00",  
    "currentStateEndDate": "2019-02-10T00:00:00",  
    "trialToPaidConversionDate": null,  
    "trialStartDate": null,  
    "trialEndDate": null,  
    "lastUsageDate": null,  
    "deprovisionedDate": null,  
    "lastRenewalDate": "2018-02-10T02:39:57.729",  
    "licenseCount": 2,  
    "churnRisk": "High",  
    "billingCycleName": "MONTHLY"  
}
```

## See also

- [Partner Center Analytics - Resources](#)

# Get subscription analytics information filtered by a search query

4/25/2020 • 3 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

How to get subscription analytics information for your customers filtered by a search query.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with User credentials only.

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<a href="#"><code>{baseUrl}/partner/v1/analytics/subscriptions?filter={filter_string}</code></a>

### URI parameters

Use the following required path parameter to identify your organization and filter the search.

NAME	TYPE	REQUIRED	DESCRIPTION
filter_string	string	Yes	The filter to apply to the subscription analytics. See the Filter syntax and Filter fields sections for the syntax, fields, and operators to use in this parameter.

### Filter syntax

The filter parameter must be composed as a series of field, value, and operator combinations. Multiple combinations can be combined using `and` or `or` operators.

An unencoded example looks like this:

- String: `?filter=Field operator 'Value'`
- Boolean: `?filter=Field operator Value`
- Contains `?filter=contains(field,'value')`

### Filter fields

The filter parameter of the request contains one or more statements that filter the rows in the response. Each statement contains a field and value that are associated with the `eq` or `ne` operators. Some fields also support the `contains`, `gt`, `lt`, `ge`, and `le` operators. Statements can be combined using `and` or `or` operators.

The following are examples of filter strings:

```
autoRenewEnabled eq true

autoRenewEnabled eq true and customerMarket eq 'US'
```

The following table shows a list of the supported fields and support operators for the filter parameter. String values must be surrounded by single quotes.

PARAMETER	SUPPORTED OPERATORS	DESCRIPTION
autoRenewEnabled	<code>eq</code> , <code>ne</code>	A value indicating whether the subscription is renewed automatically.
commitmentEndDate	<code>eq</code> , <code>ne</code> , <code>gt</code> , <code>lt</code> , <code>ge</code> , <code>le</code>	The date the subscription ends.
creationDate	<code>eq</code> , <code>ne</code> , <code>gt</code> , <code>lt</code> , <code>ge</code> , <code>le</code>	The date the subscription was created.
currentStateEndDate	<code>eq</code> , <code>ne</code> , <code>gt</code> , <code>lt</code> , <code>ge</code> , <code>le</code>	The date that the current status of the subscription will change.
customerMarket	<code>eq</code> , <code>ne</code>	The country/region that the customer does business in.
customerName	<code>contains</code>	The name of the customer.
customerTenantId	<code>eq</code> , <code>ne</code>	A GUID-formatted string that identifies the customer tenant.
deprovisionedDate	<code>eq</code> , <code>ne</code> , <code>gt</code> , <code>lt</code> , <code>ge</code> , <code>le</code>	The date that the subscription was deprovisioned. The default value is null.
effectiveStartDate	<code>eq</code> , <code>ne</code> , <code>gt</code> , <code>lt</code> , <code>ge</code> , <code>le</code>	The date the subscription starts.
friendlyName	<code>contains</code>	The name of the subscription.
id	<code>eq</code> , <code>ne</code>	A GUID-formatted string that identifies the subscription.
lastRenewalDate	<code>eq</code> , <code>ne</code> , <code>gt</code> , <code>lt</code> , <code>ge</code> , <code>le</code>	The date that the subscription was last renewed. The default value is null.
lastUsageDate	<code>eq</code> , <code>ne</code> , <code>gt</code> , <code>lt</code> , <code>ge</code> , <code>le</code>	The date that the subscription was last used. The default value is null.
partnerId	<code>eq</code> , <code>ne</code>	The MPN ID. For a direct reseller, this value will be the MPN ID of the partner. For an indirect reseller, this value will be the MPN ID of the indirect reseller.

PARAMETER	SUPPORTED OPERATORS	DESCRIPTION
partnerName	string	Name of the partner for whom the subscription was purchased
productName	<code>contains</code> , <code>eq</code> , <code>ne</code>	The name of the product.
providerName	string	When subscription transaction is for the indirect reseller, provider name is the indirect provider who bought the subscription.
status	<code>eq</code> , <code>ne</code>	The subscription status. Supported values are: "ACTIVE", "SUSPENDED", or "DEPROVISIONED".
subscriptionType	<code>eq</code> , <code>ne</code>	The subscription type. <b>Note:</b> This field is case-sensitive. Supported values are: "Office", "Azure", "Microsoft365", "Dynamics", "EMS".
trialStartDate	<code>eq</code> , <code>ne</code> , <code>gt</code> , <code>lt</code> , <code>ge</code> , <code>le</code>	The date that the trial period for the subscription started. The default value is null.
trialToPaidConversionDate	<code>eq</code> , <code>ne</code> , <code>gt</code> , <code>lt</code> , <code>ge</code> , <code>le</code>	The date that the subscription converts from trial to paid. The default value is null.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/partner/v1/analytics/subscriptions?filter=autoRenewEnabled eq true
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: ca7c39f7-1a80-43bc-90d8-ee7d1cad3123
MS-CorrelationId: ec8f62e5-1d92-47e9-8d5d-1924af105123
Content-Type: application/json
Content-Length: 0
```

## REST response

If successful, the response body contains a collection of [Subscription](#) resources that meet the filter criteria.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 177
Content-Type: application/json; charset=utf-8
MS-CorrelationId: ca7c39f7-1a80-43bc-90d8-ee7d1cad3123
MS-RequestId: ec8f62e5-1d92-47e9-8d5d-1924af105123
```

```
{
  "customerTenantId": "735920EB-A564-4C72-9FE5-52632562712C",
  "customerName": "SURFACE TEST2",
  "customerMarket": "US",
  "id": "B76412DA-D382-4688-A6A4-711A207C1C2E",
  "status": "ACTIVE",
  "productName": "UNKNOWN",
  "subscriptionType": "Azure",
  "autoRenewEnabled": true,
  "partnerId": "3B33E682-00C3-41EE-9DD2-A548ADF56438",
  "friendlyName": "MICROSOFT AZURE",
  "creationDate": "2017-06-02T23:11:58.747",
  "effectiveStartDate": "2017-06-02T00:00:00",
  "commitmentEndDate": null,
  "currentStateEndDate": null,
  "trialToPaidConversionDate": null,
  "trialStartDate": null,
  "trialEndDate": null,
  "lastUsageDate": null,
  "deprovisionedDate": null,
  "lastRenewalDate": null,
  "licenseCount": 0
}
```

## See also

- [Partner Center Analytics - Resources](#)

# Get subscription analytics grouped by dates or terms

4/25/2020 • 4 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

How to get subscription analytics information for your customers grouped by dates or terms.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with User credentials only.

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseUrl}/partner/v1/analytics/subscriptions?groupby={groupby_queries}</code>

### URI parameters

Use the following required path parameters to identify your organization and to group the results.

NAME	TYPE	REQUIRED	DESCRIPTION
groupby_queries	pairs of strings and dateTime	Yes	The terms and dates to filter the result.

### GroupBy syntax

The group by parameter must be composed as a series of comma separated, field values.

An unencoded example looks like this:

```
?groupby=termField1,dateField1,termField2
```

The following table shows a list of the supported fields for group by.

FIELD	TYPE	DESCRIPTION
customerTenantId	string	A GUID-formatted string that identifies the customer tenant.
customerName	string	The name of the customer.

FIELD	TYPE	DESCRIPTION
customerMarket	string	The country/region that the customer does business in.
id	string	A GUID-formatted string that identifies the subscription.
status	string	The subscription status. Supported values are: "ACTIVE", "SUSPENDED", or "DEPROVISIONED".
productName	string	The name of the product.
subscriptionType	string	The subscription type. Note: This field is case sensitive. Supported values are: "Office", "Azure", "Microsoft365", "Dynamics", "EMS".
autoRenewEnabled	Boolean	A value indicating whether the subscription is renewed automatically.
partnerId	string	The MPN ID. For a direct reseller, this parameter will be the MPN ID of the partner. For an indirect reseller, this parameter will be the MPN ID of the indirect reseller.
friendlyName	string	The name of the subscription.
partnerName	string	Name of the partner for whom the subscription was purchased
providerName	string	When subscription transaction is for the indirect reseller, provider name is the indirect provider who bought the subscription.
creationDate	string in UTC date time format	The date the subscription was created.
effectiveStartDate	string in UTC date time format	The date the subscription starts.
commitmentEndDate	string in UTC date time format	The date the subscription ends.
currentStateEndDate	string in UTC date time format	The date that the current status of the subscription will change.
trialToPaidConversionDate	string in UTC date time format	The date that the subscription converts from trial to paid. The default value is null.
trialStartDate	string in UTC date time format	The date that the trial period for the subscription started. The default value is null.

FIELD	TYPE	DESCRIPTION
lastUsageDate	string in UTC date time format	The date that the subscription was last used. The default value is null.
deprovisionedDate	string in UTC date time format	The date that the subscription was deprovisioned. The default value is null.
lastRenewalDate	string in UTC date time format	The date that the subscription was last renewed. The default value is null.

## Filter fields

The following table lists optional filter fields and their descriptions:

FIELD	TYPE	DESCRIPTION
top	int	The number of rows of data to return in the request. If the value isn't specified, the maximum value and the default value are 10000. If there are more rows in the query, the response body includes a next link that you can use to request the next page of data.
skip	int	The number of rows to skip in the query. Use this parameter to page through large data sets. For example, top=10000 and skip=0 retrieves the first 10000 rows of data, top=10000 and skip=10000 retrieves the next 10000 rows of data.
filter	string	One or more statements that filter the rows in the response. Each filter statement contains a field name from the response body and a value that are associated with the <code>eq</code> , <code>ne</code> , or for certain fields, the <code>contains</code> operator. Statements can be combined using <code>and</code> or <code>or</code> . String values must be surrounded by single quotes in the filter parameter. See the following section for a list of fields that can be filtered and the operators that are supported with those fields.
aggregationLevel	string	Specifies the time range for which to retrieve aggregate data. Can be one of the following strings: <code>day</code> , <code>week</code> , or <code>month</code> . If the value isn't specified, the default is <code>dateRange</code> . <b>Note:</b> This parameter applies only when a date field is passed as part of the <code>groupBy</code> parameter.
groupBy	string	A statement that applies data aggregation only to the specified fields.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/partner/v1/analytics/subscriptions?groupBy=subscriptionType
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: ca7c39f7-1a80-43bc-90d8-ee7d1cad3123
MS-CorrelationId: ec8f62e5-1d92-47e9-8d5d-1924af105123
Content-Type: application/json
Content-Length: 0
```

## REST response

If successful, the response body contains a collection of [Subscription](#) resources grouped by the specified terms and dates.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 177
Content-Type: application/json; charset=utf-8
MS-CorrelationId: ca7c39f7-1a80-43bc-90d8-ee7d1cad3123
MS-RequestId: ec8f62e5-1d92-47e9-8d5d-1924af105123
{
    "Value": [
        {
            "subscriptionType": "Azure",
            "subscriptionCount": "63",
            "licenseCount": "0"
        },
        {
            "subscriptionType": "Dynamics",
            "subscriptionCount": "62",
            "licenseCount": "405"
        },
        {
            "subscriptionType": "EMS",
            "subscriptionCount": "39",
            "licenseCount": "193"
        },
        {
            "subscriptionType": "M365",
            "subscriptionCount": "2",
            "licenseCount": "5"
        },
        {
            "subscriptionType": "Office",
            "subscriptionCount": "906",
            "licenseCount": "7485"
        },
        {
            "subscriptionType": "UNKNOWN",
            "subscriptionCount": "104",
            "licenseCount": "439"
        },
        {
            "subscriptionType": "Windows",
            "subscriptionCount": "2",
            "licenseCount": "2"
        }
    ],
    "@nextLink": null,
    "TotalCount": 7
}
```

## See also

[Partner Center Analytics - Resources](#)

# Get licenses deployment information

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center

How to get deployment information for Office and Dynamics licenses.

## Prerequisites

Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials.

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<a href="#"><code>{baseUrl}/v1/analytics/commercial/deployment/license/</code></a> HTTP/1.1

### Request headers

For more information, see [Partner Center REST headers](#).

### URI parameters

PARAMETER	TYPE	DESCRIPTION	REQUIRED
top	string	The number of rows of data to return in the request. The maximum value and the default value if not specified is 10000. If there are more rows in the query, the response body includes a next link that you can use to request the next page of data.	No
skip	int	The number of rows to skip in the query. Use this parameter to page through large data sets. For example, top=10000 and skip=0 retrieves the first 10000 rows of data, top=10000 and skip=10000 retrieves the next 10000 rows of data, and so on.	No

PARAMETER	TYPE	DESCRIPTION	REQUIRED
filter	string	<p>The <i>filter</i> parameter of the request contains one or more statements that filter the rows in the response. Each statement contains a field and value that are associated with the <code>eq</code> or <code>ne</code> operators, and statements can be combined using <code>and</code> or <code>or</code>. Here are some example <i>filter</i> parameters:</p> <ul style="list-style-type: none"> <li>• <code>filter=serviceCode eq 'O365'</code></li> <li>• <code>filter=serviceCode eq 'O365' or (channel eq 'Reseller')</code></li> </ul> <p>You can specify the following fields</p> <ul style="list-style-type: none"> <li>• <code>serviceCode</code></li> <li>• <code>serviceName</code></li> <li>• <code>channel</code></li> <li>• <code>customerTenantId</code></li> <li>• <code>customerName</code></li> <li>• <code>productId</code></li> <li>• <code>productName</code></li> </ul>	No
groupby	string	<p>A statement that applies data aggregation only to the specified fields. You can specify the following fields:</p> <ul style="list-style-type: none"> <li>• <code>serviceCode</code></li> <li>• <code>serviceName</code></li> <li>• <code>channel</code></li> <li>• <code>customerTenantId</code></li> <li>• <code>customerName</code></li> <li>• <code>productId</code></li> <li>• <code>productName</code></li> </ul> <p>The returned data rows will contain the fields specified in the <i>groupby</i> parameter as well as the following:</p> <ul style="list-style-type: none"> <li>• <code>licensesDeployed</code></li> <li>• <code>licensesSold</code></li> </ul>	No

PARAMETER	TYPE	DESCRIPTION	REQUIRED
processedDateTime	DateTime	One can specify the date from which usage data was processed. Defaults to the latest date when the data was processed	No

## Request example

```
GET https://api.partnercenter.microsoft.com/partner/v1/analytics/commercial/deployment/license?
filter=customerTenantId%20eq%20%270112A436-B14E-4888-967B-CA4BB2CF1234%27 HTTP 1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: bad5f75f-fd44-43ab-9325-bbc79dcba9da
MS-CorrelationId: 9cbdf63c-2608-4ad8-b0a9-abae27d859d9
X-Locale: en-US
Host: api.partnercenter.microsoft.com
```

## REST response

If successful, the response body contains the following fields containing data about the licenses deployed.

FIELD	TYPE	DESCRIPTION
serviceCode	string	Service code
serviceName	string	Service name
channel	string	Channel name, reseller
customerTenantId	string	Unique identifier for the customer
customerName	string	Customer name
productId	string	Unique identifier for the product
productName	string	Product name
licensesDeployed	long	Number of licenses deployed
licensesSold	long	Number of licenses sold
processedDateTime	DateTime	Date when the data was last processed

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

## Response example

HTTP/1.1 200 OK  
Content-Length: 487  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: 9cbdf63c-2608-4ad8-b0a9-abae27d859d9  
MS-RequestId: bad5f75f-fd44-43ab-9325-bbc79dcba9da  
MS-CV: f0trvmpq8mEScHcFS.0  
MS-ServerId: 4  
Date: Wed, 24 Oct 2018 22:37:18 GMT

{  
 "Value": [  
  
 {  
 "processedDateTime": "2018-10-14T00:00:00",  
 "serviceCode": "crm",  
 "serviceName": "Microsoft Dynamics",  
 "channel": "reseller",  
 "customerTenantId": "0112A436-B14E-4888-967B-CA4BB2CF1234",  
 "customerName": "TEST COMPANY",  
 "productId": "54B84594-9C77-4499-8D65-5E0D5F410E78",  
 "productName": "DYNAMICS AX TASK",  
 "licensesDeployed": 0,  
 "licensesSold": 9  
 },  
 {  
 "processedDateTime": "2018-10-14T00:00:00",  
 "serviceCode": "o365",  
 "serviceName": "Microsoft Office 365",  
 "channel": "reseller",  
 "customerTenantId": "0112A436-B14E-4888-967B-CA4BB2CF1234",  
 "customerName": "TEST COMPANY",  
 "productId": "D3B4FE1F-9992-4930-8ACB-CA6EC609365E",  
 "productName": "DOMESTIC AND INTERNATIONAL CALLING PLAN",  
 "licensesDeployed": 0,  
 "licensesSold": 5  
 }  
 ],  
 "@nextLink": null,  
 "TotalCount": 2  
}

# Get licenses usage information

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## Applies To

- Partner Center

How to get licenses usage information at the workload level for Office and Dynamics.

## Prerequisites

Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials.

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<a href="#"><code>{baseUrl}/v1/analytics/commercial/usage/license/</code></a> HTTP/1.1

### Request headers

For more information, see [Partner Center REST headers](#).

### URI parameters

PARAMETER	TYPE	DESCRIPTION	REQUIRED
top	string	The number of rows of data to return in the request. The maximum value and the default value if not specified is 10000. If there are more rows in the query, the response body includes a next link that you can use to request the next page of data.	No
skip	int	The number of rows to skip in the query. Use this parameter to page through large data sets. For example, top=10000 and skip=0 retrieves the first 10000 rows of data, top=10000 and skip=10000 retrieves the next 10000 rows of data, and so on.	No

PARAMETER	TYPE	DESCRIPTION	REQUIRED
filter	string	<p>The <i>filter</i> parameter of the request contains one or more statements that filter the rows in the response. Each statement contains a field and value that are associated with the <code>eq</code> or <code>ne</code> operators, and statements can be combined using <code>and</code> or <code>or</code>. Here are some example <i>filter</i> parameters:</p> <ul style="list-style-type: none"> <li>• <code>filter=workloadCode eq 'SFB'</code></li> <li>• <code>filter=workloadCode eq 'SFB' or (channel eq 'Reseller')</code></li> </ul> <p>You can specify the following fields</p> <ul style="list-style-type: none"> <li>• <code>workloadCode</code></li> <li>• <code>workloadName</code></li> <li>• <code>serviceCode</code></li> <li>• <code>serviceName</code></li> <li>• <code>channel</code></li> <li>• <code>customerTenantId</code></li> <li>• <code>customerName</code></li> <li>• <code>productId</code></li> <li>• <code>productName</code></li> </ul>	No
groupby	string	<p>A statement that applies data aggregation only to the specified fields. You can specify the following fields:</p> <ul style="list-style-type: none"> <li>• <code>workloadCode</code></li> <li>• <code>workloadName</code></li> <li>• <code>serviceCode</code></li> <li>• <code>serviceName</code></li> <li>• <code>channel</code></li> <li>• <code>customerTenantId</code></li> <li>• <code>customerName</code></li> <li>• <code>productId</code></li> <li>• <code>productName</code></li> </ul> <p>The returned data rows will contain the fields specified in the <i>groupby</i> parameter as well as the following:</p> <ul style="list-style-type: none"> <li>• <code>licensesActive</code></li> <li>• <code>licensesQualified</code></li> </ul>	No

PARAMETER	TYPE	DESCRIPTION	REQUIRED
processedDateTime	DateTime	One can specify the date from which usage data was processed. Defaults to the latest date when the data was processed	No

## Request example

```
GET https://api.partnercenter.microsoft.com/partner/v1/analytics/commercial/usage/license?
filter=customerTenantId%20eq%20%270112A436-B14E-4888-967B-CA4BB2CF1234%27 HTTP 1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: bad5f75f-fd44-43ab-9325-bbc79dcba9da
MS-CorrelationId: 9cbdf63c-2608-4ad8-b0a9-abae27d859d9
X-Locale: en-US
Host: api.partnercenter.microsoft.com
```

## REST response

If successful, the response body contains the following fields containing data about licenses usage.

FIELD	TYPE	DESCRIPTION
workloadCode	string	Workload code
workloadName	string	Workload name
serviceCode	string	Service code
serviceName	string	Service name
channel	string	Channel name, reseller
customerTenantId	string	Unique identifier for the customer
customerName	string	Customer name
productId	string	Unique identifier for the product
productName	string	Product name
licensesActive	long	Number of active licenses per workload
licensesQualified	long	Number of qualified licenses for the workload
processedDateTime	DateTime	Date when the data was last processed

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 487
Content-Type: application/json; charset=utf-8
MS-CorrelationId: 9cbdf63c-2608-4ad8-b0a9-abae27d859d9
MS-RequestId: bad5f75f-fd44-43ab-9325-bbc79dcba9da
MS-CV: f0trvqm8mEScHcFS.0
MS-ServerId: 4
Date: Wed, 24 Oct 2018 22:37:18 GMT

{
  "Value": [
    {
      "processedDateTime": "2018-10-14T00:00:00",
      "workloadCode": "SPO",
      "workloadName": "SharePoint",
      "serviceCode": "o365",
      "serviceName": "Microsoft Office 365",
      "channel": "reseller",
      "customerTenantId": "0112A436-B14E-4888-967B-CA4BB2CF1234",
      "customerName": "TEST COMPANY",
      "productId": "6FD2C87F-B296-42F0-B197-1E91E994B900",
      "productName": "OFFICE 365 ENTERPRISE E3",
      "licenseActive": 0,
      "licensesQualified": 1
    },
    {
      "processedDateTime": "2018-10-14T00:00:00",
      "workloadCode": "EXO",
      "workloadName": "Exchange",
      "serviceCode": "o365",
      "serviceName": "Microsoft Office 365",
      "channel": "reseller",
      "customerTenantId": "0112A436-B14E-4888-967B-CA4BB2CF1234",
      "customerName": "TEST COMPANY",
      "productId": "45A2423B-E884-448D-A831-D9E139C52D2F",
      "productName": "EXCHANGE ONLINE PROTECTION",
      "licenseActive": 0,
      "licensesQualified": 1
    }
  ]
}
```

# Get customer licenses deployment information

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## Applies To

- Partner Center

How to get licenses deployment insights for a specific customer.

### NOTE

This scenario is superceded by [Get licenses deployment information](#).

## Prerequisites

Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials.

## C#

To retrieve aggregated data on deployment for a specified customer, first call the [IAggregatePartner.Customers.ById](#) method with the customer ID to identify the customer. Then get an interface to customer level analytics collection operations from the [Analytics](#) property. Next, retrieve an interface to the customer level licenses analytics collection from the [Licenses](#) property. Finally, call the [Deployment.Get](#) method to get the aggregated data on licenses deployment. If the method succeeds you'll get a collection of [CustomerLicensesDeploymentInsights](#) objects.

```
// IAggregatePartner partnerOperations;
// string customerIdToRetrieve;

var customerLicensesDeploymentAnalytics =
    partnerOperations.Customers.ById(customerIdToRetrieve).Analytics.Licenses.Deployment.Get();
```

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<a href="#"><code>/baseURL/v1/customers/{customer-id}/analytics/licenses/deployment</code></a> HTTP/1.1

### URI parameter

Use the following path parameter to identify the customer.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-id	guid	Yes	A GUID formatted customer-id that identifies the customer.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/4d3cf487-70f4-4e1e-9ff1-b2bfc8d9f04/analytics/licenses/deployment HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: b01b8759-4dbe-4605-adb7-e5839a796c33
MS-CorrelationId: ae3b8c36-348b-46bc-9a60-398f973153ff
X-Locale: en-US
Host: api.partnercenter.microsoft.com
```

## REST response

If successful, the response body contains a collection of [CustomerLicensesDeploymentInsights](#) resources that provide information about the licenses deployed.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

## Response example

HTTP/1.1 200 OK  
Content-Length: 1012  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: ae3b8c36-348b-46bc-9a60-398f973153ff  
MS-RequestId: b01b8759-4dbe-4605-adb7-e5839a796c33  
MS-CV: deEp2Wy6DUitMCYA.0  
MS-ServerId: 102030524  
Date: Wed, 15 Mar 2017 01:19:18 GMT

```
{  
    "totalCount": 3,  
    "items": [{  
        "customerName": "DT DEMO CSP CUSTOMER 005",  
        "productName": "OFFICE 365 BUSINESS ESSENTIALS",  
        "licensesDeployed": 0,  
        "deploymentPercent": 0.0,  
        "licensesSold": 1,  
        "processedDateTime": "2017-03-14T03:25:16.36+00:00",  
        "serviceName": "o365",  
        "channel": "reseller",  
        "attributes": {  
            "objectType": "CustomerLicensesDeploymentInsights"  
        }  
    }, {  
        "customerName": "DT DEMO CSP CUSTOMER 005",  
        "productName": "EXCHANGE ONLINE (PLAN 1)",  
        "licensesDeployed": 0,  
        "deploymentPercent": 0.0,  
        "licensesSold": 5,  
        "processedDateTime": "2017-03-14T03:25:16.36+00:00",  
        "serviceName": "o365",  
        "channel": "reseller",  
        "attributes": {  
            "objectType": "CustomerLicensesDeploymentInsights"  
        }  
    }, {  
        "customerName": "DT DEMO CSP CUSTOMER 005",  
        "productName": "EXCHANGE ONLINE ARCHIVING FOR EXCHANGE ONLINE",  
        "licensesDeployed": 0,  
        "deploymentPercent": 0.0,  
        "licensesSold": 2,  
        "processedDateTime": "2017-03-14T03:25:16.36+00:00",  
        "serviceName": "o365",  
        "channel": "reseller",  
        "attributes": {  
            "objectType": "CustomerLicensesDeploymentInsights"  
        }  
    }  
],  
    "attributes": {  
        "objectType": "Collection"  
    }  
}
```

# Get customer licenses usage information

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## Applies To

- Partner Center

How to get licenses deployment insights for a specific customer.

### NOTE

This scenario is superceded by [Get licenses usage information](#).

## Prerequisites

Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials.

## C#

To retrieve aggregated data on deployment for a specified customer, first call the [IAggregatePartner.Customers.ById](#) method with the customer ID to identify the customer. Then get an interface to customer level analytics collection operations from the [Analytics](#) property. Next, retrieve an interface to the customer level licenses analytics collection from the [Licenses](#) property. Finally, call the [Usage.Get](#) method to get the aggregated data on licenses usage. If the method succeeds you'll get a collection of [CustomerLicensesUsageInsights](#) objects.

```
// IAggregatePartner partnerOperations;
// string customerIdToRetrieve;

var customerLicensesDeploymentAnalytics =
    partnerOperations.Customers.ById(customerIdToRetrieve).Analytics.Licenses.Usage.Get();
```

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<a href="#"><code>/baseURL/v1/customers/{customer-id}/analytics/licenses/usage</code></a> HTTP/1.1

### URI parameter

Use the following path parameter to identify the customer.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-id	guid	Yes	A GUID formatted customer-id that identifies the customer.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/4d3cf487-70f4-4e1e-9ff1-b2bfce8d9f04/analytics/licenses/usage HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: f657d2a8-9ed6-41b4-abfc-3cf4abebd62f
MS-CorrelationId: ae3b8c36-348b-46bc-9a60-398f973153ff
X-Locale: en-US
MS-PartnerCenter-Client: Partner Center .NET SDK
Host: api.partnercenter.microsoft.com
```

## REST response

If successful, the response body contains a collection of [CustomerLicensesUsageInsights](#) resources that provide information about licenses usage.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 1726
Content-Type: application/json; charset=utf-8
MS-CorrelationId: ae3b8c36-348b-46bc-9a60-398f973153ff
MS-RequestId: f657d2a8-9ed6-41b4-abfc-3cf4abebd62f
MS-CV: 0mufM0K1kE0oR7oI.0
MS-ServerId: 030020525
Date: Wed, 15 Mar 2017 01:19:58 GMT

{
    "totalCount": 5,
    "items": [
        {
            "customerName": "DT DEMO CSP CUSTOMER 005",
            "productName": "OFFICE 365 BUSINESS ESSENTIALS",
            "licensesActive": 0,
            "licensesQualified": 1,
            "usagePercent": 0.0,
            "workloadName": "Exchange",
            "processedDateTime": "2017-03-09T00:00:00+00:00",
            "serviceName": "o365",
            "channel": "reseller",
            "attributes": {
                "objectType": "CustomerLicensesUsageInsights"
            }
        },
        {
            "customerName": "DT DEMO CSP CUSTOMER 005",
            "productName": "OFFICE 365 BUSINESS ESSENTIALS",
            "licensesActive": 0,
            "licensesQualified": 1,
            "usagePercent": 0.0,
            "workloadName": "SharePoint",
            "processedDateTime": "2017-03-09T00:00:00+00:00",
            "serviceName": "o365"
        }
    ]
}
```

```
        "serviceName": "o365",
        "channel": "reseller",
        "attributes": {
            "objectType": "CustomerLicensesUsageInsights"
        }
    },
    {
        "customerName": "DT DEMO CSP CUSTOMER 005",
        "productName": "OFFICE 365 BUSINESS ESSENTIALS",
        "licensesActive": 0,
        "licensesQualified": 1,
        "usagePercent": 0.0,
        "workloadName": "Skype For Business",
        "processedDateTime": "2017-03-09T00:00:00+00:00",
        "serviceName": "o365",
        "channel": "reseller",
        "attributes": {
            "objectType": "CustomerLicensesUsageInsights"
        }
    },
    {
        "customerName": "DT DEMO CSP CUSTOMER 005",
        "productName": "EXCHANGE ONLINE (PLAN 1)",
        "licensesActive": 0,
        "licensesQualified": 5,
        "usagePercent": 0.0,
        "workloadName": "Exchange",
        "processedDateTime": "2017-03-09T00:00:00+00:00",
        "serviceName": "o365",
        "channel": "reseller",
        "attributes": {
            "objectType": "CustomerLicensesUsageInsights"
        }
    },
    {
        "customerName": "DT DEMO CSP CUSTOMER 005",
        "productName": "EXCHANGE ONLINE ARCHIVING FOR EXCHANGE ONLINE",
        "licensesActive": 0,
        "licensesQualified": 2,
        "usagePercent": 0.0,
        "workloadName": "Exchange",
        "processedDateTime": "2017-03-09T00:00:00+00:00",
        "serviceName": "o365",
        "channel": "reseller",
        "attributes": {
            "objectType": "CustomerLicensesUsageInsights"
        }
    }
],
"attributes": {
    "objectType": "Collection"
}
}
```

# Get partner licenses deployment information

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center

How to get partner licenses deployment information aggregated to include all customers.

### NOTE

This scenario is superceded by [Get licenses deployment information](#).

## Prerequisites

Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials.

## C#

To retrieve aggregated data on licenses deployment, first get an interface to partner level analytics collection operations from the [IAggregatePartner.Analytics](#) property. Then retrieve an interface to the partner level licenses analytics collection from the [Licenses](#) property. Finally, call the [Deployment.Get](#) method to get the aggregated data on licenses deployment. If the method succeeds you'll get a collection of [PartnerLicensesDeploymentInsights](#) objects.

```
// IAggregatePartner partnerOperations;  
  
var partnerLicensesDeploymentAnalytics = partnerOperations.Analytics.Licenses.Deployment.Get();
```

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<a href="#"><i>/baseURL</i></a> /v1/analytics/licenses/deployment HTTP/1.1

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

None.

### Request example

```
GET https://api.partnercenter.microsoft.com/v1/analytics/licenses/deployment HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 25b6edd5-1f53-456b-b48c-c64f60ec2dda
MS-CorrelationId: 6492b9d6-5629-429b-934c-040b1946e760
X-Locale: en-US
Host: api.partnercenter.microsoft.com
```

## REST response

If successful, the response body contains a collection of [PartnerLicensesDeploymentInsights](#) resources that provide information about the licenses deployed.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

### Response example

```
HTTP/1.1 200 OK
Content-Length: 487
Content-Type: application/json; charset=utf-8
MS-CorrelationId: 6492b9d6-5629-429b-934c-040b1946e760
MS-RequestId: 25b6edd5-1f53-456b-b48c-c64f60ec2dda
MS-CV: f0trvqm8mEScHcFS.0
MS-ServerId: 102030524
Date: Tue, 14 Mar 2017 17:55:01 GMT

{
    "totalCount": 2,
    "items": [
        {
            "proratedDeploymentPercent": 0.0,
            "licensesSold": 343,
            "processedDateTime": "2017-03-10T00:00:00+00:00",
            "serviceName": "crm",
            "channel": "reseller",
            "attributes": {
                "objectType": "PartnerLicensesDeploymentInsights"
            }
        },
        {
            "proratedDeploymentPercent": 1.0,
            "licensesSold": 4464,
            "processedDateTime": "2017-03-14T03:25:16.36+00:00",
            "serviceName": "o365",
            "channel": "reseller",
            "attributes": {
                "objectType": "PartnerLicensesDeploymentInsights"
            }
        }
    ],
    "attributes": {
        "objectType": "Collection"
    }
}
```

# Get partner licenses usage information

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center

How to get partner licenses usage information aggregated to include all customers.

### NOTE

This scenario is superceded by [Get licenses usage information](#).

## Prerequisites

Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials.

## C#

To retrieve aggregated data on licenses deployment, first get an interface to partner level analytics collection operations from the [IAggregatePartner.Analytics](#) property. Then retrieve an interface to the partner level licenses analytics collection from the [Licenses](#) property. Finally, call the [Usage.Get](#) method to get the aggregated data on licenses usage. If the method succeeds you'll get a collection of [PartnerLicensesUsageInsights](#) objects.

```
// IAggregatePartner partnerOperations;  
  
var partnerLicensesUsageAnalytics = partnerOperations.Analytics.Licenses.Usage.Get();
```

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<a href="#">/{baseURL}/v1/analytics/licenses/usage</a> HTTP/1.1

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

None.

### Request example

```
GET https://api.partnercenter.microsoft.com/v1/analytics/licenses/usage HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 6b588e9b-1d02-471a-bce2-79374497c24e
MS-CorrelationId: ae3b8c36-348b-46bc-9a60-398f973153ff
X-Locale: en-US
Host: api.partnercenter.microsoft.com
```

## REST response

If successful, the response body contains a collection of [PartnerLicensesUsageInsights](#) resources that provide information about the licenses used.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

### Response example

HTTP/1.1 200 OK  
Content-Length: 1156  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: ae3b8c36-348b-46bc-9a60-398f973153ff  
MS-RequestId: 6b588e9b-1d02-471a-bce2-79374497c24e  
MS-CV: wk0/vjugzEe0Z9cv.0  
MS-ServerId: 101112012  
Date: Wed, 15 Mar 2017 01:18:26 GMT

```
{  
    "totalCount": 5,  
    "items": [  
        {  
            "proratedLicensesUsagePercent": 0.0,  
            "workloadName": "Microsoft Dynamics CRM",  
            "processedDateTime": "2017-03-10T00:00:00+00:00",  
            "serviceName": "crm",  
            "channel": "reseller",  
            "attributes": {  
                "objectType": "PartnerLicensesUsageInsights"  
            }  
        }, {  
            "proratedLicensesUsagePercent": 0.0,  
            "workloadName": "SharePoint",  
            "processedDateTime": "2017-03-10T00:00:00+00:00",  
            "serviceName": "crm",  
            "channel": "reseller",  
            "attributes": {  
                "objectType": "PartnerLicensesUsageInsights"  
            }  
        }, {  
            "proratedLicensesUsagePercent": 0.0,  
            "workloadName": "Exchange",  
            "processedDateTime": "2017-03-09T00:00:00+00:00",  
            "serviceName": "o365",  
            "channel": "reseller",  
            "attributes": {  
                "objectType": "PartnerLicensesUsageInsights"  
            }  
        }, {  
            "proratedLicensesUsagePercent": 0.0,  
            "workloadName": "SharePoint",  
            "processedDateTime": "2017-03-09T00:00:00+00:00",  
            "serviceName": "o365",  
            "channel": "reseller",  
            "attributes": {  
                "objectType": "PartnerLicensesUsageInsights"  
            }  
        }, {  
            "proratedLicensesUsagePercent": 0.0,  
            "workloadName": "Skype For Business",  
            "processedDateTime": "2017-03-09T00:00:00+00:00",  
            "serviceName": "o365",  
            "channel": "reseller",  
            "attributes": {  
                "objectType": "PartnerLicensesUsageInsights"  
            }  
        }  
    ],  
    "attributes": {  
        "objectType": "Collection"  
    }  
}
```

# Audit operations

3/31/2020 • 2 minutes to read • [Edit Online](#)

The Partner Center APIs provide auditing features so you can get a record of Partner Center activity.

You can retrieve audit records for the previous 30 days from the current date, or for a date range specified by including the start date and/or the end date. Note, however, that for performance reasons activity log data availability is limited to the previous 90 days. Requests with a start date greater than 90 days prior to the current date will receive a bad request exception (error code: 400) and an appropriate message.

## Retrieve audit records

Get detailed historical audit records of operations performed by a partner user or application:

- [Get a record of Partner Center activity](#)
- [Auditing resources](#)

# Get a record of Partner Center activity

4/25/2020 • 5 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

This article describes how to retrieve a record of operations that was performed by a partner user or application over a period of time.

Use this API to retrieve audit records for the previous 30 days from the current date, or for a date range specified by including the start date and/or the end date. Note, however, that for performance reasons activity log data availability is limited to the previous 90 days. Requests with a start date greater than 90 days prior to the current date will receive a bad request exception (error code: 400) and an appropriate message.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.

## C#

To retrieve a record of Partner Center operations, first establish the date range for the records you want to retrieve. The following code example only uses a start date, but you can also include an end date. For more information, see the [Query](#) method. Next, create the variables you need for the type of filter you want to apply, and assign the appropriate values. For example, to filter by company name substring, create a variable to hold the substring. To filter by customer ID, create a variable to hold the ID.

In the following example, sample code is provided to filter by a company name substring, customer ID, or resource type. Choose one and comment out the others. In each case, you first instantiate a [SimpleFieldFilter](#) object using its default [constructor](#) to create the filter. You'll need to pass a string that contains the field to search, and the appropriate operator to apply, as shown. You also must provide the string to filter by.

Next, use the [AuditRecords](#) property to get an interface to audit record operations, and call the [Query](#) or [QueryAsync](#) method to execute the filter and get the collection of [AuditRecord's](#) that represent the first page of the result. Pass the method the start date, an optional end date not used in the example here, and an [IQuery](#) object that represents a query on an entity. The [IQuery](#) object is created by passing the filter created above to the [QueryFactory's BuildSimpleQuery](#) method.

Once you have the initial page of items, use the [Enumerators.AuditRecords.Create](#) method to create an enumerator that you can use to iterate through the remaining pages.

```

// IAggregatePartner partnerOperations;

var startDate = new DateTime(DateTime.Now.Year, DateTime.Now.Month, 01);

// First perform the query, then get the enumerator. Choose one of the following and comment out the other
// two.

// To retrieve audit records by company name substring (for example "bri" matches "Fabrikam, Inc.").
var searchSubstring="bri";
var filter = new SimpleFieldFilter(AuditRecordSearchField.CompanyName.ToString(),
FieldFilterOperation.Substring, searchSubstring);
var auditRecordsPage = partnerOperations.AuditRecords.Query(startDate.Date, query:
QueryFactory.Instance.BuildSimpleQuery(filter));

// To retrieve audit records by customer ID.
var customerId="0c39d6d5-c70d-4c55-bc02-f620844f3fd1";
var filter = new SimpleFieldFilter(AuditRecordSearchField.CustomerId.ToString(), FieldFilterOperation.Equals,
customerId);
var auditRecordsPage = partnerOperations.AuditRecords.Query(startDate.Date, query:
QueryFactory.Instance.BuildSimpleQuery(filter));

// To retrieve audit records by resource type.
int resourceTypeInt = 3; // Subscription Resource.
string searchField = Enum.GetName(typeof(ResourceType), resourceTypeInt);
var filter = new SimpleFieldFilter(AuditRecordSearchField.ResourceType.ToString(),
FieldFilterOperation.Equals, searchField);
var auditRecordsPage = partnerOperations.AuditRecords.Query(startDate.Date, query:
QueryFactory.Instance.BuildSimpleQuery(filter));

var auditRecordEnumerator = partnerOperations.Enumerators.AuditRecords.Create(auditRecordsPage);

int pageNumber = 1;
while (auditRecordEnumerator.HasValue)
{
    // Work with the current page.
    foreach (var c in auditRecordEnumerator.Current.Items)
    {
        // Display some info, such as operation type, operation date, and operation status.
        Console.WriteLine(string.Format("{0} {1} {2}.", c.OperationType, c.OperationDate, c.OperationStatus));
    }

    // Get the next page of audit records.
    auditRecordEnumerator.Next();
}

```

Sample: [Console test app](#). Project: Partner Center SDK Samples Folder: Auditing

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<a href="#"><i>{baseUrl}</i></a> /v1/auditrecords?startDate={startDate} HTTP/1.1
GET	<a href="#"><i>{baseUrl}</i></a> /v1/auditrecords?startDate={startDate}&endDate={endDate} HTTP/1.1
GET	<a href="#"><i>{baseUrl}</i></a> /v1/auditrecords?startDate={startDate}&endDate={endDate}&filter={"Field":"CompanyName","Value":"{searchSubstring}","Operator":"substring"} HTTP/1.1

METHOD	REQUEST URI
GET	<a href="#"><code>{baseUrl}/v1/auditrecords?startDate={startDate}&amp;endDate={endDate}&amp;filter={"Field":"CustomerId","Value":"{customerId}","Operator":"equals"}</code></a> HTTP/1.1
GET	<a href="#"><code>{baseUrl}/v1/auditrecords?startDate={startDate}&amp;endDate={endDate}&amp;filter={"Field":"ResourceType","Value":"{resourceType}","Operator":"equals"}</code></a> HTTP/1.1

## URI parameter

Use the following query parameters when creating the request.

NAME	TYPE	REQUIRED	DESCRIPTION
startDate	date	No	The start date in yyyy-mm-dd format. If none is provided, the result set will default to 30 days prior to the request date. This parameter is optional when a filter is supplied.
endDate	date	No	The end date in yyyy-mm-dd format. This parameter is optional when a filter is supplied. When the end date is omitted or set to null, the request returns the max window or uses today as the end date, whichever is less.
filter	string	No	The filter to apply. This parameter must be an encoded string. This parameter is optional when the start date or end date are supplied.

## Filter syntax

You must compose the filter parameter as a series of comma separated, key-value pairs. Each key and value must be individually quoted and separated by a colon. The entire filter must be encoded.

An unencoded example looks like this:

```
?filter{"Field": "CompanyName", "Value": "bri", "Operator": "substring"}
```

The following table describes the required key-value pairs:

KEY	VALUE
Field	The field to filter. The supported values can be found in <a href="#">Request syntax</a> .

KEY	VALUE
Value	<p>The value to filter by. The case of the value is ignored. The following value parameters are supported as shown in <a href="#">Request syntax</a>:</p> <ul style="list-style-type: none"> <li>searchSubstring - Replace with the name of the company. You can enter a substring to match part of the company name (for example `bri` will match `Fabrikam, Inc`).</li> </ul> <p>Example: "Value":"bri"</p> <ul style="list-style-type: none"> <li>customerId - Replace with a GUID formatted string that represents the customer identifier.</li> </ul> <p>Example: "Value":"0c39d6d5-c70d-4c55-bc02-f620844f3fd1"</p> <ul style="list-style-type: none"> <li>resourceType - Replace with the type of resource for which to retrieve audit records (for example, Subscription). The available resource types are defined in <a href="#">ResourceType</a>.</li> </ul> <p>Example: "Value":"Subscription"</p>
Operator	The operator to apply. The supported operators can be found in <a href="#">Request syntax</a> .

## Request headers

- See [Partner Center REST headers](#) for more information.

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/auditrecords?
startDate=6/1/2017%2012:00:00%20AM&filter=%7B%22Field%22:%22CustomerId%22,%22Value%22:%220c39d6d5-c70d-4c55-
bc02-f620844f3fd1%22,%22operator%22:%22equals%22%7D HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 127facaa-e389-41f8-8bb7-1d1af99db893
MS-CorrelationId: de9c2ccc-40dd-4186-9660-65b9b64c3d14
X-Locale: en-US
Host: api.partnercenter.microsoft.com
Connection: Keep-Alive
```

## REST response

If successful, this method returns a set of activities that meet the filters.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

### Response example

```
HTTP/1.1 200 OK
Content-Length: 2859
Content-Type: application/json; charset=utf-8
```

Content-Type: application/json; charset=utf-8

MS-CorrelationId: de9c2ccc-40dd-4186-9660-65b9b64c3d14

MS-RequestId: 127facaa-e389-41f8-8bb7-1d1af99db893

MS-CV: 4xDKynq/zE2im0wj.0

MS-ServerId: 030011719

Date: Tue, 27 Jun 2017 22:19:46 GMT

```
{
    "totalCount": 2,
    "items": [
        {
            "partnerId": "3b33e682-00c3-41ee-9dd2-a548adf56438",
            "customerId": "0c39d6d5-c70d-4c55-bc02-f620844f3fd1",
            "customerName": "Relecloud",
            "userPrincipalName": "admin@domain.onmicrosoft.com",
            "resourceType": "order",
            "resourceNewValue": "{\"Id\":\"d51a052e-043c-4a2a-aa37-2bb938cef6c1\",\"ReferenceCustomerId\":\"0c39d6d5-c70d-4c55-bc02-f620844f3fd1\",\"BillingCycle\":\"none\",\"LineItems\":[{\"LineItemNumber\":0,\"OfferId\":\"C0BD2E08-11AC-4836-BDC7-3712E744922F\",\"SubscriptionId\":\"488745B5-2086-4912-802C-6ABB9F7C3638\"},\"ParentSubscriptionId\":null,\"FriendlyName\":\"Office 365 Business Premium Trial\", \"Quantity\":25,\"PartnerIdOnRecord\":null,\"Links\":{\"Subscription\":{\"Uri\":\"/customers/0c39d6d5-c70d-4c55-bc02-f620844f3fd1/subscriptions/488745B5-2086-4912-802C-6ABB9F7C3638\"},\"Method\":\"GET\", \"Headers\":[{}]},\"CreationDate\":\"2017-06-15T15:56:04.077-07:00\", \"Links\":{\"Self\":{\"Uri\":\"/customers/0c39d6d5-c70d-4c55-bc02-f620844f3fd1/orders/d51a052e-043c-4a2a-aa37-2bb938cef6c1\"},\"Method\":\"GET\", \"Headers\":[{}]},\"Attributes\":{\\\"Etag\\\":\\\"eyJpZCI6ImQ1MWEwNTJ1LTA0M2MtNGEyYS1hYTM3LTJiYjkzOGNIZjZjMSIsInZlcnPb24i0jF9\\\",\\\"ObjectType\\\":\\\"Order\\\"}}}",
            "operationType": "create_order",
            "operationDate": "2017-06-15T22:56:05.0589308Z",
            "operationStatus": "succeeded",
            "customizedData": [
                {
                    "key": "OrderId",
                    "value": "d51a052e-043c-4a2a-aa37-2bb938cef6c1"
                },
                {
                    "key": "BillingCycle",
                    "value": "None"
                },
                {
                    "key": "OfferId-0",
                    "value": "C0BD2E08-11AC-4836-BDC7-3712E744922F"
                },
                {
                    "key": "SubscriptionId-0",
                    "value": "488745B5-2086-4912-802C-6ABB9F7C3638"
                },
                {
                    "key": "SubscriptionName-0",
                    "value": "Office 365 Business Premium Trial"
                },
                {
                    "key": "Quantity-0",
                    "value": "25"
                },
                {
                    "key": "PartnerOnRecord-0",
                    "value": null
                }
            ],
            "attributes": {
                "objectType": "AuditRecord"
            }
        },
        {
            "partnerId": "3b33e682-00c3-41ee-9dd2-a548adf56438",
            "customerId": "0c39d6d5-c70d-4c55-bc02-f620844f3fd1",
            "customerName": "Relecloud",
            "userPrincipalName": "admin@domain.onmicrosoft.com",
            "applicationId": "Partner Center Native App",
            "resourceType": "license",
            "resourceNewValue": "{\"LicensesToAssign\":[{\\"ExcludedPlans\\\":null,\\\"SkuId\\\":\\\"efccb6f7-5641-4e0e-bd10-b4976e1bf68a\\\"}],\\\"LicensesToRemove\\\":null,\\\"LicenseWarnings\\\":[],\\\"Attributes\\\":{\\\"ObjectType\\\":\\\"LicenseUpdate\\\"}}}",
            "operationType": "update_customer_user_licenses",
            "operationDate": "2017-06-01T20:09:07.0450483Z",
            "operationStatus": "succeeded",
            "customizedData": [
                {
                    "key": "LicenseUpdate"
                }
            ]
        }
    ]
}
```

```
        "customizedFields": [
            {
                "key": "CustomerUserId",
                "value": "482e2152-4b49-48ec-b715-823365ce3d4c"
            },
            {
                "key": "AddedLicenseSkuId",
                "value": "efccb6f7-5641-4e0e-bd10-b4976e1bf68e"
            }
        ],
        "attributes": {
            "objectType": "AuditRecord"
        }
    },
    "links": {
        "self": {
            "uri": "/auditrecords?startDate=2017-06-01&size=500&filter=%7B%22Field%22%3A%22CustomerId%22%2C%22Value%22%3A%220c39d6d5-c70d-4c55-bc02-f620844f3fd1%22%2C%22Operator%22%3A%22equals%22%7D",
            "method": "GET",
            "headers": []
        }
    },
    "attributes": {
        "objectType": "Collection"
    }
}
```

# Device deployment

4/19/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center for Microsoft Cloud Germany

The Partner Center APIs provide access to zero-touch deployment features so you can simplify secure device setup for your customers.

## Configuration policies

Topics about how to add, delete, update and retrieve device configuration policies:

- [Create a new configuration policy for the specified customer](#)
- [Delete a configuration policy for the specified customer](#)
- [Get a list of a customer's policies](#)
- [Retrieve a customer's configuration policy](#)
- [Update a configuration policy for the specified customer](#)

## Devices

Topics about how to work with and upload device batches and device metadata:

- [Get the status of a device batch upload](#)
- [Get a list of device batches for the specified customer](#)
- [Get a list of devices for the specified batch and customer](#)
- [Upload a list of devices to create a new batch for the specified customer](#)
- [Upload a list of devices to an existing batch for the specified customer](#)
- [Update a list of devices with a policy](#)
- [Delete a device for the specified customer](#)

# Create a new configuration policy for the specified customer

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center for Microsoft Cloud Germany

How to create a new configuration policy for the specified customer.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select CSP from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## C#

To create a new configuration policy for the specified customer:

1. Instantiate a new [ConfigurationPolicy](#) object as shown in the following code snippet. Then call the [IAggregatePartner.Customers.ById](#) method with the customer ID to retrieve an interface to operations on the specified customer.
2. Retrieve the [ConfigurationPolicies](#) property to get an interface to configuration policy collection operations.
3. Call the [Create](#) or [CreateAsync](#) method to create the configuration policy.

### C# example

```
// IAggregatePartner partnerOperations;
// string selectedCustomerId;

var configurationPolicyToCreate = new ConfigurationPolicy
{
    Name = "Test Config Policy",
    Description = "This configuration policy is created by the SDK samples",
    PolicySettings = new List<PolicySettingsType>() {
        PolicySettingsType.OobeUserNotLocalAdmin,
        PolicySettingsType.SkipEula }
};

var createdConfigurationPolicy =
    partnerOperations.CustomersById(selectedCustomerId).ConfigurationPolicies.Create(configurationPolicyToCreate)
;
```

## REST request

### Request syntax

METHOD	REQUEST URI
POST	<a href="#"><i>{baseUrl}</i></a> /v1/customers/{customer-id}/policies HTTP/1.1

### URI parameter

Use the following path parameters when creating the request.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-id	string	Yes	A GUID-formatted string that identifies the customer.

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

The request body must contain an object with the configuration policy information as described in the following table:

NAME	TYPE	REQUIRED	DESCRIPTION
name	string	Yes	The friendly name of the policy.
category	string	Yes	The policy category.
description	string	No	The policy description.
policySettings	array of strings	Yes	The policy settings.

### Request example

```
POST https://api.partnercenter.microsoft.com/v1/customers/47021739-3426-40bf-9601-61b4b6d7c793/policies
HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: e88d014d-ab70-41de-90a0-f7fd1797267d
MS-CorrelationId: de894e18-f027-4ac0-8b5a-34f0c222af0c
X-Locale: en-US
Content-Length: 212
Content-Type: application/json
Host: api.partnercenter.microsoft.com

{
  "name": "Windows 10 Enterprise E5",
  "category": "o_o_b_e",
  "description": "test policy creation from API",
  "policySettings": ["oobe_user_not_local_admin", "skip_express_settings"]
}
```

# REST response

If successful, the response body contains the [ConfigurationPolicy](#) resource for the new policy.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 404
Content-Type: application/json; charset=utf-8
MS-CorrelationId: 4beda413-74fc-4839-b74f-f580c353ab45
MS-RequestId: 0dfadf74-aa66-49ed-9a67-b3b78d9297cc
MS-CV: YrLe3w6BbUSMt1fi.0
MS-ServerId: 030020344
Date: Tue, 25 Jul 2017 18:07:36 GMT

{
  "id": "40cdb858-edcc-44d7-9083-d6a36d43bd3f",
  "name": "Windows 10 Enterprise E5",
  "category": "o_o_b_e",
  "description": "test policy creation from API",
  "devicesAssigned": 0,
  "policySettings": ["oobe_user_not_local_admin", "skip_express_settings"],
  "createdDate": "2017-07-25T18:07:36",
  "lastModifiedDate": "2017-07-25T18:07:36",
  "attributes": {
    "objectType": "ConfigurationPolicy"
  }
}
```

# Delete a configuration policy for the specified customer

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center for Microsoft Cloud Germany

How to delete a configuration policy for a specified customer and policy identifier.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select CSP from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- The policy identifier.

## C#

To delete a configuration policy for a specified customer:

1. Call the [IAggregatePartner.Customers.ById](#) method with the customer ID to retrieve an interface to operations on the specified customer.
2. Call the [ConfigurationPolicies.ById](#) method with the policy ID to retrieve an interface to configuration policy operations for the specified policy.
3. Call the [Delete](#) or [DeleteAsync](#) method to delete the configuration policy.

```
IAggregatePartner partnerOperations;
string selectedCustomerId;
string selectedPolicyId;

partnerOperations.CustomersById(selectedCustomerId).ConfigurationPoliciesById(selectedPolicyId).Delete();
```

Sample: [Console test app](#). Project: Partner Center SDK Samples Class: DeleteConfigurationPolicy.cs

## REST request

### Request syntax

METHOD	REQUEST URI
--------	-------------

METHOD	REQUEST URI
DELETE	<a href="#"><i>{baseURL}</i></a> /v1/customers/{customer-id}/policies/{policy-id} HTTP/1.1

#### URI parameters

Use the following path parameters when creating the request.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-id	string	Yes	A GUID-formatted string that identifies the customer.
policy-id	string	Yes	A GUID-formatted string that identifies the policy to delete.

#### Request headers

For more information, see [Partner Center REST headers](#).

#### Request body

None

#### Request example

```
DELETE https://api.partnercenter.microsoft.com/v1/customers/47021739-3426-40bf-9601-61b4b6d7c793/policies/56edf752-ee77-4fd8-b7f5-df1f74a3a9ac HTTP/1.1
Authorization: Bearer <token>
MS-RequestId: e88d014d-ab70-41de-90a0-f7fd1797267d
MS-CorrelationId: de894e18-f027-4ac0-8b5a-34f0c222af0c
X-Locale: en-US
Content-Length: 0
Content-Type: application/json
Host: api.partnercenter.microsoft.com
```

## REST response

If successful, the response returns a 204 No Content status code.

#### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

#### Response example

```
HTTP/1.1 204 No Content
Content-Length: 0
MS-CorrelationId: cee5caf4-c322-4baa-b1d7-e94afb9891a4
MS-RequestId: 76b6f317-1da1-4b61-a6fd-9952439a2c46
MS-CV: YrLe3w6BbUSMt1fi.0
MS-ServerId: 030020344
Date: Tue, 25 Jul 2017 18:10:41 GMT
```

# Get a list of a customer's policies

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center for Microsoft Cloud Germany

This article describes how to retrieve a collection of the specified customer's configuration policies.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## C#

To get a list of all of a customer's policies:

1. Call the **IAggregatePartner.Customers.ById** method with the customer ID to retrieve an interface to operations on the specified customer.
2. Retrieve the **ConfigurationPolicies** property to get an interface to configuration policy collection operations.
3. Call the **Get** or **GetAsync** method to retrieve the collection of policies.

```
IAggregatePartner partnerOperations;  
string selectedCustomerId;  
  
var configPolicies = partnerOperations.CustomersById(selectedCustomerId).ConfigurationPolicies.Get();
```

For an example, see the following:

- Sample: [Console test app](#)
- Project: [Partner Center SDK Samples](#)
- Class: [GetAllConfigurationPolicies.cs](#)

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/customers/{customer-id}/policies</code> HTTP/1.1

#### URI parameter

Use the following path parameter when creating the request:

NAME	TYPE	REQUIRED	DESCRIPTION
customer-id	string	Yes	A GUID-formatted string that identifies the customer.

#### Request headers

For more information, see [Partner Center REST headers](#).

#### Request body

None

#### Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/47021739-3426-40bf-9601-61b4b6d7c793/policies
HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: e88d014d-ab70-41de-90a0-f7fd1797267d
MS-CorrelationId: de894e18-f027-4ac0-8b5a-34f0c222af0c
Content-Length:0
X-Locale: en-US
Host: api.partnercenter.microsoft.com
```

## REST response

If successful, the response body contains the collection of [ConfigurationPolicy](#) resources.

#### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For a full list, see [Partner Center REST error codes](#).

#### Response example

HTTP/1.1 200 OK  
Content-Length: 1221  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: d5ff2573-3ef8-4553-aac4-4b73d97dce1b  
MS-RequestId: 6eb7383d-ebe5-44d7-8570-e0ed12c0547a  
MS-CV: YrLe3w6BbUSMt1fi.0  
MS-ServerId: 030020344  
Date: Tue, 25 Jul 2017 18:07:49 GMT

```
{  
    "totalCount": 3,  
    "items": [{  
        "id": "8c7d25aa-2dbb-409c-a1f0-f55bd9108fa9",  
        "name": "Windows 10 Enterprise E3",  
        "category": "o_o_b_e",  
        "description": "P462017 description",  
        "devicesAssigned": 0,  
        "policySettings": ["oobe_user_not_local_admin", "skip_express_settings"],  
        "createdDate": "2017-04-27T11:30:34.1944704-07:00",  
        "lastModifiedDate": "2017-04-27T11:30:34.1944704-07:00",  
        "attributes": {  
            "objectType": "ConfigurationPolicy"  
        }  
    }, {  
        "id": "56edf752-ee77-4fd8-b7f5-df1f74a3a9ac",  
        "name": "Test policy",  
        "category": "o_o_b_e",  
        "description": "Test policy creation from API 1",  
        "devicesAssigned": 0,  
        "policySettings": ["skip_express_settings"],  
        "createdDate": "2017-07-25T11:03:03.8457088-07:00",  
        "lastModifiedDate": "2017-07-25T11:04:00.8150016-07:00",  
        "attributes": {  
            "objectType": "ConfigurationPolicy"  
        }  
    }, {  
        "id": "a96b5fd9-0f3a-419a-b55c-a8aec6b1f00",  
        "name": "Windows 10 Enterprise E5",  
        "category": "o_o_b_e",  
        "description": "test policy creation from API",  
        "devicesAssigned": 0,  
        "policySettings": ["oobe_user_not_local_admin", "skip_express_settings"],  
        "createdDate": "2017-07-25T11:07:36.1501184-07:00",  
        "lastModifiedDate": "2017-07-25T11:07:36.1501184-07:00",  
        "attributes": {  
            "objectType": "ConfigurationPolicy"  
        }  
    }  
],  
    "attributes": {  
        "objectType": "Collection"  
    }  
}
```

# Retrieve a customer's configuration policy

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## Applies To

- Partner Center
- Partner Center for Microsoft Cloud Germany

How to retrieve the specified configuration policy for the specified customer.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- The policy identifier.

## C#

To retrieve a configuration policy for the specified customer, first call the [IAggregatePartner.Customers.ById](#) method with the customer ID to retrieve an interface to operations on the specified customer. Next, call the [ConfigurationPolicies.ById](#) method with the policy ID to retrieve an interface to configuration policy operations for the specified policy. Finally, call the [Get](#) or [GetAsync](#) method to retrieve the configuration policy.

```
IAggregatePartner partnerOperations;
string selectedCustomerId;
string selectedConfigurationPolicyId;

ConfigurationPolicy retrievedConfigurationPolicy =
    partnerOperations.CustomersById(selectedCustomerId).ConfigurationPoliciesById(selectedConfigurationPolicyId)
        .Get();
```

Sample: [Console test app](#). Project: Partner Center SDK Samples Class: GetConfigurationPolicy.cs

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/customers/{customer-id}/policies/{policy-id}</code> HTTP/1.1

### URI parameter

Use the following path and query parameters when creating the request.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-id	string	Yes	A GUID-formatted string that identifies the customer.
policy-id	string	Yes	A GUID-formatted string that identifies the policy.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/47021739-3426-40bf-9601-61b4b6d7c793/policies/56edf752-ee77-4fd8-b7f5-df1f74a3a9ac HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: e88d014d-ab70-41de-90a0-f7fd1797267d
MS-CorrelationId: de894e18-f027-4ac0-8b5a-34f0c222af0c
X-Locale: en-US
Content-Length: 0
Host: api.partnercenter.microsoft.com
```

## REST response

If successful, the response contains the requested [ConfigurationPolicy](#) resource.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 443
MS-CorrelationId: abe150cf-c677-435c-b5d5-b34899a6d1ec
MS-RequestId: ab3abfe7-dce7-46c0-ab20-4fd49bc3e2f7
MS-CV: YrLe3w6BbUSMt1fi.0
MS-ServerId: 030020344
Date: Tue, 25 Jul 2017 18:08:27 GMT

{
  "id": "56edf752-ee77-4fd8-b7f5-df1f74a3a9ac",
  "name": "Test policy",
  "category": "o_o_b_e",
  "description": "Test policy creation from API 1",
  "devicesAssigned": 0,
  "policySettings": ["skip_express_settings"],
  "createdDate": "2017-07-25T11:03:03.8457116-07:00",
  "lastModifiedDate": "2017-07-25T11:04:00.8149974-07:00",
  "attributes": {
    "objectType": "ConfigurationPolicy"
  }
}
```

# Update a configuration policy for the specified customer

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## Applies To

- Partner Center
- Partner Center for Microsoft Cloud Germany

How to update the specified configuration policy for the specified customer.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select CSP from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- The policy identifier.

## C#

To update an existing configuration policy for the specified customer, instantiate a new [ConfigurationPolicy](#) object as shown in the following code snippet. The values in this new object replace the corresponding values in the existing object. Then, call the [IAggregatePartner.Customers.ById](#) method with the customer ID to retrieve an interface to operations on the specified customer. Next, call the [ConfigurationPolicies.ById](#) method with the policy ID to retrieve an interface to configuration policy operations for the specified policy. Finally, call the [Patch](#) or [PatchAsync](#) method to update the configuration policy.

```
IAggregatePartner partnerOperations;
string selectedCustomerId;
string selectedConfigurationPolicyId;

ConfigurationPolicy configPolicyToBeUpdated = new ConfigurationPolicy()
{
    Name= "Test Config Policy",
    Id = selectedConfigurationPolicyId,
    PolicySettings = new List<PolicySettingsType>() {
        PolicySettingsType.OobeUserNotLocalAdmin,
        PolicySettingsType.RemoveOemPreinstalls }
};

ConfigurationPolicy updatedConfigurationPolicy =
    partnerOperations.CustomersById(selectedCustomerId).ConfigurationPoliciesById(selectedConfigurationPolicyId)
    .Patch(configPolicyToBeUpdated);
```

Sample: [Console test app](#). Project: Partner Center SDK Samples Class: UpdateConfigurationPolicy.cs

# REST request

## Request syntax

METHOD	REQUEST URI
PUT	<code>{baseURL}/v1/customers/{customer-id}/policies/{policy-id}</code> HTTP/1.1

## URI parameter

Use the following path parameters when creating the request.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-id	string	Yes	A GUID-formatted string that identifies the customer.
policy-id	string	Yes	A GUID-formatted string that identifies the policy to update.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

The request body must contain an object that provides the policy information.

NAME	TYPE	REQUIRED	UPDATABLE	DESCRIPTION
id	string	Yes	No	The GUID-formatted string that identifies the policy.
name	string	Yes	Yes	The friendly name of the policy.
category	string	Yes	No	The policy category.
description	string	No	Yes	The policy description.
devicesAssigned	number	No	No	The number of devices.
policySettings	array of strings	Yes	Yes	The policy settings: "none","remove_oem_preinstalls","oobe_use_r_not_local_admin","skip_express_settings","skip_early_oem_registration","skip_eula".

## Request example

```

PUT https://api.partnercenter.microsoft.com/v1/customers/47021739-3426-40bf-9601-
61b4b6d7c793/policies/56edf752-ee77-4fd8-b7f5-df1f74a3a9ac HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: e88d014d-ab70-41de-90a0-f7fd1797267d
MS-CorrelationId: de894e18-f027-4ac0-8b5a-34f0c222af0c
X-Locale: en-US
Content-Length: 256
Content-Type: application/json
Host: api.partnercenter.microsoft.com

{
    "id": "56edf752-ee77-4fd8-b7f5-df1f74a3a9ac",
    "name": "Windows test policy",
    "category": "o_o_b_e",
    "description": "Test policy creation from API",
    "devicesAssigned": 0,
    "policySettings": ["skip_express_settings"]
}

```

## REST response

If successful, the response body contains the [ConfigurationPolicy](#) resource for the new policy.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

### Response example

```

HTTP/1.1 200 OK
Content-Length: 421
Content-Type: application/json; charset=utf-8
MS-CorrelationId: f9fd5973-6ad8-4585-aadc-f2b0443fe27b
MS-RequestId: cb1fa1f3-1381-45d9-99c5-511e5d3efa7c
MS-CV: YrLe3w6BbUSMt1fi.0
MS-ServerId: 030020344
Date: Tue, 25 Jul 2017 18:10:29 GMT

{
    "id": "56edf752-ee77-4fd8-b7f5-df1f74a3a9ac",
    "name": "Windows test policy",
    "category": "o_o_b_e",
    "description": "Test policy creation from API",
    "devicesAssigned": 0,
    "policySettings": ["skip_express_settings"],
    "createdDate": "2017-01-01T00:00:00",
    "lastModifiedDate": "2017-07-25T18:10:15",
    "attributes": {
        "objectType": "ConfigurationPolicy"
    }
}

```

# Get the status of a device batch upload

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center for Microsoft Cloud Germany

How to get the status of a device batch upload for a specified customer.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- The batch tracking identifier returned in the Location header when the device batch was submitted. For more information, see [Upload a list of devices for the specified customer](#).

## C#

To get the status of a device batch upload, first call the [IAggregatePartner.Customers.ById](#) method with the customer ID to retrieve an interface to operations on the specified customer. Then, call the [BatchUploadStatus.ById](#) method with the batch tracking ID to get an interface to batch upload status operations. Finally, call the [Get](#) or [GetAsync](#) method to retrieve the status.

```
// IAggregatePartner partnerOperations;
// string selectedCustomerId;
// string selectedTrackingId;

var status =
    partnerOperations.CustomersById(selectedCustomerId).BatchUploadStatusById(selectedTrackingId).Get();
```

Sample: [Console test app](#). Project: Partner Center SDK Samples Class: GetBatchUploadStatus.cs

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/customers/{customer-id}/batchJobStatus/{batchtracking-id}</code> HTTP/1.1

### URI parameter

Use the following path parameters when creating the request.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-id	string	Yes	A GUID-formatted string that identifies the customer.
batchtracking-id	string	Yes	A GUID-formatted identifier that is used to retrieve a device batch upload status. This ID is returned in the Location header when the device batch is successfully submitted.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/47021739-3426-40bf-9601-61b4b6d7c793/batchjobstatus/0127ed8e-ff72-4983-a3d8-e8d8bd378932 HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: e88d014d-ab70-41de-90a0-f7fd1797267d
MS-CorrelationId: de894e18-f027-4ac0-8b5a-34f0c222af0c
X-Locale: en-US
Host: api.partnercenter.microsoft.com
```

## REST response

If successful, the response contains a [BatchUploadDetails](#) resource.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

## Response example

HTTP/1.1 200 OK  
Content-Length: 400  
MS-CorrelationId: 4a5002a2-0c1b-4e57-b491-dbcf19c0e7b8  
MS-RequestId: 7b3e2e00-b330-4480-9d84-59ace713427f  
MS-CV: YrLe3w6BbUSMt1fi.0  
MS-ServerId: 030020344  
Date: Tue, 25 Jul 2017 17:52:41 GMT

```
{  
    "batchTrackingId": "0127ed8e-ff72-4983-a3d8-e8d8bd378932",  
    "status": "finished",  
    "startedTime": "2017-07-25T10:00:00",  
    "completedTime": "2017-07-25T10:10:00",  
    "devicesStatus": [  
        {  
            "serialNumber": "1234567890",  
            "productKey": "12345-67890-09876-54321-13579",  
            "status": "finished_with_errors",  
            "errorCode": "808",  
            "errorDescription": "ZtdDeviceAssignedToOtherTenant",  
            "attributes": {  
                "objectType": "DeviceUploadDetails"  
            }  
        },  
        {  
            "attributes": {  
                "objectType": "BatchUploadDetails"  
            }  
        }  
    ],  
    "attributes": {  
        "objectType": "BatchUploadDetails"  
    }  
}
```

# Get a list of device batches for the specified customer

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center for Microsoft Cloud Germany

How to retrieve a collection of device batches for the specified customer.

Each device batch contains summary status information about devices that have been enrolled in zero-touch deployment.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select CSP from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## C#

To get the collection of device batches for the specified customer, first call the [IAggregatePartner.Customers.ById](#) method with the customer ID to retrieve an interface to operations on the specified customer. Then, retrieve the value of the [DeviceBatches](#) property to get an interface to device batch collection operations. Finally, call the [Get](#) or [GetAsync](#) method to retrieve the collection.

```
// IAggregatePartner partnerOperations;
// string selectedCustomerId;

var devicesBatches =
    partnerOperations.CustomersById(selectedCustomerId).DeviceBatches.Get();
```

Sample: [Console test app](#). Project: Partner Center SDK Samples Class: GetDevicesBatches.cs

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/customers/{customer-id}/deviceBatches</code> HTTP/1.1

### URI parameter

Use the following path parameters when creating the request.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-id	string	Yes	A GUID-formatted string that identifies the customer.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/47021739-3426-40bf-9601-61b4b6d7c793/deviceBatches
HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: e88d014d-ab70-41de-90a0-f7fd1797267d
MS-CorrelationId: de894e18-f027-4ac0-8b5a-34f0c222af0c
X-Locale: en-US
Host: api.partnercenter.microsoft.com
```

## REST response

If successful, the response body contains the collection of [DeviceBatch](#) resources.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

## Response example

HTTP/1.1 200 OK  
Content-Length: 339  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: 4a5002a2-0c1b-4e57-b491-dbcf19c0e7b8  
MS-RequestId: 7b3e2e00-b330-4480-9d84-59ace713427f  
MS-CV: YrLe3w6BbUSMt1fi.0  
MS-ServerId: 030020344  
Date: Tue, 25 Jul 2017 17:52:41 GMT

```
{  
    "totalCount": 1,  
    "items": [{  
        "id": "Test batch",  
        "status": "finished",  
        "creationDate": "2017-07-25T01:51:00",  
        "devicesCount": 5,  
        "devicesLink": {  
            "uri": "/customers/47021739-3426-40bf-9601-61b4b6d7c793/deviceBatches/Test batch/devices",  
            "method": "GET",  
            "headers": []  
        },  
        "attributes": {  
            "objectType": "DeviceBatch"  
        }  
    },  
    "attributes": {  
        "objectType": "Collection"  
    }  
}
```

# Get a list of devices for the specified batch and customer

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center for Microsoft Cloud Germany

This article describes how to retrieve a collection of devices in a specified device batch for a specified customer. Each device resource contains details about the device.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A device batch identifier.

## C#

To retrieve a collection of the devices in a specified device batch for the specified customer:

1. Call the **IAggregatePartner.Customers.ById** method with the customer ID to retrieve an interface to operations on the specified customer.
2. Call the **DeviceBatches.ById** method to get an interface to device batch collection operations for the specified batch.
3. Retrieve the **Devices** property to get an interface to device collection operations for the batch.
4. Call the **Get** or **GetAsync** method to retrieve the collection of devices.

```
IAggregatePartner partnerOperations;
string selectedCustomerId;
string selectedDeviceBatchId;

var devices =
    partnerOperations.CustomersById(selectedCustomerId).DeviceBatchesById(selectedDeviceBatchId).Devices.Get();
```

For an example, see the following:

- Sample: [Console test app](#)
- Project: [Partner Center SDK Samples](#)
- Class: [GetDevices.cs](#)

# REST request

## Request syntax

METHOD	REQUEST URI
GET	<code>{baseURL}/v1/customers/{customer-id}/deviceBatches/{devicebatch-id}/devices</code> HTTP/1.1

## URI parameters

Use the following path parameters when creating the request.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-id	string	Yes	A GUID-formatted string that identifies the customer.
devicebatch-id	string	Yes	A string identifier that identifies the device batch.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/47021739-3426-40bf-9601-61b4b6d7c793/deviceBatches/testbatch/devices HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: e88d014d-ab70-41de-90a0-f7fd1797267d
MS-CorrelationId: de894e18-f027-4ac0-8b5a-34f0c222af0c
X-Locale: en-US
Host: api.partnercenter.microsoft.com
```

# REST response

If successful, the response body contains a paged collection of [Device](#) resources. The collection contains 100 devices in a page. To retrieve the next page of 100 devices, the continuationToken in the response body must be included in the subsequent request as an MS-ContinuationToken header.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For a full list, see [Partner Center REST error codes](#).

## Response example

HTTP/1.1 200 OK  
Content-Length: 1742  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: 4a5002a2-0c1b-4e57-b491-dbcf19c0e7b8  
MS-RequestId: 7b3e2e00-b330-4480-9d84-59ace713427f  
MS-CV: YrLe3w6BbUSMt1fi.0  
MS-ServerId: 030020344  
Date: Tue, 25 Jul 2017 17:52:41 GMT

```
{  
    "totalCount": 2,  
    "items":  
    [{  
        "id": "7c141ea9-2816-4e15-a819-53f6856499ff",  
        "serialNumber": "2R9-ZNP67",  
        "productKey": "00329-00000-0003-AA6069",  
        "modelName": "Precision WorkStation T7500",  
        "oemManufacturerName": "Dell Inc.",  
        "policies": [  
            {"key": "o_o_b_e",  
             "value": null  
        }  
        ],  
        "uploadedDate": "2017-08-09T14:43:26.0092288-07:00",  
        "attributes": {  
            "objectType": "Device"  
        }  
    }, {  
        "id": "e528a62f-5031-49f4-bea7-5faf47388fd",  
        "serialNumber": "1234567890",  
        "productKey": "12345-67890-09876-54321-13579",  
        "modelName": "HP Z420 Workstation",  
        "oemManufacturerName": "Hewlett-Packard",  
        "policies": [  
            {"key": "o_o_b_e",  
             "value": null  
        }  
        ],  
        "uploadedDate": "2017-08-09T14:35:51.3126144-07:00",  
        "attributes": {  
            "objectType": "Device"  
        }  
    }  
],  
"attributes": {  
    "objectType": "Collection"  
}  
}
```

# Upload a list of devices to create a new batch for the specified customer

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center for Microsoft Cloud Germany

How to upload a list of information about devices to create a new batch for the specified customer. This creates a device batch for enrollment in zero-touch deployment, and associates the devices and the device batch with the specified customer.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials. Follow the [secure app model](#) when using App+User authentication with Partner Center APIs.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select CSP from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- The list of device resources that provide the information about the individual devices.

## C#

To upload a list of devices to create a new device batch:

1. Instantiate a new [List](#) of type [Device](#) and populate the list with the devices. The following combinations of populated properties are required at a minimum for identifying each device:
  - [HardwareHash + ProductKey](#).
  - [HardwareHash + SerialNumber](#).
  - [HardwareHash + ProductKey + SerialNumber](#).
  - [HardwareHash](#) only.
  - [ProductKey](#) only.
  - [SerialNumber + OemManufacturerName + ModelName](#).
2. Instantiate a [DeviceBatchCreationRequest](#) object and set the [BatchId](#) property to a unique name of your choosing, and the [Devices](#) property to the list of devices to upload.
3. Process the device batch creation request by calling the [IAggregatePartner.Customers.ById](#) method with the customer identifier to retrieve an interface to operations on the specified customer.
4. Call the [DeviceBatches.Create](#) or [CreateAsync](#) method with the device batch creation request to create the batch.

```

IAggregatePartner partnerOperations;
string selectedCustomerId;

List<Device> devicesToBeUploaded = new List<Device>
{
    new Device
    {
        HardwareHash = "DummyHash123",
        ProductKey = "00329-00000-0003-AA606",
        SerialNumber = "1R9-ZNP67"
    }
};

DeviceBatchCreationRequest
newDeviceBatch = new DeviceBatchCreationRequest
{
    BatchId = "SDKTestDeviceBatch",
    Devices = devicesToBeUploaded
};

var trackingLocation =
    partnerOperations.CustomersById(selectedCustomerId).DeviceBatches.Create(newDeviceBatch);

```

Sample: [Console test app](#). Project: Partner Center SDK Samples Class: CreateDeviceBatch.cs

## REST request

### Request syntax

METHOD	REQUEST URI
POST	<a href="#"><i>{baseUrl}</i></a> /v1/customers/{customer-id}/deviceBatches HTTP/1.1

### URI parameter

Use the following path parameters when creating the request.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-id	string	Yes	A GUID-formatted string that identifies the customer.

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

The request body must contain a [DeviceBatchCreationRequest](#) resource.

### Request example

```
POST https://api.partnercenter.microsoft.com/v1/customers/c7f3c849-129f-4b85-a96d-4f8e88b315a3/deviceBatches
HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: c245d5f2-1de3-4ae0-9e42-95e38e3cb8ff
MS-CorrelationId: e3f26e6a-044f-4371-ad52-0d91ce4200be
X-Locale: en-US
MS-PartnerCenter-Application: Partner Center .NET SDK Samples
Content-Type: application/json
Host: api.partnercenter.microsoft.com
Content-Length: 340
Expect: 100-continue
Connection: Keep-Alive
{
    "BatchId": "SDKTestDeviceBatch",
    "Devices": [
        {
            "Id": null,
            "SerialNumber": "1R9-ZNP67",
            "ProductKey": "00329-00000-0003-AA606",
            "HardwareHash": "DummyHash123",
            "Policies": null,
            "CreatedBy": null,
            "UploadedDate": "2001-01-01T00:00:00",
            "AllowedOperations": null,
            "Attributes": {
                "ObjectType": "Device"
            }
        }
    ],
    "Attributes": {
        "ObjectType": "DeviceBatchCreationRequest"
    }
}
```

## REST response

If successful, the response contains a **Location** header that has a URI that can be used to retrieve device upload status. Save this URI for use with other related REST APIs.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

### Response example

```
HTTP/1.1 202 Accepted
Content-Length: 0
Location: /customers/c7f3c849-129f-4b85-a96d-4f8e88b315a3/batchJobStatus/beba2053-5401-46ff-9223-7e841ed78fbf
MS-CorrelationId: 772871a9-399b-4f3b-b8c7-38f550e4f22a
MS-RequestId: cb82f7d6-f0d9-44d4-82f9-f6eee6e68390
MS-CV: iqOqN0FnaE2y0HcD.0
MS-ServerId: 030020525
Date: Thu, 28 Sep 2017 20:35:35 GMT
```

# Upload a list of devices to an existing batch for the specified customer

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center for Microsoft Cloud Germany

How to upload a list of information about devices to an existing batch for the specified customer. This associates the devices with a device batch already created.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- The device batch identifier.
- The list of device resources that provide the information about the individual devices.

## C#

To upload a list of devices to an existing device batch, first, instantiate a new [List](#) of type **Device** and populate the list with the devices. The following combinations of populated properties are required at a minimum for identifying each device:

- [HardwareHash](#) + [ProductKey](#).
- [HardwareHash](#) + [SerialNumber](#).
- [HardwareHash](#) + [ProductKey](#) + [SerialNumber](#).
- [HardwareHash](#) only.
- [ProductKey](#) only.
- [SerialNumber](#) + [OemManufacturerName](#) + [ModelName](#).

Then, call the [IAggregatePartner.Customers.ById](#) method with the customer identifier to retrieve an interface to operations on the specified customer. Next, call the [DeviceBatches.ById](#) method with the device batch identifier to get an interface to operations for the specified batch. Finally, call the [Devices.Create](#) or [CreateAsync](#) method with the list of devices to add the devices to the device batch.

```

IAggregatePartner partnerOperations;
string selectedCustomerId;
string selectedDeviceBatchId;

List<Device> devicesToBeUploaded = new List<Device>
{
    new Device
    {
        HardwareHash = "DummyHash1234",
        ProductKey = "00329-00000-0003-AA606",
        SerialNumber = "2R9-ZNP67"
    },
    new Device
    {
        HardwareHash = "DummyHash12345",
        ProductKey = "00329-00000-0003-AA606",
        SerialNumber = "2R9-ZNP67"
    }
};

var trackingLocation =
    partnerOperations.CustomersById(selectedCustomerId).DeviceBatchesById(selectedDeviceBatchId).Devices.Create(
        devicesToBeUploaded);

```

Sample: [Console test app](#). Project: Partner Center SDK Samples Class: CreateDevices.cs

## REST request

### Request syntax

METHOD	REQUEST URI
POST	<a href="#"><i>{baseUrl}</i>/v1/customers/{customer-id}/deviceBatches/{devicebatch-id}/devices</a> HTTP/1.1

### URI parameter

Use the following path and query parameters when creating the request.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-id	string	Yes	A GUID-formatted string that identifies the customer.
devicebatch-id	string	Yes	A string identifier that identifies the device batch.

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

The request body must contain an array of [Device](#) objects. The following combinations of fields for identifying a device are accepted:

- hardwareHash + productKey.
- hardwareHash + serialNumber.
- hardwareHash + productKey + serialNumber.

- hardwareHash only.
- productKey only.
- serialNumber + oemManufacturerName + modelName.

### Request example

```
POST https://api.partnercenter.microsoft.com/v1/customers/c7f3c849-129f-4b85-a96d-4f8e88b315a3/deviceBatches/Test/devices HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: e286d69b-7f5f-4098-8999-21d3b54e4e47
MS-CorrelationId: 772871a9-399b-4f3b-b8c7-38f550e4f22a
X-Locale: en-US
MS-PartnerCenter-Application: Partner Center .NET SDK Samples
Content-Type: application/json
Host: api.partnercenter.microsoft.com
Content-Length: 482
Expect: 100-continue

[{
    "Id": null,
    "SerialNumber": "2R9-ZNP67",
    "ProductKey": "00329-00000-0003-AA606",
    "HardwareHash": "DummyHash1234",
    "Policies": null,
    "CreatedBy": null,
    "UploadedDate": "0001-01-01T00:00:00",
    "AllowedOperations": null,
    "Attributes": {
        "ObjectType": "Device"
    }
}, {
    "Id": null,
    "SerialNumber": "2R9-ZNP67",
    "ProductKey": "00329-00000-0003-AA606",
    "HardwareHash": "DummyHash12345",
    "Policies": null,
    "CreatedBy": null,
    "UploadedDate": "0001-01-01T00:00:00",
    "AllowedOperations": null,
    "Attributes": {
        "ObjectType": "Device"
    }
}]

```

## REST response

If successful, the response contains a **Location** header that has a URI that can be used to retrieve device upload status. Save this URI for use with other related REST APIs.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

### Response example

HTTP/1.1 202 Accepted

Content-Length: 0

Location: /customers/c7f3c849-129f-4b85-a96d-4f8e88b315a3/batchJobStatus/16c00110-e79a-433d-aa28-f69dd60df671

MS-CorrelationId: 772871a9-399b-4f3b-b8c7-38f550e4f22a

MS-RequestId: e286d69b-7f5f-4098-8999-21d3b54e4e47

MS-CV: OBkGN9pSN0a5xvua.0

MS-ServerId: 101112012

Date: Thu, 28 Sep 2017 20:08:46 GMT

# Update a list of devices with a policy

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center for Microsoft Cloud Germany

How to update a list of devices with a configuration policy for the specified customer.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- The policy identifier.
- The device identifiers of the devices to update.

## C#

To update a list of devices with the specified configuration policy, first, instantiate a [List](#) of type `KeyValuePair(PolicyCategory, string)` and add the policy to apply, as shown in the following code example. You will need the policy identifier of the policy.

Then, create a list of [Device](#) objects to be updated with the policy, specifying the device identifier and the list that contains the policy to apply, for each device. Next, instantiate a [DevicePolicyUpdateRequest](#) object and set the **Devices** property to the list of device objects.

To process the device policy update request, call the [IAggregatePartner.Customers.ById](#) method with the customer identifier to retrieve an interface to operations on the specified customer. Then, retrieve the [DevicePolicy](#) property to get an interface to customer device collection operations. Finally, call the [Update](#) method with the DevicePolicyUpdateRequest object to update the devices with the policy.

```

IAggregatePartner partnerOperations;
string selectedCustomerId;
string selectedConfigurationPolicyId;
string selectedDeviceId;

// Indicate the policy to apply to the list of devices.
List<KeyValuePair<PolicyCategory, string>>
    policyToBeAdded = new List<KeyValuePair<PolicyCategory, string>>
{
    new KeyValuePair<PolicyCategory, string>
        (PolicyCategory.OOBIE, selectedConfigurationPolicyId)
};

// Create a list of devices to be updated with a policy.
List<Device> devices = new List<Device>
{
    new Device
    {
        Id = selectedDeviceId,
        Policies=policyToBeAdded
    }
};

// Instantiate a DevicePolicyUpdateRequest object.
DevicePolicyUpdateRequest
    devicePolicyUpdateRequest = new DevicePolicyUpdateRequest
{
    Devices = devices
};

// Process the DevicePolicyUpdateRequest.
var trackingLocation =
    partnerOperations.CustomersById(selectedCustomerId).DevicePolicy.Update(devicePolicyUpdateRequest);

```

Sample: [Console test app](#). Project: Partner Center SDK Samples Class: UpdateDevicesPolicy.cs

## REST request

### Request syntax

METHOD	REQUEST URI
PATCH	<a href="#"><i>{baseURL}</i></a> /v1/customers/{customer-id}/DevicePolicyUpdates HTTP/1.1

### URI parameter

Use the following path parameters when creating the request.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-id	string	Yes	A GUID-formatted string that identifies the customer.

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

The request body must contain a [DevicePolicyUpdateRequest](#) resource.

### Request example

```

PATCH https://api.partnercenter.microsoft.com/v1/customers/c7f3c849-129f-4b85-a96d-
4f8e88b315a3/DevicePolicyUpdates HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 1b658428-5afa-46d4-af86-c9c6af5634e2
MS-CorrelationId: 49b1e7b2-82e7-4403-b63b-8765269b448d
X-Locale: en-US
MS-PartnerCenter-Application: Partner Center .NET SDK Samples
Content-Type: application/json
Host: api.partnercenter.microsoft.com
Content-Length: 363
Expect: 100-continue
Connection: Keep-Alive

{
  "Devices": [
    {
      "Id": "9993-8627-3608-6844-6369-4361-72",
      "SerialNumber": null,
      "ProductKey": null,
      "HardwareHash": null,
      "Policies": [
        {
          "Key": "o_o_b_e",
          "Value": "15a04610-9229-4e80-94e0-0e826a09c9e2"
        }
      ],
      "CreatedBy": null,
      "UploadedDate": "0001-01-01T00:00:00",
      "AllowedOperations": null,
      "Attributes": {
        "ObjectType": "Device"
      }
    },
    {
      "Attributes": {
        "ObjectType": "DevicePolicyUpdateRequest"
      }
    }
  ]
}

```

## REST response

If successful, the response contains a **Location** header that has a URI that can be used to retrieve the status of this batch process. Save this URL for use with other related REST APIs.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

### Response example

```

HTTP/1.1 202 Accepted
Content-Length: 0
Location: /customers/c7f3c849-129f-4b85-a96d-4f8e88b315a3/batchJobStatus/a15f3996-620a-4404-9f1f-4c2de78de0de
MS-CorrelationId: 49b1e7b2-82e7-4403-b63b-8765269b448d
MS-RequestId: 1b658428-5afa-46d4-af86-c9c6af5634e2
MS-CV: rCXyd8Z/lUSxUd0P.0
MS-ServerId: 020021921
Date: Thu, 28 Sep 2017 21:33:05 GMT

```

# Delete a device for the specified customer

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center for Microsoft Cloud Germany

This article explains how to delete a device that belongs to a specified customer.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- The device batch identifier.
- The device identifier.

## C#

To delete a device for the specified customer:

1. Call the **IAggregatePartner.Customers.ById** method with the customer identifier to retrieve an interface to operations on the customer.
2. Call the **DeviceBatches.ById** method with the device batch identifier to get an interface to operations for the specified batch.
3. Call the **Devices.ById** method to get an interface to operation on the specified device.
4. Call the **Delete** or **DeleteAsync** method to delete the device from the batch.

```
IAggregatePartner partnerOperations;
string selectedCustomerId;
string selectedDeviceBatchId;
string selectedDeviceId;

partnerOperations.CustomersById(selectedCustomerId).DeviceBatchesById(selectedDeviceBatchId).DevicesById(selectedDeviceId).Delete();
```

Sample: [Console test app](#). Project: Partner Center SDK Samples Class: DeleteDevice.cs

## REST request

### Request syntax

METHOD	REQUEST URI
DELETE	<code>/baseURL/v1/customers/{customer-id}/deviceBatches/{devicebatch-id}/devices/{device-id}</code> HTTP/1.1

#### URI parameters

Use the following path parameters when creating the request.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-id	string	Yes	A GUID-formatted string that identifies the customer.
devicebatch-id	string	Yes	The device batch identifier of the batch that contains the device.
device-id	string	Yes	The device identifier.

#### Request headers

For more information, see [Partner Center REST headers](#).

#### Request body

None

#### Request example

```
DELETE https://api.partnercenter.microsoft.com/v1/customers/47021739-3426-40bf-9601-61b4b6d7c793/deviceBatches/testbatch/devices/7b11cd8b-dd1e-4840-8c4a-84215e4de782 HTTP/1.1
Authorization: Bearer <token>
MS-RequestId: e88d014d-ab70-41de-90a0-f7fd1797267d
MS-CorrelationId: de894e18-f027-4ac0-8b5a-34f0c222af0c
X-Locale: en-US
Content-Length: 0
Content-Type: application/json
Host: api.partnercenter.microsoft.com
```

## REST response

If successful, the response returns a **204 No Content** status code.

#### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

#### Response example

```
HTTP/1.1 204 No Content
Content-Length: 0
MS-CorrelationId: 394d96d0-05b2-4b02-b907-0697632ee3bb
MS-RequestId: 8b3e6f78-220b-4177-861b-33d6f38f7b97
MS-CV: YrLe3w6BbUSMt1fi.0
MS-ServerId: 030020344
Date: Tue, 25 Jul 2017 17:58:53 GMT
```

# Manage accounts and profiles

4/23/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

This section describes the ways that Cloud Solution Provider partners can use Partner Center to programmatically manage their user accounts and profiles.

- [Get legal business profile](#)
- [Get an organization profile](#)
- [Get partner billing profile](#)
- [Get Microsoft Partner Network profile](#)
- [Get support profile](#)
- [Update legal business profile](#)
- [Update a partner's billing profile](#)
- [Update support profile](#)
- [Update an organization profile](#)

## Work with other partners

- [Get partner by MPN ID](#)
- [Get all subscriptions by partner](#)

For more information, see [Scenarios](#), specifically the [Background](#) section.

# Get a customer's subscriptions by partner MPN ID

4/25/2020 • 3 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

How to get a list of subscriptions provided by a given partner to a specified customer.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A partner Microsoft Partner Network (MPN) identifier.

## C#

To get a list of subscriptions provided by a given partner to a specified customer, first use the [IAggregatePartner.Customers.ById](#) method with the customer ID to identify the customer. Then get an interface to customer subscription collection operations from the [Subscriptions](#) property, and call the [ByPartner](#) method with the MPN ID to identify the partner and retrieve an interface to partner subscription operations. Finally, call the [Get](#) or [GetAsync](#) method to get the collection.

```
// IAggregatePartner partnerOperations;
// string customerId;
// string partnerMpnId;

var customerSubscriptionsByMpnId =
    partnerOperations.Customers.ById(customerId).Subscriptions.ByPartner(partnerMpnId).Get();
```

Sample: [Console test app](#). Project: Partner Center SDK Samples Class: GetSubscriptionsByMpnid.cs

## Java

The [Partner Center Java SDK](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To get a list of subscriptions provided by a given partner to a specified customer, first use the [IAggregatePartner.getCustomers.byId](#) function with the customer ID to identify the customer. Then get an

interface to customer subscription collection operations from the `getSubscriptions` function, and call the `byPartner` function with the MPN ID to identify the partner and retrieve an interface to partner subscription operations. Finally, call the `get` function to get the collection.

```
// IAggregatePartner partnerOperations;
// String customerId;
// String partnerMpnId;

ResourceCollection<Subscription> customerSubscriptionsByMpnId =
partnerOperations.getCustomers().byId(customerId).getSubscriptions().byPartner(partnerMpnId).get();
```

## PowerShell

The [Partner Center PowerShell module](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To get a list of subscriptions provided by a given partner to a specified customer, execute the `Get-PartnerCustomerSubscription` command. Specify the customer ID to identify the customer using the `CustomerId` parameter, and populate the `MpnId` parameter with the MPN ID to identify the partner.

```
# $customerId
# $partnerMpnId

Get-PartnerCustomerSubscription -CustomerId $customerId -MpnId $partnerMpnId
```

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/customers/{customer-id}/subscriptions?mpn_id={mpn-id}</code> HTTP/1.1

### URI parameters

Use the following path and query parameters to identify the customer and partner.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-id	string	Yes	A GUID formatted string that identifies the customer.
mpn-id	int	Yes	A Microsoft Partner Network ID that identifies the partner.

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

None.

### Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/c501c3c4-d776-40ef-9ecf-9cefb59442c1/subscriptions?  
mpn_id=4847383 HTTP/1.1  
Authorization: Bearer <token>  
Accept: application/json  
MS-RequestId: d0e38dfd-a2c5-4a14-ac06-12d30f0ec54e  
MS-CorrelationId: e937630b-8341-4d70-8f73-450d32ee0189  
X-Locale: en-US  
Host: api.partnercenter.microsoft.com  
Connection: Keep-Alive
```

## REST response

If successful, the response body contains the collection of [Subscription](#) resources.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

### Response example

```
HTTP/1.1 200 OK
Content-Length: 985
Content-Type: application/json; charset=utf-8
MS-CorrelationId: e937630b-8341-4d70-8f73-450d32ee0189
MS-RequestId: d0e38dfd-a2c5-4a14-ac06-12d30f0ec54e
MS-CV: LdFhumtx6Ea0K15Z.0
MS-ServerId: 101112202
Date: Thu, 13 Apr 2017 20:58:08 GMT

{
    "totalCount": 1,
    "items": [
        {
            "id": "42226ED6-070A-4E0F-B80C-4CDFB3E97AA7",
            "offerId": "DB2E705F-B82A-4024-A3D5-D88E12F2DB35",
            "offerName": "Intune Device",
            "friendlyName": "new offer purchase",
            "quantity": 5,
            "unitType": "Licenses",
            "creationDate": "2017-04-10T23:02:26.02Z",
            "effectiveStartDate": "2017-04-10T00:00:00Z",
            "commitmentEndDate": "2018-05-07T00:00:00Z",
            "status": "active",
            "autoRenewEnabled": true,
            "isTrial": false,
            "billingType": "license",
            "billingCycle": "monthly",
            "partnerId": "4847383",
            "contractType": "subscription",
            "links": {
                "offer": {
                    "uri": "/offers/DB2E705F-B82A-4024-A3D5-D88E12F2DB35?country=US",
                    "method": "GET",
                    "headers": []
                },
                "self": {
                    "uri": "/customers/c501c3c4-d776-40ef-9ecf-9cefb59442c1/subscriptions/42226ED6-070A-4E0F-B80C-4CDFB3E97AA7",
                    "method": "GET",
                    "headers": []
                }
            },
            "orderId": "3EDDCAC6-63B2-4C40-B0B6-F47E18301492",
            "attributes": {
                "etag": "eyJpZCI6IjQyMjI2ZWQ2LTA3MGEtNGUwZi1i0DBjLTRjZGZiM2U5N2FhNyIsInZlcnPpb24i0jF9",
                "objectType": "Subscription"
            }
        }
    ],
    "attributes": {
        "objectType": "Collection"
    }
}
```

## See also

- [Partner Center Analytics - Resources](#)

# Get an organization profile

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Gets an object representing the partner's organization profile.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.

## C#

To get your organization profile, use your **IAggregatePartner.Profiles** collection and call the **OrganizationProfile** property. Finally, call the [Get\(\)](#) or [GetAsync\(\)](#) methods.

```
// IAggregatePartner partnerOperations;  
  
OrganizationProfile organizationProfile = partnerOperations.Profiles.OrganizationProfile.Get();
```

Sample: [Console test app](#). Project: PartnerCenterSDK.FeaturesSamples Class: GetOrganizationProfile.cs

## Java

The [Partner Center Java SDK](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To get your organization profile, use your **IAggregatePartner.getProfiles** function and call the **getOrganizationProfile** function. Finally, call the **get()** function.

```
// IAggregatePartner partnerOperations;  
  
OrganizationProfile organizationProfile = partnerOperations.getProfiles().getOrganizationProfile().get();
```

## PowerShell

The [Partner Center PowerShell module](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To get your organization profile, execute the [Get-PartnerOrganizationProfile](#) command.

## Get-PartnerOrganizationProfile

# REST request

## Request syntax

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/profiles/organization</code> HTTP/1.1

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/profiles/organization HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: b85cb7ab-cc2e-4966-93f0-cf0d8377a93f
MS-CorrelationId: 1bb03149-88d2-4bc2-9cc1-d6e83890fa9e
```

# REST response

If successful, this method returns an [OrganizationProfile](#) object in the response body.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

## Response example

HTTP/1.1 200 OK  
Content-Length: 648  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: 1bb03149-88d2-4bc2-9cc1-d6e83890fa9e  
MS-RequestId: b85cb7ab-cc2e-4966-93f0-cf0d8377a93f  
Date: Tue, 22 Mar 2016 17:11:06 GMT

```
{  
    "id":<id>,  
    "companyName": "TEST_TEST_BugBash1",  
    "defaultAddress":{  
        "country": "US",  
        "city": "Redmond",  
        "state": "WA",  
        "addressLine1": "Two Microsoft Way",  
        "addressLine2": "",  
        "postalCode": "98052",  
        "firstName": "Test",  
        "lastName": "Account",  
        "phoneNumber": ""  
    },  
    "tenantId":<tenantID>,  
    "domain": "testtestbugbash1.onmicrosoft.com",  
    "email": "test-partner@microsoft.com",  
    "language": "es",  
    "culture": "es-US",  
    "profileType": "OrganizationProfile",  
    "links":{  
        "self":{  
            "uri": "/profiles/organization",  
            "method": "GET",  
            "headers": []  
        }  
    },  
    "attributes":{  
        "etag": <etag>,  
        "objectType": "OrganizationProfile"  
    }  
}
```

# Get customers of an indirect reseller

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## Applies To

- Partner Center

How to get a list of the customers of an indirect reseller.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- The tenant identifier of the indirect reseller.

## C#

To get a collection of customers that have a relationship with the specified indirect reseller, first instantiate a [SimpleFieldFilter](#) object to create the filter. You'll need to pass the [CustomerSearchField.IndirectReseller](#) enumeration member converted to a string, and indicate [FieldFilterOperation.StartsWith](#) as the type of filter operation. You'll also need to provide the tenant identifier of the indirect reseller to filter by.

Next, instantiate an [iQuery](#) object to pass to the query by calling the [BuildSimpleQuery](#) method and passing it the filter. [BuildSimplyQuery](#) is just one of the query types supported by the [QueryFactory](#) class.

To execute the filter and get the result, first use [IAggregatePartner.Customers](#) to get an interface to the partner's customer operations. Then call the [Query](#) or [QueryAsync](#) method.

To create an enumerator for traversing paged results, get the customer collection enumerator factory interface from the [IAggregatePartner.Enumerators.Customers](#) property, and then call [Create](#), as shown in the code below, passing the variable that holds the customer collection.

```

IAggregatePartner partnerOperations;
string indirectResellerId;

// Create a filter.
var filter = new SimpleFieldFilter(
    CustomerSearchField.IndirectReseller.ToString(),
    FieldFilterOperation.StartsWith,
    indirectResellerId);

// Create an iQuery object to pass to the Query method.
var myQuery = QueryFactory.Instance.BuildSimpleQuery(filter);

// Get the collection of matching customers.
var customersPage = partnerOperations.Customers.Query(myQuery);

// Create a customer enumerator for traversing the customer pages.
var customersEnumerator = partnerOperations.Enumerators.Customers.Create(customersPage);
int pageNumber = 1;

while (customersEnumerator.HasValue)
{
    // Work with the current page.
    foreach (var c in customersEnumerator.Current.Items)
    {
        // Display customer tenant identifier and company name.
        Console.WriteLine(string.Format("{0} - {1}.",c.Id,c.CompanyProfile.CompanyName));
    }
    // Get the next page of customers.
    customersEnumerator.Next();
}

```

Sample: [Console test app](#) Project: Partner Center SDK Samples Class: GetCustomersOfIndirectReseller.cs

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<a href="#"><i>{baseURL}</i></a> /v1/customers?size={size}?filter={filter} HTTP/1.1

### URI parameter

Use the following query parameters to create the request.

NAME	TYPE	REQUIRED	DESCRIPTION
size	int	No	The number of results to be displayed at one time. This parameter is optional.

Name	Type	Required	Description
filter	filter	Yes	The query that filters the search. To retrieve customers for a specified indirect reseller, you must insert the indirect reseller identifier and include and encode the following string: {"Field":"IndirectReseller","Value":"{indirect reseller identifier}","Operator":"starts_with"}.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example (encoded)

```
GET https://api.partnercenter.microsoft.com/v1/customers?
size=0&filter=%7B%22Field%22%3A%22IndirectReseller%22%2C%22Value%22%3A%22484e548c-f5f3-4528-93a9-
c16c6373cb59%22%2C%22operator%22%3A%22starts_with%22%7D HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: aa04fb9d-c6b6-4754-8a6a-86e00cdd5ccb
MS-CorrelationId: b4e67a78-0692-45d1-b408-04b9178a8ac6
X-Locale: en-US
Host: api.partnercenter.microsoft.com
```

## Request example (decoded)

```
GET https://api.partnercenter.microsoft.com/v1/customers?size=0&filter=
{"Field":"IndirectReseller","Value":"484e548c-f5f3-4528-93a9-c16c6373cb59","Operator":"starts_with"} HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: aa04fb9d-c6b6-4754-8a6a-86e00cdd5ccb
MS-CorrelationId: b4e67a78-0692-45d1-b408-04b9178a8ac6
X-Locale: en-US
Host: api.partnercenter.microsoft.com
```

## REST response

If successful, the response body contains information about the reseller's customers.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center error codes](#).

### Response example

```
HTTP/1.1 200 OK
Content-Length: 2273
Content-Type: application/json; charset=utf-8
MS-CorrelationId: b4e67a78-0692-45d1-b408-04b9178a8ac6
MS-RequestId: aa04fb9d-c6b6-4754-8a6a-86e00cdd5ccb
```

MS-CV: XI2/vIHmIEGVlGL9.0  
MS-ServerId: 101112012  
Date: Tue, 11 Apr 2017 23:31:28 GMT

```
{  
    "totalCount": 2,  
    "items": [  
        {"id": "53eb21cb-6b2d-4ee5-9e92-27dfc927e93c",  
        "companyProfile": {  
            "tenantId": "53eb21cb-6b2d-4ee5-9e92-27dfc927e93c",  
            "domain": "FourthCoffee137.onmicrosoft.com",  
            "companyName": "FourthCoffee137",  
            "links": {  
                "self": {  
                    "uri": "/customers/53eb21cb-6b2d-4ee5-9e92-27dfc927e93c/profiles/company",  
                    "method": "GET",  
                    "headers": []  
                }  
            },  
            "attributes": {  
                "objectType": "CustomerCompanyProfile"  
            }  
        },  
        "relationshipToPartner": "reseller",  
        "links": {  
            "self": {  
                "uri": "/customers/53eb21cb-6b2d-4ee5-9e92-27dfc927e93c",  
                "method": "GET",  
                "headers": []  
            }  
        },  
        "attributes": {  
            "objectType": "Customer"  
        }  
    }, {  
        "id": "3dfe847b-cad9-4fc1-86d3-cf16c2790087",  
        "companyProfile": {  
            "tenantId": "3dfe847b-cad9-4fc1-86d3-cf16c2790087",  
            "domain": "WingtipToys1254789149.onmicrosoft.com",  
            "companyName": "Wingtip Toys1254789149",  
            "links": {  
                "self": {  
                    "uri": "/customers/3dfe847b-cad9-4fc1-86d3-cf16c2790087/profiles/company",  
                    "method": "GET",  
                    "headers": []  
                }  
            },  
            "attributes": {  
                "objectType": "CustomerCompanyProfile"  
            }  
        },  
        "relationshipToPartner": "reseller",  
        "links": {  
            "self": {  
                "uri": "/customers/3dfe847b-cad9-4fc1-86d3-cf16c2790087",  
                "method": "GET",  
                "headers": []  
            }  
        },  
        "attributes": {  
            "objectType": "Customer"  
        }  
    },  
],  
"attributes": {  
    "objectType": "Collection"  
}  
}
```



# Get indirect resellers of a customer

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## Applies To

- Partner Center

How to get a list of the indirect resellers that have a relationship with a specified customer.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## C#

To retrieve a list of indirect resellers with whom the specified customer has a relationship, first get an interface to customer collection operations for the specific customer from the `partnerOperations.Customers` property by providing the customer ID to identify the customer. Then call the `Relationships.Get` or `Get_Async` method to get the list of indirect resellers.

```
// IAggregatePartner partnerOperations;
// string customerId;

var indirectResellers = partnerOperations.Customers[customerId].Relationships.Get();
```

Sample: [Console test app](#) Project: Partner Center SDK Samples Class: GetIndirectResellersOfCustomer.cs

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseURL}/v1/customers/{customer-id}/relationships</code> HTTP/1.1

### URI parameter

Use the following path parameter to identify the customer.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-id	string	Yes	A GUID formatted string that identifies the customer.

### Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/c501c3c4-d776-40ef-9ecf-9cefb59442c1/relationships
HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: c9251710-5a30-4cd3-891a-c42d550af9a8
MS-CorrelationId: a96f326c-a392-44f4-bcfe-43152a756ba8
X-Locale: en-US
Host: api.partnercenter.microsoft.com
```

## REST response

If successful, the response body contains a collection of [PartnerRelationship](#) resources to identify the resellers.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center error codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 264
Content-Type: application/json; charset=utf-8
MS-CorrelationId: a96f326c-a392-44f4-bcfe-43152a756ba8
MS-RequestId: c9251710-5a30-4cd3-891a-c42d550af9a8
MS-CV: plJP3ufU0UqXMeuh.0
MS-ServerId: 020021921
Date: Fri, 07 Apr 2017 23:42:11 GMT

{
    "totalCount": 1,
    "items": [
        {
            "id": "484e548c-f5f3-4528-93a9-c16c6373cb59",
            "name": "First Up Consultants",
            "relationshipType": "is_indirect_cloud_solution_provider_of",
            "mpnId": "4847383",
            "attributes": {
                "objectType": "PartnerRelationship"
            }
        }
    ],
    "attributes": {
        "objectType": "Collection"
    }
}
```

# Get Microsoft Partner Network profile

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## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Gets an object representing the partner's MPN profile.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.

## C#

To get a partner network profile, use your **IAggregatePartner.Profiles** collection and call the **MpnProfile** property. Finally, call the **Get()** or **GetAsync()** methods.

```
// IAggregatePartner partnerOperations;  
  
var mpnProfile = partnerOperations.Profiles.MpnProfile.Get();
```

Sample: [Console test app](#). Project: [PartnerCenterSDK](#).FeaturesSamples Class: [GetMPNProfile.cs](#)

## Java

The [Partner Center Java SDK](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To get a partner network profile, use your **IAggregatePartner.getProfiles** function and call the **getMpnProfile** function. Finally, call the **get()** function.

```
// IAggregatePartner partnerOperations;  
  
MpnProfile mpnProfile = partnerOperations.getProfiles().getMpnProfile().get();
```

## PowerShell

The [Partner Center PowerShell module](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To get a partner network profile, execute the **Get-PartnerMpnProfile** command.

Get-PartnerMpnProfile

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<a href="#"><i>{baseUrl}</i></a> /v1/profiles/mpn HTTP/1.1

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

None.

### Request example

```
GET https://api.partnercenter.microsoft.com/v1/profiles/mpn HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 76879323-92d1-437e-90dd-c84dbb9f7dec
MS-CorrelationId: cb9f3209-d020-4bf9-871c-e1f1c75348f8
Connection: Keep-Alive
```

## REST response

If successful, this method returns a **MPNProfile** object in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

### Response example

```
HTTP/1.1 200 OK
Content-Length: 177
Content-Type: application/json; charset=utf-8
MS-CorrelationId: cb9f3209-d020-4bf9-871c-e1f1c75348f8
MS-RequestId: 76879323-92d1-437e-90dd-c84dbb9f7dec
Date: Mon, 21 Mar 2016 05:51:29 GMT

{
    "mpnId": "<mpnID>",
    "profileType": "MpnProfile",
    "links": {
        "self": {
            "uri": "/profiles/mpn",
            "method": "GET",
            "headers": []
        }
    },
    "attributes": {
        "objectType": "MpnProfile"
    }
}
```



# Get partner billing profile

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Gets an object representing the partner's billing profile.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.

## C#

To get a partner billing profile, use your `IAggregatePartner.Profiles` collection and call the `BillingProfile` property. Finally, call the `Get()` or `GetAsync()` methods.

```
// IAggregatePartner partnerOperations;  
  
BillingProfile billingProfile = partnerOperations.Profiles.BillingProfile.Get();
```

Sample: [Console test app](#). Project: PartnerCenterSDK.FeaturesSamples Class: GetBillingProfile.cs

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/profiles/billing</code> HTTP/1.1

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

None.

### Request example

```
GET https://api.partnercenter.microsoft.com/v1/profiles/billing HTTP/1.1  
Authorization: Bearer <token>  
Accept: application/json  
MS-RequestId: a0dd6cde-b24c-413c-af24-416446dc5599  
MS-CorrelationId: 1bb03149-88d2-4bc2-9cc1-d6e83890fa9e
```

# REST response

If successful, this method returns a **BillingProfile** object in the response body.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 568
Content-Type: application/json; charset=utf-8
MS-CorrelationId: 1bb03149-88d2-4bc2-9cc1-d6e83890fa9e
MS-RequestId: a0dd6cde-b24c-413c-af24-416446dc5599
Date: Tue, 22 Mar 2016 17:10:02 GMT

{
    "companyName": "TEST_TEST_BugBash1",
    "address": {
        "country": "US",
        "city": "Redmond",
        "state": "WA",
        "addressLine1": "1 Microsoft Way",
        "addressLine2": "", "postalCode": "98052"
    },
    "primaryContact": {
        "firstName": "James",
        "lastName": "Burk",
        "phoneNumber": "2066017143"
    },
    "purchaseOrderNumber": "9888",
    "taxId": "12-345678",
    "billingCurrency": "USD",
    "profileType": "BillingProfile",
    "links": {
        "self": {
            "uri": "/profiles/billing",
            "method": "GET",
            "headers": []
        }
    },
    "attributes": {
        "etag": "<etag>",
        "objectType": "BillingProfile"
    }
}
```

# Verify a partner MPN ID

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

How to verify a partner's Microsoft Partner Network identifier (MPN ID).

The technique shown here verifies the partner's Microsoft Partner Network identifier by requesting the partner's MPN profile from partner center. The identifier is considered valid if the request succeeds.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- The partner MPN ID to verify. If you omit this value, the request retrieves the MPN profile of the signed-in partner.

## C#

To verify a partner's MPN ID, first retrieve an interface to partner profile collection operations from the [IAggregatePartner.Profiles](#) property. Then get an interface to MPN profile operations from the [MpnProfile](#) property. Finally, call the [Get](#) or [GetAsync](#) methods with the MPN ID to retrieve the MPN profile. If you omit the MPN ID from the Get or GetAsync call, the request attempts to retrieve the MPN profile of the signed-in partner.

```
// IAggregatePartner partnerOperations;
// string partnerMpnId;

var partnerProfile = partnerOperations.Profiles.MpnProfile.Get(partnerMpnId);
```

**Sample:** [Console test app](#). **Project:** Partner Center SDK Samples **Class:** VerifyPartnerMpnId.cs

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<a href="#"><i>{baseUrl}</i>/v1/profiles/mpn?mpnId={mpn-id}</a> HTTP/1.1

### URI parameter

Provide the following query parameter to identify the partner. If you omit this query parameter, the request returns the MPN profile of the signed-in partner.

NAME	TYPE	REQUIRED	DESCRIPTION
mpn-id	int	No	A Microsoft Partner Network ID that identifies the partner.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/profiles/mpn?mpnId=99999999 HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 560df6b9-6e53-4954-aed7-133477ac1194
MS-CorrelationId: e937630b-8341-4d70-8f73-450d32ee0189
X-Locale: en-US
MS-PartnerCenter-Client: Partner Center .NET SDK
Host: api.partnercenter.microsoft.com
Connection: Keep-Alive
```

## REST response

If successful, the response body contains the [MpnProfile](#) resource for the partner.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

### Response example (success)

```
HTTP/1.1 200 OK
Content-Length: 159
Content-Type: application/json; charset=utf-8
MS-CorrelationId: e937630b-8341-4d70-8f73-450d32ee0189
MS-RequestId: e39e0ddf-3fd0-4b7e-bb4e-8aebe242d3ee
MS-CV: s2GvkNgZsUSadxQX.0
MS-ServerId: 030011719
Date: Thu, 13 Apr 2017 18:13:40 GMT
```

```
{
  "mpnId": "4391507",
  "profileType": "MpnProfile",
  "links": {
    "self": {
      "uri": "/profiles/mpn",
      "method": "GET",
      "headers": []
    }
  },
  "attributes": {
    "objectType": "MpnProfile"
  }
}
```

### Response example (failure)

HTTP/1.1 404 Not Found  
Content-Length: 124  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: e937630b-8341-4d70-8f73-450d32ee0189  
MS-RequestId: 560df6b9-6e53-4954-aed7-133477ac1194  
MS-CV: sLRFZMWM+EKuL47u.0  
MS-ServerId: 102030524  
Date: Thu, 13 Apr 2017 18:26:51 GMT

```
{  
    "code": 3000,  
    "description": "Partner Organization with partner_id 9999999 could not be found",  
    "data": [],  
    "source": "PartnerFD"  
}
```

# Verify an indirect reseller's Microsoft Partner Agreement signing status

4/25/2020 • 3 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center for Microsoft Cloud for US Government

You can verify whether an indirect reseller has signed the Microsoft Partner Agreement using their Microsoft Partner Network (MPN) ID or Cloud Solution Provider (CSP) tenant ID (Microsoft ID). You can use one of these identifiers to check the Microsoft Partner Agreement signing status using the **AgreementStatus API**.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- The MPN ID or the CSP tenant ID (Microsoft ID) of the indirect reseller. *You must use one of these two identifiers.*

## C#

To get the Microsoft Partner Agreement signature status of an indirect reseller:

1. Use your **IAggregatePartner.Compliance** collection to call the **AgreementSignatureStatus** property.
2. Call the [\*\*Get\(\)\*\*](#) or [\*\*GetAsync\(\)\*\*](#) method.

```
// IAggregatePartner partnerOperations;  
  
var agreementSignatureStatusByMpnId = partnerOperations.Compliance.AgreementSignatureStatus.Get(mpnId:"Enter  
MPN Id");  
  
var agreementSignatureStatusByTenantId = partnerOperations.Compliance.AgreementSignatureStatus.Get(tenantId:  
"Enter Tenant Id");
```

- Sample: [Console test app](#)
- Project: [PartnerCenterSDK.FeaturesSamples](#)
- Class: [GetAgreementSignatureStatus.cs](#)

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<a href="#"><i>{baseURL}</i>/v1/compliance/{ProgramName}/agreementstatus?</a> mpnId={MpnId}&tenantId={TenantId}

### URI parameters

You must provide one of the following two query parameters to identify the partner. If you don't provide one of

these two query parameters, you will receive a **400 (Bad request)** error.

NAME	TYPE	REQUIRED	DESCRIPTION
MpnId	int	No	A Microsoft Partner Network ID that identifies the indirect reseller.
TenantId	GUID	No	A Microsoft ID that identifies the CSP account of the indirect reseller.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request examples

### Request using MPN ID

The following example request gets the indirect reseller's Microsoft Partner Agreement signing status using the indirect reseller's Microsoft Partner Network ID.

```
GET https://api.partnercenter.microsoft.com/v1/compliance/csp/agreementstatus?mpnid=1234567 HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: aa04fb9d-c6b6-4754-8a6a-86e00cdd5ccb
MS-CorrelationId: b4e67a78-0692-45d1-b408-04b9178a8ac6
X-Locale: en-US
Host: api.partnercenter.microsoft.com
```

### Request using CSP tenant ID

The following example request gets the indirect reseller's Microsoft Partner Agreement signing status using the indirect reseller's CSP tenant ID (Microsoft ID).

```
GET https://api.partnercenter.microsoft.com/v1/compliance/csp/agreementstatus?tenantId=a2898e3a-06ca-454e-a0d0-c73b0ee36bba HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: aa04fb9d-c6b6-4754-8a6a-86e00cdd5ccb
MS-CorrelationId: b4e67a78-0692-45d1-b408-04b9178a8ac6
X-Locale: en-US
Host: api.partnercenter.microsoft.com
```

## REST response

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

### Response example (success)

The following example response successfully returns whether the indirect reseller has signed the Microsoft Partner Agreement.

```
HTTP/1.1 200 OK
Content-Length: 29
Content-Type: application/json; charset=utf-8
MS-CorrelationId: b4e67a78-0692-45d1-b408-04b9178a8ac6
MS-RequestId: aa04fb9d-c6b6-4754-8a6a-86e00cdd5ccb
MS-CV: jn3r+1wpE06nCt/0.0
MS-ServerId: 0000005B
Date: Tue, 15 Oct 2019 12:44:34 GMT
Connection: close
{
    "isAgreementSigned": true
}
```

## Response examples (failure)

You may receive responses similar to the following examples when the signing status of the indirect reseller's Microsoft Partner Agreement can't be returned.

### Non-GUID formatted CSP tenant ID

The following example response is returned when the CSP tenant ID that you passed to the API isn't a GUID.

```
HTTP/1.1 400 Bad Request
Content-Length: 105
Content-Type: application/json; charset=utf-8
MS-CorrelationId: b4e67a78-0692-45d1-b408-04b9178a8ac6
MS-RequestId: aa04fb9d-c6b6-4754-8a6a-86e00cdd5ccb
MS-CV: rbuZl5lbAkyq8WGK.0
MS-ServerId: 00000055
Date: Wed, 16 Oct 2019 08:55:23 GMT
Connection: close
{
    "code": 2000,
    "description": "Tenant Id must be a GUID.",
    "data": [],
    "source": "Partner ApiService Controllers"
}
```

### Non-numeric MPN ID

The following example response is returned when the MPN ID that you passed to the API is non-numeric.

```
HTTP/1.1 400 Bad Request
Content-Length: 103
Content-Type: application/json; charset=utf-8
MS-CorrelationId: b4e67a78-0692-45d1-b408-04b9178a8ac6
MS-RequestId: aa04fb9d-c6b6-4754-8a6a-86e00cdd5ccb
MS-CV: cP5JiS4sv0GJx1J9.0
MS-ServerId: 0000005B
Date: Wed, 16 Oct 2019 08:58:45 GMT
Connection: close
{
    "code": 2000,
    "description": "MPN Id must be numeric.",
    "data": [],
    "source": "Partner ApiService Controllers"
}
```

### No MPN ID or CSP tenant ID

The following example response is returned when you haven't passed an MPN ID or CSP tenant ID to the API. You must pass one of the two ID types to the API.

```
HTTP/1.1 400 Bad Request
Content-Length: 114
Content-Type: application/json; charset=utf-8
MS-CorrelationId: b4e67a78-0692-45d1-b408-04b9178a8ac6
MS-RequestId: aa04fb9d-c6b6-4754-8a6a-86e00cdd5ccb
MS-CV: hEV736v4qk6joDMR.0
MS-ServerId: 00000055
Date: Wed, 16 Oct 2019 09:00:30 GMT
Connection: close
{
    "code": 2001,
    "description": "Both MPN Id and Tenant Id cannot be empty.",
    "data": [],
    "source": "ComplianceController"
}
```

#### Both MPN ID and CSP tenant ID passed

The following example response is returned when you pass both the MPN ID and CSP tenant ID to the API. You must pass *only one* of the two identifier types to the API.

```
HTTP/1.1 400 Bad Request
Content-Length: 119
Content-Type: application/json; charset=utf-8
MS-CorrelationId: b4e67a78-0692-45d1-b408-04b9178a8ac6
MS-RequestId: aa04fb9d-c6b6-4754-8a6a-86e00cdd5ccb
MS-CV: WTsLWK5U1UW9sZjH.0
MS-ServerId: 0000005B
Date: Wed, 16 Oct 2019 09:02:30 GMT
Connection: close
{
    "code": 2000,
    "description": "Both MPN Id and Tenant Id should not be passed.",
    "data": [],
    "source": "ComplianceController"
}
```

# Get support profile

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Gets an object representing a user's support profile.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.

## C#

To get your support profile, use your `IAggregatePartner.Profiles` collection. Call the `SupportProfile` property, followed by the `Get()` or `GetAsync()` methods.

```
// IAggregatePartner partnerOperations;  
  
SupportProfile supportProfile = partnerOperations.Profiles.SupportProfile.Get();
```

Sample: [Console test app](#). Project: PartnerCenterSDK.FeaturesSamples Class: GetSupportProfile.cs

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseURL}/v1/profiles/support</code> HTTP/1.1

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

None.

### Request example

```
GET https://api.partnercenter.microsoft.com/v1/profiles/support HTTP/1.1  
Authorization: Bearer <token>  
Accept: application/json  
MS-RequestId: 07029132-385d-416f-a9a6-df5e9e4c78d3  
MS-CorrelationId: 20604323-50bf-4738-9968-c5486ab32be0
```

## REST response

If successful, this method returns a **SupportProfile** object in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

### Response example

```
HTTP/1.1 200 OK
Content-Length: 502
Content-Type: application/json
MS-CorrelationId: 20604323-50bf-4738-9968-c5486ab32be0
MS-RequestId: 07029132-385d-416f-a9a6-df5e9e4c78d3
Date: Wed, 25 Nov 2015 07:16:17 GMT

{
  "email": "email@example.com",
  "telephone": "4255555555",
  "website": "www.microsoft.com",
  "profileType": "support_profile",
  "links": {
    "self": {
      "uri": "/v1/profiles/support",
      "method": "GET",
      "headers": []
    }
  },
  "attributes": {
    "objectType": "PartnerSupportProfile"
  }
}
```

# Get the partner legal business profile

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## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

How to get a partner's legal business profile.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.

## C#

To get the partner legal business profile, first get an interface to the collection of partner profile operations from the **IAggregatePartner.Profiles** property. Then, get the value of the **LegalBusinessProfile** property to retrieve an interface to legal business profile operations. Finally, call the **Get** or the **GetAsync** method to retrieve the profile.

```
// IAggregatePartner partnerOperations;  
  
var billingProfile = partnerOperationsProfiles.LegalBusinessProfile.Get();
```

Sample: [Console test app](#). Project: Partner Center SDK Samples Class: GetLegalBusinessProfile.cs

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<a href="#"><i>{baseUrl}</i>/v1/profiles/legalbusiness</a> HTTP/1.1

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

None.

### Request example

```
GET https://api.partnercenter.microsoft.com/v1/profiles/legalbusiness?vettingVersion=Current HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 7391249f-cba0-467c-b026-7b3a60196422
MS-CorrelationId: 98a091a0-67db-4eeb-ae0d-7e8b2e39c1d2
X-Locale: en-US
Host: api.partnercenter.microsoft.com
Connection: Keep-Alive
```

## REST response

If successful, this method returns a **LegalBusinessProfile** object in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

### Response example

HTTP/1.1 200 OK  
Content-Length: 1151  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: 98a091a0-67db-4eeb-ae0d-7e8b2e39c1d2  
MS-RequestId: 7391249f-cba0-467c-b026-7b3a60196422  
MS-CV: MEgCpJUoGUeXG+4a.0  
MS-ServerId: 030011719  
Date: Tue, 21 Mar 2017 17:29:52 GMT

```
{  
    "companyName": "Lucerne Publishing",  
    "address": {  
        "country": "US",  
        "city": "Buffalo",  
        "state": "NY",  
        "addressLine1": "123 Main Street",  
        "addressLine2": "",  
        "postalCode": "98052",  
        "firstName": "Gena",  
        "lastName": "Soto",  
        "phoneNumber": "4255550100"  
    },  
    "primaryContact": {  
        "firstName": "Gena",  
        "lastName": "Soto",  
        "email": "gena@lucernepublishing.com",  
        "phoneNumber": "4255550100"  
    },  
    "companyApproverAddress": {  
        "country": "US",  
        "city": "Buffalo",  
        "state": "NY",  
        "addressLine1": "123 Main Street",  
        "addressLine2": "",  
        "postalCode": "98052"  
    },  
    "companyApproverEmail": "gena@lucernepublishing.com",  
    "vettingStatus": "authorized",  
    "vettingSubStatus": "none",  
    "profileType": "LegalBusinessProfile",  
    "links": {  
        "self": {  
            "uri": "/profiles/legalbusiness",  
            "method": "GET",  
            "headers": []  
        }  
    },  
    "attributes": {  
        "objectType": "LegalBusinessProfile"  
    }  
}
```

# Retrieve a list of indirect resellers

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center

How to retrieve a list of the signed-in partner's indirect resellers.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.

## C#

To retrieve a list of indirect resellers with whom the signed-in partner has a relationship, first get an interface to relationship collection operations from the [partnerOperations.Relationships](#) property. Then call the [Get](#) or [Get\\_Async](#) method, passing a member of the [PartnerRelationshipType](#) enumeration to identify the relationship type. To retrieve indirect resellers, you must use `IsIndirectCloudSolutionProviderOf`.

```
// IAggregatePartner partnerOperations;  
  
var indirectResellers =  
    partnerOperations.Relationships.Get(PartnerRelationshipType.IsIndirectCloudSolutionProviderOf);
```

Sample: [Console test app](#) Project: Partner Center SDK Samples Class: GetIndirectResellers.cs

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>/baseURL/v1/relationships?</code> relationship_type=IsIndirectCloudSolutionProviderOf HTTP/1.1

### URI parameter

Use the following query parameter to identify the relationship type.

NAME	TYPE	REQUIRED	DESCRIPTION

NAME	TYPE	REQUIRED	DESCRIPTION
relationship_type	string	Yes	<p>The value is the string representation of one of the member names found in <a href="#">PartnerRelationshipType</a>.</p> <p>If the partner is signed in as a provider and you want to get a list of the indirect resellers with whom they have established a relationship, use <code>IsIndirectCloudSolutionProviderOf</code>.</p> <p>If the partner is signed in as a reseller and you want to get a list of the indirect providers with whom they have established a relationship, use <code>IsIndirectResellerOf</code>.</p>

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/relationships?
relationship_type=IsIndirectCloudSolutionProviderOf HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 144391a4-fb06-41ae-b684-3308ce4706bd
MS-CorrelationId: 72524ef8-81aa-4141-a049-45a4fece5d84
X-Locale: en-US
Host: api.partnercenter.microsoft.com
```

## REST response

If successful, the response body contains a collection of [PartnerRelationship](#) resources to identify the resellers.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center error codes](#).

### Response example

HTTP/1.1 200 OK  
Content-Length: 298  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: 72524ef8-81aa-4141-a049-45a4fece5d84  
MS-RequestId: 144391a4-fb06-41ae-b684-3308ce4706bd  
MS-CV: b21Ll1miM0yFMPQQ.0  
MS-ServerId: 030020643  
Date: Wed, 05 Apr 2017 21:08:44 GMT

```
{  
    "totalCount": 2,  
    "items": [  
        {  
            "id": "484e548c-f5f3-4528-93a9-c16c6373cb59",  
            "name": "First Up Consultants",  
            "relationshipType": "is_indirect_cloud_solution_provider_of",  
            "state": "Active",  
            "mpnId": "4847383",  
            "location": "US",  
            "attributes": {  
                "objectType": "PartnerRelationship"  
            }  
        }, {  
            "id": "b01b1487-b36e-4e6d-9b5e-0b58974c4b28",  
            "name": "ReleCloud",  
            "relationshipType": "is_indirect_cloud_solution_provider_of",  
            "state": "Active",  
            "mpnId": "4847433",  
            "location": "BR",  
            "attributes": {  
                "objectType": "PartnerRelationship"  
            }  
        }  
    ],  
    "attributes": {  
        "objectType": "Collection"  
    }  
}
```

# Update an organization profile

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## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Updates a partner's billing profile.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.

## C#

To update your organization profile, retrieve the profile and make any necessary changes. Then, use your **IAggregatePartner.Profiles** collection and call the **OrganizationProfile** property. Finally, call the **Update()** method.

```
// IAggregatePartner partnerOperations;  
  
OrganizationProfile organizationProfile = partnerOperations.Profiles.OrganizationProfile.Get();  
  
// Generating a random phone number to update in the organization profile  
organizationProfile.DefaultAddress.PhoneNumber = ((long)(new Random().NextDouble() * 9000000000) +  
1000000000).ToString(CultureInfo.InvariantCulture);  
  
OrganizationProfile updatedOrganizationProfile =  
partnerOperations.Profiles.OrganizationProfile.Update(organizationProfile);
```

Sample: [Console test app](#). Project: PartnerCenterSDK.FeaturesSamples Class: UpdateOrganizationProfile.cs

## REST request

### Request syntax

METHOD	REQUEST URI
PUT	<a href="#">/{baseURL}/v1/profiles/organization</a> HTTP/1.1

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

None.

### Request example

```
PUT https://api.partnercenter.microsoft.com/v1/profiles/organization HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: fe76387b-9658-47d7-939d-0c70032ef589
MS-CorrelationId: cb9f3209-d020-4bf9-871c-e1f1c75348f8
Content-Length: 624
Expect: 100-continue

{
    "id":<id>,
    "companyName": "TEST_TEST_BugBash1",
    "defaultAddress": {
        "country": "US",
        "city": "Redmond",
        "state": "WA",
        "addressLine1": "Two Microsoft Way",
        "addressLine2": "",
        "postalCode": "98052",
        "firstName": "Test",
        "lastName": "Account",
        "phoneNumber": ""
    },
    "tenantId":<tenantID>,
    "domain": "testtestbugbash1.onmicrosoft.com",
    "email": "test-partner@microsoft.com",
    "language": "es",
    "culture": "es-US",
    "links": {
        "self": {
            "uri": "/profiles/organization",
            "method": "GET",
            "headers": []
        }
    },
    "attributes": {
        "etag": <etag>,
        "objectType": "OrganizationProfile"
    }
}
```

## REST response

If successful, this method returns an **OrganizationProfile** object in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

### Response example

HTTP/1.1 200 OK  
Content-Length: 648  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: cb9f3209-d020-4bf9-871c-e1f1c75348f8  
MS-RequestId: fe76387b-9658-47d7-939d-0c70032ef589  
Date: Mon, 21 Mar 2016 05:48:41 GMT

```
{  
    "id":<id>,  
    "companyName": "TEST_TEST_BugBash1",  
    "defaultAddress":{  
        "country": "US",  
        "city": "Redmond",  
        "state": "WA",  
        "addressLine1": "Two Microsoft Way",  
        "addressLine2": "",  
        "postalCode": "98052",  
        "firstName": "Test",  
        "lastName": "Account",  
        "phoneNumber": ""  
    },  
    "tenantId":<tenantID>,  
    "domain": "testtestbugbash1.onmicrosoft.com",  
    "email": "test-partner@microsoft.com",  
    "language": "es",  
    "culture": "es-US",  
    "profileType": "OrganizationProfile",  
    "links":{  
        "self":{  
            "uri": "/profiles/organization",  
            "method": "GET",  
            "headers": []  
        }  
    },  
    "attributes":{  
        "etag": <etag>,  
        "objectType": "OrganizationProfile"  
    }  
}
```

# Update the partner billing profile

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## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Updates a partner's billing profile

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.

## C#

To update a partner billing profile, retrieve the existing profile. Once you have updated the profile, use your **IAggregatePartner.Profiles** collection and call the **BillingProfile** property. Finally, call the **Update()** method.

```
// IAggregatePartner partnerOperations;  
  
BillingProfile existingBillingProfile = partnerOperations.Profiles.BillingProfile.Get();  
  
// update the profile with a purchase order number  
existingBillingProfile.PurchaseOrderNumber = new Random().Next(9000,  
10000).ToString(CultureInfo.InvariantCulture);  
  
BillingProfile updatedPartnerBillingProfile =  
partnerOperations.Profiles.BillingProfile.Update(existingBillingProfile);
```

Sample: [Console test app](#). Project: Partner Center SDK Samples Class: UpdateBillingProfile.cs

## REST request

### Request syntax

METHOD	REQUEST URI
PUT	<a href="#"><i>{baseUrl}</i>/v1/profiles/billing</a> HTTP/1.1

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

None.

### Request example

```
PUT https://api.partnercenter.microsoft.com/v1/profiles/billing HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 9231559e-ed95-41e4-810b-e754ae32dc2f
MS-CorrelationId: cb9f3209-d020-4bf9-871c-e1f1c75348f8
Content-Length: 613
Expect: 100-continue

{
    "CompanyName": "TEST_TEST_BugBash1",
    "Address": {
        "Country": "US",
        "Region": null,
        "City": "Redmond",
        "State": "WA",
        "AddressLine1": "1 Microsoft Way",
        "AddressLine2": "", "PostalCode": "98052",
        "FirstName": null,
        "LastName": null,
        "PhoneNumber": null
    },
    "PrimaryContact": {
        "FirstName": "Test",
        "LastName": "Customer",
        "Email": null,
        "PhoneNumber": ""
    },
    "PurchaseOrderNumber": "9888",
    "TaxId": <TaxId>,
    "BillingCurrency": "USD",
    "Links": {
        "Self": {
            "Uri": "/profiles/billing",
            "Method": "GET", "Headers": []
        }
    },
    "Attributes": {
        "Etag": <etag>,
        "ObjectType": "BillingProfile"
    }
}
```

## REST response

If successful, this method returns a **BillingProfile** object in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

### Response example

HTTP/1.1 200 OK  
Content-Length: 568  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: cb9f3209-d020-4bf9-871c-e1f1c75348f8  
MS-RequestId: 9231559e-ed95-41e4-810b-e754ae32dc2f  
Date: Mon, 21 Mar 2016 05:47:16 GMT

```
{  
    "CompanyName": "TEST_TEST_BugBash1",  
    "Address": {  
        "Country": "US",  
        "Region": null,  
        "City": "Redmond",  
        "State": "WA",  
        "AddressLine1": "1 Microsoft Way",  
        "AddressLine2": "", "PostalCode": "98052",  
        "FirstName": null,  
        "LastName": null,  
        "PhoneNumber": null  
    },  
    "PrimaryContact": {  
        "FirstName": "Test",  
        "LastName": "Customer",  
        "Email": null,  
        "PhoneNumber": ""  
    },  
    "PurchaseOrderNumber": "9888",  
    "TaxId": <TaxId>,  
    "BillingCurrency": "USD",  
    "Links": {  
        "Self": {  
            "Uri": "/profiles/billing",  
            "Method": "GET", "Headers": []  
        }  
    },  
    "Attributes": {  
        "Etag": <etag>,  
        "ObjectType": "BillingProfile"  
    }  
}
```

# Update support profile

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## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Updates a user's support profile.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.

## C#

To update your support profile, first [get your support profile](#) and make any changes you wish. Then, use your [IPartnerOperations.Profiles](#) collection. Call the [SupportProfile](#) property, followed by the [Update\(\)](#) or [UpdateAsync\(\)](#) method.

```
// IAggregatePartner partnerOperations;

// updated profile
SupportProfile newSupportProfile = new SupportProfile
{
    Email = supportProfile.Email,
    Website = supportProfile.Website,
    Telephone = new Random().Next(10000000, 99999999).ToString(CultureInfo.InvariantCulture)
};

SupportProfile updatedSupportProfile = partnerOperations.Profiles.SupportProfile.Update(newSupportProfile);
```

Sample: [Console test app](#). Project: PartnerCenterSDK.FeaturesSamples Class: UpdateSupportProfile.cs

## REST request

### Request syntax

METHOD	REQUEST URI
PUT	<a href="#"><i>{baseUrl}</i>/v1/profiles/supportprofile</a> HTTP/1.1

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

The full support profile resource.

### Request example

```

PUT https://api.partnercenter.microsoft.com/v1/profiles/supportprofile HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 603f3cd9-01b8-48f2-b65d-855a246f5bfd
MS-CorrelationId: 20604323-50bf-4738-9968-c5486ab32be0
Content-Type: application/json
Content-Length: 167
Expect: 100-continue

{
    "Email": "email@sample.com",
    "Telephone": "4255555555",
    "Website": "www.microsoft.com",
    "ProfileType": "support_profile",
    "Attributes": {
        "ObjectType": "PartnerSupportProfile"
    }
}

```

## REST response

If successful, this method returns updated **SupportProfile** object properties in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

### Response example

```

HTTP/1.1 200 OK
Content-Length: 502
Content-Type: application/json
MS-CorrelationId: 20604323-50bf-4738-9968-c5486ab32be0
MS-RequestId: 603f3cd9-01b8-48f2-b65d-855a246f5bfd
Date: Wed, 25 Nov 2015 07:16:18 GMT

{
    "email": "email@sample.com",
    "telephone": "4255555555",
    "website": "www.microsoft.com",
    "profileType": "support_profile",
    "links": {
        "self": {
            "uri": "/v1/profiles/support",
            "method": "GET",
            "headers": []
        }
    },
    "attributes": {
        "objectType": "PartnerSupportProfile"
    }
}

```

# Update the partner legal business profile

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## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

How to update the partner legal business profile.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.

## C#

To update the partner legal business profile, first instantiate a **LegalBusinessProfile** object and populate it with the existing profile. For more information, see [Get the partner legal business profile](#). Then, update the properties that you need to change. The following code example illustrates changing the address and primary contact phone numbers.

Next, get an interface to the partner profile operations collection from the **IAggregatePartner.Profiles** property. Then, retrieve the value of the **LegalBusinessProfile** property to get an interface to legal business profile operations. Finally, call the [Update](#) or [UpdateAsync](#) method with the changed object to update the profile.

```
// IAggregatePartner partnerOperations;

var legalBusinessProfile = partnerOperations.Profiles.LegalBusinessProfile.Get();

// Change the address and primary contact phone number.
legalBusinessProfile.Address.PhoneNumber = "4255550110";
legalBusinessProfile.PrimaryContact.PhoneNumber = "4255550110";

// Apply changes to the profile.
var updatedLegalBusinessProfile =
partnerOperations.Profiles.LegalBusinessProfile.Update(legalBusinessProfile);
```

## REST request

### Request syntax

METHOD	REQUEST URI
PUT	<a href="#"><i>{baseURL}</i>/v1/profiles/legalbusiness</a> HTTP/1.1

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

The legal business profile resource.

## Request example

```
PUT https://api.partnercenter.microsoft.com/v1/profiles/legalbusiness HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 4549ac0c-0f1d-4d8f-b02f-6d36fadcccee
MS-CorrelationId: aa2a0d8c-7a41-470f-97ae-b82e6c338ee4
X-Locale: en-US
Content-Type: application/json
Host: api.partnercenter.microsoft.com
Content-Length: 806
Expect: 100-continue

{
    "CompanyName": "Lucerne Publishing",
    "Address": {
        "Country": "US",
        "Region": null,
        "City": "Redmond",
        "State": "WA",
        "AddressLine1": "123 Main Street",
        "AddressLine2": "",
        "PostalCode": "98052",
        "FirstName": "Gena",
        "LastName": "Soto",
        "PhoneNumber": "4255550110"
    },
    "PrimaryContact": {
        "FirstName": "Gena",
        "LastName": "Soto",
        "Email": "gena@lucernepublishing.com",
        "PhoneNumber": "4255550110"
    },
    "CompanyApproverAddress": {
        "Country": "US",
        "Region": null,
        "City": "Redmond",
        "State": "WA",
        "AddressLine1": "123 Main Street",
        "AddressLine2": "",
        "PostalCode": "98052",
        "FirstName": null,
        "LastName": null,
        "PhoneNumber": null
    },
    "CompanyApproverEmail": "gena@lucernepublishing.com",
    "VettingStatus": "authorized",
    "VettingSubStatus": "none",
    "Links": {
        "Self": {
            "Uri": "/profiles/legalbusiness",
            "Method": "GET",
            "Headers": []
        }
    },
    "Attributes": {
        "ObjectType": "LegalBusinessProfile"
    }
}
```

## REST response

If successful, the response body contains the updated **LegalBusinessProfile**

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center error codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 1157
Content-Type: application/json; charset=utf-8
MS-CorrelationId: aa2a0d8c-7a41-470f-97ae-b82e6c338ee4
MS-RequestId: 4549ac0c-0f1d-4d8f-b02f-6d36fadcccee
MS-CV: KZLU42qJ4EOb075q.0
MS-ServerId: 030020643
Date: Tue, 21 Mar 2017 22:03:15 GMT

{
    "companyName": "Lucerne Publishing",
    "address": {
        "country": "US",
        "city": "Redmond",
        "state": "WA",
        "addressLine1": "123 Main Street",
        "addressLine2": "",
        "postalCode": "98052",
        "firstName": "Gena",
        "lastName": "Soto",
        "phoneNumber": "4255550110"
    },
    "primaryContact": {
        "firstName": "Gena",
        "lastName": "Soto",
        "email": "gena@lucernepublishing.com",
        "phoneNumber": "4255550110"
    },
    "companyApproverAddress": {
        "country": "US",
        "city": "Redmond",
        "state": "WA",
        "addressLine1": "123 Main Street",
        "addressLine2": "",
        "postalCode": "98052"
    },
    "companyApproverEmail": "gena@lucernepublishing.com",
    "vettingStatus": "authorized",
    "vettingSubStatus": "none",
    "profileType": "LegalBusinessProfile",
    "links": {
        "self": {
            "uri": "/profiles/legalbusiness",
            "method": "GET",
            "headers": []
        }
    },
    "attributes": {
        "objectType": "LegalBusinessProfile"
    }
}
```

# Manage billing

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## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

This section describes the ways that Cloud Solution Provider partners can use Partner Center to programmatically view and manage their invoices, and view their customer's progress against an Azure spending budget.

### Billing Cycle:

- [Change the billing cycle](#)

### Azure rates and utilization:

- [Get a customer's utilization records for Azure](#)
- [Get prices for Microsoft Azure](#)

### Invoices:

- [Get a collection of invoices](#)
- [Get invoice estimate links](#)
- [Get invoice billed commercial marketplace consumption line items](#)
- [Get invoice by ID](#)
- [Get invoice line items](#)
- [Get invoice receipt statement](#)
- [Get invoice statement](#)
- [Get invoice summaries](#)
- [Get invoice unbilled commercial marketplace consumption line items](#)
- [Get invoice unbilled recon line items](#)
- [Get the reseller's current account balance](#)

### Azure spending budget:

- [Get usage data for a subscription](get-all-monthly-usage-records-for-a-subscription.md)
- [Get usage summary for all of a customer's subscriptions](#)

For more information, see [Scenarios](#), specifically the [Background](#) section.

# Change the billing cycle

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## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Updates an [Order](#) from monthly to annual billing or from annual to monthly billing.

In the Partner Center dashboard, this operation can be performed by navigating to a customer's subscription details page. Once there, you will see an option defining the current billing cycle for the subscription with the ability to change and submit it.

## Out of scope for this article:

- Changing the billing cycle for trials
- Changing the billing cycles for any non-annual term offers (monthly, 6-year) & Azure subscriptions
- Changing the billing cycles for inactive subscriptions
- Changing billing cycles for Microsoft online services license-based subscriptions

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- An order ID.

## C#

To change the frequency of the billing cycle, update the [`Order.BillingCycle`](#) property.

```

// IAggregatePartner partnerOperations;
// string customerId;
// string offerId;
// string orderId;

var order = new Order()
{
    ReferenceCustomerId = customerId,
    BillingCycle = BillingCycleType.Annual,
    LineItems = new List<OrderLineItem>()
    {
        new OrderLineItem()
        {
            LineItemNumber = 0,
            OfferId = offerId,
            SubscriptionId = "69829602-C219-40FD-A3D5-4150FCA41A19",
            Quantity = 1
        }
    }
};

var createdOrder = partnerOperations.CustomersById(customerId).OrdersById(orderId).Patch(order);

```

## REST request

### Request syntax

METHOD	REQUEST URI
PATCH	<a href="#"><i>{baseURL}</i></a> /v1/customers/{customer-tenant-id}/orders/{order-id} HTTP/1.1

### URI parameter

This table lists the required query parameter to change the quantity of the subscription.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	GUID	Y	A GUID formatted <b>customer-tenant-id</b> that identifies the customer
order-id	GUID	Y	The order identifier

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

The following tables describe the properties in the request body.

#### Order

PROPERTY	TYPE	REQUIRED	DESCRIPTION
Id	string	N	An order identifier that is supplied upon successful creation of the order

PROPERTY	TYPE	REQUIRED	DESCRIPTION
ReferenceCustomerId	string	Y	The customer identifier
BillingCycle	string	Y	Indicates the frequency with which the partner is billed for this order. Supported values are the member names found in <a href="#">BillingCycleType</a> .
LineItems	array of objects	Y	An array of <a href="#">OrderLineItem</a> resources
CreationDate	datetime	N	The date the order was created, in date-time format
Attributes	Object	N	Contains "ObjectType": "OrderLineItem"

## OrderLineItem

PROPERTY	TYPE	REQUIRED	DESCRIPTION
LineItemNumber	number	Y	The line item number, starting with 0
OfferId	string	Y	The ID of the offer
SubscriptionId	string	Y	The ID of the subscription
FriendlyName	string	N	The friendly name for the subscription defined by the partner to help disambiguate
Quantity	number	Y	The number of licenses or instances
PartnerIdOnRecord	string	N	The MPN ID of the partner of record
Attributes	Object	N	Contains "ObjectType": "OrderLineItem"

## Request example

Update to annual billing

```
PATCH https://api.partnercenter.microsoft.com/v1/customers/4d3cf487-70f4-4e1e-9ff1-
b2bfce8d9f04/orders/CF3B0E37-BE0B-4CDD-B584-D1A97D98A922 HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 17a2658e-d2cc-439b-a2f0-2aef9344fbc
MS-CorrelationId: 60efdd24-17ef-4080-9b02-4fc315f916ff
X-Locale: en-US
Content-Type: application/json
Host: api.partnercenter.microsoft.com
Content-Length: 414
Expect: 100-continue

{
    "Id": null,
    "ReferenceCustomerId": "4d3cf487-70f4-4e1e-9ff1-b2bfce8d9f04",
    "BillingCycle" : "Annual",
    "LineItems": [
        {
            "LineItemNumber": 0,
            "OfferId": "2828BE95-46BA-4F91-B2FD-0BEF192ECF60",
            "SubscriptionId": "69829602-C219-40FD-A3D5-4150FCA41A19",
            "FriendlyName": "Some friendly name",
            "Quantity": 2,
            "PartnerIdOnRecord": null,
            "Attributes": {
                "ObjectType": "OrderLineItem"
            }
        }
    ],
    "CreationDate": null,
    "Attributes": {
        "ObjectType": "Order"
    }
}
```

## REST response

If successful, this method returns the updated subscription order in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

### Response example

HTTP/1.1 200 OK  
Content-Length: 1135  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: 60efdd24-17ef-4080-9b02-4fc315f916ff  
MS-RequestId: 17a2658e-d2cc-439b-a2f0-2aefd9344fbc  
MS-CV: WtFy3zI8V0u2lnT9.0  
MS-ServerId: 020021921  
Date: Wed, 25 Jan 2017 23:01:08 GMT

```
{  
    "id": "cf3b0e37-be0b-4cdd-b584-d1a97d98a922",  
    "referenceCustomerId": "4d3cf487-70f4-4e1e-9ff1-b2bfce8d9f04",  
    "billingCycle": "Annual",  
    "lineItems": [  
        {"lineItemNumber": 0,  
         "offerId": "195416C1-3447-423A-B37B-EE59A99A19C4",  
         "subscriptionId": "1C2B75C1-74A5-472A-A729-7F8CEFC477F9",  
         "friendlyName": "new offer purchase",  
         "quantity": 5,  
         "links": {  
             "subscription": {  
                 "uri": "/customers/4d3cf487-70f4-4e1e-9ff1-b2bfce8d9f04/subscriptions/1C2B75C1-74A5-472A-A729-7F8CEFC477F9",  
                 "method": "GET",  
                 "headers": []  
             }  
         }  
     },  
     {  
         "lineItemNumber": 1,  
         "offerId": "2828BE95-46BA-4F91-B2FD-0BEF192ECF60",  
         "subscriptionId": "69829602-C219-40FD-A3D5-4150FCA41A19",  
         "friendlyName": "Some friendly name",  
         "quantity": 2,  
         "links": {  
             "subscription": {  
                 "uri": "/customers/4d3cf487-70f4-4e1e-9ff1-b2bfce8d9f04/subscriptions/69829602-C219-40FD-A3D5-4150FCA41A19",  
                 "method": "GET",  
                 "headers": []  
             }  
         }  
     }  
],  
"creationDate": "2017-01-25T14:53:12.093-08:00",  
"links": {  
    "self": {  
        "uri": "/customers/4d3cf487-70f4-4e1e-9ff1-b2bfce8d9f04/orders/cf3b0e37-be0b-4cdd-b584-d1a97d98a922",  
        "method": "GET",  
        "headers": []  
    }  
},  
"attributes": {  
    "etag": "eyJpZCI6ImNmM2IwZTM3LWJlMGItNGNkZC1iNTg0LWQxYTk3ZDk4YTkyMiIsInZlcnPb24i0jJ9",  
    "objectType": "Order"  
}  
}
```

# Get a customer's service costs summary

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center

Gets a customer's service costs for the specified billing period.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A billing period indicator (`mostrecent`).

## C#

To retrieve a service costs summary for the specified customer:

1. Call the [IAggregatePartner.Customers.ById](#) method with the customer ID to identify the customer.
2. Use the [ServiceCosts](#) property to get an interface to customer service costs collection operations.
3. Call the [ByBillingPeriod](#) method with a member of the [ServiceCostsBillingPeriod](#) enumeration to return an [IServiceCostsCollection](#).
4. Use the [IServiceCostsCollection.Summary.Get](#) or [GetAsync](#) method to get the customer's service costs summary.

```
// IAggregatePartner partnerOperations;
// string selectedCustomerId;

var serviceCostsSummary =
    partnerOperations.Customers.ById(selectedCustomerId).ServiceCosts.ByBillingPeriod(ServiceCostsBillingPeriod.MostRecent).Summary.Get();
```

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/customers/{customer-id}/servicecosts/{billing-period}</code> HTTP/1.1

### URI parameters

Use the following path parameters to identify the customer and the billing period.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-id	guid	Yes	A GUID formatted customer ID that identifies the customer.
billing-period	string	Yes	An indicator that represents the billing period. The only supported value is MostRecent. The case of the string does not matter.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/65726577-c208-40fd-9735-8c85ac9cac68/servicecosts/mostrecent HTTP/1.1
Authorization: Bearer <authorization token>
Accept: application/json
MS-RequestId: e6a3b6b2-230a-4813-999d-57f883b60d38
MS-CorrelationId: a687bc47-8d08-4b78-aff6-5a59aa2055c2
X-Locale: en-US
Host: api.partnercenter.microsoft.com
```

## REST response

If successful, the response body contains a [ServiceCostsSummary](#) resource that provides information about the service costs.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 766
Content-Type: application/json; charset=utf-8
MS-CorrelationId: a687bc47-8d08-4b78-aff6-5a59aa2055c2
MS-RequestId: e6a3b6b2-230a-4813-999d-57f883b60d38
MS-CV: gPPoyNX1X0asAAcw.0
MS-ServerId: 101112202
Date: Fri, 02 Dec 2016 18: 54: 38 GMT

{
    "billingStartDate": "2015-12-12T00:00:00Z",
    "billingEndDate": "2016-01-11T00:00:00Z",
    "pretaxTotal": 17.22,
    "tax": 0.0,
    "afterTaxTotal": 17.22,
    "currencySymbol": "$",
    "customerId": "ae1d5b32-f9ff-4252-b2bf-40e21937a51a",
```

```
"details":  
[  
  {  
    "invoiceType": "Recurring",  
    "summary": {  
      "billingStartDate": "2015-12-12T00:00:00Z",  
      "billingEndDate": "2016-01-11T00:00:00Z",  
      "pretaxTotal": 17.22,  
      "tax": 0.0,  
      "afterTaxTotal": 17.22,  
      "currencyCode": "USD",  
      "currencySymbol": "$",  
      "customerId": "ae1d5b32-f9ff-4252-b2bf-40e21937a51a",  
      "links": {},  
      "attributes": {  
        "objectType": "ServiceCostsSummary"  
      }  
    }  
  },  
  {  
    "invoiceType": "OneTime",  
    "summary": {  
      "billingStartDate": "2019-04-01T00:00:00Z",  
      "billingEndDate": "2019-04-30T23:59:59.9999999Z",  
      "pretaxTotal": 2,  
      "tax": 0.2,  
      "afterTaxTotal": 2.2,  
      "currencyCode": "USD",  
      "currencySymbol": "$",  
      "customerId": "ae1d5b32-f9ff-4252-b2bf-40e21937a51a",  
      "links": {},  
      "attributes": {  
        "objectType": "ServiceCostsSummary"  
      }  
    }  
  }  
],  
"links": {  
  "serviceCostLineItems": {  
    "uri": "/customers/ae1d5b32-f9ff-4252-b2bf-40e21937a51a/servicecosts/MostRecent/lineitems",  
    "method": "GET",  
    "headers": []  
  },  
  "self": {  
    "uri": "/customers/ae1d5b32-f9ff-4252-b2bf-40e21937a51a/servicecosts/MostRecent",  
    "method": "GET",  
    "headers": []  
  },  
  "attributes": {  
    "objectType": "ServiceCostsSummary"  
  }  
}
```

# Get a customer's service costs line items

4/25/2020 • 3 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center

Gets a customer's service cost line items for the specified billing period.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A billing period indicator (`mostrecent`).

## C#

To retrieve a service costs summary for the specified customer:

1. Call the **IAggregatePartner.Customers.ById** method with the customer ID to identify the customer.
2. Use the **ServiceCosts** property to get an interface to customer service costs collection operations.
3. Call the **ByBillingPeriod** method with a member of the **ServiceCostsBillingPeriod** enumeration to return an **IServiceCostsCollection**.
4. Use the **IServiceCostsCollection.LineItems.Get** or **GetAsync** method to get the customer's service costs line items.

```
// IAggregatePartner partnerOperations;
// string selectedCustomerId;

var serviceCostsSummary =
    partnerOperations.Customers.ById(selectedCustomerId).ServiceCosts.ByBillingPeriod(ServiceCostsBillingPeriod.MostRecent).LineItems.Get();
```

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseURL}/v1/customers/{customer-id}/servicecosts/{billing-period}/lineitems</code> HTTP/1.1

### URI parameters

Use the following path parameters to identify the customer and the billing period.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-id	guid	Yes	A GUID formatted customer ID that identifies the customer.
billing-period	string	Yes	An indicator that represents the billing period. The only supported value is MostRecent. The case of the string does not matter.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/65726577-c208-40fd-9735-8c85ac9cac68/servicecosts/mostrecent/lineitems HTTP/1.1
Authorization: Bearer <authorization token>
Accept: application/json
MS-RequestId: e6a3b6b2-230a-4813-999d-57f883b60d38
MS-CorrelationId: a687bc47-8d08-4b78-aff6-5a59aa2055c2
X-Locale: en-US
Host: api.partnercenter.microsoft.com
```

## REST response

If successful, the response body contains a [ServiceCostLineItem](#) resource that provides information about the service costs.

### IMPORTANT

The following properties *only apply* to service cost line items where the product is a *one-time purchase*: **productId**, **productName**, **skuid**, **skuName**, **availabilityId**, **publisherId**, **publisherName**, **termAndBillingCycle**, **discountDetails**. These properties *don't apply* to service line items where the product is a *recurring purchase*. For example, these properties *don't apply* to subscription-based Office 365 and Azure.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 2148
Content-Type: application/json; charset=utf-8
MS-CorrelationId: a687bc47-8d08-4b78-aff6-5a59aa2055c2
MS-RequestId: e6a3b6b2-230a-4813-999d-57f883b60d38
MS-CV: gPPoyNX1X0asAAcw.0
MS-ServerId: 101112202
Date: Fri, 02 Dec 2016 12:54:30 GMT
```

Date: Fri, 02 Dec 2016 18: 54: 38 GMT

```
{  
    "attributes": {  
        "objectType": "Collection"  
    },  
    "items": [  
        {  
            "afterTaxTotal": 0.0,  
            "chargeType": "PURCHASE FEE",  
            "currencyCode": "USD",  
            "currencySymbol": "$",  
            "customerId": "ae1d5b32-f9ff-4252-b2bf-40e21937a51a",  
            "customerName": "AABB CCDD",  
            "endDate": "2016-01-11T00:00:00",  
            "offerId": "11E3C9A9-24A2-4CFD-9F60-A9797D68E296",  
            "offerName": "Project for Office 365 (Government Pricing)",  
            "orderId": "4FEB262A-FAF3-4710-B216-D563421B006F",  
            "pretaxTotal": 0.0,  
            "quantity": 1.0,  
            "resellerMPNId": "-1",  
            "startDate": "2015-12-15T00:00:00",  
            "subscriptionFriendlyName": "Project Pro for Office 365 (Government Pricing)",  
            "subscriptionId": "71B5BCDD-51C8-4BF2-B704-D3432EE33064",  
            "tax": 0.0,  
            "unitPrice": 0.0,  
            "invoiceNumber": "T000003163",  
            "invoiceType": "OneTime",  
            "productId": "DZH318Z0BJR6",  
            "skuId": "0001",  
            "availabilityId": "DZH318Z0BMFK",  
            "productName": "Azure Managed Experience",  
            "skuName": "Azure Managed Experience - Optimize",  
            "publisherName": "Microsoft",  
            "publisherId": "01323244",  
            "termAndBillingCycle": "",  
            "discountDetails": "N/A"  
        }, {  
            "afterTaxTotal": 17.219999999999999,  
            "chargeType": "CYCLE FEE",  
            "currencyCode": "USD",  
            "currencySymbol": "$",  
            "customerId": "ae1d5b32-f9ff-4252-b2bf-40e21937a51a",  
            "customerName": "AABB CCDD",  
            "endDate": "2016-02-11T00:00:00",  
            "offerId": "11E3C9A9-24A2-4CFD-9F60-A9797D68E296",  
            "offerName": "Project for Office 365 (Government Pricing)",  
            "orderId": "4FEB262A-FAF3-4710-B216-D563421B006F",  
            "pretaxTotal": 17.219999999999999,  
            "quantity": 1.0,  
            "resellerMPNId": "-1",  
            "startDate": "2016-01-12T00:00:00",  
            "subscriptionFriendlyName": "Project Pro for Office 365 (Government Pricing)",  
            "subscriptionId": "71B5BCDD-51C8-4BF2-B704-D3432EE33064",  
            "tax": 0.0,  
            "unitPrice": 17.219999999999999,  
            "invoiceNumber": "D000003163",  
            "invoiceType": "Recurring",  
            "productId": "DZH318Z0BJR7",  
            "skuId": "0001",  
            "availabilityId": "DZH318Z0BTTT",  
            "productName": "NGINX Plus",  
            "skuName": "NGINX Plus (Ubuntu 14.04)",  
            "publisherName": "Nginx, Inc.",  
            "publisherId": "212336222",  
            "termAndBillingCycle": "30 Days Trial",  
            "discountDetails": "20%"  
        }  
    ],  
}
```

```
"links": {
    "self": {
        "headers": [],
        "method": "GET",
        "uri": "/customers/ae1d5b32-f9ff-4252-b2bf-40e21937a51a/servicecosts/MostRecent/lineitems"
    }
},
"totalCount": 2
}
```

# Get a collection of invoices

5/7/2020 • 3 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

How to retrieve a collection of the partner's invoices.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.

## C#

To get a collection of all available invoices, use the [Invoices](#) property to get an interface to invoice operations, and then call the [Get](#) or [GetAsync](#) method to retrieve the collection.

To get a paged collection of invoices, first call the [BuildIndexedQuery](#) method and pass it the page size to create an [IQuery](#) object. Next, use the [Invoices](#) property to get an interface to invoice operations, and then pass the [IQuery](#) object to the [Query](#) or [QueryAsync](#) method to send the request and get the first page.

Next, use the [Enumerators](#) property to get an interface to the collection of supported resource collection enumerators, and then call [Invoices.Create](#) to create an enumerator for traversing the collection of invoices.

Finally, use the enumerator to retrieve and work with each page of invoices as shown in the following code example. Each call to the [Next](#) method sends a request for the next page of invoices based on the page size.

```

// IAggregatePartner partnerOperations;
// int invoicePageSize;

// Is this an unpaged or paged request?
bool isUnpaged = (this.invoicePageSize <= 0);

// If the scenario is unpaged, get all the invoices, otherwise get the first page.
var invoicesPage = (isUnpaged)
    ? partnerOperations.Invoices.Get()
    :
partnerOperations.Invoices.Query(QueryFactory.Instance.BuildIndexedQuery(this.invoicePageSize));

// Create an invoice enumerator for traversing the invoice pages.
var invoicesEnumerator = partnerOperations.Enumerators.Invoices.Create(invoicesPage);
int lineCounter = 1;

while (invoicesEnumerator.HasValue)
{
    // Print the current invoice results page.
    var invoices = invoicesEnumerator.Current.Items;

    foreach (var i in invoices)
    {
        Console.WriteLine(String.Format("{0,3}. {1} {2} {3,16:C2}",
            lineCounter++,
            i.Id,
            i.InvoiceDate.ToString("yyyy'-'MM'-'dd'T'HH':'mm':'ss'Z"),
            i.TotalCharges));
    }

    Console.WriteLine();
    Console.Write("Press any key to retrieve the next invoices page");
    Console.ReadKey();

    // Get the next page of invoices.
    invoicesEnumerator.Next();
}

```

For a slightly different example, see [Sample: Console test app](#). Project: Partner Center SDK Samples Class: `GetPagedInvoices.cs`

#### **NOTE**

The same API is used for all modern commercial purchases as well as 145p and Office licenses. Size and offset are only considered for legacy invoices. For all modern commercial purchases, pagesize & offset will be ignored.

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/invoices?size={size}&amp;offset={offset}</code> HTTP/1.1

### URI parameters

Use the following query parameters when creating the request.

NAME	TYPE	REQUIRED	DESCRIPTION
size	int	No	The number of invoice resources to return in the response. This parameter is optional.
offset	int	No	The zero-based index of the first invoice to return.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/invoices?size=200&offset=0 HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: e88d014d-ab70-41de-90a0-f7fd1797267d
MS-CorrelationId: de894e18-f027-4ac0-8b5a-34f0c222af0c
X-Locale: en-US
MS-PartnerCenter-Application: Partner Center .NET SDK Samples
Host: api.partnercenter.microsoft.com
```

## REST response

If successful, the response body contains the collection of [Invoice](#) resources.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 256
Content-Type: application/json; charset=utf-8
MS-CorrelationId: 57eb2ca7-755f-450f-9187-eae1e75a0114
MS-RequestId: a45e6643-1caf-4429-8f90-07c03d85bc2b
Date: Thu, 24 Mar 2016 05:21:01 GMT
{
  "totalCount": 2,
  "items": [
    {
      "id": "D02005YFHI",
      "invoiceDate": "2017-01-21T00:00:00Z",
      "totalCharges": 24606.35,
      "paidAmount": 1000,
      "currencyCode": "GBP",
      "currencySymbol": "£",
      "pdfDownloadLink": "/invoices/D02005YFHI/documents/statement",
      "taxReceipts": [
        {
          "id": "123456",
          "taxReceiptPdfDownloadLink": "/invoices/D02005YFHI/receipts/123456/documents/statement"
        }
      ]
    }
  ]
}
```

```
        ],
        "invoiceDetails": [
            {
                "invoiceLineItemType": "billing_line_items",
                "billingProvider": "office",
                "links": {
                    "self": {
                        "uri": "/invoices/Recurring-D02005YFHI/lineitems/Office/BillingLineItems",
                        "method": "GET",
                        "headers": []
                    }
                },
                "attributes": {
                    "objectType": "InvoiceDetail"
                }
            }
        ],
        "documentType": "invoice",
        "invoiceType": "Recurring",
        "links": {
            "self": {
                "uri": "/invoices/Recurring-D02005YFHI",
                "method": "GET",
                "headers": []
            }
        },
        "attributes": {
            "objectType": "Invoice"
        }
    },
    {
        "id": "G000024130",
        "invoiceDate": "2018-02-08T01:22:47.603895Z",
        "totalCharges": 586366,
        "paidAmount": 0,
        "currencyCode": "CHF",
        "currencySymbol": "CHF",
        "pdfDownloadLink": "/invoices/G000024130/documents/statement",
        "taxReceipts": [
            {
                "id": "234567",
                "taxReceiptPdfDownloadLink": "/invoices/G000024130/receipts/234567/documents/statement"
            }
        ],
        "invoiceDetails": [
            {
                "invoiceLineItemType": "billing_line_items",
                "billingProvider": "one_time",
                "links": {
                    "self": {
                        "uri": "/invoices/OneTime-G000024130/lineitems/OneTime/BillingLineItems",
                        "method": "GET",
                        "headers": []
                    }
                },
                "attributes": {
                    "objectType": "InvoiceDetail"
                }
            }
        ],
        "amendments": [
            {
                "id": "G000024131",
                "invoiceDate": "2018-02-08T18:44:37.5381456Z",
                "totalCharges": 107661.12,
                "paidAmount": 0,
                "currencyCode": "CHF",
                "currencySymbol": "CHF",
                "invoiceDetails": [

```

```
        {
            "invoiceLineItemType": "billing_line_items",
            "billingProvider": "one_time",
            "attributes": {
                "objectType": "InvoiceDetail"
            }
        }
    ],
    "documentType": "adjustment_note",
    "amendsOf": "G000024130",
    "invoiceType": "OneTime",
    "attributes": {
        "objectType": "Invoice"
    }
}
],
"documentType": "void_note",
"invoiceType": "OneTime",
"links": {
    "self": {
        "uri": "/invoices/OneTime-G000024130",
        "method": "GET",
        "headers": []
    }
},
"attributes": {
    "objectType": "Invoice"
}
}
],
"links": {
    "self": {
        "uri": "/invoices?size=2&offset=0",
        "method": "GET",
        "headers": []
    },
    "next": {
        "uri": "/invoices?size=2&offset=2",
        "method": "GET",
        "headers": []
    }
},
"attributes": {
    "objectType": "Collection"
}
}
```

# Get a customer's utilization records for Azure

4/25/2020 • 6 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

You can get the utilization records of a customer's Azure subscription for a specified time period using the Azure utilization API.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone app and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A subscription identifier.

This API returns daily and hourly unrated consumption for an arbitrary time span. However, *this API isn't supported for Azure plans*. If you have an Azure plan, see the articles [Get invoice unbilled consumption line items](#) and [Get invoice billed consumption line items](#) instead. These articles describe how to get rated consumption at a daily level per meter per resource. This rate consumption is equivalent to the daily grain data provided by the Azure utilization API. You'll need to use the invoice identifier to retrieve billed usage data. Or, you can use current and previous periods to get unbilled usage estimates. *Hourly grain data and arbitrary date range filters aren't currently supported for Azure plan subscription resources*.

## Azure utilization API

This Azure utilization API provides access to utilization records for a time period that represents when the utilization was reported in the billing system. It provides access to the same utilization data that is used to create and calculate the reconciliation file. However, it does not have knowledge of billing system reconciliation file logic. You should not expect reconciliation file summary results to match the result retrieved from this API exactly for the same time period.

For example, the billing system takes the same utilization data and applies lateness rules to determine what is accounted for in a reconciliation file. When a billing period closes, all usage until the end of the day that the billing period ends is included in the reconciliation file. Any late usage within the billing period that is reported within 24 hours after the billing period ends is accounted for in the next reconciliation file. For the lateness rules of how the partner is billed, see [Get consumption data for an Azure subscription](#).

This REST API is paged. If the response payload is larger than a single page, you must follow the next link to get the next page of utilization records.

C#

To obtain the Azure Utilization Records:

1. Get the customer ID and subscription ID.
2. Call the [IAzureUtilizationCollection.Query](#) method to return a [ResourceCollection](#) that contains the utilization records.
3. Obtain an Azure utilization record enumerator to traverse the utilization pages. This step is required, because the resource collection is paged.

- **Sample:** [Console test app](#)
- **Project:** Partner Center SDK Samples
- **Class:** GetAzureSubscriptionUtilization.cs

```
// IAggregatePartner partnerOperations;
// string customerId;
// string subscriptionId;

IPartner partner = PartnerService.Instance.CreatePartnerOperations(credentials);

// Retrieve the utilization records for the last year in pages of 100 records.
var utilizationRecords = partner.Customers[customerId].Subscriptions[subscriptionId].Utilization.Azure.Query(
    DateTimeOffset.Now.AddYears(-1),
    DateTimeOffset.Now,
    size: 100);

// Create an Azure utilization enumerator which will aid us in traversing the utilization pages.
var utilizationRecordEnumerator = partner.Enumerators.Utilization.Azure.Create(utilizationRecords);

while (utilizationRecordEnumerator.HasValue)
{
    //
    // Insert code here to work with this page.
    //

    // Get the next page.
    utilizationRecordEnumerator.Next();
}
```

## Java

The [Partner Center Java SDK](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To obtain the Azure Utilization Records, you first need a customer identifier and a subscription identifier. You then call the [IAzureUtilizationCollection.query](#) function to return a [ResourceCollection](#) that contains the utilization records. Because the resource collection is paged, you must then obtain an Azure utilization record enumerator to traverse the utilization pages.

```

// IAggregatePartner partnerOperations;
// String customerId;
// String subscriptionId;

ResourceCollection<AzureUtilizationRecord> utilizationRecords = partnerOperations.getCustomers()
    .byId(customerId).getSubscriptions().byId(subscriptionId)
    .getUtilization().getAzure().query(
        new DateTime().minusYears(1),
        new DateTime(),
        AzureUtilizationGranularity.Daily,
        true,
        100);

// Create an Azure utilization enumerator which will aid us in traversing the utilization pages
IResourceCollectionEnumerator<ResourceCollection<AzureUtilizationRecord>> utilizationRecordEnumerator =
    partnerOperations.getEnumerators().getUtilization().getAzure().create(utilizationRecords);

while (utilizationRecordEnumerator.HasValue())
{
    //
    // Insert code here to work with this page.
    //

    // get the next page
    utilizationRecordEnumerator.Next();
}

```

## PowerShell

The [Partner Center PowerShell module](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To obtain the Azure Utilization Records, you first need a customer identifier and a subscription identifier. You then call the [Get-PartnerCustomerSubscriptionUtilization](#). This command will return all records available for the specified period of time.

```

# $customerId
# $subscriptionId

Get-PartnerCustomerSubscriptionUtilization -CustomerId $customerId -SubscriptionId $subscriptionId -StartDate
(Get-Date).AddDays(-2).ToUniversalTime() -Granularity Hourly -ShowDetails

```

## REST request

### Request syntax

METHOD	REQUEST URI
GET	{baseUrl}/v1/customers/{customer-tenant-id}/subscriptions/{subscription-id}/utilizations/azure?start_time={start-time}&end_time={end-time}&granularity={granularity}&show_details={True}

### URI parameters

Use the following path and query parameters to get the utilization records.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	string	Yes	A GUID-formatted string that identifies the customer.
subscription-id	string	Yes	A GUID-formatted string that identifies the subscription.
start_time	string in UTC date-time offset format	Yes	The start of the time range that represents when the utilization was reported in the billing system.
end_time	string in UTC date-time offset format	Yes	The end of the time range that represents when the utilization was reported in the billing system.
granularity	string	No	Defines the granularity of usage aggregations. Available options are: <code>daily</code> (default) and <code>hourly</code> .
show_details	boolean	No	Specifies whether to get the instance-level usage details. The default is <code>true</code> .
size	number	No	Specifies the number of aggregations returned by a single API call. The default is 1000. The max is 1000.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None

## Request example

The following example request produces results similar to what the reconciliation file will show for the period 7/2 - 8/1. These results may not match exactly (see the section [Azure utilization API](#) for details).

This example request returns utilization data reported in the billing system between 7/2 at 12 AM (UTC) and 8/2 at 12 AM (UTC).

```
GET https://api.partnercenter.microsoft.com/v1/customers/E499C962-9218-4DBA-8B83-8ADC94F47B9F/subscriptions/FC8F8908-F918-4406-AF13-D5BC0FE41865/utilizations/azure?start_time=2017-07-02T00:00:00-08:00&end_time=2017-08-02T00:00:00-08:00 HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: e6a3b6b2-230a-4813-999d-57f883b60d38
MS-CorrelationId: a687bc47-8d08-4b78-aff6-5a59aa2055c2
X-Locale: en-US
Host: api.partnercenter.microsoft.com
```

# REST response

If successful, this method returns a collection of [Azure Utilization Record](#) resources in the response body. If the Azure utilization data isn't yet ready in a dependent system, this method returns an HTTP Status Code 204 with a Retry-After header.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read the HTTP status code, [error code type](#), and additional parameters.

## Response example

```
HTTP/1.1 200 OK
Content-Length: 2630
Content-Type: application/json; charset=utf-8
MS-CorrelationId: a687bc47-8d08-4b78-aff6-5a59aa2055c2
MS-RequestId: e6a3b6b2-230a-4813-999d-57f883b60d38
MS-CV: PjuGoYrw806o6A3Y.0
MS-ServerId: 030020525
Date: Fri, 04 Aug 2017 23:48:28 GMT

{
  "totalCount": 2,
  "items": [
    {
      "usageStartTime": "2017-06-07T17:00:00-07:00",
      "usageEndTime": "2017-06-08T17:00:00-07:00",
      "resource": {
        "id": "8767aeb3-6909-4db2-9927-3f51e9a9085e",
        "name": "Storage Admin",
        "category": "Storage",
        "subcategory": "Block Blob",
        "region": "Azure Stack"
      },
      "quantity": 0.217790327034891,
      "unit": "1 GB/Hr",
      "infoFields": {},
      "instanceData": {
        "resourceUri": "/subscriptions/ab7e2384-eeee-489a-a14f-1eb41ddd261d/resourcegroups/system.local/providers/Microsoft.Storage/storageaccounts/srphealthaccount",
        "location": "azurestack",
        "partNumber": "",
        "orderNumber": "",
        "additionalInfo": {
          "azureStack.MeterId": "09F8879E-87E9-4305-A572-4B7BE209F857",
          "azureStack.SubscriptionId": "dbd1aa30-e40d-4436-b465-3a8bc11df027",
          "azureStack.Location": "local",
          "azureStack.EventDateTime": "06/05/2017 06:00:00"
        }
      },
      "attributes": {
        "objectType": "AzureUtilizationRecord"
      }
    },
    {
      "usageStartTime": "2017-06-07T17:00:00-07:00",
      "usageEndTime": "2017-06-08T17:00:00-07:00",
      "resource": {
        "id": "8767aeb3-6909-4db2-9927-3f51e9a9085e",
        "name": "Storage Admin",
        "category": "Storage",
        "subcategory": "Block Blob",
        "region": "Azure Stack"
      },
      "quantity": 0.217790327034891,
      "unit": "1 GB/Hr",
```

```
"infoFields": {},
"instanceData": {
    "resourceUri": "/subscriptions/ab7e2384-eaaa-489a-a14f-1eb41ddd261d/resourcegroups/system.local/providers/Microsoft.Storage/storageaccounts/srphealthaccount",
    "location": "azurystack",
    "partNumber": "",
    "orderNumber": "",
    "additionalInfo": {
        "azureStack.MeterId": "09F8879E-87E9-4305-A572-4B7BE209F857",
        "azureStack.SubscriptionId": "dbd1aa30-e40d-4436-b465-3a8bc11df027",
        "azureStack.Location": "local",
        "azureStack.EventDateTime": "06/05/2017 06:00:00"
    },
    "attributes": {
        "objectType": "AzureUtilizationRecord"
    }
},
"links": {
    "self": {
        "uri": "customers/E499C962-9218-4DBA-8B83-8ADC94F47B9F/subscriptions/FC8F8908-F918-4406-AF13-D5BC0FE41865/utilizations/azure?start_time=2017-06-10T00:00:00Z&end_time=2017-07-09T00:00:00Z&granularity=Daily&show_details=True&size=1000",
        "method": "GET",
        "headers": []
    },
    "attributes": {
        "objectType": "Collection"
    }
}
}]
```

# Get invoice by ID

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Retrieves a given invoice using the invoice ID.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A valid Invoice ID.

## C#

To get an invoice by ID:

1. Use your `IPartner.Invoices` collection and call the `ById()` method.
2. Call the `Get()` or `GetAsync()` methods.

```
// IPartner scopedPartnerOperations;  
// string selectedInvoiceId;  
  
var invoice = scopedPartnerOperations.Invoices.ById(selectedInvoiceId).Get();
```

Sample: [Console test app](#). Project: PartnerSDK.FeatureSample Class: GetInvoice.cs

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/invoices/{invoice-id}</code> HTTP/1.1

### URI parameter

Use the following query parameter to get the invoice.

NAME	TYPE	REQUIRED	DESCRIPTION
invoice-id	string	Yes	The value is an <b>invoice-id</b> that allows the reseller to filter the results for a given invoice.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/invoices/<invoice-id> HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 8ac25aa5-9537-4b6d-b782-aa0c8e979e99
MS-CorrelationId: 57eb2ca7-755f-450f-9187-eae1e75a0114
```

## REST response

If successful, this method returns an [Invoice](#) resource in the response body.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

## Response example

HTTP/1.1 200 OK  
Content-Length: 676  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: 57eb2ca7-755f-450f-9187-eae1e75a0114  
MS-RequestId: 8ac25aa5-9537-4b6d-b782-aa0c8e979e99  
Date: Thu, 24 Mar 2016 05:22:14 GMT

```
{  
    "id": "G000024135",  
    "invoiceDate": "2018-02-08T22:40:37.5897767Z",  
    "billingPeriodStartDate": "2018-02-01T22:40:37.5897767Z",  
    "billingPeriodEndDate": "2018-02-28T22:40:37.5897767Z",  
    "totalCharges": 2076.63,  
    "paidAmount": 0,  
    "currencyCode": "USD",  
    "currencySymbol": "$",  
    "pdfDownloadLink": "/invoices/G000024135/documents/statement",  
    "taxReceipts": [  
        {  
            "id": "123456",  
            "taxReceiptPdfDownloadLink": "/invoices/G000024135/receipts/123456/documents/statement"  
        }  
    ],  
    "invoiceDetails": [  
        {  
            "invoiceLineItemType": "billing_line_items",  
            "billingProvider": "one_time",  
            "links": {  
                "self": {  
                    "uri": "/invoices/OneTime-G000024135/lineitems/OneTime/BillingLineItems",  
                    "method": "GET",  
                    "headers": []  
                }  
            },  
            "attributes": {  
                "objectType": "InvoiceDetail"  
            }  
        }  
    ],  
    "documentType": "invoice",  
    "invoiceType": "OneTime",  
    "links": {  
        "self": {  
            "uri": "/invoices/OneTime-G000024135",  
            "method": "GET",  
            "headers": []  
        }  
    },  
    "attributes": {  
        "objectType": "Invoice"  
    }  
}
```

# Get invoice billed commercial consumption line items

4/25/2020 • 6 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center

You can use the following methods to get a collection of details for commercial consumption invoice line items (also known as closed daily rated usage line items) for a specified invoice.

This API also supports **azure** provider types for Microsoft Azure (MS-AZR-0145P) subscriptions. This means this API is a backward-compatible feature.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- An invoice identifier. This identifies the invoice for which to retrieve the line items.

## C#

To get the commercial line items for the specified invoice, you must retrieve the invoice object:

1. Call the **By Id** method to get an interface to invoice operations for the specified invoice.
2. Call the **Get** or **GetAsync** method to retrieve the invoice object. The invoice object contains all of the information for the specified invoice.

The **Provider** identifies the source of the billed detail information (for example, **onetime**). The **InvoiceLineItemType** specifies the type (for example, **UsageLineItem**).

The following example code uses a **foreach** loop to process the line items collection. A separate collection of line items is retrieved for each **InvoiceLineItemType**.

To get a collection of line items that correspond to an **InvoiceDetail** instance:

1. Pass the instance's **BillingProvider** and **InvoiceLineItemType** to the **By** method.
2. Call the **Get** or **GetAsync** method to retrieve the associated line items.
3. Create an enumerator to traverse the collection as shown in the following example.

```

// IAggregatePartner partnerOperations;
// string invoiceId;
// string currencyCode;
// string period;
// int pageMaxSizeReconLineItems = 2000;

// all the operations executed on this partner operation instance will share the same correlation Id but will
// differ in request Id
IPartner scopedPartnerOperations =
partnerOperations.With(RequestContextFactory.Instance.Create(Guid.NewGuid()));

var seekBasedResourceCollection = scopedPartnerOperations.Invoices.ById(invoiceId).By("onetime",
"usagelineitems", currencyCode, period, pageMaxSizeReconLineItems).Get();

var fetchNext = true;

ConsoleKeyInfo keyInfo;

var itemNumber = 1;
while (fetchNext)
{
    Console.Out.WriteLine("\tLine line items count: " + seekBasedResourceCollection.Items.Count());

    seekBasedResourceCollection.Items.ToList().ForEach(item =>
    {
        // Instance of type DailyRatedUsageLineItem
        if (item is DailyRatedUsageLineItem)
        {
            Type t = typeof(DailyRatedUsageLineItem);
            PropertyInfo[] properties = t.GetProperties();

            foreach (PropertyInfo property in properties)
            {
                // Insert code here to work with the line item properties
            }
        }
        itemNumber++;
    });

    Console.Out.WriteLine("\tPress any key to fetch next data. Press the Escape (Esc) key to quit: \n");
    keyInfo = Console.ReadKey();

    if (keyInfo.Key == ConsoleKey.Escape)
    {
        break;
    }

    fetchNext = !string.IsNullOrWhiteSpace(seekBasedResourceCollection.ContinuationToken);

    if (fetchNext)
    {
        if (seekBasedResourceCollection.Links.Next.Headers != null &&
seekBasedResourceCollection.Links.Next.Headers.Any())
        {
            seekBasedResourceCollection = scopedPartnerOperations.Invoices.ById(invoiceId).By("onetime",
"usagelineitems", currencyCode, period,
pageMaxSizeReconLineItems).Seek(seekBasedResourceCollection.ContinuationToken, SeekOperation.Next);
        }
    }
}

```

For a similar example, see the following:

- Sample: [Console test app](#)
- Project: [Partner Center SDK Samples](#)

- Class: `GetBilledConsumptionReconLineItemsPaging.cs`

## REST request

### Request syntax

Use the first syntax to return a full list of every line item for the given invoice. For large invoices, use the second syntax with a specified size and 0-based offset to return a paged list of line items. Use the third syntax to get the next page of recon line items using `seekOperation = "Next"`.

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/invoices/{invoice-id}/lineitems?provider=onetime&amp;invoicelineitemtype=usagelineitems&amp;currencycode={currencycode}</code> HTTP/1.1
GET	<code>{baseUrl}/v1/invoices/{invoice-id}/lineitems?provider=onetime&amp;invoicelineitemtype=usagelineitems&amp;currencycode={currencycode}&amp;size={size}</code> HTTP/1.1
GET	<code>{baseUrl}/v1/invoices/{invoice-id}/lineitems?provider=onetime&amp;invoicelineitemtype=usagelineitems&amp;currencycode={currencycode}&amp;size={size}&amp;seekOperation=Next</code>

### URI parameters

Use the following URI and query parameters when creating the request.

NAME	TYPE	REQUIRED	DESCRIPTION
invoice-id	string	Yes	A string that identifies the invoice.
provider	string	Yes	The provider: "OneTime".
invoice-line-item-type	string	Yes	The type of invoice detail: "UsageLineItems".
currencyCode	string	Yes	The currency code for the billed line items.
period	string	Yes	The period for billed recon. example: current, previous.
size	number	No	The maximum number of items to return. Default size is 2000
seekOperation	string	No	Set seekOperation=Next to get the next page of recon line items.

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

None.

# REST response

If successful, the response contains the collection of line item details.

For the line item **ChargeType**, the value **Purchase** is mapped to **New**. The value **Refund** is mapped to **Cancel**.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

# REST examples

## Request-response example 1

The details for this example REST request and response are as follows:

- **Provider**: OneTime
- **InvoiceLineItemType**: UsageLineItems
- **Period**: Previous

### Request example 1

```
GET https://api.partnercenter.microsoft.com/v1/invoices/T000001234/lineitems?  
provider=onetetime&invoicelineitemtype=usagelineitems&currencycode=usd&period=previous&size=2000 HTTP/1.1  
Authorization: Bearer <token>  
Accept: application/json  
MS-RequestId: 1234ecb8-37af-45f4-a1a1-358de3ca2b9e  
MS-CorrelationId: 5e612512-4345-4bb0-866e-47aeda031234  
X-Locale: en-US  
MS-PartnerCenter-Application: Partner Center .NET SDK Samples  
Host: api.partnercenter.microsoft.com
```

### Response example 1

```
HTTP/1.1 200 OK  
Content-Length: 2484  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: 5e612512-4345-4bb0-866e-47aeda031234  
MS-RequestId: 1234ecb8-37af-45f4-a1a1-358de3ca2b9e  
MS-CV: bpqyomePDUqrSSYC.0  
MS-ServerId: 202010406  
Date: Wed, 20 Feb 2019 19:59:27 GMT  
  
{  
    "totalCount": 2,  
    "items": [  
        {  
            "partnerId": "2b8940db-5089-539c-e757-520ed1d1bc88",  
            "partnerName": "",  
            "customerId": "",  
            "customerName": "",  
            "customerDomainName": "",  
            "invoiceNumber": "T000001234",  
            "productId": "",  
            "skuId": "",  
            "availabilityId": "",  
            "skuName": "Test Test on Windows 2012 R2 (WebHost)",  
            "productName": "Test Test on Windows",  
            "publisherName": "Test",  
            "publisherId": "28503520",  
            "subscriptionId": "12345678-9d62-4a85-8fd0-91a87c261bc4",  
            "subscriptionDescription": "Subscription 10",  
            "chargeStartTime": "2018-11-01T00:00:00Z"
```

```
        "chargeStartDate": "2018-11-01T00:00:00Z",
        "chargeEndDate": "2018-12-01T00:00:00Z",
        "usageDate": "2018-11-13T00:00:00Z",
        "meterType": "1 Compute Hour - 1core",
        "meterCategory": "Virtual Machine Licenses",
        "meterId": "1core",
        "meterSubCategory": "Test Test on Windows",
        "meterName": "Test Test on Windows - Test Test on Windows 2012 R2 (WebHost) - 1 Core Hours",
        "meterRegion": "",
        "unitOfMeasure": "1 Hour",
        "resourceLocation": "EASTUS2",
        "consumedService": "Microsoft.Compute",
        "resourceGroup": "TestWINRG",
        "resourceUri": "/subscriptions/12345678-9d62-4a85-8fd0-
91a87c261bc4/resourceGroups/TestWINRG/providers/Microsoft.Compute/virtualMachines/testWinTest",
        "tags": "",
        "additionalInfo": "{ \\"ImageType\\": null, \\"ServiceType\\": \\"Standard_B1s\\", \\"VMName\\": null,
\\\"VMProperties\\": null, \\"UsageType\\": \\"ComputeHR_SW\\"}",
        "serviceInfo1": "",
        "serviceInfo2": "",
        "customerCountry": "",
        "mpnId": "1234567",
        "resellerMpnId": "",
        "chargeType": "new",
        "unitPrice": 0.0209496384791679,
        "quantity": 23.200004,
        "unitType": "1 Hour",
        "billingPreTaxTotal": 0.486031696515249,
        "billingCurrency": "USD",
        "pricingPreTaxTotal": 0.486031696515249,
        "pricingCurrency": "USD",
        "invoiceLineItemType": "usage_line_items",
        "billingProvider": "marketplace",
        "attributes": {
            "objectType": "DailyRatedUsageLineItem"
        }
    },
    {
        "partnerId": "2b8940db-5089-539c-e757-520ed1d1bc88",
        "partnerName": "",
        "customerId": "",
        "customerName": "",
        "customerDomainName": "",
        "invoiceNumber": "T000001234",
        "productId": "",
        "skuId": "",
        "availabilityId": "",
        "skuName": "Test Test on Ubuntu 16.04 (WebHost)",
        "productName": "Test Test on Linux",
        "publisherName": "Test",
        "publisherId": "28503520",
        "subscriptionId": "12345678-9d62-4a85-8fd0-91a87c261bc4",
        "subscriptionDescription": "Subscription 10",
        "chargeStartDate": "2018-11-01T00:00:00Z",
        "chargeEndDate": "2018-12-01T00:00:00Z",
        "usageDate": "2018-11-13T00:00:00Z",
        "meterType": "1 Compute Hour - 1core",
        "meterCategory": "Virtual Machine Licenses",
        "meterId": "1core",
        "meterSubCategory": "Test Test on Linux",
        "meterName": "Test Test on Linux - Test Test on Ubuntu 16.04 (WebHost) - 1 Core Hours",
        "meterRegion": "",
        "unitOfMeasure": "1 Hour",
        "resourceLocation": "EASTUS",
        "consumedService": "Microsoft.Compute",
        "resourceGroup": "TESTRG",
        "resourceUri": "/subscriptions/12345678-9d62-4a85-8fd0-
91a87c261bc4/resourceGroups/TestRG/providers/Microsoft.Compute/virtualMachines/testUbuntuTest",
        "tags": ""
    }
]
```

```

    "additionalInfo": "{ \"ImageType\": null, \"ServiceType\": \"Standard_Bits\", \"VMName\": null,
\"VMProperties\": null, \"UsageType\": \"ComputeHR_SW\"}",
    "serviceInfo1": "",
    "serviceInfo2": "",
    "customerCountry": "",
    "mpnId": "1234567",
    "resellerMpnId": "",
    "chargeType": "new",
    "unitPrice": 0.0209951014286867,
    "quantity": 23.350007,
    "unitType": "1 Hour",
    "billingPreTaxTotal": 0.490235765325545,
    "billingCurrency": "USD",
    "pricingPreTaxTotal": 0.490235765325545,
    "pricingCurrency": "USD",
    "entitlementId": "66bada28-271e-4b7a-aaf5-c0ead6312345",
    "entitlementDescription": "Partner Subscription",
    "pcToBCEExchangeRate": 1,
    "pcToBCEExchangeRateDate": "2019-08-01T00:00:00Z",
    "effectiveUnitPrice": 0.1999968000511991808131,
    "rateOfPartnerEarnedCredit": 0,
    "invoiceLineItemType": "usage_line_items",
    "billingProvider": "marketplace",
    "attributes": {
        "objectType": "DailyRatedUsageLineItem"
    }
},
],
"links": {
    "self": {
        "uri": "/invoices/T000001234/lineitems?
provider=onetime&invoicelineitemtype=usagelineitems&currencycode=usd&period=previous&size=2000",
        "method": "GET",
        "headers": []
    },
    "next": {
        "uri": "/invoices/T000001234/lineitems?
provider=onetime&invoicelineitemtype=usagelineitems&currencycode=usd&period=previous&size=2000&seekOperation=N
ext",
        "method": "GET",
        "headers": [
            {
                "key": "MS-ContinuationToken",
                "value": "AQAAAA=="
            }
        ]
    },
    "attributes": {
        "objectType": "Collection"
    }
}
}

```

## Request-response example 2

The details for this example REST request and response are as follows:

- **Provider: OneTime**
- **InvoiceLineItemType: UsageLineItems**
- **Period: Previous**
- **SeekOperation: Next**

### Request example 2

```

GET https://api.partnercenter.microsoft.com/v1/invoices/T000001234/lineitems?
provider=onetime&invoiceLineItemType=usagelineitems&currencyCode=usd&period=previous&size=2000&seekoperation=n
ext HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-ContinuationToken: d19617b8-fbe5-4684-a5d8-0230972fb0cf,0705c4a9-39f7-4261-ba6d-
53e24a9ce47d_a4ayc/80/0Gda4B0/1o/V0etp0qiLx1JwB5S3beHw0s=,0d81c700-98b4-4b13-9129-ffd5620f72e7
MS-RequestId: 1234ecb8-37af-45f4-a1a1-358de3ca2b9e
MS-CorrelationId: 5e612512-4345-4bb0-866e-47aeda031234
X-Locale: en-US
MS-PartnerCenter-Application: Partner Center .NET SDK Samples
Host: api.partnercenter.microsoft.com

```

## Response example 2

```

HTTP/1.1 200 OK
Content-Length: 2484
Content-Type: application/json; charset=utf-8
MS-CorrelationId: 5e612512-4345-4bb0-866e-47aeda031234
MS-RequestId: 1234ecb8-37af-45f4-a1a1-358de3ca2b9e
MS-CV: bpqyomePDUqrSSYC.0
MS-ServerId: 202010406
Date: Wed, 20 Feb 2019 19:59:27 GMT

{
    "totalCount": 1,
    "items": [
        {
            "partnerId": "2b8940db-5089-539c-e757-520ed1d1bc88",
            "partnerName": "",
            "customerId": "",
            "customerName": "",
            "customerDomainName": "",
            "invoiceNumber": "T000001234",
            "productId": "",
            "skuId": "",
            "availabilityId": "",
            "skuName": "Test Test on Windows 2012 R2 (WebHost)",
            "productName": "Test Test on Windows",
            "publisherName": "Test",
            "publisherId": "28503520",
            "subscriptionId": "12345678-9d62-4a85-8fd0-91a87c261bc4",
            "subscriptionDescription": "Subscription 10",
            "chargeStartDate": "2018-11-01T00:00:00Z",
            "chargeEndDate": "2018-12-01T00:00:00Z",
            "usageDate": "2018-11-13T00:00:00Z",
            "meterType": "1 Compute Hour - 1core",
            "meterCategory": "Virtual Machine Licenses",
            "meterId": "1core",
            "meterSubCategory": "Test Test on Windows",
            "meterName": "Test Test on Windows - Test Test on Windows 2012 R2 (WebHost) - 1 Core Hours",
            "meterRegion": "",
            "unitOfMeasure": "1 Hour",
            "resourceLocation": "EASTUS2",
            "consumedService": "Microsoft.Compute",
            "resourceGroup": "TestWINRG",
            "resourceUri": "/subscriptions/12345678-9d62-4a85-8fd0-
91a87c261bc4/resourceGroups/TestWINRG/providers/Microsoft.Compute/virtualMachines/testWinTest",
            "tags": "",
            "additionalInfo": "{ \\"ImageType\\": null, \\"ServiceType\\": \"Standard_B1s\", \\"VMName\\": null,
\\\"VMProperties\\": null, \\"UsageType\\": \"ComputeHR_SW\"}",
            "serviceInfo1": "",
            "serviceInfo2": "",
            "customerCountry": "",
            "mpnId": "1234567",
        }
    ]
}

```

```
"resellerMpnId": "",  
"chargeType": "new",  
"unitPrice": 0.0209496384791679,  
"quantity": 23.20004,  
"unitType": "1 Hour",  
"billingPreTaxTotal": 0.486031696515249,  
"billingCurrency": "USD",  
"pricingPreTaxTotal": 0.486031696515249,  
"pricingCurrency": "USD",  
"entitlementId": "66bada28-271e-4b7a-aaf5-c0ead6312345",  
"entitlementDescription": "Partner Subscription",  
"pcToBCEExchangeRate": 1,  
"pcToBCEExchangeRateDate": "2019-08-01T00:00:00Z",  
"effectiveUnitPrice": 0.1835431430074643112595,  
"rateOfPartnerEarnedCredit": 0.15,  
  
    "attributes": {  
        "objectType": "DailyRatedUsageLineItem"  
    }  
},  
],  
"links": {  
    "self": {  
        "uri": "/invoices/T000001234/lineitems?  
provider=onetime&invoicelineitemtype=usage&lineitems&currencycode=usd&period=previous&size=2000",  
        "method": "GET",  
        "headers": []  
    }  
},  
"attributes": {  
    "objectType": "Collection"  
}  
}
```

# Get invoice estimate links

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

You can get estimate links to help query details for unbilled reconciliation line items.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- An invoice identifier. This identifies the invoice for which to retrieve the line items.

## C#

The following example code shows how you can get the estimate links to query unbilled line items for a given currency. The response contains the estimate links for each period (for example, the current and previous month).

```
// IAggregatePartner partnerOperations;
// string currencyCode;

// all the operations executed on this partner operation instance will share the same correlation Id but will
// differ in request Id
IPartner scopedPartnerOperations =
partnerOperations.With(RequestContextFactory.Instance.Create(Guid.NewGuid()));

// read estimate links for currencycode
var estimateLinks = scopedPartnerOperations.Invoices.Estimates.Links.ByCurrency(currencyCode).Get();
```

For a similar example, see the following:

- Sample: [Console test app](#)
- Project: [Partner Center SDK Samples](#)
- Class: [GetEstimatesLinks.cs](#)

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>/baseURL/v1/invoices/estimates/links?currencycode={currencycode}</code> HTTP/1.1

### URI parameters

Use the following URI and query parameter when creating the request.

NAME	TYPE	REQUIRED	DESCRIPTION
currencyCode	string	Yes	The currency code for the unbilled line items.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/invoices/estimates/links?currencycode=usd HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 1234ecb8-37af-45f4-a1a1-358de3ca2b9e
MS-CorrelationId: 5e612512-4345-4bb0-866e-47aeda031234
X-Locale: en-US
MS-PartnerCenter-Application: Partner Center .NET SDK Samples
Host: api.partnercenter.microsoft.com
```

## REST response

If successful, the response contains the links to retrieve unbilled estimates.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Server: Microsoft-IIS/10.0
MS-CorrelationId: 80EAA055-B5D3-4D88-BFE8-924A3F706462
MS-RequestId: 1b18689e-3fe3-4fdb-d09e-39d13941390b
X-Locale: en-US
X-SourceFiles: =?UTF-8?B?
RDpcU291cmNlc1xSUEuUGFydG5lci5TZJ2aWN1LkJpbGxpemdTZJ2aWN1XHYxLjFcV2ViQXBpc1xCaWxsaw5nU2VydmljZS5WMi5XZWJcdj
Fcaw52b21jZXNCZXN0aW1hdGVzXGxpbtz?=
X-Powered-By: ASP.NET
Date: Thu, 14 Mar 2019 18:15:06 GMT
Content-Length: 1857

{
  "totalCount": 4,
  "items": [
    {
      "type": "daily_rated_usage",
      "title": "Daily rated usage unbilled",
      "description": "This invoice line items includes unbilled consumption based data only.",
      "period": "Current",
      "link": {
        "uri": "/invoices/unbilled/lineitems?
provider=Marketplace&invoicelineitemtype=UsageLineItems&currencycode=USD&period=current&size=2000",
        "method": "GET",
        "headers": []
      }
    },
  ],
}
```

```
{
  "type": "daily_rated_usage",
  "title": "Daily rated usage unbilled",
  "description": "This invoice line items includes unbilled consumption based data only.",
  "period": "Previous",
  "link": {
    "uri": "/invoices/unbilled/lineitems?
provider=Marketplace&invoicelineitemtype=UsageLineItems&currencycode=USD&period=previous&size=2000",
    "method": "GET",
    "headers": []
  }
},
{
  "type": "non_consumption",
  "title": "Unbilled reconciliation line items",
  "description": "This includes reconciliation line items for unbilled data only.",
  "period": "Current",
  "link": {
    "uri": "/invoices/unbilled/lineitems?
provider=all&invoicelineitemtype=billinglineitems&currencycode=USD&period=current&size=2000",
    "method": "GET",
    "headers": []
  }
},
{
  "type": "non_consumption",
  "title": "Unbilled reconciliation line items",
  "description": "This includes reconciliation line items for unbilled data only.",
  "period": "Previous",
  "link": {
    "uri": "/invoices/unbilled/lineitems?
provider=all&invoicelineitemtype=billinglineitems&currencycode=USD&period=previous&size=2000",
    "method": "GET",
    "headers": []
  }
},
],
"attributes": {
  "objectType": "Collection"
}
}
```

# Get invoice line items

5/7/2020 • 11 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

You can use the following methods to get a collection details for of invoice line items (also known as closed billing line items) for a specified invoice.

*Except for bug fixes, this API is no longer being updated.* You should update your applications to call the **onetetime** API instead of **marketplace**. The **onetetime** API provides additional functionality, and will continue to be updated.

You should use **onetetime** to query all commercial consumption line items instead of **marketplace**. Or, you can follow the links in the estimate links call.

This API also supports the provider types of **azure** and **office** for Microsoft Azure (MS-AZR-0145P) subscriptions and Office offers, which makes the API feature backward compatible.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- An invoice identifier. This identifies the invoice for which to retrieve the line items.

## C#

To get the line items for the specified invoice:

1. Call the **ById** method to get an interface to invoice operations for the specified invoice.
2. Call the **Get** or **GetAsync** method to retrieve the invoice object. The invoice object contains all of the information for the specified invoice.
3. Use the invoice object's **InvoiceDetails** property to get access to a collection of **InvoiceDetail** objects, each of which contains a **BillingProvider** and an **InvoiceLineItemType**. The **BillingProvider** identifies the source of the invoice detail information (such as Office, Azure, OneTime), and the **InvoiceLineItemType** specifies the type (for example, **BillingLineItem**).

The following example code uses a **foreach** loop to process the **InvoiceDetails** collection. A separate collection of line items is retrieved for each **InvoiceDetail** instance.

To get a collection of line items that correspond to an **InvoiceDetail** instance:

1. Pass the instance's **BillingProvider** and **InvoiceLineItemType** to the **By** method.
2. Call the **Get** or **GetAsync** method to retrieve the associated line items.
3. Create an enumerator to traverse the collection as shown in the following example.

```

// IAggregatePartner partnerOperations;
// int invoicePageSize;
// string invoiceId;

// Retrieve the invoice.
var invoiceOperations = partnerOperations.Invoices.ById(invoiceId);
var invoice = invoiceOperations.Get();

foreach (var invoiceDetail in invoice.InvoiceDetails)
{
    Console.WriteLine(string.Format("Getting invoice line item for product {0} and line item type {1}",
        invoiceDetail.BillingProvider,
        invoiceDetail.InvoiceLineItemType));

    // Is this an unpaged or paged request?
    bool isUnPaged = (this.invoicePageSize <= 0);

    // If the scenario is unpaged, get all the invoice line items, otherwise get the first page.
    var invoiceLineItemsCollection =
        (isUnPaged)
            ? invoiceOperations.By(invoiceDetail.BillingProvider, invoiceDetail.InvoiceLineItemType).Get()
            : invoiceOperations.By(invoiceDetail.BillingProvider,
        invoiceDetail.InvoiceLineItemType).Get(this.invoicePageSize, 0);

    // Create an enumerator for traversing the line items collection.
    var invoiceLineItemEnumerator =
        partnerOperations.Enumerators.InvoiceLineItems.Create(invoiceLineItemsCollection);

    while (invoiceLineItemEnumerator.HasValue)
    {
        // invoiceLineItemEnumerator.Current contains a collection
        // of line items.
        Console.WriteLine(string.Format("invoiceLineItemEnumerator.Current has {0} line items.",
            invoiceLineItemEnumerator.Current.TotalCount));
        //
        // Insert code here to work with the line items.
        //
        Console.WriteLine();
        Console.Write("Press any key to retrieve the next invoice line items page");
        Console.ReadKey();

        // Get the next list of invoice line items.
        invoiceLineItemEnumerator.Next();
    }
}

```

For a similar example, see the following:

- Sample: [Console test app](#)
- Project: [Partner Center SDK Samples](#)
- Class: [GetInvoiceLineItems.cs](#)

## REST request

### Request syntax

Make your request using the appropriate syntax for the billing provider in your scenario.

#### Office

The following syntax applies when the billing provider is **Office**.

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/invoices/{invoice-id}/lineitems?provider=office&amp;invoicelineitemtype=billinglineitems&amp;size={size}&amp;offset={offset} HTTP/1.1</code>

#### Microsoft Azure (MS-AZR-0145P) subscription

The following syntaxes apply when the billing provider has a Microsoft Azure (MS-AZR-0145P) subscription.

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/invoices/{invoice-id}/lineitems?provider=azure&amp;invoicelineitemtype=billinglineitems&amp;size={size}&amp;offset={offset} HTTP/1.1</code>
GET	<code>{baseUrl}/v1/invoices/{invoice-id}/lineitems?provider=azure&amp;invoicelineitemtype=usagelineitems&amp;size={size}&amp;offset={offset} HTTP/1.1</code>

#### OneTime

The following syntaxes apply when the billing provider is OneTime. This includes charges for Azure reservations, software, Azure plans, and commercial marketplace products.

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/invoices/{invoice-id}/lineitems?provider=onetime&amp;invoicelineitemtype=billinglineitems&amp;size={size} HTTP/1.1</code>
GET	<code>{baseUrl}/v1/invoices/{invoice-id}/lineitems/onetime/billinglineitems&amp;size={size}?seekOperation=Next</code>

#### Previous syntaxes

If you are using the following syntaxes, be sure to use the appropriate syntax for your use case.

*Except for bug fixes, this API is no longer being updated.* You should update your applications to call the **onetetime** API instead of **marketplace**. The **onetetime** API provides additional functionality, and will continue to be updated.

You should use **onetetime** to query all commercial consumption line items instead of **marketplace**. Or, you can follow the links in the estimate links call.

METHOD	REQUEST URI	DESCRIPTION OF SYNTAX USE CASE
GET	<code>{baseUrl}/v1/invoices/{invoice-id}/lineitems/{billing-provider}/{invoice-line-item-type} HTTP/1.1</code>	You can use this syntax to return a full list of every line item for the given invoice.
GET	<code>{baseUrl}/v1/invoices/{invoice-id}/lineitems/{billing-provider}/{invoice-line-item-type}?size={size}&amp;offset={offset} HTTP/1.1</code>	For large invoices, you can use this syntax with a specified size and 0-based offset to return a paged list of line items.

METHOD	REQUEST URI	DESCRIPTION OF SYNTAX USE CASE
GET	<code>{baseUrl}/v1/invoices/{invoice-id}/lineitems/OneTime/{invoice-line-item-type}?seekOperation=Next</code>	You can use this syntax for an invoice with a billing-provider value of <b>OneTime</b> and set <b>seekOperation</b> to <b>Next</b> to get the next page of invoice line items.

#### URI parameters

Use the following URI and query parameters when creating the request.

NAME	TYPE	REQUIRED	DESCRIPTION
invoice-id	string	Yes	A string that identifies the invoice.
billing-provider	string	Yes	The billing provider: "Office", "Azure", "OneTime".
invoice-line-item-type	string	Yes	The type of invoice detail: "BillingLineItems", "UsageLineItems".
size	number	No	The maximum number of items to return. Default max size = 2000
offset	number	No	The zero-based index of the first line item to return.
seekOperation	string	No	If <b>billing-provider</b> equals <b>OneTime</b> , set <b>seekOperation</b> equal to <b>Next</b> to get the next page of invoice line items.
hasPartnerEarnedCredit	bool	No	The value indicating if to return the line items with partner earned credit applied. Note: this parameter will be only applied when billing provider type is OneTime and InvoiceLineItemType is UsageLineItems.

#### Request headers

For more information, see [Partner Center REST headers](#).

#### Request body

None.

## REST response

If successful, the response contains the collection of line item details.

*For the line item **ChargeType**, the value **Purchase** is mapped to **New**. The value **Refund** is mapped to **Cancel**.*

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

## REST request-response examples

### Request-response example 1

In this example, the details are as follows:

- **BillingProvider: Office**
- **InvoiceLineItemType: BillingLineItems**

#### Request example 1

```
GET https://api.partnercenter.microsoft.com/v1/invoices/1234000000/lineitems?  
provider=Office&nvoicelineitemtype=BillingLineItems&size=2&offset=0 HTTP/1.1  
Authorization: Bearer <token>  
Accept: application/json  
MS-RequestId: 1eb2ecb8-37af-45f4-a1a1-358de3ca2b9e  
MS-CorrelationId: 5e612512-4345-4bb0-866e-47aeda03fe54  
X-Locale: en-US  
MS-PartnerCenter-Application: Partner Center .NET SDK Samples  
Host: api.partnercenter.microsoft.com
```

#### Response example 1

```
HTTP/1.1 200 OK  
Content-Length: 2484  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: 5e612512-4345-4bb0-866e-47aeda03fe54  
MS-RequestId: 1eb2ecb8-37af-45f4-a1a1-358de3ca2b9e  
MS-CV: bpqyomePDUqrSSYC.0  
MS-ServerId: 202010406  
Date: Thu, 07 Sep 2017 23:31:09 GMT  
  
{  
    "totalCount": 2,  
    "items": [  
        {"partnerId": "3b33e682-00c3-41ee-9dd2-a548adf56438",  
        "customerId": "74221236-D09C-4870-AC1D-33E155E9AEBE",  
        "customerName": "TSTAGIN1CUST190",  
        "mpnId": 4391507,  
        "tier2MpnId": -1,  
        "orderId": "567735045559164136",  
        "subscriptionId": "4KIKawEAAAAAAEA",  
        "syndicationPartnerSubscriptionNumber": "1F58ACD7-FE51-4705-9567-D009C9ADA150",  
        "offerId": "AAA5B3F0-0EE2-431B-A42F-3F18F3C6D540",  
        "durableOfferId": "2F707C7C-2433-49A5-A437-9CA7CF40D3EB",  
        "offerName": "EXCHANGE ONLINE (PLAN 2)",  
        "domainName": "TStagin1Cust190.onmicrosoft.com",  
        "billingCycleType": "MONTHLY",  
        "subscriptionName": "EXCHANGE ONLINE (PLAN 2)",  
        "subscriptionDescription": "EXCHANGE ONLINE (PLAN 2)",  
        "subscriptionStartDate": "2017-05-12T00:00:00",  
        "subscriptionEndDate": "2018-06-10T00:00:00",  
        "chargeStartDate": "2017-05-12T00:00:00",  
        "chargeEndDate": "2017-06-09T00:00:00",  
        "chargeType": "New",  
        "unitPrice": 0.0,  
        "quantity": 3,  
        "amount": 0.0,  
        "totalOtherDiscount": 0.0,  
        "subtotal": 0.0,  
        "tax": 0.0,
```

```

        "totalForCustomer": 0.0,
        "currency": "USD",
        "invoiceLineItemType": "billing_line_items",
        "billingProvider": "office",
        "attributes": {
            "objectType": "LicenseBasedLineItem"
        }
    },
    {
        "partnerId": "3b33e682-00c3-41ee-9dd2-a548adf56438",
        "customerId": "74221236-D09C-4870-AC1D-33E155E9AEBE",
        "customerName": "TSTAGIN1CUST190",
        "mpnId": 4391507,
        "tier2MpnId": -1,
        "orderId": "567735045564795186",
        "subscriptionId": "Ik4YawAAAAAAEA",
        "syndicationPartnerSubscriptionNumber": "D8A8F773-9D3E-4244-8797-3182075F09FA",
        "offerId": "618B53FE-9B99-428B-9745-F706AEAF3979",
        "durableOfferId": "69C67983-CF78-4102-83F6-3E5FD246864F",
        "offerName": "SHAREPOINT ONLINE (PLAN 2)",
        "domainName": "TStagin1Cust190.onmicrosoft.com",
        "billingCycleType": "MONTHLY",
        "subscriptionName": "SHAREPOINT ONLINE (PLAN 2)",
        "subscriptionDescription": "SHAREPOINT ONLINE (PLAN 2)",
        "subscriptionStartDate": "2017-05-13T00:00:00",
        "subscriptionEndDate": "2018-06-10T00:00:00",
        "chargeStartDate": "2017-05-13T00:00:00",
        "chargeEndDate": "2017-06-09T00:00:00",
        "chargeType": "New",
        "unitPrice": 0.0,
        "quantity": 1,
        "amount": 0.0,
        "totalOtherDiscount": 0.0,
        "subtotal": 0.0,
        "tax": 0.0,
        "totalForCustomer": 0.0,
        "currency": "USD",
        "invoiceLineItemType": "billing_line_items",
        "billingProvider": "office",
        "attributes": {
            "objectType": "LicenseBasedLineItem"
        }
    }
],
"links": {
    "self": {
        "uri": "/invoices/1234000000/lineitems?
provider=Office&nvoicelineitemtype=BillingLineItems&size=2&offset=0",
        "method": "GET",
        "headers": []
    },
    "next": {
        "uri": "/invoices/1234000000/lineitems?
provider=Office&nvoicelineitemtype=BillingLineItems&size=2&offset=",
        "method": "GET",
        "headers": []
    }
},
"attributes": {
    "objectType": "Collection"
}
}

```

## Request-response example 2

In the following example, the details are as follows:

- BillingProvider: Azure

- **InvoiceLineItemType: BillingLineItems**

#### Request example 2

```
GET https://api.partnercenter.microsoft.com/v1/invoices/1234000000/lineitems?  
provider=Azure&invoicelineitemtype=BillingLineItems&size=2&offset=0 HTTP/1.1  
Authorization: Bearer <token>  
Accept: application/json  
MS-RequestId: 1eb2ecb8-37af-45f4-a1a1-358de3ca2b9e  
MS-CorrelationId: 5e612512-4345-4bb0-866e-47aeda03fe54  
X-Locale: en-US  
MS-PartnerCenter-Application: Partner Center .NET SDK Samples  
Host: api.partnercenter.microsoft.com
```

#### Response example 2

```
HTTP/1.1 200 OK  
Content-Length: 2484  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: 5e612512-4345-4bb0-866e-47aeda03fe54  
MS-RequestId: 1eb2ecb8-37af-45f4-a1a1-358de3ca2b9e  
MS-CV: bpqyomePDUqrSSYC.0  
MS-ServerId: 202010406  
Date: Thu, 07 Sep 2017 23:31:09 GMT  
  
{  
    "totalCount": 2,  
    "items": [  
        {  
            "detailLineItemId": 1,  
            "sku": "7UD-00001",  
            "includedQuantity": 0,  
            "overageQuantity": 745,  
            "listPrice": 0.085,  
            "currency": "USD",  
            "pretaxCharges": 63.33,  
            "taxAmount": 6.34,  
            "postTaxTotal": 69.67,  
            "pretaxEffectiveRate": 0.08500671,  
            "postTaxEffectiveRate": 0.09351677,  
            "chargeType": "Assess usage fee for current cycle",  
            "invoiceLineItemType": "billing_line_items",  
            "partnerId": "1F5CCB06-8E36-4A74-A74C-FCAA9E000000",  
            "partnerName": "TEST_TEST_Big foot consulting",  
            "partnerBillableAccountId": "1010578050",  
            "customerId": "65726577-c208-40fd-9735-8c85ac000000",  
            "domainName": "600test.onmicrosoft.com",  
            "customerCompanyName": "601 tests",  
            "mpnId": 4390934,  
            "tier2MpnId": -1,  
            "invoiceNumber": "1234000000",  
            "subscriptionId": "87f4b92f-a490-485e-ad34-5b70cb000000",  
            "subscriptionName": "Microsoft Azure",  
            "subscriptionDescription": "Microsoft Azure",  
            "billingCycleType": "Monthly",  
            "orderId": "568297985427000000",  
            "serviceName": "Azure App Service",  
            "serviceType": "Standard Plan",  
            "resourceGuid": "505db374-df8a-44df-9d8c-13c14b61dee1",  
            "resourceName": "S1",  
            "region": "",  
            "consumedQuantity": 745,  
            "chargeStartDate": "2019-08-02T00:00:00",  
            "chargeEndDate": "2019-09-01T00:00:00",  
            "unit": "1 Hour",  
            "billingProvider": "azure",  
            "attributes": {
```

```

        "objectType": "UsageBasedLineItem"
    },
},
{
    "detailLineItemId": 1,
    "sku": "7UD-00001",
    "includedQuantity": 0,
    "overageQuantity": 0.000882,
    "listPrice": 0.0383,
    "currency": "USD",
    "pretaxCharges": 0,
    "taxAmount": 0,
    "postTaxTotal": 0,
    "pretaxEffectiveRate": 0,
    "postTaxEffectiveRate": 0,
    "chargeType": "Assess usage fee for current cycle",
    "invoiceLineItemType": "billing_line_items",
    "partnerId": "1F5CCB06-8E36-4A74-A74C-FCAA9E87E26A",
    "partnerName": "TEST_TEST_Big foot consulting",
    "partnerBillableAccountId": "1010578050",
    "customerId": "65726577-c208-40fd-9735-8c85ac9cac68",
    "domainName": "600test.onmicrosoft.com",
    "customerCompanyName": "601 tests",
    "mpnId": 4390934,
    "tier2MpnId": -1,
    "invoiceNumber": "1234000000",
    "subscriptionId": "87f4b92f-a490-485e-ad34-5b70cb000000",
    "subscriptionName": "Microsoft Azure",
    "subscriptionDescription": "Microsoft Azure",
    "billingCycleType": "Monthly",
    "orderId": "568297985427000000",
    "serviceName": "Storage",
    "serviceType": "Standard Page Blob",
    "resourceGuid": "d23a5753-ff85-4ddf-af28-8cc5cf2d3882",
    "resourceName": "LRS Data Stored",
    "region": "",
    "consumedQuantity": 0.000882,
    "chargeStartDate": "2019-08-02T00:00:00",
    "chargeEndDate": "2019-09-01T00:00:00",
    "unit": "1 GB/Month",
    "billingProvider": "azure",
    "attributes": {
        "objectType": "UsageBasedLineItem"
    }
}
],
"links": {
    "self": {
        "uri": "/invoices/1234000000/lineitems?
provider=Azure&invoicelineitemtype=BillingLineItems&size=2&offset=0",
        "method": "GET",
        "headers": []
    },
    "next": {
        "uri": "/invoices/1234000000/lineitems?
provider=Azure&invoicelineitemtype=BillingLineItems&size=2&offset=2",
        "method": "GET",
        "headers": []
    }
},
"attributes": {
    "objectType": "Collection"
}
}

```

### Request-response example 3

In the following example, the details are as follows:

- **BillingProvider: Azure**
- **InvoiceLineItemType: UsageLineItems**

#### Request example 3

```
GET https://api.partnercenter.microsoft.com/v1/invoices/1234000000/lineitems?
provider=Azure&invoicelineitemtype=UsageLineItems&size=2&offset=0 HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 1eb2ecb8-37af-45f4-a1a1-358de3ca2b9e
MS-CorrelationId: 5e612512-4345-4bb0-866e-47aeda03fe54
X-Locale: en-US
MS-PartnerCenter-Application: Partner Center .NET SDK Samples
Host: api.partnercenter.microsoft.com
```

#### Response example 3

```
HTTP/1.1 200 OK
Content-Length: 2484
Content-Type: application/json; charset=utf-8
MS-CorrelationId: 5e612512-4345-4bb0-866e-47aeda03fe54
MS-RequestId: 1eb2ecb8-37af-45f4-a1a1-358de3ca2b9e
MS-CV: bpqyomePDUqrSSYC.0
MS-ServerId: 202010406
Date: Thu, 07 Sep 2017 23:31:09 GMT

{
  "totalCount": 2,
  "items": [
    {
      "customerBillableAccount": "1439508127",
      "usageDate": "2019-08-05T00:00:00",
      "invoiceLineItemType": "usage_line_items",
      "partnerId": "1F5CCB06-8E36-4A74-A74C-FCAA9E000000",
      "partnerName": "TEST_TEST_BIG FOOT CONSULTING",
      "partnerBillableAccountId": "1010578050",
      "customerId": "9E9B71BA-3442-458B-B519-E1CCF72FBB54",
      "domainName": "test600.onmicrosoft.com",
      "customerCompanyName": "600 TEST",
      "mpnId": 4390934,
      "tier2MpnId": -1,
      "invoiceNumber": "1234000000",
      "subscriptionId": "F9BA6DA0-6DAC-4F88-B623-313C9B9C117A",
      "subscriptionName": "MICROSOFT AZURE",
      "subscriptionDescription": "MICROSOFT AZURE",
      "billingCycleType": "MONTHLY",
      "orderId": "568297985577171353",
      "serviceName": "STORAGE",
      "serviceType": "STANDARD PAGE BLOB",
      "resourceGuid": "9CC63CF8-6593-410A-B0E7-26A4EF71E8B3",
      "resourceName": "DISK DELETE OPERATIONS",
      "region": "",
      "consumedQuantity": 2.9616,
      "chargeStartDate": "2019-08-05T00:00:00",
      "chargeEndDate": "2019-09-04T00:00:00",
      "unit": "10K",
      "billingProvider": "azure",
      "attributes": {
        "objectType": "DailyUsageLineItem"
      }
    },
    {
      "customerBillableAccount": "1307536861",
      "usageDate": "2019-08-10T00:00:00",
      "invoiceLineItemType": "usage_line_items",
      "partnerId": "1F5CCB06-8E36-4A74-A74C-FCAA9E000000",
      "partnerName": "TEST_TEST_BIG FOOT CONSULTING"
    }
  ]
}
```

```

    "partnerName": "TEST_TEST_BIG FOOT CONSULTING",
    "partnerBillableAccountId": "1010578050",
    "customerId": "EB53B7BD-267E-440E-B3C0-8F0B40000000",
    "domainName": "brandontest.onmicrosoft.com",
    "customerCompanyName": "BRANDON'S TEST",
    "mpnId": 4390934,
    "tier2MpnId": -1,
    "invoiceNumber": "1234000000",
    "subscriptionId": "62D22561-AB15-41E5-AD59-99025C000000",
    "subscriptionName": "MICROSOFT AZURE",
    "subscriptionDescription": "MICROSOFT AZURE",
    "billingCycleType": "MONTHLY",
    "orderId": "568297985605838583",
    "serviceName": "VIRTUAL MACHINES",
    "serviceType": "D/DS SERIES WINDOWS",
    "resourceGuid": "62C64B6C-4033-4E20-AB33-9E81271AC12A",
    "resourceName": "D1/DS1",
    "region": "US WEST",
    "consumedQuantity": 24,
    "chargeStartDate": "2019-08-05T00:00:00",
    "chargeEndDate": "2019-09-04T00:00:00",
    "unit": "1 HOUR",
    "billingProvider": "azure",
    "attributes": {
        "objectType": "DailyUsageLineItem"
    }
},
],
"links": {
    "self": {
        "uri": "/invoices/1234000000/lineitems?
provider=Azure&invoicelineitemtype=UsageLineItems&size=2&offset=0",
        "method": "GET",
        "headers": []
    },
    "next": {
        "uri": "/invoices/1234000000/lineitems?
provider=Azure&invoicelineitemtype=UsageLineItems&size=2&offset=2",
        "method": "GET",
        "headers": []
    }
},
"attributes": {
    "objectType": "Collection"
}
}
}

```

#### Request-response example 4

In the following example, the details are as follows:

- **BillingProvider:OneTime**
- **InvoiceLineItemType:BillingLineItems**

#### Request example 4

```

GET https://api.partnercenter.microsoft.com/v1/invoices/G000024135/lineitems/OneTime/BillingLineItems?
size=2&offset=0 HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 1eb2ecb8-37af-45f4-a1a1-358de3ca2b9e
MS-CorrelationId: 5e612512-4345-4bb0-866e-47aeda03fe54
X-Locale: en-US
MS-PartnerCenter-Application: Partner Center .NET SDK Samples
Host: api.partnercenter.microsoft.com

```

#### Response example 4

HTTP/1.1 200 OK  
Content-Length: 2484  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: 5e612512-4345-4bb0-866e-47aeda03fe54  
MS-RequestId: 1eb2ecb8-37af-45f4-a1a1-358de3ca2b9e  
MS-CV: bpqyomePDUqrSSYC.0  
MS-ServerId: 202010406  
Date: Thu, 07 Sep 2017 23:31:09 GMT

```
{  
    "continuationToken": "d19617b8-fbe5-4684-a5d8-0230972fb0cf,0705c4a9-39f7-4261-ba6d-  
53e24a9ce47d_a4ayc/80/0Gda4B0/1o/V0etp0qiLx1JwB5S3beHW0s,,0d81c700-98b4-4b13-9129-ffd5620f72e7",  
    "totalCount": 2,  
    "items": [  
        {  
            "partnerId": "6480d686-cfb4-424d-a945-6b9b9f000000",  
            "customerId": "org:9060d13d-c5ed-482e-b059-a15a38000000",  
            "customerName": "recipientCustomerName",  
            "customerDomainName": "recipientCustomerDomain",  
            "invoiceNumber": "1234000000",  
            "quoteId": "abcd12345678",  
            "mpnId": "4870137",  
            "resellerMpnId": 0,  
            "orderId": "QDOx5ZN3YR9uYhm4M1MGQJ_0nievU0rx1",  
            "orderDate": "2018-02-08T22:31:42.9397946Z",  
            "productId": "productid",  
            "skuId": "skuid",  
            "availabilityId": "availabilityid",  
            "productName": "TEST PRODUCT",  
            "skuName": "TEST SKU TITLE",  
            "chargeType": "New",  
            "unitPrice": 431.8,  
            "effectiveUnitPrice": 496.07,  
            "unitType": "Seats",  
            "quantity": 1,  
            "subtotal": 431.8,  
            "taxTotal": 38.87,  
            "totalForCustomer": 470.67,  
            "currency": "USD",  
            "providerName": "Test Networks Inc",  
            "providerId": "12343810",  
            "subscriptionDescription": "",  
            "subscriptionId": "281e26fe-9ce7-415b-911c-f39232000000",  
            "subscriptionStartDate": "2019-01-03T19:53:55.1292512+00:00",  
            "subscriptionEndDate": "2019-02-02T19:53:55.1292512+00:00",  
            "termAndBillingCycle": "1 Month Subscription",  
            "alternateId": "1234278124b8",  
            "priceAdjustmentDescription": "[\"100.0% Tier 1 Discount\"]",  
            "pricingCurrency": "USD",  
            "pcToBCEExchangeRate": 1,  
            "pcToBCEExchangeRateDate": "2019-09-30T23:59:59Z",  
            "billableQuantity": 0.0159369774,  
            "meterDescription": "Bandwidth - Data Transfer In (GB) - Zone 2",  
            "billingFrequency": "Monthly",  
            "reservationOrderId": "883d475b-0000-2222-0000-8818752f1234",  
            "invoiceLineItemType": "billing_line_items",  
            "billingProvider": "one_time",  
            "attributes": {  
                "objectType": "OneTimeInvoiceLineItem"  
            }  
        },  
        {  
            "partnerId": "6480d686-cfb4-424d-a945-6b9b9f4badc2",  
            "customerId": "org:9060d13d-c5ed-482e-b059-a15a38ccb28e",  
            "customerName": "recipientCustomerName",  
            "customerDomainName": "recipientCustomerDomain",  
            "invoiceNumber": "1234000000",  
            "quoteId": "abcd12345678",  
        }  
    ]  
}
```

```

        "mpnId": "4870137",
        "resellerMpnId": 0,
        "orderId": "QDOx5ZN3YR9uYhm4M1MGQJ_0nievU0rx1",
        "orderDate": "2018-02-08T22:31:42.9397946Z",
        "productId": "productid",
        "skuId": "skuid",
        "availabilityId": "availabilityid",
        "productName": "TEST PRODUCT",
        "skuName": "TEST SKU TITLE",
        "chargeType": "New",
        "unitPrice": 26.35,
        "effectiveUnitPrice": 496.07,
        "unitType": "1 Hour",
        "quantity": 1,
        "subtotal": 26.35,
        "taxTotal": 2.37,
        "totalForCustomer": 28.72,
        "currency": "USD",
        "providerName": "Test Networks Inc",
        "providerId": "12343810",
        "subscriptionDescription": "",
        "subscriptionId": "281e26fe-9ce7-415b-911c-f39232ea904a",
        "subscriptionStartDate": "2019-01-03T19:53:55.1292512+00:00",
        "subscriptionEndDate": "2019-02-02T19:53:55.1292512+00:00",
        "termAndBillingCycle": "1 Month Subscription",
        "alternateId": "1234578124b8",
        "priceAdjustmentDescription": "[\"100.0% Tier 1 Discount\"]",
        "pricingCurrency": "USD",
        "pcToBCEExchangeRate": 1,
        "pcToBCEExchangeRateDate": "2019-09-30T23:59:59Z",
        "billableQuantity": 0.0130687981,
        "meterDescription": "Bandwidth - Data Transfer In (GB) - Zone 2",
        "reservationOrderId": "",
        "invoiceLineItemType": "billing_line_items",
        "billingProvider": "one_time",
        "attributes": {
            "objectType": "OneTimeInvoiceLineItem"
        }
    },
],
"links": {
    "self": {
        "uri": "/invoices/G000024135/lineitems?
provider=OneTime&nvoiceLineItemType=BillingLineItems&size=2",
        "method": "GET",
        "headers": []
    },
    "next": {
        "uri": "/invoices/G000024135/lineitems?
provider=OneTime&nvoiceLineItemType=BillingLineItems&size=2?seekOperation=Next",
        "method": "GET",
        "headers": [
            {
                "key": "MS-ContinuationToken",
                "value": "d19617b8-fbe5-4684-a5d8-0230972fb0cf,0705c4a9-39f7-4261-ba6d-
53e24a9ce47d_a4ayc/80/0Gda4B0/1o/V0etpOqiLx1JwB5S3beHW0s=,0d81c700-98b4-4b13-9129-ffd5620f72e7"
            }
        ]
    }
},
"attributes": {
    "objectType": "Collection"
}
}

```

## Request-response example 5

In the following example, there is paging using a continuation token. The details are as follows:

- **BillingProvider**: OneTime
- **InvoiceLineItemType**: BillingLineItems
- **SeekOperation**: Next

#### Request example 5

```
GET https://api.partnercenter.microsoft.com/v1/invoices/G000024135/lineitems/OneTime/BillingLineItems?
seekOperation=Next HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-ContinuationToken: d19617b8-fbe5-4684-a5d8-0230972fb0cf,0705c4a9-39f7-4261-ba6d-
53e24a9ce47d_a4ayc/80/0Gda4B0/1o/V0etp0qiLx1JwB5S3beHW0s=,0d81c700-98b4-4b13-9129-ffd5620f72e7
MS-RequestId: 1eb2ecb8-37af-45f4-a1a1-358de3ca2b9e
MS-CorrelationId: 5e612512-4345-4bb0-866e-47aeda03fe54
X-Locale: en-US
MS-PartnerCenter-Application: Partner Center .NET SDK Samples
Host: api.partnercenter.microsoft.com
```

#### Response example 5

```
HTTP/1.1 200 OK
Content-Length: 2484
Content-Type: application/json; charset=utf-8
MS-CorrelationId: 5e612512-4345-4bb0-866e-47aeda03fe54
MS-RequestId: 1eb2ecb8-37af-45f4-a1a1-358de3ca2b9e
MS-CV: bpqyomePDUqrSSYC.0
MS-ServerId: 202010406
Date: Thu, 07 Sep 2017 23:31:09 GMT

{
  "totalCount": 1,
  "items": [
    {
      "partnerId": "6480d686-cfb4-424d-a945-6b9b9f000000",
      "customerId": "org:9060d13d-c5ed-482e-b059-a15a38000000",
      "customerName": "recipientCustomerName",
      "customerDomainName": "recipientCustomerDomain",
      "invoiceNumber": "1234000000",
      "quoteId": "abcd12345678",
      "mpnId": "4870137",
      "resellerMpnId": 0,
      "orderId": "NeqT31Kziwf8gkCXM9YQToWTqu-9Jbm81",
      "orderDate": "2018-02-08T22:31:47.1751688Z",
      "productId": "DZH318Z0BQ3P",
      "skuId": "001F",
      "availabilityId": "DZH318Z0DR0H",
      "productName": "Reserved VM Instance, Standard_D1, AP East, 3 years",
      "skuName": "D Series",
      "chargeType": "New",
      "unitPrice": 1447,
      "effectiveUnitPrice": 496.07,
      "unitType": "Seats",
      "quantity": 1,
      "subtotal": 1447,
      "taxTotal": 130.24,
      "totalForCustomer": 1577.24,
      "currency": "USD",
      "providerName": "Test Networks Inc",
      "providerId": "12343810",
      "subscriptionDescription": "",
      "subscriptionId": "281e26fe-9ce7-415b-911c-f39232000000",
      "subscriptionStartDate": "2019-01-03T19:53:55.1292512+00:00",
      "subscriptionEndDate": "2019-02-02T19:53:55.1292512+00:00",
      "termAndBillingCycle": "1 Month Subscription",
      "alternateId": "1234568124b8",
    }
  ]
}
```

```
"priceAdjustmentDescription": "",  
"pricingCurrency": "USD",  
"pcToBCEExchangeRate": 1,  
"pcToBCEExchangeRateDate": "2019-09-30T23:59:59Z",  
"billableQuantity": 0.0130687981,  
"meterDescription": "Bandwidth - Data Transfer In (GB) - Zone 2",  
"reservationOrderId": "",  
"billingFrequency": "Monthly",  
"invoiceLineItemType": "billing_line_items",  
"billingProvider": "one_time",  
"attributes": {  
    "objectType": "OneTimeInvoiceLineItem"  
}  
}  
]  
,"links": {  
    "self": {  
        "uri": "/invoices/G000024135/lineitems?  
provider=OneTime&nvoicelineitemtype=BillingLineItems&size=2",  
        "method": "GET",  
        "headers": []  
    }  
},  
"attributes": {  
    "objectType": "Collection"  
}  
}
```

# Get invoice receipt statement

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## Applies To

- Partner Center

Retrieves an invoice receipt statement using invoice ID and the receipt ID.

### IMPORTANT

This feature is only applicable to Taiwan tax receipts.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A valid Invoice ID and a corresponding receipt ID.

## C#

To get an invoice receipt statement by ID, starting with Partner Center SDK v1.12.0, use your **IPartner.Invoices** collection and call the **ById()** method using the invoice ID, then call the **Receipts** collection and call **ById()** then call the **Documents()** and **Statement()** methods to access the invoice receipt statement. Finally, call the **Get()** or **GetAsync()** methods.

```
// IPartner scopedPartnerOperations;
// string selectedInvoiceId;

var invoiceStatement =
    scopedPartnerOperations.Invoices.ById(selectedInvoiceId).Receipts.ById(selectedReceipt).Documents.Statement.Get();
```

Sample: [Console test app](#). Project: PartnerSDK.FeatureSample Class: GetInvoiceReceiptStatement.cs

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<a href="#"><i>{baseURL}</i></a> /v1/invoices/{invoice-id}/receipts/{receipt-id}/documents/statement HTTP/1.1

### URI parameter

Use the following query parameter to get the invoice receipt statement.

NAME	TYPE	REQUIRED	DESCRIPTION

NAME	TYPE	REQUIRED	DESCRIPTION
invoice-id	string	Yes	The value is an invoice-id that allows the reseller to filter the results for a given invoice.
receipt-id	string	Yes	The value is a receipt-id that allows the reseller to filter the receipts for a given invoice.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/invoices/<invoice-id>/receipts/<receipt-id>/documents/statement
HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 8ac25aa5-9537-4b6d-b782-aa0c8e979e99
MS-CorrelationId: 57eb2ca7-755f-450f-9187-eae1e75a0114
```

## REST response

If successful, this method returns a pdf stream in the response body.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 195556
Content-Type: application/pdf
MS-CorrelationId: a1d6ab41-5a30-4643-898b-b30d65d3a0a1
MS-RequestId: cc1ba6db-ab26-404a-9196-712b6395f518
Date: Tue, 05 Feb 2019 04:08:23 GMT

{
    _content    {System.Net.Http.ByteArrayContent}    System.Net.Http.HttpContent
{System.Net.Http.ByteArrayContent}
    _content    {byte[195556]}    byte[]
    _headers    {Content-Type: application/pdf Content-Disposition: attachment; filename=E-Tax-8602768.pdf}
}
```

# Get invoice statement

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## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Retrieves an invoice statement using the invoice ID.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A valid Invoice ID.

## C#

To get an invoice statement by ID, use your **IPartner.Invoices** collection and call the **ById()** method using the invoice ID, then call the **Documents()** and **Statement()** methods to access the invoice statement. Finally, call the **Get()** or **GetAsync()** methods.

```
// IPartner scopedPartnerOperations;
// string selectedInvoiceId;

var invoiceStatement = scopedPartnerOperations.Invoices.ById(selectedInvoiceId).Documents.Statement.Get();
```

Sample: [Console test app](#). Project: PartnerSDK.FeatureSample Class: GetInvoiceStatement.cs

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<i>{baseUrl}</i> /v1/invoices/{invoice-id}/documents/statement HTTP/1.1

### URI parameter

Use the following query parameter to get the invoice statement.

NAME	TYPE	REQUIRED	DESCRIPTION
invoice-id	string	Yes	The value is an invoice-id that allows the reseller to filter the results for a given invoice.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/invoices/<invoice-id>/documents/statement HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 8ac25aa5-9537-4b6d-b782-aa0c8e979e99
MS-CorrelationId: 57eb2ca7-755f-450f-9187-eae1e75a0114
```

## REST response

If successful, this method returns an [InvoiceStatement](#) resource in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

### Response example

```
HTTP/1.1 200 OK
Content-Length: 219753
Content-Type: application/json; charset=utf-8
MS-CorrelationId: 57eb2ca7-755f-450f-9187-eae1e75a0114
MS-RequestId: a45e6643-1caf-4429-8f90-07c03d85bc2b
Date: Thu, 24 Mar 2016 05:21:01 GMT

{
    _content      {System.Net.Http.ByteArrayContent}      System.Net.Http.HttpContent
{System.Net.Http.ByteArrayContent}
    _content      {byte[219753]}      byte[]
    _headers      {Content-Type: application/pdf Content-Disposition: attachment;
filename=Invoice_G000024132.pdf}
}
```

# Get invoice summaries

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## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

You can use the **InvoiceSummaries** to retrieve an invoice summary which shows the balance and total charges of both recurring and one-time charges. The **InvoiceSummaries** resource contains an invoice summary for each currency type.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A valid invoice identifier.

## C#

To retrieve an **InvoiceSummaries** collection that contains an **InvoiceSummary** for each currency type:

1. Use your **IAggregatePartner.Invoices** collection to call the **Summaries** property.
2. Call the **Get()** method.
3. To get the balance of an individual **InvoiceSummary**, access the **BalanceAmount** property for that member of the collection.

```
// IAggregatePartner scopedPartnerOperations;  
  
// Get the invoice summaries collection.  
var invoiceSummaries = scopedPartnerOperations.Invoices.Summaries.Get();  
  
// Display the balance on the first invoice summary in the collection.  
Console.Out.WriteLine("Current Account Balance: {0:C}", invoiceSummaries[0].BalanceAmount);
```

For more information, see the following example code:

- Sample: [Console test app](#)
- Project: [PartnerSDK.FeatureSample](#)
- Class: [GetInvoiceSummaries.cs](#)

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<a href="#"><code>{baseUrl}/v1/invoices/summaries</code></a> HTTP/1.1

#### URI parameter

None.

#### Request headers

For more information, see [Partner Center REST headers](#).

#### Request body

None.

#### Request example

```
GET https://api.partnercenter.microsoft.com/v1/invoices/summaries HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: a45e6643-1caf-4429-8f90-07c03d85bc2b
MS-CorrelationId: 57eb2ca7-755f-450f-9187-eae1e75a0114
Connection: Keep-Alive
```

## REST response

If successful, this method returns an [InvoiceSummaries](#) resource in the response body.

#### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

#### Response example

```
HTTP/1.1 200 OK
Content-Length: 256
Content-Type: application/json; charset=utf-8
MS-CorrelationId: 57eb2ca7-755f-450f-9187-eae1e75a0114
MS-RequestId: a45e6643-1caf-4429-8f90-07c03d85bc2b
Date: Thu, 24 Mar 2016 05:21:01 GMT

{
  "totalCount": 3,
  "items": [
    {
      "balanceAmount": 751094.39,
      "currencyCode": "GBP",
      "currencySymbol": "£",
      "accountingDate": "2018-03-16T00:00:00",
      "firstInvoiceCreationDate": "2017-01-21T00:00:00Z",
      "lastPaymentDate": "2017-01-01T12:00:00Z",
      "lastPaymentAmount": 1000,
      "latestInvoiceDate": "2018-03-16T00:00:00",
      "details": [
        {
          "invoiceType": "Recurring",
          "summary": {
            "balanceAmount": 202955.87,
            "currencyCode": "GBP",
            "currencySymbol": "£",
            "accountingDate": "2017-02-27T00:00:00Z",
            "firstInvoiceCreationDate": "2017-01-21T00:00:00Z",
            "lastPaymentDate": "2017-01-01T12:00:00Z",
            "lastPaymentAmount": 1000
          }
        }
      ]
    }
  ]
}
```

```
        "lastPaymentDate": "2017-01-01T12:00:00Z",
        "lastPaymentAmount": 1000,
        "latestInvoiceDate": "0001-01-01T00:00:00",
        "attributes": {
            "objectType": "InvoiceSummary"
        }
    },
    {
        "invoiceType": "OneTime",
        "summary": {
            "balanceAmount": 548138.52,
            "currencyCode": "GBP",
            "currencySymbol": "£",
            "accountingDate": "2018-03-16T00:00:00",
            "firstInvoiceCreationDate": "2018-03-16T00:00:00",
            "lastPaymentDate": "0001-01-01T00:00:00",
            "lastPaymentAmount": 0,
            "latestInvoiceDate": "2018-03-16T00:00:00",
            "attributes": {
                "objectType": "InvoiceSummary"
            }
        }
    }
],
"links": {
    "self": {
        "uri": "/invoices/summary",
        "method": "GET",
        "headers": []
    }
},
"attributes": {
    "objectType": "InvoiceSummary"
}
},
{
    "balanceAmount": 1230.33,
    "currencyCode": "CHF",
    "currencySymbol": "CHF",
    "accountingDate": "2018-03-16T00:00:00",
    "firstInvoiceCreationDate": "2018-03-16T00:00:00",
    "lastPaymentDate": "0001-01-01T00:00:00",
    "lastPaymentAmount": 0,
    "latestInvoiceDate": "2018-03-16T00:00:00",
    "details": [
        {
            "invoiceType": "OneTime",
            "summary": {
                "balanceAmount": 1230.33,
                "currencyCode": "CHF",
                "currencySymbol": "CHF",
                "accountingDate": "2018-03-16T00:00:00",
                "firstInvoiceCreationDate": "2018-03-16T00:00:00",
                "lastPaymentDate": "0001-01-01T00:00:00",
                "lastPaymentAmount": 0,
                "latestInvoiceDate": "2018-03-16T00:00:00",
                "attributes": {
                    "objectType": "InvoiceSummary"
                }
            }
        }
    ],
    "links": {
        "self": {
            "uri": "/invoices/summary",
            "method": "GET",
            "headers": []
        }
    }
}
```

```
        },
        "attributes": {
            "objectType": "InvoiceSummary"
        }
    },
    {
        "balanceAmount": 1001.12,
        "currencyCode": "EUR",
        "currencySymbol": "€",
        "accountingDate": "2018-03-16T00:00:00",
        "firstInvoiceCreationDate": "2018-03-16T00:00:00",
        "lastPaymentDate": "0001-01-01T00:00:00",
        "lastPaymentAmount": 0,
        "latestInvoiceDate": "2018-03-16T00:00:00",
        "details": [
            {
                "invoiceType": "OneTime",
                "summary": {
                    "balanceAmount": 1001.12,
                    "currencyCode": "EUR",
                    "currencySymbol": "€",
                    "accountingDate": "2018-03-16T00:00:00",
                    "firstInvoiceCreationDate": "2018-03-16T00:00:00",
                    "lastPaymentDate": "0001-01-01T00:00:00",
                    "lastPaymentAmount": 0,
                    "latestInvoiceDate": "2018-03-16T00:00:00",
                    "attributes": {
                        "objectType": "InvoiceSummary"
                    }
                }
            }
        ],
        "links": {
            "self": {
                "uri": "/invoices/summary",
                "method": "GET",
                "headers": []
            }
        },
        "attributes": {
            "objectType": "InvoiceSummary"
        }
    }
],
"links": {
    "self": {
        "uri": "/invoices/summaries",
        "method": "GET",
        "headers": []
    }
},
"attributes": {
    "objectType": "Collection"
}
}
```

# Get invoice unbilled commercial consumption line items

4/25/2020 • 6 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center

How to get a collection of unbilled commercial consumption line item details.

You can use the following methods to get a collection of details unbilled commercial consumption line items (also known as open usage line items) programmatically.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- An invoice identifier. This identifies the invoice for which to retrieve the line items.

## C#

To get the line items for the specified invoice:

1. Call the [By Id](#) method to get an interface to invoice operations for the specified invoice.
2. Call the [Get](#) or [GetAsync](#) method to retrieve the invoice object.

The **invoice** object contains all of the information for the specified invoice. The **Provider** identifies the source of the unbilled detail information (for example, **OneTime**). The **InvoiceLineItemType** specifies the type (for example, **UsageLineItem**).

The following example code uses a **foreach** loop to process the **InvoiceLineItems** collection. A separate collection of line items is retrieved for each **InvoiceLineItemType**.

To get a collection of line items that correspond to an **InvoiceDetail** instance:

1. Pass the instance's **BillingProvider** and **InvoiceLineItemType** to the [By](#) method.
2. Call the [Get](#) or [GetAsync](#) method to retrieve the associated line items.
3. Create an enumerator to traverse the collection as shown in the following example.

```

// IAggregatePartner partnerOperations;
// string currencyCode;
// string period;
// int pageSizeReconLineItems = 2000;

// all the operations executed on this partner operation instance will share the same correlation Id but will
// differ in request Id
IPartner scopedPartnerOperations =
partnerOperations.With(RequestContextFactory.Instance.Create(Guid.NewGuid()));

var seekBasedResourceCollection = scopedPartnerOperations.Invoices.ById("unbilled").By("onetime",
"usagelineitems", currencyCode, period, pageSizeReconLineItems).Get();

var fetchNext = true;

ConsoleKeyInfo keyInfo;

var itemNumber = 1;
while (fetchNext)
{
    Console.Out.WriteLine("\tLine items count: " + seekBasedResourceCollection.Items.Count());

    seekBasedResourceCollection.Items.ToList().ForEach(item =>
    {
        // Instance of type DailyRatedUsageLineItem
        if (item is DailyRatedUsageLineItem)
        {
            Type t = typeof(DailyRatedUsageLineItem);
            PropertyInfo[] properties = t.GetProperties();

            foreach (PropertyInfo property in properties)
            {
                // Insert code here to work with the line item properties
            }
        }
        itemNumber++;
    });
}

Console.Out.WriteLine("\tPress any key to fetch next data. Press the Escape (Esc) key to quit: \n");
keyInfo = Console.ReadKey();

if (keyInfo.Key == ConsoleKey.Escape)
{
    break;
}

fetchNext = !string.IsNullOrWhiteSpace(seekBasedResourceCollection.ContinuationToken);

if (fetchNext)
{
    if (seekBasedResourceCollection.Links.Next.Headers != null &&
seekBasedResourceCollection.Links.Next.Headers.Any())
    {
        seekBasedResourceCollection = scopedPartnerOperations.Invoices.ById("unbilled").By("onetime",
"usagelineitems", currencyCode, period,
pageSizeReconLineItems).Seek(seekBasedResourceCollection.ContinuationToken, SeekOperation.Next);
    }
}
}

```

For a similar example, see:

- Sample: [Console test app](#)
- Project: [Partner Center SDK Samples](#)
- Class: [GetUnBilledConsumptionReconLineItemsPaging.cs](#)

# REST request

## Request syntax

You can use the following syntaxes for your REST request, depending on your use case. For more information, see the descriptions for each syntax.

METHOD	REQUEST URI	DESCRIPTION OF SYNTAX USE CASE	
GET	<code>{baseUrl}/v1/invoices/unbilled/lineitems?</code> <code>provider=onetime&amp;invoicelineitemtype=usagelineitems</code> <code>&amp;currencycode={currencycode}&amp;period={period}</code> HTTP/1.1	Use this syntax to return a full list of every line item for the given invoice.	
GET	<code>{baseUrl}/v1/invoices/unbilled/lineitems?</code> <code>provider=onetime&amp;invoicelineitemtype=usagelineitems</code> <code>&amp;currencycode={currencycode}&amp;period={period}&amp;size={size}</code> HTTP/1.1	Use this syntax for large invoices. Use this syntax with a specified size and 0-based offset to return a paged list of line items.	
GET	<code>{baseUrl}/v1/invoices/unbilled/lineitems?</code> <code>provider=onetime&amp;invoicelineitemtype=usagelineitems</code> <code>&amp;currencycode={currencycode}&amp;period={period}&amp;size={size}&amp;seekOperation=Next</code>	Use this syntax to get the next page of reconciliation line items using <code>seekOperation = "Next"</code> .	

## URI parameters

Use the following URI and query parameters when creating the request.

NAME	TYPE	REQUIRED	DESCRIPTION
provider	string	Yes	The provider: "OneTime".
invoice-line-item-type	string	Yes	The type of invoice detail: "UsageLineItems", "UsageLineItems".
currencyCode	string	Yes	The currency code for the unbilled line items.
period	string	Yes	The period for unbilled recon (for example: <b>current</b> , <b>previous</b> ).
size	number	No	The maximum number of items to return. The default size is 2000.

NAME	TYPE	REQUIRED	DESCRIPTION
seekOperation	string	No	Set <code>seekOperation=Next</code> to get the next page of reconciliation line items.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## REST response

If successful, the response contains the collection of line item details.

*For the line item **ChargeType**, the value **Purchase** is mapped to **New** and the value **Refund** is mapped to **Cancel**.*

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

## Request-response examples

### Request-response example 1

The following details apply to this example:

- **Provider:OneTime**
- **InvoiceLineItemType:UsageLineItems**
- **Period: Previous**

### Request example 1

```
GET https://api.partnercenter.microsoft.com/v1//invoices/unbilled/lineitems?
provider=onetime&invoicelineitemtype=usage&lineitems&currencycode=usd&period=previous&size=2000 HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 1234ecb8-37af-45f4-a1a1-358de3ca2b9e
MS-CorrelationId: 5e612512-4345-4bb0-866e-47aeda031234
X-Locale: en-US
MS-PartnerCenter-Application: Partner Center .NET SDK Samples
Host: api.partnercenter.microsoft.com
```

### Response example 1

```
HTTP/1.1 200 OK
Content-Length: 2484
Content-Type: application/json; charset=utf-8
MS-CorrelationId: 5e612512-4345-4bb0-866e-47aeda031234
MS-RequestId: 1234ecb8-37af-45f4-a1a1-358de3ca2b9e
MS-CV: bpqyomePDUqrSSYC.0
MS-ServerId: 202010406
Date: Wed, 20 Feb 2019 19:59:27 GMT

{
    "totalCount": 2,
```

```
"items": [
  {
    "partnerId": "00083575-bbd0-54de-b2ad-0f5b0e927d71",
    "partnerName": "MTBC",
    "customerId": "",
    "customerName": "",
    "customerDomainName": "",
    "invoiceNumber": "",
    "productId": "",
    "skuId": "",
    "availabilityId": "",
    "skuName": "VM-Series Next-Generation Firewall (Bundle 2 PAYG)",
    "productName": "VM-Series Next Generation Firewall",
    "publisherName": "Test Alto Networks, Inc.",
    "publisherId": "",
    "subscriptionId": "12345678-04d9-421c-baf8-e3b8dd62ddba",
    "subscriptionDescription": "Pay-As-You-Go",
    "chargeStartDate": "2019-01-01T00:00:00Z",
    "chargeEndDate": "2019-02-01T00:00:00Z",
    "usageDate": "2019-01-01T00:00:00Z",
    "meterType": "1 Compute Hour - 4core",
    "meterCategory": "Virtual Machine Licenses",
    "meterId": "4core",
    "meterSubCategory": "VM-Series Next Generation Firewall",
    "meterName": "VM-Series Next Generation Firewall - VM-Series Next-Generation Firewall (Bundle 2 PAYG) - 4 Core Hours",
    "meterRegion": "",
    "unitOfMeasure": "1 Hour",
    "resourceLocation": "EASTUS",
    "consumedService": "Microsoft.Compute",
    "resourceGroup": "ECH-PAN-RG",
    "resourceUri": "/subscriptions/12345678-04d9-421c-baf8-e3b8dd62ddba/resourceGroups/ECH-PAN-RG/providers/Microsoft.Compute/virtualMachines/echpanfw",
    "tags": "",
    "additionalInfo": "{ \\"ImageType\\": null, \\"ServiceType\\": \"Standard_D3_v2\", \\"VMName\\": null, \\"VMProperties\\": null, \\"UsageType\\": \"ComputeHR_SW\"}",
    "serviceInfo1": "",
    "serviceInfo2": "",
    "customerCountry": "",
    "mpnId": "1234567",
    "resellerMpnId": "",
    "chargeType": "",
    "unitPrice": 1.2799888920023,
    "quantity": 24.0,
    "unitType": "",
    "billingPreTaxTotal": 30.7197334080551,
    "billingCurrency": "USD",
    "pricingPreTaxTotal": 30.7197334080551,
    "pricingCurrency": "USD",
    "entitlementId": "1234547f-b249-4edd-9319-637862d8c0b4",
    "entitlementDescription": "Partner Subscription",
    "pcToBCEExchangeRate": 1,
    "pcToBCEExchangeRateDate": "2019-08-01T00:00:00Z",
    "effectiveUnitPrice": 0,
    "rateOfPartnerEarnedCredit": 0,
    "invoiceLineItemType": "usage_line_items",
    "billingProvider": "marketplace",
    "attributes": {
      "objectType": "DailyRatedUsageLineItem"
    }
  },
  {
    "partnerId": "00083575-bbd0-54de-b2ad-0f5b0e927d71",
    "partnerName": "MTBC",
    "customerId": "",
    "customerName": "",
    "customerDomainName": "",
    "invoiceNumber": "",
    "productId": ""
```

```

        "skuId": "",
        "availabilityId": "",
        "skuName": "VM-Series Next-Generation Firewall (Bundle 2 PAYG)",
        "productName": "VM-Series Next Generation Firewall",
        "publisherName": "Test Alto Networks, Inc.",
        "publisherId": "",
        "subscriptionId": "12345678-04d9-421c-baf8-e3b8dd62ddba",
        "subscriptionDescription": "Pay-As-You-Go",
        "chargeStartDate": "2019-01-01T00:00:00Z",
        "chargeEndDate": "2019-02-01T00:00:00Z",
        "usageDate": "2019-01-02T00:00:00Z",
        "meterType": "1 Compute Hour - 4core",
        "meterCategory": "Virtual Machine Licenses",
        "meterId": "4core",
        "meterSubCategory": "VM-Series Next Generation Firewall",
        "meterName": "VM-Series Next Generation Firewall - VM-Series Next-Generation Firewall (Bundle 2 PAYG) - 4 Core Hours",
        "meterRegion": "",
        "unitOfMeasure": "1 Hour",
        "resourceLocation": "EASTUS",
        "consumedService": "Microsoft.Compute",
        "resourceGroup": "ECH-PAN-RG",
        "resourceUri": "/subscriptions/12345678-04d9-421c-baf8-e3b8dd62ddba/resourceGroups/ECH-PAN-RG/providers/Microsoft.Compute/virtualMachines/echpanfw",
        "tags": "",
        "additionalInfo": "{ \\"ImageType\\": null, \\"ServiceType\\": \\"Standard_D3_v2\\", \\"VMName\\": null, \\"VMProperties\\": null, \\"UsageType\\": \\"ComputeHR_SW\\\"}",
        "serviceInfo1": "",
        "serviceInfo2": "",
        "customerCountry": "",
        "mpnId": "1234567",
        "resellerMpnId": "",
        "chargeType": "",
        "unitPrice": 1.2799888920023,
        "quantity": 24.0,
        "unitType": "",
        "billingPreTaxTotal": 30.7197334080551,
        "billingCurrency": "USD",
        "pricingPreTaxTotal": 30.7197334080551,
        "pricingCurrency": "USD",
        "entitlementId": "31cdf47f-b249-4edd-9319-637862d12345",
        "entitlementDescription": "Partner Subscription",
        "pcToBCEexchangeRate": 1,
        "pcToBCEexchangeRateDate": "2019-08-01T00:00:00Z",
        "effectiveUnitPrice": 0,
        "rateOfPartnerEarnedCredit": 0,
        "invoiceLineItemType": "usage_line_items",
        "billingProvider": "marketplace",
        "attributes": {
            "objectType": "DailyRatedUsageLineItem"
        }
    }
],
"links": {
    "self": {
        "uri": "/invoices/unbilled/lineitems?
provider=onetime&invoicelineitemtype=usagelineitems&currencycode=usd&period=previous&size=2000",
        "method": "GET",
        "headers": []
    },
    "next": {
        "uri": "/invoices/unbilled/lineitems?
provider=onetime&invoicelineitemtype=usagelineitems&currencycode=usd&period=previous&size=2000&seekOperation=N
ext",
        "method": "GET",
        "headers": [
            {
                "key": "MS-ContinuationToken",
                "value": "AQAAAA=="
            }
        ]
    }
}

```

```
        }
    ]
}
},
"attributes": {
    "objectType": "Collection"
}
}
```

## Request-response example 2

The following details apply to this example:

- Provider: OneTime
  - InvoiceLineItemType: UsageLineItems
  - Period: Previous
  - SeekOperation: Next

## Request example 2

```
GET https://api.partnercenter.microsoft.com/v1/invoices/unbilled/lineitems?  
provider=onetime&invoiceLineItemType=usagelineitems&currencyCode=usd&period=previous&size=2000&seekoperation=next  
HTTP/1.1  
Authorization: Bearer <token>  
Accept: application/json  
MS-ContinuationToken: d19617b8-fbe5-4684-a5d8-0230972fb0cf,0705c4a9-39f7-4261-ba6d-  
53e24a9ce47d_a4ayc/80/0Gda4B0/1o/V0etp0qiLx1JwB5S3beHW0s=,0d81c700-98b4-4b13-9129-ffd5620f72e7  
MS-RequestId: 1234ecb8-37af-45f4-a1a1-358de3ca2b9e  
MS-CorrelationId: 5e612512-4345-4bb0-866e-47aeda031234  
X-Locale: en-US  
MS-PartnerCenter-Application: Partner Center .NET SDK Samples  
Host: api.partnercenter.microsoft.com
```

## Response example 2

HTTP/1.1 200 OK  
Content-Length: 2484  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: 5e612512-4345-4bb0-866e-47aeda031234  
MS-RequestId: 1234ecb8-37af-45f4-a1a1-358de3ca2b9e  
MS-CV: bpqyomePDUQrSSYC.0  
MS-ServerId: 202010406  
Date: Wed, 20 Feb 2019 19:59:27 GMT

```
{  
    "totalCount": 1,  
    "items": [  
        {  
            "partnerId": "00083575-bbd0-54de-b2ad-0f5b0e927d71",  
            "partnerName": "MTBC",  
            "customerId": "",  
            "customerName": "",  
            "customerDomainName": "",  
            "invoiceNumber": "",  
            "productId": "",  
            "skuId": "",  
            "availabilityId": "",  
            "skuName": "VM-Series Next-Generation Firewall (Bundle 2 PAYG)",  
            "productName": "VM-Series Next Generation Firewall",  
            "publisherName": "Test Alto Networks, Inc.",  
            "publisherId": "",  
            "subscriptionId": "12345678-04d9-421c-baf8-e3b8dd62ddba",  
            "subscriptionDescription": "Pay-As-You-Go",  
            "chargeStartDate": "2019-01-01T00:00:00Z",  
            "chargeEndDate": "2019-02-01T00:00:00Z".  
    ]  
}
```

```

        "usageDate": "2019-01-02T00:00:00Z",
        "meterType": "1 Compute Hour - 4core",
        "meterCategory": "Virtual Machine Licenses",
        "meterId": "4core",
        "meterSubCategory": "VM-Series Next Generation Firewall",
        "meterName": "VM-Series Next Generation Firewall - VM-Series Next-Generation Firewall (Bundle 2
PAYG) - 4 Core Hours",
        "meterRegion": "",
        "unitOfMeasure": "1 Hour",
        "resourceLocation": "EASTUS",
        "consumedService": "Microsoft.Compute",
        "resourceGroup": "ECH-PAN-RG",
        "resourceUri": "/subscriptions/12345678-04d9-421c-baf8-e3b8dd62ddba/resourceGroups/ECH-PAN-
RG/providers/Microsoft.Compute/virtualMachines/echpanfw",
        "tags": "",
        "additionalInfo": "{ \\"ImageType\\": null, \\"ServiceType\\": \\"Standard_D3_v2\\", \\"VMName\\":
null, \\"VMProperties\\": null, \\"UsageType\\": \\"ComputeHR_SW\\\"}",
        "serviceInfo1": "",
        "serviceInfo2": "",
        "customerCountry": "",
        "mpnId": "1234567",
        "resellerMpnId": "",
        "chargeType": "",
        "unitPrice": 1.2799888920023,
        "quantity": 24.0,
        "unitType": "",
        "billingPreTaxTotal": 30.7197334080551,
        "billingCurrency": "USD",
        "pricingPreTaxTotal": 30.7197334080551,
        "pricingCurrency": "USD",
        "entitlementId": "31cdf47f-b249-4edd-9319-637862d8c0b4",
        "entitlementDescription": "Partner Subscription",
        "pcToBCEExchangeRate": 1,
        "pcToBCEExchangeRateDate": "2019-08-01T00:00:00Z",
        "effectiveUnitPrice": 0,
        "rateOfPartnerEarnedCredit": 0,
        "invoiceLineItemType": "usage_line_items",
        "billingProvider": "marketplace",
        "attributes": {
            "objectType": "DailyRatedUsageLineItem"
        }
    }
},
],
"links": {
    "self": {
        "uri": "/invoices/unbilled/lineitems?
provider=onetime&invoicelineitemtype=usagelineitems&currencycode=usd&period=previous&size=2000",
        "method": "GET",
        "headers": []
    }
},
"attributes": {
    "objectType": "Collection"
}
}

```

# Get invoice's unbilled reconciliation line items

4/25/2020 • 7 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

You can use the following methods get a collection of details for unbilled invoice line items (also known as open billing line items).

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- An invoice identifier. This identifies the invoice for which to retrieve the line items.

## C#

To get the line items for the specified invoice, retrieve the invoice object:

1. Call the [By Id](#) method to get an interface to invoice operations for the specified invoice.
2. Call the [Get](#) or [GetAsync](#) method to retrieve the invoice object.

The invoice object contains all of the information for the specified invoice:

- **Provider** identifies the source of the unbilled detail information (for example, [OneTime](#)).
- **InvoiceLineItemType** specifies the type (for example, [BillingLineItem](#)).

To get a collection of line items that correspond to an **InvoiceDetail** instance:

1. Pass the instance's **BillingProvider** and **InvoiceLineItemType** to the [By](#) method.
2. Call the [Get](#) or [GetAsync](#) method to retrieve the associated line items.
3. Create an enumerator to traverse the collection. For an example, see the following sample code.

The following sample code uses a **foreach** loop to process the **InvoiceLineItems** collection. A separate collection of line items is retrieved for each **InvoiceLineItemType**.

```

// IAggregatePartner partnerOperations;
// string currencyCode;
// string period;
// int pageMaxSizeReconLineItems = 2000;

// all the operations executed on this partner operation instance will share the same correlation Id but will
// differ in request Id
IPartner scopedPartnerOperations =
partnerOperations.With(RequestContextFactory.Instance.Create(Guid.NewGuid()));

var seekBasedResourceCollection = scopedPartnerOperations.Invoices.ById("unbilled").By("onetime",
"billinglineitems", currencyCode, period, pageMaxSizeReconLineItems).Get();

var fetchNext = true;

ConsoleKeyInfo keyInfo;

var itemNumber = 1;
while (fetchNext)
{
    Console.Out.WriteLine("\tLine line items count: " + seekBasedResourceCollection.Items.Count());

    seekBasedResourceCollection.Items.ToList().ForEach(item =>
    {
        // Instance of type OneTimeInvoiceLineItem
        if (item is OneTimeInvoiceLineItem)
        {
            Type t = typeof(OneTimeInvoiceLineItem);
            PropertyInfo[] properties = t.GetProperties();

            foreach (PropertyInfo property in properties)
            {
                // Insert code here to work with the line item properties
            }
        }
        itemNumber++;
    });
}

Console.Out.WriteLine("\tPress any key to fetch next data. Press the Escape (Esc) key to quit: \n");
keyInfo = Console.ReadKey();

if (keyInfo.Key == ConsoleKey.Escape)
{
    break;
}

fetchNext = !string.IsNullOrWhiteSpace(seekBasedResourceCollection.ContinuationToken);

if (fetchNext)
{
    if (seekBasedResourceCollection.Links.Next.Headers != null &&
seekBasedResourceCollection.Links.Next.Headers.Any())
    {
        seekBasedResourceCollection = scopedPartnerOperations.Invoices.ById("unbilled").By("onetime",
"billinglineitems", currencyCode, period,
pageMaxSizeReconLineItems).Seek(seekBasedResourceCollection.ContinuationToken, SeekOperation.Next);
    }
}
}

```

For a similar example, see:

- Sample: [Console test app](#)
- Project: [Partner Center SDK Samples](#)
- Class: [GetUnBilledReconLineItemsPaging.cs](#)

# REST request

## Request syntax

You can use the following syntaxes for your REST request, depending on your use case. For more information, see the descriptions for each syntax.

METHOD	REQUEST URI	DESCRIPTION OF SYNTAX USE CASE
GET	<code>{baseUrl}/v1/invoices/{invoice-id}/lineitems?</code> <code>provider=onetime&amp;invoicelineitemtype=billinglineitems&amp;currencycode={currencycode}&amp;period={period}</code> HTTP/1.1	Use this syntax to return a full list of every line item for the given invoice.
GET	<code>{baseUrl}/v1/invoices/{invoice-id}/lineitems?</code> <code>provider=onetime&amp;invoicelineitemtype=billinglineitems&amp;currencycode={currencycode}&amp;period={period}&amp;size={size}</code> HTTP/1.1	For large invoices, use this syntax with a specified size and 0-based offset to return a paged list of line items.
GET	<code>{baseUrl}/v1/invoices/{invoice-id}/lineitems?</code> <code>provider=onetime&amp;invoicelineitemtype=billinglineitems&amp;currencycode={currencycode}&amp;period={period}&amp;size={size}&amp;seekOperation=Next</code>	Use this syntax to get the next page of reconciliation line items using <code>seekOperation = "Next"</code> .

## URI parameters

Use the following URI and query parameters when creating the request.

NAME	TYPE	REQUIRED	DESCRIPTION
invoice-id	string	Yes	A string that identifies the invoice. Use 'unbilled' to get unbilled estimates.
provider	string	Yes	The provider: "OneTime".
invoice-line-item-type	string	Yes	The type of invoice detail: "BillingLineItems".
hasPartnerEarnedCredit	bool	No	The value indicating if to return the line items with partner earned credit applied. Note: this parameter will be only applied when provider type is OneTime and InvoiceLineItemType is UsageLineItems.
currencyCode	string	Yes	The currency code for the unbilled line items.

NAME	TYPE	REQUIRED	DESCRIPTION
period	string	Yes	The period for unbilled recon. example: current, previous.
size	number	No	The maximum number of items to return. Default size is 2000
seekOperation	string	No	Set seekOperation=Next to get the next page of recon line items.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## REST response

If successful, the response contains the collection of line item details.

*For the line item ChargeType, the value Purchase is mapped to New and the value Refund is mapped to Cancel.*

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

## Request-response examples

### Request-response example 1

The following details apply to this example:

- Provider: **OneTime**
- InvoiceLineItemType: **BillingLineItems**
- Period: **Previous**

### Request example 1

```
GET https://api.partnercenter.microsoft.com/v1//invoices/unbilled/lineitems?
provider=onetime&invoicelineitemtype=billinglineitems&currencycode=usd&period=previous&size=2000 HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 1234ecb8-37af-45f4-a1a1-358de3ca2b9e
MS-CorrelationId: 5e612512-4345-4bb0-866e-47aeda031234
X-Locale: en-US
MS-PartnerCenter-Application: Partner Center .NET SDK Samples
Host: api.partnercenter.microsoft.com
```

### Response example 1

```
HTTP/1.1 200 OK
Content-Length: 2484
Content-Type: application/json; charset=utf-8
MS-CorrelationId: 5e612512-4345-4bb0-866e-47aeda031234
```

MS-RequestId: 1234ecb8-37af-45f4-a1a1-358de3ca2b9e

MS-CV: bpqyomePDUqrSSYC.0

MS-ServerId: 202010406

Date: Wed, 20 Feb 2019 19:59:27 GMT

```
{
    "totalCount": 2,
    "items": [
        {
            "partnerId": "0c924e8d-4852-4692-a4d7-7dd0dc09ad80",
            "customerId": "org:d7f565f5-5367-492f-a465-9e2057c5e3c3",
            "customerName": "TEST_TEST_GTM1",
            "customerDomainName": "TESTTESTGTM1.ccsctp.net",
            "customerCountry": "US",
            "invoiceNumber": "",
            "mpnId": "1234567",
            "resellerMpnId": 0,
            "orderId": "HJVtMZMkgQ2miuCiNv0RSr51zQDans0m1",
            "orderDate": "2019-02-04T17:59:52.9460102Z",
            "productId": "DZH318Z0BXWC",
            "skuId": "0002",
            "availabilityId": "DZH318Z0BP8B",
            "productName": "Test WAF-as-a-Service",
            "skuName": "Test WaaS - Medium Plan",
            "chargeType": "New",
            "unitPrice": 820,
            "effectiveUnitPrice": 820,
            "unitType": "",
            "quantity": 1,
            "subtotal": 820,
            "taxTotal": 0,
            "totalForCustomer": 0,
            "currency": "USD",
            "publisherName": "Test Networks, Inc.",
            "publisherId": "21223810",
            "subscriptionDescription": "",
            "subscriptionId": "12345678-9cf0-4a1f-9514-7fcc7fe9d1fe",
            "chargeStartDate": "2019-02-04T09:22:40.1767993-08:00",
            "chargeEndDate": "2019-03-03T09:22:40.1767993-08:00",
            "termAndBillingCycle": "1 Month Subscription",
            "alternateId": "123456ad566",
            "priceAdjustmentDescription": "[\"15.0% Partner earned credit for services managed\"]",
            "discountDetails": "",
            "pricingCurrency": "USD",
            "pcToBCExchangeRate": 1,
            "pcToBCExchangeRateDate": "2019-08-01T00:00:00Z",
            "billableQuantity": 3.1618,
            "meterDescription": "Bandwidth - Data Transfer In (GB) - Zone 2",
            "reservationOrderId": "883d475b-0000-1234-0000-8818752f1234",
            "attributes": {
                "objectType": "OneTimeInvoiceLineItem"
            }
        },
        {
            "partnerId": "0c924e8d-4852-4692-a4d7-7dd0dc09ad80",
            "customerId": "org:d7f565f5-5367-492f-a465-9e2057c5e3c3",
            "customerName": "TEST_TEST_GTM1",
            "customerDomainName": "TESTTESTGTM1.ccsctp.net",
            "customerCountry": "US",
            "invoiceNumber": "",
            "mpnId": "1234567",
            "resellerMpnId": 0,
            "orderId": "Oj2kwDPE0yGEFUkESk3QR4XSxcpvwp1x1",
            "orderDate": "2019-02-04T17:59:53.1628078Z",
            "productId": "DZH318Z0BXWC",
            "skuId": "0005",
            "availabilityId": "DZH318Z0BH9R",
            "productName": "Test WAF-as-a-Service",
            "skuName": "Test WaaS - Large Plan",
        }
    ]
}
```

```

"chargeType": "New",
"unitPrice": 2598,
"effectiveUnitPrice": 2598,
"unitType": "",
"quantity": 1,
"subtotal": 2598,
"taxTotal": 0,
"totalForCustomer": 0,
"currency": "USD",
"publisherName": "Test Networks, Inc.",
"publisherId": "21223810",
"subscriptionDescription": "",
"subscriptionId": "12345678-28db-48c2-8c30-04d7c9455746",
"chargeStartDate": "2019-02-04T09:22:34.6455294-08:00",
"chargeEndDate": "2019-03-03T09:22:34.6455294-08:00",
"termAndBillingCycle": "1 Month Subscription",
"alternateId": "123456ad566",
"priceAdjustmentDescription": "[\"15.0% Partner earned credit for services managed\", \"100.0% Tier 1 Discount\"]",
"discountDetails": "",
"pricingCurrency": "USD",
"pcToBCExchangeRate": 1,
"pcToBCExchangeRateDate": "2019-08-01T00:00:00Z",
"billableQuantity": 0.737083,
"meterDescription": "",
"reservationOrderId": "883d475b-0000-2222-0000-8818752f1234",
"attributes": {
    "objectType": "OneTimeInvoiceLineItem"
}
],
],
"links": {
    "self": {
        "uri": "/invoices/unbilled/lineitems?
provider=onetimetime&invoicelineitemtype=billinglineitems&currencycode=usd&period=previous&size=2000",
        "method": "GET",
        "headers": []
    },
    "next": {
        "uri": "/invoices/unbilled/lineitems?
provider=onetimetime&invoicelineitemtype=billinglineitems&currencycode=usd&period=previous&size=2000&seekOperation=Next",
        "method": "GET",
        "headers": [
            {
                "key": "MS-ContinuationToken",
                "value": "AQAAA=="
            }
        ]
    }
},
"attributes": {
    "objectType": "Collection"
}
}

```

## Request-response example 2

The following details apply to this example:

- Provider: **OneTime**
- InvoiceLineItemType: **BillingLineItems**
- Period: **Previous**
- SeekOperation: **Next**

## Request example 2

```

GET https://api.partnercenter.microsoft.com/v1/invoices/unbilled/lineitems?
provider=onetime&invoiceLineItemType=billinglineitems&currencyCode=usd&period=previous&size=2000&seekoperation
=next HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-ContinuationToken: d19617b8-fbe5-4684-a5d8-0230972fb0cf,0705c4a9-39f7-4261-ba6d-
53e24a9ce47d_a4ayc/80/0Gda4B0/1o/V0etp0qiLx1JwB5S3beHW0s=,0d81c700-98b4-4b13-9129-ffd5620f72e7
MS-RequestId: 1234ecb8-37af-45f4-a1a1-358de3ca2b9e
MS-CorrelationId: 5e612512-4345-4bb0-866e-47aeda031234
X-Locale: en-US
MS-PartnerCenter-Application: Partner Center .NET SDK Samples
Host: api.partnercenter.microsoft.com

```

## Response example 2

```

HTTP/1.1 200 OK
Content-Length: 2484
Content-Type: application/json; charset=utf-8
MS-CorrelationId: 5e612512-4345-4bb0-866e-47aeda031234
MS-RequestId: 1234ecb8-37af-45f4-a1a1-358de3ca2b9e
MS-CV: bpqyomePDUqrSSYC.0
MS-ServerId: 202010406
Date: Wed, 20 Feb 2019 19:59:27 GMT

{
    "totalCount": 1,
    "items": [
        {
            "partnerId": "0c924e8d-4852-4692-a4d7-7dd0dc09ad80",
            "customerId": "org:d7f565f5-5367-492f-a465-9e2057c5e3c3",
            "customerName": "TEST_TEST_GTM1",
            "customerDomainName": "TESTTESTGTM1.ccsctp.net",
            "customerCountry": "US",
            "invoiceNumber": "",
            "mpnId": "1234567",
            "resellerMpnId": 0,
            "orderId": "0i2kwDPEOyGEFUKesk3QR4XSxcpvwp1x1",
            "orderDate": "2019-02-04T17:59:53.1628078Z",
            "productId": "DZH318Z0BXWC",
            "skuId": "0005",
            "availabilityId": "DZH318Z0BH9R",
            "productName": "Test WAF-as-a-Service",
            "skuName": "Test WaaS - Large Plan",
            "chargeType": "New",
            "unitPrice": 2598,
            "effectiveUnitPrice": 2598,
            "unitType": "",
            "quantity": 1,
            "subtotal": 2598,
            "taxTotal": 0,
            "totalForCustomer": 0,
            "currency": "USD",
            "publisherName": "Test Networks, Inc.",
            "publisherId": "21223810",
            "subscriptionDescription": "",
            "subscriptionId": "12345678-28db-48c2-8c30-04d7c9455746",
            "chargeStartDate": "2019-02-04T09:22:34.6455294-08:00",
            "chargeEndDate": "2019-03-03T09:22:34.6455294-08:00",
            "termAndBillingCycle": "1 Month Subscription",
            "alternateId": "123456ad566",
            "priceAdjustmentDescription": "[\"15.0% Partner earned credit for services managed\", \"100.0% Tier 1 Discount\"]",
            "discountDetails": "",
            "pricingCurrency": "USD",
            "pcToBCEExchangeRate": 1,
            "pcToBCEExchangeRateDate": "2019-08-01T00:00:00Z",
            "billableQuantity": 0.737023
        }
    ]
}

```

```

        "billableQuantity": 0.757003,
        "meterDescription": "",
        "reservationOrderId": ""
    },
    "attributes": {
        "objectType": "OneTimeInvoiceLineItem"
    }
},
],
"links": {
    "self": {
        "uri": "/invoices/unbilled/lineitems?
provider=onetime&invoiceLineItemType=billinglineitems&currencyCode=usd&period=previous&size=2000",
        "method": "GET",
        "headers": []
    }
},
"attributes": {
    "objectType": "Collection"
}
}

```

### Request example 3

```

GET https://api.partnercenter.microsoft.com/v1/invoices/unbilled/lineitems?
provider=OneTime&invoiceLineItemType=UsageLineItems&currencyCode=usd&period=previous&size=2000&seekoperation=n
ext HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-ContinuationToken: d19617b8-fbe5-4684-a5d8-0230972fb0cf,0705c4a9-39f7-4261-ba6d-
53e24a9ce47d_a4ayc/80/0Gda4B0/1o/V0etp0qiLx1JwB5S3beHWs=,0d81c700-98b4-4b13-9129-ffd5620f72e7
MS-RequestId: 1234ecb8-37af-45f4-a1a1-358de3ca2b9e
MS-CorrelationId: 5e612512-4345-4bb0-866e-47aeda031234
X-Locale: en-US
MS-PartnerCenter-Application: Partner Center .NET SDK Samples
Host: api.partnercenter.microsoft.com

```

### Response example 3

```

HTTP/1.1 200 OK
Content-Length: 2484
Content-Type: application/json; charset=utf-8
MS-CorrelationId: 5e612512-4345-4bb0-866e-47aeda031234
MS-RequestId: 1234ecb8-37af-45f4-a1a1-358de3ca2b9e
MS-CV: bpqyomePDUqrSSYC.0
MS-ServerId: 202010406
Date: Wed, 20 Feb 2019 19:59:27 GMT

{
    "totalCount": 1,
    "items": [
        {
            "partnerId": "0c924e8d-4852-4692-a4d7-7dd0dc09ad80",
            "PartnerName": "testPartner",
            "customerId": "org:d7f565f5-5367-492f-a465-9e2057c5e3c3",
            "customerName": "TEST_TEST_GTM1",
            "customerDomainName": "TESTTESTGTM1.ccsctp.net",
            "invoiceNumber": "T11ETHHDDD",
            "productId": "DZH318Z0BXWC",
            "skuId": "0005",
            "availabilityId": "DZH318Z0BH9R",
            "productName": "Test WAF-as-a-Service",
            "publisherId": "21223810",
            "subscriptionId": "12345678-28db-48c2-8c30-04d7c9455746",
            "subscriptionDescription": "sub description",
            "chargeStartDate": "2019-02-04T09:22:34.6455294-08:00",
            "chargeEndDate": "2019-03-03T09:22:34.6455294-08:00",
            "UsageDate": "2019-02-07T09:22:34.6455294-08:00",
            "usageQuantity": 0.757003
        }
    ]
}

```

```
"MeterType": "type",
"MeterCategory": "category",
"MeterId": "21312312312-fdsfsd",
"MeterSubCategory": "subcategory",
"MeterName": "meter name",
"MeterRegion": "meter region",
"UnitOfMeasure": "11",
"skuName": "Test WaaS - Large Plan",
"publisherName": "Test Networks, Inc.",
"chargeType": "New",
"unitPrice": 2598,
"effectiveUnitPrice": 2598,
"unitType": "",
"quantity": 1,
"subtotal": 2598,
"taxTotal": 0,
"totalForCustomer": 0,
"currency": "USD",
"termAndBillingCycle": "1 Month Subscription",
"alternateId": "123456ad566",
"discountDetails": "",
"providerSource": "All",
"RateOfPartnerEarnedCredit": 0.15,
"IsPartnerEarnedCreditApplied": true,
"attributes": {
    "objectType": "OneTimeInvoiceLineItem"
}
},
],
"links": {
    "self": {
        "uri": "/invoices/unbilled/lineitems?
provider=all&invoicelineitemtype=billinglineitems&currencycode=usd&period=previous&size=2000",
        "method": "GET",
        "headers": []
    }
},
"attributes": {
    "objectType": "Collection"
}
}
```

# Get prices for Microsoft Azure

4/25/2020 • 3 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

How to get an [Azure Rate Card](#) with real-time prices for an Azure offer. Azure pricing is quite dynamic and changes frequently.

To track usage and help predict your monthly bill and the bills for individual customers, you can combine this Azure Rate Card query to get prices for Microsoft Azure with a request to [Get a customer's utilization records for Azure](#).

Prices differ by market and currency, and this API takes location into consideration. By default, the API uses your partner profile settings in Partner Center and your browser language, and those settings are customizable. The location awareness is especially relevant if you manage sales in multiple markets from a single, centralized office. For more information, see [URI parameters](#).

## C#

To obtain the Azure Rate Card, call the [IAzureRateCard.Get](#) method to return an [AzureRateCard](#) resource that contains the Azure prices.

```
// IAggregatePartner partnerOperations;  
  
var azureRateCard = partner.RateCards.Azure.Get();
```

Sample: [Console test app](#). Project: Partner Center SDK Samples Class: GetAzureRateCard.cs

## Java

The [Partner Center Java SDK](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To obtain the Azure Rate Card, call the [IAzureRateCard.get](#) function to return rate card details that contains the Azure prices.

```
// IAggregatePartner partnerOperations;  
  
AzureRateCard azureRateCard = partner.getRateCards().getAzure().get();
```

## PowerShell

The [Partner Center PowerShell module](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner

community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To obtain the Azure Card, execute the **Get-PartnerAzureRateCard** command to return rate card details that contains the Azure prices.

```
Get-PartnerAzureRateCard
```

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseURL}/v1/ratecards/azure?currency={currency}&amp;region={region}</code>

### URI parameters

NAME	TYPE	REQUIRED	DESCRIPTION
currency	string	No	Optional three letter ISO code for the currency in which the resource rates will be provided (for example <code>EUR</code> ). The default is <code>USD</code> .
region	string	No	Optional two-letter ISO country/region code that indicates the market where the offer is purchased (for example <code>FR</code> ). The default is <code>US</code> .

You can include the optional X-Locale [header](#) in your request. If you don't include the X-Locale header, the default value ("en-US") is used.

- If you provide currency and region parameters in your request, the value of X-Locale is used to determine the response's language.
- If you don't provide region and currency parameters in your request, the value of X-Locale is used to determine the response's region, currency, and language.

### Request header

For more information, see [Partner Center REST headers](#).

### Request body

None.

### Request example

```
GET https://api.partnercenter.microsoft.com/v1/ratecards/azure HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 07ced227-3f32-4eeb-8062-f0bef849a9bc
MS-CorrelationId: a687bc47-8d08-4b78-aff6-5a59aa2055c2
X-Locale: en-US
Host: api.partnercenter.microsoft.com
Connection: Keep-Alive
```

## REST response

If the request is successful, it returns an [Azure Rate Card](#) resource.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

### Response example

HTTP/1.1 200 OK  
Content-Length: 1545508  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: 57b25659-fc00-4215-87e7-2b09bac6845d  
MS-RequestId: 870118d0-adbb-41a3-82d2-a3d45ade3c73  
MS-CV: CYBB8PXMSeukJBIn.0  
MS-ServerId: 201021413  
Date: Wed, 01 Feb 2017 00:13:45 GMT

```
{
    "locale": "en-US",
    "currency": "USD",
    "isTaxIncluded": false,
    "meters": [
        {
            "id": "4b836326-7e19-46e6-8bce-1b19bb6cd91e",
            "name": "Unlimited Data - 1 Gbps",
            "rates": {
                "0": 7395.0
            },
            "tags": [],
            "category": "Networking",
            "subcategory": "ExpressRoute",
            "region": "Zone 2",
            "unit": "Connections",
            "includedQuantity": 0.0,
            "effectiveDate": "2015-09-01T00:00:00Z"
        },
        {
            "id": "1e8f6d9f-8b40-4c97-80cc-cff87a290a93",
            "name": "Compute Hours",
            "rates": {
                "0": 3.9729
            },
            "tags": [],
            "category": "Cloud Services",
            "subcategory": "Standard_L16 Cloud Services",
            "region": "AU East",
            "unit": "1 Hour",
            "includedQuantity": 0.0,
            "effectiveDate": "2016-09-01T00:00:00Z"
        },
        {
            "id": "7a2639ce-ae47-4413-9837-6b4f4b78be3d",
            "name": "Compute Hours",
            "rates": {
                "0": 0.1122
            },
            "tags": [],
            "category": "Virtual Machines",
            "subcategory": "Standard_D1_v2 VM (Windows)",
            "region": "BR South",
            "unit": "Hours",
            "includedQuantity": 0.0,
            "effectiveDate": "2017-01-01T00:00:00Z"
        }
    ],
    "offerTerms": [
        {
            "name": "Overage discount",
            "discount": 0.15,
            "excludedMeterIds": ["53cc0061-0fe2-4249-bf62-e1008c811f5c", "c82dbd27-c978-43a7-ad41-525a90d8962b"],
            "effectiveDate": "2014-01-01T00:00:00"
        }
    ],
    "attributes": {
        "objectType": "AzureRateCard"
    }
}
```

# Get prices for Microsoft Azure Partner Shared Services

4/25/2020 • 3 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

How to get an [Azure Rate Card](#) with prices for Microsoft Azure Partner Shared Services.

Prices differ by market and currency, and this API takes location into consideration. By default, the API uses your partner profile settings in Partner Center and your browser language, and those settings are customizable. The location awareness is especially relevant if you manage sales in multiple markets from a single, centralized office.

## Example Code

### C#

To obtain the Azure Rate Card, call the `IAzureRateCard.GetShared` method to return an [AzureRateCard](#) resource that contains the Azure prices.

```
// IAggregatePartner partnerOperations;  
  
var azureRateCard = partner.RateCards.Azure.GetShared();
```

### Java

The [Partner Center Java SDK](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To obtain the Azure Rate Card, call the `IAzureRateCard.getShared` function to return rate card details that contains the Azure prices.

```
// IAggregatePartner partnerOperations;  
  
AzureRateCard azureRateCard = partner.getRateCards().getAzure().getShared();
```

### PowerShell

The [Partner Center PowerShell module](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To obtain the Azure Card, execute the `Get-PartnerAzureRateCard` command and specify the `SharedServices`

parameter to return rate card details that contains the Azure prices.

```
Get-PartnerAzureRateCard -SharedServices
```

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>/baseURL/v1/ratecards/azure-shared?currency={currency}&amp;region={region}</code>

### URI parameters

NAME	TYPE	REQUIRED	DESCRIPTION
currency	string	No	Optional three letter ISO code for the currency in which the resource rates will be provided (for example <code>EUR</code> ). The default is the currency associated with the market in the partner profile.
region	string	No	Optional two-letter ISO country/region code that indicates the market where the offer is purchased (for example <code>FR</code> ). The default is the country/region code set in the partner profile.

If the optional X-Locale header is included in the request, its value determines the language used for the details in the response.

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

None.

### Request example

```
GET https://api.partnercenter.microsoft.com/v1/ratecards/azure-shared HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 07ced227-3f32-4eeb-8062-f0bef849a9bc
MS-CorrelationId: a687bc47-8d08-4b78-aff6-5a59aa2055c2
X-Locale: en-US
Host: api.partnercenter.microsoft.com
Connection: Keep-Alive
```

## REST response

If the request is successful, it returns an [Azure Rate Card](#) resource.

## **Response success and error codes**

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

## **Response example**

HTTP/1.1 200 OK  
Content-Length: 1545508  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: 57b25659-fc00-4215-87e7-2b09bac6845d  
MS-RequestId: 870118d0-adbb-41a3-82d2-a3d45ade3c73  
MS-CV: CYBB8PXMsEukJBIn.0  
MS-ServerId: 201021413  
Date: Wed, 01 Feb 2017 00:13:45 GMT

```
{  
    "locale": "en-US",  
    "currency": "USD",  
    "isTaxIncluded": false,  
    "meters": [{  
        "id": "4b836326-7e19-46e6-8bce-1b19bb6cd91e",  
        "name": "Unlimited Data - 1 Gbps",  
        "rates": {  
            "0": 7395.0  
        },  
        "tags": [],  
        "category": "Networking",  
        "subcategory": "ExpressRoute",  
        "region": "Zone 2",  
        "unit": "Connections",  
        "includedQuantity": 0.0,  
        "effectiveDate": "2015-09-01T00:00:00Z"  
    }, {  
        "id": "1e8f6d9f-8b40-4c97-80cc-cff87a290a93",  
        "name": "Compute Hours",  
        "rates": {  
            "0": 3.9729  
        },  
        "tags": [],  
        "category": "Cloud Services",  
        "subcategory": "Standard_L16 Cloud Services",  
        "region": "AU East",  
        "unit": "1 Hour",  
        "includedQuantity": 0.0,  
        "effectiveDate": "2016-09-01T00:00:00Z"  
    }, {  
        "id": "7a2639ce-ae47-4413-9837-6b4f4b78be3d",  
        "name": "Compute Hours",  
        "rates": {  
            "0": 0.1122  
        },  
        "tags": [],  
        "category": "Virtual Machines",  
        "subcategory": "Standard_D1_v2 VM (Windows)",  
        "region": "BR South",  
        "unit": "Hours",  
        "includedQuantity": 0.0,  
        "effectiveDate": "2017-01-01T00:00:00Z"  
    }]  
},  
"offerTerms": [{  
    "name": "Overage discount",  
    "discount": 0.15,  
    "excludedMeterIds": ["53cc0061-0fe2-4249-bf62-e1008c811f5c", "c82dbd27-c978-43a7-ad41-525a90d8962b"],  
    "effectiveDate": "2014-01-01T00:00:00"  
}  
],  
"attributes": {  
    "objectType": "AzureRateCard"  
}  
}
```

# Get the partner's current account balance

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Retrieves the partner's current account balance. A summary of the balance and total charges of an invoice for both recurring and one-time charges.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.

## C#

To retrieve your account balance, use your **IAggregatePartner.Invoices** collection, and then call the **Summary** property. Then call the **Get** function, and finally call the **BalanceAmount** property.

```
// IAggregatePartner scopedPartnerOperations;  
  
var invoiceSummary = scopedPartnerOperations.Invoices.Summary.Get();  
  
Console.Out.WriteLine("Current Account Balance: {0:C}", invoiceSummary.BalanceAmount);
```

Sample: [Console test app](#). Project: PartnerSDK.FeatureSample Class: GetInvoiceSummary.cs

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<a href="#"><i>{baseUrl}</i></a> /v1/invoices/summary HTTP/1.1

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

None

### Request example

```
GET https://api.partnercenter.microsoft.com/v1/invoices/summary HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: a45e6643-1caf-4429-8f90-07c03d85bc2b
MS-CorrelationId: 57eb2ca7-755f-450f-9187-eae1e75a0114
Connection: Keep-Alive
```

## REST response

If successful, this method returns an [InvoiceSummary](#) resource in the response.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

### Response example

HTTP/1.1 200 OK  
Content-Length: 256  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: 57eb2ca7-755f-450f-9187-eae1e75a0114  
MS-RequestId: a45e6643-1caf-4429-8f90-07c03d85bc2b  
Date: Thu, 24 Mar 2016 05:21:01 GMT

```
{  
    "balanceAmount": 751094.39,  
    "currencyCode": "USD",  
    "currencySymbol": "$",  
    "accountingDate": "2018-03-16T00:00:00",  
    "firstInvoiceCreationDate": "2017-01-21T00:00:00Z",  
    "lastPaymentDate": "2017-01-01T12:00:00Z",  
    "lastPaymentAmount": 1000,  
    "latestInvoiceDate": "2018-03-16T00:00:00",  
    "details": [  
        {  
            "invoiceType": "Recurring",  
            "summary": {  
                "balanceAmount": 202955.87,  
                "currencyCode": "USD",  
                "currencySymbol": "$",  
                "accountingDate": "2017-02-27T00:00:00Z",  
                "firstInvoiceCreationDate": "2017-01-21T00:00:00Z",  
                "lastPaymentDate": "2017-01-01T12:00:00Z",  
                "lastPaymentAmount": 1000,  
                "latestInvoiceDate": "2001-01-01T00:00:00",  
                "attributes": {  
                    "objectType": "InvoiceSummary"  
                }  
            }  
        },  
        {  
            "invoiceType": "OneTime",  
            "summary": {  
                "balanceAmount": 548138.52,  
                "currencyCode": "USD",  
                "currencySymbol": "$",  
                "accountingDate": "2018-03-16T00:00:00",  
                "firstInvoiceCreationDate": "2018-03-16T00:00:00",  
                "lastPaymentDate": "2001-01-01T00:00:00",  
                "lastPaymentAmount": 0,  
                "latestInvoiceDate": "2018-03-16T00:00:00",  
                "attributes": {  
                    "objectType": "InvoiceSummary"  
                }  
            }  
        }  
    ],  
    "links": {  
        "self": {  
            "uri": "/invoices/summary",  
            "method": "GET",  
            "headers": []  
        }  
    },  
    "attributes": {  
        "objectType": "InvoiceSummary"  
    }  
}
```

# Azure spending

4/22/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Cloud Solution Provider (CSP) partners can view and manage their Azure spending through Partner Center APIs. They can also programmatically view their customers' spending against an Azure spending budget.

For more information, see [scenarios in which CSP partners can use the Partner Center APIs to manage customer and partner accounts and orders](#), specifically the background section.

## Partner usage management

- [Get a partner usage summary](#) using the **PartnerUsageSummary** resource
- [Get usage records for all customers](#) using the **CustomerMonthlyUsageRecord** resource

## Customer usage management

- [Get a customer's usage summary](#) using the **CustomerUsageSummary** resource
- [Get all subscription usage records for a customer](#) using the **SubscriptionMonthlyUsageRecord** resource

## Subscription usage management

- [Get a subscription usage summary](#) using the **SubscriptionUsageSummary** resource
- [Get all monthly usage records for a subscription](#) using the **AzureResourceMonthlyUsageRecord** resource
- [Get usage data for a subscription by resource](#) using the **ResourceUsageRecord** resource
- [Get usage data for a subscription by meter](#) using the **MeterUsageRecord** resource

## Azure spending budget management

- [Get a customer's usage budget](#) using the **CustomerUsageSummary** resource
- [Update a customer's usage budget](#) using the **CustomerUsageSummary** resource

# Get a usage summary for a partner

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

You can use the **PartnerUsageSummary** resource to get a partner usage summary of all customers that purchased a specific Azure service or resource during the current billing period.

*The total returned by this API will not return consumption for customers that have an Azure plan. Planned for deprecation in the future.*

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.

## C#

To get a usage summary for all customers that purchased a specific Azure service or resource during the current billing period:

1. Use your **IAggregatePartner**.
2. Call the **UsageSummary** property, followed by the **Get()** or **GetAsync()** methods:

```
// IAggregatePartner partnerOperations;  
  
var usageSummary = partnerOperations.UsageSummary.Get();
```

For an example, see the following:

- Sample: [Console test app](#)
- Project: [PartnerSDK.FeatureSamples](#)
- Class: [GetPartnerUsageSummary.cs](#)

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<a href="#"><i>{baseUrl}</i></a> /v1/usagesummary HTTP/1.1

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/usagesummary HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: e128c8e2-4c33-4940-a3e2-2e59b0abdc67
MS-CorrelationId: 47c36033-af5d-4457-80a4-512c1626fac4
```

## REST response

If successful, this method returns a **PartnerUsageSummary** resource in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, the error type, and additional parameters. For a full list, see [Error Codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 1120
Content-Type: application/json
MS-CorrelationId: 47c36033-af5d-4457-80a4-512c1626fac4
MS-RequestId: e128c8e2-4c33-4940-a3e2-2e59b0abdc67
Date: Tue, 17 Sep 2019 20:31:45 GMT

{
  "customersOverBudget": 1,
  "customersTrendingOver": 0,
  "customersWithUsageBasedSubscription": 11,
  "resourceId": "11111111-4574-4539-bc42-0e539b9684c0",
  "id": "11111111-4574-4539-bc42-0e539b9684c0",
  "resourceName": "PLAMUATT2NETNEW",
  "name": "PLAMUATT2NETNEW",
  "billingStartDate": "2019-08-28T00:00:00-07:00",
  "billingEndDate": "2019-09-27T00:00:00-07:00",
  "totalCost": 22.861172,
  "currencyLocale": "fr-FR",
  "lastModifiedDate": "2019-09-01T23:04:41.193+00:00",
  "links": {
    "self": {
      "uri": "/usagesummary",
      "method": "GET",
      "headers": []
    }
  },
  "attributes": {
    "objectType": "PartnerUsageSummary"
  }
}
```

# Get usage records for all customers

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Partners can use the **CustomerMonthlyUsageRecord** resource collection to get usage records for all their customers. This resource represents usage records for all customers. That includes those customers with a Microsoft Azure (MS-AZR-0145P) subscription or an Azure plan.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select CSP from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## C#

To get all the usage records for all customers who purchased a specific Azure service or resource during the current billing period:

1. Use your **IAggregatePartner.Customers** collection to call the **ById()** method.
2. Call **UsageRecords** property, then call the **Get()** or **GetAsync()** method.

```
// IAggregatePartner partnerOperations;
var usageRecords = partnerOperations.Customers.UsageRecords.Get();
```

For an example, see the following sample:

- Sample: [Console test app](#)
- Project: [PartnerSDK.FeatureSamples](#)
- Class: [GetCustomerUsageRecords.cs](#)

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/customers/usagerecords</code> HTTP/1.1

### Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/usagerecords HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: e128c8e2-4c33-4940-a3e2-2e59b0abdc67
MS-CorrelationId: 47c36033-af5d-4457-80a4-512c1626fac4
```

## REST response

If successful, this method returns a **CustomerMonthlyUsageRecord** resource in the response body.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, the error type, and additional parameters. For a full list, see [Error Codes](#).

## Response example

You can use the **isUpgraded** property to identify customers who have an Azure plan. If the value for **isUpgraded** is **true**, it means the customers have Azure plans.

HTTP/1.1 200 OK  
Content-Length: 1120  
Content-Type: application/json  
MS-CorrelationId: 47c36033-af5d-4457-80a4-512c1626fac4  
MS-RequestId: e128c8e2-4c33-4940-a3e2-2e59b0abdc67  
Date: Tue, 17 Sep 2019 20:31:45 GMT

```
{  
    "totalCount": 25,  
    "items": [  
        {  
            "budget": {  
                "attributes": {  
                    "objectType": "SpendingBudget"  
                }  
            },  
            "customerSpendingBudget": {  
                "attributes": {  
                    "objectType": "SpendingBudget"  
                }  
            },  
            "percentUsed": 0,  
            "isUpgraded": false,  
            "resourceId": "11111111-1843-4b3b-872f-206e08a08e51",  
            "id": "11111111-1843-4b3b-872f-206e08a08e51",  
            "resourceName": "LEGACY AZURE CUSTOMER SE",  
            "name": "LEGACY AZURE CUSTOMER SE",  
            "totalCost": 0,  
            "currencyLocale": "fr-FR",  
            "usdTotalCost": 0,  
            "lastModifiedDate": "2019-08-01T23:00:16.57+00:00",  
            "attributes": {  
                "objectType": "CustomerMonthlyUsageRecord"  
            }  
        },  
        {  
    ]}
```

```
"budget": {
    "amount": 20,
    "attributes": {
        "objectType": "SpendingBudget"
    }
},
"percentUsed": 602.84,
"isUpgraded": true,
"resourceId": "11111111-6fb9-4b05-8f15-b3d72e0596e6",
"id": "11111111-6fb9-4b05-8f15-b3d72e0596e6",
"resourceName": "Modern Azure Customer SE",
"name": "Modern Azure Customer SE",
"totalCost": 120.5682999999995904716,
"currencyCode": "SEK",
"usdTotalCost": 12.399999999999985235,
"lastModifiedDate": "2019-09-17T17:08:11.1433333+00:00",
"attributes": {
    "objectType": "CustomerMonthlyUsageRecord"
}
},
{
    "budget": {
        "attributes": {
            "objectType": "SpendingBudget"
        }
    },
    "percentUsed": 0,
    "isUpgraded": true,
    "resourceId": "11111111-5892-4326-8541-9da1fdb233fb",
    "id": "11111111-5892-4326-8541-9da1fdb233fb",
    "resourceName": "Test_Test_MA20190829_14",
    "name": "Test_Test_MA20190829_14",
    "totalCost": 0,
    "currencyCode": "GBP",
    "usdTotalCost": 0,
    "lastModifiedDate": "2019-09-17T17:08:11.1433333+00:00",
    "attributes": {
        "objectType": "CustomerMonthlyUsageRecord"
    }
},
{
    "budget": {
        "amount": 97,
        "attributes": {
            "objectType": "SpendingBudget"
        }
    },
    "percentUsed": 28.08,
    "isUpgraded": true,
    "resourceId": "11111111-641b-4c53-b7fc-0f2bfca8a581",
    "id": "11111111-641b-4c53-b7fc-0f2bfca8a581",
    "resourceName": "Modern Azure Customer UK",
    "name": "Modern Azure Customer UK",
    "totalCost": 27.23292827625710931604,
    "currencyCode": "GBP",
    "usdTotalCost": 33.28000000000001044,
    "lastModifiedDate": "2019-09-17T17:08:11.1433333+00:00",
    "attributes": {
        "objectType": "CustomerMonthlyUsageRecord"
    }
},
],
"links": {
    "self": {
        "uri": "/customers/usagerecords",
        "method": "GET",
        "headers": []
    }
},
```

```
  "attributes": {  
    "objectType": "Collection"  
  }  
}
```

# Get a usage summary for all of a customer's subscriptions

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

You can use the **CustomerUsageSummary** resource to get a customer's usage of a specific Azure service or resource during the current billing period.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## C#

To get a usage summary for all of a customer's subscriptions:

1. Use your **IAggregatePartner.Customers** collection to call the **ById()** method.
2. Call the **UsageSummary** property, followed by the **Get()** or **GetAsync()** methods:

```
// IAggregatePartner partnerOperations;
// var selectedCustomerId as string;

var usageSummary = partnerOperations.Customers.ById(selectedCustomerId).UsageSummary.Get();
```

For an example, see the following:

- Sample: [Console test app](#)
- Project: **PartnerSDK.FeatureSamples**
- Class: **GetCustomerUsageSummary.cs**

## REST request

### Request syntax

METHOD	REQUEST URI
--------	-------------

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/customers/{customer-tenant-id}/usagesummary</code> HTTP/1.1

#### URI parameter

This table lists the required query parameter to get the customer's rated usage information.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	guid	Y	A GUID corresponding to the customer.

#### Request headers

For more information, see [Partner Center REST headers](#).

#### Request body

None.

#### Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/{customer-tenant-id}/usagesummary HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: e128c8e2-4c33-4940-a3e2-2e59b0abdc67
MS-CorrelationId: 47c36033-af5d-4457-80a4-512c1626fac4
```

## REST response

If successful, this method returns a **CustomerUsageSummary** resource in the response body.

#### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, the error type, and additional parameters. For a full list, see [Error Codes](#).

#### Response example for Microsoft Azure (MS-AZR-0145P) subscription

In this example, the customer purchased a **145P Azure PayG** offer.

*For customers with Microsoft Azure (MS-AZR-0145P) subscriptions, there will be no change to the API response.*

```

HTTP/1.1 200 OK
Content-Length: 1120
Content-Type: application/json
MS-CorrelationId: 47c36033-af5d-4457-80a4-512c1626fac4
MS-RequestId: e128c8e2-4c33-4940-a3e2-2e59b0abdc67
Date: Tue, 17 Sep 2019 20:31:45 GMT

{
    "budget": {
        "ammount": 300.00000,
        "attributes": {
            "objectType": "SpendingBudget"
        }
    },
    "id": "65726577-C208-40FD-9735-8C85AC9CAC68",
    "name": "600 test",
    "billingStartDate": "2016-02-06T00:00:00-08:00",
    "billingEndDate": "2016-03-05T00:00:00-08:00",
    "totalCost": 0.0,
    "currencyLocale": "en-US",
    "lastModifiedDate": "2016-02-26T09:42:54.5130558+00:00",
    "links": {
        "self": {
            "uri": "/customers/{customer-tenant-id}/usagesummary",
            "method": "GET",
            "headers": []
        }
    },
    "attributes": {
        "objectType": "CustomerUsageSummary"
    }
}

```

### Response example for Azure plan

In this example, the customer purchased an Azure plan.

*For customers with Azure plans, there are the following changes to the API response:*

- **currencyLocale** is replaced with **currencyCode**
- **usdTotalCost** is a new field

HTTP/1.1 200 OK  
Content-Length: 1120  
Content-Type: application/json  
MS-CorrelationId: 47c36033-af5d-4457-80a4-512c1626fac4  
MS-RequestId: e128c8e2-4c33-4940-a3e2-2e59b0abdc67  
Date: Tue, 17 Sep 2019 20:31:45 GMT

```
{  
    "budget": {  
        "amount": 97,  
        "attributes": {  
            "objectType": "SpendingBudget"  
        }  
    },  
    "resourceId": "44908a11-641b-4c53-b7fc-0f2bfca8a581",  
    "resourceName": "Modern Azure Customer UK",  
    "billingStartDate": "2019-09-01T00:00:00+00:00",  
    "billingEndDate": "2019-10-01T00:00:00+00:00",  
    "totalCost": 28.82860766744404945074,  
    "currencyCode": "GBP",  
    "usdTotalCost": 35.2300000000000362337,  
    "lastModifiedDate": "2019-09-18T17:09:26.16+00:00",  
    "attributes": {  
        "objectType": "CustomerUsageSummary"  
    }  
}
```

# Get subscription usage records for a customer

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## Applies to:

- Partner Center
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

You can use the **SubscriptionMonthlyUsageRecord** resource collection to get subscription usage records for a customer of a specific Azure service or resource during the current billing period. This resource represents all subscriptions for the customer. For a customer with an Azure plan, this resource returns a list of those plans (not individual Azure subscriptions).

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## C#

To get subscription usage records for a customer of a specific Azure service or resource during the current billing period:

1. Use your **IAggregatePartner.Customers** collection to call the **ById()** method.
2. Then call the **Subscriptions** property, as well as **UsageRecords** property. Finish by calling the **Get()** or **GetAsync()** methods.

```
// IAggregatePartner partnerOperations;
// var selectedCustomerId as string;

var usageRecords =
    partnerOperations.Customers.ById(selectedCustomerId).Subscriptions.UsageRecords.Get();
```

For an example, see the following:

- Sample: [Console test app](#)
- Project: [PartnerSDK.FeatureSamples](#)
- Class: [GetSubscriptionUsageRecords.cs](#)

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<a href="#"><i>/baseURL</i></a> /v1/customers/{customer-tenant-id}/subscriptions/usagerecords HTTP/1.1

#### URI parameter

This table lists the required query parameter to get the customer's rated usage information.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	guid	Y	A GUID corresponding to the customer.

#### Request headers

For more information, see [Partner Center REST headers](#).

#### Request body

None.

#### Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/{customer-tenant-id}/subscriptions/usagerecords
HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: e128c8e2-4c33-4940-a3e2-2e59b0abdc67
MS-CorrelationId: 47c36033-af5d-4457-80a4-512c1626fac4
```

## REST response

If successful, this method returns a **SubscriptionMonthlyUsageRecord** resource in the response body.

#### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, the error type, and additional parameters. For a full list, see [Error Codes](#).

#### Response example for Microsoft Azure (MS-AZR-0145P) subscriptions

In this example, the customer purchased a **145P Azure PayG** offer.

*For customers with Microsoft Azure (MS-AZR-0145P) subscriptions, there will be no change to the API response.*

```

HTTP/1.1 200 OK
Content-Length: 1120
Content-Type: application/json
MS-CorrelationId: 47c36033-af5d-4457-80a4-512c1626fac4
MS-RequestId: e128c8e2-4c33-4940-a3e2-2e59b0abdc67
Date: Tue, 17 Sep 2019 20:31:45 GMT

{
    "totalCount": 1,
    "items": [
        {
            "status": "active",
            "offerId": "MS-AZR-0145P",
            "resourceId": "11111111-F347-41B6-B02C-187B1B778A43",
            "id": "11111111-F347-41B6-B02C-187B1B778A43",
            "resourceName": "Microsoft Azure",
            "name": "Microsoft Azure",
            "totalCost": 22.861172,
            "currencyLocale": "fr-FR",
            "usdTotalCost": 0,
            "lastModifiedDate": "2019-09-01T23:04:41.193+00:00",
            "attributes": {
                "objectType": "SubscriptionMonthlyUsageRecord"
            }
        }
    ],
    "links": {
        "self": {
            "uri": "/customers/<customer-tenant-id>/subscriptions/usagerecords/",
            "method": "GET",
            "headers": []
        }
    },
    "attributes": {
        "objectType": "Collection"
    }
}

```

## REST response example for Azure plan

In this example, the customer purchased an Azure plan.

*For customers with Azure plans, there are the following changes in the API response:*

- **currencyLocale** is replaced with **currencyCode**
- **usdTotalCost** is a new field

HTTP/1.1 200 OK  
Content-Length: 1120  
Content-Type: application/json  
MS-CorrelationId: 47c36033-af5d-4457-80a4-512c1626fac4  
MS-RequestId: e128c8e2-4c33-4940-a3e2-2e59b0abdc67  
Date: Tue, 17 Sep 2019 20:31:45 GMT

```
{  
    "totalCount": 2,  
    "items": [  
        {  
            "status": "active",  
            "partnerOnRecord": "some-id",  
            "offerId": "DZH318Z0BPS6:0001:DZH318Z0BML6",  
            "resourceId": "11111111-7d58-6654-69fa-0797198155d3",  
            "id": "11111111-7d58-6654-69fa-0797198155d3",  
            "resourceName": "Azure plan",  
            "name": "Azure plan",  
            "totalCost": 0,  
            "currencyCode": "GBP",  
            "usdTotalCost": 0,  
            "lastModifiedDate": "2019-09-18T17:09:26.16+00:00",  
            "attributes": {  
                "objectType": "SubscriptionMonthlyUsageRecord"  
            }  
        },  
        {  
            "status": "active",  
            "partnerOnRecord": "some-id",  
            "offerId": "DZH318Z0BPS6:0001:DZH318Z0BML6",  
            "resourceId": "11111111-25aa-ebb8-2bb4-fb406307babd",  
            "id": "11111111-25aa-ebb8-2bb4-fb406307babd",  
            "resourceName": "Azure plan",  
            "name": "Azure plan",  
            "totalCost": 0,  
            "currencyCode": "GBP",  
            "usdTotalCost": 0,  
            "lastModifiedDate": "2019-09-18T17:09:26.16+00:00",  
            "attributes": {  
                "objectType": "SubscriptionMonthlyUsageRecord"  
            }  
        }  
    ],  
    "links": {  
        "self": {  
            "uri": "/customers/<customer-tenant-id>/subscriptions/usagerecords",  
            "method": "GET",  
            "headers": []  
        }  
    },  
    "attributes": {  
        "objectType": "Collection"  
    }  
}
```

# Get usage summary for customer's subscription

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## Applies to:

- Partner Center
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

You can use the **SubscriptionUsageSummary** resource to get a subscription usage summary for a customer. This resource represents the subscription usage summary of a specific Azure service or resource during the current billing period.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select CSP from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A subscription identifier

## C#

To get a subscription usage summary for a customer's subscription:

1. Use your **IAggregatePartner.Customers** collection to call the **ById()** method.
2. Then call the **Subscriptions** property, as well as **UsageSummary** property. Finish by calling the **Get()** or **GetAsync()** methods.

```
// IAggregatePartner partnerOperations;
// var selectedCustomerId as string;
// var selectedSubscriptionId as string;

var subscriptionUsageSummary =
    partnerOperations.Customers.ById(selectedCustomerId).Subscriptions.ById(selectedSubscriptionId).UsageSummary.Get();
```

For an example, see the following:

- Sample: [Console test app](#)
- Project: [PartnerSDK.FeatureSamples](#)
- Class: [GetSubscriptionUsageSummary.cs](#)

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>/baseURL/v1/customers/{customer-tenant-id}/subscriptions/{subscription-id}/usagesummary</code> HTTP/1.1

#### URI parameters

This table lists the required query parameters to get the customer's rated usage information.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	guid	Y	A GUID corresponding to the customer.
subscription-id	guid	Y	A GUID corresponding to the identifier of a subscription. For an Azure plan, this is the identifier of the corresponding Partner Center <a href="#">subscription resource</a> , which represents the Azure plan. <i>For Azure plan subscription resources, provide the plan-id as the subscription-id in this route.</i>

#### Request headers

For more information, see [Partner Center REST headers](#).

#### Request body

None.

#### Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/{customer-tenant-id}/subscriptions/{subscription-id}/usagesummary HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: e128c8e2-4c33-4940-a3e2-2e59b0abdc67
MS-CorrelationId: 47c36033-af5d-4457-80a4-512c1626fac4
```

## REST response

If successful, this method returns a **SubscriptionUsageSummary** resource in the response body.

#### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, the error type, and additional parameters. For a full list, see [Error Codes](#).

#### Response example for Microsoft Azure (MS-AZR-0145P) subscriptions

In this example, the customer purchased a **145P Azure PayG** offer.

*For customers with Microsoft Azure (MS-AZR-0145P) subscriptions, there will be no change to the API response.*

```
HTTP/1.1 200 OK
Content-Length: 1120
Content-Type: application/json
MS-CorrelationId: 47c36033-af5d-4457-80a4-512c1626fac4
MS-RequestId: e128c8e2-4c33-4940-a3e2-2e59b0abdc67
Date: Tue, 17 Sep 2019 20:31:45 GMT

{
    "resourceId": "ABCDEFGH-F347-41B6-B02C-187B1B778A43",
    "id": "ABCDEFGH-F347-41B6-B02C-187B1B778A43",
    "resourceName": "Microsoft Azure",
    "name": "Microsoft Azure",
    "billingStartDate": "2019-08-28T00:00:00-07:00",
    "billingEndDate": "2019-09-27T00:00:00-07:00",
    "totalCost": 22.861172,
    "currencyLocale": "fr-FR",
    "lastModifiedDate": "2019-09-01T23:04:41.193+00:00",
    "links": {
        "self": {
            "uri": "/customers/<customer-tenant-id>/subscriptions/<subscription-id>/usagesummary",
            "method": "GET",
            "headers": []
        }
    },
    "attributes": {
        "objectType": "SubscriptionUsageSummary"
    }
}
```

## REST response example for Azure plan

In this example, the customer purchased an Azure plan.

*For customers with Azure plans, there are the following API response changes:*

- **currencyLocale** is replaced with **currencyCode**
- **usdTotalCost** is a new field

HTTP/1.1 200 OK  
Content-Length: 1120  
Content-Type: application/json  
MS-CorrelationId: 47c36033-af5d-4457-80a4-512c1626fac1  
MS-RequestId: e128c8e2-4c33-4940-a3e2-2e59b0abdc67  
Date: Tue, 17 Sep 2019 20:31:45 GMT

```
{  
    "resourceId": "11111111-dca5-6f31-d3a6-dbbfad9be0fc",  
    "resourceName": "Azure plan",  
    "billingStartDate": "2019-09-01T00:00:00+00:00",  
    "billingEndDate": "2019-10-01T00:00:00+00:00",  
    "totalCost": 28.82860766744404945074,  
    "currencyCode": "GBP",  
    "usdTotalCost": 35.2300000000000362337,  
    "lastModifiedDate": "2019-09-18T17:09:26.16+00:00",  
    "links": {  
        "self": {  
            "uri": "/customers/<customer-tenant-id>/subscriptions/<subscription-id>/usagesummary",  
            "method": "GET",  
            "headers": []  
        }  
    },  
    "attributes": {  
        "objectType": "SubscriptionUsageSummary"  
    }  
}
```

# Get all monthly usage records for a subscription.

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## Applies to:

- Partner Center
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

You can use the [AzureResourceMonthlyUsageRecord](#) resource collection to get a list of services within a customer's subscription and their associated rated usage information.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A subscription identifier.

*This API only supports Microsoft Azure (MS-AZR-0145P) subscriptions. If you are using an Azure plan, see [Get usage data for subscription by meter instead](#).*

## C#

To get a subscription's resource usage information:

1. Use your **IAggregatePartner.Customers** collection to call the **ById()** method.
2. Call the **Subscriptions** property, as well as **UsageRecords**, then the **Resources** property.
3. Call the **Get()** or **GetAsync()** methods.

```
// IAggregatePartner partnerOperations;
// var selectedCustomerId as string;
// var selectedSubscriptionID as string;

var usageRecords =
    partnerOperations.Customers.ById(selectedCustomerId).Subscriptions.ById(selectedSubscriptionId).UsageRecords.Resources.Get();
```

For an example, see the following:

- Sample: [Console test app](#)
- Project: [PartnerSDK.FeatureSample](#)
- Class: [SubscriptionResourceUsageRecords.cs](#)

## REST request

## Request syntax

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/customers/{customer-tenant-id}/subscriptions/{id-for-subscription}/usagerecords/resources</code> HTTP/1.1

### URI parameters

This table lists the required query parameters to get the rated usage information.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	guid	Y	A GUID corresponding to the customer.
subscription-id	guid	Y	A GUID corresponding to the subscription.

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

None.

### Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/{customer-tenant-id}/subscriptions/{id-for-subscription}/usagerecords/resources HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 65b26053-37d0-4303-9fd1-46ad8012bcb6
MS-CorrelationId: 47c36033-af5d-4457-80a4-512c1626fac4
```

## REST response

If successful, this method returns a collection of `AzureResourceMonthlyUsageRecord` resources in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

### Response example

HTTP/1.1 200 OK  
Content-Length: 12014  
Content-Type: application/json  
MS-CorrelationId: 648a26a4-a63e-459f-844b-4f29d7913353  
MS-RequestId: be82a8ba-4a53-49f7-8313-b033c058687e  
Date: Tue, 10 Nov 2015 19:09:59 GMT

```
{  
    "totalCount": 20,  
    "items": [  
        {  
            "category": "Storage",  
            "subcategory": "LOCALLY REDUNDANT",  
            "quantityUsed": 0.151287527825352,  
            "unit": "GB",  
            "id": "2a2419c0-cefe-46b2-8004-8eb002ad606c",  
            "name": "Azure Resource 1",  
            "totalCost": 0.195779159290613,  
            "currencyLocale": "en-US",  
            "attributes": {  
                "objectType": "AzureResourceMonthlyUsageRecord"  
            }  
        },  
        {  
            "category": "Remote App",  
            "subcategory": "Remote App",  
            "quantityUsed": 0.932546524299563,  
            "unit": "GB",  
            "id": "7e4099c8-2b3d-41a6-a1bd-d5cf315989b2",  
            "name": "Azure Resource 2",  
            "totalCost": 0.920983775016379,  
            "currencyLocale": "en-US",  
            "attributes": {  
                "objectType": "AzureResourceMonthlyUsageRecord"  
            }  
        }],  
        "links": {  
            "self": {  
                "uri": "/v1/customers/<customer-tenant-id>/subscriptions/<id-for-subscription>%20/usagerecords",  
                "method": "GET",  
                "headers": []  
            },  
            "attributes": {  
                "objectType": "Collection"  
            }  
        }  
}
```

# Get usage data for subscription by resource

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## Applies to:

- Partner Center
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

This article describes how to get the **ResourceUsageRecord** resource. This resource represents an aggregated total for the month for individual resources provisioned in your Azure plan. You can use this resource to get a customer's resource usage records for specific Azure services or resources during the current billing period. This API returns data that was not available previously through Azure spending APIs.

*This route does not support Microsoft Azure (MS-AZR-0145P) subscriptions.*

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A subscription identifier

## C#

To get resource usage records of a customer for a specific Azure service or resource during the current billing period:

1. Use your **IAggregatePartner.Customers** collection to call the **ById()** method.
2. Call the **Subscriptions** property, as well as **UsageRecords**, then the **Resources** property. Finish by calling the **Get()** or **GetAsync()** methods.

```
// IAggregatePartner partnerOperations;
// var selectedCustomerId as string;
// var selectedSubscriptionId as string;

var usageRecords =
    partnerOperations.Customers.ById(selectedCustomerId).Subscriptions.ById(selectedSubscriptionId).UsageRecords.Resources.Get();
```

For an example, see the following:

- Sample: [Console test app](#)
- Project: [PartnerSDK.FeatureSamples](#)
- Class: [GetSubscriptionUsageRecordsByResource.cs](#)

# REST request

## Request syntax

METHOD	REQUEST URI
GET	<code>{baseURL}/v1/customers/{customer-tenant-id}/subscriptions/{subscription-id}/resourceusagerecords</code> HTTP/1.1

## URI parameters

This table lists the required query parameters to get the customer's rated usage information.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	guid	Y	A GUID corresponding to the customer.
subscription-id	guid	Y	A GUID corresponding to the identifier of a Partner Center <a href="#">subscription resource</a> , which represents a Microsoft Azure (MS-AZR-0145P) subscription or an Azure plan. <i>For Azure plan subscription resources, provide the plan-id as the subscription-id in this route.</i>

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/{customer-tenant-id}/subscriptions/{subscription-id}/resourceusagerecords HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: e128c8e2-4c33-4940-a3e2-2e59b0abdc67
MS-CorrelationId: 47c36033-af5d-4457-80a4-512c1626fac4
```

# REST response

If successful, this method returns a `PagedResourceCollection<ResourceUsageRecord>` resource in the response body.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, the error type, and additional parameters. For a full list, see [Error Codes](#).

## Response example

```
HTTP/1.1 200 OK
```

...../1.1 200 OK

Content-Length: 1120

Content-Type: application/json

MS-CorrelationId: 47c36033-af5d-4457-80a4-512c1626fac4

MS-RequestId: e128c8e2-4c33-4940-a3e2-2e59b0abdc67

Date: Tue, 17 Sep 2019 20:31:45 GMT

```
{  
    "totalCount": 3,  
    "items": [  
        {  
            "subscriptionId": "{subscription-id}",  
            "resourceUri": "/subscriptions/{subscription-  
id}/resourceGroups/TESTRG1/providers/Microsoft.Compute/disks/testVM1_OsDisk_1_531d3c99534b4649ae025d485370143e  
",  
            "resourceType": "Microsoft.Compute",  
            "entitlementId": "{entitlement-id}",  
            "entitlementName": "Partner Subscription",  
            "resourceGroupName": "TESTRG1",  
            "name": "testVM1_OsDisk_1_531d3c99534b4649ae025d485370143e",  
            "resourceName": "testVM1_OsDisk_1_531d3c99534b4649ae025d485370143e",  
            "totalCost": 2.0211938955034572,  
            "currencyCode": "GBP",  
            "usdTotalCost": 2.4700000000000001,  
            "lastModifiedDate": "2019-09-17T21:08:44.2566667+00:00",  
            "attributes": {  
                "objectType": "ResourceUsageRecord"  
            }  
        },  
        {  
            "subscriptionId": "{subscription-id}",  
            "resourceUri": "/subscriptions/{subscription-  
id}/resourceGroups/TESTRG1/providers/Microsoft.Compute/virtualMachines/testVM1",  
            "resourceType": "Microsoft.Compute",  
            "entitlementId": "{entitlement-id}",  
            "entitlementName": "Partner Subscription",  
            "resourceGroupName": "TESTRG1",  
            "name": "testVM1",  
            "resourceName": "testVM1",  
            "totalCost": 80.3322286322163563,  
            "currencyCode": "GBP",  
            "usdTotalCost": 98.169999999999985,  
            "lastModifiedDate": "2019-09-17T21:08:44.2566667+00:00",  
            "attributes": {  
                "objectType": "ResourceUsageRecord"  
            }  
        },  
        {  
            "subscriptionId": "{subscription-id}",  
            "resourceUri": "/subscriptions/{subscription-  
id}/resourceGroups/testrg1/providers/Microsoft.Storage/storageAccounts/testrg1diag153",  
            "resourceType": "Microsoft.Storage",  
            "entitlementId": "{entitlement-id}",  
            "entitlementName": "Partner Subscription",  
            "resourceGroupName": "testrg1",  
            "name": "testrg1diag153",  
            "resourceName": "testrg1diag153",  
            "totalCost": 0.0081829712368561032,  
            "currencyCode": "GBP",  
            "usdTotalCost": 0.009999999999999997,  
            "lastModifiedDate": "2019-09-17T21:08:44.2566667+00:00",  
            "attributes": {  
                "objectType": "ResourceUsageRecord"  
            }  
        }  
    ],  
    "links": {  
        "self": {  
            "uri": "/customers/<customer-tenant-id>/subscriptions/<subscription-id>/resourceusagerecords",  
            "method": "GET"  
        }  
    }  
}
```

```
        "method": "GET",
        "headers": []
    },
    "attributes": {
        "objectType": "Collection"
    }
}
```

# Get usage data for subscription by meter

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## Applies to:

- Partner Center
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

You can use the **MeterUsageRecord** resource collection to get meter usage records of a customer for specific Azure services or resources during the current billing period. This resource collection represents an aggregated total for each meter for the current billing cycle, across your entire Azure plan.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A subscription ID

*This new route is equivalent to `subscriptions/{subscription-id}/usagerecords/resources`, which will continue to function only for Microsoft Azure (MS-AZR-0145P) subscriptions. This new route will support both Microsoft Azure (MS-AZR-0145P) subscriptions and Azure plans. In order to get this information for your Azure plan, you need to switch to this new route. Other than the properties mentioned in the following sections, the response is the same as the old route.*

## C#

To get meter usage records of a customer for a specific Azure service or resource during the current billing period:

1. Use your **IAggregatePartner.Customers** collection to call the **ById()** method.
2. Call the **Subscriptions** property, and **UsageRecords**, then the **Meters** property. Finish by calling the **Get()** or **GetAsync()** methods.

```
// IAggregatePartner partnerOperations;
// var selectedCustomerId as string;
// var selectedSubscriptionId as string;

var usageRecords =
    partnerOperations.Customers.ById(selectedCustomerId).Subscriptions.ById(selectedSubscriptionId).UsageRecords.Meters.Get();
```

For an example, see the following sample:

- Sample: [Console test app](#)
- Project: [PartnerSDK.FeatureSamples](#)

- Class: `GetSubscriptionUsageRecordsByMeter.cs`

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseURL}/v1/customers/{customer-tenant-id}/subscriptions/{subscription-id}/meterusagerecords</code> HTTP/1.1

### URI parameters

This table lists the required query parameters to get the customer's rated usage information.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	guid	Y	A GUID corresponding to the customer.
subscription-id	guid	Y	A GUID corresponding to the identifier of a Partner Center <a href="#">subscription resource</a> , which represents a Microsoft Azure (MS-AZR-0145P) subscription or an Azure plan. <i>For Azure plan subscription resources, provide the plan-id as the subscription-id in this route.</i>

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

None.

### Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/{customer-tenant-id}/subscriptions/{subscription-id}/meterusagerecords HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: e128c8e2-4c33-4940-a3e2-2e59b0abdc67
MS-CorrelationId: 47c36033-af5d-4457-80a4-512c1626fac4
```

## REST response

If successful, this method returns a `PagedResourceCollection<MeterUsageRecord>` resource in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, the error type, and additional parameters. For a full list, see [Error Codes](#).

## Response example for Microsoft Azure (MS-AZR-0145P) subscriptions

In this example, the customer purchased 145P Azure PayG.

*For customers with a Microsoft Azure (MS-AZR-0145P) subscription, there will be no change to API response.*

```
HTTP/1.1 200 OK
Content-Length: 1120
Content-Type: application/json
MS-CorrelationId: 47c36033-af5d-4457-80a4-512c1626fac4
MS-RequestId: e128c8e2-4c33-4940-a3e2-2e59b0abdc67
Date: Tue, 17 Sep 2019 20:31:45 GMT

{
    "totalCount": 1,
    "items": [
        {
            "status": "active",
            "offerId": "MS-AZR-0145P",
            "resourceId": "11111111-F347-41B6-B02C-187B1B778A43",
            "id": "11111111-F347-41B6-B02C-187B1B778A43",
            "resourceName": "Microsoft Azure",
            "name": "Microsoft Azure",
            "totalCost": 22.861172,
            "currencyLocale": "fr-FR",
            "usdTotalCost": 0,
            "lastModifiedDate": "2019-09-01T23:04:41.193+00:00",
            "attributes": {
                "objectType": "SubscriptionMonthlyUsageRecord"
            }
        }
    ],
    "links": {
        "self": {
            "uri": "/customers/{customer-tenant-id}/subscriptions/usagerecords/",
            "method": "GET",
            "headers": []
        }
    },
    "attributes": {
        "objectType": "Collection"
    }
}
```

## REST response example for Azure plan

In this example, the customer purchased an Azure plan.

*For customers with Azure plans, there are the following changes in the API response:*

- **currencyLocale** is replaced with **currencyCode**
- **usdTotalCost** is a new field

```
HTTP/1.1 200 OK
Content-Length: 1120
Content-Type: application/json
MS-CorrelationId: 47c36033-af5d-4457-80a4-512c1626fac4
MS-RequestId: e128c8e2-4c33-4940-a3e2-2e59b0abdc67
Date: Fri, 26 Feb 2016 20:31:45 GMT

{
    "totalCount": 4,
    "items": [
        {
            "subscriptionId": "{subscription-id}"
        }
    ]
}
```

```
        "subscriptionId": "{subscription-id}",
        "meterId": "DZH318Z0BNVX-005J-Data Transfer In (GB)",
        "meterName": "Data Transfer In",
        "category": "Bandwidth",
        "subcategory": "Bandwidth",
        "quantityUsed": 0.01129,
        "unit": "1 GB",
        "totalCost": 0,
        "currencyCode": "GBP",
        "usdTotalCost": 0,
        "lastModifiedDate": "2019-09-17T21:08:44.2566667+00:00",
        "attributes": {
            "objectType": "MeterUsageRecord"
        }
    },
    {
        "subscriptionId": "{subscription-id}",
        "meterId": "DZH318Z0BNVX-005J-Data Transfer Out (GB)",
        "meterName": "Data Transfer Out",
        "category": "Bandwidth",
        "subcategory": "Bandwidth",
        "quantityUsed": 0.000224,
        "unit": "1 GB",
        "totalCost": 0,
        "currencyCode": "GBP",
        "usdTotalCost": 0,
        "lastModifiedDate": "2019-09-17T21:08:44.2566667+00:00",
        "attributes": {
            "objectType": "MeterUsageRecord"
        }
    },
    {
        "subscriptionId": "{subscription-id}",
        "meterId": "DZH318Z0BNZ5-006G-10K Batch Write Operations",
        "meterName": "Batch Write Operations",
        "category": "Storage",
        "subcategory": "Tables",
        "quantityUsed": 0.2462,
        "unit": "10K",
        "totalCost": 0,
        "currencyCode": "GBP",
        "usdTotalCost": 0,
        "lastModifiedDate": "2019-09-17T21:08:44.2566667+00:00",
        "attributes": {
            "objectType": "MeterUsageRecord"
        }
    },
    {
        "subscriptionId": "{subscription-id}",
        "meterId": "DZH318Z0BNZ5-006G-Data Stored (GB/Month)",
        "meterName": "LRS Data Stored",
        "category": "Storage",
        "subcategory": "Tables",
        "quantityUsed": 0.002632,
        "unit": "1 GB/Month",
        "totalCost": 0,
        "currencyCode": "GBP",
        "usdTotalCost": 0,
        "lastModifiedDate": "2019-09-17T21:08:44.2566667+00:00",
        "attributes": {
            "objectType": "MeterUsageRecord"
        }
    }
],
"links": {
    "self": {
        "uri": "/customers/<customer-tenant-id>/subscriptions/<subscription-id>/meterusagerecords",
        "method": "GET",
        "headers": []
    }
}
```

```
        },
        "attributes": {
            "objectType": "Collection"
        }
    }
```

# Meter usage record resource

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## Applies to:

- Partner Center

You can use the **MeterUsageRecord** resource to describe the estimated monetary cost of a subscription's meter level usage in the current billing cycle.

## MeterUsageRecord

PROPERTY	TYPE	DESCRIPTION
SubscriptionId	string	A GUID corresponding to the identifier of a Partner Center <a href="#">subscription resource</a> , which represents a Microsoft Azure (MS-AZR-0145P) subscription or an Azure plan. For Microsoft Azure (MS-AZR-0145P) subscriptions,, this value is the commerce subscription identifier. For Azure plan subscription resources, this value is the Azure plan identifier.
MeterId	string	Gets or sets the meter identifier.
MeterName	string	Gets or sets the meter name.
Category	string	Gets or sets the Azure resource category.
Subcategory	string	Gets or sets the Azure resource sub-category.
QuantityUsed	decimal	Gets or sets the quantity of the Azure resource used.
Unit	string	Gets or sets the unit of measure for the Azure resource.
TotalCost	decimal	Gets or sets the estimated total cost of usage.

PROPERTY	TYPE	DESCRIPTION	
CurrencyLocale	string	The locale in which the subscription was used. This property determines the currency that is used on the invoice. This property is available for Microsoft Azure (MS-AZR-0145P) subscriptions.	
CurrencyCode	string	Gets or sets the currency code. This property is available for Azure plans.	
USDTotalCost	decimal	Gets or sets the estimated total cost in USD. This property is available for Azure plans.	
LastModifiedDate	string	The day (in date-time format) that this record was last modified.	
Attributes	ResourceAttributes	The metadata attributes corresponding to the resource.	

# Resource usage record resources

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## Applies to:

- Partner Center

You can use the **ResourceUsageRecord** resource to describe the estimated monetary cost of a subscription's resource level usage in the current billing cycle.

## ResourceUsageRecord

PROPERTY	TYPE	DESCRIPTION	
SubscriptionId	string	Gets or sets the subscription identifier. For Microsoft Azure (MS-AZR-0145P) subscriptions, this value is the commerce subscription identifier. For Azure plans, this value is the Azure plan identifier).	
ResourceUri	string	Gets or sets the resource URI."	
ResourceType	string	Gets or sets the resource type.	
EntitlementId	string	Gets or sets the entitlement identifier (the Azure subscription identifier).	
EntitlementName	string	Gets or sets the entitlement name.	
ResourceGroupName	double	Gets or sets the resource group name.	
Name	string	The name of the resource.	
ResourceName	string	Gets or sets the name of the resource.	
TotalCost	decimal	Gets or sets the estimated total cost usage.	
CurrencyCode	string	Gets or sets the currency code.	
USDTotalCost	decimal	Gets or sets the estimated total cost in USD.	

PROPERTY	TYPE	DESCRIPTION	
LastModifiedDate	string	The day (in date-time format) that this record was last modified.	
Attributes	ResourceAttributes	The metadata attributes corresponding to the resource.	

# Get a customer's usage spending budget

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## Applies to:

- Partner Center
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

You can update the spending budget (the **SpendingBudget** object) in the [customer usage summary](#) (the [CustomerUsageSummary](#) resource).

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select CSP from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## C#

To update a customer's usage spending budget:

1. Create a new **SpendingBudget** object with the updated amount.
2. Use the **IAggregatePartner.Customers** collection to call the **ById()** method with the specified customer's identifier.
3. Call the **Get** or **GetAsync** method to get the customer's usage budget.

```
// IAggregatePartner partnerOperations;
// string selectedCustomerId;

// Create a new spending budget with the updated amount.
var newUsageBudget = new SpendingBudget()
{
    Amount = 100
};

// Update the customer's usage budget.
var usageBudget = partnerOperations.CustomersById(selectedCustomerId).UsageBudget.Get();
```

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>/baseURL/v1/customers/{customer-tenant-id}/usagebudget</code> HTTP/1.1

## URI parameter

Use the following query parameter to update the billing profile.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	guid	Y	The value is a GUID formatted <b>customer-tenant-id</b> that allows the reseller to filter the results for a given customer that belongs to the reseller.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

The full resource.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/<customer-tenant-id>/usagebudget HTTP/1.1
Authorization: Bearer <token>
Accept: application/json, text/plain, /*
MS-RequestId: 312b044d-dc41-4b37-c2d5-7d27322d9654
MS-CorrelationId: 7cb67bb7-4750-403d-cc2e-6bc44c52d52c
Content-Type: application/json; charset=utf-8
X-Locale: "en-US"
```

## REST response

If successful, this method returns a user's spending budget with the updated amount.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

### Response example

HTTP/1.1 200 OK  
Content-Length: 12014  
Content-Type: application/json  
MS-CorrelationId: 7cb67bb7-4750-403d-cc2e-6bc44c52d52c  
MS-RequestId: be82a8ba-4a53-49f7-8313-b033c058687e  
Date: Tue, 17 Sep 2019 20:31:45 GMT

```
{  
  {  
    "amount": 100,  
    "usageSpendingBudget": 100,  
    "attributes":{  
      "objectType":"SpendingBudget"  
    }  
  },  
  "links":{  
    "self":{  
      "uri":"/v1/customers/<customer-tenant-id>/usagebudget",  
      "method":"GET",  
      "headers":[]  
    }  
  }  
}
```

# Update a customer's usage spending budget

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## Applies To

- Partner Center
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Update the [spending budget](#) allocated for a customer's usage.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## C#

To update a customer's usage spending budget, first create a new [SpendingBudget](#) object with the updated amount. Then use the [IAggregatePartner.Customers](#) collection and call the [ById\(\)](#) method with the specified customer's ID. Then access the [UsageBudget](#) property and pass the updated usage budget to the [Patch\(\)](#) or [PatchAsync\(\)](#) method.

```
// IAggregatePartner partnerOperations;
// string selectedCustomerId;

// Create a new spending budget with the updated amount.
var newUsageBudget = new SpendingBudget()
{
    Amount = 100
};

// Update the customer's usage budget.
var usageBudget = partnerOperations.Customers.ById(selectedCustomerId).UsageBudget.Patch(newUsageBudget);
```

## REST request

### Request syntax

METHOD	REQUEST URI
PATCH	<code>{baseUrl}/v1/customers/{customer-tenant-id}/usagebudget</code> HTTP/1.1

### URI parameter

Use the following query parameter to update the billing profile.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	guid	Y	The value is a GUID formatted <b>customer-tenant-id</b> that allows the reseller to filter the results for a given customer that belongs to the reseller.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

The full resource.

## Request example

```
PATCH https://api.partnercenter.microsoft.com/v1/customers/<customer-tenant-id>/usagebudget HTTP/1.1
Authorization: Bearer <token>
Accept: application/json, text/plain, /*
MS-RequestId: 312b044d-dc41-4b37-c2d5-7d27322d9654
MS-CorrelationId: 7cb67bb7-4750-403d-cc2e-6bc44c52d52c
Content-Type: application/json; charset=utf-8
X-Locale: "en-US"

{
    "Amount": 100,
    "Attributes": {
        "ObjectType": "SpendingBudget"
    }
}
```

## REST response

If successful, this method returns a user's spending budget with the updated amount.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 12014
Content-Type: application/json
MS-CorrelationId: 7cb67bb7-4750-403d-cc2e-6bc44c52d52c
MS-RequestId: be82a8ba-4a53-49f7-8313-b033c058687e
Date: Tue, 10 Nov 2015 19:09:59 GMT

{
  {
    "amount": 100,
    "usageSpendingBudget": 100,
    "attributes": {
      "objectType": "SpendingBudget"
    }
  },
  "links": {
    "self": {
      "uri": "/v1/customers/<customer-tenant-id>/usagebudget",
      "method": "PATCH",
      "headers": []
    }
  }
}
```

# Product upgrade resources

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## Applies to:

- Partner Center

You can use the following resources for information about Partner Center product upgrades from a Microsoft Azure (MS-AZR-0145P) subscription to an Azure plan.

## ProductUpgradeRequest

The **ProductUpgradesRequest** resource provides information about the product upgrades request object.

PROPERTY	TYPE	DESCRIPTION
customerId	string	A GUID-formatted string that identifies the customer.
productFamily	string	The product family for which the upgrade is requested for.
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes.

## ProductUpgradesEligibility

The **ProductUpgradesEligibility** resource provides information about the customer's eligibility for upgrading a product.

PROPERTY	TYPE	DESCRIPTION	PROPERTY	TYPE	DESCRIPTION
customerId	string	A GUID-formatted string that identifies the customer.	productFamily	string	The product family for which the upgrade is requested for.
isEligible	bool	The bool value indicates whether the customer is eligible for requested upgrade.			
upgradeId	string	The upgrade ID if a product upgrade for given family is already in place.			

PROPERTY	TYPE	DESCRIPTION			
reason	string	The reason for which customer isn't eligible for product upgrade.			
productFamily	string	The product family for which the upgrade is requested for.			
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes.			

## ProductUpgradesStatus

The **ProductUpgradesStatus** resource provides information about the status of a product upgrade.

PROPERTY	TYPE	DESCRIPTION
Id	string	A GUID-formatted string that identifies the upgrade.
productFamily	string	The product family for which the upgrade is requested for.
status	string	The status of the product upgrade.
lineItems	array of <a href="#">UpgradesLineItem</a> resources	An array of objects that provides information of the upgrade details for each line item that was part of the request body.
errorDetails	<a href="#">ErrorDetails</a> resource	The error details for upgrade requested.
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes.

## UpgradesLineItem

The **UpgradesLineItem** resource describes the status of product upgrade details for each line item of the request.

PROPERTY	TYPE	DESCRIPTION
sourceProduct	<a href="#">UpgradeProduct</a> object	Information of the source product being upgraded.
targetProduct	<a href="#">UpgradeProduct</a> object	Information of the target product post upgrade.
upgradedDate	string in UTC date-time format	The date the subscription was upgraded.

PROPERTY	TYPE	DESCRIPTION
status	string	The status of the product upgrade.
errorDetails	<a href="#">ErrorDetails</a> resource	The error details for upgrade requested.
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes.

## UpgradeProduct

The **UpgradeProduct** resource provides information about the product being upgraded.

PROPERTY	TYPE	DESCRIPTION
id	string	A GUID-formatted string that identifies the product.
name	string	The friendly name of product being upgraded.
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes.

## ErrorDetails

The **ErrorDetails** resource provides details about errors during the upgrade process.

PROPERTY	TYPE	DESCRIPTION
code	string	A error code when the product upgrade fails.
message	string	The error message when the product upgrade fails.
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes.

# Get the product upgrade status for a customer

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## Applies to:

- Partner Center

You can use the [ProductUpgradeRequest](#) resource to get the status of an upgrade to a new product family. This resource applies when you're upgrading a customer from an Microsoft Azure (MS-AZR-0145P) subscription to an Azure plan. A successful request returns the [ProductUpgradesEligibility](#) resource.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials. Follow the [secure app model](#) when using App+User authentication with Partner Center APIs.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- The product family.
- The upgrade-id of an upgrade request.

## C#

To check if a customer is eligible to upgrade to Azure plan:

1. Create a **ProductUpgradesRequest** object and specify the customer identifier and "Azure" as the product family.
2. Use the **IAggregatePartner.ProductUpgrades** collection.
3. Call the **ById** method and pass in the **upgrade-id**.
4. Call the **CheckStatus** method and pass in the **ProductUpgradesRequest** object, which will return a **ProductUpgradeStatus** object.

```

// IAggregatePartner partnerOperations;

string selectedCustomerId = "58e2af4f-0ad3-4688-8744-be2357cd939a";

string selectedProductFamily = "azure";

var productUpgradeRequest = new ProductUpgradesRequest
{
    CustomerId = selectedCustomerId,
    ProductFamily = selectedProductFamily
};

ProductUpgradesStatus productUpgradeStatus =
partnerOperations.ProductUpgrades.ById(selectedUpgradeId).CheckStatus(productUpgradeRequest);

if (productUpgradeEligibility.IsEligibile)
{
    ....
}

```

## REST request

### Request syntax

METHOD	REQUEST URI
POST	<a href="#"><i>/baseURL</i></a> /v1/productUpgrades/{upgrade-id}/status HTTP/1.1

### URI parameter

Use the following query parameter to specify the customer for whom you're getting a product upgrade status.

NAME	TYPE	REQUIRED	DESCRIPTION
upgrade-id	GUID	Yes	The value is a GUID-formatted upgrade identifier. You can use this identifier to specify an upgrade to track.

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

The request body must contain a [ProductUpgradeRequest](#) resource.

### Request example

```

POST https://api.partnercenter.microsoft.com/v1/productupgrades/42d075a4-bfe7-43e7-af6d-7c68a57edcb4/status
HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: c245d5f2-1de3-4ae0-9e42-95e38e3cb8ff
MS-CorrelationId: e3f26e6a-044f-4371-ad52-0d91ce4200be
X-Locale: en-US
MS-PartnerCenter-Application: Partner Center .NET SDK Samples
Content-Type: application/json
Host: api.partnercenter.microsoft.com
Content-Length: 340
Expect: 100-continue
Connection: Keep-Alive
{
{
    "customerId": "4c721420-72ad-4708-a0a7-371a2f7b0969",
    "productFamily": "azure"
}
"Attributes": {
    "ObjectType": "ProductUpgradeRequest"
}
}

```

## REST response

If successful, this method returns a [ProductUpgradesEligibility](#) resource in the body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

### Response example

```

HTTP/1.1 200 Ok
Content-Length: 150
MS-CorrelationId: 772871a9-399b-4f3b-b8c7-38f550e4f22a
MS-RequestId: cb82f7d6-f0d9-44d4-82f9-f6eee6e68390
MS-CV: iqQn0FnAE2y0HcD.0
MS-ServerId: 030020525
Date: Thu, 04 Oct 2019 20:35:35 GMT

{
    "id": "42d075a4-bfe7-43e7-af6d-7c68a57edcb4",
    "status": "Completed",
    "productFamily": "Azure",
    "lineItems": [
        {
            "sourceProduct": {
                "id": "b1beb621-3cad-4d7a-b360-62db33ce028e",
                "name": "AzureSubscription"
            },
            "targetProduct": {
                "id": "d231908e-31c1-de0e-027b-bc5ce11f09d9",
                "name": "Microsoft Azure plan"
            },
            "upgradedDate": "2019-08-29T23:47:28.8524555Z",
            "status": "Completed"
        }
    ]
}

```

# Check a customer's eligibility for upgrading to an Azure plan

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## Applies to:

- Partner Center

You can use the [ProductUpgradeRequest](#) resource to check if a customer is eligible to upgrade to an Azure plan from a Microsoft Azure (MS-AZR-0145P) subscription. This method returns a [ProductUpgradesEligibility](#) resource with the customer's product upgrade eligibility.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials. Follow the [secure app model](#) when using App+User authentication with Partner Center APIs.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- The product family.

## C#

To check if a customer is eligible to upgrade to Azure plan:

1. Create a **ProductUpgradesRequest** object and specify the customer identifier and "Azure" as the product family.
2. Use the **IAggregatePartner.ProductUpgrades** collection.
3. Call the **CheckEligibility** method and pass in the **ProductUpgradesRequest** object, which will return a **ProductUpgradesEligibility** object.

```

// IAggregatePartner partnerOperations;

string selectedCustomerId = "58e2af4f-0ad3-4688-8744-be2357cd939a";

string selectedProductFamily = "azure";

var productUpgradeRequest = new ProductUpgradesRequest
{
    CustomerId = selectedCustomerId,
    ProductFamily = selectedProductFamily
};

ProductUpgradesEligibility productUpgradeEligibility =
partnerOperations.ProductUpgrades.CheckEligibility(productUpgradeRequest);

if (productUpgradeEligibility.IsEligible)
{
    ....
}

```

## REST request

### Request syntax

METHOD	REQUEST URI
POST	<a href="#"><i>/baseURL</i></a> /v1/productUpgrades/eligibility HTTP/1.1

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

The request body must contain a [ProductUpgradeRequest](#) resource.

### Request example

```

POST https://api.partnercenter.microsoft.com/v1/productupgrades/eligibility HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: c245d5f2-1de3-4ae0-9e42-95e38e3cb8ff
MS-CorrelationId: e3f26e6a-044f-4371-ad52-0d91ce4200be
X-Locale: en-US
MS-PartnerCenter-Application: Partner Center .NET SDK Samples
Content-Type: application/json
Host: api.partnercenter.microsoft.com
Content-Length: 340
Expect: 100-continue
Connection: Keep-Alive
{
    "customerId": "4c721420-72ad-4708-a0a7-371a2f7b0969",
    "productFamily": "azure"
}

```

## REST response

If successful, this method returns a [ProductUpgradesEligibility](#) resource in the body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

## Response example

```
HTTP/1.1 200 Ok
Content-Length: 150
MS-CorrelationId: 772871a9-399b-4f3b-b8c7-38f550e4f22a
MS-RequestId: cb82f7d6-f0d9-44d4-82f9-f6eee6e68390
MS-CV: iq0qN0FnaE2y0HcD.0
MS-ServerId: 030020525
Date: Thu, 04 Oct 2019 20:35:35 GMT

{
  "customerId": "c1958bc7-3284-4952-a257-de594ee64743",
  "isEligible": true,
  "productFamily": "azure"
}
```

# Create a product upgrade entity for a customer

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center

You can create a product upgrade entity to upgrade a customer to a given product family (for example, Azure plan) using the **ProductUpgradeRequest** resource.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials. Follow the [secure app model](#) when using App+User authentication with Partner Center APIs.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- The product family to which you want to upgrade the customer.

## C#

To upgrade a customer to Azure plan:

1. Create a **ProductUpgradesRequest** object and specify the customer identifier and "Azure" as the product family.
2. Use the **IAggregatePartner.ProductUpgrades** collection.
3. Call the **Create** method and pass in the **ProductUpgradesRequest** object, which will return a **location header** string.
4. Extract the **upgrade-id** from the location header string which can be used to [query the upgrade status](#).

```
// IAggregatePartner partnerOperations;

string selectedCustomerId = "58e2af4f-0ad3-4688-8744-be2357cd939a";

string selectedProductFamily = "Azure";

var productUpgradeRequest = new ProductUpgradesRequest
{
    CustomerId = selectedCustomerId,
    ProductFamily = selectedProductFamily
};

var productUpgradeLocationHeader = partnerOperations.ProductUpgrades.Create(productUpgradeRequest);

var upgradeId = Regex.Split(productUpgradeLocationHeader, "/")[1];
```

# REST request

## Request syntax

METHOD	REQUEST URI
POST	<code>/baseURL/v1/productupgrades</code> HTTP/1.1

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

The request body must contain a [ProductUpgradeRequest](#) resource.

## Request example

```
POST https://api.partnercenter.microsoft.com/v1/productupgrades HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: c245d5f2-1de3-4ae0-9e42-95e38e3cb8ff
MS-CorrelationId: e3f26e6a-044f-4371-ad52-0d91ce4200be
X-Locale: en-US
MS-PartnerCenter-Application: Partner Center .NET SDK Samples
Content-Type: application/json
Host: api.partnercenter.microsoft.com
Content-Length: 340
Expect: 100-continue
Connection: Keep-Alive
{
  "customerId": "4c721420-72ad-4708-a0a7-371a2f7b0969",
  "productFamily": "Azure"
}
```

# REST response

If successful, the response contains a **Location** header that has a URI that can be used to retrieve product upgrade status. Save this URI for use with other related REST APIs.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

## Response example

```
HTTP/1.1 202 Accepted
Content-Length: 0
Location: productUpgrades/42d075a4-bfe7-43e7-af6d-7c68a57edcb4
MS-CorrelationId: 772871a9-399b-4f3b-b8c7-38f550e4f22a
MS-RequestId: cb82f7d6-f0d9-44d4-82f9-f6eee6e68390
MS-CV: iqQqN0FnaE2y0HcD.0
MS-ServerId: 030020525
Date: Thu, 28 Sep 2019 20:35:35 GMT
```

# Get a list of Azure entitlements for a subscription

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center

You can use the [Azure entitlement resource](#) (`AzureEntitlement`) to get a collection of resources that belong to a subscription.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A subscription identifier.

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseURL}/v1/customers/{customer-tenant-id}/subscriptions/{subscription-id}/azureentitlements</code> HTTP/1.1

### URI parameters

The following table lists the required query parameters to get all the Azure entitlements for a subscription.

NAME	TYPE	REQUIRED	DESCRIPTION
<code>customer-tenant-id</code>	guid	Y	A GUID corresponding to the customer.
<code>subscription-id</code>	guid	Y	A GUID corresponding to the subscription.

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

None.

### Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/11f9bc2a-1f38-431c-a0b0-9455c6f5bbc0/subscriptions/3f15978e-005c-b763-bb78-2a8fab289c58/azureEntitlements HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 16fee928-dc2c-412f-adbb-871f68babf16
MS-CorrelationId: c49004b1-224f-4d86-a607-6c8bcc52cfdd
Connection: Keep-Alive
```

## REST response

If successful, this method returns a collection of [AzureEntitlement](#) resources in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

### Response example

```
HTTP/1.1 200 OK
Content-Length: 73754
Content-Type: application/json
MS-CorrelationId: c49004b1-224f-4d86-a607-6c8bcc52cfdd
MS-RequestId: 16fee928-dc2c-412f-adbb-871f68babf16
Date: Wed, 04 Oct 2019 05:50:45 GMT

{
  "totalCount":1,
  "items":[
    {
      "id":"899ae6f1-8a74-4d5e-b6c6-e6b5019bbff8",
      "friendlyName":"Microsoft Azure",
      "status":"active",
      "subscriptionId":"3f15978e-005c-b763-bb78-2a8fab289c58"
    },
    "attributes":{"objectType":"Collection"}
  }
}
```

# Manage customers

5/8/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

This section describes the ways that Cloud Solution Provider partners can use Partner Center to programmatically manage customer accounts.

## Create a customer

- [Request a reseller relationship](#)
- [Remove a reseller relationship with a customer](#)

## Look up a customer

- [Get a customer by ID](#)
- [Get a customer by company name or domain](#)
- [Get a list of customers](#)

## Manage customer orders and subscriptions

- [Get all of a customer's orders](#)
- [Get a list of orders by customer and billing cycle type](#)
- [Get a collection of entitlements](#)
- [Get all of a customer's subscriptions](#)
- [Update the nickname for a subscription](#)

## Manage customer account details

- [Get a customer's billing profile](#)
- [Update a customer's billing profile](#)
- [Get a customer's company profile](#)
- [Update a customer's usage spending budget](#)
- [Add a verified domain for a customer](#)
- [Get agreement metadata for Microsoft Cloud Agreement](#)
- [Get confirmation of customer acceptance of Microsoft Cloud agreement](#)
- [Get direct signing \(direct acceptance\) status of Microsoft Customer Agreement](#)
- [Confirm customer acceptance of Microsoft Customer Agreement](#)
- [Get a partner's validation codes](#)
- [Get a customer's qualification](#)
- [Update a customer's qualification](#)

## Manage user accounts and assign licenses

- [Create user accounts for a customer](#)
- [Delete user accounts for a customer](#)
- [View deleted users for a customer](#)
- [Restore a deleted user for a customer](#)
- [Update user accounts for a customer](#)
- [Get a list of all user accounts for a customer](#)
- [Reset user password for a customer](#)
- [Get user roles for a customer](#)
- [Set user roles for a customer](#)
- [Get a list of available licenses](#)
- [Assign licenses to a user](#)
- [Check which licenses are assigned to a user](#)

## Manage a customer's self-serve policies

- [Create a self serve policy](#)
- [Delete a self serve policy](#)
- [Update a self serve policy](#)
- [Get a list of self serve policies](#)
- [Get a self serve policy by ID](#)

For more information, see [Scenarios](#), specifically the [Background](#) section.

# Add a verified domain for a customer

4/25/2020 • 4 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

How to add a verified domain to the list of approved domains for an existing customer.

## Prerequisites

- You must be a Partner who is a domain registrar.
- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## Adding a verified domain

If you are a Partner who is a domain registrar, you can use the `verifieddomain` API to POST a new **Domain** resource to the list of domains for an existing customer. To do this, identify the customer using their **CustomerTenantId**. Specify a value for the **VerifiedDomainName** property. Pass a **Domain** resource in the Request with the required **Name**, **Capability**, **AuthenticationType**, **Status**, and **VerificationMethod** properties included. To specify that the new **Domain** is a federated domain, set the **AuthenticationType** property in the **Domain** resource to `Federated`, and include a **DomainFederationSettings** resource in the Request. If the method is successful, the Response will include a **Domain** resource for the new verified domain.

### Custom verified domains

When adding a custom verified domain, a domain that isn't registered on [onmicrosoft.com](#), you must set the **CustomerUser.immutableId** property to a unique ID value for the customer you are adding the domain for. This unique identifier is required during the validation process when the domain is being verified. For more information about customer user accounts, see [create user accounts for a customer](#).

## REST request

### Request syntax

METHOD	REQUEST URI
POST	<code>{baseUrl}/v1/customers/{CustomerTenantId}/verifieddomain</code> HTTP/1.1

### URI parameter

Use the following query parameter to specify the customer you are adding a verified domain for.

NAME	TYPE	REQUIRED	DESCRIPTION
CustomerTenantId	guid	Y	The value is a GUID formatted <b>CustomerTenantId</b> that allows you to specify a customer.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

This table describes the required properties in the request body.

NAME	TYPE	REQUIRED	DESCRIPTION
VerifiedDomainName	string	Yes	The verified domain name.
Domain	object	Yes	Contains the domain information.
DomainFederationSettings	object	Yes (If AuthenticationType = <b>Federated</b> )	The domain federation settings to be used if the domain is a <b>Federated</b> domain and not a <b>Managed</b> domain.

## Domain

This table describes the required and optional **Domain** properties in the request body.

NAME	TYPE	REQUIRED	DESCRIPTION
AuthenticationType	string	Yes	Defines whether the domain is a <b>Managed</b> domain or a <b>Federated</b> domain. Supported values: <b>Managed</b> , <b>Federated</b> .
Capability	string	Yes	Specifies the domain capability. For example, <b>Email</b> .
IsDefault	nullable boolean	No	Indicates whether the domain is the default domain for the tenant. Supported values: <b>True</b> , <b>False</b> , <b>Null</b> .
IsInitial	nullable boolean	No	Indicates whether the domain is an initial domain. Supported values: <b>True</b> , <b>False</b> , <b>Null</b> .

NAME	TYPE	REQUIRED	DESCRIPTION
Name	string	Yes	The domain name.
RootDomain	string	No	The name of the root domain.
Status	string	Yes	The domain status. For example, <code>Verified</code> . Supported values: <code>Unverified</code> , <code>Verified</code> , <code>PendingDeletion</code> .
VerificationMethod	string	Yes	The domain verification method type. Supported values: <code>None</code> , <code>DnsRecord</code> , <code>Email</code> .

## Domain federation settings

This table describes the required and optional `DomainFederationSettings` properties in the request body.

NAME	TYPE	REQUIRED	DESCRIPTION
ActiveLogOnUri	string	No	The logon URI used by rich clients. This property is the partner's STS Auth URL.
DefaultInteractiveAuthenticationMethod	string	No	Indicates the default authentication method that should be used when an application requires the user to have interactive login.
FederationBrandName	string	No	The federation brand name.
IssuerUri	string	Yes	The name of the issuer of the certificates.
LogOffUri	string	Yes	The logoff URI. This property describes the federated domain sign-out URL.
MetadataExchangeUri	string	No	The URL that specifies the metadata exchange endpoint used for authentication from rich client applications.
NextSigningCertificate	string	No	The certificate used for the coming future by the ADFS V2 STS to sign claims. This property is a base64 encoded representation of the certificate.

NAME	TYPE	REQUIRED	DESCRIPTION
OpenIdConnectDiscoveryEndpoint	string	No	The OpenID Connect Discovery Endpoint of the federated IDP STS.
PassiveLogOnUri	string	Yes	The logon URI used by older passive Clients. This property is the address to send federated sign-in requests.
PreferredAuthenticationProtocol	string	Yes	The format for the authentication token. For example, <code>WsFed</code> . Supported values: <code>WsFed</code> , <code>Samlp</code>
PromptLoginBehavior	string	Yes	The prompt login behavior type. For example, <code>TranslateToFreshPasswordAuth</code> . Supported values: <code>TranslateToFreshPasswordAuth</code> , <code>NativeSupport</code> , <code>Disabled</code>
SigningCertificate	string	Yes	The certificate currently used by the ADFS V2 STS to sign claims. This property is a base64 encoded representation of the certificate.
SigningCertificateUpdateStatus	string	No	Indicates the update status of the Signing certificate.
SigningCertificateUpdateStatus	nullable boolean	No	Indicates whether the IDP STS supports MFA. Supported values: <code>True</code> , <code>False</code> , <code>Null</code> .

### Request example

```
POST https://api.partnercenter.microsoft.com/v1/customers/{CustomerTenantId}/verifieddomain HTTP/1.1
Authorization: Bearer <token>
Accept: application/json, text/plain, /*
MS-RequestId: 312b044d-dc41-4b37-c2d5-7d27322d9654
MS-CorrelationId: 7cb67bb7-4750-403d-cc2e-6bc44c52d52c
Content-Type: application/json; charset=utf-8
X-Locale: "en-US"

{
    "VerifiedDomainName": "Example.com",
    "Domain": {
        "AuthenticationType": "Federated",
        "Capability": "Email",
        "IsDefault": Null,
        "IsInitial": Null,
        "Name": "Example.com",
        "RootDomain": null,
        "Status": "Verified",
        "VerificationMethod": "None"
    },
    "DomainFederationSettings": {
        "ActiveLogOnUri": "https://sts.microsoftonline.com/FederationPassive/",
        "DefaultInteractiveAuthenticationMethod":
        "http://schemas.microsoft.com/ws/2008/06/identity/authenticationmethod/password",
        "FederationBrandName": "FederationBrandName",
        "IssuerUri": "Example.com",
        "LogOffUri": "https://sts.microsoftonline.com/FederationPassive/",
        "MetadataExchangeUri": null,
        "NextSigningCertificate": null,
        "OpenIdConnectDiscoveryEndpoint": "https://sts.contoso.com/adfs/.well-known/openid-configuration",
        "PassiveLogOnUri": "https://sts.microsoftonline.com/Trust/2005/UsernameMixed",
        "PreferredAuthenticationProtocol": "WsFed",
        "PromptLoginBehavior": "TranslateToFreshPasswordAuth",
        "SigningCertificate": <Certificate Signature goes here>,
        "SigningCertificateUpdateStatus": null,
        "SupportsMfa": true
    }
}
```

## REST response

If successful, this API returns a [Domain](#) resource for the new verified domain.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

### Response example

HTTP/1.1 201 Created  
Content-Length: 206  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: 7cb67bb7-4750-403d-cc2e-6bc44c52d52c  
MS-RequestId: 312b044d-dc41-4b37-c2d5-7d27322d9654  
Date: Tue, 14 Feb 2017 20:06:02 GMT

```
{  
    "authenticationType": "federated",  
    "capability": "email",  
    "isDefault": false,  
    "isInitial": false,  
    "name": "Example.com",  
    "status": "verified",  
    "verificationMethod": "dns_record"  
}
```

# Assign licenses to a user

4/25/2020 • 4 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center

How to assign licenses to a customer user.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A customer user identifier. This ID identifies the user to whom to assign the license.
- A product SKU identifier that identifies the product for the license.

## Assigning licenses through code

When you assign licenses to a user, you must choose from the customer's collection of subscribed SKUs. Then, having identified the products that you want to assign, you must obtain the product SKU ID for each product in order to make the assignments. Each **SubscribedSku** instance contains a **ProductSku** property from which you can reference the **ProductSku** object and get the ID.

A license assignment request must contain licenses from a single license group. For example, you cannot assign licenses from **Group1** and **Group2** in the same request. An attempt to assign licenses from more than one group in a single request will fail with an appropriate error. To find out what licenses are available by license group, see [Get a list of available licenses by license group](#).

Here are the steps to assign licenses through code:

1. Instantiate a **LicenseAssignment** object. You use this object to specify the product SKU and service plans to assign.

```
LicenseAssignment license = new LicenseAssignment();
```

2. Populate the object properties as shown below. This code assumes that you already have the product SKU ID, and that all of the available service plans will be assigned (that is, none will be excluded).

```
license.SkuId = selectedProductSkuId;
license.ExcludedPlans = null;
```

3. If you don't have the product SKU ID, you need to retrieve the collection of subscribed SKUs and get the product SKU ID from one of them. Here is an example if you know the product SKU name.

```
var customerSubscribedSkus = partnerOperations.CustomersById(selectedCustomerId).SubscribedSkus.Get();
var sku = customerSubscribedSkus.Items.Where(n => n.ProductSku.Name == "Office 365 Enterprise E3").First();
license.SkuId = sku.ProductSku.Id;
license.ExcludedPlans = null;
```

4. Next, instantiate a new list of type [LicenseAssignment](#), and add the license object. You can assign more than one license by adding each individually to the list. The licenses included in this list must be from the same license group.

```
List<LicenseAssignment> licenseList = new List<LicenseAssignment>();
licenseList.Add(license);
```

5. Create a [LicenseUpdate](#) instance and assign the list of license assignments to the [LicensesToAssign](#) property.

```
LicenseUpdate updateLicense = new LicenseUpdate();
updateLicense.LicensesToAssign = licenseList;
```

6. Call the [Create](#) or [CreateAsync](#) method and pass the license update object as shown below to assign the licenses.

```
var assignLicense =
partnerOperations.CustomersById(selectedCustomerId).UsersById(selectedCustomerUserId).LicenseUpdates.Create(updateLicense);
```

## C#

To assign a license to a customer user, first instantiate a [LicenseAssignment](#) object, and populate the [Skuid](#) and [ExcludedPlans](#) properties. You use this object to specify the product SKU to assign and service plans to exclude. Next, instantiate a new list of type [LicenseAssignment](#), and add the license object to the list. Then create a [LicenseUpdate](#) instance and assign the list of license assignments to the [LicensesToAssign](#) property.

Next, use the [IAggregatePartner.Customers.GetById](#) method with the customer ID to identify the customer, and the [Users.GetById](#) method with the user ID to identify the user. Then get an interface to customer user license update operations from the [LicenseUpdates](#) property.

Finally, call the [Create](#) or [CreateAsync](#) method and pass the license update object to assign the license.

```

// IAggregatePartner partnerOperations;
// string selectedCustomerUserId;
// string selectedCustomerId;
// string selectedProductSkuId;

// Instantiate and populate a LicenseAssignment object.
LicenseAssignment license = new LicenseAssignment();
license.SkuId = selectedProductSkuId;
license.ExcludedPlans = null;

// Instantiate a list of licenses to assign and add the license to it.
List<LicenseAssignment> licenseList = new List<LicenseAssignment>();
licenseList.Add(license);

// Instantiate a LicenseUpdate object and add the list of licenses to assign.
LicenseUpdate updateLicense = new LicenseUpdate();
updateLicense.LicensesToAssign = licenseList;

// Update the user licenses.
var assignLicense =
partnerOperations.CustomersById(selectedCustomerId).UsersById(selectedCustomerUserId).LicenseUpdates.Create(
updateLicense);

```

Sample: [Console test app](#). Project: Partner Center SDK Samples Class: CustomerUserAssignLicenses.cs

## REST request

### Request syntax

METHOD	REQUEST URI
POST	<a href="#"><i>{baseUrl}</i></a> /v1/customers/{customer-id}/users/{user-id}/licenseupdates HTTP/1.1

### URI parameters

Use the following path parameters to identify the customer and user.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-id	string	Yes	A GUID formatted ID that identifies the customer.
user-id	string	Yes	A GUID formatted ID that identifies the user.

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

Include a [LicenseUpdate](#) resource in the request body that specifies the licenses to assign.

### Request example

```

POST https://api.partnercenter.microsoft.com/v1/customers/0c39d6d5-c70d-4c55-bc02-f620844f3fd1/users/554526aa-cf5e-46fa-95df-98dbc55d8a1e/licenseupdates HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: a37d3009-665d-4e12-b76e-1aa10cf80140
MS-CorrelationId: c73c9570-c352-459e-98a3-dafe4bd8c821
X-Locale: en-US
MS-PartnerCenter-Client: Partner Center .NET SDK
Content-Type: application/json
Host: api.partnercenter.microsoft.com
Content-Length: 183
Expect: 100-continue

{
    "LicensesToAssign": [
        {
            "ExcludedPlans": null,
            "SkuId": "f8a1db68-be16-40ed-86d5-cb42ce701560"
        }
    ],
    "LicensesToRemove": null,
    "LicenseWarnings": null,
    "Attributes": {
        "ObjectType": "LicenseUpdate"
    }
}

```

## REST response

If successful, an HTTP response status code 201 is returned and the response body contains a [LicenseUpdate](#) resource with the license information.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

### Response example (success)

```

HTTP/1.1 201 Created
Content-Length: 139
Content-Type: application/json; charset=utf-8
MS-CorrelationId: c73c9570-c352-459e-98a3-dafe4bd8c821
MS-RequestId: a37d3009-665d-4e12-b76e-1aa10cf80140
MS-CV: 5AnzcZQrvUqCq3kd.0
MS-ServerId: 030020525
Date: Thu, 20 Apr 2017 21:50:39 GMT

{
    "licensesToAssign": [
        {
            "skuId": "f8a1db68-be16-40ed-86d5-cb42ce701560"
        }
    ],
    "licenseWarnings": [],
    "attributes": {
        "objectType": "LicenseUpdate"
    }
}

```

### Response example (license isn't available)

```
HTTP/1.1 400 Bad Request
Content-Length: 341
Content-Type: application/json; charset=utf-8
MS-CorrelationId: c73c9570-c352-459e-98a3-dafe4bd8c821
MS-RequestId: f4f3b748-8b22-4d07-a5a1-dceb32824192
MS-CV: 5npA0K22CUmWPOzB.0
MS-ServerId: 102030524
Date: Thu, 20 Apr 2017 22:12:36 GMT

{
    "code": 60012,
    "description": "We're sorry, it looks like you've run out of licenses. Buy more licenses, and then try again.",
    "data": ["LicenseQuotaExceededException : Subscription with Account 0c39d6d5-c70d-4c55-bc02-f620844f3fd1 and SKU f8a1db68-be16-40ed-86d5-cb42ce701560 does not have any available licenses left."],
    "source": "PartnerFD"
}
```

# Get agreement metadata for Microsoft Cloud Agreement

4/25/2020 • 3 minutes to read • [Edit Online](#)

## Applies To

- Partner Center

### NOTE

The **AgreementMetaData** resource is currently supported by Partner Center in the Microsoft public cloud only. It isn't applicable to:

- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

## Prerequisites

- If you are using the Partner Center .NET SDK, version 1.9 or newer is required.
- If you are using the Partner Center Java SDK, version 1.8 or newer is required.
- Credentials as described in [Partner Center authentication](#). This scenario supports app + user authentication..

## .NET (version 1.14 or newer)

To retrieve the agreement metadata for Microsoft Cloud Agreement:

1. First, retrieve the **IAggregatePartner.AgreementDetails** collection.
2. Call **ByAgreementType** method to filter the collection to Microsoft Cloud Agreement.
3. Finally, call **Get** or **GetAsync** method.

```
// IAggregatePartner partnerOperations;  
  
string agreementType = "MicrosoftCloudAgreement";  
  
var microsoftCloudAgreementDetails =  
partnerOperations.AgreementDetails.ByAgreementType(agreementType).Get().Items.Single();
```

A complete sample can be found in the [GetAgreementDetails](#) class from the [console test app](#) project.

## .NET (version 1.9 - 1.13)

To retrieve agreement metadata for the Microsoft Cloud Agreement:

First retrieve the **IAggregatePartner.AgreementDetails** collection and then call the **Get** or **GetAsync** methods. Then search for the item within the collection, which corresponds to the Microsoft Cloud Agreement:

```
// IAggregatePartner partnerOperations;  
  
var agreements = partnerOperations.AgreementDetails.Get();  
  
AgreementMetaData microsoftCloudAgreement = agreements.Items.FirstOrDefault (agr => agr.AgreementType ==  
AgreementType.MicrosoftCloudAgreement);
```

## Java

The [Partner Center Java SDK](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To retrieve agreement metadata for the Microsoft Cloud Agreement:

First call the `IAggregatePartner.getAgreementDetails` function and then call the `get` function. Then search for the item within the collection, which corresponds to the Microsoft Cloud Agreement:

```
// IAggregatePartner partnerOperations;  
  
ResourceCollection<AgreementMetaData> agreements = partnerOperations.getAgreements().get();  
  
AgreementMetaData microsoftCloudAgreement;  
  
for (AgreementMetaData metadata : agreements)  
{  
    if(metadata.getAgreementType() == AgreementType.MicrosoftCloudAgreement)  
    {  
        microsoftCloudAgreement = metadata;  
    }  
}
```

A complete sample can be found in the [GetAgreementDetails](#) class from the [console test app](#) project.

## PowerShell

The [Partner Center PowerShell module](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To retrieve agreement metadata for the Microsoft Cloud Agreement:

Use the [Get-PartnerAgreementDetail](#) command. Then search for the item within the collection, which corresponds to the Microsoft Cloud Agreement:

```
Get-PartnerAgreementDetail | Where-Object {$_._.AgreementType -eq 'MicrosoftCloudAgreement'} | Select-Object -  
First 1
```

## REST request

To retrieve agreement metadata for Microsoft Cloud Agreement, first create a REST Request to retrieve the **AgreementMetaData** collection. Then search for the item in the collection which corresponds to the Microsoft Cloud Agreement.

## Request syntax

METHOD	REQUEST URI
GET	<i>{baseUrl}</i> /v1/agreements HTTP/1.1

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/agreements HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 94e4e214-6b06-4fb7-96d1-94d559f9b47f
MS-CorrelationId: ab993325-1605-4cf4-bac4-fb584142a31b
```

## REST response

If successful, this method returns a collection of **AgreementMetaData** resources in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 620
Content-Type: application/json
MS-RequestId: 94e4e214-6b06-4fb7-96d1-94d559f9b47f
MS-CorrelationId: ab993325-1605-4cf4-bac4-fb584142a31b
{
    "totalCount": 1,
    "items": [
        {
            "templateId": "998b88de-aa99-4388-a42c-1b3517d49490",
            "agreementType": "MicrosoftCloudAgreement",
            "agreementLink": "https://docs.microsoft.com/partner-center/agreements",
            "versionRank": 0
        }
    ],
    "links": {
        "self": {
            "uri": "/agreements",
            "method": "GET",
            "headers": []
        }
    },
    "attributes": {
        "objectType": "Collection"
    }
}
```

To identify the resource in the response which corresponds to the Microsoft Cloud Agreement, look for the resource whose **agreementType** property has value "MicrosoftCloudAgreement".



# Get agreement metadata for the Microsoft Customer Agreement

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center

Agreement metadata for Microsoft Customer Agreement is currently supported by Partner Center only in the *Microsoft public cloud*. It doesn't apply to:

- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

You must retrieve the agreement metadata for the Microsoft Customer Agreement before you can:

- [Confirm a customer's acceptance of the Microsoft Customer Agreement](#)
- [Retrieve a download link for the Microsoft Customer Agreement template](#)

## Prerequisites

- If you are using the Partner Center .NET SDK, version 1.14 or newer is required.
- Credentials as described in [Partner Center authentication](#). This scenario supports App+User authentication only.

## .NET (version 1.14 or newer)

To retrieve the agreement metadata for Microsoft Customer Agreement:

1. First, retrieve the **IAggregatePartner.AgreementDetails** collection.
2. Call **ByAgreementType** method to filter the collection to Microsoft Customer Agreement.
3. Finally, call **Get** or **GetAsync** method.

```
// IAggregatePartner partnerOperations;

string agreementType = "MicrosoftCustomerAgreement";

var microsoftCustomerAgreementDetails =
    partnerOperations.AgreementDetails.ByAgreementType(agreementType).Get().Items.Single();
```

A complete sample can be found in the [GetAgreementDetails](#) class from the [console test app](#) project.

## REST request

To retrieve the agreement metadata for Microsoft Customer Agreement:

1. Create a REST request to retrieve the [AgreementMetaData](#) collection.
2. Use the **agreementType** query parameter to scope the result to only the Microsoft Customer Agreement.

## Request syntax

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/agreements?agreementType={agreement-type}</code> HTTP/1.1

## URI parameters

NAME	TYPE	REQUIRED	DESCRIPTION
agreement-type	string	No	<p>Use this parameter to scope the query response to specific agreement type. The supported values are:</p> <ul style="list-style-type: none"><li>• <b>MicrosoftCloudAgreement</b> that includes agreement metadata only of the type <i>MicrosoftCloudAgreement</i></li><li>• <b>MicrosoftCustomerAgreement</b> that includes agreement metadata only of the type <i>MicrosoftCustomerAgreement</i>.</li><li>• * that returns all agreement metadata. (Don't use * unless your code has the necessary runtime logic to handle unfamiliar agreement types because Microsoft may introduce agreement metadata with new agreement types at any time.)</li></ul> <p>If the URI parameter isn't specified, the query defaults to <b>MicrosoftCloudAgreement</b> for backward compatibility.</p>

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/agreements?agreementType=MicrosoftCustomerAgreement HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 94e4e214-6b06-4fb7-96d1-94d559f9b47f
MS-CorrelationId: ab993325-1605-4cf4-bac4-fb584142a31b
```

## REST response

If successful, this method returns a collection of [AgreementMetaData resources](#) in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information.

Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

### Response example

```
HTTP/1.1 200 OK
Content-Length: 620
Content-Type: application/json
MS-RequestId: 94e4e214-6b06-4fb7-96d1-94d559f9b47f
MS-CorrelationId: ab993325-1605-4cf4-bac4-fb584142a31b
{
    "totalCount": 1,
    "items": [
        {
            "templateId": "117a77b0-9360-443b-8795-c6dedc750cf9",
            "agreementType": "MicrosoftCustomerAgreement",
            "agreementLink": "https://aka.ms/customeragreement",
            "versionRank": 0
        }
    ],
    "attributes": {
        "objectType": "Collection"
    }
}
```

# Get confirmation of customer acceptance of Microsoft Cloud Agreement

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## Applies To

- Partner Center

### NOTE

The **Agreement** resource is currently supported by Partner Center in the Microsoft public cloud only. It isn't applicable to:

- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

## Prerequisites

- If you are using the Partner Center .NET SDK, version 1.9 or newer is required.
- If you are using the Partner Center Java SDK, version 1.8 or newer is required.
- Credentials as described in [Partner Center authentication](#). This scenario supports only supports app + user authentication.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## .NET (version 1.4 or newer)

To retrieve confirmation(s) of customer acceptance that was previously provided:

- Use the **IAggregatePartner.Customers** collection and call **ById** method with the specified customer identifier.
- Fetch the **Agreements** property and filter the results to Microsoft Cloud Agreement by calling **ByAgreementType** method.
- Call **Get** or **GetAsync** method.

```
// IAggregatePartner partnerOperations;
// string selectedCustomerId;

string agreementType = "MicrosoftCloudAgreement";

var cloudAgreements =
    partnerOperations.Customers.ById(selectedCustomerId).Agreements.ByAgreementType(agreementType).Get();
```

A complete sample can be found in the [GetCustomerAgreements](#) class from the [console test app](#) project.

## .NET (version 1.9 - 1.13)

To retrieve confirmation of customer acceptance provided previously:

Use the **IAggregatePartner.Customers** collection and call the **ById** method with the specified customer's identifier. Then, get the **Agreements** property, followed by calling the **Get** or **GetAsync** methods.

```
// IAggregatePartner partnerOperations;
// string selectedCustomerId;

var agreements = partnerOperations.CustomersById(selectedCustomerId).Agreements.Get();
```

## Java

The [Partner Center Java SDK](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To retrieve confirmation of customer acceptance provided previously:

Use the **IAggregatePartner.getCustomers** function and call the **byId** function with the specified customer's identifier. Then, get the **getAgreements** function, followed by calling the **get** function.

```
// IAggregatePartner partnerOperations;
// String selectedCustomerId;

ResourceCollection<Agreement> agreements =
partnerOperations.getCustomers().byId(selectedCustomerId).getAgreements().get();
```

A complete sample can be found in the [GetCustomerAgreements](#) class from the [console test app](#) project.

## PowerShell

The [Partner Center PowerShell module](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To retrieve confirmation of customer acceptance provided previously:

Use the **Get-PartnerCustomerAgreement** command.

```
Get-PartnerCustomerAgreement -CustomerId '14876998-c0dc-46e6-9d0c-65a57a6c32ec'
```

## REST request

To retrieve confirmation of customer acceptance provided previously, see the following instructions.

Create a new **Agreement** resource with the relevant certification information.

### Request syntax

METHOD	REQUEST URI
GET	<a href="#"><i>{baseURL}</i></a> /v1/customers/{customer-tenant-id}/agreements HTTP/1.1

#### URI parameter

Use the following query parameter to specify the customer you are confirming.

NAME	TYPE	REQUIRED	DESCRIPTION
CustomerTenantId	GUID	Y	The value is a GUID formatted <b>CustomerTenantId</b> that allows you to specify a customer.

#### Request headers

For more information, see [Partner Center REST headers](#).

#### Request body

None.

#### Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/14876998-c0dc-46e6-9d0c-65a57a6c32ec/agreements
HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 94e4e214-6b06-4fb7-96d1-94d559f9b47f
MS-CorrelationId: ab993325-1605-4cf4-bac4-fb584142a31b
```

## REST response

If successful, this method returns a collection of **Agreement** resources in the response body.

#### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

#### Response example

HTTP/1.1 200 OK  
Content-Length: 620  
Content-Type: application/json  
MS-RequestId: 94e4e214-6b06-4fb7-96d1-94d559f9b47f  
MS-CorrelationId: ab993325-1605-4cf4-bac4-fb584142a31b

```
{  
    "totalCount": 2,  
    "items":  
    [  
        {  
            "primaryContact":  
            {  
                "firstName": "Tania",  
                "lastName": "Carr",  
                "email": "SomeEmail@outlook.com"  
                "phoneNumber": "1234567890"  
            },  
            "templateId": "998b88de-aa99-4388-a42c-1b3517d49490",  
            "dateAgreed": "2018-07-28T00:00:00",  
            "type": "MicrosoftCloudAgreement",  
            "agreementLink": "https://docs.microsoft.com/partner-center/agreements"  
        },  
        {  
            "primaryContact":  
            {  
                "firstName": "Tania",  
                "lastName": "Carr",  
                "email": "SomeEmail@outlook.com"  
                "phoneNumber": "1234567890"  
            },  
            "templateId": "998b88de-aa99-4388-a42c-1b3517d49490",  
            "dateAgreed": "2017-08-01T00:00:00",  
            "type": "MicrosoftCloudAgreement",  
            "agreementLink": "https://docs.microsoft.com/partner-center/agreements"  
        }  
    ]  
}
```

# Get a download link for the Microsoft Customer Agreement template

4/25/2020 • 9 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center

The **AgreementDocument** resource is currently supported by Partner Center only in the *Microsoft public cloud*. This resource doesn't apply to:

- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

This article describes how to get a link to download the Microsoft Customer Agreement template, based on the customer's country and language.

## Prerequisites

- If you are using the Partner Center .NET SDK, version 1.14 or newer is required.
- Credentials as described in [Partner Center authentication](#). This scenario only supports App+User authentication.
- The customer's country to which the Microsoft Customer Agreement template applies.
- The language in which the Microsoft Customer Agreement template should be localized.

### IMPORTANT

- The Microsoft Customer Agreement is country-specific. When requesting for a link to download the Microsoft Customer Agreement template, Be sure to specify the correct country based on customer's location. or list of supported countries, please refer to [List of supported countries and languages](#).
- For some countries, the Microsoft Customer Agreement is available in multiple languages. For best customer experience, pick the language that best match the customer's needs. For list of supported languages, please refer to [List of supported countries and languages](#).
- This method is only supported with the Microsoft Customer Agreement.

## .NET

To retrieve a link to download the Microsoft Customer Agreement template:

1. Retrieve the agreement metadata for the Microsoft Customer Agreement. You must obtain the **templateId** of the Microsoft Customer Agreement. For more information, see [Get agreement metadata for Microsoft Customer Agreement](#).

```
// IAggregatePartner partnerOperations;

string agreementType = "MicrosoftCustomerAgreement";

AgreementMetaData microsoftCustomerAgreementDetails = partnerOperations.AgreementDetails.
ByAgreementType(agreementType).Get().Items.Single();
```

2. Use the `IAggregatePartner.AgreementTemplates` collection.
3. Call the `ById` method and specify the `templateId` of the Microsoft Customer Agreement.
4. Fetch the `Document` property.
5. Call the `ByCountry` method and specify the customer's country to which the agreement template applies. The query defaults to `US` if the method isn't specified. For a list of supported country codes, please refer to [List of supported countries and languages](#). This method is **case-sensitive**.
6. Call the `ByLanguage` method and specify the language which the agreement template should be localized in. The query defaults to `en-US` if the method isn't specified or the country code specified isn't supported for the country specified. For list of supported language codes, please refer to [List of supported countries and languages](#).
7. Call the `Get` or `GetAsync` method.

```
// IAggregatePartner partnerOperations;

string customerCountry = "US";

string languageForLocalization = "en-US";

var agreementDocument = partnerOperations.AgreementTemplates.ById
(microsoftCustomerAgreementDetails.TemplateId).Document.ByCountry(customerCountry).ByLanguage
(languageForLocalization).Get();
```

A complete sample can be found in the [GetAgreementDetails](#) class from the [console test app](#) project.

## REST request

To retrieve a link to download the Microsoft Customer Agreement template:

1. Retrieve the agreement metadata for the Microsoft Customer Agreement. You must obtain the `templateId` of the Microsoft Customer Agreement. For more information, see [Get agreement metadata for Microsoft Customer Agreement](#).
2. Create a REST request to fetch an [AgreementDocument resource](#). For an example, see the [request syntax](#) example. You must specify the following information:
  - The `templateId` of the Microsoft Customer Agreement.
  - The country to which the Microsoft Customer Agreement template applies.
  - The language in which the Microsoft Customer Agreement template should be localized.

### Request syntax

Use the following request syntax for this resource:

METHOD	REQUEST URI
--------	-------------

METHOD	REQUEST URI
GET	<code>/baseURL/v1/agreementtemplates/{agreement-template-id}/document?language={language}&amp;country={country}</code> HTTP/1.1

## URI parameters

You can use the following URI parameters with your request:

NAME	TYPE	REQUIRED	DESCRIPTION
agreement-template-id	string	Yes	Unique identifier of the agreement type. You can obtain the templateId for Microsoft Customer Agreement by retrieving the agreement metadata for Microsoft Customer Agreement. For more information, see <a href="#">Get agreement metadata for Microsoft Customer Agreement</a> . This parameter is <b>case-sensitive</b> .
country	string	No	Indicates the country to which the agreement template applies. The query defaults to <i>US</i> if the parameter isn't specified. For a list of supported country codes, please refer to <a href="#">List of supported countries and languages</a> .
language	string	No	Indicates the language in which the agreement template should be localized. The query defaults to <i>en-US</i> if the parameter isn't specified or the country code specified isn't supported for the country specified. For list of supported country codes, please refer to <a href="#">List of supported countries and languages</a> .

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/agreementtemplates/117a77b0-9360-443b-8795-c6dedc750cf9/document?language=en-US&country=US HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 94e4e214-6b06-4fb7-96d1-94d559f9b47f
MS-CorrelationId: ab993325-1605-4cf4-bac4-fb584142a31b
```

## REST response

If successful, this method returns an [AgreementDocument](#) resource in the response body.

The resource has a **downloadUri** property, which contains a URL string that can be used to download the agreement template. A different link is returned each time you make a query. This link expires after five minutes.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information.

Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

### Response example

```
HTTP/1.1 200 OK
Content-Length: 620
Content-Type: application/json
MS-RequestId: 94e4e214-6b06-4fb7-96d1-94d559f9b47f
MS-CorrelationId: ab993325-1605-4cf4-bac4-fb584142a31b
{
  "displayUri": "https://wopihost.int.12o.microsoft.com/v1/officehost/agreement/files/Preview...",
  "downloadUri": "https://12oagreementintbn2.blob.core.windows.net/agreementscontainer/Preview...",
  "language": "en-US",
  "country": "US"
}
```

## List of supported countries and languages

### IMPORTANT

The country code property is case-sensitive. Please sure to use the correct casing specified in the table below.

COUNTRY	COUNTRY CODE	SUPPORTED LANGUAGE CODE(S)
Åland Islands	AX	en-US
Afghanistan	AF	en-US
Albania	AL	en-US
Algeria	DZ	en-US, fr-FR, en-US
American Samoa	AS	en-US
Andorra	AD	en-US

COUNTRY	COUNTRY CODE	SUPPORTED LANGUAGE CODE(S)
Angola	AO	en-US, pt-PT
Anguilla	AI	en-US
Antarctica	AQ	en-US
Antigua and Barbuda	AG	en-US
Argentina	AR	en-US, es-ES
Armenia	AM	en-US
Aruba	AW	en-US
Australia	AU	en-US
Austria	AT	en-US, de-DE
Azerbaijan	AZ	en-US
Bahamas	BS	en-US
Bahrain	BH	en-US, ar-SA
Bangladesh	BD	en-US
Barbados	BB	en-US
Belarus	BY	en-US, ru-RU
Belgium	BE	en-US, nl-NL
Belize	BZ	en-US, es-ES
Benin	BJ	en-US
Bermuda	BM	en-US
Bhutan	BT	en-US
Bolivia	BO	en-US, es-ES
Bonaire	BQ	en-US
Bosnia and Herzegovina	BA	en-US
Botswana	BW	en-US
Bouvet Island	BV	en-US

COUNTRY	COUNTRY CODE	SUPPORTED LANGUAGE CODE(S)
Brazil	BR	en-US, pt-BR
British Indian Ocean Territory	IO	en-US
British Virgin Islands	VG	en-US
Brunei	BN	en-US
Bulgaria	BG	en-US, bg-BG
Burkina Faso	BF	en-US
Burundi	BI	en-US
Côte d'Ivoire	CI	en-US, fr-FR
Cabo Verde	CV	en-US, pt-PT
Cambodia	KH	en-US
Cameroon	CM	en-US, fr-FR
Canada	CA	en-US, fr-FR
Cayman Islands	KY	en-US, en-US
Central African Republic	CF	en-US
Chad	TD	en-US
Chile	CL	en-US, es-ES
Christmas Island	CX	en-US
Cocos (Keeling) Islands	CC	en-US
Colombia	CO	en-US, es-ES
Comoros	KM	en-US
Congo (DRC)	CD	en-US
Congo	CG	en-US
Cook Islands	CK	en-US
Costa Rica	CR	en-US, es-ES
Croatia	HR	en-US, hr-HR

COUNTRY	COUNTRY CODE	SUPPORTED LANGUAGE CODE(S)
Curaçao	CW	en-US
Cyprus	CY	en-US
Czechia	CZ	en-US, cs-CZ
Denmark	DK	en-US, da-DK
Djibouti	DJ	en-US
Dominica	DM	en-US
Dominican Republic	DO	en-US, es-ES
Ecuador	EC	en-US
Egypt	EG	en-US, ar-SA
El Salvador	SV	en-US, es-ES
Equatorial Guinea	GQ	en-US
Eritrea	ER	en-US
Estonia	EE	en-US, et-EE
eSwatini	SZ	en-US
Ethiopia	ET	en-US
Falkland Islands	FK	en-US
Faroe Islands	FO	en-US
Fiji	FJ	en-US
Finland	FI	en-US, fi-FI
France	FR	en-US, fr-FR
French Guiana	GF	en-US, fr-FR
French Polynesia	PF	en-US
French Southern Territories	TF	en-US
Gabon	GA	en-US
Gambia	GM	en-US

COUNTRY	COUNTRY CODE	SUPPORTED LANGUAGE CODE(S)
Georgia	GE	en-US
Germany	DE	en-US, de-DE
Ghana	GH	en-US
Gibraltar	GI	en-US
Greece	GR	en-US, el-GR
Greenland	GL	en-US
Grenada	GD	en-US
Guadeloupe	GP	en-US
Guam	GU	en-US
Guatemala	GT	en-US, es-ES
Guernsey	GG	en-US
Guinea	GN	en-US
Guinea-Bissau	GW	en-US
Guyana	GY	en-US
Haiti	HT	en-US
Heard Island and McDonald Islands	HM	en-US
Honduras	HN	en-US, es-ES
Hong Kong SAR	HK	en-US, zh-HK
Hungary	HU	en-US, hu-HU
Iceland	IS	en-US
India	IN	en-US, hi-IN
Indonesia	ID	en-US, id-ID
Iraq	IQ	en-US, ar-SA
Ireland	IE	en-US
Isle of Man	IM	en-US

COUNTRY	COUNTRY CODE	SUPPORTED LANGUAGE CODE(S)
Israel	IL	en-US, he-IL
Italy	IT	en-US, it-IT
Jamaica	JM	en-US
Jan Mayen	XJ	en-US
Japan	JP	en-US, ja-JP
Jersey	JE	en-US
Jordan	JO	en-US, ar-SA
Kazakhstan	KZ	en-US, kk-KZ
Kenya	KE	en-US
Kiribati	KI	en-US
Korea	KR	en-US, ko-KR
Kosovo	XK	en-US
Kuwait	KW	en-US, ar-SA
Kyrgyzstan	KG	en-US, ru-RU
Laos	LA	en-US
Latvia	LV	en-US, lv-LV
Lebanon	LB	en-US, ar-SA
Lesotho	LS	en-US
Liberia	LR	en-US
Libya	LY	en-US, ar-SA
Liechtenstein	LI	en-US, de-DE
Lithuania	LT	en-US, lt-LT
Luxembourg	LU	en-US, fr-FR
Macao SAR	MO	en-US, zh-HK
Macedonia, FYRO	MK	en-US

COUNTRY	COUNTRY CODE	SUPPORTED LANGUAGE CODE(S)
Madagascar	MG	en-US
Malawi	MW	en-US
Malaysia	MY	en-US, ms-MY
Maldives	MV	en-US
Mali	ML	en-US
Malta	MT	en-US
Marshall Islands	MH	en-US
Martinique	MQ	en-US
Mauritania	MR	en-US
Mauritius	MU	en-US, ar-SA
Mayotte	YT	en-US
Mexico	MX	en-US, es-ES
Micronesia	FM	en-US
Moldova	MD	en-US, ro-RO
Monaco	MC	en-US, fr-FR
Mongolia	MN	en-US
Montenegro	ME	en-US
Montserrat	MS	en-US
Morocco	MA	en-US, fr-FR, en-US
Mozambique	MZ	en-US
Myanmar	MM	en-US
Namibia	NA	en-US
Nauru	NR	en-US
Nepal	NP	en-US
Netherlands	NL	en-US, nl-NL

COUNTRY	COUNTRY CODE	SUPPORTED LANGUAGE CODE(S)
New Caledonia	NC	en-US
New Zealand	NZ	en-US
Nicaragua	NI	en-US, es-ES
Niger	NE	en-US
Nigeria	NG	en-US
Niue	NU	en-US
Norfolk Island	NF	en-US
Northern Mariana Islands	MP	en-US
Norway	NO	en-US, nb-NO
Oman	OM	en-US, ar-SA
Pakistan	PK	en-US
Palau	PW	en-US
Palestinian Authority	PS	en-US
Panama	PA	en-US, es-ES
Papua New Guinea	PG	en-US
Paraguay	PY	en-US, es-ES
Peru	PE	en-US, es-ES
Philippines	PH	en-US
Pitcairn Islands	PN	en-US
Poland	PL	en-US, pl-PL
Portugal	PT	en-US, pt-PT
Puerto Rico	PR	en-US, en-US
Qatar	QA	en-US, ar-SA
Réunion	RE	en-US
Romania	RO	en-US, ro-RO

COUNTRY	COUNTRY CODE	SUPPORTED LANGUAGE CODE(S)
Russia	RU	en-US, ru-RU
Rwanda	RW	en-US, fr-FR
São Tomé and Príncipe	ST	en-US, fr-FR
Saba	XS	en-US
Saint-Barthélemy	BL	en-US
Saint Kitts and Nevis	KN	en-US
Saint Lucia	LC	en-US, en-US
Saint Martin	MF	en-US, en-US
Saint Pierre and Miquelon	PM	en-US
Saint Vincent and the Grenadines	VC	en-US
Samoa	WS	en-US
San Marino	SM	en-US
Saudi Arabia	SA	en-US
Senegal	SN	en-US, fr-FR
Serbia	RS	en-US, sr-Latn-RS, en-US
Seychelles	SC	en-US
Sierra Leone	SL	en-US
Singapore	SG	en-US, zh-SG
Sint Eustatius	XE	en-US
Sint Maarten	SX	en-US, en-US
Slovakia	SK	en-US, sk-SK
Slovenia	SI	en-US, sl-SI
Solomon Islands	SB	en-US
Somalia	SO	en-US
South Africa	ZA	en-US

COUNTRY	COUNTRY CODE	SUPPORTED LANGUAGE CODE(S)
South Georgia and South Sandwich Islands	GS	en-US
South Sudan	SS	en-US
Spain	ES	en-US, es-ES, en-US, en-US
Sri Lanka	LK	en-US
St Helena, Ascension, Tristan da Cunha	SH	en-US
Suriname	SR	en-US
Svalbard	SJ	en-US
Sweden	SE	en-US, sv-SE
Switzerland	CH	en-US, fr-FR, en-US, en-US
Taiwan	TW	en-US, zh-HK
Tajikistan	TJ	en-US
Tanzania	TZ	en-US
Thailand	TH	en-US, th-TH
Timor-Leste	TL	en-US
Togo	TG	en-US
Tokelau	TK	en-US
Tonga	TO	en-US
Trinidad and Tobago	TT	en-US
Tunisia	TN	en-US, fr-FR, en-US
Turkey	TR	en-US, tr-TR
Turkmenistan	TM	en-US
Turks and Caicos Islands	TC	en-US
Tuvalu	TV	en-US
U.S. Outlying Islands	UM	en-US
U.S. Virgin Islands	VI	en-US

COUNTRY	COUNTRY CODE	SUPPORTED LANGUAGE CODE(S)
Uganda	UG	en-US
Ukraine	UA	en-US, uk-UA
United Arab Emirates	AE	en-US, ar-SA
United Kingdom	GB	en-US
United States	US	en-US
Uruguay	UY	en-US, es-ES
Uzbekistan	UZ	en-US, ru-RU
Vanuatu	VU	en-US
Vatican City	VA	en-US
Venezuela	VE	en-US, es-ES
Vietnam	VN	en-US, vi-VN
Wallis and Futuna	WF	en-US
Yemen	YE	en-US, ar-SA
Zambia	ZM	en-US
Zimbabwe	ZW	en-US

# Get confirmation of customer acceptance of Microsoft Customer Agreement

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center

The **Agreement** resource is currently supported by Partner Center only in the *Microsoft public cloud*. This resource doesn't apply to:

- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

This article explains how you can retrieve confirmation(s) of a customer's acceptance of the Microsoft Customer Agreement.

## Prerequisites

- If you are using the Partner Center .NET SDK, version 1.14 or newer is required.
- Credentials as described in [Partner Center authentication](#). This scenario only supports App+User authentication.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## .NET

To retrieve confirmation(s) of customer acceptance that was previously provided:

- Use the **IAggregatePartner.Customers** collection and call **ById** method with the specified customer identifier.
- Fetch the **Agreements** property and filter the results to Microsoft Customer Agreement by calling **ByAgreementType** method.
- Call **Get** or **GetAsync** method.

```
// IAggregatePartner partnerOperations;
// string selectedCustomerId;

string agreementType = "MicrosoftCustomerAgreement";

var customerAgreements =
    partnerOperations.CustomersById(selectedCustomerId).Agreements.ByAgreementType(agreementType).Get();
```

A complete sample can be found in the [GetCustomerAgreements](#) class from the [console test app](#) project.

# REST request

To retrieve confirmation of customer acceptance that was previously provided:

1. Create a REST request to retrieve the [Agreements](#) collection for the customer.
2. Use the **agreementType** query parameter to scope the results to only the Microsoft Customer Agreement.

## Request syntax

Use the following request syntax:

METHOD	REQUEST URI
GET	<i>/baseURL/v1/customers/{customer-tenant-id}/agreements?</i> agreementType={agreement-type} HTTP/1.1

## URI parameters

You can use the following URI parameters with your request:

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	GUID	Yes	The value is a GUID formatted <b>CustomerTenantId</b> that allows you to specify a customer.

NAME	TYPE	REQUIRED	DESCRIPTION
agreement-type	string	No	<p>This parameter returns all agreement metadata. Use this parameter to scope the query response to specific agreement type. The supported values are:</p> <ul style="list-style-type: none"> <li>• <b>MicrosoftCloudAgreement</b> that only includes agreement metadata of the type <i>MicrosoftCloudAgreement</i>.</li> <li>• <b>MicrosoftCustomerAgreement</b> that only includes agreement metadata of the type <i>MicrosoftCustomerAgreement</i>.</li> <li>• * that returns all agreement metadata. (Don't use * unless your code has the necessary logic to handle unexpected agreement types.)</li> </ul> <p>If the URI parameter isn't specified, the query defaults to <b>MicrosoftCloudAgreement</b> for backward compatibility. Microsoft may introduce agreement metadata with new agreement types at any time.</p>

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/14876998-c0dc-46e6-9d0c-65a57a6c32ec/agreements?
agreementType=MicrosoftCustomerAgreement HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 94e4e214-6b06-4fb7-96d1-94d559f9b47f
MS-CorrelationId: ab993325-1605-4cf4-bac4-fb584142a31b
```

## REST response

If successful, this method returns a collection of **Agreement** resources in the response body.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information.

Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 620
Content-Type: application/json
MS-RequestId: 94e4e214-6b06-4fb7-96d1-94d559f9b47f
MS-CorrelationId: ab993325-1605-4cf4-bac4-fb584142a31b
{
    "totalCount": 2,
    "items":
    [
        {
            "primaryContact":
            {
                "firstName": "Tania",
                "lastName": "Carr",
                "email": "SomeEmail@example.com",
                "phoneNumber": "1234567890"
            },
            "templateId": "117a77b0-9360-443b-8795-c6dedc750cf9",
            "dateAgreed": "2019-08-26T00:00:00",
            "type": "MicrosoftCustomerAgreement",
            "agreementLink": "https://aka.ms/customeragreement"
        },
        {
            "primaryContact":
            {
                "firstName": "Tania",
                "lastName": "Carr",
                "email": "SomeEmail@example.com",
                "phoneNumber": "1234567890"
            },
            "templateId": "117a77b0-9360-443b-8795-c6dedc750cf9",
            "dateAgreed": "2019-08-27T00:00:00",
            "type": "MicrosoftCustomerAgreement",
            "agreementLink": "https://aka.ms/customeragreement"
        }
    ]
}
```

# Get the status of a customer's direct signing (direct acceptance) of Microsoft Customer Agreement

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center

The **DirectSignedCustomerAgreementStatus** resource is currently supported by Partner Center only in the Microsoft public cloud.

This resource is *not applicable* to:

- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

This article explains how you can retrieve the status of a customer's direct acceptance of the Microsoft Customer Agreement.

## REST request

To retrieve the status of a customer's direct acceptance of the Microsoft Customer Agreement, create a REST request to retrieve the **DirectSignedCustomerAgreementStatus** for the customer.

### Request syntax

Use the following request syntax:

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/customers/{customer-tenant-id}/directSignedMicrosoftCustomerStatus HTTP/1.1</code>

### URI parameters

You can use the following URI parameters with your request:

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	GUID	Yes	The value is a GUID-formatted <b>CustomerTenantId</b> that allows you to specify the tenant ID of a customer.

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

None.

### Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/14876998-c0dc-46e6-9d0c-  
65a57a6c32ec/directSignedMicrosoftCustomerAgreementStatus HTTP/1.1  
Authorization: Bearer <token>  
Accept: application/json  
MS-RequestId: 94e4e214-6b06-4fb7-96d1-94d559f9b47f  
MS-CorrelationId: ab993325-1605-4cf4-bac4-fb584142a31b
```

## REST response

If successful, this method returns a [DirectSignedCustomerAgreementStatus](#) resource in the response body.

The resource has an **isSigned** property that indicates the customer's direct signing (direct acceptance) status.

- A value of **true** indicates that the agreement has been signed (accepted) directly by the customer.
- A value of **false** indicates that the agreement has *not* been signed (accepted) directly by the customer.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information.

Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

### Response example

```
HTTP/1.1 200 OK  
Content-Length: 20  
Content-Type: application/json  
MS-RequestId: 94e4e214-6b06-4fb7-96d1-94d559f9b47f  
MS-CorrelationId: ab993325-1605-4cf4-bac4-fb584142a31b  
  
{"isSigned":true}
```

# Confirm customer acceptance of Microsoft Customer Agreement

4/25/2020 • 3 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center

Partner Center currently supports confirmation of customer acceptance of the Microsoft Customer Agreement only in the *Microsoft public cloud*. This functionality doesn't currently apply to:

- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

This article describes how to confirm or re-confirm customer acceptance of the Microsoft Customer Agreement.

## Prerequisites

- If you are using the Partner Center .NET SDK, version 1.14 or newer is required.
- Credentials as described in [Partner Center authentication](#). *This scenario only supports App+User authentication.*
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- The date (**dateAgreed**) when the customer accepted the Microsoft Customer Agreement.
- Information about the user from the customer organization that accepted the Microsoft Customer Agreement. This includes:
  - First name
  - Last name
  - Email address
  - Phone number (optional)

## .NET

To confirm or re-confirm customer acceptance of the Microsoft Customer Agreement:

1. Retrieve the agreement metadata for the Microsoft Customer Agreement. You must obtain the **templateId** of the Microsoft Customer Agreement. For more details, see [Get agreement metadata for Microsoft Customer Agreement](#).

```
// IAggregatePartner partnerOperations;

string agreementType = "MicrosoftCustomerAgreement";

var microsoftCustomerAgreementDetails =
partnerOperations.AgreementDetails.ByAgreementType(agreementType).Get().Items.Single();
```

2. Create a new **Agreement** object containing details of the confirmation.
3. Use the **IAggregatePartner.Customers** collection and call the **ById** method with the specified **customer-tenant-id**.
4. Use the **Agreements** property, followed by calling **Create** or **CreateAsync**.

```
// string selectedCustomerId;

var agreementToCreate = new Agreement
{
    DateAgreed = DateTime.UtcNow,
    TemplateId = microsoftCustomerAgreementDetails.TemplateId,
    PrimaryContact = new Contact
    {
        FirstName = "Tania",
        LastName = "Carr",
        Email = "someone@example.com",
        PhoneNumber = "1234567890"
    }
};

Agreement agreement =
partnerOperations.CustomersById(selectedCustomerId).Agreements.Create(agreementToCreate);
```

A complete sample can be found in the [CreateCustomerAgreement](#) class from the [console test app](#) project.

## REST request

To confirm or re-confirm customer acceptance of the Microsoft Customer Agreement:

1. Retrieve the agreement metadata for the Microsoft Customer Agreement. You must obtain the **templateId** of the Microsoft Customer Agreement. For more details, see [Get agreement metadata for Microsoft Customer Agreement](#).
2. Create a new [Agreement resource](#) to confirm that a customer has accepted the Microsoft Customer Agreement. Use the following [REST request syntax](#).

### Request syntax

METHOD	REQUEST URI
POST	<a href="#"><i>{baseUrl}</i></a> /v1/customers/{customer-tenant-id}/agreements HTTP/1.1

### URI parameter

Use the following query parameter to specify the customer that you're confirming.

NAME	TYPE	REQUIRED	DESCRIPTION

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	GUID	Yes	The value is a GUID-formatted <b>customer-tenant-id</b> , which is an identifier that allows you to specify a customer.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

This table describes the required properties in the REST request body.

NAME	TYPE	DESCRIPTION
Agreement	object	Details provided by partner to confirm customer acceptance of the Microsoft Customer Agreement.

### Agreement

This table describes the minimum required fields to create an [Agreement](#) resource.

PROPERTY	TYPE	DESCRIPTION
primaryContact	Contact	Information about the user from the customer organization who accepted the Microsoft Customer Agreement, including: <b>firstName</b> , <b>lastName</b> , <b>email</b> and <b>phoneNumber</b> (optional)
dateAgreed	string in UTC date time format	The date when the customer accepted the agreement.
templateId	string	Unique identifier of the agreement type accepted by the customer. You can obtain the <b>templateId</b> for Microsoft Customer Agreement by retrieving the agreement metadata for Microsoft Customer Agreement. See <a href="#">Get agreement metadata for Microsoft Customer Agreement</a> for details.
type	string	Agreement type accepted by the customer. Use "MicrosoftCustomerAgreement" if customer accepted the Microsoft Customer Agreement.

## Request example

```
POST https://api.partnercenter.microsoft.com/v1/customers/14876998-c0dc-46e6-9d0c-65a57a6c32ec/agreements
HTTP/1.1
Authorization: Bearer <token>
Content-Type: application/json
MS-RequestId: 94e4e214-6b06-4fb7-96d1-94d559f9b47f
MS-CorrelationId: ab993325-1605-4cf4-bac4-fb584142a31b
{
    "primaryContact": {
        "firstName": "Tania",
        "lastName": "Carr",
        "email": "someone@example.com",
        "phoneNumber": "1234567890"
    },
    "templateId": "117a77b0-9360-443b-8795-c6dedc750cf9",
    "dateAgreed": "2018-06-14T00:00:00.000Z",
    "type": "MicrosoftCustomerAgreement"
}
```

## REST response

If successful, this method returns an [Agreement resource](#).

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information.

Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

### Response example

```
HTTP/1.1 201 Created
Content-Length: 261
Content-Type: application/json
MS-RequestId: 94e4e214-6b06-4fb7-96d1-94d559f9b47f
MS-CorrelationId: ab993325-1605-4cf4-bac4-fb584142a31b
{
    "userId": "3d6f2c09-eb40-48ca-a4b3-d24c9c007531",
    "primaryContact": {
        "firstName": "Tania",
        "lastName": "Carr",
        "email": "someone@example.com",
        "phoneNumber": "1234567890"
    },
    "templateId": "117a77b0-9360-443b-8795-c6dedc750cf9",
    "dateAgreed": "2018-06-14T00:00:00.000Z",
    "type": "MicrosoftCustomerAgreement"
}
```

# Get licenses assigned to a user

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## Applies to:

- Partner Center

How to get a list of licenses assigned to a user within a customer account. The examples shown here return licenses assigned from group1, the default license group that represents licenses managed by Azure Active Directory. To get licenses assigned from specified license groups, see [Get licenses assigned to a user by license group](#).

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A user identifier.

## C#

To check which licenses are assigned to a user from the default group1 license group, first use the **IAggregatePartner.Customers.ById** method with the customer ID to identify the customer. Then call the **Users.ById** method with the user ID to identify the user. Next, get an interface to customer user license operations from the **Licenses** property. Finally, call the **Get** or the **GetAsync** method to retrieve the collection of licenses assigned to the user.

```
// string selectedCustomerUserId;
// string selectedCustomerId;
// IAggregatePartner partnerOperations;

var customerUserAssignedLicenses =
    partnerOperations.Customers.ById(selectedCustomerId).Users.ById(selectedCustomerUserId).Licenses.Get();
```

Sample: [Console test app](#). Project: Partner Center SDK Samples Class: CustomerUserAssignedLicenses.cs

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/customers/{customer-id}/users/{user-id}/licenses</code> HTTP/1.1

### URI parameter

Use the following path parameters to identify the customer and user.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-id	string	Yes	A GUID formatted string that identifies the customer.
user-id	string	Yes	A GUID formatted string that identifies the user.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/0c39d6d5-c70d-4c55-bc02-f620844f3fd1/users/482e2152-4b49-48ec-b715-823365ce3d4c/licenses HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 68e50b00-e1ff-422a-a293-158617463d41
MS-CorrelationId: 813f15b3-eb18-4709-b2f3-668d62babf91
X-Locale: en-US
Host: api.partnercenter.microsoft.com
```

## REST response

If successful, the response body contains the collection of [License](#) resources.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center error codes](#).

## Response example

HTTP/1.1 200 OK  
Content-Length: 3883  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: 813f15b3-eb18-4709-b2f3-668d62babf91  
MS-RequestId: 68e50b00-e1ff-422a-a293-158617463d41  
MS-CV: WYkHYMfWTUajFosK.0  
MS-ServerId: 020021921  
Date: Fri, 09 Jun 2017 00:29:24 GMT

```
{  
    "totalCount": 1,  
    "items": [  
        "servicePlans": [  
            {"displayName": "Azure Information Protection Premium P1",  
             "serviceName": "RMS_S_PREMIUM",  
             "id": "6c57d4b6-3b23-47a5-9bc9-69f17b4947b3",  
             "capabilityStatus": "Assigned",  
             "targetType": "User"},  
            {"displayName": "Microsoft Intune A Direct",  
             "serviceName": "INTUNE_A",  
             "id": "c1ec4a95-1f05-45b3-a911-aa3fa01094f5",  
             "capabilityStatus": "Assigned",  
             "targetType": "User"},  
            {"displayName": "Microsoft Azure Active Directory Rights",  
             "serviceName": "RMS_S_ENTERPRISE",  
             "id": "bea4c11e-220a-4e6d-8eb8-8ea15d019f90",  
             "capabilityStatus": "Assigned",  
             "targetType": "User"},  
            {"displayName": "Azure Active Directory Premium P1",  
             "serviceName": "AAD_PREMIUM",  
             "id": "41781fb2-bc02-4b7c-bd55-b576c07bb09d",  
             "capabilityStatus": "Assigned",  
             "targetType": "User"},  
            {"displayName": "Microsoft Azure Multi-Factor Authentication",  
             "serviceName": "MFA_PREMIUM",  
             "id": "8a256a2b-b617-496d-b51b-e76466e88db0",  
             "capabilityStatus": "Assigned",  
             "targetType": "User"}],  
        "productSku": {  
            "id": "efccb6f7-5641-4e0e-bd10-b4976e1bf68e",  
            "name": "Enterprise Mobility + Security E3",  
            "skuPartNumber": "EMS",  
            "licenseGroupId": "group1"},  
        "attributes": {  
            "objectType": "License"}],  
        "attributes": {  
            "objectType": "Collection"}]}  
}
```

# Get licenses assigned to a user by license group

4/25/2020 • 3 minutes to read • [Edit Online](#)

## Applies To

- Partner Center

How to get a list of user assigned licenses for the specified license groups.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A user identifier.
- A list of one or more license group identifiers.

## C#

To check which licenses are assigned to a user from specified license groups, start by instantiating a [List](#) of type **LicenseGroupId**, and then add the license groups to the list. Then, use the [IAggregatePartner.Customers.ById](#) method with the customer ID to identify the customer. Next, call the [Users.ById](#) method with the user ID to identify the user. Then, get an interface to customer user license operations from the [Licenses](#) property. Finally, pass the list of license groups to the [Get](#) or [GetAsync](#) method to retrieve the collection of licenses assigned to the user.

```
// string selectedCustomerUserId;
// string selectedCustomerId;
// IAggregatePartner partnerOperations;

// To get the group1 (Azure Active Directory (AAD)) assigned licenses.
List<LicenseGroupId> licenseGroupIds = new List<LicenseGroupId>(){ LicenseGroupId.Group1 };
var customerUserAadAssignedLicenses =
    partnerOperations.Customers.ById(selectedCustomerId).Users.ById(selectedCustomerUserId).Licenses.Get(licenseGr
oupIds);

// To get the group2 (Minecraft) assigned licenses.
List<LicenseGroupId> licenseGroupIds = new List<LicenseGroupId>(){ LicenseGroupId.Group2 };
var customerUserSfbAssignedLicenses =
    partnerOperations.Customers.ById(selectedCustomerId).Users.ById(selectedCustomerUserId).Licenses.Get(licenseGr
oupIds);

// To get both AAD and Minecraft assigned licenses.
List<LicenseGroupId> licenseGroupIds = new List<LicenseGroupId>(){ LicenseGroupId.Group1,
    LicenseGroupId.Group2 };
var customerUserBothAadAndSfbAssignedLicenses =
    partnerOperations.Customers.ById(selectedCustomerId).Users.ById(selectedCustomerUserId).Licenses.Get(licenseGr
oupIds);
```

# REST request

## Request syntax

METHOD	REQUEST URI
GET	<code>{baseURL}/v1/customers/{customer-id}/users/{user-id}/licenses?licenseGroupIds=Group1</code> HTTP/1.1
GET	<code>{baseURL}/v1/customers/{customer-id}/users/{user-id}/licenses?licenseGroupIds=Group2</code> HTTP/1.1
GET	<code>{baseURL}/v1/customers/{customer-id}/users/{user-id}/licenses?</code> <code>licenseGroupIds=Group1&amp;licenseGroupIds=Group2</code> HTTP/1.1

## URI parameter

Use the following path and query parameters to identify the customer, user and license groups.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-id	string	Yes	A GUID formatted string that identifies the customer.
user-id	string	Yes	A GUID formatted string that identifies the user.
licenseGroupIds	string	No	An enum value that indicates the license group of the assigned licenses. Valid values: Group1, Group2 Group1 - This group has all products whose license can be managed in the Azure Active Directory (AAD). Group2 - This group has only Minecraft product licenses.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/0c39d6d5-c70d-4c55-bc02-f620844f3fd1/users/482e2152-4b49-48ec-b715-823365ce3d4c/licenses?licenseGroupIds=Group1&licenseGroupIds=Group2 HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: a1d077e4-28b1-4578-b873-6d1a82fa1644
MS-CorrelationId: c8cb5a60-ae08-4afc-92f0-efc42adfa186
X-Locale: en-US
Host: api.partnercenter.microsoft.com
```

# REST response

If successful, the response body contains the collection of [License](#) resources.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center error codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Type: application/json
MS-CorrelationId: 8a53b025-d5be-4d98-ab20-229d1813de76
MS-RequestId: b1317092-f087-471e-a637-f66523b2b94c
Date: June 24 2016 22:00:25 PST

{
  "totalCount": 2,
  "items": [
    {
      "servicePlans": [
        ],
      "productSku": {
        "id": "984df360-9a74-4647-8cf8-696749f6247a",
        "name": "Minecraft Education Edition Faculty",
        "skuPartNumber": "CFQ7TTC0K5DR/0002",
        "licenseGroupId": "group2"
      },
      "attributes": {
        "objectType": "License"
      }
    }, {
      "servicePlans": [
        {
          "displayName": "Windows Defender Advanced Threat Protection",
          "serviceName": "WINDEFATP",
          "id": "871d91ec-ec1a-452b-a83f-bd76c7d770ef",
          "capabilityStatus": "Assigned",
          "targetType": "User"
        },
        {
          "displayName": "Windows 10 Enterprise E3",
          "serviceName": "WIN10_PRO_ENT_SUB",
          "id": "21b439ba-a0ca-424f-a6cc-52f954a5b111",
          "capabilityStatus": "Assigned",
          "targetType": "User"
        }
      ],
      "productSku": {
        "id": "1e7e1070-8ccb-4aca-b470-d7cb538cb07e",
        "name": "Windows 10 Enterprise E5",
        "skuPartNumber": "WIN_ENT_E5",
        "licenseGroupId": "group1"
      },
      "attributes": {
        "objectType": "License"
      }
    }
  ],
  "attributes": {
    "objectType": "Collection"
  }
}
```

## Response example (no matching licenses found)

If no matching licenses can be found for the specified license groups, the response contains an empty collection with a totalCount element whose value is 0.

HTTP/1.1 200 OK  
Content-Length: 71  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: c8cb5a60-ae08-4afc-92f0-efc42adfa186  
MS-RequestId: a1d077e4-28b1-4578-b873-6d1a82fa1644  
MS-CV: q05xrhUeDUKvhFt.0  
MS-ServerId: 030020525  
Date: Fri, 09 Jun 2017 22:50:11 GMT

```
{  
    "totalCount": 0,  
    "items": [],  
    "attributes": {  
        "objectType": "Collection"  
    }  
}
```

# Create a customer

4/25/2020 • 5 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud for US Government

This article explains how to create a new customer.

### IMPORTANT

If you are an indirect provider and you want to create a customer for an indirect reseller, please see [Create a customer for an indirect reseller](#).

As a cloud solution provider (CSP) partner, when you create a customer you can place orders on behalf of the customer. When you create a customer, you also create:

- An Azure Active Directory (AD) tenant object for the customer.
- A relationship between the reseller and customer, used for delegated admin privileges.
- A user name and password to sign in as an admin for the customer.

Once the customer is created, be sure to save the customer ID and Azure AD details for future use with the Partner Center SDK (for example, account management).

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.

### IMPORTANT

To create a customer tenant you must provide a valid physical address during the creation process. An address can be validated by following the steps outlined in the [Validate an address](#) scenario. If you create a customer using an invalid address in the sandbox environment, you will not be able to delete that customer tenant.

## C#

To add a customer:

1. Instantiate a new **Customer** object. Be sure to fill in the **BillingProfile** and **CompanyProfile**.
2. Add the new customer to your **IAggregatePartner.Customers** collection by calling **Create** or **CreateAsync**.

### C# example

```

// IAggregatePartner partnerOperations;

var partnerOperations = this.Context.UserPartnerOperations;

var customerToCreate = new Customer()
{
    CompanyProfile = new CustomerCompanyProfile()
    {
        Domain = string.Format(CultureInfo.InvariantCulture,
            "SampleApplication{0}.{1}",
            new Random().Next(),
            this.Context.Configuration.Scenario.CustomerDomainSuffix)
    },
    BillingProfile = new CustomerBillingProfile()
    {
        Culture = "EN-US",
        Email = "someone@example.com",
        Language = "En",
        CompanyName = "Some Company" + new Random().Next(),
        DefaultAddress = new Address()
        {
            FirstName = "Tania",
            LastName = "Carr",
            AddressLine1 = "One Microsoft Way",
            City = "Redmond",
            State = "WA",
            Country = "US",
            PostalCode = "98052",
            PhoneNumber = ""
        }
    }
};

var newCustomer = partnerOperations.Customers.Create(customerToCreate);

```

Sample: [Console test app](#). Project: Partner Center SDK Samples Class: CreateCustomer.cs

## Java

The [Partner Center Java SDK](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To create a new customer:

1. Create a new instance of the `CustomerBillingProfile` and the `CustomerCompanyProfile` objects. Be sure to populate the required fields.
2. Create the customer by calling the `IAggregatePartner.getCustomers().create` function.

### Java example

```

// IAggregatePartner partnerOperations;

Address address = new Address();

address.setFirstName( "Gena" );
address.setLastName( "Soto" );
address.setAddressLine1( "One Microsoft Way" );
address.setCity( "Redmond" );
address.setState( "WA" );
address.setCountry( "US" );
address.setPostalCode( "98052" );
address.setPhoneNumber( "4255550101" );

CustomerBillingProfile billingProfile = new CustomerBillingProfile();

billingProfile.setCulture( "en-US" );
billingProfile.setEmail( "gena@wingtiptoys.com" );
billingProfile.setLanguage( "en" );
billingProfile.setCompanyName( "Wingtip Toys" + new Random().nextInt() );
billingProfile.setDefaultValue( address );

CustomerCompanyProfile companyProfile = new CustomerCompanyProfile();

companyProfile.setDomain( "WingtipToys" + Math.abs( new Random().nextInt() ) + ".onmicrosoft.com" );

Customer customerToCreate = new Customer();

customerToCreate.setBillingProfile( billingProfile );
customerToCreate.setCompanyProfile( companyProfile );

Customer newCustomer = partnerOperations.getCustomers().create( customerToCreate );

```

## PowerShell

The [Partner Center PowerShell module](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To create a customer execute the [New-PartnerCustomer](#) command.

```

New-PartnerCustomer -BillingAddressLine1 '1 Microsoft Way' -BillingAddressCity 'Redmond' -
    BillingAddressCountry 'US' -BillingAddressPostalCode '98052' -BillingAddressState 'WA' -ContactEmail
    'jdoe@customer.com' -ContactFirstName 'Jane' -ContactLastName 'Doe' -Culture 'en-US' -Domain
    'newcustomer.onmicrosoft.com' -Language 'en' -Name 'New Customer'

```

## REST request

### Request syntax

METHOD	REQUEST URI
POST	<a href="#"><i>/baseURL</i></a> /v1/customers HTTP/1.1

### Request headers

- This API is idempotent (it will not yield a different result if you call it multiple times).
- A request ID and correlation ID are required.

- For more information, see [Partner Center REST headers](#).

## Request body

This table describes the required properties in the request body.

NAME	TYPE	DESCRIPTION
BillingProfile	object	The customer's billing profile information.
CompanyProfile	object	The customer's company profile information.

### Billing profile

This table describes the minimum required fields from the [CustomerBillingProfile](#) resource needed to create a new customer.

NAME	TYPE	DESCRIPTION
email	string	The customer's email address.
culture	string	Their preferred culture for communication and currency, such as "en-US". See <a href="#">Partner Center supported languages and locales</a> for the supported cultures.
language	string	The default language. Two character language codes (for example <code>en</code> or <code>fr</code> ) are supported.
company_name	string	The registered company/organization name.
default_address	<a href="#">Address</a>	The registered address of the customer's company/organization. See the <a href="#">Address</a> resource for information on any length limitations.

### Company profile

This table describes the minimum required fields from the [CustomerCompanyProfile](#) resource needed to create a new customer.

NAME	TYPE	DESCRIPTION
domain	string	The customer's domain name, such as contoso.onmicrosoft.com.

## Request example

```
POST https://api.partnercenter.microsoft.com/v1/customers HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 94e4e214-6b06-4fb7-96d1-94d559f9b47f
MS-CorrelationId: ab993325-1605-4cf4-bac4-fb584142a31b
X-Locale: en-US
Content-Type: application/json
Host: api.partnercenter.microsoft.com
Content-Length: 789
Expect: 100-continue
Connection: Keep-Alive

{
    "CompanyProfile": {
        "Domain": "xyz.ccsctp.net",
    },
    "BillingProfile": {
        "Culture": "EN-US",
        "Email": "test@outlook.com",
        "Language": "en",
        "CompanyName": "test company",
        "DefaultAddress": {
            "FirstName": "Test",
            "LastName": "Test",
            "AddressLine1": "One Microsoft Way",
            "City": "Redmond",
            "State": "WA",
            "PostalCode": "98052",
            "Country": "US",
        }
    }
}
```

## REST response

If successful, this API returns a [Customer](#) resource for the new customer. Save the customer ID and Azure AD details for future use with the Partner Center SDK. You will need them for use with account management, for example.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

### Response example

HTTP/1.1 201 Created  
Content-Length: 834  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: ab993325-1605-4cf4-bac4-fb584142a31b  
MS-RequestId: 94e4e214-6b06-4fb7-96d1-94d559f9b47f  
MS-CV: ObwhuhD2tUKJoM+Z.0  
MS-ServerId: 202010223  
Date: Tue, 14 Feb 2017 20:06:02 GMT

```
{
  "id": "dfd8cc0a-c592-468c-8461-869a38d24738",
  "commerceId": "0a4ce58a-6f96-4273-8035-d9c7d31b9ba4",
  "companyProfile": {
    "tenantId": "dfd8cc0a-c592-468c-8461-869a38d24738",
    "domain": "xyz.ccsctp.net",
    "attributes": {
      "objectType": "CustomerCompanyProfile"
    }
  },
  "billingProfile": {
    "id": "d17c0275-da92-5c33-9032-782ef1d0b69b",
    "email": "test@outlook.com",
    "culture": "en-US",
    "language": "en",
    "companyName": "test company",
    "defaultAddress": {
      "country": "US",
      "city": "Redmond",
      "state": "WA",
      "addressLine1": "One Microsoft Way",
      "postalCode": "98052",
      "firstName": "Test",
      "lastName": "Test",
      "phoneNumber": ""
    },
    "attributes": {
      "etag": "5920358838484612121",
      "objectType": "CustomerBillingProfile"
    }
  },
  "relationshipToPartner": "none",
  "userCredentials": {
    "userName": "admin",
    "password": "=;;n.=s9Z"
  },
  "attributes": {
    "objectType": "Customer"
  }
}
```

# Create a customer for an indirect reseller

4/25/2020 • 3 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center

An indirect provider can create a customer for an indirect reseller.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- The tenant identifier of the indirect reseller.
- The indirect reseller must have a partnership with the indirect provider.

## C#

To add a new customer for an indirect reseller:

1. Instantiate a new **Customer** object and then instantiate and populate the **BillingProfile** and **CompanyProfile**. Be sure to assign the indirect reseller ID to the **AssociatedPartnerID** property.
2. Use the **IAggregatePartner.Customers** property to get an interface to customer collection operations.
3. Call the **Create** or **CreateAsync** method to create the customer.

## C# example

```

// IAggregatePartner partnerOperations;
// var indirectResellerId;
var customerToCreate = new Customer()
{
    CompanyProfile = new CustomerCompanyProfile()
    {
        Domain = string.Format(CultureInfo.InvariantCulture,
            "WingtipToys{0}.{1}",
            new Random().Next(),
            this.Context.Configuration.Scenario.CustomerDomainSuffix)
    },
    BillingProfile = new CustomerBillingProfile()
    {
        Culture = "EN-US",
        Email = "Gena@wingtiptoys.com",
        Language = "En",
        CompanyName = "Wingtip Toys" + new Random().Next(),
        DefaultAddress = new Address()
        {
            FirstName = "Gena",
            LastName = "Soto",
            AddressLine1 = "One Microsoft Way",
            City = "Redmond",
            State = "WA",
            Country = "US",
            PostalCode = "98052",
            PhoneNumber = "4255550101"
        }
    },
    AssociatedPartnerId = indirectResellerId
};

var newCustomer = partnerOperations.Customers.Create(customerToCreate);

```

**Sample:** [Console test app](#). **Project:** Partner Center SDK Samples **Class:** CreateCustomerforIndirectReseller.cs

## REST request

### Request syntax

METHOD	REQUEST URI
POST	<a href="#"><i>{baseUrl}</i></a> /v1/customers HTTP/1.1

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

This table describes the required properties in the request body.

NAME	TYPE	REQUIRED	DESCRIPTION
BillingProfile	object	Yes	The customer's billing profile information.
CompanyProfile	object	Yes	The customer's company profile information.

NAME	TYPE	REQUIRED	DESCRIPTION
AssociatedPartnerId	string	Yes	The indirect reseller ID. The indirect reseller as indicated by the ID supplied here must have a partnership with the indirect provider or the request will fail. Also note that if the AssociatedPartnerId value isn't supplied, the customer is created as a direct customer of the indirect provider rather than the indirect reseller.

#### Billing profile

This table describes the minimum required fields from the [CustomerBillingProfile](#) resource needed to create a new customer.

NAME	TYPE	REQUIRED	DESCRIPTION
email	string	Yes	The customer's email address.
culture	string	Yes	Their preferred culture for communication and currency, such as "en-US". See <a href="#">Partner Center supported languages and locales</a> for the supported cultures.
language	string	Yes	The default language. Two character language codes (for example <code>en</code> or <code>fr</code> ) are supported.
company_name	string	Yes	The registered company/organization name.
default_address	<a href="#">Address</a>	Yes	The registered address of the customer's company/organization. See the <a href="#">Address</a> resource for information on any length limitations.

#### Company profile

This table describes the minimum required fields from the [CustomerCompanyProfile](#) resource needed to create a new customer.

NAME	TYPE	REQUIRED	DESCRIPTION
domain	string	.Yes	The customer's domain name, such as contoso.onmicrosoft.com.

## Request example

```
POST https://api.partnercenter.microsoft.com/v1/customers HTTP/1.1
Authorization: Bearer <token>
MS-RequestId: d628adbe-b7ee-412e-ac55-58f22b4ba2f4
MS-CorrelationId: 0dd197a8-992c-44ca-aeae-21cd83494dce
X-Locale: en-US
MS-PartnerCenter-Client: Partner Center .NET SDK
Content-Type: application/json
Host: api.partnercenter.microsoft.com
Content-Length: 823
Expect: 100-continue
Connection: Keep-Alive

{
    "Id": null,
    "CommerceId": null,
    "CompanyProfile": {
        "TenantId": null,
        "Domain": "WingtipToys678152504.onmicrosoft.com",
        "CompanyName": null,
        "Attributes": {
            "ObjectType": "CustomerCompanyProfile"
        }
    },
    "BillingProfile": {
        "Id": null,
        "FirstName": null,
        "LastName": null,
        "Email": "Gena@wingtiptoys.com",
        "Culture": "EN-US",
        "Language": "En",
        "CompanyName": "Wingtip Toys678152504",
        "DefaultAddress": {
            "Country": "US",
            "Region": null,
            "City": "Redmond",
            "State": "WA",
            "AddressLine1": "One Microsoft Way",
            "AddressLine2": null,
            "PostalCode": "98052",
            "FirstName": "Gena",
            "LastName": "Soto",
            "PhoneNumber": "4255550101"
        },
        "Attributes": {
            "ObjectType": "CustomerBillingProfile"
        }
    },
    "RelationshipToPartner": "none",
    "AllowDelegatedAccess": null,
    "UserCredentials": null,
    "CustomDomains": null,
    "AssociatedPartnerId": "484e548c-f5f3-4528-93a9-c16c6373cb59",
    "Attributes": {
        "ObjectType": "Customer"
    }
}
```

## REST response

If successful, the response contains a [Customer](#) resource for the new customer.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging

information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

## Response example

```
HTTP/1.1 201 Created
Content-Length: 1085
Content-Type: application/json; charset=utf-8
MS-CorrelationId: 0dd197a8-992c-44ca-aeae-21cd83494dce
MS-RequestId: d628adbe-b7ee-412e-ac55-58f22b4ba2f4
MS-CV: Yy/YaA0gYEmfQyR/.0
MS-ServerId: 030020525
Date: Tue, 06 Jun 2017 23:11:40 GMT

{
  "id": "626099fe-17af-4756-9fd0-6a73b7127859",
  "commerceId": "626099fe-17af-4756-9fd0-6a73b7127859",
  "companyProfile": {
    "tenantId": "626099fe-17af-4756-9fd0-6a73b7127859",
    "domain": "WingtipToys678152504.onmicrosoft.com",
    "companyName": "Wingtip Toys678152504",
    "links": {
      "self": {
        "uri": "/customers/626099fe-17af-4756-9fd0-6a73b7127859/profiles/company",
        "method": "GET",
        "headers": []
      }
    },
    "attributes": {
      "objectType": "CustomerCompanyProfile"
    }
  },
  "billingProfile": {
    "id": "7079246e-7b62-56ef-7cbd-a819514b54b5",
    "email": "Gena@wingtiptoys.com",
    "culture": "en-US",
    "language": "En",
    "companyName": "Wingtip Toys678152504",
    "defaultAddress": {
      "country": "US",
      "city": "Redmond",
      "state": "WA",
      "addressLine1": "One Microsoft Way",
      "postalCode": "98052",
      "firstName": "Gena",
      "lastName": "Soto",
      "phoneNumber": "4255550101"
    },
    "attributes": {
      "etag": "-8799889149591823008",
      "objectType": "CustomerBillingProfile"
    }
  },
  "relationshipToPartner": "reseller",
  "allowDelegatedAccess": true,
  "userCredentials": {
    "userName": "admin",
    "password": "0Krha*Io"
  },
  "associatedPartnerId": "484e548c-f5f3-4528-93a9-c16c6373cb59",
  "attributes": {
    "objectType": "Customer"
  }
}
```

# Create user accounts for a customer

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center

Create a new user account for your customer.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## C#

To obtain a new user account for a customer:

1. Create a new **CustomerUser** object with the relevant user information.
2. Use your **IAggregatePartner.Customers** collection and call the **ById()** method.
3. Call the **Users** property, followed by the **Create** method.

```
// string selectedCustomerId;
// IAggregatePartner partnerOperations;
// var SelectedCustomer;

var userToCreate = new CustomerUser()
{
    PasswordProfile = new PasswordProfile() { ForceChangePassword = true, Password = "Password!1" },
    DisplayName = "TestDisplayName",
    FirstName = "TestFirstName",
    LastName = "TestLastName",
    UsageLocation = "US",
    UserPrincipalName = Guid.NewGuid().ToString("N") + "@" + selectedCustomer.CompanyProfile.Domain.ToString()
};

User createdUser = partnerOperations.CustomersById(selectedCustomerId).Users.Create(userToCreate);
```

Sample: [Console test app](#). Project: PartnerSDK.FeatureSamples Class: CustomerUserCreate.cs

## REST request

### Request syntax

METHOD	REQUEST URI
POST	<a href="#"><code>/baseURL/v1/customers/{customer-tenant-id}/users</code></a> HTTP/1.1

#### URI parameters

Use the following query parameters to identify the correct customer.

NAME	TYPE	REQUIRED	DESCRIPTION
<b>customer-tenant-id</b>	guid	Y	The value is a GUID formatted <b>customer-tenant-id</b> . It allows the reseller to filter the results for a given customer that belongs to the reseller.
<b>user-id</b>	guid	N	The value is a GUID formatted <b>user-id</b> that belongs to a single user account.

#### Request headers

For more information, see [Partner Center REST headers](#).

#### Request body

None.

#### Request example

```
POST https://api.partnercenter.microsoft.com/v1/customers/<customer-tenant-id>/users HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: b1317092-f087-471e-a637-f66523b2b94c
MS-CorrelationId: 8a53b025-d5be-4d98-ab20-229d1813de76
{
    "usageLocation": "country/region code",
    "userPrincipalName": "userid@domain.onmicrosoft.com",
    "firstName": "First",
    "lastName": "Last",
    "displayName": "User name",
    "immutableId": "Some unique ID",
    "passwordProfile": {
        "password": "abCD123*",
        "forceChangePassword: true
    },
    "attributes": {
        "objectType": "CustomerUser"
    }
}
```

## REST response

If successful, this method returns a user account, including the GUID.

#### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 31942
Content-Type: application/json
MS-CorrelationId: 8a53b025-d5be-4d98-ab20-229d1813de76
MS-RequestId: b1317092-f087-471e-a637-f66523b2b94c
Date: June 24 2016 22:00:25 PST

{
  "usageLocation": "country/region code",
  "id": "4b10bf41-ab11-40e3-8c53-cd67849b50de",
  "userPrincipalName": "userid@domain.onmicrosoft.com",
  "firstName": "First",
  "lastName": "Last",
  "displayName": "User name",
  "immutableId": "Some unique ID",
  "passwordProfile": {
    "forceChangePassword": true,
    "password": "abCD123*"
  },
  "lastDirectorySyncTime": null,
  "userDomainType": "none",
  "state": "active",
  "softDeletionTime": null,
  "attributes": {
    "objectType": "CustomerUser"
  }
}
```

# Delete a user account for a customer

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center

This article explains how to delete an existing user account for a customer.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A user ID. If you do not have the user ID, see [Get a list of all user accounts for a customer](#).

## Deleting a user account

When you delete a user account, the user state is set to **inactive** for thirty days. After thirty days, the user account and its associated data are purged and made unrecoverable.

You can [restore a deleted user account for a customer](#) if the inactive account is within the thirty day window. However, when you restore an account that was deleted and marked as inactive, the account is no longer returned as a member of the user collection (for example, when you [get a list of all user accounts for a customer](#)).

## C#

To delete an existing customer user account:

1. Use the **IAggregatePartner.Customers.ById** method with the customer ID to identify the customer.
2. Call the **Users.ById** method to identify the user.
3. Call the **Delete** method to delete the user and set the user state to inactive.

```
// IAggregatePartner partnerOperations;
// string selectedCustomerId;
// string customerUserIdToDelete;

partnerOperations.CustomersById(selectedCustomerId).UsersById(customerUserIdToDelete).Delete();
```

Sample: [Console test app](#). Project: Partner Center SDK Samples Class: DeleteCustomerUser.cs

## REST request

### Request syntax

METHOD	REQUEST URI
DELETE	<a href="#"><i>{baseUrl}</i></a> /v1/customers/{customer-tenant-id}/users/{user-id} HTTP/1.1

#### URI parameters

Use the following query parameters to identify the customer and user.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	GUID	Y	The value is a GUID-formatted <b>customer-tenant-id</b> that allows the reseller to filter the results for a given customer.
user-id	GUID	Y	The value is a GUID-formatted <b>user-id</b> that belongs to a single user account.

#### Request headers

For more information, see [Partner Center REST headers](#).

#### Request body

None.

#### Request example

```
DELETE https://api.partnercenter.microsoft.com/v1/customers/4d3cf487-70f4-4e1e-9ff1-b2bfce8d9f04/users/a45f1416-3300-4f65-9e8d-f123b397a4ea HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: f113b126-ec13-4baa-ab4d-67c245244971
MS-CorrelationId: 709c0b80-016c-4662-b29f-697fdf03e87a
X-Locale: en-US
Host: api.partnercenter.microsoft.com
Content-Length: 0
```

## REST response

If successful, this method returns a **204 No Content** status code.

#### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST Error Codes](#).

#### Response example

```
HTTP/1.1 204 No Content
Content-Length: 0
MS-CorrelationId: 709c0b80-016c-4662-b29f-697fdf03e87a
MS-RequestId: f113b126-ec13-4baa-ab4d-67c245244971
MS-CV: 90KUJA7HKEaG8wHu.0
MS-ServerId: 101112616
Date: Tue, 24 Jan 2017 23:27:18 GMT
```



# Get a collection of entitlements

4/25/2020 • 5 minutes to read • [Edit Online](#)

## Applies To

- Partner Center

How to get a collection of entitlements.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## C#

To get an entitlements collection for a customer, obtain an interface to **Entitlement** operations by calling the **IAggregatePartner.Customers.ById()** method with the customer ID to identify the customer. Then, retrieve the interface from the **Entitlements** property and call the **Get()** or **GetAsync()** method to retrieve the collection of entitlements.

```
IAggregatePartner partnerOperations;
string customerId;

// Get the collection of entitlements.
var entitlements = partnerOperations.Customers.ById(customerId).Entitlements.Get();
```

To populate expiry dates for the entitlements to be retrieved, call the same methods above and set the optional boolean parameter **showExpiry** to true **Get(true)** or **GetAsync(true)**. This indicates that entitlement expiry dates are required (when applicable).

### IMPORTANT

On-premise entitlement types do not have expiry dates.

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/customers/{customerId}/entitlements</code> HTTP/1.1

### URI parameters

Use the following path and query parameters when creating the request.

NAME	TYPE	REQUIRED	DESCRIPTION
customerId	string	Yes	A GUID formatted customerId that identifies the customer.
entitlementType	string	No	Can be used to specify the type of entitlements to be retrieved ( <b>software</b> or <b>reservedInstance</b> ). If not set, all types will be retrieved
showExpiry	boolean	No	Optional flag which indicates if entitlements expiry dates are required.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/18ac2950-8ea9-4dfc-92a4-ff4d4cd57796/entitlements
HTTP/1.1
Authorization: Bearer <Token>
Accept: application/json
MS-RequestId: cdc428d2-035b-41c4-9a32-e643c4471cbd
MS-CorrelationId: 799eee8d-07d1-452a-a035-388259df137c
X-Locale: en-US
Host: api.partnercenter.microsoft.com
```

## REST response

If successful, the response body contains a collection of [Entitlement](#) resources.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 103778
Content-Type: application/json; charset=utf-8
MS-CorrelationId: 799eee8d-07d1-452a-a035-388259df137c
MS-RequestId: cdc428d2-035b-41c4-9a32-e643c4471cbd
X-Locale: en-US
MS-CV: EjFd8fCpkKyMyza.0
MS-ServerId: 000002
Date: Mon, 19 Mar 2018 07:42:51 GMT

{
  "totalCount": 2,
  "items": [
    {
      "id": "12345678-90ab-cdef-1234-567890abcdef",
      "type": "software",
      "name": "Office 365 ProPlus License"
    },
    {
      "id": "98765432-1234-5678-90ab-cdef12345678",
      "type": "reservedInstance",
      "name": "Windows Server 2016 Standard"
    }
  ]
}
```

```

    "includedEntitlements": [],
    "referenceOrder": {
      "id": "KaJ8XvkKc_GoNZOUyjVaRJaLTBN5MWdV1",
      "lineItemId": "0"
    },
    "productId": "DZH318Z0BQ3W",
    "quantity": 1,
    "entitledArtifacts": [
      {
        "link": {
          "uri": "/customers/18ac2950-8ea9-4dfc-92a4-
ff4d4cd57796/artifacts/reservedinstance/groups/2caf524395724e638ef64e109f1f79ca/lineitems/03500b1b-f2d6-4e23-
ab4b-9fd67b917012/resource/ebf2e74b-630e-4a09-857d-a1f6c6351336",
          "method": "GET",
          "headers": []
        },
        "resourceId": "ebf2e74b-630e-4a09-857d-a1f6c6351336",
        "artifactType": "reservedinstance"
      }
    ],
    "skuId": "007J",
    "entitlementType": "reservedinstance"
    "dynamicAttributes": {
      "reservationType": "virtualmachines"
    }
  },
  {
    "includedEntitlements": [
      {
        "includedEntitlements": [],
        "referenceOrder": {
          "id": "NUXMSvmS20EQ4kFsZmzkSqb747fqKmNk1",
          "lineItemId": "0"
        },
        "productId": "DG7GMGF0DWLJ",
        "quantity": 1,
        "entitledArtifacts": [],
        "skuId": "0001",
        "entitlementType": "software"
      },
      {
        "includedEntitlements": [],
        "referenceOrder": {
          "id": "NUXMSvmS20EQ4kFsZmzkSqb747fqKmNk1",
          "lineItemId": "0"
        },
        "productId": "DG7GMGF0DWLG",
        "quantity": 1,
        "entitledArtifacts": [],
        "skuId": "0002",
        "entitlementType": "software"
      }
    ],
    "referenceOrder": {
      "id": "NUXMSvmS20EQ4kFsZmzkSqb747fqKmNk1",
      "lineItemId": "0"
    },
    "productId": "DG7GMGF0DWTK",
    "quantity": 1,
    "entitledArtifacts": [],
    "skuId": "0002",
    "entitlementType": "software"
  }
],
"attributes": {
  "objectType": "Collection"
}
}

```

## Additional Examples

The following example shows you how to retrieve a specific type of entitlements along with expiry dates (when applicable)

### C# example

To retrieve a specific type of entitlements, obtain the **ByEntitlementType** interface from the **Entitlements** interface and use the **Get()** or **GetAsync()** methods.

```
ResourceCollection<Entitlement> entitlements =
    partnerOperations.CustomersById(selectedCustomerId).Entitlements.ByEntitlementType("software").Get(true);
```

### Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/de3dcef9-9991-459c-ac71-2903d1127414/entitlements?
  entitlementtype=software&showExpiry=true
  Authorization: Bearer <Token>
  Accept: application/json
  MS-RequestId: 6517a410-67ce-4995-9bb7-116a52179f92
  MS-CorrelationId: d9eb8194-9b99-4057-a2fe-98bdf05f013c
  X-Locale: en-US
  Host: api.partnercenter.microsoft.com
```

### Response example

```
HTTP/1.1 200 OK
Content-Length: 1791
Content-Type: application/json; charset=utf-8
MS-CorrelationId: d9eb8194-9b99-4057-a2fe-98bdf05f013c
MS-RequestId: 6517a410-67ce-4995-9bb7-116a52179f92
X-Locale: en-US
MS-CV: yD+4LBKePUSp/vqJ.0
MS-ServerId: 000002
Date: Mon, 28 Jan 2019 18:31:43 GMT

{
  "totalCount": 2,
  "items": [
    {
      "includedEntitlements": [
        {
          "includedEntitlements": [],
          "referenceOrder": {
            "id": "4teYMtWYEeKM77JftGLIQYMOZPTwyOEV1",
            "lineItemId": "0",
            "alternateId": "8f3af3dea1ea"
          },
          "productId": "DG7GMGF0DWMM2",
          "quantity": 1,
          "entitledArtifacts": [],
          "skuId": "0001",
          "entitlementType": "software"
        },
        {
          "includedEntitlements": [],
          "referenceOrder": {
            "id": "4teYMtWYEeKM77JftGLIQYMOZPTwyOEV1",
            "lineItemId": "0",
            "alternateId": "8f3af3dea1ea"
          },
          "productId": "DG7GMGF0DWMK",
          "quantity": 1,
          "entitledArtifacts": []
        }
      ]
    }
  ]
}
```

```

        "quantity": 1,
        "entitledArtifacts": [],
        "skuId": "0001",
        "entitlementType": "software"
    }
],
"referenceOrder": {
    "id": "4teYMtWYEeKM77JftGLIQYMOZPTwyOEV1",
    "lineItemId": "0",
    "alternateId": "8f3af3dea1ea"
},
"productId": "DG7GMGF0DWM3",
"quantity": 1,
"entitledArtifacts": [],
"skuId": "0002",
"entitlementType": "software"
},
{
"includedEntitlements": [
{
"includedEntitlements": [],
"referenceOrder": {
    "id": "4teYMtWYEeKM77JftGLIQYMOZPTwyOEV1",
    "lineItemId": "1",
    "alternateId": "8f3af3dea1ea"
},
"productId": "DG7GMGF0DWV1",
"quantity": 1,
"entitledArtifacts": [],
"skuId": "0002",
"entitlementType": "software"
},
{
"includedEntitlements": [],
"referenceOrder": {
    "id": "4teYMtWYEeKM77JftGLIQYMOZPTwyOEV1",
    "lineItemId": "1",
    "alternateId": "8f3af3dea1ea"
},
"productId": "DG7GMGF0DWV2",
"quantity": 1,
"entitledArtifacts": [],
"skuId": "0002",
"entitlementType": "software"
}
],
"referenceOrder": {
    "id": "4teYMtWYEeKM77JftGLIQYMOZPTwyOEV1",
    "lineItemId": "1",
    "alternateId": "8f3af3dea1ea"
},
"productId": "DG7GMGF0DWBQ",
"quantity": 1,
"entitledArtifacts": [],
"skuId": "0003",
"entitlementType": "software",
"expiryDate": "2022-01-28T00:00:00Z"
}
],
"attributes": {
    "objectType": "Collection"
}
}
}

```

The following examples show you how to retrieve information about products and reservations from an entitlement.

## Retrieve virtual machine reservation details from an entitlement by using SDK V1.8

### C# example

To retrieve more details related to the virtual machine reservations from an entitlement, invoke the URI exposed under `entitledArtifacts.link` with `artifactType = virtual_machine_reserved_instance`.

```
ResourceCollection<Entitlement> entitlements =
partnerOperations.CustomersById(selectedCustomerId).Entitlements.ByEntitlementType("VirtualMachineReservedInstance").Get();

((VirtualMachineReservedInstanceArtifact)entitlements.First()).EntitledArtifacts.First(x => x.Type ==
ArtifactType.VirtualMachineReservedInstance)).Link.InvokeAsync<VirtualMachineReservedInstanceArtifactDetails>
(partnerOperations)
```

### Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/18ac2950-8ea9-4dfc-92a4-
ff4d4cd57796/artifacts/virtualmachinereservedinstance/groups/2caf524395724e638ef64e109f1f79ca/lineitems/03500b
1b-f2d6-4e23-ab4b-9fd67b917012/resource/ebf2e74b-630e-4a09-857d-a1f6c6351336 HTTP/1.1
Authorization: Bearer <Token>
Accept: application/json
MS-RequestId: cdc428d2-035b-41c4-9a32-e643c4471cbd
MS-CorrelationId: 799eee8d-07d1-452a-a035-388259df137c
X-Locale: en-US
Host: api.partnercenter.microsoft.com
```

### Response example

```
HTTP/1.1 200 OK
Content-Length: 368
Content-Type: application/json; charset=utf-8
MS-CorrelationId: 799eee8d-07d1-452a-a035-388259df137c
MS-RequestId: cdc428d2-035b-41c4-9a32-e643c4471cbd
X-Locale: en-US
MS-CV: yrdTGSZ7IU2v9okv.0
MS-ServerId: 000002
Date: Mon, 19 Mar 2018 07:45:14 GMT

{
  "type": "virtual_machine_reserved_instance",
  "virtualMachineReservations": [
    {
      "reservationId": "99f320db-c029-4c1b-a157-dad76e4481b6",
      "scopeType": "Shared",
      "quantity": 1,
      "expiryDateTime": "2019-02-23T00:00:00",
      "effectiveDateTime": "2018-02-23T18:15:24.6724884Z",
      "provisioningState": "Created"
    }
  ]
}
```

## Retrieve reservation details from an entitlement by using SDK V1.9

### C# example

To retrieve more details related to the reservations from a reserved instance entitlement, invoke the URI exposed under `entitledArtifacts.link` with `artifactType = reservedinstance`.

```

ResourceCollection<Entitlement> entitlements =
partnerOperations.CustomersById(selectedCustomerId).Entitlements.ByEntitlementType("ReservedInstance").Get();

((ReservedInstanceArtifact)entitlements.First()).EntitledArtifacts.First(x => x.Type ==
ArtifactType.ReservedInstance)).Link.InvokeAsync<ReservedInstanceArtifactDetails>(partnerOperations);

```

## Request example

```

GET https://api.partnercenter.microsoft.com/v1/customers/18ac2950-8ea9-4dfc-92a4-
ff4d4cd57796/artifacts/reservedinstance/groups/2caf524395724e638ef64e109f1f79ca/lineitems/03500b1b-f2d6-4e23-
ab4b-9fd67b917012/resource/ebf2e74b-630e-4a09-857d-a1f6c6351336 HTTP/1.1
Authorization: Bearer <Token>
Accept: application/json
MS-RequestId: cdc428d2-035b-41c4-9a32-e643c4471cbd
MS-CorrelationId: 799eee8d-07d1-452a-a035-388259df137c
X-Locale: en-US
Host: api.partnercenter.microsoft.com

```

## Response example

```

HTTP/1.1 200 OK
Content-Length: 368
Content-Type: application/json; charset=utf-8
MS-CorrelationId: 799eee8d-07d1-452a-a035-388259df137c
MS-RequestId: cdc428d2-035b-41c4-9a32-e643c4471cbd
X-Locale: en-US
MS-CV: yrdTGSZTIU2v9okv.0
MS-ServerId: 000002
Date: Mon, 19 Mar 2018 07:45:14 GMT

{
  "type": "reservedinstance",
  "virtualMachineReservations": [
    {
      "reservationId": "99f320db-c029-4c1b-a157-dad76e4481b6",
      "scopeType": "Shared",
      "quantity": 1,
      "expiryDateTime": "2019-02-23T00:00:00",
      "effectiveDateTime": "2018-02-23T18:15:24.6724884Z",
      "provisioningState": "Created"
    }
  ]
}

```

## API Consumers

Partners who are using the API to query virtual machine reserved instance entitlements - Update the request URI from `/customers/{customerId}/entitlements` to `/customers/{customerId}/entitlements?entitlementType=virtualmachinereservedinstance` to maintain backward compatibility. In order to consume virtual machine or Azure SQL with enhanced contract, update the request URI to `/customers/{customerId}/entitlements?entitlementType=reservedinstance`.

# Get a customer by ID

4/25/2020 • 3 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Gets a **Customer** resource that corresponds to a customer ID.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports app+user credentials or app-only authentication.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## C#

To get a customer by ID, use your **IAggregatePartner.Customers** collection, call the **ById()** method, then call the **Get()** or **GetAsync()** methods.

```
// IAggregatePartner partnerOperations;
// string customerIdToRetrieve;

Customer customerInfo = partnerOperations.Customers.ById(customerIdToRetrieve).Get();
```

Sample: [Console test app](#). Project: PartnerSDK.FeatureSamples Class: CustomerInformation.cs

## Java

The [Partner Center Java SDK](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To get a customer by ID, use your **IAggregatePartner.getCustomers** function, call the **byId()** function, then call the **get()** function.

```
// IAggregatePartner partnerOperations;
// String customerIdToRetrieve;

Customer customerInfo = partnerOperations.getCustomers().byId(customerIdToRetrieve).get();
```

# PowerShell

The [Partner Center PowerShell module](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To get a customer by ID, execute the [Get-PartnerCustomer](#) command and specify the `CustomerId` parameter.

```
Get-PartnerCustomer -CustomerId '2ca7de6c-c05c-46b5-b689-32e53573a97a'
```

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<a href="#"><code>{baseURL}/v1/customers/{customer-tenant-id}</code></a> HTTP/1.1

### URI parameter

Use the following query parameter to a specific customer.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	guid	Y	The value is a GUID formatted <code>customer-tenant-id</code> that allows the reseller to filter the results for a given customer that belongs to the reseller.

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

None.

### Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/<customer-tenant-id> HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-CorrelationId: a176c585-b5de-4d65-824c-67a6deb45cd9
MS-RequestId: 74ca1db9-df92-41c6-a362-a16433b0542b
```

## REST response

If successful, this method returns a [Customer](#) resource in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

### Response example



```
"allowDelegatedAccess": true,  
"customDomains": [  
    "abcdefghijkl1234.ccsctp.net"  
,  
    "links": {  
        "self": {  
            "uri": "/customers/eabd1b55-5360-4438-a11d-5c06918c3014",  
            "method": "GET",  
            "headers": []  
        }  
    },  
    "attributes": {  
        "objectType": "Customer"  
    }  
}
```

# Get a customer's billing profile

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Gets the billing profile of a customer.

In the Partner Center dashboard, this operation can be performed by first [selecting a customer](#). Then, under the customer's name in the left sidebar, select **Account**. The billing profile can be found under the **Bill-to info** heading.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## C#

To get a customer's billing profile, use your **IPartner.Customers** collection and call the **ById()** method. Then call the **Profiles** property, followed by the **Billing** property. Finally, call the **Get()** or **GetAsync()** methods.

```
// IAggregatePartner partnerOperations;
// var selectedCustomerId as string;

var billingProfile = partnerOperations.Customers.ById(selectedCustomerId).Profiles.Billing.Get();
```

Sample: [Console test app](#). Project: PartnerSDK.FeatureSamples Class: GetCustomerBillingProfile.cs

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/customers/{customer-tenant-id}/profiles/billing</code> HTTP/1.1

### URI parameter

Use the following query parameter to get the billing profile.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	guid	Y	The value is a GUID formatted <b>customer-tenant-id</b> that allows the reseller to filter the results for a given customer that belongs to the reseller.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/<customer-tenant-id>/profiles/billing HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: a5581a74-2778-4e34-9172-18baa4877081
MS-CorrelationId: 51d521b3-62db-4682-b75d-fb8ab09113b2
```

## REST response

If successful, this method returns a collection of [Profile](#) resources in the response body.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

## Response example

HTTP/1.1 200 OK  
Content-Length: 1206  
Content-Type: application/json  
MS-CorrelationId: 51d521b3-62db-4682-b75d-fb8ab09113b2  
MS-RequestId: a5581a74-2778-4e34-9172-18baa4877081  
Date: Mon, 23 Nov 2015 18:13:43 GMT

```
{  
    "id": "<billing-profile-id>",  
    "firstName": "FirstName",  
    "lastName": "LastName",  
    "email": "email@sample.com",  
    "culture": "en-US",  
    "language": "en",  
    "companyName": "CompanyName",  
    "defaultAddress": {  
        "country": "US",  
        "city": "Redmond",  
        "state": "WA",  
        "addressLine1": "1 Microsoft Way",  
        "postalCode": "98052",  
        "firstName": "FirstName",  
        "lastName": "LastName",  
        "phoneNumber": "4255555555"  
    },  
    "links": {  
        "self": {  
            "uri": "/v1/customers/<customer-tenant-id>/profiles/billing",  
            "method": "GET",  
            "headers": []  
        }  
    },  
    "attributes": {  
        "etag": "<etag>",  
        "objectType": "CustomerBillingProfile"  
    }  
}
```

# Get a customer's company profile

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Gets the company profile of a customer.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## C#

To get the company profile for a customer, call the **IAggregatePartner.Customers.GetById** method with the customer ID to identify the customer. Then get the customer's **ICustomerProfileCollection** interface from the **Profiles** property, in order to access its Company property. Next, get the **ICustomerReadOnlyProfile** interface from the **ICustomerProfileCollection.Company** property, and call its **Get()** or **GetAsync()** methods.

```
// IAggregatePartner partnerOperations;
// string customerId;

var companyProfile = partnerOperations.Customers.GetById(customerId).Profiles.Company.Get();
```

**Sample:** [Download the Partner Center SDK](#). **Project:** PartnerSdk.FeatureSamples Class:  
GetCustomerCompanyProfile.cs

## Java

The [Partner Center Java SDK](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To get the company profile for a customer, call the **IAggregatePartner.getCustomers().byId** function with the customer identifier to identify the customer. Then get the customer's **ICustomerProfileCollection** interface from the **[getProfiles]** function, in order to access its Company property. Next, get the **ICustomerReadOnlyProfile** interface from the **ICustomerProfileCollection.getCompany** function, and call the **get** function.

```
// IAggregatePartner partnerOperations;
// String customerId;

CustomerCompanyProfile companyProfile =
partnerOperations.getCustomers().byId(customerId).getProfiles().getCompany().get();
```

## REST request

### Request syntax

METHOD	REQUEST URI
GET	{baseURL}/v1/customers/{customer-tenant-id}/profiles/company HTTP/1.1

### URI parameter

Use the following query parameter to get the company profile.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	guid	Y	The value is a GUID formatted <b>customer-tenant-id</b> that allows the reseller to filter the results for a given customer that belongs to the reseller.

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

None

### Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/4d3cf487-70f4-4e1e-9ff1-b2bfce8d9f04/profiles/company
HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 0b6f039c-e4b5-4b9e-bdac-b39077bb60da
MS-CorrelationId: ffa9174c-dbcb-47de-b70d-10e640a7f1b4
X-Locale: en-US
Host: api.partnercenter.microsoft.com
Connection: Keep-Alive
```

## REST response

If successful, this method returns information in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST Error Codes](#).

### Response example

HTTP/1.1 200 OK  
Content-Length: 488  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: ffa9174c-dbc9-47de-b70d-10e640a7f1b4  
MS-RequestId: 0b6f039c-e4b5-4b9e-bdac-b39077bb60da  
MS-CV: /e74N8OrkE29ycwZ.0  
MS-ServerId: 101112202  
Date: Wed, 04 Jan 2017 19:48:51 GMT

```
{  
    "tenantId": "4d3cf487-70f4-4e1e-9ff1-b2bfce8d9f04",  
    "domain": "dtdemocspcustomer005.onmicrosoft.com",  
    "companyName": "DT Demo CSP Customer 005",  
    "address": {  
        "country": "US",  
        "region": "WA",  
        "city": "Redmond ",  
        "addressLine1": "1 Microsoft Way",  
        "postalCode": "98052",  
        "phoneNumber": "4155551212"  
    },  
    "email": "daniel@hotmail.com.tw",  
    "links": {  
        "self": {  
            "uri": "/customers/4d3cf487-70f4-4e1e-9ff1-b2bfce8d9f04/profiles/company",  
            "method": "GET",  
            "headers": []  
        }  
    },  
    "attributes": {  
        "objectType": "CustomerCompanyProfile"  
    }  
}
```

# Get a customer's qualification

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center

How to get a customer's qualification.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## C#

To get a customer's qualification, call the **IAggregatePartner.Customers.ById** method with the customer identifier. Then use the **Qualification** property to retrieve a **ICustomerQualification** interface. Finally, call **Get** or **GetAsync** to retrieve the customer's qualification.

```
// IAggregatePartner partnerOperations;
// string customerId;

var customerQualification = partnerOperations.Customers.ById(customerId).Qualification.Get();
```

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/customers/{customer-tenant-id}/qualification</code> HTTP/1.1

### URI parameter

This table lists the required query parameter to get all the qualification.

NAME	TYPE	REQUIRED	DESCRIPTION
<code>customer-tenant-id</code>	string	Yes	A GUID-formatted string that identifies the customer.

### Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/<customer-tenant-id>/qualification HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-CorrelationId: 7d2456fd-2d79-46d0-9f8e-5d7ecd5f8745
MS-RequestId: 037db222-6d8e-4d7f-ba78-df3dca33fb68
```

## REST response

If successful, this method returns a qualification value in the response body. Below is an example of the GET call on a customer with the **education** qualification.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

### Response example

```
HTTP/1.1 200 OK
Content-Length:
Content-Type: application/json
MS-CorrelationId: 7d2456fd-2d79-46d0-9f8e-5d7ecd5f8745
MS-RequestId: 037db222-6d8e-4d7f-ba78-df3dca33fb68

"education"
```

## Related articles

- [Update a customer's qualification](#)

# Get all of a customer's orders

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Gets a collection of all the orders for a specified customer. There is a delay of up to 15 minutes between the time an order is submitted and when it will appear in a collection of a customer's orders.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## C#

To obtain a collection of all of a customer's orders:

1. Use your **IAggregatePartner.Customers** collection and call the **ById()** method.
2. Call the **Orders** property, followed by the **Get()** or **GetAsync()** methods.

```
// IAggregatePartner partnerOperations;
// string selectedCustomerId;

var orders = partnerOperations.Customers.ById(selectedCustomerId).Orders.Get();
```

Sample: [Console test app](#). Project: PartnerSDK.FeatureSamples Class: GetOrders.cs

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/customers/{customer-tenant-id}/orders</code> HTTP/1.1

### URI parameter

Use the following query parameter to get all orders.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	string	Yes	A GUID formatted string corresponding to the customer.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/b0d70a69-4c42-4b27-b17b-91a835d8686a/orders HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 0e5fc923-8e3c-4560-9100-ce7283c3e081
MS-CorrelationId: 8a53b025-d5be-4d98-ab20-229d1813de76
Connection: Keep-Alive
```

## REST response

If successful, this method returns a collection of [Order](#) resources in the response body.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 22463
Content-Type: application/json; charset=utf-8
MS-RequestId: 0e5fc923-8e3c-4560-9100-ce7283c3e081
MS-CorrelationId: 8a53b025-d5be-4d98-ab20-229d1813de76
Date: Thu, 15 Mar 2018 20:44:40 GMT

{
  "totalCount": 2,
  "items": [
    {
      "id": "9qg-Erc0-4MPbPqq_3MIQaS7bn8W6HfG1",
      "referenceCustomerId": "b0d70a69-4c42-4b27-b17b-91a835d8686a",
      "billingCycle": "one_time",
      "currencyCode": "USD",
      "lineItems": [
        {
          "lineItemNumber": 0,
          "offerId": "DZH318Z0BQ4B:000Z:DZH318Z0DSPL",
          "friendlyName": "Reserved_VM_Instance_Standard_D1_AP_East_1_Year",
          "quantity": 1,
          "links": {
            "sku": {
              "uri": "/products/DZH318Z0BQ4B/skus/000Z?country=US",
              "method": "GET",
              "headers": []
            }
          }
        }
      ]
    }
  ]
}
```

```
],
  "creationDate": "2018-03-15T02:17:15.64555674Z",
  "status": "pending",
  "links": {
    "provisioningStatus": {
      "uri": "/customers/b0d70a69-4c42-4b27-b17b-91a835d8686a/orders/9qg-Erc0-4MPbPqq_3MIQaS7bn8W6HfG1/provisioningstatus",
      "method": "GET",
      "headers": []
    },
    "self": {
      "uri": "/customers/b0d70a69-4c42-4b27-b17b-91a835d8686a/orders/9qg-Erc0-4MPbPqq_3MIQaS7bn8W6HfG1",
      "method": "GET",
      "headers": []
    }
  },
  "attributes": {
    "objectType": "Order"
  }
},
{
  "id": "eeba9d00-7b46-443a-917e-22887a8fc993",
  "referenceCustomerId": "b0d70a69-4c42-4b27-b17b-91a835d8686a",
  "billingCycle": "monthly",
  "currencyCode": "USD",
  "lineItems": [
    {
      "lineItemNumber": 0,
      "offerId": "E59159FC-6F67-4599-B3CB-17FF4020F643",
      "subscriptionId": "DB8C695B-1C3C-4C55-B697-771503DD46BF",
      "friendlyName": "Azure Active Directory Premium P2",
      "quantity": 1,
      "links": {
        "subscription": {
          "uri": "/customers/b0d70a69-4c42-4b27-b17b-91a835d8686a/subscriptions/DB8C695B-1C3C-4C55-B697-771503DD46BF",
          "method": "GET",
          "headers": []
        },
        "sku": {
          "uri": "/products/84A661C4-E949-4BD2-A560-ED7766FCAF2B/skus/E59159FC-6F67-4599-B3CB-17FF4020F643",
          "method": "GET",
          "headers": []
        },
        "provisioningStatus": {
          "uri": "/subscriptions/DB8C695B-1C3C-4C55-B697-771503DD46BF/provisioningstatus",
          "method": "GET",
          "headers": []
        }
      }
    ],
    "creationDate": "2018-03-06T17:37:05.253-08:00",
    "status": "completed",
    "links": {
      "self": {
        "uri": "/customers/b0d70a69-4c42-4b27-b17b-91a835d8686a/orders/eeba9d00-7b46-443a-917e-22887a8fc993",
        "method": "GET",
        "headers": []
      }
    },
    "attributes": {
      "etag": "eyJpZCI6ImVlYmE5ZDAwLTdiNDYtNDQzYS05MTdlLTIyODg3YThmYzk5MyIsInZlcNpb24i0jF9",
      "objectType": "Order"
    }
  ]
},
```

```
"links": {  
    "self": {  
        "uri": "/customers/b0d70a69-4c42-4b27-b17b-91a835d8686a/orders",  
        "method": "GET",  
        "headers": []  
    }  
},  
"attributes": {  
    "objectType": "Collection"  
}  
}
```

# Get a customer's subscriptions

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

How to get a collection of a customer's subscriptions.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select CSP from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## C#

To get a list of all of a customer's subscriptions, first use the [IAggregatePartner.Customers.ById](#) method with the customer identifier to identify the customer. Then use the [Subscriptions](#) property to retrieve an interface to subscription collection operations. Finally, call the [Get](#) or [GetAsync](#) methods to retrieve the customer's subscriptions collection.

```
// IAggregatePartner partnerOperations;
// string customerId;

var customerSubscriptions = partnerOperations.CustomersById(customerId).Subscriptions.Get();
```

Sample: [Console test app](#). Project: Partner Center SDK Samples Class: GetSubscriptions.cs

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<a href="#"><code>{baseUrl}</code></a> /v1/customers/{customer-tenant-id}/subscriptions HTTP/1.1

### URI parameter

This table lists the required query parameter to get all the subscriptions.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	string	Yes	A GUID-formatted string that identifies the customer.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/<customer-tenant-id>/subscriptions HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: b2d13828-2ca5-41d4-94fb-9946214f4244
MS-CorrelationId: c49004b1-224f-4d86-a607-6c8bcc52cfdd
Connection: Keep-Alive
```

## REST response

If successful, this method returns a collection of [Subscription](#) resources in the response body.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

## Response example

HTTP/1.1 200 OK  
Content-Length: 73754  
Content-Type: application/json  
MS-CorrelationId: c49004b1-224f-4d86-a607-6c8bcc52cfdd  
MS-RequestId: b2d13828-2ca5-41d4-94fb-9946214f4244  
Date: Wed, 25 Nov 2015 05:43:06 GMT

```
{  
    "totalCount": 37,  
    "items": [  
        {  
            "id": "83ef9d05-4169-4ef9-9657-0e86b1eab1de",  
            "entitlementId": "a356ac8c-e310-44f4-bf85-C7f29044af99",  
            "friendlyName": "nickname",  
            "quantity": 1,  
            "unitType": "none",  
            "creationDate": "2015-11-25T06: 41: 12Z",  
            "effectiveStartDate": "2015-11-24T08: 00: 00Z",  
            "commitmentEndDate": "2016-12-12T08: 00: 00Z",  
            "status": "active",  
            "autoRenewEnabled": false,  
            "billingType": "none",  
            "contractType": "subscription",  
            "links": {  
                "offer": {  
                    "uri": "/v1/offers/0CCA44D6-68E9-4762-94EE-31ECE98783B9",  
                    "method": "GET",  
                    "headers": []  
                },  
                "self": {  
                    "uri": "/subscriptions?key=<key>",  
                    "method": "GET",  
                    "headers": []  
                }  
            },  
            "orderId": "6183db3d-6318-4e52-877e-25806e4971be",  
            "attributes": {  
                "etag": "<etag>",  
                "objectType": "Subscription"  
            }  
        },  
        {  
            "attributes": {  
                "objectType": "Collection"  
            }  
        }  
    ]  
}
```

# Get a customer's subscriptions transfer eligibility

6/19/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center

How to get a collection of a customer's subscriptions that are eligible/ineligible for transfer.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseURL}/v1/customers/{customer-tenant-id}/transferseligibility?transferType={transfer-type}</code> HTTP/1.1

### URI parameter

This table lists the required query parameter to get all the subscriptions.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	string	Yes	A GUID-formatted string that identifies the customer.
transfer-type	string	Yes	The type of transfer that is intended.

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

None.

### Request example

```
GET /v1/customers/823c6c3f-9259-4d51-bae2-5dd06743177f/transferseligibility?transferType=directtoindirect
HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 202b5e9a-ae82-4ab9-8a0a-f4e9e04eb14d
MS-CorrelationId: cd589c16-dc94-49ad-e529-125c258573d6
Connection: Keep-Alive
```

## REST response

If successful, this method returns a collection of [TransferEligibility](#) resources in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

### Response example

```
HTTP/1.1 200 OK
Content-Length: 73754
Content-Type: application/json
MS-CorrelationId: cd589c16-dc94-49ad-e529-125c258573d6
MS-RequestId: 202b5e9a-ae82-4ab9-8a0a-f4e9e04eb14d
Date: Tue, 24 Mar 2020 23:43:25 GMT

[
  {
    "id": "548FA265-5F40-4765-9A6B-47826F72A4BF",
    "isEligible": false,
    "reason": "Subscription: 548FA265-5F40-4765-9A6B-47826F72A4BF is in state: Deleted"
  },
  {
    "id": "E2A3AEB3-70A7-42E3-930C-7519EEDDC45A",
    "isEligible": false,
    "reason": "Subscription: E2A3AEB3-70A7-42E3-930C-7519EEDDC45A is in state: Suspended"
  },
  {
    "id": "4B600A9A-DF56-4564-A75A-6CC6D2D0C9F9",
    "isEligible": false,
    "reason": "subscription is already part of another transfer request id : 31a06eac-c527-458a-a6b4-0de197a45996"
  },
  {
    "id": "D3350F46-AA29-4F6F-95A0-E3011988915C",
    "isEligible": true
  },
  {
    "id": "E82B2F4A-736A-4E2B-955C-C1A4C56C0171",
    "isEligible": true
  }
]
```

# Get a customer's transfers

6/19/2020 • 5 minutes to read • [Edit Online](#)

## Applies To

- Partner Center

How to get a list of a customer's transfers.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## Request syntax

METHOD	REQUEST URI
GET	<code>/baseURL/v1/customers/{customer-tenant-id}/transfers</code> HTTP/1.1

## URI parameter

This table lists the required query parameter to get all the subscriptions.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	string	Yes	A GUID-formatted string that identifies the customer.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET /v1/customers/b67f0b00-f9e8-4c57-bcb5-0b8b95c6ccf0/transfers HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: ca2cdd2c-7eb8-4a2e-cdd7-2848752e801a
MS-CorrelationId: dec58181-67b5-4831-c2c9-2fa099122f5d
Connection: Keep-Alive
```

## REST response

If successful, this method returns a list of [TransferEntity](#) resources in the response body.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 13828
Content-Type: application/json
MS-CorrelationId: dec58181-67b5-4831-c2c9-2fa099122f5d
MS-RequestId: ca2cdd2c-7eb8-4a2e-cdd7-2848752e801a
Date: Fri, 27 Mar 2020 17:50:34 GMT

[
  {
    "id": "ab724652-3442-4912-8615-61525bb9903d",
    "status": "Reject",
    "createdTime": "2019-10-09T22:44:13.5411441Z",
    "lastModifiedTime": "2020-02-20T21:27:59Z",
    "customerTenantId": "b67f0b00-f9e8-4c57-bcb5-0b8b95c6ccf0",
    "partnertenantid": "3a9a35ce-d5be-4814-ab58-4451c36fe157",
    "sourcePartnerName": "Test_Test_09032019GBL",
    "sourcePartnerTenantId": "7c8db11f-1e5e-4472-8386-f0b627d1f3e1",
    "targetPartnerName": "Test_Test_09032019GBL",
    "targetPartnerTenantId": "3a9a35ce-d5be-4814-ab58-4451c36fe157",
    "lastModifiedUser": "edc0524d-2e42-4619-af7e-349c015cfdfd",
    "lineItems": [
      {
        "id": 0,
        "subscriptionId": "586DFB1A-E65C-48F4-BF6C-0D62D68AF1D0",
        "offerId": "B4D4B7F4-4089-43B6-9C44-DE97B760FB11",
        "billingCycle": "monthly",
        "friendlyName": "Visio Online Plan 2",
        "quantity": 1,
        "partnerIdOnRecord": "5139005",
        "addonItems": [
          ]
      },
      {
        "id": 0,
        "subscriptionId": "1151B8CE-125C-49D7-8C48-E62FC9101B77",
        "offerId": "13D32E13-A1B0-400D-96C0-4EAAA14DCED5",
        "billingCycle": "monthly",
        "friendlyName": "Dynamics 365 for Supply Chain Management Attach to Qualifying Dynamics 365 Base Offer (Qualified Offer)",
        "quantity": 20,
        "partnerIdOnRecord": "5139005",
        "addonItems": [
          ]
      }
    ],
    "links": {
      "self": {
        "uri": "/customers/b67f0b00-f9e8-4c57-bcb5-0b8b95c6ccf0/transfers/ab724652-3442-4912-8615-61525bb9903d",
        "method": "GET",
        "headers": [
          ]
      }
    },
    "attributes": {
      "objectType": "TransferEntity"
    }
  }
]
```

```
},
{
  "id": "38a00d97-421c-4c33-8ae4-c8750604e02c",
  "status": "Complete",
  "createdTime": "2020-02-20T21:16:30.0149083Z",
  "lastModifiedTime": "2020-02-27T01:11:33Z",
  "customerTenantId": "b67f0b00-f9e8-4c57-bcb5-0b8b95c6ccf0",
  "partnertenantid": "3a9a35ce-d5be-4814-ab58-4451c36fe157",
  "sourcePartnerName": "Test_Test_09092019GBL",
  "sourcePartnerTenantId": "7c8db11f-1e5e-4472-8386-f0b627d1f3e1",
  "targetPartnerName": "Test_Test_09032019GBL",
  "targetPartnerTenantId": "3a9a35ce-d5be-4814-ab58-4451c36fe157",
  "lastModifiedUser": "edc0524d-2e42-4619-af7e-349c015cfdf",
  "lineItems": [
    {
      "id": 0,
      "subscriptionId": "25339C80-8C79-49A8-8C38-C98A80F4D3A5",
      "offerId": "5E1087B6-246B-4503-B88A-B60BDF0B3840",
      "orderId": "5761e79a-f441-4a18-9902-83f9582ccff6",
      "billingCycle": "monthly",
      "friendlyName": "PowerApps per app plan",
      "quantity": 1,
      "partnerIdOnRecord": "5139005",
      "transferGroupId": "0",
      "status": "Complete",
      "addonItems": [
        ]
    },
    {
      "id": 0,
      "subscriptionId": "FE2EA4C8-88EA-41DC-BC2F-76195E282202",
      "offerId": "91FD106F-4B2C-4938-95AC-F54F74E9A239",
      "orderId": "9a088a06-dfe5-4f71-ba79-2711c313b634",
      "billingCycle": "monthly",
      "friendlyName": "Office 365 E1",
      "quantity": 1,
      "partnerIdOnRecord": "5139005",
      "transferGroupId": "1",
      "status": "Complete",
      "addonItems": [
        ]
    },
    {
      "id": 0,
      "subscriptionId": "D6C8BF37-CE99-46E1-A64F-329F1971F54D",
      "offerId": "MS-AZR-0145P",
      "orderId": "6a9a544c-54c9-43e9-a863-b40c6f92d111",
      "billingCycle": "monthly",
      "friendlyName": "Microsoft Azure",
      "quantity": 1,
      "partnerIdOnRecord": "5139005",
      "transferGroupId": "2",
      "status": "Complete",
      "addonItems": [
        ]
    }
  ],
  "links": {
    "self": {
      "uri": "/customers/b67f0b00-f9e8-4c57-bcb5-0b8b95c6ccf0/transfers/38a00d97-421c-4c33-8ae4-c8750604e02c",
      "method": "GET",
      "headers": [
        ]
    }
  }
}
```

```
,
```

```
    },
    "attributes": {
        "objectType": "TransferEntity"
    }
},
{
    "id": "d4f478d2-61e0-4550-b85d-c427abfe1e62",
    "status": "Complete",
    "createdTime": "2020-02-20T21:28:55.4245587Z",
    "lastModifiedTime": "2020-02-20T21:29:22Z",
    "customerTenantId": "b67f0b00-f9e8-4c57-bcb5-0b8b95c6ccf0",
    "partnertenantid": "3a9a35ce-d5be-4814-ab58-4451c36fe157",
    "sourcePartnerName": "Test_Test_09092019GBL",
    "sourcePartnerTenantId": "7c8db11f-1e5e-4472-8386-f0b627d1f3e1",
    "targetPartnerName": "Test_Test_09032019GBL",
    "targetPartnerTenantId": "3a9a35ce-d5be-4814-ab58-4451c36fe157",
    "lastModifiedUser": "edc0524d-2e42-4619-af7e-349c015cfdfd",
    "lineItems": [
        {
            "id": 0,
            "subscriptionId": "586DFB1A-E65C-48F4-BF6C-0D62D68AF1D0",
            "offerId": "B4D4B7F4-4089-43B6-9C44-DE97B760FB11",
            "orderId": "2340952e-af72-40e6-a106-e9b2aca99bb5",
            "billingCycle": "monthly",
            "friendlyName": "Visio Online Plan 2",
            "quantity": 2,
            "partnerIdOnRecord": "5139005",
            "transferGroupId": "0",
            "status": "Complete",
            "addonItems": [
                ]
            },
            {
                "id": 0,
                "subscriptionId": "6D63E69C-7551-4E37-B7F6-87AC124B3235",
                "offerId": "F1A2FDB0-5CA8-475D-8CCC-9BB81C033DA5",
                "orderId": "5dd120ab-10a4-4bbf-b2bd-e52657431f85",
                "billingCycle": "monthly",
                "friendlyName": "Dynamics 365 for Project Service Automation (Qualified Offer) (250 seat minimum requirement)",
                "quantity": 250,
                "partnerIdOnRecord": "5139005",
                "transferGroupId": "1",
                "status": "Complete",
                "addonItems": [
                    ]
            }
        ],
        "links": {
            "self": {
                "uri": "/customers/b67f0b00-f9e8-4c57-bcb5-0b8b95c6ccf0/transfers/d4f478d2-61e0-4550-b85d-c427abfe1e62",
                "method": "GET",
                "headers": [
                    ]
            }
        },
        "attributes": {
            "objectType": "TransferEntity"
        }
},
{
    "id": "f10421cd-d4af-4939-82b9-cd0e75022759",
    "status": "PartiallyComplete",
    "createdTime": "2020-02-26T21:54:51.2901506Z",
    "lastModifiedTime": "2020-02-27T01:10:26Z"
```

```
    "lastModifiedTime": "2020-02-27T01:10:20Z",
    "customerTenantId": "b67f0b00-f9e8-4c57-bcb5-0b8b95c6ccf0",
    "partnerTenantId": "3a9a35ce-d5be-4814-ab58-4451c36fe157",
    "sourcePartnerName": "Test_Test_09092019GBL",
    "sourcePartnerTenantId": "7c8db11f-1e5e-4472-8386-f0b627d1f3e1",
    "targetPartnerName": "Test_Test_09032019GBL",
    "targetPartnerTenantId": "3a9a35ce-d5be-4814-ab58-4451c36fe157",
    "lastModifiedUser": "edc0524d-2e42-4619-af7e-349c015cfdf",
    "lineItems": [
        {
            "id": 0,
            "subscriptionId": "586DFB1A-E65C-48F4-BF6C-0D62D68AF1D0",
            "offerId": "B4D4B7F4-4089-43B6-9C44-DE97B760FB11",
            "billingCycle": "monthly",
            "friendlyName": "Visio Online Plan 2",
            "quantity": 2,
            "partnerIdOnRecord": "5139005",
            "transferGroupId": "0",
            "status": "Failed",
            "addonItems": [
                ],
            "transferError": "Subscription has already been transferred. Subscription: 586dfb1a-e65c-48f4-bf6c-0d62d68af1d0"
        },
        {
            "id": 0,
            "subscriptionId": "E9C06692-4D85-411E-8C4A-45E3D6D24EDD",
            "offerId": "1B4642E5-C69A-43EA-B4F6-F29BAE46227E",
            "orderId": "0e6793f0-3d9c-4749-b50d-1cf3527aa454",
            "billingCycle": "monthly",
            "friendlyName": "Dynamics 365 for Retail Attach to Qualifying Dynamics 365 Base Offer From SA From VL/DPL",
            "quantity": 20,
            "partnerIdOnRecord": "5139005",
            "transferGroupId": "1",
            "status": "Complete",
            "addonItems": [
                ]
        }
    ],
    "links": {
        "self": {
            "uri": "/customers/b67f0b00-f9e8-4c57-bcb5-0b8b95c6ccf0/transfers/f10421cd-d4af-4939-82b9-cd0e75022759",
            "method": "GET",
            "headers": [
                ]
        }
    },
    "attributes": {
        "objectType": "TransferEntity"
    }
},
{
    "id": "ddb933ad-02f4-4678-a09a-7fecca481acc",
    "status": "Reject",
    "createdTime": "2020-03-11T17:44:26.8841412Z",
    "lastModifiedTime": "2020-03-11T17:45:08Z",
    "customerTenantId": "b67f0b00-f9e8-4c57-bcb5-0b8b95c6ccf0",
    "partnerTenantId": "3a9a35ce-d5be-4814-ab58-4451c36fe157",
    "sourcePartnerName": "Test_Test_09092019GBL",
    "sourcePartnerTenantId": "7c8db11f-1e5e-4472-8386-f0b627d1f3e1",
    "targetPartnerName": "Test_Test_09032019GBL",
    "targetPartnerTenantId": "3a9a35ce-d5be-4814-ab58-4451c36fe157",
    "lastModifiedUser": "01a7548d-1136-4cf0-ba9a-300f921ffb22",
    "lineItems": [
        ]
```

```

    "id": 0,
    "subscriptionId": "68ECA8B4-A5E7-4245-94FB-A7A81F3B7234",
    "offerId": "5B04B78C-FD36-4CF3-A7A5-3457991C8B79",
    "billingCycle": "monthly",
    "friendlyName": "Dynamics 365 Business Central Device",
    "quantity": 1,
    "partnerIdOnRecord": "5139005",
    "addonItems": [
        ]
    },
    {
        "id": 1,
        "subscriptionId": "F09A8540-AE89-4B08-8967-1ECB92FEE35B",
        "offerId": "MS-AZR-0145P",
        "billingCycle": "monthly",
        "friendlyName": "Microsoft Azure",
        "quantity": 1,
        "partnerIdOnRecord": "5139005",
        "addonItems": [
            ]
        }
    ],
    "links": {
        "self": {
            "uri": "/customers/b67f0b00-f9e8-4c57-bcb5-0b8b95c6ccf0/transfers/ddb933ad-02f4-4678-a09a-7fecca481acc",
            "method": "GET",
            "headers": [
                ]
            }
        },
        "attributes": {
            "objectType": "TransferEntity"
        }
    },
    {
        "id": "0a25bd0e-e6c1-40ac-9e96-40b56d46e902",
        "status": "Complete",
        "createdTime": "2020-03-11T17:56:53.622599Z",
        "lastModifiedTime": "2020-03-11T17:58:00Z",
        "customerTenantId": "b67f0b00-f9e8-4c57-bcb5-0b8b95c6ccf0",
        "partnertenantid": "3a9a35ce-d5be-4814-ab58-4451c36fe157",
        "sourcePartnerName": "Test_Test_09092019GBL",
        "sourcePartnerTenantId": "7c8db11f-1e5e-4472-8386-f0b627d1f3e1",
        "targetPartnerName": "Test_Test_09032019GBL",
        "targetPartnerTenantId": "3a9a35ce-d5be-4814-ab58-4451c36fe157",
        "lastModifiedUser": "edc0524d-2e42-4619-af7e-349c015cfdfd",
        "lineItems": [
            {
                "id": 0,
                "subscriptionId": "68ECA8B4-A5E7-4245-94FB-A7A81F3B7234",
                "offerId": "5B04B78C-FD36-4CF3-A7A5-3457991C8B79",
                "orderId": "42436b2f-d417-4642-bb76-feb697184100",
                "billingCycle": "monthly",
                "friendlyName": "Dynamics 365 Business Central Device",
                "quantity": 1,
                "partnerIdOnRecord": "5139005",
                "transferGroupId": "0",
                "status": "Complete",
                "addonItems": [
                    ]
                },
                {
                    "id": 1,

```

```
"subscriptionId": "F09A8540-AE89-4B08-8967-1ECB92FEE35B",
"offerId": "MS-AZR-0145P",
"orderId": "d9a1b396-ad2c-4283-a9fe-5490acd0ce7d",
"billingCycle": "monthly",
"friendlyName": "Microsoft Azure",
"quantity": 1,
"partnerIdOnRecord": "5139005",
"transferGroupId": "1",
"status": "Complete",
"addonItems": [
]
},
],
"links": {
"self": {
"uri": "/customers/b67f0b00-f9e8-4c57-bcb5-0b8b95c6ccf0/transfers/0a25bd0e-e6c1-40ac-9e96-40b56d46e902",
"method": "GET",
"headers": [
]
}
},
"attributes": {
"objectType": "TransferEntity"
}
},
{
"id": "8dc673dd-d6a6-4739-9e8f-0b66bbf2a2c8",
"status": "Complete",
"createdTime": "2020-03-19T23:21:03.2754503Z",
"lastModifiedTime": "2020-03-19T23:22:33Z",
"customerTenantId": "b67f0b00-f9e8-4c57-bcb5-0b8b95c6ccf0",
"partnertenantid": "3a9a35ce-d5be-4814-ab58-4451c36fe157",
"sourcePartnerName": "Test_Test_09092019GBL",
"sourcePartnerTenantId": "7c8db11f-1e5e-4472-8386-f0b627d1f3e1",
"targetPartnerName": "Test_Test_09032019GBL",
"targetPartnerTenantId": "3a9a35ce-d5be-4814-ab58-4451c36fe157",
"lastModifiedUser": "3badf44d-fd41-4432-a17d-214e31f2d9ee",
"lineItems": [
{
"id": 0,
"subscriptionId": "F5B2EB56-9E0E-4160-9CEE-4218D1EEADDB",
"offerId": "3DD9350B-27D6-4501-93A4-C8D107F1DE47",
"orderId": "31bfde4a-efca-49b2-b210-62973fb773db",
"billingCycle": "monthly",
"friendlyName": "Microsoft Flow Plan 1 (Qualified Offer)",
"quantity": 1,
"partnerIdOnRecord": "5139005",
"transferGroupId": "0",
"status": "Complete",
"addonItems": [
]
}
],
"links": {
"self": {
"uri": "/customers/b67f0b00-f9e8-4c57-bcb5-0b8b95c6ccf0/transfers/8dc673dd-d6a6-4739-9e8f-0b66bbf2a2c8",
"method": "GET",
"headers": [
]
}
},
"attributes": {
"objectType": "TransferEntity"
}
```

```
        },
    },
    {
        "id": "ac4a9d22-ba07-444e-890f-cfe084eed498",
        "status": "Reject",
        "createdTime": "2020-03-25T22:05:25.1057725Z",
        "lastModifiedTime": "2020-03-27T17:50:32Z",
        "customerTenantId": "b67f0b00-f9e8-4c57-bcb5-0b8b95c6ccf0",
        "partnertenantid": "3a9a35ce-d5be-4814-ab58-4451c36fe157",
        "sourcePartnerName": "Test_Test_09092019GBL",
        "sourcePartnerTenantId": "7c8db11f-1e5e-4472-8386-f0b627d1f3e1",
        "targetPartnerName": "Test_Test_09032019GBL",
        "targetPartnerTenantId": "3a9a35ce-d5be-4814-ab58-4451c36fe157",
        "lastModifiedUser": "01a7548d-1136-4cf0-ba9a-300f921ffb22",
        "lineItems": [
            {
                "id": 0,
                "subscriptionId": "1151B8CE-125C-49D7-8C48-E62FC9101B77",
                "offerId": "13D32E13-A1B0-400D-96C0-4EAAA14DCED5",
                "billingCycle": "monthly",
                "friendlyName": "Dynamics 365 for Supply Chain Management Attach to Qualifying Dynamics 365 Base Offer (Qualified Offer)",
                "quantity": 20,
                "partnerIdOnRecord": "5139005",
                "addonItems": [
                    ]
                }
            ],
        "links": {
            "self": {
                "uri": "/customers/b67f0b00-f9e8-4c57-bcb5-0b8b95c6ccf0/transfers/ac4a9d22-ba07-444e-890f-cfe084eed498",
                "method": "GET",
                "headers": [
                    ]
                }
            },
        "attributes": {
            "objectType": "TransferEntity"
        }
    },
    {
        "id": "7b1ce5e6-5829-45c6-b3bb-89bfb791a69e",
        "status": "PartiallyComplete",
        "createdTime": "2020-03-25T22:20:38.8090876Z",
        "lastModifiedTime": "2020-03-25T22:24:35Z",
        "customerTenantId": "b67f0b00-f9e8-4c57-bcb5-0b8b95c6ccf0",
        "partnertenantid": "3a9a35ce-d5be-4814-ab58-4451c36fe157",
        "sourcePartnerName": "Test_Test_09092019GBL",
        "sourcePartnerTenantId": "7c8db11f-1e5e-4472-8386-f0b627d1f3e1",
        "targetPartnerName": "Test_Test_09032019GBL",
        "targetPartnerTenantId": "3a9a35ce-d5be-4814-ab58-4451c36fe157",
        "lastModifiedUser": "edc0524d-2e42-4619-af7e-349c015cfdfd",
        "lineItems": [
            {
                "id": 0,
                "subscriptionId": "2FAFDD44-1891-4EEA-9928-A07B558825C5",
                "offerId": "5344C201-3099-44E5-B333-C3EB0401EDE0",
                "orderId": "21b92393-ffce-4bc7-87c5-62cfa897d8f9",
                "billingCycle": "annual",
                "friendlyName": "Dynamics 365 Customer Engagement Plan (36 mo)",
                "quantity": 1,
                "partnerIdOnRecord": "5139005",
                "transferGroupId": "0",
                "status": "Complete",
                "addonItems": [

```

```
        ],
    },
    {
        "id": 1,
        "subscriptionId": "637FF8F6-D842-4573-8DA8-89765356CD1A",
        "offerId": "A4179D30-CC09-49F0-977E-DC2CB70B874F",
        "billingCycle": "annual",
        "friendlyName": "Project Online Essentials",
        "quantity": 1,
        "partnerIdOnRecord": "5139005",
        "transferGroupId": "1",
        "status": "Failed",
        "addonItems": [
            ],
        "transferError": "Subscription SyncState must be SyncComplete for the Subscription to be a source in a Subscription Ownership Transfer. Subscription: 637ff8f6-d842-4573-8da8-89765356cd1a, current state: None"
    },
    {
        "id": 2,
        "subscriptionId": "41D4FD77-1EB3-425A-BF40-88B8461D39B2",
        "offerId": "1A90EE13-2CB4-4785-BB0F-542813F00A37",
        "orderId": "7414b8ea-c167-4cc4-bc8e-b43efc177a46",
        "billingCycle": "annual",
        "friendlyName": "Dynamics 365 Business Central Essential",
        "quantity": 1,
        "partnerIdOnRecord": "5139005",
        "transferGroupId": "2",
        "status": "Complete",
        "addonItems": [
            ]
    }
],
"links": {
    "self": {
        "uri": "/customers/b67f0b00-f9e8-4c57-bcb5-0b8b95c6ccf0/transfers/7b1ce5e6-5829-45c6-b3bb-89bfb791a69e",
        "method": "GET",
        "headers": [
            ]
    }
},
"attributes": {
    "objectType": "TransferEntity"
}
}
]
```

# Get transfer details by id

6/19/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A transfer identifier for an existing transfer.

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>/baseURL/v1/customers/{customer-id}/transfers/{transfer-id}</code> HTTP/1.1

### URI parameter

Use the following path parameter to identify the customer and specify the transfer to be accepted.

NAME	TYPE	REQUIRED	DESCRIPTION
<code>customer-id</code>	string	Yes	A GUID formatted customer-id that identifies the customer.
<code>transfer-id</code>	string	Yes	A GUID formatted transfer-id that identifies the transfer.

### Request headers

For more information, see [Partner Center REST headers](#).

### Request example

```
GET /v1/customers/b67f0b00-f9e8-4c57-bcb5-0b8b95c6ccf0/transfers/46e8ed67-8adf-4f65-b3d8-d31318080556 HTTP/1.1
Authorization: Bearer <token>
Connection: keep-alive
MS-RequestId: 0d61b5ce-b396-4f5e-a50b-e8779d0d23cc
MS-CorrelationId: 68eacc61-971c-43b0-c06f-2622bf79b090
Accept: application/json
```

# REST response

If successful, this method returns the populated [TransferEntity](#) resource in the response body.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 1501
Content-Type: application/json; charset=utf-8
MS-CorrelationId: 68eacc61-971c-43b0-c06f-2622bf79b090
MS-RequestId: 0d61b5ce-b396-4f5e-a50b-e8779d0d23cc
X-Locale: en-US
Date: Fri, 27 Mar 2020 18:25:25 GMT

{
  "id": "46e8ed67-8adf-4f65-b3d8-d31318080556",
  "status": "Active",
  "createdTime": "2020-03-27T18:22:33.2875302Z",
  "lastModifiedTime": "2020-03-27T18:22:33Z",
  "customerTenantId": "b67f0b00-f9e8-4c57-bcb5-0b8b95c6ccf0",
  "partnertenantid": "3a9a35ce-d5be-4814-ab58-4451c36fe157",
  "sourcePartnerName": "Test_Test_09092019GBL",
  "sourcePartnerTenantId": "7c8db11f-1e5e-4472-8386-f0b627d1f3e1",
  "targetPartnerName": "Test_Test_09032019GBL",
  "targetPartnerTenantId": "3a9a35ce-d5be-4814-ab58-4451c36fe157",
  "lastModifiedUser": "edc0524d-2e42-4619-af7e-349c015cfdfd",
  "lineItems": [
    {
      "id": 0,
      "subscriptionId": "75B71186-73C3-45B4-A403-281C0D7EB032",
      "offerId": "F72752C8-3E37-4C9B-A1A0-69E8442068DC",
      "billingCycle": "annual",
      "friendlyName": "Dynamics 365 Business Central Team Member",
      "quantity": 1,
      "partnerIdOnRecord": "5139005",
      "addonItems": [
        ]
    },
    {
      "id": 1,
      "subscriptionId": "1FB4CB0A-EB79-4300-9E87-7D486054888A",
      "offerId": "88F9EB8A-0636-45E8-A601-553E0A48AA9E",
      "billingCycle": "annual",
      "friendlyName": "Dynamics 365 Business Central External Accountant",
      "quantity": 1,
      "partnerIdOnRecord": "5139005",
      "addonItems": [
        ]
    },
    {
      "id": 2,
      "subscriptionId": "08AB3010-B647-402E-8955-B6C0FB364D8F",
      "offerId": "4D8F3B90-29B3-4E7B-B37C-4A435DDEF1D9",
      "billingCycle": "annual",
      "friendlyName": "Common Area Phone",
      "quantity": 1,
      "partnerIdOnRecord": "5139005",
      "addonItems": [
        ]
    }
  ]
}
```

```
        ]
    }
],
"links": {
    "self": {
        "uri": "/customers/b67f0b00-f9e8-4c57-bcb5-0b8b95c6ccf0/transfers/46e8ed67-8adf-4f65-b3d8-d31318080556",
        "method": "GET",
        "headers": [
            ]
    }
},
"attributes": {
    "objectType": "TransferEntity"
}
}
```

# Get a list of all user accounts for a customer

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center

This article describes how to get a list of all user accounts that belong to one of your customers.

To look up a single user account by ID, see [Get a user account by ID](#).

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## C#

To retrieve the collection of all user accounts for a specified customer:

1. Call the [IAggregatePartner.Customers.ById](#) method with the specified customer ID to identify the customer.
2. Call the [Users.Get](#) or [GetAsync](#) method to retrieve the collection.

```
// IAggregatePartner partnerOperations;
// string selectedCustomerId;

// Get customer users collection.
var customerUsers = partnerOperations.CustomersById(selectedCustomerId).Users.Get();
```

For an example, see the following:

- Sample: [Console test app](#)
- Project: [Partner Center SDK Samples](#)
- Class: [GetCustomerUserCollection.cs](#)

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/customers/{customer-tenant-id}/users</code> HTTP/1.1

### URI parameter

Use the following URI parameter to identify the correct customer.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	guid	Y	The value is a GUID formatted <b>customer-tenant-id</b> that allows the reseller to filter the results for a given customer that belongs to the reseller.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/4d3cf487-70f4-4e1e-9ff1-b2bfce8d9f04/users HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 5d845377-5b7d-4cd4-98f6-19e5ae3faa81
MS-CorrelationId: 5a3d64d4-4490-4932-bf5e-0dc9a58f27ca
X-Locale: en-US
Host: api.partnercenter.microsoft.com
```

## REST response

If successful, this method returns a collection of user accounts for a customer.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

## Response example

HTTP/1.1 200 OK  
Content-Length: 1030  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: 5a3d64d4-4490-4932-bf5e-0dc9a58f27ca  
MS-RequestId: 5d845377-5b7d-4cd4-98f6-19e5ae3faa81  
MS-CV: 6zmKqrSFB0+t7m3y.0  
MS-ServerId: 101112616  
Date: Wed, 21 Dec 2016 21:13:24 GMT

```
{  
    "totalCount": 2,  
    "items": [  
        {  
            "usageLocation": "US",  
            "id": "a9ef48bb-8758-4590-a312-d4a47bfaded4",  
            "userPrincipalName": "Daniel@dtdemocspcustomer005.onmicrosoft.com",  
            "firstName": "Daniel",  
            "lastName": "Tsai",  
            "displayName": "Daniel Tsai",  
            "userDomainType": "none",  
            "state": "active",  
            "links": {  
                "self": {  
                    "uri": "/customers/4d3cf487-70f4-4e1e-9ff1-b2bfce8d9f04/users/a9ef48bb-8758-4590-a312-d4a47bfaded4",  
                    "method": "GET",  
                    "headers": []  
                }  
            },  
            "attributes": {  
                "objectType": "CustomerUser"  
            }  
        }, {  
            "id": "6e668259-1f09-479d-bcb8-d9b03e826b8d",  
            "userPrincipalName": "admin@dtdemocspcustomer005.onmicrosoft.com",  
            "firstName": "Daniel",  
            "lastName": "Tsai",  
            "displayName": "DT Demo CSP Customer 005",  
            "userDomainType": "none",  
            "state": "active",  
            "links": {  
                "self": {  
                    "uri": "/customers/4d3cf487-70f4-4e1e-9ff1-b2bfce8d9f04/users/6e668259-1f09-479d-bcb8-d9b03e826b8d",  
                    "method": "GET",  
                    "headers": []  
                }  
            },  
            "attributes": {  
                "objectType": "CustomerUser"  
            }  
        }  
    ],  
    "links": {  
        "self": {  
            "uri": "/customers/4d3cf487-70f4-4e1e-9ff1-b2bfce8d9f04/users",  
            "method": "GET",  
            "headers": []  
        }  
    },  
    "attributes": {  
        "objectType": "Collection"  
    }  
}
```

# Get a list of available licenses

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## Applies to:

- Partner Center

This article describes how to get a list of licenses available to users of the specified customer.

The following examples return licenses available from **group1**, the default license group that represents licenses managed by Azure Active Directory (Azure AD). To get available licenses for a specified license group, see [Get a list of available licenses by license group](#).

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select CSP from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## C#

To retrieve the list of licenses available from the default license group to users of a customer:

1. Use the [IAggregatePartner.Customers.ById](#) method with the customer ID to identify the customer.
2. Get the value of the [SubscribedSkus](#) property to retrieve an interface to customer subscribed SKU collection operations.
3. Call the [Get](#) or [GetAsync](#) method to retrieve the list of licenses.

```
// string selectedCustomerId;
// IAggregatePartner partnerOperations;

var customerUserSubscribedSkus = partnerOperations.CustomersById(selectedCustomerId).SubscribedSkus.Get();
```

For an example, see the following:

- Sample: [Console test app](#)
- Project: [Partner Center SDK Samples](#)
- Class: [GetCustomerSubscribedSkus.cs](#)

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<a href="#"><i>{baseURL}</i></a> /v1/customers/{customer-id}/subscribedskus HTTP/1.1

#### URI parameter

Use the following path parameter to identify the customer.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-id	string	Yes	A GUID formatted string that identifies the customer.

#### Request headers

For more information, see [Partner Center REST headers](#).

#### Request body

None.

#### Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/0c39d6d5-c70d-4c55-bc02-f620844f3fd1/subscribedskus
HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 53308f82-1bf7-44e2-8dda-4517e4688bd4
MS-CorrelationId: 95660db2-7425-4021-babe-a26ddbcb0187
X-Locale: en-US
Host: api.partnercenter.microsoft.com
```

## REST response

If successful, the response body contains a collection of [SubscribedSku](#) resources.

#### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For a full list, see [Partner Center REST error codes](#).

#### Response example

```
HTTP/1.1 200 OK
Content-Length: 4859
Content-Type: application/json; charset=utf-8
MS-CorrelationId: 95660db2-7425-4021-babe-a26ddbcb0187
MS-RequestId: 53308f82-1bf7-44e2-8dda-4517e4688bd4
MS-CV: 7BQ0jitzXUCLwRM6.0
MS-ServerId: 020021921
Date: Fri, 09 Jun 2017 17:50:46 GMT
```

```
{
  "totalCount": 2,
  "items": [
    {
      "availableUnits": 4,
      "activeUnits": 5,
      "consumedUnits": 1,
      "suspendedUnits": 0,
      "totalUnits": 5,
      "warningUnits": 0,
      "unitType": "Standard"
    }
  ]
}
```

```
"productSku": {
    "id": "efccb6f7-5641-4e0e-bd10-b4976e1bf68e",
    "name": "Enterprise Mobility + Security E3",
    "skuPartNumber": "EMS",
    "targetType": "User",
    "licenseGroupId": "group1"
},
"servicePlans": [
    {
        "displayName": "Azure Information Protection Premium P1",
        "serviceName": "RMS_S_PREMIUM",
        "id": "6c57d4b6-3b23-47a5-9bc9-69f17b4947b3",
        "capabilityStatus": "Enabled",
        "targetType": "User"
    },
    {
        "displayName": "Microsoft Intune A Direct",
        "serviceName": "INTUNE_A",
        "id": "c1ec4a95-1f05-45b3-a911-aa3fa01094f5",
        "capabilityStatus": "Enabled",
        "targetType": "User"
    },
    {
        "displayName": "Microsoft Azure Active Directory Rights",
        "serviceName": "RMS_S_ENTERPRISE",
        "id": "bea4c11e-220a-4e6d-8eb8-8ea15d019f90",
        "capabilityStatus": "Enabled",
        "targetType": "User"
    },
    {
        "displayName": "Azure Active Directory Premium P1",
        "serviceName": "AAD_PREMIUM",
        "id": "41781fb2-bc02-4b7c-bd55-b576c07bb09d",
        "capabilityStatus": "Enabled",
        "targetType": "User"
    },
    {
        "displayName": "Microsoft Azure Multi-Factor Authentication",
        "serviceName": "MFA_PREMIUM",
        "id": "8a256a2b-b617-496d-b51b-e76466e88db0",
        "capabilityStatus": "Enabled",
        "targetType": "User"
    }
],
"capabilityStatus": "Enabled",
"attributes": {
    "objectType": "SubscribedSku"
}
},
{
    "availableUnits": 0,
    "activeUnits": 1,
    "consumedUnits": 1,
    "suspendedUnits": 0,
    "totalUnits": 1,
    "warningUnits": 0,
    "productSku": {
        "id": "f8a1db68-be16-40ed-86d5-cb42ce701560",
        "name": "Power BI Pro",
        "skuPartNumber": "POWER_BI_PRO",
        "targetType": "User",
        "licenseGroupId": "group1"
    },
    "servicePlans": [
        {
            "displayName": "Exchange Foundation",
            "serviceName": "EXCHANGE_S_FOUNDATION",
            "id": "113feb6c-3fe4-4440-bddc-54d774bf0318",
            "capabilityStatus": "Enabled",
            "targetType": "Tenant"
        },
        {
            "displayName": "Power BI Pro",
            "serviceName": "BI_AZURE_P2",
            "id": "70d33638-9c74-4d01-bfd3-562de28bd4ba",
            "capabilityStatus": "Enabled",
            "targetType": "User"
        }
    ]
}
```

```
        }
    ],
    "capabilityStatus": "Enabled",
    "attributes": {
        "objectType": "SubscribedSku"
    }
}
],
"attributes": {
    "objectType": "Collection"
}
}
```

# Get a list of available licenses by license group

4/25/2020 • 3 minutes to read • [Edit Online](#)

## Applies To

- Partner Center

How to get a list of licenses for the specified license groups available to users of the specified customer.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A list of one or more license group identifiers.

## C#

To get a list of available licenses for the specified license groups, start by instantiating a [List](#) of type **LicenseGroupId**, and then add the license groups to the list. Next, use the [IAggregatePartner.Customers.ById](#) method with the customer ID to identify the customer. Then, get the value of the **SubscribedSkus** property to retrieve an interface to customer subscribed SKU collection operations. Finally, pass the list of license groups to the [Get](#) or [GetAsync](#) method to retrieve the list of subscribed SKUs with details on available license units.

```
// string selectedCustomerId;
// IAggregatePartner partnerOperations;

// To get subscribed SKUs available for group1, the license group for Azure Active Directory (AAD).
List<LicenseGroupId> licenseGroupIds = new List<LicenseGroupId>() { LicenseGroupId.Group1};
var customerUserAadSubscribedSkus =
    partnerOperations.Customers.ById(selectedCustomerId).SubscribedSkus.Get(licenseGroupIds);

// To get subscribed SKUs available for group2, the license group for Minecraft product licenses.
List<LicenseGroupId> licenseGroupIds = new List<LicenseGroupId>() { LicenseGroupId.Group2};
var customerUserSfbSubscribedSkus =
    partnerOperations.Customers.ById(selectedCustomerId).SubscribedSkus.Get(licenseGroupIds);

// To get both AAD and Minecraft subscribed SKUs.
List<LicenseGroupId> licenseGroupIds = new List<LicenseGroupId>() { LicenseGroupId.Group1,
    LicenseGroupId.Group2};
var customerUserBothAadAndSfbSubscribedSkus =
    partnerOperations.Customers.ById(selectedCustomerId).SubscribedSkus.Get(licenseGroupIds);
```

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<a href="#"><code>{baseUrl}/v1/customers/{customer-id}/subscribedskus?</code></a> licenseGroupIds=Group1 HTTP/1.1
GET	<a href="#"><code>{baseUrl}/v1/customers/{customer-id}/subscribedskus?</code></a> licenseGroupIds=Group2 HTTP/1.1
GET	<a href="#"><code>{baseUrl}/v1/customers/{customer-id}/subscribedskus?</code></a> licenseGroupIds=Group1&licenseGroupIds=Group2 HTTP/1.1

## URI parameter

Use the following path and query parameters to identify the customer and the license groups.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-id	string	Yes	A GUID formatted string that identifies the customer.
licenseGroupIds	string	No	An enum value that indicates the license group of the assigned licenses. Valid values: Group1, Group2 Group1 - This group has all products whose license can be managed in the Azure Active Directory (AAD). Group2 - This group has only Minecraft product licenses.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/0c39d6d5-c70d-4c55-bc02-f620844f3fd1/subscribedskus?
licenseGroupIds=Group1&licenseGroupIds=Group2 HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: a1d077e4-28b1-4578-b873-6d1a82fa1644
MS-CorrelationId: c8cb5a60-ae08-4afc-92f0-efc42adfa186
X-Locale: en-US
Host: api.partnercenter.microsoft.com
```

## REST response

If successful, the response body contains a collection of [SubscribedSku](#) resources.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center error codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 4328
Content-Type: application/json; charset=utf-8
MS-CorrelationId: c8cb5a60-ae08-4afc-92f0-efc42adfa186
MS-RequestId: a1d077e4-28b1-4578-b873-6d1a82fa1644
MS-CV: S6Pd5XQAx0Ss/zQi.0
MS-ServerId: 030011719
Date: Sat, 10 Jun 2017 00:19:44 GMT

{
    "totalCount": 04,
    "items": [
        {
            "availableUnits": 15,
            "activeUnits": 15,
            "consumedUnits": 0,
            "suspendedUnits": 0,
            "totalUnits": 15,
            "warningUnits": 0,
            "productSku": {
                "id": "078d2b04-f1bd-4111-bbd4-b4b1b354cef4",
                "name": "Azure Active Directory Premium P1",
                "skuPartNumber": "AAD_PREMIUM",
                "targetType": "User",
                "licenseGroupId": "group1"
            },
            "servicePlans": [
                {
                    "displayName": "Exchange Foundation",
                    "serviceName": "EXCHANGE_S_FOUNDATION",
                    "id": "113feb6c-3fe4-4440-bddc-54d774bf0318",
                    "capabilityStatus": "Enabled",
                    "targetType": "Tenant"
                },
                {
                    "displayName": "Azure Active Directory Premium P1",
                    "serviceName": "AAD_PREMIUM",
                    "id": "41781fb2-bc02-4b7c-bd55-b576c07bb09d",
                    "capabilityStatus": "Enabled",
                    "targetType": "User"
                },
                {
                    "displayName": "Microsoft Azure Multi-Factor Authentication",
                    "serviceName": "MFA_PREMIUM",
                    "id": "8a256a2b-b617-496d-b51b-e76466e88db0",
                    "capabilityStatus": "Enabled",
                    "targetType": "User"
                }
            ],
            "capabilityStatus": "Enabled",
            "attributes": {
                "objectType": "SubscribedSku"
            }
        },
        {
            "availableUnits": 1,
            "activeUnits": 1,
            "consumedUnits": 0,
            "suspendedUnits": 0,
            "totalUnits": 1,
            "warningUnits": 0,
            "productSku": {
                "id": "54b84594-9c77-4499-8d65-5e0d5f410e78",
                "name": "Dynamics AX Task",
                "skuPartNumber": "AX_TASK_USER",
                "targetType": "User",
                "licenseGroupId": "group1"
            },
            "servicePlans": [
                ]
            ]
        }
    ]
}
```

```

    "capabilityStatus": "Enabled",
    "attributes": {
        "objectType": "SubscribedSku"
    }
},
{
    "availableUnits": 23,
    "activeUnits": 72,
    "consumedUnits": 49,
    "suspendedUnits": 0,
    "totalUnits": 72,
    "warningUnits": 0,
    "productSku": {
        "id": "984df360-9a74-4647-8cf8-696749f6247a",
        "name": "Minecraft Education Edition Faculty",
        "skuPartNumber": "CFQ7TTC0K5DR/0002",
        "targetType": "User",
        "licenseGroupId": "group2"
    },
    "servicePlans": [
        ],
        "capabilityStatus": "Enabled",
        "attributes": {
            "objectType": "SubscribedSku"
        }
},
{
    "availableUnits": 71,
    "activeUnits": 112,
    "consumedUnits": 41,
    "suspendedUnits": 0,
    "totalUnits": 112,
    "warningUnits": 0,
    "productSku": {
        "id": "1e7e1070-8ccb-4aca-b470-d7cb538cb07e",
        "name": "Windows 10 Enterprise E5",
        "skuPartNumber": "WIN_ENT_E5",
        "targetType": "User",
        "licenseGroupId": "group1"
    },
    "servicePlans": [
        {
            "displayName": "Windows Defender Advanced Threat Protection",
            "serviceName": "WINDEFATP",
            "id": "871d91ec-ec1a-452b-a83f-bd76c7d770ef",
            "capabilityStatus": "Enabled",
            "targetType": "User"
        },
        {
            "displayName": "Windows 10 Enterprise E3",
            "serviceName": "WIN10_PRO_ENT_SUB",
            "id": "21b439ba-a0ca-424f-a6cc-52f954a5b111",
            "capabilityStatus": "Enabled",
            "targetType": "User"
        }
    ],
    "capabilityStatus": "Enabled",
    "attributes": {
        "objectType": "SubscribedSku"
    }
}
],
"attributes": {
    "objectType": "Collection"
}
}
}

```

### Response example (no matching SKUs found)

If no matching subscribed SKUs can be found for the specified license groups, the response contains an empty collection with a totalCount element whose value is 0.

```
HTTP/1.1 200 OK
Content-Length: 71
Content-Type: application/json; charset=utf-8
MS-CorrelationId: c8cb5a60-ae08-4afc-92f0-efc42adfa186
MS-RequestId: a1d077e4-28b1-4578-b873-6d1a82fa1644
MS-CV: q05xrhUeDUKvhFt.0
MS-ServerId: 030020525
Date: Fri, 09 Jun 2017 22:50:11 GMT
```

```
{
    "totalCount": 0,
    "items": [],
    "attributes": {
        "objectType": "Collection"
    }
}
```

# Get a list of customers

4/25/2020 • 3 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

This article describes how to get a collection of resources that represents all of a partner's customers.

### TIP

You can also perform this operation in the Partner Center dashboard. On the main page, under **Customer management**, select **View Customers**. Or, on the sidebar, select **Customers**.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.

## C#

To get a list of all customers:

1. Use the [IAggregatePartner.Customers](#) collection to create an [IPartner](#) object.
2. Retrieve the customer list using the [Query\(\)](#) or [QueryAsync\(\)](#) methods. (For instructions on creating a query, see the [QueryFactory](#) class.)

```
// IAggregatePartner partnerOperations;

// All the operations executed on this partner operation instance will share the same correlation Id but will
// differ in request Id
IPartner scopedPartnerOperations =
    partnerOperations.With(RequestContextFactory.Instance.Create(Guid.NewGuid()));

// read customers into chunks of 40s
var customersBatch = scopedPartnerOperations.Customers.Query(QueryFactory.Instance.BuildIndexedQuery(40));
var customersEnumerator = scopedPartnerOperations.Enumerators.Customers.Create(customersBatch);
```

For an example, see the following:

- Sample: [Console test app](#)
- Project: [PartnerSDK.FeatureSamples](#)
- Class: [CustomerPaging.cs](#)

## Java

The [Partner Center Java SDK](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner

community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To get a list of all customers:

1. Use the [`IAggregatePartner.getCustomers`] function to get a reference to the customer operations.
2. Retrieve the customer list using the `query()` function.

```
// Query the customers, get the first page if a page size was set, otherwise get all customers
SeekBasedResourceCollection<Customer> customersPage =
    partnerOperations.getCustomers().query(QueryFactory.getInstance().buildIndexedQuery(40));

// Create a customer enumerator which will aid us in traversing the customer pages
IResourceCollectionEnumerator<SeekBasedResourceCollection<Customer>> customersEnumerator =
    partnerOperations.getEnumerators().getCustomers().create( customersPage );

int pageNumber = 1;

while (customersEnumerator.HasValue())
{
    /*
     * Use the customersEnumerator.GetCurrent() function to
     * access the current page of customers.
     */

    // Get the next page of customers
    customersEnumerator.Next();
}
```

## PowerShell

The [Partner Center PowerShell module](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

Execute the `Get-PartnerCustomer` command with no parameters to get a complete list of customers.

```
Get-PartnerCustomer
```

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/customers?size={size}</code> HTTP/1.1

### URI parameter

Use the following query parameter to get a list of customers.

NAME	TYPE	REQUIRED	DESCRIPTION
<code>size</code>	<code>int</code>	Y	The number of results to be displayed at one time.

### Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers?size=40 HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 3705fc6d-4127-4a87-bdba-9658f73fe019
MS-CorrelationId: b12260fb-82de-4701-a25f-dcd367690645
```

## REST response

If successful, this method returns a collection of [Customer](#) resources in the response body.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For a full list, see [Error Codes](#).

## Response example

HTTP/1.1 200 OK  
Content-Length: 15650  
Content-Type: application/json  
MS-CorrelationId: b12260fb-82de-4701-a25f-dcd367690645  
MS-RequestId: 3705fc6d-4127-4a87-bdba-9658f73fe019  
Date: Fri, 20 Nov 2015 01:08:23 GMT

```
{  
    "totalCount": 2,  
    "items": [  
        {  
            "id": "b44bb1fb-c595-45b0-9e09-d657365580bf",  
            "companyProfile": {  
                "tenantId": "<guid>",  
                "domain": "domain",  
                "companyName": "companyName",  
                "attributes": {  
                    "objectType": "CustomerCompanyProfile"  
                }  
            },  
            "relationshipToPartner": "reseller",  
            "attributes": {  
                "objectType": "Customer"  
            }  
        },  
        {  
            "id": "45c44870-ef77-4fdd-b6fe-3dacb075cff2",  
            "companyProfile": {  
                "tenantId": "<guid>",  
                "domain": "domain",  
                "companyName": "companyName",  
                "attributes": {  
                    "objectType": "CustomerCompanyProfile"  
                }  
            },  
            "relationshipToPartner": "reseller",  
            "attributes": {  
                "objectType": "Customer"  
            }  
        }  
    "links": {  
        "self": {  
            "uri": "/v1/customers?size=40",  
            "method": "GET",  
            "headers": []  
        }  
    },  
    "attributes": {  
        "objectType": "Collection"  
    }  
}
```

# Get a list of customers filtered by a search field

4/25/2020 • 3 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Gets a collection of [Customer](#) resources that match a filter. You can optionally set a page size. You can filter by company name, domain, indirect reseller, or indirect cloud solution provider (CSP).

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A user-constructed filter.

## C#

To get a collection of customers that match a filter, first instantiate a [SimpleFieldFilter](#) object to create the filter. You'll need to pass a string that contains the [CustomerSearchField](#), and indicate the type of filter operation as [FieldFilterOperation.StartsWith](#). That's the only field filter operation supported by the customers end point. You'll also need to provide the string to filter by.

Next, instantiate an [iQuery](#) object to pass to the query by calling the [BuildSimpleQuery](#) method and passing it the filter. BuildSimplyQuery is just one of the query types supported by the [QueryFactory](#) class.

Finally, to execute the filter and get the result, first use [IAggregatePartner.Customers](#) to get an interface to the partner's customer operations. Then call the [Query](#) or [QueryAsync](#) method.

```
IAggregatePartner partnerOperations;

// Specify the partial string to filter by (to match Contoso).
string searchPrefix = "cont"

// Create a simple field filter.
var fieldFilter = new SimpleFieldFilter(
    CustomerSearchField.CompanyName.ToString(),
    FieldFilterOperation.StartsWith,
    searchPrefix);

// Create an iQuery object to pass to the Query method.
var myQuery = QueryFactory.Instance.BuildSimpleQuery(fieldFilter);

// Get the collection of matching customers.
var customers = partnerOperations.Customers.Query(myQuery);
```

Sample: [Console test app](#). Project: Partner Center SDK Samples Class: FilterCustomers.cs

## REST request

## Request syntax

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/customers?size={size}&amp;filter={filter}</code> HTTP/1.1

## URI parameters

Use the following query parameters.

NAME	TYPE	REQUIRED	DESCRIPTION
size	int	No	The number of results to be displayed at one time. This parameter is optional.
filter	filter	Yes	The filter to apply to customers. This must be an encoded string.

## Filter Syntax

You must compose the filter parameter as a series of comma separated, key-value pairs. Each key and value must be individually quoted and separated by a colon. The entire filter must be encoded.

An unencoded example looks like this:

```
?filter{"Field":"CompanyName","Value":"cont","Operator":"starts_with"}
```

The following table describes the required key-value pairs:

KEY	VALUE
Field	The field to filter. The valid values can be found in <a href="#">CustomerSearchField</a> .
Value	The value to filter by. The case of the value is ignored.
Operator	The operator to apply. The only supported value for this customer scenario is "starts_with".

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers?  
size=0&filter=%7B%22Field%22%3A%22CompanyName%22%2C%22Value%22%3A%22Cont%22%2C%22Operator%22%3A%22starts_with  
%22%7D  
HTTP/1.1  
Authorization: Bearer <token>  
Accept: application/json  
MS-RequestId: 5ce66de5-eea9-486f-a11c-c852aa3d1502  
MS-CorrelationId: a2a912ee-d595-47e2-97ae-1b0ae1efa13d  
X-Locale: en-US  
Host: api.partnercenter.microsoft.com  
Connection: Keep-Alive
```

## REST response

If successful, this method returns a collection of matching [Customer](#) resources in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

### Response example

```
HTTP/1.1 200 OK  
Content-Length: 1839  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: a2a912ee-d595-47e2-97ae-1b0ae1efa13d  
MS-RequestId: dfeda56c-1af5-43fc-a9c0-346b9e85dc96  
MS-CV: n0lMNyJtaUC802p0.0  
MS-ServerId: 202010223  
Date: Fri, 24 Feb 2017 22:08:20 GMT  
  
{  
    "totalCount": 3,  
    "items": [  
        {"id": "c5757d70-06f3-4f23-8367-5a9e55019f94",  
        "companyProfile": {  
            "tenantId": "c5757d70-06f3-4f23-8367-5a9e55019f94",  
            "domain": "contoso190.onmicrosoft.com",  
            "companyName": "Contoso190",  
            "links": {  
                "self": {  
                    "uri": "/customers/c5757d70-06f3-4f23-8367-5a9e55019f94/profiles/company",  
                    "method": "GET",  
                    "headers": []  
                }  
            },  
            "attributes": {  
                "objectType": "CustomerCompanyProfile"  
            }  
        },  
        "relationshipToPartner": "reseller",  
        "links": {  
            "self": {  
                "uri": "/customers/c5757d70-06f3-4f23-8367-5a9e55019f94",  
                "method": "GET",  
                "headers": []  
            }  
        },  
        "attributes": {  
            "objectType": "Customer"  
        }  
    ],  
    "id": "7b26b357-9ca3-48b8-a58e-4febe2662a5d",  
    "companyProfile": {
```

```
        "tenantId": "7b26b357-9ca3-48b8-a58e-4febe2662a5d",
        "domain": "ContosoCorpCo.onmicrosoft.com",
        "companyName": "Contoso",
        "links": {
            "self": {
                "uri": "/customers/7b26b357-9ca3-48b8-a58e-4febe2662a5d/profiles/company",
                "method": "GET",
                "headers": []
            }
        },
        "attributes": {
            "objectType": "CustomerCompanyProfile"
        }
    },
    "relationshipToPartner": "reseller",
    "links": {
        "self": {
            "uri": "/customers/7b26b357-9ca3-48b8-a58e-4febe2662a5d",
            "method": "GET",
            "headers": []
        }
    },
    "attributes": {
        "objectType": "Customer"
    }
},
{
    "id": "bfb6ef0-311f-47ec-bbd7-0fc7846661b",
    "companyProfile": {
        "tenantId": "bfb6ef0-311f-47ec-bbd7-0fc7846661b",
        "domain": "contosocorpdemo.onmicrosoft.com",
        "companyName": "Contoso",
        "links": {
            "self": {
                "uri": "/customers/bfb6ef0-311f-47ec-bbd7-0fc7846661b/profiles/company",
                "method": "GET",
                "headers": []
            }
        },
        "attributes": {
            "objectType": "CustomerCompanyProfile"
        }
    },
    "relationshipToPartner": "reseller",
    "links": {
        "self": {
            "uri": "/customers/bfb6ef0-311f-47ec-bbd7-0fc7846661b",
            "method": "GET",
            "headers": []
        }
    },
    "attributes": {
        "objectType": "Customer"
    }
}
],
"links": {
    "self": {
        "uri": "/customers?
size=0&filter=%7B%22Field%22%3A%22Domain%22%2C%22Value%22%3A%22cont%22%2C%22operator%22%3A%22starts_with%22%7D",
        "method": "GET",
        "headers": []
    }
},
"attributes": {
    "objectType": "Collection"
}
}
```



# Get a list of orders by customer and billing cycle type

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Gets a collection of Order resources that correspond to a given customer and billing cycle type. There is a delay of up to 15 minutes between the time an order is submitted and when it will appear in a collection of a customer's orders.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## C#

To get a collection of a customer's orders:

1. Use your **IAggregatePartner.Customers** collection and call the **ById()** method with the selected customer ID.
2. Call the **Orders** property and the **ByBillingCycleType()** method with your specified **BillingCycleType**.
3. Call the **Get()** or **GetAsync()** method.

```
// IAggregatePartner partnerOperations;
// string selectedCustomerId;
// BillingCycleType selectedBillingCycleType;

var orders =
    partnerOperations.Customers.ById(selectedCustomerId).Orders.ByBillingCycleType(selectedBillingCycleType).Get();
```

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/customers/{customer-tenant-id}/orders?billingType={billing-cycle-type}</code> HTTP/1.1

METHOD	REQUEST URI
--------	-------------

## URI parameters

This table lists the required query parameters to get a collection of orders by customer ID and billing cycle type.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	string	Yes	A GUID formatted string corresponding to the customer.
billing-cycle-type	string	No	A string corresponding to the billing cycle type.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/b0d70a69-4c42-4b27-b17b-91a835d8686a/orders?
billingType=onetime HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 0e5fc923-8e3c-4560-9100-ce7283c3e081
MS-CorrelationId: 8a53b025-d5be-4d98-ab20-229d1813de76
Connection: Keep-Alive
```

## REST response

If successful, this method returns a collection of [Order](#) resources in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 22463
Content-Type: application/json; charset=utf-8
MS-CorrelationId: 97fa8b4f-6576-4cd9-dd19-ac7c97a023a7
MS-RequestId: 3c6a034c-82ee-4095-d50f-9b530a415f1f
MS-CV: nb4/b3Yl2keY0eYR.0
MS-ServerId: 202010607
Date: Thu, 15 Mar 2018 20:44:40 GMT

{
  "totalCount": 2,
  "items": [
    {
      "id": "9qg-ErcO-4MPbPqq_3MIQaS7bn8W6HfG1",
      "referenceCustomerId": "b0d70a69-4c42-4b27-b17b-91a835d8686a".
```

```
        "friendlyName": "Reserved_VM_Instance_Standard_D1_AP_East_1_Year",
        "quantity": 1,
        "links": {
          "sku": {
            "uri": "/products/DZH318Z0BQ4B/skus/000Z?country=US",
            "method": "GET",
            "headers": []
          }
        }
      },
    ],
    "creationDate": "2018-03-15T02:17:15.6455674Z",
    "status": "pending",
    "links": {
      "provisioningStatus": {
        "uri": "/customers/b0d70a69-4c42-4b27-b17b-91a835d8686a/orders/9qg-Erc0-4MPbPqq_3MIQaS7bn8W6HfG1/provisioningstatus",
        "method": "GET",
        "headers": []
      },
      "self": {
        "uri": "/customers/b0d70a69-4c42-4b27-b17b-91a835d8686a/orders/9qg-Erc0-4MPbPqq_3MIQaS7bn8W6HfG1",
        "method": "GET",
        "headers": []
      }
    },
    "attributes": {
      "objectType": "Order"
    }
  },
  {
    "id": "s-BZlr_TeGksPNT61SsWRL-sqMaKbyVa1",
    "referenceCustomerId": "b0d70a69-4c42-4b27-b17b-91a835d8686a",
    "billingCycle": "one_time",
    "currencyCode": "USD",
    "lineItems": [
      {
        "lineItemNumber": 0,
        "offerId": "DZH318Z0BQ4Z:002P:DZH318Z0CL2D",
        "friendlyName": "Reserved_VM_Instance_Standard_NC12_AU_East_3_Years",
        "quantity": 1,
        "links": {
          "sku": {
            "uri": "/products/DZH318Z0BQ4Z/skus/002P?country=US",
            "method": "GET",
            "headers": []
          }
        }
      }
    ],
    "creationDate": "2018-03-15T01:42:36.8440279Z",
    "status": "pending",
    "links": {
      "provisioningStatus": {
        "uri": "/customers/b0d70a69-4c42-4b27-b17b-91a835d8686a/orders/s-BZlr_TeGksPNT61SsWRL-sqMaKbyVa1/provisioningstatus",
        "method": "GET",
        "headers": []
      },
      "self": {
        "uri": "/customers/b0d70a69-4c42-4b27-b17b-91a835d8686a/orders/s-BZlr_TeGksPNT61SsWRL-sqMaKbyVa1"
      }
    }
  }
]
```

```
        "method": "GET",
        "headers": []
    },
    "attributes": { "objectType": "Order" }
}
],
"links": {
    "self": {
        "uri": "/customers/b0d70a69-4c42-4b27-b17b-91a835d8686a/orders",
        "method": "GET",
        "headers": []
    }
},
"attributes": {
    "objectType":
    "Collection"
}
}
```

# Get a partner's validation codes

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## Applies To

- Partner Center

How to get a collection of a partner's Government Community Cloud validation codes. A validation code is required to create a customer in the government community cloud.

If you are interested in having your organization or your customers organization approved for Office 365 Government GCC for CSP, please see [Office 365 Government GCC for CSP Partner and Customer Eligibility Criteria](#).

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- Confirmed validation after filling out form [here](#).
- A customer without a qualification.

## C#

To get a list of all of a partner's validation codes, call **GetValidationCodes**.

```
// create the partner operations
IAggregatePartner partnerOperations = PartnerService.Instance.CreatePartnerOperations(credentials);

var gccValidations = partnerOperations.Validations.GetValidationCodes();
```

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<a href="#"><i>/baseURL</i></a> /v1/customers/all/validations HTTP/1.1

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

None.

### Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/all/validations HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-CorrelationId: 283b9b70-963a-4159-9920-f2bdf7ab7fce
MS-RequestId: 7266f5f6-30ca-4672-9eb6-6c9d6dd0e9d3
```

# REST response

If successful, this method returns a list of [ValidationCode](#) resources in the response body.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 434
Content-Type: application/json
MS-CorrelationId: 283b9b70-963a-4159-9920-f2bdf7ab7fce
MS-RequestId: 7266f5f6-30ca-4672-9eb6-6c9d6dd0e9d3

[
  {
    "partnerId": "9daaeb1c-4195-4db5-9f1d-509eb70c8c2d",
    "organizationName": "Contoso, Inc.",
    "validationId": "12345",
    "maxCreates": 5,
    "remainingCreates": 4,
    "eTag": "W/\"datetime'2018-10-10T18%3A49%3A58.727348Z'\""
  },
  {
    "partnerId": "9daaeb1c-4195-4db5-9f1d-509eb70c8c2d",
    "organizationName": "Contoso, Inc. Finance Department",
    "validationId": "987654",
    "maxCreates": 5,
    "remainingCreates": 5,
    "eTag": "W/\"datetime'2018-10-19T17%3A51%3A45.6584512Z'\""
  }
]
```

# Get a user account by ID

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## Applies To

- Partner Center

Get a specific user account for a customer.

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select CSP from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## C#

To retrieve a user account for a customer, call the [IAggregatePartner.Customers.ById](#) method with the customer ID to identify the customer. Next, call the [Users.ById](#) method to retrieve the specific user. Finally, call the [Users.Get](#) or [GetAsync](#) method to retrieve the user account.

```
// IAggregatePartner partnerOperations;
// string selectedCustomerId;
// string selectedCustomerUserId;

// Get customer user detail.
var customerUsers =
    partnerOperations.CustomersById(selectedCustomerId).UsersById(selectedCustomerUserId).Get();
```

Sample: [Console test app](#). Project: Partner Center SDK Samples Class: `GetCustomerUserDetails.cs`

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseURL}/v1/customers/{customer-tenant-id}/users/{user-id}</code> HTTP/1.1

### URI parameter

Use the following URI parameters to identify the correct customer and user.

NAME	TYPE	REQUIRED	DESCRIPTION
------	------	----------	-------------

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	guid	Y	The value is a GUID formatted <b>customer-tenant-id</b> that allows the reseller to filter the results for a given customer that belongs to the reseller.
user-id	guid	Y	The value is a GUID formatted <b>user-id</b> that belongs to a single user account.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/4d3cf487-70f4-4e1e-9ff1-b2bfce8d9f04/users/a9ef48bb-8758-4590-a312-d4a47bfaded4 HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: c1f673cb-655c-45a7-8a6b-257a0a006f4b
MS-CorrelationId: 24a631eb-a110-49dc-8325-99d4b196774c
X-Locale: en-US
Host: api.partnercenter.microsoft.com
```

## REST response

If successful, this method returns the user account for the customer.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

## Response example

HTTP/1.1 200 OK  
Content-Length: 432  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: 24a631eb-a110-49dc-8325-99d4b196774c  
MS-RequestId: c1f673cb-655c-45a7-8a6b-257a0a006f4b  
MS-CV: uWM1EGU7+0aI2MvV.0  
MS-ServerId: 020021921  
Date: Wed, 21 Dec 2016 22:59:10 GMT

```
{  
    "usageLocation": "US",  
    "id": "a9ef48bb-8758-4590-a312-d4a47bfaded4",  
    "userPrincipalName": "Daniel@dtdemocspcustomer005.onmicrosoft.com",  
    "firstName": "Daniel",  
    "lastName": "Tsai",  
    "displayName": "Daniel Tsai",  
    "userDomainType": "none",  
    "state": "active",  
    "links": {  
        "self": {  
            "uri": "/customers/4d3cf487-70f4-4e1e-9ff1-b2bfce8d9f04/users/a9ef48bb-8758-4590-a312-  
d4a47bfaded4",  
            "method": "GET",  
            "headers": []  
        }  
    },  
    "attributes": {  
        "objectType": "CustomerUser"  
    }  
}
```

# Get user roles for a customer

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## Applies To

- Partner Center

Get a list of all the roles/permissions attached to a user account. Variations include getting a list of all permissions across all user accounts for a customer, and getting a list of users that have a given role.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## C#

To retrieve all the directory roles for a specified customer, first retrieve the specified customer ID. Then, use your **IAggregatePartner.Customers** collection and call the **ById()** method. Then call the **DirectoryRoles** property, followed by the **Get()** or **\*\*GetAsync()\*\*** method.

```
// string selectedCustomerId;
// IAggregatePartner partnerOperations;

var directoryRoles = partnerOperations.Customers.ById(selectedCustomerId).DirectoryRoles.Get();
```

**Sample:** [Console test app](#). **Project:** Partner Center SDK Samples **Class:** GetCustomerDirectoryRoles.cs

To retrieve a list of customer users that have a given role, first retrieve the specified customer ID and the directory role ID. Then, use your **IAggregatePartner.Customers** collection and call the **ById()** method. Then call the **DirectoryRoles** property, then **ById()** method, then the **UserMembers** property, the followed by the **Get()** or **GetAsync()** method.

```
// string selectedCustomerId;
// IAggregatePartner partnerOperations;
// string selectedDirectoryRoleId;

var userMembers =
partnerOperations.Customers.ById(selectedCustomerId).DirectoryRoles.ById(selectedDirectoryRoleId).UserMembers.
Get();
```

**Sample:** [Console test app](#). **Project:** PartnerSDK.FeatureSamples **Class:** GetCustomerDirectoryRoleUserMembers.cs

## REST request

## Request syntax

METHOD	REQUEST URI
GET	<code>{baseURL}/v1/customers/{customer-tenant-id}/users/{user-id}/directoryroles</code> HTTP/1.1
GET	<code>{baseURL}/v1/customers/{customer-tenant-id}/directoryroles</code> HTTP/1.1
GET	<code>{baseURL}/v1/customers/{customer-tenant-id}/directoryroles/{role-ID}/usermembers</code>

## URI parameter

Use the following query parameter to identify the correct customer.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	guid	Y	The value is a GUID formatted <b>customer-tenant-id</b> that allows the reseller to filter the results for a given customer that belongs to the reseller.
user-id	guid	N	The value is a GUID formatted <b>user-id</b> that belongs to a single user account.
role-id	guid	N	The value is a GUID formatted <b>role-id</b> that belongs to a type of role. You can get these IDs by querying all the directory roles for a customer, across all user accounts. (The second scenario, above).

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

### Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/<customer-tenant-id>/users/<user-id>/directoryroles  
HTTP/1.1  
Authorization: Bearer <token>  
Accept: application/json  
MS-RequestId: b1317092-f087-471e-a637-f66523b2b94c  
MS-CorrelationId: 8a53b025-d5be-4d98-ab20-229d1813de76
```

## REST response

If successful, this method returns a list of the roles associated with the given user account.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 31942
Content-Type: application/json
MS-CorrelationId: 8a53b025-d5be-4d98-ab20-229d1813de76
MS-RequestId: b1317092-f087-471e-a637-f66523b2b94c
Date: June 24 2016 22:00:25 PST

{
    "totalCount": 2,
    "items": [
        {
            "name": "Helpdesk Administrator",
            "id": "729827e3-9c14-49f7-bb1b-9608f156bbb8",
            "attributes": { "objectType": "DirectoryRole" }
        },
        {
            "name": "User Account Administrator",
            "id": "fe930be7-5e62-47db-91af-98c3a49a38b1",
            "attributes": { "objectType": "DirectoryRole" }
        }
    ],
    "attributes": { "objectType": "Collection" }
}
```

# Remove a customer user from a role

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center

How to remove a user from a directory role within a customer account.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## C#

To remove a user from a directory role, select the customer with the user to modify with a call to the **IAggregatePartner.Customers.GetById** method. From there, specify the role using the **DirectoryRoles.GetById** method with the directory role ID. Then, access the **UserMembers.GetById** method to identify the user to remove, and the **Delete** method to remove the user from the role.

```
// IAggregatePartner partnerOperations;
// string selectedCustomerId;
// string selectedRoleId;
// string selectedUserMemberId;

partnerOperations.Customers.GetById(selectedCustomerId).DirectoryRoles.GetById(selectedRoleId).UserMembers.GetById(selectedUserMemberId).Delete();
```

Sample: [Console test app](#). Project: Partner Center SDK Samples Class:

RemoveCustomerUserMemberFromDirectoryRole.cs

## REST request

### Request syntax

METHOD	REQUEST URI
DELETE	<code>/baseURL/v1/customers/{customer-tenant-id}/directoryroles/{role-ID}/usermembers/{user-ID}</code> HTTP/1.1

### URI parameter

Use the following URI parameters to identify the correct customer, role and user.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	guid	Y	The value is a GUID formatted <b>customer-tenant-id</b> that identifies the customer.
role-id	guid	Y	The value is a GUID formatted <b>role-id</b> that identifies the role.
user-id	guid	Y	The value is a GUID formatted <b>user-id</b> that identifies a single user account.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
DELETE https://api.partnercenter.microsoft.com/v1/customers/4d3cf487-70f4-4e1e-9ff1-
b2bfce8d9f04%20/directoryroles/729827e3-9c14-49f7-bb1b-9608f156bbb8/usermembers/4d3cf487-70f4-4e1e-9ff1-
b2bfce8d9f04%20 HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 0a00ec08-6273-46bb-ab6f-14a13959b381
MS-CorrelationId: 87d18a45-81fc-40cf-921a-b91cb82d67fe
X-Locale: en-US
Host: api.partnercenter.microsoft.com
Content-Length: 0
Connection: Keep-Alive
```

## REST response

If the user is removed from the role successfully, the response body is empty.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

## Response example

```
HTTP/1.1 204 No Content
Content-Length: 0
MS-CorrelationId: 90bda268-7929-4ad6-be01-89c5af5fc504
MS-RequestId: e784d7aa-8c8d-45ee-8f97-9e09823d7338
MS-CV: es01VX8do0u2aTxw.0
MS-ServerId: 101112616
Date: Tue, 20 Dec 2016 23:16:35 GMT
```

# Remove a reseller relationship with a customer

4/25/2020 • 4 minutes to read • [Edit Online](#)

## Applies To

- Partner Center

Remove a reseller relationship with a customer that you no longer have transactions with.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- All Azure Reserved VM Instance orders must be canceled before a reseller relationship is removed. Call Azure support for canceling any open Azure Reserved VM Instance orders.

## C#

To remove the reseller relationship for a customer, first ensure that any active Azure Reserved VM Instances for that customer are canceled. Next, ensure that all active subscriptions for that customer are suspended. To do so, determine the ID of the customer for whom you want to delete the reseller relationship. In the following code example, the user is prompted to provide the customer identifier.

To determine if any Azure Reserved VM Instances for the customer must be canceled, retrieve the collection of entitlements by calling the **IAggregatePartner.Customers.ById** method using the customer identifier to specify the customer, and the **Entitlements** property to retrieve an interface to entitlement collection operations. Call the **Get** or **GetAsync** method to retrieve the entitlement collection. Filter the collection for any entitlements with an **EntitlementType** value of **EntitlementType.VirtualMachineReservedInstance** and if there are any, cancel them by calling support before proceeding.

Then, retrieve a collection of the customer's subscriptions by calling the **IAggregatePartner.Customers.ById** method using the customer identifier to specify the customer, and the **Subscriptions** property to retrieve an interface to subscription collection operations. Finally, call the **Get** or **GetAsync** method to retrieve the customer's subscriptions collection. Traverse the subscription collection and ensure that none of the subscriptions have a **Subscriptions.Status** property value of **SubscriptionStatus.Active**. If a subscription is still active, see [Suspend a subscription](#) for information on how to suspend it.

After confirming that all active Azure Reserved VM Instances for that customer are canceled and all active subscriptions are suspended, you can remove the reseller relationship for the customer. First, create a new **Customer** object with the **Customer.RelationshipToPartner** property set to **CustomerPartnerRelationship.None**. Then call the **IAggregatePartner.Customers.ById** method using the customer identifier to specify the customer, and call the **Patch** method, passing in the new customer object.

To re-establish the relationship, repeat the process of [requesting a reseller relationship](#).

```

// IAggregatePartner partnerOperations;

// Prompt the user the enter the customer ID.
var customerIdToDeleteRelationshipOf = this.Context.ConsoleHelper.ReadNonEmptyString("Please enter the ID of
the customer you want to delete the relationship with", "The customer ID can't be empty");

// Determine if there are any active Azure Reserved VM Instances for this customer.
ResourceCollection<Entitlement> entitlements =
partnerOperations.Customers.ById(customerIdToDeleteRelationshipOf).Entitlements.Get();

If (entitlements.Items.Where(x => x.EntitlementType == EntitlementType.VirtualMachineReservedInstance).Any())
{
    this.Context.ConsoleHelper.Warning("Please cancel Azure Reserved Virtual Machine Instance orders through
support and try again. Aborting the delete customer relationship operation");
    return;
}

// Verify that there are no active subscriptions.
ResourceCollection<Subscription> customerSubscriptions =
partnerOperations.Customers.ById(customerIdToDeleteRelationshipOf).Subscriptions.Get();
IList<Subscription> subscriptions = new List<Subscription>(customerSubscriptions.Items);

foreach (Subscription customerSubscription in subscriptions)
{
    if (customerSubscription.Status == SubscriptionStatus.Active)
    {
        this.Context.ConsoleHelper.Warning(String.Format("Subscription with ID :{0} OfferName: {1} cannot be
in active state, ", customerSubscription.Id, customerSubscription.OfferName));
        this.Context.ConsoleHelper.Warning("Please Suspend all the Subscriptions and try again. Aborting the
delete customer relationship operation");
        return;
    }
}

// Delete the customer's relationship to the partner.
Customer customer = new Customer();
customer.RelationshipToPartner = CustomerPartnerRelationship.None;
customer = partnerOperations.Customers.ById(customerIdToDeleteRelationshipOf).Patch(customer);

if (customer.RelationshipToPartner == CustomerPartnerRelationship.None)
{
    this.Context.ConsoleHelper.Success("Customer Partner Relationship successfully deleted");
}

```

Sample: [Console test app](#). Project: PartnerSDK.FeatureSample Class: DeletePartnerCustomerRelationship.cs

## REST request

### Request syntax

METHOD	REQUEST URI
PATCH	<a href="#"><i>/baseURL</i></a> /v1/customers/{customer-tenant-id}/ HTTP/1.1

### URI parameter

This table lists the required query parameters to remove a reseller relationship.

NAME	TYPE	REQUIRED	DESCRIPTION

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	guid	Y	The value is a GUID formatted <b>customer-tenant-id</b> that identifies the customer.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

A **Customer** resource is required in the request body. Ensure the **RelationshipToPartner** property has been set to none.

## Request example

```
PATCH https://api.partnercenter.microsoft.com/v1/customers/<customer-tenant-id> HTTP/1.1
Authorization: Bearer <token>
Content-Length: 74
Content-Type: application/json; charset=utf-8
MS-CorrelationId: 9b4bf2ca-f374-4d51-9113-781ca87b8380
MS-RequestId: 9fef8b23-6e3e-45d2-8678-e9fe89c35af5
Date: Fri, 12 Jan 2018 00:31:55 GMT

{
  "relationshipToPartner": "none",
  "attributes": {
    "objectType": "Customer"
  }
}
```

## REST response

If successful, this method removes a reseller relationship for the specified customer.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

### Response example

HTTP/1.1 200 OK  
MS-RequestId: 7988dde4-b516-472c-b226-6d53fb18f04e  
MS-CorrelationId: 9b4bf2ca-f374-4d51-9113-781ca87b8380  
X-Locale: en-US  
Content-Type: application/json  
Content-Length: 242  
Expect: 100-continue

```
{  
    "Id":null,  
    "CommerceId":null,  
    "CompanyProfile":null,  
    "BillingProfile":null,  
    "RelationshipToPartner":"none",  
    "AllowDelegatedAccess":null,  
    "UserCredentials":null,  
    "CustomDomains":null,  
    "AssociatedPartnerId":null,  
    "Attributes":{  
        "ObjectType":"Customer"  
    }  
}
```

# Retrieve a relationship request URL

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany

How to retrieve a relationship request URL to send to a customer.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.

## C#

To retrieve a relationship request URL, first use [IAggregatePartner.Customers](#) to get an interface to the partner's customer operations. Next, use the [RelationshipRequest](#) property to get an interface to customer relationship request operations. Finally, call the [Get](#) or [GetAsync](#) method to retrieve the URL.

```
// IAggregatePartner partnerOperations;  
  
var customerRelationshipRequest = partnerOperations.Customers.RelationshipRequest.Get();
```

**Sample:** [Console test app](#). **Project:** Partner Center SDK Samples **Class:** GetCustomerRelationshipRequest.cs

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<a href="#"><i>/baseURL</i></a> /v1/customers/relationshiprequests HTTP/1.1

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

None

### Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/relationshiprequests HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: ee519026-4c67-4113-bec7-a38aca621bf0
MS-CorrelationId: 02971f0f-1029-47b2-9fdb-1932f0987470
X-Locale: en-US
Host: api.partnercenter.microsoft.com
Connection: Keep-Alive
```

## REST response

If successful, the response contains the [RelationshipRequest](#) object.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

### Response example

```
HTTP/1.1 200 OK
Content-Length: 196
Content-Type: application/json; charset=utf-8
MS-CorrelationId: 02971f0f-1029-47b2-9fdb-1932f0987470
MS-RequestId: ee519026-4c67-4113-bec7-a38aca621bf0
MS-CV: jbYZRWjU3E262f8o.0
MS-ServerId: 030020643
Date: Fri, 19 May 2017 22:32:07 GMT

{
  "url": "https://portal.office.com/partner/partnersignup.aspx?type=ResellerRelationship&id=3b33e682-00c3-41ee-9dd2-a548adf56438&csp=1&msppid=0",
  "attributes": {
    "objectType": "RelationshipRequest"
  }
}
```

# Reset user password for a customer

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center

Resetting a password is very similar to updating other details in an existing user account for your customer.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## C#

To reset a password for a specified customer user, first retrieve the specified customer ID and the targeted user. Then, create a new **CustomerUser** object that contains the information for the existing customer, but with a new **PasswordProfile** object. Then, use your **IAggregatePartner**.**Customers** collection and call the **ById()** method. Then call the **Users** property, the **ById()** method, and then the **Patch** method.

```
// IAggregatePartner partnerOperations;
// string selectedCustomerId;
// CustomerUser specifiedUser;

var selectedCustomer = partnerOperations.Customers.ById(selectedCustomerId).Get();
var userToUpdate = new CustomerUser()
{
    PasswordProfile = new PasswordProfile() { ForceChangePassword = true, Password = "newPassword" },
    DisplayName = "Roger Federer",
    FirstName = "Roger",
    LastName = "Federer",
    UsageLocation = "US",
    UserPrincipalName = Guid.NewGuid().ToString("N") + "@" +
    selectedCustomer.CompanyProfile.Domain.ToString()
};

// update customer user information
User updatedCustomerUserInfo =
partnerOperations.Customers.ById(selectedCustomerId).Users.ById(specifiedUser.Id).Patch(userToUpdate);
```

Sample: [Console test app](#). Project: PartnerSDK.FeatureSamples Class: CustomerUserUpdate.cs

## REST request

### Request syntax

METHOD	REQUEST URI
PATCH	<a href="#"><i>{baseUrl}</i></a> /v1/customers/{customer-tenant-id}/users HTTP/1.1

## URI parameter

Use the following query parameter to identify the correct customer.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	guid	Y	The value is a GUID formatted <b>customer-tenant-id</b> that allows the reseller to filter the results for a given customer that belongs to the reseller.
user-id	guid	Y	The value is a GUID formatted <b>user-id</b> that belongs to a single user account.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

### Request example

```
PATCH https://api.partnercenter.microsoft.com/v1/customers/<customer-tenant-id>/users/<user-id> HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: b1317092-f087-471e-a637-f66523b2b94c
MS-CorrelationId: 8a53b025-d5be-4d98-ab20-229d1813de76
{
    "passwordProfile": {
        "password": "Renew456*",
        "forceChangePassword": true
    },
    "attributes": {
        "objectType": "CustomerUser"
    }
}
```

## REST response

If successful, this method returns the user information, along with the updated password information.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

### Response example

HTTP/1.1 200 OK  
Content-Length: 31942  
Content-Type: application/json  
MS-CorrelationId: 8a53b025-d5be-4d98-ab20-229d1813de76  
MS-RequestId: b1317092-f087-471e-a637-f66523b2b94c  
Date: June 24 2016 22:00:25 PST

{  
    "usageLocation": "AX",  
    "id": "95794928-9abe-4548-8b43-50ffc20b9404",  
    "userPrincipalName": "aaaa4@abcdefg1234.ccsctp.net",  
    "firstName": "aaaa4",  
    "lastName": "aaaa4",  
    "displayName": "aaaa4",  
    "passwordProfile": {  
        "forceChangePassword": false,  
        "password": "Renew456\*"  
    },  
    "lastDirectorySyncTime": null,  
    "userDomainType": "none",  
    "state": "active",  
    "softDeletionTime": null,  
    "links": {  
        "self": {  
            "uri": "/customers/eebd1b55-5360-4438-a11d-5c06918c3014/users/95794928-9abe-4548-8b43-50ffc20b9404",  
            "method": "GET",  
            "headers": [  
                ]  
        }  
    },  
    "attributes": {  
        "objectType": "CustomerUser"  
    }  
}

# Restore a deleted user for a customer

4/25/2020 • 3 minutes to read • [Edit Online](#)

## Applies To

- Partner Center

How to restore a deleted **User** by customer ID and user ID.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- The user ID. If you do not have the user ID, see [View deleted users for a customer](#).

## When can you restore a deleted user account?

The user state is set to "inactive" when you delete a user account. It remains that way for thirty days, after which the user account and its associated data are purged and made unrecoverable. You can only restore a deleted user account during this thirty-day window. Once deleted and marked "inactive" the user account is no longer returned as a member of the user collection (for example, using [Get a list of all user accounts for a customer](#)).

## C#

To restore a user, create a new instance of the **CustomerUser** class, and set the value of the **User.State** property to **UserState.Active**.

You restore a deleted user by setting the user's state to active. You do not have to repopulate the remaining fields in the user resource. Those values will automatically be restored from the deleted, inactive user resource. Next, use the **IAggregatePartner.Customers.GetById** method with the customer ID to identify the customer, and the **Users.GetById** method to identify the user.

Finally, call the **Patch** method and pass the **CustomerUser** instance to send the request to restore the user.

```

// IAggregatePartner partnerOperations;
// string selectedCustomerId;
// string selectedCustomerUserId;

var updatedCustomerUser = new CustomerUser()
{
    State = UserState.Active
};

// Restore customer user information.
var restoredCustomerUserInfo =
    partnerOperations.CustomersById(selectedCustomerId).UsersById(selectedCustomerUserId).Patch(updatedCustomerUser);

```

Sample: [Console test app](#). Project: Partner Center SDK Samples Class: CustomerUserRestore.cs

## REST request

### Request syntax

METHOD	REQUEST URI
PATCH	<a href="#"><i>{baseUrl}</i></a> /v1/customers/{customer-tenant-id}/users/{user-id} HTTP/1.1

### URI parameter

Use the following query parameters to specify the customer id and user id.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	guid	Y	The value is a GUID formatted <b>customer-tenant-id</b> that allows the reseller to filter the results to a given customer.
user-id	guid	Y	The value is a GUID formatted <b>user-id</b> that belongs to a single user account.

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

This table describes the required properties in the request body.

NAME	TYPE	REQUIRED	DESCRIPTION
State	string	Y	The user state. To restore a deleted user, this string must contain "active".
Attributes	object	N	Contains "ObjectType": "CustomerUser".

### Request example

```

PATCH https://api.partnercenter.microsoft.com/v1/customers/4d3cf487-70f4-4e1e-9ff1-
b2bfce8d9f04/users/a45f1416-3300-4f65-9e8d-f123b397a4ea HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 6e668bc0-5bd7-44d6-b6fa-529d41ce9659
MS-CorrelationId: 32be760f-8282-4e01-a37b-829c8a700e8a
X-Locale: en-US
Content-Type: application/json
Host: api.partnercenter.microsoft.com
Content-Length: 269
Expect: 100-continue

{
    "State": "active",
    "Attributes": {
        "ObjectType": "CustomerUser"
    }
}

```

## REST response

If successful, the response returns the restored user information in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST Error Codes](#).

### Response example

```

HTTP/1.1 200 OK
Content-Length: 465
Content-Type: application/json; charset=utf-8
MS-CorrelationId: 32be760f-8282-4e01-a37b-829c8a700e8a
MS-RequestId: 6e668bc0-5bd7-44d6-b6fa-529d41ce9659
MS-CV: ZTeBriO7mEaiM13+.0
MS-ServerId: 101112616
Date: Fri, 20 Jan 2017 22:24:55 GMT

{
    "usageLocation": "US",
    "id": "a45f1416-3300-4f65-9e8d-f123b397a4ea",
    "userPrincipalName": "e83763f7f2204ac384cfcd49f79f2749@dtdemocspcustomer005.onmicrosoft.com",
    "firstName": "Ferdinand",
    "lastName": "Filibuster",
    "displayName": "Ferdinand",
    "userDomainType": "none",
    "state": "active",
    "links": {
        "self": {
            "uri": "/customers/4d3cf487-70f4-4e1e-9ff1-b2bfce8d9f04/users/a45f1416-3300-4f65-9e8d-
f123b397a4ea",
            "method": "GET",
            "headers": []
        }
    },
    "attributes": {
        "ObjectType": "CustomerUser"
    }
}

```

# Set user roles for a customer

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center

Within a customer account, there's a set of directory roles. You can assign user accounts to those roles.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## C#

To assign a directory role to a customer user, create a new **UserMember** with the relevant user details. Then, call the **IAggregatePartner.Customers.ById** method with the specified customer ID to identify the customer. From there, use the **DirectoryRoles.ById** method with the directory role ID to specify the role. Then, access the **UserMembers** collection, and use the **Create** method to add the new user member to the collection of user members assigned to that role.

```
// UserMember createdUser;
// IAggregatePartner partnerOperations;
// Customer selectedCustomer;
// IDirectoryRole selectedRole;

// Create the new user member.
UserMember userMemberToAdd = new UserMember()
{
    UserPrincipalName = createdUser.UserPrincipalName,
    DisplayName = createdUser.DisplayName,
    Id = createdUser.Id
};

// Add the new user member to the role.
var userMemberAdded =
    partnerOperations.Customers.ById(selectedCustomer.Id).DirectoryRoles.ById(selectedRole.Id).UserMembers.Create(
        userMemberToAdd);
```

Sample: [Console test app](#). Project: Partner Center SDK Samples Class: `AddUserMemberToDirectoryRole.cs`

## REST request

### Request syntax

METHOD	REQUEST URI
POST	<a href="#"><i>{baseURL}</i></a> /v1/customers/{customer-tenant-id}/directoryroles/{role-ID}/usermembers HTTP/1.1

## URI parameter

Use the following URI parameters to identify the correct customer and role. To identify the user to whom to assign the role, supply the identifying information in the request body.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	guid	Y	The value is a GUID formatted <b>customer-tenant-id</b> that allows the reseller to filter the results for a given customer that belongs to the reseller.
role-id	guid	Y	The value is a GUID formatted <b>role-id</b> that identifies the role to assign to the user.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

This table describes the required properties in the request body.

NAME	TYPE	REQUIRED	DESCRIPTION
Id	string	Y	The Id of the user to add to the role.
DisplayName	string	Y	The friendly display name of the user.
UserPrincipalName	string	Y	The name of the user principal.
Attributes	object	Y	Contains "ObjectType":"UserMember"

## Request example

```

POST https://api.partnercenter.microsoft.com/v1/customers/4d3cf487-70f4-4e1e-9ff1-
b2bfce8d9f04/directoryroles/f023fd81-a637-4b56-95fd-791ac0226033/usermembers HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: a56cb2e5-a156-4f68-9155-57ffe2b93d18
MS-CorrelationId: 90bda268-7929-4ad6-be01-89c5af5fc504
X-Locale: en-US
Content-Type: application/json
Host: api.partnercenter.microsoft.com
Content-Length: 180
Expect: 100-continue

{
    "Id": "a9ef48bb-8758-4590-a312-d4a47bfaded4",
    "DisplayName": "Daniel Tsai",
    "UserPrincipalName": "Daniel@dtdemocspcustomer005.onmicrosoft.com",
    "Attributes": {
        "ObjectType": "UserMember"
    }
}

```

## REST response

This method returns the user account with the role id attached when the user is successfully assigned the role.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

### Response example

```

HTTP/1.1 201 Created
Content-Length: 231
Content-Type: application/json; charset=utf-8
MS-CorrelationId: 90bda268-7929-4ad6-be01-89c5af5fc504
MS-RequestId: a56cb2e5-a156-4f68-9155-57ffe2b93d18
MS-CV: aia94+gnrEeQqkGr.0
MS-ServerId: 101112202
Date: Tue, 20 Dec 2016 23:36:55 GMT

{
    "displayName": "Daniel Tsai",
    "userPrincipalName": "Daniel@dtdemocspcustomer005.onmicrosoft.com",
    "roleId": "f023fd81-a637-4b56-95fd-791ac0226033",
    "id": "a9ef48bb-8758-4590-a312-d4a47bfaded4",
    "attributes": {
        "ObjectType": "UserMember"
    }
}

```

# Update a customer's billing profile

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Updates a customer's billing profile, including the address associated with the profile.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## C#

To update a customer's billing profile, retrieve the billing profile and update the properties as necessary. Then, retrieve your **IPartner.Customers** collection, and then call the **ById()** method. Then call the **Profiles** property, followed by the **Billing** property. Then, finish by calling the **Update()** or **UpdateAsync()** methods.

```
// IAggregatePartner partnerOperations;
// var selectedCustomerId as string;

var billingProfile = partnerOperations.Customers.ById(selectedCustomerId).Profiles.Billing.Get();

// Apply changes to profile;

billingProfile = partnerOperations.Customers.ById(selectedCustomerId).Profiles.Billing.Update(billingProfile);
```

Sample: [Console test app](#). Project: PartnerSDK.FeatureSamples Class: UpdateCustomerBillingProfile.cs

## REST request

### Request syntax

METHOD	REQUEST URI
PUT	<code>{baseUrl}/v1/customers/{customer-tenant-id}/profiles/billing</code> HTTP/1.1

### URI parameter

Use the following query parameter to update the billing profile.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	guid	Y	The value is a GUID formatted <b>customer-tenant-id</b> that allows the reseller to filter the results for a given customer that belongs to the reseller.

## Request headers

- **If-Match:** "<ETag>" is required for concurrency detection. For more information, see [Partner Center REST headers](#).

## Request body

The full resource.

## Request example

```
PUT https://api.partnercenter.microsoft.com/v1/customers/<customer-tenant-id>/profiles/billing HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: ff85f13a-eb65-4b8e-9b67-05beb0565410
MS-CorrelationId: ff1b757d-cfaf-463a-b48b-0f96d05e95d7
Content-Type: application/json
Content-Length: 639
Expect: 100-continue

{
    "Id": "a58ceba5-60ac-48e4-a0bc-2a855811807a",
    "FirstName": "FirstName",
    "LastName": "LastName",
    "Email": "email@sample.com",
    "Culture": "en-US",
    "Language": "en",
    "CompanyName": "CompanyName",
    "DefaultAddress": {
        "Country": "US",
        "Region": null,
        "City": "Redmond",
        "State": "WA",
        "AddressLine1": "One Microsoft Way",
        "AddressLine2": null,
        "PostalCode": "98052",
        "FirstName": "FirstName",
        "LastName": "LastName",
        "PhoneNumber": "4255555555"
    },
    "Links": {
        "Self": {
            "Uri": "/v1/customers/<customer-tenant-id>/profiles/billing",
            "Method": "GET",
            "Headers": []
        }
    },
    "Attributes": {
        "Etag": "<etag>",
        "ObjectType": "CustomerBillingProfile"
    }
}
```

## REST response

If successful, this method returns updated [Profile](#) resource properties in the response body. This call requires an ETag for concurrency detection.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

### Response example

```
HTTP/1.1 200 OK
Content-Length: 1210
Content-Type: application/json
MS-CorrelationId: ff1b757d-cfaf-463a-b48b-0f96d05e95d7
MS-RequestId: ff85f13a-eb65-4b8e-9b67-05beb0565410
Date: Mon, 23 Nov 2015 18:20:43 GMT

{
  "id": "a58ceba5-60ac-48e4-a0bc-2a855811807a",
  "firstName": "FirstName",
  "lastName": "LastName",
  "email": "email@sample.com",
  "culture": "en-US",
  "language": "en",
  "companyName": "companyName",
  "defaultAddress": {
    "country": "US",
    "city": "Redmond",
    "state": "WA",
    "addressLine1": "One Microsoft Way",
    "postalCode": "98052",
    "firstName": "FirstName",
    "lastName": "LastName",
    "phoneNumber": "4255555555"
  },
  "links": {
    "self": {
      "uri": "/v1/customers/<customer-tenant-id>/profiles/billing",
      "method": "GET",
      "headers": []
    }
  },
  "attributes": {
    "etag": "<etag>",
    "objectType": "CustomerBillingProfile"
  }
}
```

# Update a customer's qualification

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center

Updates a customer's qualification.

A partner can update a customer's qualification to be "Education" or "GovernmentCommunityCloud". Other values, "None" and "Nonprofit", cannot be set.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## C#

To update a customer's qualification to "Education", call [Update](#) on an existing [Customer](#).

```
// CustomerQualification is an enum

var eduCustomerQualification =
    partnerOperations.Customers.ById(existingCustomer.Id).Qualification.Update(CustomerQualification.Education);
```

Sample: [Console test app](#). Project: PartnerSDK.FeatureSamples Class: CustomerQualificationOperations.cs

To update a customer's qualification to **GovernmentCommunityCloud** on an existing customer without a qualification. The partner is also required to include the customer's [ValidationCode](#).

```
// CustomerQualification is an enum
// GCC validation is type ValidationCode

var gccCustomerQualification =
    partnerOperations.Customers.ById(existingCustomer.Id).Qualification.Update(CustomerQualification.GovernmentCommunityCloud, gccValidation);
```

## REST request

### Request syntax

METHOD	REQUEST URI
PUT	<code>/baseURL/v1/customers/{customer_id}/qualification?code={validationCode}</code> HTTP/1.1

## URI parameter

Use the following query parameter to update the qualification.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	GUID	Yes	The value is a GUID formatted <i>customer-tenant-id</i> that allows the reseller to filter the results for a given customer that belongs to the reseller.
validationCode	int	No	Only needed for Government Community Cloud.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

The integer value from the [CustomerQualification](#) enum.

## Request example

```
PUT https://api.partnercenter.microsoft.com/v1/customers/<customer-tenant-id>/qualification?code=<validation-code> HTTP/1.1
Accept: application/json
Content-Type: application/json
MS-CorrelationId: 7d2456fd-2d79-46d0-9f8e-5d7ecd5f8745
MS-RequestId: 037db222-6d8e-4d7f-ba78-df3dca33fb68
```

## REST response

If successful, this method returns updated [Qualification](#) property in the response body.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 14
Content-Type: application/json
MS-CorrelationId: 7d2456fd-2d79-46d0-9f8e-5d7ecd5f8745
MS-RequestId: 037db222-6d8e-4d7f-ba78-df3dca33fb68
"governmentcommunitycloud"
```

## Related articles

- [Get a customer's qualification](#)
- [Get a partner's validation codes](#)

# Update the nickname for a subscription

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Updates the friendly name or nickname for a customer's [Subscription](#). This name appears in Partner Center to help differentiate the subscriptions in the customer's account.

In the Partner Center dashboard, this operation can be performed by first [selecting a customer](#). Then, select the subscription in question that you wish to rename. To finish, change the name in the **Subscription nickname** field, then select **Submit**.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A subscription ID.

## C#

To update the nickname of a customer's subscription, first [Get the subscription](#), then change the subscription's **FriendlyName** property. Once the change is made, use your **IPartner.Customers** collection and call the **ById()** method. Then call the **Subscriptions** property, followed by the **ById()** method. Then, finish by calling the **Patch()** method.

```
// IAggregatePartner partnerOperations;
// var SelectedcustomerId as string;

ResourceCollection<Subscription> customerSubscriptions =
partnerOperations.Customers.ById(selectedCustomerId).Subscriptions.Get();
Subscription selectedSubscription = customerSubscriptions.Items.FirstOrDefault(sub => sub.Status ==
SubscriptionStatus.Active);

// Apply changes to subscription;

var updatedSubscription =
partnerOperations.Customers.ById(selectedCustomerId).Subscriptions.GetById(selectedSubscription.Id).Patch(selecte
dSubscription);
```

Sample: [Console test app](#). Project: PartnerSDK.FeatureSamples Class: UpdateSubscription.cs

# REST request

## Request syntax

METHOD	REQUEST URI
PATCH	<code>{baseURL}/v1/customers/{customer-tenant-id}/subscriptions/{id-for-subscription}</code> HTTP/1.1

## URI parameter

This table lists the required query parameter to update the subscription nickname.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	guid	Y	The <b>customer-tenant-id</b> (a GUID).
id-for-subscription	guid	Y	The subscription ID (a GUID).

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

A full **Subscription** resource is required in the request body. Ensure the **FriendlyName** property has been updated.

## Request example

```
PATCH https://api.partnercenter.microsoft.com/v1/customers/<customer-tenant-id>/subscriptions/<subscriptionID>
HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: ca7c39f7-1a80-43bc-90d8-ee7d1cad3831
MS-CorrelationId: ec8f62e5-1d92-47e9-8d5d-1924af105f2c
Content-Type: application/json
Content-Length: 1029
Expect: 100-continue
Connection: Keep-Alive

{
    "Id": "<subscriptionID>",
    "FriendlyName": "nickname",
    "Quantity": 2,
    "UnitType": "none",
    "ParentSubscriptionId": null,
    "CreationDate": "2015-11-25T06:41:12Z",
    "EffectiveStartDate": "2015-11-24T08:00:00Z",
    "CommitmentEndDate": "2016-12-12T08:00:00Z",
    "Status": "active",
    "AutoRenewEnabled": false,
    "BillingType": "none",
    "PartnerId": null,
    "ContractType": "subscription",
    OrderId": "6183db3d-6318-4e52-877e-25806e4971be",
    "Attributes": {
        "Etag": "<etag>",
        "ObjectType": "Subscription"
    }
}
```

# REST response

If successful, this method returns updated [Subscription](#) resource properties in the response body.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

## Response example

```
PATCH https://api.partnercenter.microsoft.com/v1/customers/<customer-tenant-id>/subscriptions/<subscriptionID>
HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-Contract-Version: v1
MS-RequestId: ca7c39f7-1a80-43bc-90d8-ee7d1cad3831
MS-CorrelationId: ec8f62e5-1d92-47e9-8d5d-1924af105f2c
Content-Type: application/json
Content-Length: 1029
Expect: 100-continue
Connection: Keep-Alive

{
    "Id": "<subscriptionID>",
    "FriendlyName": "nickname",
    "Quantity": 2,
    "UnitType": "none",
    "ParentSubscriptionId": null,
    "CreationDate": "2015-11-25T06:41:12Z",
    "EffectiveStartDate": "2015-11-24T08:00:00Z",
    "CommitmentEndDate": "2016-12-12T08:00:00Z",
    "Status": "active",
    "AutoRenewEnabled": false,
    "BillingType": "none",
    "PartnerId": null,
    "ContractType": "subscription",
    "Links": {
        "Offer": {
            "Uri": "/v1/offers/0CCA44D6-68E9-4762-94EE-31ECE98783B9",
            "Method": "GET",
            "Headers": []
        },
        "Entitlement": {
            "Uri": "/entitlements?key=<key>",
            "Method": "GET",
            "Headers": []
        },
        "Self": {
            "Uri": "/subscriptions?key=<key>",
            "Method": "GET",
            "Headers": []
        }
    },
    "OrderId": "6183db3d-6318-4e52-877e-25806e4971be",
    "Attributes": {
        "Etag": "<etag>",
        "ObjectType": "Subscription"
    }
}
```

# Withdraw a transfer

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## Applies to:

- Partner Center

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A transfer identifier for an existing transfer.

## REST request

### Request syntax

METHOD	REQUEST URI
DELETE	<code>/baseURL/v1/customers/{customer-id}/transfers/{transfer-id}</code> HTTP/1.1

### URI parameter

Use the following path parameter to identify the customer.

NAME	TYPE	REQUIRED	DESCRIPTION
<code>customer-id</code>	string	Yes	A GUID formatted customer-id that identifies the customer.
<code>transfer-id</code>	string	Yes	A GUID formatted transfer-id that identifies the transfer.

### Request headers

For more information, see [Partner Center REST headers](#).

### Request example

```
DELETE /v1/customers/d6bf25b7-e0a8-4f2d-a31b-97b55cf774d/transfers/67c5b05b-09b5-47ba-9047-5056fe2afa4f
HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: cdf6e25c-7b32-4cc3-d8bc-53e0b37eebd8
MS-CorrelationId: 9041d76d-8915-43a8-8e82-00ca46a1a73d
Connection: keep-alive
```

## REST response

If successful, this method returns No Content (204).

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

### Response example

```
HTTP/1.1 204 No Content
Content-Length: 0
MS-CorrelationId: 9041d76d-8915-43a8-8e82-00ca46a1a73d
MS-RequestId: cdf6e25c-7b32-4cc3-d8bc-53e0b37eebd8
Date: Tue, 24 Mar 2020 23:44:06 GMT
```

# Create a transfer

6/19/2020 • 3 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## REST request

### Request syntax

METHOD	REQUEST URI
POST	<code>{baseUrl}/v1/customers/{customer-id}/transfers</code> HTTP/1.1

### URI parameter

Use the following path parameter to identify the customer.

NAME	TYPE	REQUIRED	DESCRIPTION
<code>customer-id</code>	string	Yes	A GUID formatted customer-id that identifies the customer.

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

This table describes the [TransferEntity](#) properties in the request body.

PROPERTY	TYPE	REQUIRED	DESCRIPTION
<code>id</code>	string	No	A transferEntity identifier that is supplied upon successful creation of the transferEntity.

PROPERTY	TYPE	REQUIRED	DESCRIPTION
createdTime	DateTime	No	The date the transferEntity was created, in date-time format. Applied upon successful creation of the transferEntity.
lastModifiedTime	DateTime	No	The date the transferEntity was last updated, in date-time format. Applied upon successful creation of the transferEntity.
lastModifiedUser	string	No	The user who last updated the transferEntity. Applied upon successful creation of transferEntity.
customerName	string	No	Optional. The name of the customer whose subscriptions are being transferred.
customerTenantId	string	No	A GUID formatted customer-id that identifies the customer. Applied upon successful creation of the transferEntity.
partnertenantid	string	No	A GUID formatted partner-id that identifies the partner.
sourcePartnerName	string	No	Optional. The name of the partner's organization who is initiating the transfer.
sourcePartnerTenantId	string	Yes	A GUID formatted partner-id that identifies the partner initiating the transfer.
targetPartnerName	string	No	Optional. The name of the partner's organization to whom the transfer is targeted.
targetPartnerTenantId	string	Yes	A GUID formatted partner-id that identifies the partner to whom the transfer is targeted.
lineItems	Array of objects	Yes	An Array of <a href="#">TransferLineItem</a> resources.

PROPERTY	TYPE	REQUIRED	DESCRIPTION
status	string	No	The status of the transferEntity. Possible values are "Active" (can be deleted/submitted) and "Completed" (has already been completed). Applied upon successful creation of the transferEntity.

This table describes the [TransferLineItem](#) properties in the request body.

PROPERTY	TYPE	REQUIRED	DESCRIPTION
id	string	No	A unique identifier for a transfer line item. Applied upon successful creation of the transferEntity.
subscriptionId	string	Yes	The subscription identifier.
quantity	int	No	The number of licenses or instances.
billingCycle	Object	No	The type of billing cycle set for the current period.
friendlyName	string	No	Optional. The friendly name for the item defined by the partner to help disambiguate.
partnerIdOnRecord	string	No	PartnerId on Record (MPNID) on the purchase that happens when the transfer is accepted.
offerId	string	No	The offer identifier.
addonItems	List of TransferLineItem objects	No	A collection of transferEntity line items for addons that will be transferred along with the base subscription that is being transferred. Applied upon successful creation of the transferEntity.
transferError	string	No	Applied after transferEntity is accepted in case of an error.
status	string	No	The status of the lineitem in the transferEntity.

### Request example

```
POST /v1/customers/d6bf25b7-e0a8-4f2d-a31b-97b55cf774d/transfers HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 4fa6dad6-a89f-4875-8247-7294a10ae1cf
MS-CorrelationId: 0e93c70c-977c-4a88-9580-7cf084c73286
X-Locale: en-US
Content-Type: application/json
Host: api.partnercenter.microsoft.com
Expect: 100-continue

{
    "sourcePartnerTenantId": "da6c51b5-1246-4a42-b4ab-cbf38df54537",
    "targetPartnerTenantId": "656218b1-80c9-40b2-83ae-3a2703b55271",
    "lineItems": [
        {
            "subscriptionId": "7291BFBF-1772-4C5B-A624-18B6152CD8CB",
            "partnerIdOnRecord": "517285"
        },
        {
            "subscriptionId": "6C0B221B-8DF9-4F4A-A5BB-4C9CBB7B27B0",
            "partnerIdOnRecord": "517285"
        }
    ]
}
```

## REST response

If successful, this method returns the populated [TransferEntity](#) resource in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

### Response example

HTTP/1.1 201 Created  
Content-Length: 138  
Content-Type: application/json; charset=utf-8  
MS-RequestId: 4fa6dad6-a89f-4875-8247-7294a10ae1cf  
MS-CorrelationId: 0e93c70c-977c-4a88-9580-7cf084c73286  
X-Locale: en-US,en-US

```
{  
    "id": "67c5b05b-09b5-47ba-9047-5056fe2afa4f",  
    "status": "Active",  
    "createdTime": "2020-03-24T20:44:14.9602781Z",  
    "lastModifiedTime": "2020-03-24T20:44:15Z",  
    "customerTenantId": "823c6c3f-9259-4d51-bae2-5dd06743177f",  
    "partnertenantid": "da6c51b5-1246-4a42-b4ab-cbf38df54537",  
    "sourcePartnerTenantId": "da6c51b5-1246-4a42-b4ab-cbf38df54537",  
    "targetPartnerTenantId": "656218b1-80c9-40b2-83ae-3a2703b55271",  
    "lastModifiedUser": "d0648481-b615-45c9-8cd1-ff87940dbdc4",  
    "lineItems": [  
        {  
            "id": 0,  
            "subscriptionId": "7291BFBF-1772-4C5B-A624-18B6152CD8CB",  
            "offerId": "50E9A47A-7B4D-4970-9D90-CAE927F53753",  
            "billingCycle": "annual",  
            "friendlyName": "Dynamics 365 for Sales Enterprise Attach to Qualifying Dynamics 365 Base Offer",  
            "quantity": 1,  
            "addonItems": [  
                {  
                    "id": 0,  
                    "subscriptionId": "D738C6C9-DDBD-46E9-B316-65F9D9B3ECB4",  
                    "offerId": "2BCF9FE8-8B65-4FCF-9240-419203FB8CF4",  
                    "billingCycle": "annual",  
                    "friendlyName": "Dynamics 365 - Additional Production Instance (Qualified Offer)",  
                    "quantity": 4  
                }  
            ]  
        },  
        {  
            "id": 0,  
            "subscriptionId": "6C0B221B-8DF9-4F4A-A5BB-4C9CBB7B27B0",  
            "offerId": "455DDD41-32ED-4E2D-B3A2-BBCB22CAA467",  
            "billingCycle": "annual",  
            "friendlyName": "Dynamics 365 Customer Engagement Plan Patch",  
            "quantity": 8,  
            "addonItems": []  
        }  
    ],  
    "links": {  
        "self": {  
            "uri": "/customers/823c6c3f-9259-4d51-bae2-5dd06743177f/transfers/67c5b05b-09b5-47ba-9047-5056fe2afa4f",  
            "method": "GET",  
            "headers": []  
        }  
    },  
    "attributes": {  
        "objectType": "TransferEntity"  
    }  
}
```

# Accept a transfer

6/19/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A transfer identifier for an existing transfer.

## REST request

### Request syntax

METHOD	REQUEST URI
POST	<code>/baseURL/v1/customers/{customer-id}/transfers/{transfer-id}/accept</code> HTTP/1.1

### URI parameter

Use the following path parameter to identify the customer and specify the transfer to be accepted.

NAME	TYPE	REQUIRED	DESCRIPTION
<code>customer-id</code>	string	Yes	A GUID formatted customer-id that identifies the customer.
<code>transfer-id</code>	string	Yes	A GUID formatted transfer-id that identifies the transfer.

### Request headers

For more information, see [Partner Center REST headers](#).

### Request example

```
POST /v1/customers/d6bf25b7-e0a8-4f2d-a31b-97b55cf774d/transfers/aa2bddb6-9cc8-4949-80fe-a37d5e0a13ba/accept
HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-CorrelationId: 4827b753-8541-428b-8c90-059b6b4851bd
MS-RequestId: 8389053b-731c-4261-9899-1583d7859153
X-Locale: en-US
Content-Type: application/json
Host: api.partnercenter.microsoft.com
Content-Length: 0
```

## REST response

If successful, this method returns the populated [TransferSubmitResult](#) resource in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

### Response example

```
HTTP/1.1 200 OK
Content-Length: 3389
Content-Type: application/json; charset=utf-8
MS-CorrelationId: 4827b753-8541-428b-8c90-059b6b4851bd
MS-RequestId: 8389053b-731c-4261-9899-1583d7859153
X-Locale: en-US
Date: Wed, 25 Mar 2020 19:13:06 GMT

{
  "orders": [
    {
      "id": "21b92393-ffce-4bc7-87c5-62cfa897d8f9",
      "alternateId": "21b92393-ffce-4bc7-87c5-62cfa897d8f9",
      "referenceCustomerId": "b67f0b00-f9e8-4c57-bcb5-0b8b95c6ccf0",
      "billingCycle": "annual",
      "currencyCode": "USD",
      "lineItems": [
        {
          "lineItemNumber": 0,
          "offerId": "5344C201-3099-44E5-B333-C3EB0401EDE0",
          "termDuration": "P1Y",
          "transactionType": "New",
          "friendlyName": "Dynamics 365 Customer Engagement Plan (36 mo)",
          "quantity": 1,
          "partnerIdOnRecord": "5139005",
          "links": {}
        }
      ],
      "creationDate": "2020-03-25T22:24:23.183+00:00",
      "status": "completed",
      "transactionType": "UserPurchase",
      "links": {
        "self": {
          "uri": "/customers/b67f0b00-f9e8-4c57-bcb5-0b8b95c6ccf0/orders/21b92393-ffce-4bc7-87c5-62cfa897d8f9",
          "method": "GET",
          "headers": []
        },
        "patchOperation": {
          "uri": "/customers/b67f0b00-f9e8-4c57-bcb5-0b8b95c6ccf0/orders/21b92393-ffce-4bc7-87c5-62cfa897d8f9",
          "method": "PATCH",
        }
      }
    }
  ]
}
```

```
        "headers": [ ]
    }
},
"attributes": {
    "etag": "eyJpZCI6IjIxYjkyMzkzLWZmY2UtNGJjNy04N2M1LTyyY2ZhODk3ZDhmOSIsInZlcnPpb24i0jF9",
    "objectType": "Order"
}
},
{
    "id": "7414b8ea-c167-4cc4-bc8e-b43efc177a46",
    "alternateId": "7414b8ea-c167-4cc4-bc8e-b43efc177a46",
    "referenceCustomerId": "b67f0b00-f9e8-4c57-bcb5-0b8b95c6ccf0",
    "billingCycle": "annual",
    "currencyCode": "USD",
    "lineItems": [
        {
            "lineItemNumber": 0,
            "offerId": "1A90EE13-2CB4-4785-BB0F-542813F00A37",
            "termDuration": "P1Y",
            "transactionType": "New",
            "friendlyName": "Dynamics 365 Business Central Essential",
            "quantity": 1,
            "partnerIdOnRecord": "5139005",
            "links": {
            }
        }
    ],
    "creationDate": "2020-03-25T22:24:34.59+00:00",
    "status": "completed",
    "transactionType": "UserPurchase",
    "links": {
        "self": {
            "uri": "/customers/b67f0b00-f9e8-4c57-bcb5-0b8b95c6ccf0/orders/7414b8ea-c167-4cc4-bc8e-b43efc177a46",
            "method": "GET",
            "headers": []
        },
        "patchOperation": {
            "uri": "/customers/b67f0b00-f9e8-4c57-bcb5-0b8b95c6ccf0/orders/7414b8ea-c167-4cc4-bc8e-b43efc177a46",
            "method": "PATCH",
            "headers": []
        }
    },
    "attributes": {
        "etag": "eyJpZCI6Ijc0MTRiOGVhLWMxNjctNGNjNC1iYzhLLWI0M2VmYzE3N2E0NiIsInZlcnPpb24i0jF9",
        "objectType": "Order"
    }
},
],
"transferErrors": [
{
    "transferGroupId": "1",
    "lineItems": [
        {
            "id": 1,
            "subscriptionId": "637FF8F6-D842-4573-8DA8-89765356CD1A",
            "entitlementId": "637FF8F6-D842-4573-8DA8-89765356CD1A",
            "offerId": "A4179D30-CC09-49F0-977E-DC2CB70B874F",
            "friendlyName": "Project Online Essentials",
            "quantity": 1,
            "transferGroupId": "1",
            "addonItems": [],
            "partnerIdOnRecord": "5139005",
            "billingCycle": "annual",
            "sourceSubscriptionId": "637FF8F6-D842-4573-8DA8-89765356CD1A"
        }
    ],
    "code": 900103,
    "description": "Subscription SyncState must be SyncComplete for the Subscription to be a source in a Subscription Ownership Transfer. Subscription: 637ff8f6-d842-4573-8da8-89765356cd1a, current state: None",
}
```

```
        "attributes": {
            "objectType": "TransferError"
        }
    },
    "attributes": {
        "objectType": "TransferSubmitResult"
    }
}
```

# Reject a transfer

6/19/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A transfer identifier for an existing transfer.

## REST request

### Request syntax

METHOD	REQUEST URI
PATCH	<code>/baseURL/v1/customers/{customer-id}/transfers/{transfer-id}</code> HTTP/1.1

### URI parameter

Use the following path parameter to identify the customer and specify the transfer to be accepted.

NAME	TYPE	REQUIRED	DESCRIPTION
<code>customer-id</code>	string	Yes	A GUID formatted customer-id that identifies the customer.
<code>transfer-id</code>	string	Yes	A GUID formatted transfer-id that identifies the transfer.

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

This table describes the [TransferEntity](#) properties in the request body.

PROPERTY	TYPE	REQUIRED	DESCRIPTION
----------	------	----------	-------------

PROPERTY	TYPE	REQUIRED	DESCRIPTION
id	string	No	A transferEntity identifier that is supplied upon successful creation of the transferEntity.
status	string	No	The status of the transferEntity. To reject a transfer, the value is to be set as "reject"

## Request example

```
PATCH /v1/customers/b67f0b00-f9e8-4c57-bcb5-0b8b95c6ccf0/transfers/ac4a9d22-ba07-444e-890f-cfe084eed498
HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-CorrelationId: efa4c6f5-153a-4f76-e458-1375e181cc14
MS-RequestId: 5b46e795-b661-428e-a2e7-f208b8d0d25c
Connection: keep-alive
Content-Length: 63

{"id":"ac4a9d22-ba07-444e-890f-cfe084eed498","status":"reject"}
```

## REST response

If successful, this method returns the populated [TransferEntity](#) resource in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

### Response example

HTTP/1.1 200 OK  
Content-Length: 1069  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: efa4c6f5-153a-4f76-e458-1375e181cc14  
MS-RequestId: 5b46e795-b661-428e-a2e7-f208b8d0d25c  
X-Locale: en-US  
Date: Fri, 27 Mar 2020 17:50:33 GMT

```
{  
    "id": "ac4a9d22-ba07-444e-890f-cfe084eed498",  
    "status": "Reject",  
    "createdTime": "2020-03-25T22:05:25.1057725Z",  
    "lastModifiedTime": "2020-03-27T17:50:32Z",  
    "customerTenantId": "b67f0b00-f9e8-4c57-bcb5-0b8b95c6ccf0",  
    "partnertenantid": "3a9a35ce-d5be-4814-ab58-4451c36fe157",  
    "sourcePartnerName": "Test_Test_09092019GBL",  
    "sourcePartnerTenantId": "7c8db11f-1e5e-4472-8386-f0b627d1f3e1",  
    "targetPartnerName": "Test_Test_09032019GBL",  
    "targetPartnerTenantId": "3a9a35ce-d5be-4814-ab58-4451c36fe157",  
    "lastModifiedUser": "01a7548d-1136-4cf0-ba9a-300f921ffb22",  
    "lineItems": [  
        {  
            "id": 0,  
            "subscriptionId": "1151B8CE-125C-49D7-8C48-E62FC9101B77",  
            "offerId": "13D32E13-A1B0-400D-96C0-4EAAA14DCED5",  
            "billingCycle": "monthly",  
            "friendlyName": "Dynamics 365 for Supply Chain Management Attach to Qualifying Dynamics 365 Base Offer (Qualified Offer)",  
            "quantity": 20,  
            "partnerIdOnRecord": "5139005",  
            "addonItems": [  
                ]  
            }  
        ],  
        "links": {  
            "self": {  
                "uri": "/customers/b67f0b00-f9e8-4c57-bcb5-0b8b95c6ccf0/transfers/ac4a9d22-ba07-444e-890f-cfe084eed498",  
                "method": "GET",  
                "headers": [  
                    ]  
                }  
            },  
            "attributes": {  
                "objectType": "TransferEntity"  
            }  
        }  
}
```

# Update user accounts for a customer

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center

Update details in an existing user account for your customer.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## C#

To update the details for a specified customer user, first retrieve the specified customer ID and user to update. Then, create an updated version of the user in a new **CustomerUser** object. Then, use your **IAggregatePartner.Customers** collection and call the **ById()** method. Then call the **Users** property, the **ById()** method, followed by the **Patch()** method.

```
// string selectedCustomerId;
// customerUser specifiedUser;
// IAggregatePartner partnerOperations;

// Updated information
var userToUpdate = new CustomerUser()
{
    PasswordProfile = new PasswordProfile() { ForceChangePassword = true, Password = "testPw@!122B" },
    DisplayName = "DisplayNameChange",
    FirstName = "FirstNameChange",
    LastName = "LastNameChange",
    UsageLocation = "US",
    UserPrincipalName = Guid.NewGuid().ToString("N") + "@" + selectedCustomer.CompanyProfile.Domain.ToString()
};

// Update customer user information
User updatedCustomerUserInfo =
    partnerOperations.Customers.ById(selectedCustomerId).UsersById(specifiedUser.Id).Patch(userToUpdate);
```

Sample: [Console test app](#). Project: PartnerSDK.FeatureSamples Class: CustomerUserUpdate.cs

## REST request

### Request syntax

METHOD	REQUEST URI
PATCH	<a href="#"><i>{baseUrl}</i></a> /v1/customers/{customer-tenant-id}/users HTTP/1.1

## URI parameter

Use the following query parameter to identify the correct customer.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	guid	Y	The value is a GUID formatted <b>customer-tenant-id</b> that allows the reseller to filter the results for a given customer that belongs to the reseller.
user-id	guid	Y	The value is a GUID formatted <b>user-id</b> that belongs to a single user account.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

### Request example

```
PATCH https://api.partnercenter.microsoft.com/v1/customers/<customer-tenant-id>/users/<user-id> HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: b1317092-f087-471e-a637-f66523b2b94c
MS-CorrelationId: 8a53b025-d5be-4d98-ab20-229d1813de76
{
    "usageLocation": "new country/region code",

    "attributes": {
        "objectType": "CustomerUser"
    }
}
```

## REST response

If successful, this method returns a user account with the updated information.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

### Response example

```
HTTP/1.1 200 OK
Content-Length: 31942
Content-Type: application/json
MS-CorrelationId: 8a53b025-d5be-4d98-ab20-229d1813de76
MS-RequestId: b1317092-f087-471e-a637-f66523b2b94c
Date: June 24 2016 22:00:25 PST
{
  "usageLocation": "new country/region code",
  "id": "4b10bf41-ab11-40e3-8c53-cd67849b50de",
  "userPrincipalName": "emailidchange@abcdefg1234.ccsctp.net",
  "firstName": "FirstNameChange",
  "lastName": "LastNameChange",
  "displayName": "DisplayNameChange",
  "userDomainType": "none",
  "state": "active",
  "links": {
    "self": {
      "uri": "/customers/eabd1b55-5360-4438-a11d-5c06918c3014/users/4b10bf41-ab11-40e3-8c53-cd67849b50de",
      "method": "GET",
      "headers": [
        ]
    }
  },
  "attributes": {
    "objectType": "CustomerUser"
  }
}
```

# View deleted users for a customer

4/25/2020 • 3 minutes to read • [Edit Online](#)

## Applies To

- Partner Center

Gets a list of deleted CustomerUser resources for a customer by customer ID. You can optionally set a page size. You must supply a filter.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## What happens when you delete a user account?

The user state is set to "inactive" when you delete a user account. It remains that way for thirty days, after which the user account and its associated data are purged and made unrecoverable. If you want to restore a deleted user account within the thirty day window, see [Restore a deleted user for a customer](#). Once deleted and marked "inactive", the user account is no longer returned as a member of the user collection (for example, using [Get a list of all user accounts for a customer](#)). To get a list of deleted users that have not yet been purged, you must query for user accounts that have been set to inactive.

## C#

To retrieve a list of deleted users, construct a query that filters for customer users whose status is set to inactive. First, create the filter by instantiating a [SimpleFieldFilter](#) object with the parameters as shown in the following code snippet. Then create the query using the [BuildIndexedQuery](#) method. If you do not want paged results, you can use the [BuildSimpleQuery](#) method instead. Next, use the [IAggregatePartner.Customers.ById](#) method with the customer ID to identify the customer. Finally, call the [Query](#) method to send the request.

```
// IAggregatePartner partnerOperations;
// int customerUserPageSize;

// Create a filter for users whose status is inactive (i.e. deleted).
var filter = new SimpleFieldFilter("UserState", FieldFilterOperation.Equals, "Inactive");

// Build a paged query.
var simpleQueryWithFilter = QueryFactory.Instance.BuildIndexedQuery(customerUserPageSize, 0, filter);

// Send the request.
var customerUsers = partnerOperations.CustomersById(selectedCustomerId).Users.Query(simpleQueryWithFilter);
```

Sample: [Console test app](#). Project: Partner Center SDK Samples Class: `GetCustomerInactiveUsers.cs`

# REST request

## Request syntax

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/customers/{customer-id}/users?size={size}&amp;filter={filter}</code> HTTP/1.1

## URI parameter

Use the following path and query parameters when creating the request.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-id	guid	Yes	The value is a GUID formatted customer-id that identifies the customer.
size	int	No	The number of results to be displayed at one time. This parameter is optional.
filter	filter	Yes	The query that filters the user search. To retrieve deleted users, you must include and encode the following string: <code>{"Field":"UserState","Value":"Inactive","Operator":"equals"}</code> .

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/4d3cf487-70f4-4e1e-9ff1-b2bfce8d9f04/users?  
size=50&filter=%7B%22Field%22%3A%22UserState%22%2C%22Value%22%3A%22Inactive%22%2C%22operator%22%3A%22equals%2  
2%7D HTTP/1.1  
Authorization: Bearer <token>  
Accept: application/json  
MS-RequestId: c11feb95-55d2-45b6-9d1b-74b55d2221fb  
MS-CorrelationId: 2b4ab588-f48c-4874-b479-a61895e107b2  
X-Locale: en-US  
Host: api.partnercenter.microsoft.com
```

# REST response

If successful, this method returns a collection of [CustomerUser](#) resources in the response body.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 802
Content-Type: application/json; charset=utf-8
MS-CorrelationId: 690b34ca-07c8-4f8a-ab13-f22a50594a43
MS-RequestId: 1187f9ad-02b4-4d96-b668-7cf3d289467b
MS-CV: 3TLmR9gz6EaCVCjR.0
MS-ServerId: 101112616
Date: Fri, 20 Jan 2017 19:13:14 GMT

{
    "totalCount": 1,
    "items": [
        {
            "usageLocation": "US",
            "id": "a45f1416-3300-4f65-9e8d-f123b397a4ea",
            "userPrincipalName": "e83763f7f2204ac384cfcd49f79f2749@dtdemocspcustomer005.onmicrosoft.com",
            "firstName": "Ferdinand",
            "lastName": "Filibuster",
            "displayName": "Ferdinand",
            "userDomainType": "none",
            "state": "inactive",
            "softDeletionTime": "2017-01-20T00:33:34Z",
            "links": {
                "self": {
                    "uri": "/customers/4d3cf487-70f4-4e1e-9ff1-b2bfce8d9f04/users/a45f1416-3300-4f65-9e8d-f123b397a4ea",
                    "method": "GET",
                    "headers": []
                }
            },
            "attributes": {
                "objectType": "CustomerUser"
            }
        }
    ],
    "links": {
        "self": {
            "uri": "/customers/4d3cf487-70f4-4e1e-9ff1-b2bfce8d9f04/users?size=500&filter=%7B%22Field%22%3A%22UserStatus%22%2C%22Value%22%3A%22Inactive%22%2C%22operator%22%3A%22equals%22%7D",
            "method": "GET",
            "headers": []
        }
    },
    "attributes": {
        "objectType": "Collection"
    }
}
```

# Create a SelfServePolicy

4/29/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center

This topic explains how to create a new self serve policy.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials.

## REST request

### Request syntax

METHOD	REQUEST URI
POST	<a href="#"><i>{baseUrl}</i>/v1/SelfServePolicy</a> HTTP/1.1

### Request headers

- A request ID and correlation ID are required.
- See [Partner Center REST headers](#) for more information.

### Request body

This table describes the required properties in the request body.

NAME	TYPE	DESCRIPTION
<a href="#">SelfServePolicy</a>	object	The self serve policy information.

### SelfServePolicy

This table describes the minimum required fields from the [SelfServePolicy](#) resource needed to create a new self serve policy.

PROPERTY	TYPE	DESCRIPTION
SelfServeEntity	SelfServeEntity	The self serve entity that is being granted access.
Grantor	Grantor	The grantor that is granting access.
Permissions	Array of Permission	An Array of <a href="#">Permission</a> resources.

### Request example

```

POST https://api.partnercenter.microsoft.com/v1/SelfServePolicy HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 94e4e214-6b06-4fb7-96d1-94d559f9b47f
MS-CorrelationId: ab993325-1605-4cf4-bac4-fb584142a31b
X-Locale: en-US
Content-Type: application/json
Host: api.partnercenter.microsoft.com
Content-Length: 789
Expect: 100-continue
Connection: Keep-Alive

{
  "selfServeEntity": {
    "selfServeEntityType": "customer",
    "tenantID": "0431a72c-7d8a-4393-b25e-ef63f5efb415"
  },
  "grantor": {
    "grantorType": "billToPartner",
    "tenantID": "634f6379-ad54-449b-9821-564f737158ab"
  },
  "permissions": [
    {
      "resource": "AzureReservedInstances",
      "action": "Purchase"
    }
  ]
}

```

## REST response

If successful, this API returns a [SelfServePolicy](#) resource for the new self serve policy.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

This method returns the following error codes:

HTTP STATUS CODE	ERROR CODE	DESCRIPTION
409	600041	Self serve policy already exists.

### Response example

HTTP/1.1 201 Created  
Content-Length: 834  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: ab993325-1605-4cf4-bac4-fb584142a31b  
MS-RequestId: 94e4e214-6b06-4fb7-96d1-94d559f9b47f  
Date: Tue, 14 Feb 2017 20:06:02 GMT

```
{  
  "id": "634f6379-ad54-449b-9821-564f737158ab_0431a72c-7d8a-4393-b25e-ef63f5efb415",  
  "selfServeEntity": {  
    "selfServeEntityType": "customer",  
    "tenantID": "0431a72c-7d8a-4393-b25e-ef63f5efb415"  
  },  
  "grantor": {  
    "grantorType": "billToPartner",  
    "tenantID": "634f6379-ad54-449b-9821-564f737158ab"  
  },  
  "permissions": [  
    {"resource": "AzureReservedInstances",  
     "action": "Purchase"}],  
  "attributes": {  
    "etag": "\"933523d1-3f63-4fc3-8789-5e21c02cdaed\"",  
    "objectType": "SelfServePolicy"  
  }  
}
```

# Delete a SelfServePolicy

4/29/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center

This topic explains how to update a self serve policy.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials.

## REST request

### Request syntax

METHOD	REQUEST URI
DELETE	<i>{baseUrl}</i> /v1/SelfServePolicy/{id} HTTP/1.1

### URI parameter

Use the following path parameters to get the specified product.

NAME	TYPE	REQUIRED	DESCRIPTION
SelfServePolicy-id	string	Yes	A string that identifies the self serve policy.

### Request headers

- A request ID and correlation ID are required.
- See [Partner Center REST headers](#) for more information.

### Request body

None.

### Request example

```
DELETE https://api.partnercenter.microsoft.com/v1/SelfServePolicy/634f6379-ad54-449b-9821-564f737158ab_0431a72c-7d8a-4393-b25e-ef63f5efb415 HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 94e4e214-6b06-4fb7-96d1-94d559f9b47f
MS-CorrelationId: ab993325-1605-4cf4-bac4-fb584142a31b
X-Locale: en-US
Host: api.partnercenter.microsoft.com
Content-Length: 789
Connection: Keep-Alive
```

# REST response

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

## Response example

```
HTTP/1.1 204 deleted
MS-CorrelationId: ab993325-1605-4cf4-bac4-fb584142a31b
MS-RequestId: 94e4e214-6b06-4fb7-96d1-94d559f9b47f
Date: Tue, 14 Feb 2017 20:06:02 GMT
```

# Get a list of self serve policies

4/29/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center

This topic describes how to get a collection of resources that represents self serve polices for an entity.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials.

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>/baseURL/v1/SelfServePolicy?entity_id={entity_id}</code> HTTP/1.1

### URI parameter

Use the following query parameter to get a list of customers.

NAME	TYPE	REQUIRED	DESCRIPTION
entity_id	string	Y	The entity identifier requesting access for. This will be the customers tenant id.

### Request headers

See [Headers](#) for more information.

### Request body

None.

### Request example

```
GET https://api.partnercenter.microsoft.com/v1/SelfServePolicy?entity_id=0431a72c-7d8a-4393-b25e-ef63f5efb415
HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 3705fc6d-4127-4a87-bdba-9658f73fe019
MS-CorrelationId: b12260fb-82de-4701-a25f-dcd367690645
```

## REST response

If successful, this method returns a collection of [SelfServePolicy](#) resources in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For a full list, see [Error Codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 15650
Content-Type: application/json
MS-CorrelationId: b12260fb-82de-4701-a25f-dcd367690645
MS-RequestId: 3705fc6d-4127-4a87-bdba-9658f73fe019
Date: Fri, 20 Nov 2015 01:08:23 GMT

{
    "totalCount": 1,
    "items": [
        {
            "id": "634f6379-ad54-449b-9821-564f737158ab_0431a72c-7d8a-4393-b25e-ef63f5efb415",
            "selfServeEntity": {
                "selfServeEntityType": "customer",
                "tenantID": "0431a72c-7d8a-4393-b25e-ef63f5efb415"
            },
            "grantor": {
                "grantorType": "billToPartner",
                "tenantID": "634f6379-ad54-449b-9821-564f737158ab"
            },
            "permissions": [
                {
                    "resource": "AzureReservedInstances",
                    "action": "Purchase"
                }
            ],
            "attributes": {
                "etag": "\"933523d1-3f63-4fc3-8789-5e21c02cdaed\"",
                "objectType": "SelfServePolicy"
            }
        },
        "attributes": {
            "objectType": "Collection"
        }
    ]
}
```

# Get a self serve policy by ID

4/29/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center

Gets the specified self serve policy using its ID.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials.
- A self serve policy ID.

## Examples

### REST Request

#### Request syntax

METHOD	REQUEST URI
GET	<a href="#"><i>/baseURL</i></a> /v1/SelfServePolicy/{id} HTTP/1.1

#### URI parameter

Use the following path parameters to get the specified product.

NAME	TYPE	REQUIRED	DESCRIPTION
SelfServePolicy-id	string	Yes	A string that identifies the self serve policy.

#### Request headers

- See [Headers](#) for more information.

#### Request body

None.

#### Request example

```
GET https://api.partnercenter.microsoft.com/v1/SelfServePolicy/634f6379-ad54-449b-9821-564f737158ab_0431a72c-7d8a-4393-b25e-ef63f5efb415 HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 031160b2-b0b0-4d40-b2b1-aaa9bb84211d
MS-CorrelationId: 7c1f6619-c176-4040-a88f-2c71f3ba4533
```

## REST response

If successful, the response body contains a [SelfServePolicy](#) resource.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center error codes](#).

This method returns the following error codes:

HTTP STATUS CODE	ERROR CODE	DESCRIPTION
404	600039	Self serve policy not found.

## Response example

```
HTTP/1.1 200 OK
Content-Length: 1918
Content-Type: application/json
MS-CorrelationId: 7c1f6619-c176-4040-a88f-2c71f3ba4533
MS-RequestId: ac943950-ba3d-47a0-bd2a-c5617a7fefeb8
Date: Tue, 23 Jan 2018 23:13:01 GMT

{
  "id": "634f6379-ad54-449b-9821-564f737158ab_0431a72c-7d8a-4393-b25e-ef63f5efb415",
  "selfServeEntity": {
    "selfServeEntityType": "customer",
    "tenantID": "0431a72c-7d8a-4393-b25e-ef63f5efb415"
  },
  "grantor": {
    "grantorType": "billToPartner",
    "tenantID": "634f6379-ad54-449b-9821-564f737158ab"
  },
  "permissions": [
    {
      "resource": "AzureReservedInstances",
      "action": "Purchase"
    }
  ],
  "attributes": {
    "etag": "\"933523d1-3f63-4fc3-8789-5e21c02cdaed\"",
    "objectType": "SelfServePolicy"
  }
}
```

# Update a SelfServePolicy

5/14/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center

This topic explains how to update a self serve policy.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials.

## REST request

### Request syntax

METHOD	REQUEST URI
PUT	<a href="#"><i>{baseUrl}</i>/v1/SelfServePolicy</a> HTTP/1.1

### Request headers

- A request ID and correlation ID are required.
- See [Partner Center REST headers](#) for more information.

### Request body

This table describes the required properties in the request body.

NAME	TYPE	DESCRIPTION
<a href="#">SelfServePolicy</a>	object	The self serve policy information.

### SelfServePolicy

This table describes the minimum required fields from the [SelfServePolicy](#) resource needed to create a new self serve policy.

PROPERTY	TYPE	DESCRIPTION
id	string	A self serve policy identifier that is supplied upon successful creation of the self serve policy.
SelfServeEntity	SelfServeEntity	The self serve entity that is being granted access.
Grantor	Grantor	The grantor that is granting access.
Permissions	Array of Permission	An Array of <a href="#">Permission</a> resources.
Etag	string	The Etag.

## Request example

```
PUT https://api.partnercenter.microsoft.com/v1/SelfServePolicy HTTP/1.1
Authorization: Bearer <token>
MS-RequestId: 94e4e214-6b06-4fb7-96d1-94d559f9b47f
MS-CorrelationId: ab993325-1605-4cf4-bac4-fb584142a31b
Content-Type: application/json
Host: api.partnercenter.microsoft.com
Connection: Keep-Alive

{
  "id": "634f6379-ad54-449b-9821-564f737158ab_0431a72c-7d8a-4393-b25e-ef63f5efb415",
  "selfServeEntity": {
    "selfServeEntityType": "customer",
    "tenantID": "0431a72c-7d8a-4393-b25e-ef63f5efb415"
  },
  "grantor": {
    "grantorType": "billToPartner",
    "tenantID": "634f6379-ad54-449b-9821-564f737158ab"
  },
  "permissions": [
    {
      "resource": "AzureReservedInstances",
      "action": "Purchase"
    }
  ],
  "attributes": {
    "etag": "\"933523d1-3f63-4fc3-8789-5e21c02cdaed\"",
    "objectType": "SelfServePolicy"
  }
}
```

## REST response

If successful, this API returns a [SelfServePolicy](#) resource for the updated self serve policy.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

This method returns the following error codes:

HTTP STATUS CODE	ERROR CODE	DESCRIPTION
404	600039	Self serve policy was not found
404	600040	Self serve policy identifier is incorrect

## Response example

HTTP/1.1 200 OK  
Content-Length: 834  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: ab993325-1605-4cf4-bac4-fb584142a31b  
MS-RequestId: 94e4e214-6b06-4fb7-96d1-94d559f9b47f  
Date: Tue, 14 Feb 2017 20:06:02 GMT

```
{  
    "id": "634f6379-ad54-449b-9821-564f737158ab_0431a72c-7d8a-4393-b25e-ef63f5efb415",  
    "selfServeEntity": {  
        "selfServeEntityType": "customer",  
        "tenantID": "0431a72c-7d8a-4393-b25e-ef63f5efb415"  
    },  
    "grantor": {  
        "grantorType": "billToPartner",  
        "tenantID": "634f6379-ad54-449b-9821-564f737158ab"  
    },  
    "permissions": [  
        {"resource": "AzureReservedInstances",  
         "action": "Purchase"}],  
    "attributes": {  
        "etag": "\"1ec98034-a249-46f4-b9dd-9cd464fb5e47\"",  
        "objectType": "SelfServePolicy"  
    }  
}
```

# Manage orders

4/23/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud for US Government

This section describes the ways that Cloud Solution Provider partners can use Partner Center to programmatically manage customer orders and subscriptions.

## Purchase Azure Reserved VM Instances

- [Purchase Azure reservations](#)

## Make a one-time purchase

- [Make a one-time purchase](#)

## Get offers from the catalog

- [Get a list of offer categories by country and locale](#)
- [Get a list of offers for a market](#)
- [Get an offer by ID](#)
- [Get add-ons for an offer ID](#)
- [Get a list of products](#)
- [Get a product by ID](#)
- [Get a list of SKUs for a product](#)
- [Get a SKU by ID](#)
- [Get a list of availabilities for a SKU](#)
- [Get an availability by ID](#)
- [Check Inventory](#)

## Manage an order

- [Cancel an order from the integration sandbox](#)
- [Checkout a cart](#)
- [Create a cart](#)
- [Create a cart with add-ons](#)
- [Get activation link by order line item](#)
- [Get an order by ID](#)
- [Purchase an add-on to a subscription](#)
- [Purchase catalog items](#)
- [Update a cart](#)

## Enable a subscription for Azure Reserved VM Instance purchases

- [Register a subscription](#)
- [Get subscription registration status](#)

## Get subscription details

- [Get a subscription by ID](#)
- [Get a list of subscriptions by order](#)
- [Get a list of add-ons for a subscription](#)

## Manage a subscription

- [Change the quantity of a subscription](#)
- [Update autorenew for a commercial marketplace subscription](#)
- [Suspend a subscription](#)
- [Reactivate a suspended subscription](#)
- [Transition a subscription](#)
- [Cancel a commercial marketplace subscription](#)

For more information about the process of reviewing offers, creating orders, or working with subscriptions, see [Scenarios](#), specifically the [Background](#) section.

# Create an Azure plan

4/24/2020 • 4 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center

You can purchase, create, and manage an Azure plan using the Partner Center APIs. The process is similar to creating a Microsoft Azure (MS-AZR-0145P) subscription. You must [get the catalog item for the Azure plan](#), then [create and submit an order](#).

## Prerequisites

- [Partner Center authentication](#) credentials. This scenario supports authentication with both standalone App and App+User credentials.
- The customer identifier. If you don't have a customer's identifier, follow the steps in [Get a list of customers](#). Alternatively, sign in to Partner Center, choose the customer from the list of customers, select **Account**, then save their **Microsoft ID**.
- [Confirmation of the customer's acceptance of the Microsoft Customer Agreement](#).

## Get the catalog item for Azure plan

Before you can create an Azure plan for a customer, you need to retrieve the corresponding catalog item. You can retrieve the catalog item using the existing Partner Center catalog APIs with the following resource models.

- **Product**: A grouping construct for purchasable goods or services. A product itself isn't a purchasable item.
- **SKU**: A purchasable Stock Keeping Unit (SKU) under a product. SKUs represent the different shapes of the product.
- **Availability**: A configuration in which a SKU is available for purchase (such as country, currency, or industry segment).

To obtain the catalog item for an Azure plan, complete the following steps:

1. Identify and retrieve the *product* identifier for the Azure plan. Follow the steps in [Get a list of products](#) and specify the **targetView** as **MicrosoftAzure**. (If you already know the *product* identifier for the Azure plan, you can follow the steps in [Get a product using the product ID](#) instead.)
2. Retrieve the **SKU** from the product for the Azure plan. Follow the steps in [Get a list of SKUs for a product](#). If you already know the **SKU** identifier for the Azure plan, you can follow the steps in [Get a SKU using the SKU ID](#) instead.
3. Retrieve the **availability** from the **SKU** for the Azure plan. Follow the steps in [Get a list of availabilities for a SKU](#). If you already know the identifier for the availability you need, you can follow the steps in [Get an availability using the availability ID](#) instead. *Be sure to note the value of the CatalogItemId property of the availability for the Azure plan. You will need this value to create an order.*

## Create and submit an order

To submit your order for an Azure plan, follow these steps:

1. [Create a cart](#) to hold the collection of catalog items that you intend to buy. When you create a **cart**, the **cart line items** are automatically grouped based on what can be purchased together in the same **order**. (You can

also update a cart.)

2. [Check out the cart](#), which results in the creation of an [order](#).

## Get order details

You can [retrieve the details of an individual order using the order ID](#). You can also [retrieve a list of all orders for a specific customer](#).

### NOTE

After an order is submitted, there is a delay of up to 15 minutes before the order appears in that customer's order list.

## Manage Azure plans

After the order is successfully processed, a Partner Center **Subscription** resource will be created for the Azure plan. You can use the following methods for managing Partner Center **Subscription** resources to manage the Azure plan:

- [Get a customer's subscriptions](#)
- [Get a list of subscriptions by order](#)

When an Azure plan is created in Partner Center, a corresponding Azure usage subscription is also created in Azure. You can also create additional Azure usage subscriptions under the same Azure plan using Azure Portal and Azure APIs. You can obtain the identifiers of all the Azure usage subscriptions associated with an Azure plan by following the steps in [Get a list of Azure entitlements for Partner Center subscription](#)

## Lifecycle management

You can suspend an existing Azure plan by following the steps in [Suspend a subscription](#).

*You can only suspend an existing Azure plan if it no longer has any active usage assets associated with it, including Azure usage subscriptions and Azure reservations.*

For details on how to disable Azure usage subscriptions, see [Azure API on subscription lifecycle management](#).

To remove existing Azure reservations, you must [cancel the reservations](#). After you suspend an Azure plan, you can reactivate it.

For details on how to reactivate an Azure plan, see [Reactivate a suspended subscription](#)

## Transition existing CSP offers to Azure plan

You can't create an Azure plan for an existing customer with a Microsoft Azure (MS-AZR-0145P) subscription. However, you can [transition a customer from their existing CSP Azure offers to Azure services under the Azure plan](#) in the new commerce experience in the CSP program from within Partner Center. To transition an existing customer, use the product upgrade APIs to follow these steps:

- [Check whether the customer is eligible for a transition to Azure plan](#)
- [Initiate a product upgrade for the customer](#)
- [Check the status of a product upgrade](#)

## Azure spending

You can track [Azure spending](#) by querying for usage summary and detailed usage records using the following methods:

- [Get partner usage summary](#)
- [Get all customer usage records for a partner](#)
- [Get customer usage summary](#)
- [Get all subscription usage records for a customer](#)
- [Get subscription usage summary](#)
- [Get usage data for subscription by resource](#)
- [Get usage data for subscription by meter](#)
- [Get meter usage record resources](#)
- [Get resource usage record resources](#)

You can also set and manage customer usage budget using the following methods:

- [Get customer usage budget](#)
- [Update customer usage budget](#)

## Invoice and reconciliation

You can manage invoices and reconciliation data using the following methods:

- [Get a collection of invoices](#)
- [Get invoice estimate links](#)
- [Get invoice by ID](#)
- [Get invoice statement](#)
- [Get invoice summaries](#)
- [Get invoice billed consumption line items](#)
- [Get invoice unbilled consumption line items](#)
- [Get invoice billed recon line items](#)
- [Get invoice unbilled recon line items](#)

# Purchase Azure reservations

6/19/2020 • 7 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center for Microsoft Cloud for US Government

To purchase an Azure reservation for a customer using the Partner Center API, you must have an existing Microsoft Azure (MS-AZR-0145P) subscription or Azure plan for them.

### NOTE

Azure reservations are not available in the following markets:

UNAVAILABLE MARKETS	UNAVAILABLE MARKETS (CONTINUED...)	UNAVAILABLE MARKETS (CONTINUED...)
Åland Islands	Greenland	Papua New Guinea
American Samoa	Grenada	Pitcairn Islands
Andorra	Guadeloupe	Reunion
Anguilla	Guam	Russian Federation
Antarctica	Guernsey	Saba
Antigua and Barbuda	Guinea	Saint Barthélemy
Aruba	Guinea-Bissau	Saint Lucia
Benin	Guyana	Saint Martin
Bhutan	Haiti	Saint Pierre and Miquelon
Bonaire	Heard Island and McDonald Islands	Saint Vincent and the Grenadines
Bouvet Island	Isle of Man	Samoa
Brazil	Jan Mayen	San Marino
British Indian Ocean Territory	Jersey	São Tomé and Príncipe
British Virgin Islands	Kiribati	Seychelles
Burkina Faso	Kosovo	Sierra Leone
Burundi	Laos	Sint Eustatius
Cambodia	Lesotho	Sint Maarten
Central African Republic	Liberia	Solomon Islands
Chad	Madagascar	Somalia

UNAVAILABLE MARKETS	UNAVAILABLE MARKETS (CONTINUED...)	UNAVAILABLE MARKETS (CONTINUED...)
China	Malawi	South Georgia and South Sandwich Islands
Christmas Island	Maldives	South Sudan
Cocos (Keeling) Islands	Mali	St Helena, Ascension, Tristan da Cunha
Comoros	Marshall Islands	Suriname
Congo	Martinique	Svalbard
Congo (DRC)	Mauritania	Swaziland
Cook Islands	Mayotte	Timor-Leste
Djibouti	Micronesia	Togo
Dominica	Montserrat	Tokelau
Equatorial Guinea	Mozambique	Tonga
Eritrea	Myanmar	Turks and Caicos Islands
Falkland Islands	Nauru	Tuvalu
French Guiana	New Caledonia	U.S. Outlying Islands
French Polynesia	Niger	Vanuatu
French Southern Territories	Niue	Vatican City
Gabon	Norfolk Island	Wallis and Futuna
Gambia	Northern Mariana Islands	Yemen
Gibraltar	Palau	

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A subscription ID for an active CSP Azure subscription or an Azure plan.

## How to purchase Microsoft Azure reservations

Once you have identified the active CSP Azure subscription that you want to add an Azure reservation to, use the following steps to purchase it:

1. [Enablement](#) - Register an active CSP Azure subscription to enable it for purchasing Azure reservations.
2. [Discovery](#) - Find and select the Azure reservation products and SKUs you want to purchase and check their availability.
3. [Order submission](#) - Create a shopping cart with the items in your order and submit it.
4. [Get order details](#) - Review the details of an order, all the orders for a customer, or view orders by billing cycle type.

After you have purchased Azure reservations, the following scenarios show you how to manage their lifecycle by getting information about your Azure reservation entitlements, and how to retrieve balance statements, invoices, and invoice summaries.

- [Lifecycle management](#)
- [Invoice and reconciliation](#)

## Enablement

Enablement means associating an existing Microsoft Azure (**MS-AZR-0145P**) subscription to an Azure Reserved VM Instance by registering the subscription so that it is enabled for Azure reservations. Registration is a prerequisite to purchase Azure Reserved VM Instances.

A subscription is required due to the following:

1. To check if the customer is eligible to deploy resources and hence purchase Azure Reserved VM Instances in a region or not.
2. To provide capacity priority for deployments on a subscription. This is applicable only to single scope Azure Reserved VM Instances with the **capacity priority** option selected.

Once you have identified the active subscription that you want to add the Azure reservation to, you must register the subscription so that it is enabled for Azure reservations. To register an existing [Subscription](#) resource so that it is enabled for ordering Azure reservations, see [Register a subscription](#).

After registering your subscription, you should confirm that the registration process is completed by checking the registration status. To do this, see [Get subscription registration status](#).

### NOTE

When purchasing Microsoft Azure reservation for a customer with an Azure plan, you must register the Azure plan first. Similar to a Microsoft Azure (**MS-AZR-0145P**) subscription, an Azure plan is represented by a Partner Center [Subscription](#) resource. Hence, you can use the same [Register a subscription](#) method to register an Azure plan.

## Discovery

Once the subscription is enabled for purchasing Azure reservations, you're ready to select products and SKUs and check their availability using the following Partner Center API models:

- [Product](#) - A grouping construct for purchasable goods or services. A product by itself isn't a purchasable item.
- [SKU](#) - A purchasable Stock Keeping Unit (SKU) under a product. These represent the different shapes of the product.
- [Availability](#) - A configuration in which a SKU is available for purchase (such as country, currency and industry segment).

Before purchasing an Azure reservation, complete the following steps:

1. Identify and retrieve the Product and SKU that you want to purchase. You can do this by listing the products and SKUs first, or If you already know the IDs of the product and SKU, selecting them.
  - [Get a list of products \(by country\)](#)
  - [Get a product using the product ID](#)
  - [Get a list of SKUs for a product \(by country\)](#)
  - [Get a SKU using the SKU ID](#)
2. Check the inventory for a SKU. This step is only needed for SKUs that are tagged with an **InventoryCheck** prerequisite.
  - [Check Inventory](#)
3. Retrieve the [availability](#) for the [SKU](#). You will need the **CatalogItemId** of the availability when placing the order. To get this value, use one of the following APIs:
  - [Get a list of availabilities for a SKU \(by country\)](#)
  - [Get an availability using the availability ID](#)

#### IMPORTANT

Each Microsoft Azure reservation product has different availabilities for Microsoft Azure (**MS-AZR-0145P**) subscription and Azure plan. To [Get a list of products \(by country\)](#), or [Get a list of SKUs for a product \(by country\)](#), or [Get a list of availabilities for a SKU \(by country\)](#) which are applicable to Azure plan only, specify the "reservationScope=AzurePlan" parameter.

## Order submission

To submit your Azure reservation order, do the following:

1. Create a cart to hold the collection of catalog items that you intend to buy. When you create a [Cart](#), the [cart line items](#) are automatically grouped based on what can be purchased together in the same [Order](#).
  - [Create a shopping cart](#)
  - [Update a shopping cart](#)
2. Check out the cart. Checking out a cart results in the creation of an [Order](#).
  - [Checkout the cart](#)

## Get order details

Once you have created your Azure reservation order, you can retrieve the details of an individual order using the order ID, or get a list of orders for a customer. There is a delay of up to 15 minutes between the time an order is submitted and when it will appear in a list of a customer's orders.

- To get the details of an individual order using the order ID. See, [Get an order by ID](#).
- To get a list of orders for a customer using the customer ID. See, [Get all of a customer's orders](#).
- To get a list of orders for a customer by [billing cycle type](#) allowing you to list Azure reservation orders (one-time charges) and annual or monthly billed orders separately. See, [Get a list of orders by customer and billing cycle type](#).

## Lifecycle management

As part of managing the lifecycle of your Azure reservations in Partner Center, you can retrieve information about

your Azure reservation [Entitlements](#), and get reservation details using the reservation order ID. For examples of how to do this, see [Get entitlements](#).

## Invoice and reconciliation

The following scenarios show you how to programmatically view your customer's [invoices](#), and get your account balances and summaries that include one-time charges for Azure reservations.

### Balance and payment

To get current account balance in your default currency type that is a balance of both recurring and one-time (Azure reservation) charges, see [Get your current account balance](#)

### Multi-currency balance and payment

To get your current account balance and a collection of invoice summaries containing an invoice summary with both recurring and one-time charges for each of your customer's currency types, see [Get invoice summaries](#).

### Invoices

To get a collection of invoices that show both recurring and one time charges, see [Get a collection of invoices](#).

### Single Invoice

To retrieve a specific invoice using the invoice ID, see [Get an invoice by ID](#).

### Reconciliation

To get a collection of invoice line item details (Reconciliation line items) for a specific invoice ID, see [Get invoice line items](#).

### Download an invoice as a PDF

To retrieve an invoice statement in PDF form using an invoice ID, see [Get an invoice statement](#).

# Create a subscription for commercial marketplace products

4/24/2020 • 3 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center

You can create a subscription for commercial marketplace products using Partner Center APIs. You must [get a list of offers for a market](#), [create and submit an order](#) for a commercial marketplace subscription, then [retrieve an activation link](#).

You can also [perform lifecycle management](#) and [manage invoices](#) for these subscriptions.

## Prerequisites

- [Partner Center authentication](#) credentials. This scenario supports authentication with both standalone App and App+User credentials.
- The customer identifier. If you don't have a customer's identifier, follow the steps in [Get a list of customers](#). Alternatively, sign in to Partner Center, choose the customer from the list of customers, select **Account**, then save their Microsoft ID.

## Get a list of offers for a market

You can check the available offers for a market using the following Partner Center API models:

- **Product**: A grouping construct for purchasable goods or services. A product itself isn't a purchasable item.
- **SKU**: A purchasable Stock Keeping Unit (SKU) under a product. These represent the different shapes of the product.
- **Availability**: A configuration in which a SKU is available for purchase (such as country, currency, or industry segment).

Before you purchase an Azure reservation, complete the following steps:

1. Identify and retrieve the product and SKU that you want to purchase. If you already know the Product ID and SKU ID, select them.
  - [Get a list of products](#)
  - [Get a product using the product ID](#)
  - [Get a list of SKUs for a product](#)
  - [Get a SKU using the SKU ID](#)

### NOTE

You can identify commercial marketplace products by their **ProductType** property of "Azure" and their **SubType** property of "SaaS".

2. If the SKUs are tagged with an **InventoryCheck** prerequisite, [check the inventory for a SKU](#).

**NOTE**

At this time, there are no commercial marketplace products that support inventory check or are tagged with an [InventoryCheck](#) prerequisite.

3. Retrieve the availability for the SKU. You will need the [CatalogItemId](#) of the availability when placing the order, which you can retrieve through the following APIs:

- [Get a list of availabilities for a SKU](#)
- [Get an availability using the availability ID](#)

## Create and submit an order

To submit your Azure reservation order, follow these steps:

1. [Create a cart](#) to hold the collection of catalog items that you intend to buy. When you create a [cart](#), the [cart line items](#) are automatically grouped based on what can be purchased together in the same [order](#). (You can also [update a cart](#).)
2. [Check out the cart](#), which results in the creation of an [order](#).

### Get order details

You can retrieve the details of an individual order using the order ID. You can also [retrieve a list of all orders for a specific customer](#).

**NOTE**

After an order is submitted, there is a delay of up to 15 minutes before the order appears in that customer's order list.

## Get activation link

The partner or customer must activate subscriptions to Azure Marketplace products. You can [get an activation link by order line item](#). You can also [get a subscription by ID](#), then enumerate its [Links](#) property to create an activation link.

## Lifecycle management

You can manage the lifecycle of your subscriptions to commercial marketplace products using the following methods:

- [Cancel a commercial marketplace subscription](#)
- [Enable or disable autorenew for a commercial marketplace subscription](#)

## Quantity management

The quantity of a commercial marketplace subscription must be within the limits defined by its associated [SKU](#) (see the [minimumQuantity](#) and [maximumQuantity](#) attributes). To update the quantity of a commercial marketplace subscription, use the following method:

- [Change the quantity of a subscription](#)

## Invoice and reconciliation

You can manage customer [invoices](#) (including charges for subscriptions to commercial marketplace products) using the following methods:

- [Get invoice billed commercial marketplace consumption line items](#)
- [Get invoice estimate links](#)
- [Get invoice unbilled commercial marketplace consumption line items](#)
- [Get invoice unbilled reconciliation line items](#)

## Test using integration sandbox account

In production, after you have created a subscription to commercial marketplace SaaS products, you need to retrieve a personalized activation link from Partner Center and visit the publisher's site to complete the setup process. Subscription billing will begin only after setup is complete.

In the CSP sandbox environment, there is no integration with ISVs. If you try to retrieve an activation link from Partner Center, a dummy link will be returned. You cannot use this dummy link to complete the setup process at the publisher's site. To use the integration sandbox account to test billing for subscriptions to commercial marketplace SaaS products, use the following method to activate the subscription instead. Subscription billing will begin after successful activation:

- [Activate a sandbox subscription for commercial marketplace products](#)

# Activate a sandbox subscription for commercial marketplace products

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center

How to activate subscription for commercial marketplace Software as a Service (SaaS) products from integration sandbox accounts to enable billing.

### NOTE

It's only possible to activate a subscription for commercial marketplace SaaS products from integration sandbox accounts. If you have a production subscription, you must visit the publisher's site to complete the setup process. Subscription billing will begin only after setup is complete.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- An integration sandbox partner account with a customer having an active subscription for commercial marketplace SaaS products.
- For partners using Partner Center .NET SDK, you must use SDK version 1.14.0 or higher to access this capability.

## C#

Use the following steps to activate a subscription for commercial marketplace SaaS products:

1. Make an interface to the subscription operations available. You must identify the customer and specify the subscription identifier of the trial subscription.

```
var subscriptionOperations =  
    partnerOperations.Customers.ById(customerId).Subscriptions.ById(subscriptionId);
```

2. Activate the subscription using the **Activate** operation.

```
var subscriptionActivationResult = subscriptionOperations.Activate();
```

## REST request

### Request syntax

METHOD	REQUEST URI
--------	-------------

METHOD	REQUEST URI
POST	<code>{baseURL}/v1/customers/{customer-tenant-id}/subscriptions/{subscription-id}/activate</code> HTTP/1.1

## URI parameter

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	guid	Y	The value is a GUID-formatted customer tenant identifier ( <b>customer-tenant-id</b> ), which allows you to specify a customer.
subscription-id	guid	Y	The value is a GUID-formatted subscription identifier ( <b>subscription-id</b> ), which allows you to specify a subscription.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
POST https://api.partnercenter.microsoft.com/v1/customers/42b5f772-5c5c-4bce-b9d7-bdadeecca411/subscriptions/87363db7-39ab-dd25-d371-94340aaa2f97/activate HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-CorrelationId: 1438ea3d-b515-45c7-9ec1-27ee0cc8e6bd
MS-RequestId: 655890ba-4d2b-4d09-a95f-4ea1348686a5
```

## REST response

This method returns the **subscription-id** and **status** properties.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 79
Content-Type: application/json
MS-CorrelationId: 1438ea3d-b515-45c7-9ec1-27ee0cc8e6bd
MS-RequestId: 655890ba-4d2b-4d09-a95f-4ea1348686a5

{
    "subscriptionId": "87363db7-39ab-dd25-d371-94340aaa2f97",
    "status": "Success"
}
```

# Cancel a commercial marketplace subscription

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center

You can cancel a commercial marketplace [subscription](#) resource that matches the customer and subscription ID.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A subscription ID.

## Partner Center dashboard method

To cancel a commercial marketplace subscription in the Partner Center dashboard:

1. [Select a customer](#).
2. Select the subscription that you wish to cancel.
3. Choose the **Cancel subscription** option, then select **Submit**.

## C#

To cancel a customer's subscription:

1. [Get the subscription by ID](#).
2. Change the subscription's **Status** property. For information on **Status** codes, see [SubscriptionStatus enumeration](#).
3. After the change is made, use your `IAggregatePartner.Customers` collection and call the `ById()` method.
4. Call the **Subscriptions** property, followed by the `ById()` method.
5. Call the **Patch()** method.

```
// IAggregatePartner partnerOperations;
// var selectedCustomerId as string;
// Subscription selectedSubscription;

selectedSubscription.Status = SubscriptionStatus.Deleted;
var updatedSubscription =
partnerOperations.Customers.GetById(selectedCustomerId).Subscriptions.GetById(selectedSubscription.Id).Patch(selecte
dSubscription);
```

## Sample console test app

Sample: [Console test app](#). Project: PartnerSDK.FeatureSample Class: UpdateSubscription.cs

## REST request

### Request syntax

METHOD	REQUEST URI
PATCH	<code>{baseUrl}/v1/customers/{customer-tenant-id}/subscriptions/{id-for-subscription}</code> HTTP/1.1

### URI parameter

This table lists the required query parameter to suspend the subscription.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	guid	Y	A GUID corresponding to the customer.
id-for-subscription	guid	Y	A GUID corresponding to the subscription.

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

A full **Subscription** resource is required in the request body. Ensure that the **Status** property has been updated.

### Request example

```

PATCH https://api.partnercenter.microsoft.com/v1/customers/<customer-tenant-id>/subscriptions/<id-for-
subscription> HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: ca7c39f7-1a80-43bc-90d8-ee7d1cad3831
MS-CorrelationId: ec8f62e5-1d92-47e9-8d5d-1924af105f2c
If-Match: <etag>
Content-Type: application/json
Content-Length: 1029
Expect: 100-continue
Connection: Keep-Alive

{
    "id": "6e7aa601-629e-461b-8933-0898c3cc3c7c",
    "offerId": "DZH318Z0BXWC:0001:DZH318Z0BMJX",
    "offerName": "offer Name",
    "friendlyName": "friendly Name",
    "quantity": 1,
    "unitType": "License(s)",
    "hasPurchasableAddons": false,
    "creationDate": "2019-01-04T01:00:12.6647304Z",
    "effectiveStartDate": "2019-01-09T00:21:45.9263727+00:00",
    "commitmentEndDate": "2019-02-08T00:21:45.9263727+00:00",
    "status": "deleted",
    "autoRenewEnabled": false,
    "isTrial": false,
    "billingType": "license",
    "billingCycle": "monthly",
    "termDuration": "P1M",
    "refundOptions": [
        {
            "type": "Full",
            "expiresAt": "2019-01-10T00:21:45.9263727+00:00"
        }
    ],
    "isMicrosoftProduct": false,
    "partnerId": "",
    "contractType": "subscription",
    "publisherName": "publisher Name",
    "orderId": "ImxjLNL4_f0c-2KoyOxGTZcrlIquzls11",
    "attributes": {"objectType": "Subscription"},
}

```

## REST response

If successful, this method returns deleted [Subscription](#) resource properties in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

### Response example

HTTP/1.1 200 OK  
Content-Length: 1322  
Content-Type: application/json; charset=utf-8  
MS-RequestId: ca7c39f7-1a80-43bc-90d8-ee7d1cad3831  
MS-CorrelationId: ec8f62e5-1d92-47e9-8d5d-1924af105f2c  
X-Locale: en-US

```
{  
    "id": "6e7aa601-629e-461b-8933-0898c3cc3c7c",  
    "offerId": "DZH318Z0BXWC:0001:DZH318Z0BMJX",  
    "offerName": "offer Name",  
    "friendlyName": "friendly Name",  
    "quantity": 1,  
    "unitType": "License(s)",  
    "hasPurchasableAddons": false,  
    "creationDate": "2019-01-04T01:00:12.6647304Z",  
    "effectiveStartDate": "2019-01-09T00:21:45.9263727+00:00",  
    "commitmentEndDate": "2019-02-08T00:21:45.9263727+00:00",  
    "status": "deleted",  
    "autoRenewEnabled": false,  
    "isTrial": false,  
    "billingType": "license",  
    "billingCycle": "monthly",  
    "termDuration": "P1M",  
    "refundOptions": [  
        {  
            "type": "Full",  
            "expiresAt": "2019-01-10T00:21:45.9263727+00:00"  
        }  
    ],  
    "isMicrosoftProduct": false,  
    "partnerId": "",  
    "contractType": "subscription",  
    "links": {  
        "product": {  
            "uri": "/products/DZH318Z0BXWC?country=US",  
            "method": "GET",  
            "headers": []  
        },  
        "sku": {  
            "uri": "/products/DZH318Z0BXWC/skus/0001?country=US",  
            "method": "GET",  
            "headers": []  
        },  
        "availability": {  
            "uri": "/products/DZH318Z0BXWC/skus/0001/availabilities/DZH318Z0BMJX?country=US",  
            "method": "GET",  
            "headers": []  
        },  
        "self": {  
            "uri": "/customers/5921f00a-32c0-4457-aaa1-e8018c650895/subscriptions/6e7aa601-629e-461b-8933-0898c3cc3c7c",  
            "method": "GET",  
            "headers": []  
        }  
    },  
    "publisherName": "publishe rName",  
    "orderId": "ImxjLNL4_f0c-2KoyOxGTZcrIquzls11",  
    "attributes": {  
        "etag": "",  
        "objectType": "Subscription"  
    }  
}
```

# Cancel software purchases

4/24/2020 • 3 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center

You can use the Partner Center APIs to cancel software subscriptions and perpetual software purchases (as long as those purchases were made within the cancellation window from the purchase date). You don't need to create a support ticket to make such cancellations, and can use the following self-service methods instead.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.

## C#

To cancel a software order,

1. Pass your account credentials to the [CreatePartnerOperations](#) method to get an [IPartner](#) interface to get partner operations.
2. Select a particular [Order](#) you wish to cancel. Call the [Customers.ById\(\)](#) method with the customer identifier, followed by [Orders.ById\(\)](#) with order identifier.
3. Call the [Get](#) or [GetAsync](#) method to retrieve the order.
4. Set the [Order.Status](#) property to `cancelled`.
5. (Optional) If you want to specify certain line items for cancellation, set the [Order.LineItems](#) to list of line items that you want to cancel.
6. Use the [Patch\(\)](#) method to update the order.

```
// IPartnerCredentials accountCredentials;
// Customer tenant Id to be deleted.
// string customerTenantId;

IPartner accountPartnerOperations = PartnerService.Instance.CreatePartnerOperations(accountCredentials);

// Cancel order
var order = accountPartnerOperations.Customers.ById(customerTenantId).Orders.ById(orderId).Get();
order.Status = "cancelled";
order.LineItems = new List<OrderLineItem> {
    order.LineItems.First()
};
order = accountPartnerOperations.Customers.ById(customerTenantId).Orders.ById(orderId).Patch(order);
```

## REST request

### Request syntax

METHOD	REQUEST URI
PATCH	<i>{baseURL}</i> /v1/customers/{customer-tenant-id}/orders/{order-id} HTTP/1.1

## URI parameters

Use the following query parameters to delete a customer.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	guid	Y	The value is a GUID formatted customer tenant identifier that allows the reseller to filter the results for a given customer that belongs to the reseller.
order-id	string	Y	The value is a string that denotes the identifier of the order that you want to cancel.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

```
{
  "id": "2y6dF_rVgDAXMxypQPPnTquuXhKVK_3N1",
  "status": "cancelled",
  "lineItems": [
    {
      "lineItemNumber": 0,
      "offerId": "DG7GMGF0FKZV:0003:DG7GMGF0DWMS"
    }
  ]
}
```

## Request example

```
PATCH https://api.partnercenter.microsoft.com/v1/customers/<customer-tenant-id>/orders/<order-id> HTTP/1.1
Accept: application/json
MS-RequestId: 655890ba-4d2b-4d09-a95f-4ea1348686a5
MS-CorrelationId: 1438ea3d-b515-45c7-9ec1-27ee0cc8e6bd

{
  "id": "2y6dF_rVgDAXMxypQPPnTquuXhKVK_3N1",
  "status": "cancelled",
  "lineItems": [
    {
      "lineItemNumber": 0,
      "offerId": "DG7GMGF0FKZV:0003:DG7GMGF0DWMS"
    }
  ]
}
```

## REST response

If successful, this method returns the order with canceled line items.

The order status will be marked as either **cancelled** if all the line items in the order are cancelled, or **completed** if not all line items in the order are canceled.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

## Response example

In the following example response, you can see that the quantity of line item with the offer identifier `DG7GMGF0FKZV:0003:DG7GMGF0DWMS` has become zero (0). This change means that the line item that was marked for cancellation has been canceled successfully. The example order contains other line items that weren't canceled, which means that the status of the overall order will be marked as **completed**, not **cancelled**.

```
HTTP/1.1 200 OK
Content-Length: 866
MS-CorrelationId: 1438ea3d-b515-45c7-9ec1-27ee0cc8e6bd
MS-RequestId: 655890ba-4d2b-4d09-a95f-4ea1348686a5

{
    "id": "2y6dF_rVgDAXMxypQPPnTquuXhKVK_3N1",
    "alternateId": "c403d91b21d2",
    "referenceCustomerId": "45411344-b09d-47e7-9653-542006bf9766",
    "billingCycle": "one_time",
    "currencyCode": "USD",
    "currencySymbol": "$",
    "lineItems": [
        {
            "lineItemNumber": 0,
            "offerId": "DG7GMGF0FKZV:0003:DG7GMGF0DWMS",
            "termDuration": "P3Y",
            "transactionType": "New",
            "friendlyName": "SQL Server Enterprise - 2 Core License Pack - 3 year",
            "quantity": 0,
            "links": {
                "product": {
                    "uri": "/products/DG7GMGF0FKZV?country=US",
                    "method": "GET",
                    "headers": []
                },
                "sku": {
                    "uri": "/products/DG7GMGF0FKZV/skus/0003?country=US",
                    "method": "GET",
                    "headers": []
                },
                "availability": {
                    "uri": "/products/DG7GMGF0FKZV/skus/0003/availabilities/DG7GMGF0DWMS?country=US",
                    "method": "GET",
                    "headers": []
                }
            }
        },
        {
            "lineItemNumber": 1,
            "offerId": "DG7GMGF0DVT7:000C:DG7GMGF0FVZM",
            "termDuration": "P3Y",
            "transactionType": "New",
            "friendlyName": "Windows Server CAL - 1 Device CAL - 3 year",
            "quantity": 1,
            "links": {
                "product": {
                    "uri": "/products/DG7GMGF0DVT7?country=US",
                    "method": "GET"
                }
            }
        }
    ]
}
```

```
        "method": "GET",
        "headers": []
    },
    "sku": {
        "uri": "/products/DG7GMGF0DVT7/skus/000C?country=US",
        "method": "GET",
        "headers": []
    },
    "availability": {
        "uri": "/products/DG7GMGF0DVT7/skus/000C/availabilities/DG7GMGF0FVZM?country=US",
        "method": "GET",
        "headers": []
    }
},
],
"creationDate": "2019-12-12T17:33:56.1306495Z",
"status": "completed",
"transactionType": "UserPurchase",
"links": {
    "self": {
        "uri": "/customers/45411344-b09d-47e7-9653-542006bf9766/orders/2y6dF_rVgDAXMxypQPPnTquuXhKVK_3N1",
        "method": "GET",
        "headers": []
    },
    "provisioningStatus": {
        "uri": "/customers/45411344-b09d-47e7-9653-542006bf9766/orders/2y6dF_rVgDAXMxypQPPnTquuXhKVK_3N1/provisioningstatus",
        "method": "GET",
        "headers": []
    },
    "patchOperation": {
        "uri": "/customers/45411344-b09d-47e7-9653-542006bf9766/orders/2y6dF_rVgDAXMxypQPPnTquuXhKVK_3N1",
        "method": "PATCH",
        "headers": []
    }
},
"client": {
    "marketplaceCountry": "US",
    "deviceFamily": "UniversalStore-PartnerCenter",
    "name": "Partner Center API"
},
"attributes": {
    "objectType": "Order"
}
}
```

# Cancel an order from the integration sandbox

6/19/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

How to cancel reserved instance, software, and commercial marketplace Software as a Service (SaaS) subscription orders from integration sandbox accounts.

### NOTE

Please be aware that the cancellations of reserved instance, or commercial marketplace SaaS subscription orders are only possible from integration sandbox accounts.

To cancel production orders of software through API, use [cancel-software-purchases](#). You can also cancel production orders of software through dashboard using [cancel a purchase](#).

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- An integration sandbox partner account with a customer having active reserved instance / software / third-party SaaS subscription orders.

## C#

To cancel an order from the integration sandbox, pass your account credentials to the [CreatePartnerOperations](#) method to get an [IPartner](#) interface to get partner operations.

To select a particular [Order](#), use the partner operations and call [Customers.ById\(\)](#) method with the customer identifier to specify the customer, followed by [orders.ById\(\)](#) with order identifier to specify the order and finally [Get](#) or [GetAsync](#) method to retrieve it.

Set the [Order.Status](#) property to [cancelled](#) and use the [Patch\(\)](#) method to update the order.

```
// IPartnerCredentials tipAccountCredentials;
// Customer tenant Id to be deleted.
// string customerTenantId;

IPartner tipAccountPartnerOperations = PartnerService.Instance.CreatePartnerOperations(tipAccountCredentials);

// Cancel order
var order = tipAccountPartnerOperations.Customers.ById(customerTenantId).Orders.ById(orderId).Get();
order.Status = "cancelled";
order = tipAccountPartnerOperations.Customers.ById(customerTenantId).Orders.ById(orderId).Patch(order);
```

# REST request

## Request syntax

METHOD	REQUEST URI
PATCH	<code>{baseURL}/v1/customers/{customer-tenant-id}/orders/{order-id}</code> HTTP/1.1

## URI parameter

Use the following query parameter to delete a customer.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	guid	Y	The value is a GUID formatted <b>customer-tenant-id</b> that allows the reseller to filter the results for a given customer that belongs to the reseller.
order-id	string	Y	The value is a string denoting the order IDs that need to be canceled.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

```
{
  "id": "UKXASSO1dezh3HdxClHxSp5UEFXGbAnt1",
  "status": "cancelled",
}
```

## Request example

```
PATCH https://api.partnercenter.microsoft.com/v1/customers/<customer-tenant-id>/orders/<order-id> HTTP/1.1
Accept: application/json
MS-RequestId: 655890ba-4d2b-4d09-a95f-4ea1348686a5
MS-CorrelationId: 1438ea3d-b515-45c7-9ec1-27ee0cc8e6bd

{
  "id": "UKXASSO1dezh3HdxClHxSp5UEFXGbAnt1",
  "status": "cancelled",
}
```

# REST response

If successful, this method returns the canceled order.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

## Response example

HTTP/1.1 200 OK  
Content-Length: 866  
MS-CorrelationId: 1438ea3d-b515-45c7-9ec1-27ee0cc8e6bd  
MS-RequestId: 655890ba-4d2b-4d09-a95f-4ea1348686a5

```
{
  "id": "UKXASSO1dezh3HdxClHxSp5UEFXGbAnt1",
  "alternateId": "11fc4bdfd47a",
  "referenceCustomerId": "bd59b416-37f9-4d8f-8df3-5750111fc615",
  "billingCycle": "one_time",
  "currencyCode": "USD",
  "currencySymbol": "$",
  "lineItems": [
    {
      "lineItemNumber": 0,
      "offerId": "DG7GMGF0DWT0:0001:DG7GMGF0DSQR",
      "termDuration": "",
      "transactionType": "New",
      "friendlyName": "Microsoft Identity Manager 2016 - 1 User CAL",
      "quantity": 1,
      "links": {
        "product": {
          "uri": "/products/DG7GMGF0DWT0?country=US",
          "method": "GET",
          "headers": []
        },
        "sku": {
          "uri": "/products/DG7GMGF0DWT0/skus/0001?country=US",
          "method": "GET",
          "headers": []
        },
        "availability": {
          "uri": "/products/DG7GMGF0DWT0/skus/0001/availabilities/DG7GMGF0DSQR?country=US",
          "method": "GET",
          "headers": []
        }
      }
    }
  ],
  "creationDate": "2019-02-21T17:56:21.1335741Z",
  "status": "cancelled",
  "transactionType": "UserPurchase",
  "attributes": {
    "objectType": "Order"
  }
}
```

# Change the quantity of a subscription

4/25/2020 • 3 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Updates a [subscription](#) to increase or decrease the quantity of licenses.

In the Partner Center dashboard, this operation can be performed by first [selecting a customer](#). Then, select the subscription in question that you wish to rename. To finish, change the value in the **Quantity** field, then select **Submit**.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A subscription ID.

## C#

To change the quantity of a customer's subscription, first [get the subscription](#), then change the subscription's **Quantity** property. Once the change is made, use your **IAggregatePartner.Customers** collection and call the **ById()** method. Then call the **Subscriptions** property, followed by the **ById()** method. Then, finish by calling the **Patch()** method.

```
// IAggregatePartner partnerOperations;
// var customerId;
// var subscriptionId;

//retrieving the subscription, for the purpose of the sample
ResourceCollection<Subscription> customerSubscriptions =
partnerOperations.Customers.ById(selectedCustomerId).Subscriptions.Get();
Subscription selectedSubscription = customerSubscriptions.Items.FirstOrDefault(sub => sub.Status ==
SubscriptionStatus.Active);

//update selected subscription,
selectedSubscription.Quantity++;

var updatedSubscription =
partnerOperations.Customers.ById(selectedCustomerId).Subscriptions.GetById(selectedSubscription.Id).Patch(selecte
dSubscription);
```

Sample: [Console test app](#). Project: PartnerSDK.FeatureSample Class: UpdateSubscription.cs

# REST request

## Request syntax

METHOD	REQUEST URI
PATCH	<a href="#"><i>{baseUrl}</i>/v1/customers/{customer-tenant-id}/subscriptions/{id-for-subscription}</a> HTTP/1.1

## URI parameter

This table lists the required query parameter to change the quantity of the subscription.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	guid	Y	A GUID corresponding to the customer.
id-for-subscription	guid	Y	A GUID corresponding to the subscription.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

A full Subscription resource is required in the request body. Ensure that the **Quantity** property has been updated.

## Request example

```
PATCH https://api.partnercenter.microsoft.com/v1/customers/<customer-tenant-id>/subscriptions/<id-for-subscription> HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: ca7c39f7-1a80-43bc-90d8-ee7d1cad3831
MS-CorrelationId: ec8f62e5-1d92-47e9-8d5d-1924af105f2c
Content-Type: application/json
Content-Length: 1029
Expect: 100-continue
Connection: Keep-Alive

{
    "Id": "83ef9d05-4169-4ef9-9657-0e86b1eab1de",
    "FriendlyName": "nickname",
    "Quantity": 2,
    "UnitType": "none",
    "ParentSubscriptionId": null,
    "CreationDate": "2015-11-25T06:41:12Z",
    "EffectiveStartDate": "2015-11-24T08:00:00Z",
    "CommitmentEndDate": "2016-12-12T08:00:00Z",
    "Status": "active",
    "AutoRenewEnabled": false,
    "BillingType": "none",
    "PartnerId": null,
    "ContractType": "subscription",
    "OrderId": "6183db3d-6318-4e52-877e-25806e4971be",
    "Attributes": {
        "Etag": "<etag>",
        "ObjectType": "Subscription"
    }
}
```

## REST response

If successful, this method returns an **HTTP status 200** status code and updated [subscription resource](#) properties in the response body.

### Response success and error codes

Each response returns an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read the status code, error type, and additional parameters. For the full list, see [Error Codes](#).

When the patch operation takes longer than the expected time, the Partner Center sends an **HTTP status 202** status code and a location header that points to where to retrieve the subscription. You can query the subscription periodically to monitor the status and quantity changes.

### Response examples

#### Response example 1

Successful request with an **HTTP status 200** status code:

```

PATCH https://api.partnercenter.microsoft.com/v1/customers/<customer-tenant-id>/subscriptions/<subscriptionID>
HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-Contract-Version: v1
MS-RequestId: ca7c39f7-1a80-43bc-90d8-ee7d1cad3831
MS-CorrelationId: ec8f62e5-1d92-47e9-8d5d-1924af105f2c
Content-Type: application/json
Content-Length: 1029
Expect: 100-continue
Connection: Keep-Alive

{
    "Id": "83ef9d05-4169-4ef9-9657-0e86b1eab1de",
    "FriendlyName": "nickname",
    "Quantity": 2,
    "UnitType": "none",
    "ParentSubscriptionId": null,
    "CreationDate": "2015-11-25T06:41:12Z",
    "EffectiveStartDate": "2015-11-24T08:00:00Z",
    "CommitmentEndDate": "2016-12-12T08:00:00Z",
    "Status": "active",
    "AutoRenewEnabled": false,
    "BillingType": "none",
    "PartnerId": null,
    "ContractType": "subscription",
    "Links": {
        "Offer": {
            "Uri": "/v1/offers/0CCA44D6-68E9-4762-94EE-31ECE98783B9",
            "Method": "GET",
            "Headers": []
        },
        "Entitlement": {
            "Uri": "/entitlements?key=<key>",
            "Method": "GET",
            "Headers": []
        },
        "Self": {
            "Uri": "/subscriptions?key=<key>",
            "Method": "GET",
            "Headers": []
        }
    },
    "OrderId": "6183db3d-6318-4e52-877e-25806e4971be",
    "Attributes": {
        "Etag": "<etag>",
        "ObjectType": "Subscription"
    }
}

```

#### **Response example 2**

Successful request with an HTTP status 202 status code:

```

PATCH https://api.partnercenter.microsoft.com/v1/customers/<customer-tenant-id>/subscriptions/<subscriptionID>
HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 01880c1b-1966-40f0-d470-501a66d9948b
MS-CorrelationId: 2c5827c1-d5f9-4835-cc6d-f1918b782c79
Content-Type: application/json
Content-Length: 1432
Connection: Keep-Alive
Location: /customers/<customer-tenant-id>/subscriptions/<subscriptionID>

```

# Convert a trial subscription to paid

4/25/2020 • 3 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center

You can convert a trial subscription to paid.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A subscription ID for an active trial subscription.
- An available conversion offer.

## Convert a trial subscription to paid through code

To convert a trial subscription to a paid one, you must first obtain a collection of the trial conversions available. Then, you must choose the conversion offer that you want to purchase.

The conversion offers will specify a quantity that defaults to the same number of licenses as the trial subscription. You can change this quantity by setting the **Quantity** property to the number of licenses that you want to purchase.

### NOTE

Regardless of the number of licenses purchased, the subscription ID of the trial is reused for the purchased licenses. As a result, the trial in effect disappears and is replaced by the purchase.

Use the following steps to convert a trial subscription through code:

1. Get an interface to the subscription operations available. You must identify the customer and specify the subscription identifier of the trial subscription.

```
var subscriptionOperations =  
    partnerOperations.Customers.ById(customerId).Subscriptions.ById(subscriptionId);
```

2. Get a collection of the available conversion offers. For more information and details on the request/response for this method, see [Get a list of trial conversion offers](#).

```
var conversions = subscriptionOperations.Conversions.Get();
```

3. Choose a conversion offer. The following code chooses the first conversion offer in the collection.

```
var selectedConversion = conversions.Items.ToList()[0];
```

4. Optionally, specify the number of licenses to purchase. The default is the number of licenses in the trial subscription.

```
selectedConversion.Quantity = 10;
```

5. Call the [Create](#) or [CreateAsync](#) method to convert the trial subscription to paid.

```
var convertResult = subscriptionOperations.Conversions.Create(selectedConversion);
```

## C#

To convert a trial subscription to a paid one:

1. Use the [IAggregatePartner.Customers.ById](#) method with the customer ID to identify the customer.
2. Get an interface to subscription operations by calling the [Subscriptions.ById](#) method with the trial subscription ID. Save a reference to the subscription operations interface in a local variable.
3. Use the [Conversions](#) property to obtain an interface to the available operations on conversions, and then call the [Get](#) or [GetAsync](#) method to retrieve a collection of available [Conversion](#) offers. You must choose one. The following example defaults to the first conversion available.
4. Use the reference to the subscription operations interface that you saved in a local variable and the [Conversions](#) property to obtain an interface to the available operations on conversions.
5. Pass the selected conversion offer object to the [Create](#) or [CreateAsync](#) method to attempt the trial conversion.

### C# example

```
// IAggregatePartner partnerOperations;
// string customerId;
// string subscriptionId;

// Get subscription operations for the trial subscription.
var subscriptionOperations = partnerOperations.CustomersById(customerId).SubscriptionsById(subscriptionId);

// Get the available conversions.
var conversions = subscriptionOperations.Conversions.Get();

// If there are no conversions available, we're done.
// Otherwise, convert the trial to the first available conversion offer.
if (conversions.TotalCount <= 0)
{
    System.Console.WriteLine("This subscription has no conversions");
}
else
{
    // Default to the first conversion.
    var selectedConversion = conversions.Items.ToList()[0];

    // Convert the trial and return the result.
    var convertResult = subscriptionOperations.Conversions.Create(selectedConversion);
}
```

# REST request

## Request syntax

METHOD	REQUEST URI
POST	<code>{baseURL}/v1/customers/{customer-id}/subscriptions/{subscription-id}/conversions</code> HTTP/1.1

## URI parameter

Use the following path parameters to identify the customer and trial subscription.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-id	string	Yes	A GUID formatted string that identifies the customer.
subscription-id	string	Yes	A GUID formatted string that identifies the trial subscription.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

A populated [Conversion](#) resource must be included in the request body.

## Request example

```
POST https://api.partnercenter.microsoft.com/v1/customers/0c39d6d5-c70d-4c55-bc02-f620844f3fd1/subscriptions/488745B5-2086-4912-802C-6ABB9F7C3638/conversions HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: bd0cde7f-ba87-4010-8a73-1190b641f2a4
MS-CorrelationId: 8daa6d54-72ab-4d6b-9c7d-9266d3734a47
X-Locale: en-US
Content-Type: application/json
Host: api.partnercenter.microsoft.com
Content-Length: 234
Expect: 100-continue

{
    "OfferId": "C0BD2E08-11AC-4836-BDC7-3712E744922F",
    "TargetOfferId": "031C9E47-4802-4248-838E-778FB1D2CC05",
    "OrderId": "D51A052E-043C-4A2A-AA37-2BB938CEF6C1",
    "Quantity": 25,
    "BillingCycle": "monthly",
    "Attributes": {
        "ObjectType": "Conversion"
    }
}
```

# REST response

If successful, the response body contains a [ConversionResult](#) resource.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see

## [Partner Center error codes.](#)

### **Response example**

```
HTTP/1.1 200 OK
Content-Length: 211
Content-Type: application/json; charset=utf-8
MS-CorrelationId: 8daa6d54-72ab-4d6b-9c7d-9266d3734a47
MS-RequestId: bd0cde7f-ba87-4010-8a73-1190b641f2a4
MS-CV: kW4GzmvHEqCq1ls.0
MS-ServerId: 030020643
Date: Thu, 15 Jun 2017 23:10:40 GMT

{
    "subscriptionId": "488745B5-2086-4912-802C-6ABB9F7C3638",
    "offerId": "C0BD2E08-11AC-4836-BDC7-3712E744922F",
    "targetOfferId": "031C9E47-4802-4248-838E-778FB1D2CC05",
    "attributes": {
        "objectType": "ConversionResult"
    }
}
```

# Check inventory

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center

How to check the inventory for a specific set of catalog items.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- One or more product IDs. Optionally, SKU IDs can also be specified.
- Any additional context needed for verifying the inventory of the SKU(s) referenced by the provided product/SKU ID(s). These requirements may vary by type of product/SKU and can be determined from the [SKU's InventoryVariables](#) property.

## C#

To check the inventory, build an [InventoryCheckRequest](#) object using an [InventoryItem](#) object for each item to be checked. Then, use an [IAggregatePartner.Extensions](#) accessor, scope it down to [Product](#) and then select the country using the [ByCountry\(\)](#) method. Finally, call the [CheckInventory\(\)](#) method with your [InventoryCheckRequest](#) object.

```
IAggregatePartner partnerOperations;
string customerId;
string subscriptionId;
string countryCode;
string productId;

// Build the inventory check request details object.
var inventoryCheckRequest = new InventoryCheckRequest()
{
    TargetItems = new InventoryItem[]{ new InventoryItem { ProductId = productId } },
    InventoryContext = new Dictionary<string, string>()
    {
        { "customerId", customerId },
        { "azureSubscriptionId", subscriptionId }
        { "armRegionName", armRegionName }
    }
};

// Get the inventory results.
var inventoryResults =
    partnerOperations.Extensions.Product.ByCountry(countryCode).CheckInventory(inventoryCheckRequest);
```

## REST request

### Request syntax

METHOD	REQUEST URI
POST	<a href="#"><code>{baseUrl}/v1/extensions/product/checkInventory?country={country-code}</code></a> HTTP/1.1

## URI parameter

Use the following query parameter to check the inventory.

NAME	TYPE	REQUIRED	DESCRIPTION
country-code	string	Yes	A country/region ID.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

The inventory request details, consisting of an [InventoryCheckRequest](#) resource containing one or more [InventoryItem](#) resources.

## Request example

```
POST https://api.partnercenter.microsoft.com/v1/extensions/product/checkInventory?country=US HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: d1b1981a-e088-4610-870a-eebec96d6bcd
MS-CorrelationId: 4acb26a1-3536-4081-bc7d-092869a4961a
X-Locale: en-US
MS-PartnerCenter-Client: Partner Center .NET SDK
Content-Type: application/json

{"TargetItems": [{"ProductId": "DZH318Z0BQ3P"}], "InventoryContext": {"customerId": "d6bf25b7-e0a8-4f2d-a31b-97b55cfcc774d", "azureSubscriptionId": "3A231FBE-37FE-4410-93FD-730D3D5D4C75", "armRegionName": "Europe"}}
```

## REST response

If successful, the response body contains a collection of [InventoryItem](#) objects populated with the restriction details, if any apply.

### NOTE

If an input [InventoryItem](#) represents an item that could not be found in the catalog, it will not be included in the output collection.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center error codes](#).

This method returns the following error codes:

HTTP STATUS CODE	ERROR CODE	DESCRIPTION
400	2001	The request body is missing.

HTTP STATUS CODE	ERROR CODE	DESCRIPTION
400	400026	A required inventory context item is missing.

## Response example

```

HTTP/1.1 200 OK
Content-Length: 1021
Content-Type: application/json; charset=utf-8
MS-CorrelationId: 4acb26a1-3536-4081-bc7d-092869a4961a
MS-RequestId: d1b1981a-e088-4610-870a-eebec96d6bcd
X-Locale: en-US
[
  {
    "productId": "DZH318Z0BQ3P",
    "skuId": "0039",
    "isRestricted": true,
    "restrictions": [
      {
        "reasonCode": "NotAvailableForSubscription",
        "description": "Restriction identified of type 'Location' with values 'japanwest'.",
        "properties": {
          "type": "Location",
          "values": "japanwest"
        }
      }
    ]
  },
  {
    "productId": "DZH318Z0BQ3P",
    "skuId": "0038",
    "isRestricted": true,
    "restrictions": [
      {
        "reasonCode": "NotAvailableForSubscription",
        "description": "Restriction identified of type 'Location' with values 'japanwest'.",
        "properties": {
          "type": "Location",
          "values": "japanwest"
        }
      }
    ]
  },
  {
    "productId": "DZH318Z0BQ3P",
    "skuId": "0005",
    "isRestricted": false,
    "restrictions": []
  },
  {
    "productId": "DZH318Z0BQ3P",
    "skuId": "0011",
    "isRestricted": false,
    "restrictions": []
  }
]

```

# Checkout a cart

4/25/2020 • 3 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

How to checkout an order for a customer in a cart.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A Cart ID for an existing cart.

## C#

To checkout an order for a customer, get a reference to the cart using the cart and customer identifier. Finally, call the **Create** or **CreateAsync** functions to complete the order.

```
// IAggregatePartner partnerOperations;
// string customerId;
// string cartId;

var cart = partnerOperations.Customers.ById(customerId).Cart.ById(cartId).Checkout();
```

## Java

The [Partner Center Java SDK](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To checkout an order for a customer, get a reference to the cart using the cart and customer identifier. Finally, call the **create** function to complete the order.

```
// IAggregatePartner partnerOperations;
// String customerId;
// String cartId;

Cart cart = partnerOperations.getCustomers().byId(customerId).getCart().byId(cartId).checkout();
```

# PowerShell

The [Partner Center PowerShell module](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To checkout an order for a customer, execute the [Submit-PartnerCustomerCart](#) to complete the order.

```
# $customerId  
# $cartId  
  
Submit-PartnerCustomerCart -CartId $cartId -CustomerId $customerId
```

# REST request

## Request syntax

METHOD	REQUEST URI
POST	<code>{baseUrl}/v1/customers/{customer-id}/carts/{cart-id}/checkout</code> HTTP/1.1

## URI parameters

Use the following path parameters to identify the customer and specify the cart to be checked out.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-id	string	Yes	A GUID formatted customer-id that identifies the customer.
cart-id	string	Yes	A GUID formatted cart-id that identifies the cart.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
POST /v1/customers/d6bf25b7-e0a8-4f2d-a31b-97b55fcf774d/carts/b4c8fdea-cbe4-4d17-9576-13fcacbf9605/checkout
HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 4fa6dad6-a89f-4875-8247-8294a10ae1cf
MS-CorrelationId: 0e93c70c-977a-4a88-9580-7cf084c73286
X-Locale: en-US
MS-PartnerCenter-Client: Partner Center .NET SDK
Content-Type: application/json
Host: api.partnercenter.microsoft.com
Content-Length: 0
Expect: 100-continue

No-Content-Body
```

## REST response

If successful, the response body contains the populated [CartCheckoutResult](#) resource.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

### Response example

```
HTTP/1.1 201 Created
Content-Length: 764
Content-Type: application/json; charset=utf-8
MS-CorrelationId: 0e93c70c-977a-4a88-9580-7cf084c73286
MS-RequestId: 4fa6dad6-a89f-4875-8247-8294a10ae1cf
X-Locale: en-US,en-US
MS-CV: sF/wRa2ih0CzbABC.0
MS-ServerId: 000001
Date: Thu, 15 Mar 2018 17:15:01 GMT
?{
  "orders": [
    {
      "id": "3c6f2530-1e31-4088-8230-dd1c31a18bce",
      "alternateId": "3c6f2530-1e31-4088-8230-dd1c31a18bce",
      "referenceCustomerId": "28045616-f6b9-462f-9701-0d89b5e65c44",
      "billingCycle": "monthly",
      "currencyCode": "USD",
      "lineItems": [
        {
          "lineItemNumber": 0,
          "offerId": "MS-AZR-0145P",
          "subscriptionId": "EF2E1307-86E6-40E3-A794-872403FBD31C",
          "termDuration": "P1Y",
          "transactionType": "New",
          "friendlyName": "Microsoft Azure",
          "quantity": 1,
          "links": {...}
        }
      ],
      "creationDate": "2019-01-16T00:48:44.76+00:00",
      "status": "completed",
      "transactionType": "UserPurchase",
      "links": {...},
      ...
    },
    {
      "id": "311qiN8iFwkv-XARWVmXRYAwYKMACVqv1",
      "alternateId": "0a3624c6e47d",
```

```
"referenceCustomerId": "28045616-f6b9-462f-9701-0d89b5e65c44",
"billingCycle": "one_time",
"currencyCode": "USD",
"currencySymbol": "$",
"lineItems": [
  {
    "lineItemNumber": 0,
    "offerId": "DZH318Z0BQ36:004G:DZH318Z08C0S",
    "termDuration": "P1Y",
    "transactionType": "New",
    "friendlyName": "Reserved VM Instance, Standard_NV12, US East 2, 1 Year",
    "quantity": 1,
    "links": {...}
  },
  {
    "lineItemNumber": 1,
    "offerId": "DZH318Z0BQ36:004J:DZH318Z08B8X",
    "termDuration": "P3Y",
    "transactionType": "New",
    "friendlyName": "Reserved VM Instance, Standard_NV12, US East 2, 3 Years",
    "quantity": 1,
    "links": {...}
  },
  {
    "lineItemNumber": 2,
    "offerId": "DG7GMGF0DWIM3:0002:DG7GMGF0DT1M",
    "transactionType": "New",
    "friendlyName": "BizTalk Server 2016 Branch",
    "quantity": 1,
    "links": {...}
  }
],
"creationDate": "2019-01-16T00:48:51.6578126Z",
"status": "pending",
"transactionType": "UserPurchase",
"links": {...},
...
},
{
  "id": "HVu_c08Ea7fNRQP4ia1QTpZap-kg_7P71",
  "alternateId": "55a4e6854d54",
  "referenceCustomerId": "28045616-f6b9-462f-9701-0d89b5e65c44",
  "billingCycle": "monthly",
  "currencyCode": "USD",
  "currencySymbol": "$",
  "lineItems": [
    {
      "lineItemNumber": 0,
      "offerId": "DZH318Z0BXWC:0002:DZH318Z0BMRV",
      "termDuration": "P1M",
      "transactionType": "New",
      "friendlyName": "Barracuda WaaS - Medium Plan",
      "quantity": 1,
      "links": {...}
    }
],
"creationDate": "2019-01-16T00:48:44.4514129Z",
"status": "pending",
"transactionType": "UserPurchase",
"links": {...},
...
},
...
]
```

# Create a cart

4/25/2020 • 7 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

You can add an order for a customer in a cart. For more information about what is currently available to sell, see [Partner offers in the Cloud Solution Provider program](#).

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## C#

To create an order for a customer:

1. Instantiate a **Cart** object.
2. Create a list of **CartLineItem** objects, and assign the list to the cart's **LineItems** property. Each cart line item contains the purchase information for one product. You must have at least one cart line item.
3. Obtain an interface to cart operations by calling the **IAggregatePartner.CustomersById** method with the customer ID to identify the customer, and then retrieving the interface from the **Cart** property.
4. Call the **Create** or **CreateAsync** method to create the cart.

### C# example

```
// IAggregatePartner partnerOperations;
// string customerId;
// string subscriptionId;

var cart = new Cart()
{
    LineItems = new List<CartLineItem>()
    {
        new CartLineItem()
        {
            /* Microsoft Azure Subscription */
            Id = 0,
            CatalogItemId = "MS-AZR-0145P",
            Quantity = 1,
            BillingCycle = BillingCycleType.Monthly,
            TermDuration = "P1Y"
        }
    }
}
```

```

        },
        new CartLineItem()
        {
            /* Azure Reserved Instance */
            Id = 1,
            CatalogItemId = "DZH318Z0BQ36:004G:DZH318Z08C0S",
            Quantity = 1,
            BillingCycle = BillingCycleType.OneTime,
            TermDuration = "P1Y",
            ProvisioningContext = new Dictionary<string, string>
            {
                { "subscriptionId", subscriptionId },
                { "scope", "shared" }
            }
        },
        new CartLineItem()
        {
            /* Azure Reserved Instance */
            Id = 2,
            CatalogItemId = "DZH318Z0BQ36:004J:DZH318Z08B8X",
            Quantity = 1,
            BillingCycle = BillingCycleType.OneTime,
            TermDuration = "P3Y",
            ProvisioningContext = new Dictionary<string, string>
            {
                { "subscriptionId", subscriptionId },
                { "scope", "shared" }
            }
        },
        new CartLineItem()
        {
            /* Perpetual Software */
            Id = 3,
            CatalogItemId = "DG7GMGF0DWMB:0002:DG7GMGF0DT1M",
            Quantity = 1,
            BillingCycle = BillingCycleType.OneTime
        },
        new CartLineItem()
        {
            /* SaaS */
            Id = 4,
            CatalogItemId = "DZH318Z0BXWC:0002:DZH318Z0BMRV",
            Quantity = 1,
            BillingCycle = BillingCycleType.Monthly,
            TermDuration = "P1M"
        },
        new CartLineItem()
        {
            /* SaaS Free Trial */
            Id = 5,
            CatalogItemId = "DZH318Z0C0WF:0001:DZH318Z0BP69",
            Quantity = 10,
            BillingCycle = BillingCycleType.None,
            TermDuration = "P1M",
            RenewsTo = new RenewsTo
            {
                TermDuration = "P1Y"
            }
        }
    );
}

cart = partnerOperations.Customers.ById(customerId).Carts.Create(cart);

```

The [Partner Center Java SDK](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To create an order for a customer:

1. Instantiate a Cart object.
2. Create a list of **CartLineItem** objects, and assign the list to the cart's line items. Each cart line item contains the purchase information for one product. You must have at least one cart line item.
3. Obtain an interface to cart operations by calling the **IAggregatePartner.getCustomers().byId** function with the customer ID to identify the customer, and then retrieving the interface from the **getCart** function.
4. Call the **create** function to create the cart.

## Java example

```
// IAggregatePartner partnerOperations;
// String customerId;
// String subscriptionId;
// String catalogItemId;

CartLineItem lineItem = new CartLineItem();

lineItem.setBillingCycle(BillingCycleType.OneTime);
lineItem.setCatalogItemId(catalogItemId);
lineItem.setFriendlyName("Sample RI Purchase");
lineItem.setQuantity(1);

Map<String, String> provisioningContext = new HashMap<String, String>();

provisioningContext.put("duration", "3Years");
provisioningContext.put("scope", "shared");
provisioningContext.put("subscriptionId", subscriptionId);

lineItem.setProvisioningContext(provisioningContext);

List<CartLineItem> lineItemList = new ArrayList<CartLineItem>();
lineItemList.add(lineItem);

Cart cart = new Cart();
cart.setLineItems(lineItemList);

Cart cartCreated = partnerOperations.getCustomers().byId(customerId).getCart().create(cart);
```

## PowerShell

The [Partner Center PowerShell module](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To create an order for a customer:

1. Instantiate a Cart object.
2. Create a list of **CartLineItem** objects, and assign the list to the cart's line items. Each cart line item contains the purchase information for one product. You must have at least one cart line item.

3. Execute the [New-PartnerCustomerCart](#) command to create the cart.

```
# $customerId
# $subscriptionId
# $catalogItemId

$lineItem = New-Object -TypeName Microsoft.Store.PartnerCenter.PowerShell.Models.Carts.PSCartLineItem

$lineItem.BillingCycle = 'OneTime'
$lineItem.CatalogItemId = $catalogItemId
$lineItem.FriendlyName = 'Sample RI Purchase'
$lineItem.ProvisioningContext.Add('duration', '1Year')
$lineItem.ProvisioningContext.Add('scope', 'shared')
$lineItem.ProvisioningContext.Add('subscriptionId', $subscriptionId)
$lineItem.Quantity = 10

New-PartnerCustomerCart -CustomerId $customerId -LineItems $lineItem
```

## REST request

### Request syntax

METHOD	REQUEST URI
POST	<a href="#">/{baseURL}/v1/customers/{customer-id}/carts</a> HTTP/1.1

### URI parameter

Use the following path parameter to identify the customer.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-id	string	Yes	A GUID formatted customer-id that identifies the customer.

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

This table describes the [Cart](#) properties in the request body.

PROPERTY	TYPE	REQUIRED	DESCRIPTION
id	string	No	A cart identifier that is supplied upon successful creation of the cart.
creationTimeStamp	DateTime	No	The date the cart was created, in date-time format. Applied upon successful creation of the cart.
lastModifiedTimeStamp	DateTime	No	The date the cart was last updated, in date-time format. Applied upon successful creation of the cart.

PROPERTY	TYPE	REQUIRED	DESCRIPTION
expirationTimeStamp	DateTime	No	The date the cart will expire, in date-time format. Applied upon successful creation of cart.
lastModifiedUser	string	No	The user who last updated the cart. Applied upon successful creation of cart.
lineItems	Array of objects	Yes	An Array of <a href="#">CartLineItem</a> resources.

This table describes the [CartLineItem](#) properties in the request body.

PROPERTY	TYPE	REQUIRED	DESCRIPTION
id	string	No	A Unique identifier for a cart line item. Applied upon successful creation of cart.
catalogId	string	Yes	The catalog item identifier.
friendlyName	string	No	Optional. The friendly name for the item defined by the partner to help disambiguate.
quantity	int	Yes	The number of licenses or instances.
currencyCode	string	No	The currency code.
billingCycle	Object	Yes	The type of billing cycle set for the current period.
participants	List of Object String pairs	No	A collection of PartnerId on Record (MPNID) on the purchase.
provisioningContext	Dictionary<string, string>	No	Information required for provisioning for some items in the catalog. The provisioningVariables property in a SKU indicates which properties are required for specific items in the catalog.
orderGroup	string	No	A group to indicate which items can be placed together.
error	Object	No	Applied after cart is created in case of an error.

PROPERTY	TYPE	REQUIRED	DESCRIPTION
renewsTo	Array of objects	No	An array of <a href="#">RenewsTo</a> resources.

This table describes the [RenewsTo](#) properties in the request body.

PROPERTY	TYPE	REQUIRED	DESCRIPTION
termDuration	string	No	An ISO 8601 representation of the renewal term's duration. The current supported values are <b>P1M</b> (1 month) and <b>P1Y</b> (1 year).

## Request example

```
POST /v1/customers/d6bf25b7-e0a8-4f2d-a31b-97b55fc774d/carts HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 4fa6dad6-a89f-4875-8247-8294a10ae1cf
MS-CorrelationId: 0e93c70c-977a-4a88-9580-7cf084c73286
X-Locale: en-US
MS-PartnerCenter-Client: Partner Center .NET SDK
Content-Type: application/json
Host: api.partnercenter.microsoft.com
Content-Length: 496
Expect: 100-continue

{
  "lineItems": [
    {
      /* Microsoft Azure Subscription */
      "id": 0,
      "catalogItemId": "MS-AZR-0145P",
      "quantity": 1,
      "billingCycle": "monthly",
      "termDuration": "P1Y"
    },
    {
      /* Azure Reserved Instance */
      "id": 1,
      "catalogItemId": "DZH318Z0BQ36:004G:DZH318Z08C0S",
      "quantity": 1,
      "billingCycle": "one_time",
      "termDuration": "P1Y",
      "provisioningContext": {
        "subscriptionId": "1C461A25-F729-4FA5-AADB-280947DD05E8",
        "scope": "shared"
      }
    },
    {
      /* Azure Reserved Instance */
      "id": 2,
      "catalogItemId": "DZH318Z0BQ36:004J:DZH318Z08B8X",
      "quantity": 1,
      "billingCycle": "one_time",
      "termDuration": "P3Y",
      "provisioningContext": {
        "subscriptionId": "1C461A25-F729-4FA5-AADB-280947DD05E8",
        "scope": "single"
      }
    },
    {
      /* Non-persistent Software */
    }
  ]
}
```

```

/* Perpetual Software */
{
  "id": 3,
  "catalogItemId": "DG7GMGF0DWTL:0001:DG7GMGF0DSFM",
  "quantity": 1,
  "billingCycle": "one_time"
},
{
  /* SaaS */
  "id": 4,
  "catalogItemId": "DZH318Z0BXWC:0002:DZH318Z0BMRV",
  "quantity": 1,
  "billingCycle": "monthly",
  "termDuration": "P1M"
},
{
  /* SaaS Free Trial */
  "id": 5,
  "catalogItemId": "DZH318Z0C0WF:0001:DZH318Z0BP69",
  "quantity": 10,
  "billingCycle": "none",
  "termDuration": "P1M",
  "renewsTo": {
    "termDuration": "P1Y"
  }
}
]
}

```

## REST response

If successful, this method returns the populated [Cart](#) resource in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

### Response example

```

HTTP/1.1 201 Created
Content-Length: 764
Content-Type: application/json; charset=utf-8
MS-CorrelationId: 0e93c70c-977a-4a88-9580-7cf084c73286
MS-RequestId: 4fa6dad6-a89f-4875-8247-8294a10ae1cf
X-Locale: en-US,en-US
MS-CV: sF/wRa2ih0CzbABC.0
MS-ServerId: 000001
Date: Thu, 15 Mar 2018 17:15:01 GMT
{
  "id": "3655b1a0-b1c9-4268-9824-577fdbcb4d0be",
  "creationTimestamp": "2019-01-16T00:45:41.6062996Z",
  "lastModifiedTimestamp": "2019-01-16T00:45:41.6062996Z",
  "expirationTimestamp": "2019-01-16T01:00:54.4188497Z",
  "lastModifiedUser": "1824b7fc-2fac-4478-b177-66823c40ab75",
  "status": "Active",
  "lineItems": [
    {
      "id": 0,
      "catalogItemId": "MS-AZR-0145P",
      "quantity": 1,
      "currencyCode": "USD",
      "billingCycle": "monthly",
      "termDuration": "P1Y",
      "orderGroup": "OMS-0"
    },
    {
      "id": 1,
      "catalogItemId": "MS-AZR-0145P",
      "quantity": 1,
      "currencyCode": "USD",
      "billingCycle": "monthly",
      "termDuration": "P1Y",
      "orderGroup": "OMS-0"
    }
  ]
}

```

```
{
  "id": 1,
  "catalogItemId": "DZH318Z0BQ36:004G:DZH318Z08C0S",
  "quantity": 1,
  "currencyCode": "USD",
  "billingCycle": "one_time",
  "termDuration": "P1Y",
  "provisioningContext": {
    "subscriptionId": "1C461A25-F729-4FA5-AADB-280947DD05E8",
    "scope": "shared"
  },
  "orderGroup": "0"
},
{
  "id": 2,
  "catalogItemId": "DZH318Z0BQ36:004J:DZH318Z08B8X",
  "quantity": 1,
  "currencyCode": "USD",
  "billingCycle": "one_time",
  "termDuration": "P3Y",
  "provisioningContext": {
    "subscriptionId": "1C461A25-F729-4FA5-AADB-280947DD05E8",
    "scope": "shared"
  },
  "orderGroup": "0"
},
{
  "id": 3,
  "catalogItemId": "DG7GMGF0DWM3:0002:DG7GMGF0DT1M",
  "quantity": 1,
  "currencyCode": "USD",
  "billingCycle": "one_time",
  "orderGroup": "0"
},
{
  "id": 4,
  "catalogItemId": "DZH318Z0BXWC:0002:DZH318Z0BMRV",
  "quantity": 1,
  "currencyCode": "USD",
  "billingCycle": "monthly",
  "termDuration": "P1M",
  "orderGroup": "1"
},
{
  "id": 5,
  "catalogItemId": "DZH318Z0C0WF:0001:DZH318Z0BP69",
  "quantity": 10,
  "currencyCode": "USD",
  "billingCycle": "none",
  "termDuration": "P1M",
  "renewsTo": {
    "termDuration": "P1Y"
  },
  "orderGroup": "2"
}
],
"links": {
  "self": {
    "uri": "/customers/28045616-f6b9-462f-9701-0d89b5e65c44/carts/3655b1a0-b1c9-4268-9824-577fdbc4d0be",
    "method": "GET",
    "headers": []
  }
},
"attributes": {
  "objectType": "Cart"
}
}
```

# Create a cart with add-ons

4/25/2020 • 5 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center

You can purchase add-ons through a cart. For more information about what is currently available to sell, see [Partner offers in the Cloud Solution Provider program](#).

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## C#

A cart enables the purchase of a base offer and its corresponding add-ons. Follow these steps to create a cart:

1. Instantiate a [Cart](#) object.
2. Create a list of [CartLineItem](#) objects which represent the base offer(s), and assign the list to the cart's [LineItems](#) property.
3. Under each base offer's cart line item, populate the list of [AddOnItems](#) with other [CartLineItem](#) objects that each represent an add-on that will be purchased against that base offer.
4. Obtain an interface to cart operations by using [IAggregatePartner](#) to call the [ICustomerCollection.ById](#) method with the customer ID to identify the customer, and then retrieving the interface from the [Cart](#) property.
5. Finally, call the [Create](#) or [CreateAsync](#) method to create the cart.

## C# example

```

// IAggregatePartner partnerOperations;
// string customerId;

var cart = new Cart()
{
    LineItems = new List<CartLineItem>()
    {
        new CartLineItem()
        {
            Id = 0,
            CatalogItemId = "A_base_offer_ID",
            FriendlyName = "Myofferpurchase",
            Quantity = 3,
            BillingCycle = BillingCycleType.Monthly,
            AddonItems = new List<CartLineItem>
            {
                new CartLineItem
                {
                    Id = 1,
                    CatalogItemId = "AnAddon_item_ID",
                    BillingCycle = BillingCycleType.Monthly,
                    Quantity = 2,
                },
                new CartLineItem
                {
                    Id = 2,
                    CatalogItemId = "AnotherAddon_item_ID",
                    BillingCycle = BillingCycleType.Monthly,
                    Quantity = 3
                }
            }
        }
    }
};

var createdCart = partnerOperations.Customers.ById(customerId).Carts.Create(cart);

```

Follow these steps to create a cart which will enable the purchase of add-on(s) against existing base subscription(s):

1. Create a **Cart** with a new **CartLineItem** containing the subscription ID in the **ProvisioningContext** property with key "ParentSubscriptionId".
2. Call the **Create** or **CreateAsync** method.

```

// IAggregatePartner partnerOperations;
// string selectedCustomerId;

var cart = new Cart()
{
    LineItems = new List<CartLineItem>()
    {
        new CartLineItem()
        {
            Id = 0,
            CatalogItemId = "An_addon_item_ID",
            ProvisioningContext = new Dictionary<string, string>
            {
                {
                    "ParentSubscriptionId", "An_existing_subscription_Id"
                }
            },
            Quantity = 1,
            BillingCycle = BillingCycleType.Annual,
        }
    }
};

var createdCart = partnerOperations.Customers.ById(selectedCustomerId).Carts.Create(cart);

```

## REST request

### Request syntax

METHOD	REQUEST URI
POST	<a href="#"><i>{baseUrl}</i>/v1/customers/{customer-id}/carts</a> HTTP/1.1

### URI parameter

Use the following path parameter to identify the customer.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-id	string	Yes	A GUID formatted customer-id that identifies the customer.

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

This table describes the [Cart](#) properties in the request body.

PROPERTY	TYPE	REQUIRED	DESCRIPTION
id	string	No	A cart identifier that is supplied upon successful creation of the cart.
creationTimeStamp	DateTime	No	The date the cart was created, in date-time format. Applied upon successful creation of the cart.

PROPERTY	TYPE	REQUIRED	DESCRIPTION
lastModifiedTimeStamp	DateTime	No	The date the cart was last updated, in date-time format. Applied upon successful creation of the cart.
expirationTimeStamp	DateTime	No	The date the cart will expire, in date-time format. Applied upon successful creation of cart.
lastModifiedUser	string	No	The user who last updated the cart. Applied upon successful creation of cart.
lineItems	Array of objects	Yes	An Array of <a href="#">CartLineItem</a> resources.

This table describes the [CartLineItem](#) properties in the request body.

PROPERTY	TYPE	DESCRIPTION
id	string	A unique identifier for a cart line item. Applied upon successful creation of cart.
catalogId	string	The catalog item identifier.
friendlyName	string	Optional. The friendly name for the item defined by the partner to help disambiguate.
quantity	int	The number of licenses or instances.
currencyCode	string	The currency code.
billingCycle	Object	The type of billing cycle set for the current period.
participants	List of Object String pairs	A collection of PartnerId on Record (MPNID) on the purchase.
provisioningContext	Dictionary<string, string>	A context used for provisioning of offer.
orderGroup	string	A group to indicate which items can be placed together.
addonItems	List of <a href="#">CartLineItem</a> objects	A collection of cart line items for add-ons that will be purchased towards the base subscription that results from the parent cart line item's purchase.
error	Object	Applied after cart is created in case of an error.

## Request example (new base subscription)

The following REST example shows how to create a cart with add-on items for a new base subscription.

```
POST https://api.partnercenter.microsoft.com/v1/customers/18ac2950-8ea9-4dfc-92a4-fff4d4cd57796/carts HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: f931348a-6312-47d0-a8dd-31a386dedb8f
MS-CorrelationId: f73baf70-bbc3-43d0-8b29-dffa08ff9511

{
    "LineItems": [
        {
            "Id":0,
            "CatalogItemId":"91FD106F-4B2C-4938-95AC-F54F74E9A239",
            "FriendlyName":"Myofferpurchase",
            "Quantity":3,
            "BillingCycle":"monthly",
            "AddonItems": [
                {
                    "Id":1,
                    "CatalogItemId":"C94271D8-B431-4A25-A3C5-A57737A1C909",
                    "Quantity":2,
                    "BillingCycle":"monthly"
                },
                {
                    "Id":2,
                    "CatalogItemId":"43FCE491-76D1-4BCC-B709-8A288786DBAE",
                    "Quantity":3,
                    "BillingCycle":"monthly"
                }
            ]
        }
    ]
}
```

## Request example (existing base subscription)

The following REST example show how to append add-ons to an existing base subscription.

```
POST https://api.partnercenter.microsoft.com/v1/customers/18ac2950-8ea9-4dfc-92a4-fff4d4cd57796/carts HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 512a777a-5427-452d-9637-18421387e435
MS-CorrelationId: 182474ba-7303-4d0f-870a-8c7fba5ccc4b

{
    "LineItems": [
        {
            "Id":0,
            "CatalogItemId":"C94271D8-B431-4A25-A3C5-A57737A1C909",
            "Quantity":1,
            "BillingCycle":"annual",
            "ProvisioningContext":{"ParentSubscriptionId":"97555B61-7461-477A-A98C-9C76148783E4"}
        }
    ]
}
```

## REST response

If successful, this method returns the populated [Cart](#) resource in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging

information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

#### Response example (new base subscription)

```
HTTP/1.1 201 Created
Content-Length: 958
Content-Type: application/json
MS-CorrelationId: f73baf70-bbc3-43d0-8b29-dffa08ff9511
MS-RequestId: f931348a-6312-47d0-a8dd-31a386dedb8f
X-Locale: en-US,en-US
Date: Thu, 01 Nov 2018 22:29:05 GMT

{
    "id": "dbe2f8d4-f21d-43e2-9356-cff6387c4ba1",
    "creationTimestamp": "2018-11-01T22:29:03.6900182Z",
    "lastModifiedTimestamp": "2018-11-01T22:29:03.6900182Z",
    "expirationTimestamp": "2018-11-01T22:44:05.0025799Z",
    "lastModifiedUser": "1824b7fc-2fac-4478-b177-66823c40ab75",
    "status": "Active",
    "lineItems": [
        {
            "id": 0,
            "catalogItemId": "91FD106F-4B2C-4938-95AC-F54F74E9A239",
            "friendlyName": "Myofferpurchase",
            "quantity": 3,
            "currencyCode": "USD",
            "billingCycle": "monthly",
            "orderGroup": "OMS-0",
            "addonItems": [
                {
                    "id": 1,
                    "catalogItemId": "C94271D8-B431-4A25-A3C5-A57737A1C909",
                    "quantity": 2,
                    "currencyCode": "USD",
                    "billingCycle": "monthly",
                    "orderGroup": "OMS-0"
                },
                {
                    "id": 2,
                    "catalogItemId": "43FCE491-76D1-4BCC-B709-8A288786DBAE",
                    "quantity": 3,
                    "currencyCode": "USD",
                    "billingCycle": "monthly",
                    "orderGroup": "OMS-0"
                }
            ]
        }
    ],
    "links": {
        "self": {
            "uri": "/customers/18ac2950-8ea9-4dfc-92a4-ff4d4cd57796/carts/dbe2f8d4-f21d-43e2-9356-cff6387c4ba1",
            "method": "GET",
            "headers": []
        }
    },
    "attributes": {
        "objectType": "Cart"
    }
}
```

#### Response example (existing base subscription)

HTTP/1.1 201 Created  
Content-Length: 707  
Content-Type: application/json  
MS-CorrelationId: 182474ba-7303-4d0f-870a-8c7fba5ccc4b  
MS-RequestId: 512a777a-5427-452d-9637-18421387e435  
X-Locale: en-US,en-US  
Date: Thu, 01 Nov 2018 22:46:18 GMT

```
{  
    "id": "4d927e27-93d1-448b-abe5-819b66ecca22",  
    "creationTimestamp": "2018-11-01T22:46:16.2996364Z",  
    "lastModifiedTimestamp": "2018-11-01T22:46:16.2996364Z",  
    "expirationTimestamp": "2018-11-01T23:01:18.7543264Z",  
    "lastModifiedUser": "1824b7fc-2fac-4478-b177-66823c40ab75",  
    "status": "Active",  
    "lineItems": [  
        {  
            "id": 0,  
            "catalogItemId": "C94271D8-B431-4A25-A3C5-A57737A1C909",  
            "quantity": 1,  
            "currencyCode": "USD",  
            "billingCycle": "annual",  
            "provisioningContext": {  
                "parentSubscriptionId": "97555B61-7461-477A-A98C-9C76148783E4"  
            },  
            "orderGroup": "OMS-0"  
        }  
    ],  
    "links": {  
        "self": {  
            "uri": "/customers/18ac2950-8ea9-4dfc-92a4-ff4d4cd57796/carts/4d927e27-93d1-448b-abe5-819b66ecca22",  
            "method": "GET",  
            "headers": [  
            ]  
        }  
    },  
    "attributes": {  
        "objectType": "Cart"  
    }  
}
```

# Create an order

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## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud for US Government

Creating an **order** for Azure reserved VM instance products applies *only* to:

- Partner Center

For information about what is currently available to sell, see [Partner offers in the Cloud Solution Provider program](#).

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- An offer identifier.

## C#

To create an order for a customer:

1. Instantiate an **Order** object and set the **ReferenceCustomerID** property to the customer ID to record the customer.
2. Create a list of **OrderLineItem** objects, and assign the list to the order's **LineItems** property. Each order line item contains the purchase information for one offer. You must have at least one order line item.
3. Obtain an interface to order operations. First, call the **IAggregatePartner.Customers.ById** method with the customer ID to identify the customer. Next, retrieve the interface from the **Orders** property.
4. Call the **Create** or **CreateAsync** method and pass in the **Order** object.

```

IAggregatePartner partnerOperations;
string customerId;
string offerId;

var order = new Order()
{
    ReferenceCustomerId = customerId,
    LineItems = new List<OrderLineItem>()
    {
        new OrderLineItem()
        {
            OfferId = offerId,
            FriendlyName = "new offer purchase",
            Quantity = 1,
            ProvisioningContext = new Dictionary<string, string>
            {
                { "subscriptionId", "5198C069-3DAA-403A-8660-5BE11BFD12EE" },
                { "scope", "shared" },
                { "duration", "3Years" }
            }
        }
    }
};

var createdOrder = partnerOperations.CustomersById(customerId).Orders.Create(order);

```

Sample: [Console test app](#). Project: Partner Center SDK Samples Class: CreateOrder.cs

## REST request

### Request syntax

METHOD	REQUEST URI
POST	<a href="#"><i>{baseUrl}</i></a> /v1/customers/{customer-id}/orders HTTP/1.1

### URI parameters

Use the following path parameter to identify the customer.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-id	string	Yes	A GUID formatted customer-id that identifies the customer.

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

#### Order

This table describes the [Order](#) properties in the request body.

PROPERTY	TYPE	REQUIRED	DESCRIPTION
id	string	No	An order identifier that is supplied upon successful creation of the order.

PROPERTY	TYPE	REQUIRED	DESCRIPTION
referenceCustomerId	string	No	The customer identifier.
billingCycle	string	No	Indicates the frequency with which the partner is billed for this order. Supported values are the member names found in <a href="#">BillingCycleType</a> . The default is "Monthly" or "OneTime" at order creation. This field is applied upon successful creation of the order.
lineItems	array of <a href="#">OrderLineItem</a> resources	Yes	An itemized list of the offers the customer is purchasing including the quantity.
currencyCode	string	No	Read-only. The currency used when placing the order. Applied upon successful creation of the order.
creationDate	datetime	No	Read-only. The date the order was created, in date-time format. Applied upon successful creation of the order.
status	string	No	Read-only. The status of the order. Supported values are the member names found in <a href="#">OrderStatus</a> .
links	<a href="#">OrderLinks</a>	No	The resource links corresponding to the Order.
attributes	<a href="#">ResourceAttributes</a>	No	The metadata attributes corresponding to the Order.

#### OrderLineItem

This table describes the [OrderLineItem](#) properties in the request body.

#### NOTE

The partnerIdOnRecord should only be provided when an indirect provider places an order on behalf of an indirect reseller. It's used to store the Microsoft Partner Network ID of the indirect reseller only (never the ID of the indirect provider).

NAME	TYPE	REQUIRED	DESCRIPTION
lineItemNumber	int	Yes	Each line item in the collection gets a unique line number, counting up from 0 to count-1.

NAME	TYPE	REQUIRED	DESCRIPTION
offerId	string	Yes	The offer identifier.
subscriptionId	string	No	The subscription identifier.
parentSubscriptionId	string	No	Optional. The ID of the parent subscription in an add-on offer. Applies to PATCH only.
friendlyName	string	No	Optional. The friendly name for the subscription defined by the partner to help disambiguate.
quantity	int	Yes	The number of licenses for a license-based subscription.
partnerIdOnRecord	string	No	When an indirect provider places an order on behalf of an indirect reseller, populate this field with the MPN ID of the <b>indirect reseller only</b> (never the ID of the indirect provider). This ensures proper accounting for incentives.
provisioningContext	Dictionary<string, string>	No	Information required for provisioning for some items in the catalog. The provisioningVariables property in a SKU indicates which properties are required for specific items in the catalog.
links	<a href="#">OrderLineItemLinks</a>	No	Read-only. The resource links corresponding to the Order line item.
attributes	<a href="#">ResourceAttributes</a>	No	The metadata attributes corresponding to the OrderLineItem.
renewsTo	Array of objects	No	An array of <a href="#">RenewsTo</a> resources.

#### [RenewsTo](#)

This table describes the [RenewsTo](#) properties in the request body.

PROPERTY	TYPE	REQUIRED	DESCRIPTION

PROPERTY	TYPE	REQUIRED	DESCRIPTION
termDuration	string	No	An ISO 8601 representation of the renewal term's duration. The current supported values are <b>P1M</b> (1 month) and <b>P1Y</b> (1 year).

## Request example

```
POST https://api.partnercenter.microsoft.com/v1/customers/b0d70a69-4c42-4b27-b17b-91a835d8686a/orders HTTP/1.1
Authorization: Bearer <token>
Host: api.partnercenter.microsoft.com
Content-Length: 691
Content-Type: application/json

{
  "BillingCycle": "one_time",
  "CurrencyCode": "USD",
  "LineItems": [
    {
      "LineItemNumber": 0,
      "ProvisioningContext": {
        "subscriptionId": "3D5ECED6-1151-44C7-AEE6-70A4BB725666",
        "scope": "shared",
        "duration": "1Year"
      },
      "OfferId": "DZH318Z0BQ4B:0047:DZH318Z0DSM8",
      "FriendlyName": "A_sample_Azure_RI",
      "Quantity": 1
    }
  ]
}
```

## REST response

If successful, the method returns an [Order](#) resource in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center error codes](#).

This method returns the following error codes:

HTTP STATUS CODE	ERROR CODE	DESCRIPTION
400	2093	Inventory is not available for the catalog item selected.
400	2094	Subscription is not a valid Azure subscription. Only applicable for Azure Reserved VM Instance purchase.
400	2095	Subscription is not enabled for an Azure Reserved VM Instance purchase.

## Response example

HTTP/1.1 201 Created  
Content-Length: 788  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: b593ccb7-b358-4b31-81fc-e60b9c277a7f  
MS-RequestId: 025f4c19-217f-49d6-a056-391902c62fb3  
Date: Thu, 15 Mar 2018 22:30:02 GMT

```
{  
    "id": "Cs_jyTxubLpvDJXdo8xcQZN6I2RsLrgZ1",  
    "referenceCustomerId": "b0d70a69-4c42-4b27-b17b-91a835d8686a",  
    "billingCycle": "one_time",  
    "currencyCode": "USD",  
    "lineItems": [  
        {  
            "lineItemNumber": 0,  
            "offerId": "84A03D81-6B37-4D66-8D4A-FAEA24541538",  
            "friendlyName": "A_sample_Azure_RI",  
            "quantity": 1,  
            "links": {  
                "sku": {  
                    "uri": "/products/DZH318Z0BQ4B/skus/0047?country=US",  
                    "method": "GET",  
                    "headers": []  
                }  
            }  
        }],  
    "creationDate": "2018-03-15T22:30:02.085152Z",  
    "status": "pending",  
    "links": {  
        "provisioningStatus": {  
            "uri": "/customers/b0d70a69-4c42-4b27-b17b-91a835d8686a/orders/Cs_jyTxubLpvDJXdo8xcQZN6I2RsLrgZ1/provisioningstatus",  
            "method": "GET",  
            "headers": []  
        },  
        "self": {  
            "uri": "/customers/b0d70a69-4c42-4b27-b17b-91a835d8686a/orders/Cs_jyTxubLpvDJXdo8xcQZN6I2RsLrgZ1",  
            "method": "GET",  
            "headers": []  
        }  
    },  
    "attributes": {  
        "objectType": "Order"  
    }  
}
```

# Create an order for a customer of an indirect reseller

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## Applies to:

- Partner Center

How to create an order for a customer of an indirect reseller.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- The offer identifier of the item to purchase.
- The tenant identifier of the indirect reseller.

## C#

To create an order for a customer of an indirect reseller:

1. Get a collection of the indirect resellers that have a relationship with the signed-in partner.
2. Get a local variable to the item in the collection that matches the indirect reseller ID. This step helps you access the reseller's **MpnId** property when you create the order.
3. Instantiate an **Order** object and set the **ReferenceCustomerID** property to the customer identifier in order to record the customer.
4. Create a list of **OrderLineItem** objects, and assign the list to the order's **LineItems** property. Each order line item contains the purchase information for one offer. Be sure to populate the **PartnerIdOnRecord** property in each line item with the MPN ID of the indirect reseller. You must have at least one order line item.
5. Obtain an interface to order operations by calling the **IAggregatePartner.Customers.ById** method with the customer ID to identify the customer, and then retrieve the interface from the **Orders** property.
6. Call the **Create** or **CreateAsync** method to create the order.

## C# example

```

// IAggregatePartner partnerOperations;
// string customerId;
// string offerId;
// string indirectResellerId;

// Get the indirect resellers with a relationship to the signed-in partner.
var indirectResellers =
    partnerOperations.Relationships.Get(PartnerRelationshipType.IsIndirectCloudSolutionProviderOf);

// Find the matching reseller in the collection.
var selectedIndirectReseller = (indirectResellers != null && indirectResellers.Items.Any()) ?
    indirectResellers.Items.FirstOrDefault(reseller => reseller.Id.Equals(indirectResellerId,
    StringComparison.OrdinalIgnoreCase)) :
    null;

// Prepare the order and populate the PartnerIdOnRecord with the reseller's Microsoft Partner Network Id.
var order = new Order()
{
    ReferenceCustomerId = customerId,
    LineItems = new List<OrderLineItem>()
    {
        new OrderLineItem()
        {
            OfferId = offerId,
            FriendlyName = "New offer purchase.",
            Quantity = 5,
            PartnerIdOnRecord = selectedIndirectReseller != null ? selectedIndirectReseller.MpnId : null
        }
    }
};

// Place the order.
var createdOrder = partnerOperations.Customers.ById(customerId).Orders.Create(order);

```

Sample: [Console test app](#) Project: Partner Center SDK Samples Class: PlaceOrderForCustomer.cs

## REST request

### Request syntax

METHOD	REQUEST URI
POST	<a href="#"><i>{baseUrl}</i></a> /v1/customers/{customer-id}/orders HTTP/1.1

### URI parameters

Use the following path parameter to identify the customer.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-id	string	Yes	A GUID formatted string that identifies the customer.

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

#### Order

This table describes the **Order** properties in the request body.

NAME	TYPE	REQUIRED	DESCRIPTION
id	string	No	An order identifier that is supplied upon successful creation of the order.
referenceCustomerId	string	Yes	The customer identifier.
billingCycle	string	No	The frequency with which the partner is billed for this order. The default is "Monthly" and is applied upon successful creation of the order. Supported values are the member names found in <a href="#">BillingCycleType</a> . Note: the annual billing feature isn't yet generally available. Support for annual billing is coming soon.
lineItems	array of objects	Yes	An array of <a href="#">OrderLineItem</a> resources.
creationDate	string	No	The date the order was created, in date-time format. Applied upon successful creation of the order.
attributes	object	No	Contains "ObjectType": "Order".

#### OrderLineItem

This table describes the [OrderLineItem](#) properties in the request body.

NAME	TYPE	REQUIRED	DESCRIPTION
lineItemNumber	int	Yes	Each line item in the collection gets a unique line number, counting up from 0 to count-1.
offerId	string	Yes	The offer identifier.
subscriptionId	string	No	The subscription identifier.
parentSubscriptionId	string	No	Optional. The ID of the parent subscription in an add-on offer. Applies to PATCH only.
friendlyName	string	No	Optional. The friendly name for the subscription defined by the partner to help disambiguate.

Name	Type	Required	Description
quantity	int	Yes	The number of licenses for a license-based subscription.
partnerIdOnRecord	string	No	When an indirect provider places an order on behalf of an indirect reseller, populate this field with the MPN ID of the <b>indirect reseller only</b> (never the ID of the indirect provider). This ensures proper accounting for incentives. <b>Failure to provide the reseller MPN ID does not cause the order to fail. However, the reseller isn't recorded and as a consequence incentive calculations may not include the sale.</b>
attributes	object	No	Contains "ObjectType": "OrderLineItem".

## Request example

```

POST https://api.partnercenter.microsoft.com/v1/customers/c501c3c4-d776-40ef-9ecf-9cefb59442c1/orders HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 02109f46-3ff2-4be4-9f37-b2eb6d58d542
MS-CorrelationId: 85195ae6-3de5-4978-abd4-7be2fbfe4c84
X-Locale: en-US
Content-Type: application/json
Host: api.partnercenter.microsoft.com
Content-Length: 410
Expect: 100-continue

{
  "Id": null,
  "ReferenceCustomerId": "c501c3c4-d776-40ef-9ecf-9cefb59442c1",
  "BillingCycle": "unknown",
  "LineItems": [
    {
      "LineItemNumber": 0,
      "OfferId": "DB2E705F-B82A-4024-A3D5-D88E12F2DB35",
      "SubscriptionId": null,
      "ParentSubscriptionId": null,
      "FriendlyName": "New offer purchase.",
      "Quantity": 5,
      "PartnerIdOnRecord": "4847383",
      "Attributes": {
        "ObjectType": "OrderLineItem"
      }
    }
  ],
  "CreationDate": null,
  "Attributes": {
    "ObjectType": "Order"
  }
}

```

# REST response

If successful, the response body contains the populated [Order](#) resource.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center error codes](#).

## Response example

```
HTTP/1.1 201 Created
Content-Length: 831
Content-Type: application/json; charset=utf-8
MS-CorrelationId: 85195ae6-3de5-4978-abd4-7be2fbfe4c84
MS-RequestId: 02109f46-3ff2-4be4-9f37-b2eb6d58d542
MS-CV: Nd3Oum/L5EywtKQK.0
MS-ServerId: 020021921
Date: Mon, 10 Apr 2017 23:02:24 GMT

{
  "id": "3eddcac6-63b2-4c40-b0b6-f47e18301492",
  "referenceCustomerId": "c501c3c4-d776-40ef-9ecf-9cefb59442c1",
  "billingCycle": "monthly",
  "lineItems": [
    {
      "lineItemNumber": 0,
      "offerId": "DB2E705F-B82A-4024-A3D5-D88E12F2DB35",
      "subscriptionId": "42226ED6-070A-4E0F-B80C-4CDFB3E97AA7",
      "friendlyName": "New offer purchase.",
      "quantity": 5,
      "partnerIdOnRecord": "4847383",
      "links": {
        "subscription": {
          "uri": "/customers/c501c3c4-d776-40ef-9ecf-9cefb59442c1/subscriptions/42226ED6-070A-4E0F-B80C-4CDFB3E97AA7",
          "method": "GET",
          "headers": []
        }
      }
    },
    {
      "creationDate": "2017-04-10T16:02:25.983-07:00",
      "links": {
        "self": {
          "uri": "/customers/c501c3c4-d776-40ef-9ecf-9cefb59442c1/orders/3eddcac6-63b2-4c40-b0b6-f47e18301492",
          "method": "GET",
          "headers": []
        }
      },
      "attributes": {
        "etag": "eyJpZCI6IjNlZGRjYWM2LTYzYjItNGM0MC1iMGI2LWY0N2UxODMwMTQ5MiIsInZlcnPb24i0jF9",
        "objectType": "Order"
      }
    }
  ]
}
```

# Get a list of add-ons for a subscription

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

This article describes how to get a collection of add-ons that a customer has chosen to add to their **Subscription** resource.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A subscription ID.

## C#

To get the list of add-ons for a customer's subscription:

1. Use your **IAggregatePartner.Customers** collection to call the **ById()** method.
2. Call the **Subscriptions** property, followed by the **ById()** method.
3. Call the **Addons** property, followed by **Get()** or **GetAsync()**.

```
// IAggregatePartner partnerOperations;
// var selectedCustomerId as string;
// var selectedSubscription Subscription;

var subscriptionDetails =
    partnerOperations.Customers.ById(selectedCustomerId).Subscriptions.ById(selectedSubscription.Id).AddOns.Get();
```

For an example, see the following:

- Sample: [Console test app](#)
- Project: [PartnerSDK.FeatureSample](#)
- Class: [SubscriptionAddons.cs](#)

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<a href="#"><i>{baseUrl}</i></a> /v1/customers/{customer-tenant-id}/subscriptions/{id-for-subscription}/addons HTTP/1.1

#### URI parameter

This table lists the required query parameters to get the list of add-ons for the subscription.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	guid	Y	A GUID corresponding to the customer.
id-for-subscription	guid	Y	A GUID corresponding to the subscription.

#### Request headers

For more information, see [Partner Center REST headers](#).

#### Request body

None.

#### Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/<customer-tenant-id>/subscriptions/<id-for-subscription>/addons HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 429902e2-ea2f-4704-b8a0-27fc53c539ba
MS-CorrelationId: c49004b1-224f-4d86-a607-6c8bcc52cfdd
```

## REST response

If successful, this method returns a collection of resources in the response body.

#### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For a full list, see [Error Codes](#).

#### Response example

HTTP/1.1 200 OK  
Content-Length: 73754  
Content-Type: application/json  
MS-CorrelationId: c49004b1-224f-4d86-a607-6c8bcc52cfdd  
MS-RequestId: 16fee928-dc2c-412f-adbb-871f68babf16  
Date: Wed, 25 Nov 2015 05:50:45 GMT

```
{  
    "totalCount": 37,  
    "items": [  
        {  
            "id": "83ef9d05-4169-4ef9-9657-0e86b1eab1de",  
            "entitlementId": "42226ed6-070a-4e0f-b80c-4cdfB3e97aa7",  
            "friendlyName": "Myofferpurchase",  
            "quantity": 1,  
            "unitType": "none",  
            "creationDate": "2015-11-25T06: 41: 12Z",  
            "effectiveStartDate": "2015-11-24T08: 00: 00Z",  
            "commitmentEndDate": "2016-12-12T08: 00: 00Z",  
            "status": "active",  
            "autoRenewEnabled": false,  
            "billingType": "none",  
            "contractType": "subscription",  
            "links": {  
                "offer": {  
                    "uri": "/v1/offers/0CCA44D6-68E9-4762-94EE-31ECE98783B9",  
                    "method": "GET",  
                    "headers": []  
                },  
                "self": {  
                    "uri": "/subscriptions?key=<key>",  
                    "method": "GET",  
                    "headers": []  
                }  
            },  
            "orderId": "6183db3d-6318-4e52-877e-25806e4971be",  
            "attributes": {  
                "etag": "<etag>",  
                "objectType": "Subscription"  
            }  
        },  
        {  
            "attributes": {  
                "objectType": "Collection"  
            }  
        }  
    ]  
}
```

# Get a list of availabilities for a SKU (by country)

4/25/2020 • 3 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center

This article describes how to get a collection of availabilities in a particular country for a specified product and SKU.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A product identifier.
- A SKU identifier.
- A country.

## C#

To get the list of [availabilities](#) for a [SKU](#):

1. Follow the steps in [Get a SKU by ID](#) to get the interface for a specific SKU's operations.
2. From the SKU interface, select the **Availabilities** property to get an interface with the operations for availabilities.
3. (Optional) Use the **ByTargetSegment()** method to filter the availabilities by target segment.
4. Call **Get()** or **GetAsync()** to retrieve a collection of the availabilities for this SKU.

```

IAggregatePartner partnerOperations;
string countryCode;
string productId;
string skuId;
string targetSegment;
string productIdForAzureReservation;
string skuIdForAzureReservation;

// Get the availabilities.
var availabilities =
partnerOperations.Products.ByCountry(countryCode).ById(productId).SkusById(skuId).Availabilities.Get();

// Get the availabilities, filtered by target segment.
var availabilities =
partnerOperations.Products.ByCountry(countryCode).ById(productId).SkusById(skuId).Availabilities.BySegment(t
argetSegment).Get();

// Get the availabilities for an Azure reservation product and sku which are applicable to Microsoft Azure
(MS-AZR-0145P) subscriptions only.
var availabilities =
partnerOperations.Products.ByCountry(countryCode).ById(productIdForAzureReservation).SkusById(skuIdForAzureR
eservation).Availabilities.ByReservationScope("AzurePlan").Get();

// Get the availabilities for an Azure reservation product and sku which are applicable to Azure plans only.
var availabilities =
partnerOperations.Products.ByCountry(countryCode).ById(productIdForAzureReservation).SkusById(skuIdForAzureR
eservation).Availabilities.Get();

```

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<a href="#"><i>/baseURL</i></a> /v1/products/{product-id}/skus/{sku- id}/availabilities?country={country-code}&targetSegment= {target-segment} HTTP/1.1

### URI parameters

Use the following path and query parameters to get a list of availabilities for a SKU.

NAME	TYPE	REQUIRED	DESCRIPTION
product-id	string	Yes	A string that identifies the product.
sku-id	string	Yes	A string that identifies the SKU.
country-code	string	Yes	A country/region ID.
target-segment	string	No	A string that identifies the target segment used for filtering.

NAME	TYPE	REQUIRED	DESCRIPTION
reservationScope	string	No	When querying for a list of availabilities for an Azure Reservation SKU, specify <code>reservationScope=AzurePlan</code> to get a list of availabilities which are applicable to AzurePlan. Exclude this parameter to get a list of availabilities which are applicable to Microsoft Azure (MS-AZR-0145P) subscriptions.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request examples

### Availabilities for SKU by country

Follow this example to get a list of availabilities for a given SKU by country:

```
GET http:// api.partnercenter.microsoft.com/v1/products/DZH318Z0BQ3Q/skus/0001/availabilities?country=US
HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 70324727-62d8-4195-8f99-70ea25058d02
MS-CorrelationId: 83b644b5-e54a-4bdc-b354-f96c525b3c58
```

### Availabilities for VM reservations (Azure plan)

Follow this example to get a list of availabilities by country for Azure VM reservation SKUs. This example is for SKUs that apply to Azure plans:

```
GET https://api.partnercenter.microsoft.com/v1/products/DZH318Z0BQ3Q/skus/0001/availabilities?
country=US&targetView=AzureReservationsVM&reservationScope=AzurePlan HTTP/1.1
Authorization: Bearer
Accept: application/json
MS-RequestId: 031160b2-b0b0-4d40-b2b1-aaa9bb84211d
MS-CorrelationId: 7c1f6619-c176-4040-a88f-2c71f3ba4533
```

### Availabilities for VM reservations for Microsoft Azure (MS-AZR-0145P) subscriptions

Follow this example to get a list of availabilities by country for Azure VM reservations that are applicable to Microsoft Azure (MS-AZR-0145P) subscriptions.

```
GET https://api.partnercenter.microsoft.com/v1/products/DZH318Z0BQ3Q/skus/0001/availabilities?
country=US&targetView=AzureReservationsVM HTTP/1.1
Authorization: Bearer
Accept: application/json
MS-RequestId: 031160b2-b0b0-4d40-b2b1-aaa9bb84211d
MS-CorrelationId: 7c1f6619-c176-4040-a88f-2c71f3ba4533
```

## REST response

If successful, the response body contains a collection of [Availability](#) resources.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For a full list, see [Partner Center error codes](#).

This method returns the following error codes:

HTTP STATUS CODE	ERROR CODE	DESCRIPTION
403	400030	Access to the requested <b>targetSegment</b> is not allowed.

### Response example

HTTP/1.1 200 OK  
Content-Type: application/json; charset=utf-8  
Server: Microsoft-IIS/10.0  
MS-CorrelationId: 83b644b5-e54a-4bdc-b354-f96c525b3c58,83b644b5-e54a-4bdc-b354-f96c525b3c58  
MS-RequestId: 70324727-62d8-4195-8f99-70ea25058d02,70324727-62d8-4195-8f99-70ea25058d02  
X-Locale: en-US,en-US  
X-SourceFiles: =?UTF-8?B?  
QzpcVXN1cnNcbWFtZW5kZXZcZHBzLXJwZVxSUEUuUGFydG51ci5TZJ2aWN1LkNhdGFsb2dcV2ViQXBpc1xDYXRhbG9nU2VydmljZS5WM  
i5XZWJcdjFccHJvZHvjdHNcRFpIMzE4WjBCUTNRXHNrdXNcMDAwMVxhdmFpbGFiaWxpdGllcw==?=  
X-Powered-By: ASP.NET  
Date: Wed, 14 Mar 2018 22:19:37 GMT  
Content-Length: 808

```
{  
    "totalCount": 1,  
    "items": [  
        {  
            "id": "DZH318XZXVNf",  
            "productId": "DZH318Z0BQ3Q",  
            "skuId": "0001",  
            "catalogItemId": "DZH318Z0BQ3Q:0001:DZH318XZXVNf",  
            "defaultCurrency": {  
                "code": "USD",  
                "symbol": "$"  
            },  
            "segment": "commercial",  
            "country": "US",  
            "isPurchasable": true,  
            "isRenewable": false,  
            "terms": [{  
                "duration": "P1Y",  
                "description": "1 Year Prepaid"  
            }],  
            "product": { ... },  
            "sku": { ... },  
            "links": {  
                "self": {  
                    "uri": "/products/DZH318Z0BQ3Q/skus/0001/availabilities/DZH318Z0HMKQ?country=US",  
                    "method": "GET",  
                    "headers": []  
                }  
            }  
        }  
    ],  
    "links": {  
        "self": {  
            "uri": "/products/DZH318Z0BQ3Q/skus/0001/availabilities?country=US&targetSegment=commercial",  
            "method": "GET",  
            "headers": []  
        }  
    },  
    "attributes": {  
        "objectType": "Collection"  
    }  
}
```

# Get a list of availabilities for a SKU (by customer)

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## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

You can use the following methods to get a collection of availabilities for a specified product and SKU available to a particular customer.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A product identifier (**product-id**).
- A SKU identifier (**sku-id**).

## REST request

### Request syntax

METHOD	REQUEST URI
POST	<code>{baseUrl}/v1/customers/{customer-tenant-id}/products/{product-id}/skus/{sku-id}</code> HTTP/1.1

### Request URI parameters

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	GUID	Yes	The value is a GUID-formatted <b>customer-tenant-id</b> , which is an identifier that allows you to specify a customer.
product-id	string	Yes	A string that identifies the product.
sku-id	string	Yes	A string that identifies the SKU.

### Request header

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/65543400-f8b0-4783-8530-  
6d35ab8c6801/products/DZH318Z0BPS6/skus/0001/availabilities HTTP/1.1  
Authorization: Bearer <token>  
Accept: application/json  
MS-RequestId: 83643f5e-5dfd-4375-88ed-054412460dc8  
MS-CorrelationId: b1939cb2-e83d-4fb0-989f-514fb741b734
```

## REST response

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center error codes](#).

This method returns the following error codes:

HTTP STATUS CODE	ERROR CODE	DESCRIPTION
404	400013	The parent product was not found.

## Response example

HTTP/1.1 200 OK

Content-Length: 1909

Content-Type: application/json; charset=utf-8

MS-CorrelationId: cad955c2-8efc-47fe-b112-548ff002ba18

MS-RequestId: ae7288e2-2673-4ad4-8c12-7aad818d5949

```
{  
    "id": "0001",  
    "productId": "DZH318Z0BPS6",  
    "title": "Microsoft Azure plan",  
    "description": "Microsoft Azure plan (MS-AZR-0017G)",  
    "minimumQuantity": 1,  
    "maximumQuantity": 1,  
    "isTrial": false,  
    "supportedBillingCycles": [  
        "one_time"  
    ],  
    "purchasePrerequisites": [  
        "MicrosoftCustomerAgreement"  
    ],  
    "inventoryVariables": [],  
    "provisioningVariables": [],  
    "actions": [  
        "Refund"  
    ],  
    "dynamicAttributes": {  
        "isMicrosoftProduct": true,  
        "pilotProgram": "modernazurepilot"  
    },  
    "links": {  
        "availabilities": {  
            "uri": "/products/DZH318Z0BPS6/skus/0001/availabilities?country=US",  
            "method": "GET",  
            "headers": []  
        },  
        "self": {  
            "uri": "/products/DZH318Z0BPS6/skus/0001?country=US",  
            "method": "GET",  
            "headers": []  
        }  
    }  
}
```

# Get a list of offer categories by market

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## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

This article describes how to get a collection that contains all the offer categories in a given country/region and locale.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.

## C#

To get a list of offer categories in a given country/region and locale:

1. Use your [IAggregatePartner.Operations](#) collection to call the [With\(\)](#) method on a given context.
2. Inspect the [OfferCategories](#) property of the resulting object.

```
// IAggregatePartner partnerOperations;  
  
ResourceCollection<OfferCategory> offerCategoryResults =  
partnerOperations.With(RequestContextFactory.Instance.Create()).OfferCategories.ByCountry("US").Get();
```

For an example, see the following:

- Sample: [Console test app](#)
- Project: [PartnerSDK.FeatureSample](#)
- Class: [PartnerSDK.FeatureSample](#)

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<a href="#">/{baseURL}/v1/offercategories?country={country-id}</a> HTTP/1.1

### URI parameter

This table lists the required query parameters to get the offer categories.

NAME	TYPE	REQUIRED	DESCRIPTION
country-id	string	Y	The country/region ID.

## Request headers

A **locale-id** formatted as a string is required.

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/offercategories?country=<country-id> HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 4fb54bd5-a4c3-4fac-955f-9b6e3436d606
MS-CorrelationId: 47882653-eaed-4a2e-a552-1070a3fa1089
X-Locale: <locale-id>
Connection: Keep-Alive
```

## REST response

If successful, this method returns a collection of **OfferCategory** resources in the response body.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For a full list, see [Error Codes](#).

## Response example

HTTP/1.1 200 OK  
Content-Length: 1184  
Content-Type: application/json  
MS-CorrelationId: 47882653-eaed-4a2e-a552-1070a3fa1089  
MS-RequestId: 4fb54bd5-a4c3-4fac-955f-9b6e3436d606  
Date: Thu, 26 Nov 2015 00:07:10 GMT

```
{  
    "totalCount": 4,  
    "items": [  
        {  
            "id": "Enterprise_Key",  
            "name": "Enterprise",  
            "rank": 20,  
            "locale": "en-us",  
            "country": "US",  
            "attributes": {  
                "objectType": "OfferCategory"  
            }  
        },  
        {  
            "id": "SmallBusiness_Key",  
            "name": "SmallBusiness",  
            "rank": 30,  
            "locale": "en-us",  
            "country": "US",  
            "attributes": {  
                "objectType": "OfferCategory"  
            }  
        },  
        {  
            "id": "Government_Key",  
            "name": "Government",  
            "rank": 40,  
            "locale": "en-us",  
            "country": "US",  
            "attributes": {  
                "objectType": "OfferCategory"  
            }  
        },  
        {  
            "id": "Internal_Key",  
            "name": "Internal",  
            "rank": 100,  
            "locale": "en-us",  
            "country": "US",  
            "attributes": {  
                "objectType": "OfferCategory"  
            }  
        }  
    ],  
    "attributes": {  
        "objectType": "Collection"  
    }  
}
```

# Get a list of offers for a market

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## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Gets a collection that contains all the offers for a specific market.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.

## C#

To get a list of offers in a given market, use your `IAggregatePartner.Offers` collection, select the market by country, and call the `Get()` or `Get Async()` method.

```
// IAggregatePartner partnerOperations;  
  
ResourceCollection<Offer> offers = partnerOperations.Offers.ByCountry("US").Get();
```

Sample: [Console test app](#). Project: PartnerSDK.FeatureSample Class: Offers.cs

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/offers?country={country-id}</code> HTTP/1.1

### URI parameter

This table lists the required query parameters to get the offers.

NAME	TYPE	REQUIRED	DESCRIPTION
country-id	string	Y	The country/region ID.

### Request headers

- A `locale-id` formatted as a string is required. For more information, see [Partner Center REST headers](#).

### Request body

None.

### Request example

```
GET https://api.partnercenter.microsoft.com/v1/offers?country=<country-id> HTTP/1.1
Authorization: Bearer
Accept: application/json
MS-RequestId: 031160b2-b0b0-4d40-b2b1-aaa9bb84211d
MS-CorrelationId: 7c1f6619-c176-4040-a88f-2c71f3ba4533
X-Locale: <locale-id>
```

## REST response

If successful, this method returns a collection of **Offer** resources in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

### Response example

```
HTTP/1.1 200 OK
Content-Length: 26584
Content-Type: application/json
MS-CorrelationId: 7c1f6619-c176-4040-a88f-2c71f3ba4533
MS-RequestId: 031160b2-b0b0-4d40-b2b1-aaa9bb84211d
Date: Mon, 23 Nov 2015 23:20:44 GMT

{
    "totalCount":12,"items": [
        {
            "id":"E60E0348-1710-484B-992A-32B294D4CDE1",
            "name":"Azure Rights Management Premium (Government Pricing)",
            "description":"Microsoft Azure Rights Management Premium helps you protect confidential documents and email with strong encryption.
Control the use of your information by specifying who can view, edit, print, save and share your data.
Simple to use and integrated with Microsoft Office, SharePoint and Exchange.",
            "minimumQuantity":1,
            "maximumQuantity":10000000,
            "rank":5,
            "uri":"/3c95518e-8c37-41e3-9627-0ca339200f53/Offers/E60E0348-1710-484B-992A-32B294D4CDE1",
            "locale":"EN-US",
            "country":"US",
            "category": {
                "id":"Government_Key",
                "name":"Government",
                "rank":40,
                "locale":"en-us",
                "country":"US",
                "attributes": {
                    "objectType": "OfferCategory"
                }
            },
            "prerequisiteOffers": [],
            "isAddOn":false,
            "isAvailableForPurchase":true,
            "billing":"license",
            "isAutoRenewable":true,
            "product": {
                "id":"c52ea49f-fe5d-4e95-93ba-1de91d380f89",
                "name":"Azure Rights Management Premium",
                "unit":"Licenses"
            },
            "unitType":"Licenses",
            "links": {
                "learnMore": {
                    "uri":"http://g.microsoftonline.com/0BXPS00en/0000"
                }
            }
        }
    ]
}
```

```
        "method":"GET",
        "headers":[]

    },
    "self":{
        "uri":"/offers/E60E0348-1710-484B-992A-32B294D4CDE1",
        "method":"GET",
        "headers":[]
    }
},
"attributes":{
    "objectType":"Offer"
}
},
"links":{
    "self":{
        "uri":"/v1/offers?country={country-id}",
        "method":"GET",
        "headers":[]
    },
    "previous":{
        "uri":"/v1/offers?country={country-id}",
        "method":"GET",
        "headers":[]
    }
},
"attributes":{
    "objectType":"Collection"
}
}
```

# Get a list of products (by country)

4/25/2020 • 4 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

You can use the following methods to get a collection of products available in a particular country.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A country.

## C#

To get a list of products:

1. Use your **IAggregatePartner.Products** collection to select the country by using the **ByCountry()** method.
2. Select the catalog view using the **ByTargetView()** method.
3. (Optional) Select the reservation scope using the **ByReservationScope()** method.
4. (Optional) Select the target segment using the **ByTargetSegment()** method.
5. Call the **Get()** or **GetAsync()** method to return the collection.

```
IAggregatePartner partnerOperations;

// Get the products for the specified catalog view.
ResourceCollection<Products> products =
partnerOperations.Products.ByCountry("US").ByTargetView("MicrosoftAzure").Get();

// Get the products filtered by target view and target segment.
ResourceCollection<Products> products =
partnerOperations.Products.ByCountry("US").ByTargetView("MicrosoftAzure").ByTargetSegment("commercial").Get();

// Get the products for Azure reservations which are applicable to Microsoft Azure (MS-AZR-0145P)
// subscriptions only.
ResourceCollection<Product> products =
partnerOperations.Products.ByCountry("US").ByTargetView("AzureReservations").Get();

// Get the products for Azure reservations which are applicable to Azure plans only.
ResourceCollection<Product> products =
partnerOperations.Products.ByCountry("US").ByTargetView("AzureReservations").ByReservationScope("AzurePlan").Get();
```

## Java

The [Partner Center Java SDK](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To get a list of products:

1. Use your `IAggregatePartner.getProducts` function to select the country by using the `byCountry()` function.
2. Select the catalog view using the `byTargetView()` function.
3. (Optional) Select the target segment using the `byTargetSegment()` function.
4. Call the `get()` function to return the collection.

```
// IAggregatePartner partnerOperations;

// Get the products for the specified catalog view.
ResourceCollection<Products> products =
partnerOperations.getProducts().byCountry("US").byTargetView("Azure").get();

// Get the products filtered by target view and target segment.
ResourceCollection<Products> products =
partnerOperations.getProducts().byCountry("US").byTargetView("Azure").byTargetSegment("commercial").get();
```

## PowerShell

The [Partner Center PowerShell module](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To get a list of products:

1. Execute the `Get-PartnerProduct` command.
2. Select the catalog by specifying the `Catalog` parameter.
3. (Optional) Select the target segment by specifying the `Segment` parameter.

```
Get-PartnerProduct -Catalog 'Azure' -Segment 'commercial'
```

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>/baseUrl/v1/products?country={country}&amp;targetView={targetView}&amp;targetSegment={targetSegment}</code> HTTP/1.1

### URI parameters

Use the following path and query parameters to get a list of products.

NAME	TYPE	REQUIRED	DESCRIPTION
country	string	Yes	The country/region ID.
targetView	string	Yes	<p>Identifies the target view of the catalog. The supported values are:</p> <ul style="list-style-type: none"> <li>• <b>Azure</b>, which includes all Azure items</li> <li>• <b>AzureReservations</b>, which includes all Azure reservation items</li> <li>• <b>AzureReservations VM</b>, which includes all virtual machine (VM) reservation items</li> <li>• <b>AzureReservations SQL</b>, which includes all SQL reservation items</li> <li>• <b>AzureReservations CosmosDb</b>, which includes all Cosmos database reservation items</li> <li>• <b>MicrosoftAzure</b>, which includes items for Microsoft Azure subscriptions (<b>MS-AZR-0145P</b>) and Azure plans</li> <li>• <b>OnlineServices</b>, which includes all online service items (including commercial marketplace products)</li> <li>• <b>Software</b>, which includes all software items</li> <li>• <b>SoftwareSUSELinux</b>, which includes all software SUSE Linux items</li> <li>• <b>SoftwarePerpetual</b>, which includes all perpetual software items</li> <li>• <b>SoftwareSubscriptions</b>, which includes all software subscription items</li> </ul>

NAME	TYPE	REQUIRED	DESCRIPTION
targetSegment	string	No	<p>Identifies the target segment. The view for different target audiences. The supported values are:</p> <ul style="list-style-type: none"> <li>• <b>commercial</b></li> <li>• <b>education</b></li> <li>• <b>government</b></li> <li>• <b>nonprofit</b></li> </ul>
reservationScope	string	No	<p>When querying for a list of products for Azure Reservations, specify <code>reservationScope=AzurePlan</code> to get a list of products that are applicable to Azure plans. Exclude this parameter to get a list of products for Azure reservations, which are applicable to Microsoft Azure (MS-AZR-0145P) subscriptions.</p>

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request examples

### Products by country

Follow this example to get a list of products by country for Microsoft Azure (MS-AZR-0145P) subscriptions and Azure plans.

```
GET https://api.partnercenter.microsoft.com/v1/products?country=US&targetView=MicrosoftAzure HTTP/1.1
Authorization: Bearer
Accept: application/json
MS-RequestId: 031160b2-b0b0-4d40-b2b1-aaa9bb84211d
MS-CorrelationId: 7c1f6619-c176-4040-a88f-2c71f3ba4533
```

### Azure VM reservations (Azure plan)

Follow this example to get a list of products by country for Azure VM reservations that are applicable to Azure plans.

```
GET https://api.partnercenter.microsoft.com/v1/products?
country=US&targetView=AzureAzureReservationsVM&reservationScope=AzurePlan HTTP/1.1
Authorization: Bearer
Accept: application/json
MS-RequestId: 031160b2-b0b0-4d40-b2b1-aaa9bb84211d
MS-CorrelationId: 7c1f6619-c176-4040-a88f-2c71f3ba4533
```

### Azure VM reservations for Microsoft Azure (MS-AZR-0145P) subscriptions

Follow this example to get a list of products by country for Azure VM reservations that are applicable to Microsoft Azure (MS-AZR-0145P) subscriptions.

```
GET https://api.partnercenter.microsoft.com/v1/products?country=US&targetView=AzureReservationsVM HTTP/1.1
Authorization: Bearer
Accept: application/json
MS-RequestId: 031160b2-b0b0-4d40-b2b1-aaa9bb84211d
MS-CorrelationId: 7c1f6619-c176-4040-a88f-2c71f3ba4533
```

## REST response

If successful, the response body contains a collection of [Product](#) resources.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center error codes](#).

This method returns the following error codes:

HTTP STATUS CODE	ERROR CODE	DESCRIPTION
403	400030	Access to the requested targetSegment is not allowed.
403	400036	Access to the requested targetView is not allowed.

### Response example

```
{  
    "totalCount": 19,  
    "items": [  
        {  
            "id": "DZH318Z0BQ3Q",  
            "title": "Virtual Machines DSV2 Series",  
            "description": "Dsv2-series instances are the latest generation of D-series instances that will carry more powerful CPUs which are on average about 35% faster than D-series instances, and carry the same memory and disk configurations as the D-series. Dsv2-series instances are based on the latest generation 2.4 GHz Intel Xeon® E5-2673 v3 (Haswell) processor, and with Intel Turbo Boost Technology 2.0 can go to 3.2 GHz.",  
            "productType": {  
                "id": "Azure",  
                "displayName": "Azure",  
                "subType": {  
                    "id": "VirtualMachines",  
                    "displayName": "VirtualMachines"  
                }  
            },  
            "isMicrosoftProduct": true,  
            "publisherName": "Microsoft",  
            "links": {  
                "skus": {  
                    "uri": "/products/DZH318Z0BQ3Q/skus?country=US",  
                    "method": "GET",  
                    "headers": []  
                },  
                "self": {  
                    "uri": "/products/DZH318Z0BQ3Q?country=US",  
                    "method": "GET",  
                    "headers": []  
                }  
            },  
            ...  
        },  
        ...  
    ],  
    "links": {  
        "self": {  
            "uri": "/products?country=US&targetView=Azure",  
            "method": "GET",  
            "headers": []  
        }  
    },  
    "attributes": {  
        "objectType": "Collection"  
    }  
}
```

# Get a list of products (by customer)

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

You can use the following methods to get a collection of products for an existing customer.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## REST request

### Request syntax

METHOD	REQUEST URI
POST	<code>/baseURL/v1/customers/{customer-tenant-id}/products?</code> targetView={targetView} HTTP/1.1

### Request URI parameters

NAME	TYPE	REQUIRED	DESCRIPTION
<code>customer-tenant-id</code>	GUID	Yes	The value is a GUID-formatted <b>customer-tenant-id</b> , which is an identifier that allows you to specify a customer.

NAME	TYPE	REQUIRED	DESCRIPTION
targetView	string	Yes	<p>Identifies the target view of the catalog. The supported values are:</p> <ul style="list-style-type: none"> <li>• <b>Azure</b>, which includes all Azure items</li> <li>• <b>AzureReservations</b>, which includes all Azure reservation items</li> <li>• <b>AzureReservations VM</b>, which includes all virtual machine (VM) reservation items</li> <li>• <b>AzureReservations SQL</b>, which includes all SQL reservation items</li> <li>• <b>AzureReservations CosmosDb</b>, which includes all Cosmos database reservation items</li> <li>• <b>MicrosoftAzure</b>, which includes items for Microsoft Azure subscriptions (<b>MS-AZR-0145P</b>) and Azure plans</li> <li>• <b>OnlineServices</b>, which includes all online service items, including commercial marketplace products</li> <li>• <b>Software</b>, which includes all software items</li> <li>• <b>SoftwareSUSELinux</b>, which includes all software SUSE Linux items</li> <li>• <b>SoftwarePerpetual</b>, which includes all perpetual software items</li> <li>• <b>SoftwareSubscriptions</b>, which includes all software subscription items</li> </ul>

## Request header

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

Request for a list of Azure usage-based products available to a given customer. Products for both Microsoft Azure (MS-AZR-0145P) and Azure plans will be returned for customers in public cloud:

```
GET https://api.partnercenter.microsoft.com/v1/customers/65543400-f8b0-4783-8530-6d35ab8c6801/products?  
targetView=MicrosoftAzure HTTP/1.1  
Authorization: Bearer <token>  
Accept: application/json  
MS-RequestId: 83643f5e-5dfd-4375-88ed-054412460dc8  
MS-CorrelationId: b1939cb2-e83d-4fb0-989f-514fb741b734
```

## Rest response

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center error codes](#).

This method returns the following error codes:

HTTP STATUS CODE	ERROR CODE	DESCRIPTION
403	400036	Access to the requested targetView is not allowed.

## Response example

HTTP/1.1 200 OK  
Content-Length: 1909  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: cad955c2-8efc-47fe-b112-548ff002ba18  
MS-RequestId: ae7288e2-2673-4ad4-8c12-7aad818d5949

```
{  
    "totalCount": 2,  
    "items": [  
        {  
            "id": "MS-AZR-0145P",  
            "productId": "9DEA7946-EC2C-441E-9FFD-E3B275F7E838",  
            "title": "Microsoft Azure",  
            "description": "Azure Cloud Solution Provider offer for Partner and Resellers",  
            "minimumQuantity": 1,  
            "maximumQuantity": 1,  
            "isTrial": false,  
            "supportedBillingCycles": [  
                "monthly"  
            ],  
            "purchasePrerequisites": [  
                "MicrosoftCloudAgreement"  
            ],  
            "actions": [  
                "Refund"  
            ],  
            "dynamicAttributes": {  
                "isMicrosoftProduct": true,  
                "billingType": "usage",  
                "category": "Enterprise",  
                "isAddon": false,  
                "prerequisiteSkus": [],  
                "rank": 1413,  
                "hasAddOns": false,  
                "isAutoRenewable": false,  
                "upgradeTargetOffers": null  
            }  
        }  
    ]  
}
```

```
        "conversionTargetOffers": [],
        "unitType": "Usage-based",
        "limitUnitOfMeasure": "None",
        "limit": 0,
        "reselleeQualifications": [],
        "resellerQualifications": []
    },
    "links": {
        "availabilities": {
            "uri": "/products/9DEA7946-EC2C-441E-9FFD-E3B275F7E838/skus/MS-AZR-0145P/availabilities?
country=US&targetSegment=Commercial",
            "method": "GET",
            "headers": []
        },
        "self": {
            "uri": "/products/9DEA7946-EC2C-441E-9FFD-E3B275F7E838/skus/MS-AZR-0145P?country=US",
            "method": "GET",
            "headers": []
        }
    }
},
{
    "id": "0001",
    "productId": "DZH318Z0BPS6",
    "title": "Microsoft Azure plan",
    "description": "Microsoft Azure plan (MS-AZR-0017G)",
    "minimumQuantity": 1,
    "maximumQuantity": 1,
    "isTrial": false,
    "supportedBillingCycles": [
        "one_time"
    ],
    "purchasePrerequisites": [
        "MicrosoftCustomerAgreement"
    ],
    "inventoryVariables": [],
    "provisioningVariables": [],
    "actions": [
        "Refund"
    ],
    "dynamicAttributes": {
        "isMicrosoftProduct": true,
        "pilotProgram": "modernazurepilot"
    },
    "links": {
        "availabilities": {
            "uri": "/products/DZH318Z0BPS6/skus/0001/availabilities?
country=US&targetSegment=Commercial",
            "method": "GET",
            "headers": []
        },
        "self": {
            "uri": "/products/DZH318Z0BPS6/skus/0001?country=US",
            "method": "GET",
            "headers": []
        }
    }
},
],
"links": {
    "self": {
        "uri": "/customers/e2a0c0f3-0f74-4d1c-808c-dfa511481913/products/all/skus?
targetView=MicrosoftAzure&targetSegment=Commercial",
        "method": "GET",
        "headers": []
    }
},
"attributes": {
    "objectType": "Collection"
}
```

```
OBJECTTYPE : COLLECTION
```

```
}
```

```
}
```

# Get a list of SKUs for a product (by country)

4/25/2020 • 5 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center

You can get a collection of SKUs available in a country for a specific product using Partner Center APIs.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A product identifier.

## C#

To get the list of SKUs for a product:

1. Get an interface for a specific product's operations by following the steps in [Get a product by ID](#).
2. From the interface, select the `Skus` property to obtain an interface with the available operations for SKUs.
3. Call the `Get()` or `GetAsync()` method to retrieve a collection of the available SKUs for the product.
4. (Optional) Select the reservation scope using the `ByReservationScope()` method.
5. (Optional) Use the `ByTargetSegment()` method to filter the SKUs by target segment before calling `Get()` or `GetAsync()`.

```
IAggregatePartner partnerOperations;

string countryCode;
string productId;
string productIdForAzureReservation;
string targetSegment;

// Get the available SKUs.
var skus = partnerOperations.Products.ByCountry(countryCode).ById(productId).Skus.Get();

// Get the available SKUs, filtered by target segment.
var segmentSkus =
    partnerOperations.Products.ByCountry(countryCode).ById(productId).Skus.ByTargetSegment(targetSegment).Get();

// Get the skus for an Azure reservation product which are applicable to Microsoft Azure (MS-AZR-0145P)
// subscriptions only.
var skus = partnerOperations.Products.ByCountry(countryCode).ById(productIdForAzureReservation).Skus.Get();

// Get the skus for an Azure reservation product which are applicable to Azure plans only.
var skus =
    partnerOperations.Products.ByCountry(countryCode).ById(productIdForAzureReservation).Skus.ByReservationScope(
        "AzurePlan").Get();
```

## Java

The [Partner Center Java SDK](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To get the list of SKUs for a product:

1. Get an interface for a specific product's operations by following the steps in [Get a product by ID](#).
2. From the interface, select the `getSkus` function to obtain an interface with the available operations for SKUs.
3. Call the `get()` function to retrieve a collection of the available SKUs for the product.
4. (Optional) Use the `byTargetSegment()` function to filter the SKUs by target segment before calling the `get()` function.

```
// IAggregatePartner partnerOperations;

// String countryCode;
// String productId;
// String targetSegment;

// Get the available SKUs.
ResourceCollection<Sku> skus =
partnerOperations.getProducts().byCountry(countryCode).byId(productId).getSkus().get();

// Get the available SKUs, filtered by target segment.
var segmentSkus =
partnerOperations.getProducts().byCountry(countryCode).byId(productId).getSkus().byTargetSegment(targetSegment).get();
```

## PowerShell

The [Partner Center PowerShell module](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To get the list of SKUs for a product:

1. Execute the `Get-PartnerProductSku` command.
2. (Optional) Specify the `Segment` parameter to filter the SKUs by target segment.

```
# $productId
# $targetSegment

# Get the available SKUs.
Get-PartnerProductSku -ProductId $productId

# Get the available SKUs, filtered by target segment.
Get-PartnerProductSku -ProductId $productId -Segment $targetSegment
```

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/products/{product-id}/skus?country={country-code}&amp;targetSegment={target-segment}</code> HTTP/1.1

#### URI parameters

Use the following path and query parameters to get a list of SKUs for a product.

NAME	TYPE	REQUIRED	DESCRIPTION
product-id	string	Yes	A string that identifies the product.
country-code	string	Yes	A country/region ID.
target-segment	string	No	A string that identifies the target segment used for filtering.
reservationScope	string	No	When querying for a list of SKUs for an Azure Reservation product, specify <code>reservationScope=AzurePlan</code> to get a list of SKUs which are applicable to AzurePlan. Exclude this parameter to get a list of SKUs for an Azure Reservation products which are applicable to Microsoft Azure (MS-AZR-0145P) subscriptions.

#### Request headers

For more information, see [Partner Center REST headers](#).

#### Request body

None.

#### Request examples

Get a list of SKUs for a given product:

```
GET http://api.partnercenter.microsoft.com/v1/products/DZH318Z0BPS6/skus?country=US HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 18b41adf-29b5-48eb-b14f-c9683a4e5b7d
MS-CorrelationId: e75c1060-852e-4b49-92b0-cd15167a0d51
```

Get a list of SKUs for an Azure Reservation product. Only include the SKUs which are applicable to Azure plans and not Microsoft Azure (MS-AZR-0145P) subscriptions:

```
GET http://api.partnercenter.microsoft.com/v1/products/DZH318Z0BQ5S/skus?
country=US&reservationScope=AzurePlan HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 18b41adf-29b5-48eb-b14f-c9683a4e5b7d
MS-CorrelationId: e75c1060-852e-4b49-92b0-cd15167a0d51
```

Get a list of SKUs for an Azure Reservation product. Only include the SKUs which are applicable to Microsoft Azure (MS-AZR-0145P) subscriptions and not Azure plans:

```
GET http://api.partnercenter.microsoft.com/v1/products/DZH318Z0BQ5S/skus?country=US HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 18b41adf-29b5-48eb-b14f-c9683a4e5b7d
MS-CorrelationId: e75c1060-852e-4b49-92b0-cd15167a0d51
```

## REST response

If successful, the response body contains a collection of [SKU](#) resources.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center error codes](#).

This method returns the following error codes:

HTTP STATUS CODE	ERROR CODE	DESCRIPTION
403	400030	Access to the requested targetSegment is not allowed.
404	400013	The parent product was not found.

### Response example

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=utf-8
Server: Microsoft-IIS/10.0
MS-CorrelationId: e75c1060-852e-4b49-92b0-cd15167a0d51,e75c1060-852e-4b49-92b0-cd15167a0d51
MS-RequestId: 18b41adf-29b5-48eb-b14f-c9683a4e5b7d,18b41adf-29b5-48eb-b14f-c9683a4e5b7d
X-Locale: en-US,en-US
X-SourceFiles: =?UTF-8?B?
QzpcVXNlcNcbWFtZW5kZVxkZXZcZHBzLXJwZVxSUEuUGFydG5lc15TZJ2aWN1LkNhdGFsb2dcV2ViQXBpc1xDYXRhbG9nU2Vydm1jZS5WM
i5XZWJcdjFccHJvZHVjdHNcRFpIMzE4WjBCUTVTXHNrdXM=?=
X-Powered-By: ASP.NET
Date: Thu, 15 Mar 2018 21:06:03 GMT
Content-Length: 50917

{
    "totalCount": 40,
    "items": [
        {
            "id": "0001",
            "productId": "DZH318Z0BQ5S",
            "title": "Reserved VM Instance, Standard_ND12s, US West 2, 1 Year",
            "description": "Reserved Virtual Machines Instance, Standard_ND12s, US West 2, 1 Year",
            "minimumQuantity": 1,
            "maximumQuantity": 99999999,
            "isTrial": false,
            "supportedBillingCycles": [
                "one_time"
            ],
            "purchasePrerequisites": [
                "AzureSubscriptionRegistration",
                "InventoryCheck"
            ],
            "provisioningVariables": [
                ...
            ]
        }
    ]
}
```

```
        "Scope",
        "SubscriptionId"
    ],
    "dynamicAttributes": {
        "armSkuName": "Standard_ND12s",
        "cores": "12",
        "ram": "224",
        "skuDisplayName": "ND12",
        "category": "GPU",
        "armRegionName": "westus2",
        "duration": "1Year",
        "region": "US West 2",
        "diskType": "Hdd"
    },
    "links": {
        "availabilities": {
            "uri": "/products/DZH318Z0BQ5S/skus/0001/availabilities?country=US",
            "method": "GET",
            "headers": []
        },
        "self": {
            "uri": "/products/DZH318Z0BQ5S/skus/0001?country=US",
            "method": "GET",
            "headers": []
        }
    }
},
{
    "id": "0002",
    "productId": "DZH318Z0BQ5S",
    "title": "Reserved VM Instance, Standard_ND6s, US West 2, 1 Year",
    "description": "Reserved Virtual Machines Instance, Standard_ND6s, US West 2, 1 Year",
    "minimumQuantity": 1,
    "maximumQuantity": 999999999,
    "isTrial": false,
    "supportedBillingCycles": [
        "one_time"
    ],
    "purchasePrerequisites": [
        "AzureSubscriptionRegistration",
        "InventoryCheck"
    ],
    "provisioningVariables": [
        "Scope",
        "SubscriptionId"
    ],
    "dynamicAttributes": {
        "armSkuName": "Standard_ND6s",
        "cores": "6",
        "ram": "112",
        "skuDisplayName": "ND6",
        "category": "GPU",
        "armRegionName": "westus2",
        "duration": "1Year",
        "region": "US West 2",
        "diskType": "Hdd"
    },
    "links": {
        "availabilities": {
            "uri": "/products/DZH318Z0BQ5S/skus/0002/availabilities?country=US",
            "method": "GET",
            "headers": []
        },
        "self": {
            "uri": "/products/DZH318Z0BQ5S/skus/0002?country=US",
            "method": "GET",
            "headers": []
        }
    }
}
```

```
        }
        [...]
    ],
    "links": {
        "self": {
            "uri": "/products/DZH318Z0BQ5S/skus?country=US",
            "method": "GET",
            "headers": []
        }
    },
    "attributes": {
        "objectType": "Collection"
    }
}
```

# Get a list of SKUs for a product (by customer)

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Gets a collection of SKUs for a particular product that is available to an existing customer.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A product ID (`product-id`).

## REST request

### Request syntax

METHOD	REQUEST URI
POST	<code>{baseURL}/v1/customers/{customer-tenant-id}/products/{product-id}/skus</code> HTTP/1.1

### Request URI parameter

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	GUID	Yes	The value is a GUID-formatted <b>customer-tenant-id</b> , which is an identifier that allows you to specify a customer.
product-id	string	Yes	A string that identifies the product.

### Request header

For more information, see [Partner Center REST headers](#).

### Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/65543400-f8b0-4783-8530-  
6d35ab8c6801/products/DZH318Z0BPS6 HTTP/1.1  
Authorization: Bearer <token>  
Accept: application/json  
MS-RequestId: 83643f5e-5dfd-4375-88ed-054412460dc8  
MS-CorrelationId: b1939cb2-e83d-4fb0-989f-514fb741b734
```

## REST response

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center error codes](#).

This method returns the following error codes:

HTTP STATUS CODE	ERROR CODE	DESCRIPTION
404	400013	The parent product was not found.

### Response example

HTTP/1.1 200 OK  
Content-Length: 1909  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: cad955c2-8efc-47fe-b112-548ff002ba18  
MS-RequestId: ae7288e2-2673-4ad4-8c12-7aad818d5949

```
{  
    "id": "DZH318Z0BPS6",  
    "title": "Microsoft Azure plan",  
    "description": "Gain access to Azure Services.",  
    "productType": {  
        "id": "Azure",  
        "displayName": "Azure",  
        "subType": {  
            "id": "Azure",  
            "displayName": "Azure"  
        }  
    },  
    "isMicrosoftProduct": true,  
    "publisherName": "Microsoft Corporation",  
    "links": {  
        "skus": {  
            "uri": "/products/DZH318Z0BPS6/skus?country=US",  
            "method": "GET",  
            "headers": []  
        },  
        "self": {  
            "uri": "/products/DZH318Z0BPS6?country=US",  
            "method": "GET",  
            "headers": []  
        }  
    },  
    "localizedAttributes": [  
        {  
            "key": "OfferType",  
            "value": "OfferType"  
        },  
        {  
            "key": "Standard",  
            "value": "Standard"  
        },  
        {  
            "key": "DevTest",  
            "value": "Dev/Test"  
        }  
    ]  
}
```

# Get a list of subscriptions by order

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Gets a collection of [Subscription](#) resources that correspond to a given order.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- An order ID.

## C#

To get a list of subscriptions by order, use your **IAggregatePartner.Customers** collection and call the **ById()** method. Then call the **Subscriptions** property, followed by the **ByOrder()** method. Finish by calling **Get()** or **GetAsync()**.

```
// IAggregatePartner partnerOperations;
// var selectedCustomerId as string;
// string orderID;

ResourceCollection<Subscription> customerSubscriptions =
    partnerOperations.Customers.ById(selectedCustomerId).Subscriptions.ByOrder(orderID).Get();
```

Sample: [Console test app](#). Project: PartnerSDK.FeatureSample Class: SubscriptionsByOrder.cs

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/customers/{customer-tenant-id}/subscriptions?order_id={id-for-order}</code> HTTP/1.1

### URI parameter

This table lists the required query parameter to get all the subscriptions.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	guid	Y	A GUID corresponding to the customer.
id-for-order	guid	Y	A GUID corresponding to the order.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/{customer-tenant-id}/subscriptions?order_id={id-for-order} HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 16fee928-dc2c-412f-adbb-871f68babf16
MS-CorrelationId: c49004b1-224f-4d86-a607-6c8bcc52cfdd
Connection: Keep-Alive
```

## REST response

If successful, this method returns a collection of [Subscription](#) resources in the response body.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

## Response example

HTTP/1.1 200 OK  
Content-Length: 73754  
Content-Type: application/json  
MS-CorrelationId: c49004b1-224f-4d86-a607-6c8bcc52cfdd  
MS-RequestId: 16fee928-dc2c-412f-adbb-871f68babf16  
Date: Wed, 25 Nov 2015 05:50:45 GMT

```
{  
    "totalCount": 37,  
    "items": [  
        {  
            "id": "83ef9d05-4169-4ef9-9657-0e86b1eab1de",  
            "entitlementId": "a356ac8c-e310-44f4-bf85-C7f29044af99",  
            "friendlyName": "Myofferpurchase",  
            "quantity": 1,  
            "unitType": "none",  
            "creationDate": "2015-11-25T06: 41: 12Z",  
            "effectiveStartDate": "2015-11-24T08: 00: 00Z",  
            "commitmentEndDate": "2016-12-12T08: 00: 00Z",  
            "status": "active",  
            "autoRenewEnabled": false,  
            "billingType": "none",  
            "contractType": "subscription",  
            "links": {  
                "offer": {  
                    "uri": "/v1/offers/0CCA44D6-68E9-4762-94EE-31ECE98783B9",  
                    "method": "GET",  
                    "headers": []  
                },  
                "self": {  
                    "uri": "/subscriptions?key=<key>",  
                    "method": "GET",  
                    "headers": []  
                }  
            },  
            "orderId": "{id-for-order}",  
            "attributes": {  
                "etag": "<etag>",  
                "objectType": "Subscription"  
            }  
        },  
        {  
            "attributes": {  
                "objectType": "Collection"  
            }  
        }  
    ]  
}
```

# Get a list of trial conversion offers

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center

How to retrieve a list of trial conversion offers.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A subscription ID for an active trial subscription.

## C#

To get a list of trial conversions available, start by using the **IAggregatePartner.Customers.ById** method with the customer ID to identify the customer. Then, get an interface to subscription operations by calling the **Subscriptions.ById** method with the trial subscription ID. Next, use the **Conversions** property to obtain an interface to the available operations on conversions, and then call the **Get** or **GetAsync** method to retrieve a collection of available **Conversion** offers.

```
// IAggregatePartner partnerOperations;
// string customerId;
// string subscriptionId;

// Get the available conversions.
var conversions =
    partnerOperations.CustomersById(customerId).SubscriptionsById(subscriptionId).Conversions.Get();
```

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/customers/{customer-id}/subscriptions/{subscription-id}/conversions</code> HTTP/1.1

### URI parameter

Use the following path parameters to identify the customer and trial subscription.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-id	string	Yes	A GUID formatted string that identifies the customer.
subscription-id	string	Yes	A GUID formatted string that identifies the trial subscription.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/0c39d6d5-c70d-4c55-bc02-f620844f3fd1/subscriptions/488745b5-2086-4912-802c-6abb9f7c3638/conversions HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: e17f5bc6-24bf-4cbe-b632-d7fc6cec3058
MS-CorrelationId: 8daa6d54-72ab-4d6b-9c7d-9266d3734a47
X-Locale: en-US
Host: api.partnercenter.microsoft.com
```

## REST response

If successful, the response body contains a collection of [Conversion](#) resources.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center error codes](#).

## Response example

HTTP/1.1 200 OK  
Content-Length: 305  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: 8daa6d54-72ab-4d6b-9c7d-9266d3734a47  
MS-RequestId: e17f5bc6-24bf-4cbe-b632-d7fc6cec3058  
MS-CV: feJByqU1X0ObaTQr.0  
MS-ServerId: 030011719  
Date: Thu, 15 Jun 2017 23:10:01 GMT

```
{  
    "totalCount": 1,  
    "items": [  
        {  
            "offerId": "C0BD2E08-11AC-4836-BDC7-3712E744922F",  
            "targetOfferId": "031C9E47-4802-4248-838E-778FB1D2CC05",  
            "orderId": "D51A052E-043C-4A2A-AA37-2BB938CEF6C1",  
            "quantity": 25,  
            "billingCycle": "monthly",  
            "attributes": {  
                "objectType": "Conversion"  
            }  
        },  
        {  
            "attributes": {  
                "objectType": "Collection"  
            }  
        }  
    ]  
}
```

# Get a product by ID

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center

Gets the specified product resource using a product ID.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A product ID.

## C#

To find a specific product by ID, use your `IAggregatePartner.Products` collection, select the country by using the `ByCountry()` method, then call the `ById()` method. Finally, call the `Get()` or `GetAsync()` method to return the product.

```
// IAggregatePartner partnerOperations;  
  
Product productDetail = partnerOperations.Products.ByCountry("US").ById("DZH318Z0BQ3Q").Get();
```

## Java

The [Partner Center Java SDK](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To find a specific product by ID, use your `IAggregatePartner.getProducts` function, select the country by using the `byCountry()` function, then call the `byId()` function. Finally, call the `get()` function to return the product.

```
// IAggregatePartner partnerOperations;  
  
Product productDetail = partnerOperations.getProducts().byCountry("US").byId("DZH318Z0BQ3Q").get();
```

## PowerShell

The [Partner Center PowerShell module](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To find a specific product by ID, execute the `Get-PartnerProduct` command and specify the `ProductId` parameter. The `CountryCode` parameter is optional, if it isn't specified then the country associated with the reseller will be used.

```
Get-PartnerProduct -ProductId 'DZH318Z0BQ3Q'
```

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/products/{product-id}?country={country}</code> HTTP/1.1

### URI parameter

Use the following path parameters to get the specified product.

NAME	TYPE	REQUIRED	DESCRIPTION
product-id	string	Yes	A string that identifies the product.
country	string	Yes	A country/region ID.

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

None.

### Request example

```
GET https://api.partnercenter.microsoft.com/v1/products/{product-id}?country=US HTTP/1.1
Authorization: Bearer
Accept: application/json
MS-RequestId: 031160b2-b0b0-4d40-b2b1-aaa9bb84211d
MS-CorrelationId: 7c1f6619-c176-4040-a88f-2c71f3ba4533
```

## REST response

If successful, the response body contains a [Product](#) resource.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center error codes](#).

This method returns the following error codes:

HTTP STATUS CODE	ERROR CODE	DESCRIPTION
404	400013	Product was not found.

### Response example

HTTP/1.1 200 OK  
Content-Length: 1918  
Content-Type: application/json  
MS-CorrelationId: 7c1f6619-c176-4040-a88f-2c71f3ba4533  
MS-RequestId: ac943950-ba3d-47a0-bd2a-c5617a7fefef8  
Date: Tue, 23 Jan 2018 23:13:01 GMT

```
{  
    "id": "DZH318Z0BQ3Q",  
    "title": "Virtual Machines DSv2 Series",  
    "description": "Dsv2-series instances are the latest generation of D-series instances that will carry more powerful CPUs which are on average about 35% faster than D-series instances, and carry the same memory and disk configurations as the D-series. Dsv2-series instances are based on the latest generation 2.4 GHz Intel Xeon\u00ae E5-2673 v3 (Haswell) processor, and with Intel Turbo Boost Technology 2.0 can go to 3.2 GHz.",  
    "productType": {  
        "id": "Azure",  
        "displayName": "Azure",  
        "subType": {  
            "id": "VirtualMachines",  
            "displayName": "VirtualMachines"  
        }  
    },  
    "isMicrosoftProduct": true,  
    "publisherName": "Microsoft",  
    "links": {  
        "skus": {  
            "uri": "/products/DZH318Z0BQ3Q/skus?country=US",  
            "method": "GET",  
            "headers": []  
        },  
        "self": {  
            "uri": "/products/DZH318Z0BQ3Q?country=US",  
            "method": "GET",  
            "headers": []  
        }  
    }  
}
```

# Get a SKU by ID

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center

Gets a SKU for the specified product using the specified SKU ID.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A product ID.
- A SKU ID.

## C#

To get the details of a specific SKU, start by following the steps in [Get a product by ID](#) to get the interface for a specific product's operations. From the resulting interface, select the `Skus` property to obtain an interface with the available operations for SKUs. Pass the SKU ID to the `ById()` method, and call `Get()` or `GetAsync()` to retrieve the SKU details.

```
IAggregatePartner partnerOperations;
string countryCode;
string productId;
string skuId;

// Get the SKU details.
var sku = partnerOperations.Products.ByCountry(countryCode).ById(productId).Skus.ById(skuId).Get();
```

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/products/{product-id}/skus/{sku-id}?country={country-code}</code> HTTP/1.1

### URI parameter

Use the following path and query parameters to get a SKU for the specified product using the specified SKU ID.

NAME	TYPE	REQUIRED	DESCRIPTION
product-id	string	Yes	A string that identifies the product.
sku-id	string	Yes	A string that identifies the SKU.

NAME	TYPE	REQUIRED	DESCRIPTION
country-code	string	Yes	A country/region ID.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET http://api.partnercenter.microsoft.com/v1/products/DZH318Z0BQ3V/skus/00G1?country=US HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: e0ae69a5-6322-4d7e-809d-59e02b51d71f
MS-CorrelationId: 956eae17-7650-4470-94d2-4f61b9b02a23
X-Locale: en-US
MS-PartnerCenter-Client: Partner Center .NET SDK
MS-PartnerCenter-Application: Partner Center .NET SDK Samples
Host: api.partnercenter.microsoft.com
```

## REST response

If successful, the response body contains a [SKU](#) resource.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center error codes](#).

This method returns the following error codes:

HTTP STATUS CODE	ERROR CODE	DESCRIPTION
404	400013	Product was not found.
404	400018	Sku was not found.

## Response example

HTTP/1.1 200 OK  
Content-Type: application/json; charset=utf-8  
Server: Microsoft-IIS/10.0  
MS-CorrelationId: 956eae17-7650-4470-94d2-4f61b9b02a23,956eae17-7650-4470-94d2-4f61b9b02a23  
MS-RequestId: e0ae69a5-6322-4d7e-809d-59e02b51d71f,e0ae69a5-6322-4d7e-809d-59e02b51d71f  
X-Locale: en-US,en-US  
X-SourceFiles: =?UTF-8?B?  
QzpcVXNlcNcbWFtZW5kZVxkZXZcZHBzLXJwZVxSUEuuUGFydG51ci5TZXJ2aN1LkNhdGFsb2dcV2ViQXBpc1xDYXRhbG9nU2VydmljZS5WM  
i5XZWJcdjFcCHJvZHvjdHncRFpIMzE4WjBCUTNWXHnrdXNcMDBHMQ==?=  
X-Powered-By: ASP.NET  
Date: Thu, 15 Mar 2018 17:43:25 GMT  
Content-Length: 1108

```
{  
    "id": "00G1",  
    "productId": "DZH318Z0BQ3V",  
    "title": "Reserved VM Instance, Standard_D32s_v3, US West 2, 3 Years",  
    "description": "Reserved Virtual Machines Instance, Standard_D32s_v3, US West 2, 3 Years",  
    "minimumQuantity": 1,  
    "maximumQuantity": 999999999,  
    "isTrial": false,  
    "supportedBillingCycles": [  
        "one_time"  
    ],  
    "purchasePrerequisites": [  
        "AzureSubscriptionRegistration",  
        "InventoryCheck"  
    ],  
    "inventoryVariables": [  
        "CustomerId",  
        "AzureSubscriptionId"  
    ],  
    "provisioningVariables": [  
        "Scope",  
        "SubscriptionId"  
    ],  
    "dynamicAttributes": {  
        "armSkuName": "Standard_D32s_v3",  
        "cores": "32",  
        "ram": "128",  
        "skuDisplayName": "D32s v3",  
        "category": "General purpose",  
        "armRegionName": "westus2",  
        "duration": "3Years",  
        "region": "US West 2",  
        "diskType": "Ssd"  
    },  
    "links": {  
        "availabilities": {  
            "uri": "/products/DZH318Z0BQ3V/skus/00G1/availabilities?country=us",  
            "method": "GET",  
            "headers": []  
        },  
        "self": {  
            "uri": "/products/DZH318Z0BQ3V/skus/00G1?country=us",  
            "method": "GET",  
            "headers": []  
        }  
    }  
}
```

# Get a subscription by ID

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Gets a [Subscription](#) resource that matches the customer ID and the subscription ID.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A subscription ID.

## C#

To get a subscription by ID, begin by obtaining an interface to the subscription operations by calling the [IAggregatePartner.Customers.ById](#) method with the customer ID to identify the customer, and the [Subscriptions.ById](#) method to identify the subscription. Use that [interface](#) to retrieve the subscription details by calling [Get](#).

```
// IAggregatePartner partnerOperations;
// string selectedCustomerId;
// string subscriptionID;

var subscriptionDetails =
    partnerOperations.Customers.ById(selectedCustomerId).Subscriptions.ById(subscriptionID).Get();
```

Sample: [Console test app](#). Project: Partner Center SDK Samples Class: GetSubscription.cs

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/customers/{customer-tenant-id}/subscriptions/{id-for-subscription}</code> HTTP/1.1

### URI parameter

This table lists the required query parameters to get the subscription.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	guid	Y	A GUID corresponding to the customer.
id-for-subscription	guid	Y	A GUID corresponding to the subscription.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/4d3cf487-70f4-4e1e-9ff1-b2bfce8d9f04/subscriptions/A356AC8C-E310-44F4-BF85-C7F29044AF99 HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 8f489776-a3f3-47cb-91c3-538e1f70f560
MS-CorrelationId: e72e1dc3-4abd-4ce0-908b-d23fdaedcb28
X-Locale: en-US
Host: api.partnercenter.microsoft.com
```

## REST response

If successful, this method returns a [Subscription](#) resource in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

### Response example for a standard subscription

```

HTTP/1.1 200 OK
Content-Length: 833
Content-Type: application/json; charset=utf-8
MS-CorrelationId: e72e1dc3-4abd-4ce0-908b-d23fdaedcb28
MS-RequestId: 8f489776-a3f3-47cb-91c3-538e1f70f560
MS-CV: 7v11Wa//5EuGEo+A.0
MS-ServerId: 202010406
Date: Fri, 27 Jan 2017 21:51:40 GMT

{
    "id": "A356AC8C-E310-44F4-BF85-C7F29044AF99",
    "entitlementId": "42226ED6-070A-4E0F-B80C-4CDFB3E97AA7",
    "offerId": "MS-AZR-0145P",
    "offerName": "Microsoft Azure",
    "friendlyName": "Microsoft Azure",
    "quantity": 1,
    "unitType": "Usage-based",
    "creationDate": "2016-05-10T07:30:05.427Z",
    "effectiveStartDate": "2016-05-10T00:00:00Z",
    "commitmentEndDate": "9999-12-10T00:00:00Z",
    "status": "active",
    "autoRenewEnabled": false,
    "billingType": "usage",
    "contractType": "subscription",
    "links": {
        "offer": {
            "uri": "/offers/MS-AZR-0145P?country=US",
            "method": "GET",
            "headers": []
        },
        "self": {
            "uri": "/customers/4d3cf487-70f4-4e1e-9ff1-b2bfce8d9f04/subscriptions/A356AC8C-E310-44F4-BF85-C7F29044AF99",
            "method": "GET",
            "headers": []
        }
    },
    "orderId": "B23FDEDD-D6BD-415A-8B71-3624C81C9644",
    "attributes": {
        "etag": "eyJpZCI6ImEzNTZhYzhjLWUzMTAtNDRmNC1iZjg1LWM3ZjI5MDQ0YWY5OSIsInZlcNpb24i0jJ9",
        "objectType": "Subscription"
    }
}

```

### Response example for an add-on subscription

The response for an add-on subscription includes the parent subscription ID in the body and in the links.

HTTP/1.1 200 OK  
Content-Length: 1132  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: 6eacec93-852d-4167-9d96-c57809bea7ed  
MS-RequestId: 22bfd0fb-d1e6-4a8f-aa1a-124b7c820d80  
MS-CV: cmde2DtbUWi8JLq.0  
MS-ServerId: 201022015  
Date: Fri, 27 Jan 2017 00:12:53 GMT

```
{  
    "id": "968BA1CF-C146-4ADF-A300-308DCF718EEE",  
    "offerId": "2828BE95-46BA-4F91-B2FD-0BEF192ECF60",  
    "offerName": "Exchange Online Archiving for Exchange Online",  
    "friendlyName": "Some friendly name",  
    "quantity": 2,  
    "unitType": "Licenses",  
    "parentSubscriptionId": "1C2B75C1-74A5-472A-A729-7F8CEFC477F9",  
    "creationDate": "2017-01-25T23:01:08.693Z",  
    "effectiveStartDate": "2017-01-25T00:00:00Z",  
    "commitmentEndDate": "2018-02-10T00:00:00Z",  
    "status": "active",  
    "autoRenewEnabled": true,  
    "billingType": "license",  
    "contractType": "subscription",  
    "links": {  
        "offer": {  
            "uri": "/offers/2828BE95-46BA-4F91-B2FD-0BEF192ECF60?country=US",  
            "method": "GET",  
            "headers": []  
        },  
        "parentSubscription": {  
            "uri": "/customers/4d3cf487-70f4-4e1e-9ff1-b2bfce8d9f04/subscriptions/1C2B75C1-74A5-472A-A729-7F8CEFC477F9",  
            "method": "GET",  
            "headers": []  
        },  
        "self": {  
            "uri": "/customers/4d3cf487-70f4-4e1e-9ff1-b2bfce8d9f04/subscriptions/968BA1CF-C146-4ADF-A300-308DCF718EEE",  
            "method": "GET",  
            "headers": []  
        }  
    },  
    "orderId": "CF3B0E37-BE0B-4CDD-B584-D1A97D98A922",  
    "attributes": {  
        "etag": "eyJpZCI6Ijk2OGJhMWNmLWMxNDYtNGFkZi1hMzAwLTMwOGRjZjcxOGVlZSIzInZlcNpb24i0jF9",  
        "objectType": "Subscription"  
    }  
}
```

# Get activation link by order line item

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## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Gets a commercial marketplace subscription activation link by the order line item number.

In the Partner Center dashboard, you can do this operation by selecting either a **Specific Subscription** under **Subscription** on the main page, or selecting the **Go to Publisher's site** link next to the subscription to activate on the **Subscriptions** page.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- Completed order with product that needs activation.

## C#

To get a line item's activation link, use your **IAggregatePartner.Customers** collection and call the **ById()** method with the selected customer ID. Then call the **Orders** property and the **ById()** method with your specified **OrderId**. Then, call the **LineItems** with **ById()** method with the line item number identifier. Finally, call the **ActivationLinks()** method.

```
// IAggregatePartner partnerOperations;
// string customerId;
// string orderId;
// string lineItemNumber

// get the activation link for the specific line item
var
    partnerOperations.CustomersById(customerId).OrdersById(orderId).OrderLineItemsById(lineItemNumber).ActivationLinks();
```

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<a href="#"><code>{baseUrl}/v1/customers/{customerId}/orders/{orderId}/lineitems/{lineItemNumber}/activationlinks</code></a> HTTP/1.1

### Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/8c5b65fd-c725-4f50-8d9c-97ec9169fdd0/orders/03fb46b3-bf8c-49aa-b908-ca2e93bcc04a/lineitems/0/activationlinks HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 3705fc6d-4127-4a87-bdba-9658f73fe019
MS-CorrelationId: b12260fb-82de-4701-a25f-dcd367690645
```

## REST response

If successful, this method returns a collection of [Customer](#) resources in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 809
Content-Type: application/json
MS-CorrelationId: b12260fb-82de-4701-a25f-dcd367690645
MS-RequestId: 3705fc6d-4127-4a87-bdba-9658f73fe019
Date: Fri, 20 Nov 2015 01:08:23 GMT
{
  "totalCount": 1,
  "items": [
    {
      "lineItemNumber": 0,
      "link": {
        "uri": "<link populated here>",
        "method": "GET",
        "headers": [
          ]
      }
    }
  ],
  "links": {
    "self": {
      "uri": "/customers/8c5b65fd-c725-4f50-8d9c-97ec9169fdd0/orders/03fb46b3-bf8c-49aa-b908-ca2e93bcc04a/lineitems/0/activationlinks",
      "method": "GET",
      "headers": [
        ]
    }
  },
  "attributes": {
    "objectType": "Collection"
  }
}
```

# Get add-ons for an offer ID

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## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

How to get the add-ons for an offer ID.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- An offer ID. If you don't have the offer ID, see [Get a list of offers for a market](#).

## C#

To get the add-ons for an offer by ID, first call the [IAggregatePartner.Offers.ByCountry](#) method with the country code to get an interface to offer operations based on the given country. Then call the [ById](#) method with the offer ID to identify the offer whose add-ons you want to retrieve. Next, use the [AddOns](#) property to get an interface to add-on operations for the current offer. Finally, call the [Get](#) or [GetAsync](#) method to get a collection of all the add-ons for the specified offer.

```
// IAggregatePartner partnerOperations;
// string offerId;
// string countryCode;

var offerAddOns = partnerOperations.Offers.ByCountry(countryCode).ById(offerId).AddOns.Get();
```

Sample: [Console test app](#). Project: Partner Center SDK Samples Class: GetOffer.cs

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<a href="#">/{baseUrl}</a> /v1/offers/{offer-id}/addons?country={country-code} HTTP/1.1

### URI parameters

Use the following parameters to provide the offer ID and country code.

NAME	TYPE	REQUIRED	DESCRIPTION
offer-id	guid	Y	A GUID that identifies the offer.

NAME	TYPE	REQUIRED	DESCRIPTION
country	string	Y	The country code (for example <code>US</code> ).

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/offers/195416C1-3447-423A-B37B-EE59A99A19C4/addons?country=us
HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: c15e829e-ecc7-42c2-8a4b-5e6961f4e3f8
MS-CorrelationId: 26d2b3b1-c76a-4aeb-8298-1654c91d9eb8
X-Locale: en-US
Host: api.partnercenter.microsoft.com
```

## REST response

If successful, this method returns a collection of [Offer](#) objects in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 3137
Content-Type: application/json; charset=utf-8
MS-CorrelationId: 26d2b3b1-c76a-4aeb-8298-1654c91d9eb8
MS-RequestId: c15e829e-ecc7-42c2-8a4b-5e6961f4e3f8
MS-CV: P8xjUcSeY0ithZ9S.0
MS-ServerId: 202010406
Date: Wed, 01 Feb 2017 22:37:58 GMT

{
  "totalCount": 2,
  "items": [
    {
      "id": "2828BE95-46BA-4F91-B2FD-0BEF192ECF60",
      "name": "Exchange Online Archiving for Exchange Online",
      "description": "A personal e-mail archive for users who have mailboxes on Exchange Server 2010 or later.",
      "minimumQuantity": 1,
      "maximumQuantity": 10000000,
      "rank": 200,
      "uri": "/3c95518e-8c37-41e3-9627-0ca339200f53/Offers/2828BE95-46BA-4F91-B2FD-0BEF192ECF60",
      "locale": "en-US",
      "country": "US",
      "category": {
        "id": "",
        "name": "",
        "rank": 0,
        "locale": "en-us",
        "country": "US",
        "category": {
          "id": "",
          "name": "",
          "rank": 0,
          "locale": "en-us",
          "country": "US"
        }
      }
    }
  ]
}
```

```
        "attributes": {
            "objectType": "OfferCategory"
        }
    },
    "prerequisiteOffers": ["35A36B80-270A-44BF-9290-00545D350866", "6FBAD345-B7DE-42A6-B6AB-79B363D0B371", "91FD106F-4B2C-4938-95AC-F54F74E9A239", "195416C1-3447-423A-B37B-EE59A99A19C4", "22A70120-4078-4926-9592-39ED91CB9C01", "2A727AE4-F201-497D-A9D6-C6A892DF4A87", "BD938F12-058F-4927-BBA3-AE36B1D2501C", "031C9E47-4802-4248-838E-778FB1D2CC05", "B2016E73-D9AD-4758-B8B8-D5C001BDF411", "AA98032C-5403-472F-B24F-F6654846B15D"],
    "isAddOn": true,
    "isAvailableForPurchase": true,
    "billing": "license",
    "isAutoRenewable": true,
    "salesGroupId": "1",
    "product": {
        "id": "EE02FD1B-340E-4A4B-B355-4A514E4C8943",
        "name": "Exchange Online Archiving for Exchange Online",
        "unit": "Licenses"
    },
    "unitType": "Licenses",
    "links": {
        "learnMore": {
            "uri": "http://g.microsoftonline.com/0BXPS00en-us/1302",
            "method": "GET",
            "headers": []
        },
        "self": {
            "uri": "/offers/2828BE95-46BA-4F91-B2FD-0BEF192ECF60?country=US",
            "method": "GET",
            "headers": []
        }
    },
    "attributes": {
        "objectType": "Offer"
    }
},
{
    "id": "45320EC9-9B8E-49D0-B900-F14141A0ABD1",
    "name": "Microsoft MyAnalytics",
    "description": "Microsoft MyAnalytics provides insights about time and relationships to help individuals and teams achieve more at work.",
    "minimumQuantity": 1,
    "maximumQuantity": 10000000,
    "rank": 232,
    "uri": "/3c95518e-8c37-41e3-9627-0ca339200f53/Offers/45320EC9-9B8E-49D0-B900-F14141A0ABD1",
    "locale": "en-US",
    "country": "US",
    "category": {
        "id": "",
        "name": "",
        "rank": 0,
        "locale": "en-us",
        "country": "US",
        "attributes": {
            "objectType": "OfferCategory"
        }
    },
    "prerequisiteOffers": ["195416C1-3447-423A-B37B-EE59A99A19C4", "2F707C7C-2433-49A5-A437-9CA7CF40D3EB", "91FD106F-4B2C-4938-95AC-F54F74E9A239", "796B6B5F-613C-4E24-A17C-EBA730D49C02", "8909E28E-5832-42F4-9886-B0A5545F3645", "2B3B8D2D-10AA-4BE4-B5FD-7F2FEB0C3091"],
    "isAddOn": true,
    "isAvailableForPurchase": true,
    "billing": "license",
    "isAutoRenewable": true,
    "salesGroupId": "1",
    "product": {
        "id": "90A8F363-DA30-4ECD-90A7-D3A6B203486D",
        "name": "Microsoft MyAnalytics",
        "unit": "Licenses"
    }
},
```

```
"unitType": "Licenses",
"links": [
    "learnMore": {
        "method": "GET",
        "headers": []
    },
    "self": {
        "uri": "/offers/45320EC9-9B8E-49D0-B900-F14141A0ABD1?country=US",
        "method": "GET",
        "headers": []
    }
],
"attributes": {
    "objectType": "Offer"
}
},
],
"attributes": {
    "objectType": "Collection"
}
}
```

# Get the availability by ID

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## Applies To

- Partner Center

Gets the availability for the specified product and SKU using an availability ID.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A product ID.
- A SKU ID.
- An availability ID.

## C#

To get details of a specific [availability](#), start by using the steps in [Get a SKU by ID](#) to get the interface for a specific [SKU's](#) operations. From the resulting interface, select the **Availabilities** property to obtain an interface with the available operations for [Availabilities](#). After that, pass the availability ID to the **ById()** method to get the operations for that specific availability and then call **Get()** or **GetAsync()** to retrieve the availability details.

```
IAggregatePartner partnerOperations;
string countryCode;
string productId;
string skuId;
string availabilityId;

// Get the availability details.
var availability =
    partnerOperations.Products.ByCountry(countryCode).ById(productId).Skus.ById(skuId).Availabilities.GetById(availabilityId).Get();
```

## Java

The [Partner Center Java SDK](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To get details of a specific [availability](#), start by using the steps in [Get a SKU by ID](#) to get the interface for a specific [SKU's](#) operations. From the resulting interface, select the **getAvailabilities** function to obtain an interface with the available operations for [Availabilities](#). After that, pass the availability ID to the **byId()** function to get the operations for that specific availability and then call the **get()** function to retrieve the availability details.

```

IAggregatePartner partnerOperations;
String countryCode;
String productId;
String skuId;
String availabilityId;

// Get the availability details.
Availability availability =
partnerOperations.getProducts().byCountry(countryCode).byId(productId).getSkus().byId(skuId).getAvailabilities().byId(availabilityId).get();

```

## PowerShell

The [Partner Center PowerShell module](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To get details of a specific `availability`, execute the [Get-PartnerProductAvailability](#) and specify the `AvailabilityId`, `CountryCode`, `ProductId`, and `Skuid` parameters to retrieve the availability details.

```
Get-PartnerProductAvailability -Product $productId -SkuId $skuId -AvailabilityId $availabilityId
```

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>/baseURL/v1/products/{product-id}/skus/{sku-id}/availabilities/{availability-id}?country={country-code}</code> HTTP/1.1

### URI parameter

Use the following path and query parameters to get a specific availability using an availability ID.

NAME	TYPE	REQUIRED	DESCRIPTION
product-id	string	Yes	A GUID formatted string that identifies the product.
sku-id	string	Yes	A GUID formatted string that identifies the SKU.
availability-id	string	Yes	A GUID formatted string that identifies the availability.
country-code	string	Yes	A country/region ID.

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

None.

## Request example

```
GET http://api.partnercenter.microsoft.com/v1/products/DZH318Z0BQ3Q/skus/0001/availabilities/DZH318XZPHL?  
country=US HTTP/1.1  
Authorization: Bearer <token>  
Accept: application/json  
MS-RequestId: 2e12a576-ded5-437e-a5ec-dbfbcbd1624c  
MS-CorrelationId: 83b644b5-e54a-4bdc-b354-f96c525b3c58  
X-Locale: en-US  
MS-PartnerCenter-Client: Partner Center .NET SDK  
Host: api.partnercenter.microsoft.com
```

## REST response

If successful, the response body contains an [Availability](#) resource.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center error codes](#).

This method returns the following error codes:

HTTP STATUS CODE	ERROR CODE	DESCRIPTION
404	400013	Product was not found.
404	400018	Sku was not found.
404	400019	Availability not found.

## Response example

HTTP/1.1 200 OK  
Content-Type: application/json; charset=utf-8  
Server: Microsoft-IIS/10.0  
MS-CorrelationId: 83b644b5-e54a-4bdc-b354-f96c525b3c58,83b644b5-e54a-4bdc-b354-f96c525b3c58  
MS-RequestId: 2e12a576-ded5-437e-a5ec-dbfbcbd1624c,2e12a576-ded5-437e-a5ec-dbfbcbd1624c  
X-Locale: en-US,en-US  
X-SourceFiles: =?UTF-8?B?  
QzpcVXN1cnNcbWFtZW5kZVxkZXcZHBzLXJwZVxSUEUuUGFydG51ci5TZJ2aWN1LkNhdGFsb2dcV2ViQXBpc1xDYXRhbG9nU2VydmljZS5WM  
i5XZWJcdjFccHJvZHVjdHNcRFpIMzE4WjBCUTNRXHNrdXNcMDAwMvxhdmFpbGFiaWxpdGllc1xEWkgzMThaMEhNS1E=?=br/>  
X-Powered-By: ASP.NET  
Date: Wed, 14 Mar 2018 22:19:43 GMT  
Content-Length: 440

```
{  
    "id": "DZH318XZXPHL",  
    "productId": "DZH318Z0BQ3Q",  
    "skuId": "0001",  
    "catalogItemId": "DZH318Z0BQ3Q:0001:DZH318XZXPHL",  
    "defaultCurrency": {  
        "code": "USD",  
        "symbol": "$"  
    },  
    "segment": "commercial",  
    "country": "US",  
    "isPurchasable": true,  
    "isRenewable": false,  
    "terms": [{  
        "duration": "P1Y",  
        "description": "1 Year Prepaid"  
    }],  
    "product": { ... },  
    "sku": { ... },  
    "links": {  
        "self": {  
            "uri": "/products/DZH318Z0BQ3Q/skus/0001/availabilities/DZH318XZXPHL?country=US",  
            "method": "GET",  
            "headers": []  
        }  
    }  
}
```

# Get an offer by ID

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Gets an **Offer** resource that matches the offer ID.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- An offer ID.

## C#

To find a specific offer by ID, use your **IAggregatePartner.Offers** collection, establish the country with a call to **ByCountry()**, and then call the **ByID()** method. Then, call the **Get()** or **Get Async()** method.

```
// IAggregatePartner partnerOperations;
// string countryCode;
// string offerId;

// retrieve the offer
var offer = partnerOperations.Offers.ByCountry(countryCode).ById(offerId).Get();
```

Sample: [Console test app](#). Project: PartnerSDK.FeatureSample Class: GetOffer.cs

## Java

The [Partner Center Java SDK](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To find a specific offer by ID, use your **IAggregatePartner.getOffers** function, establish the country with a call to the **byCountry()** function, and then call the **byID()** function. Then call the **get()** function.

```
// IAggregatePartner partnerOperations;
// String countryCode;
// String offerId;

// Retrieve the offer
Offer offer = partnerOperations.getOffers().byCountry(countryCode).byId(offerId).get();
```

## PowerShell

The [Partner Center PowerShell module](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To find a specific offer by ID, execute the [Get-PartnerOffer](#) command, and specify the `CountryCode` and `OfferId` parameters.

```
# $countryCode  
# $offerId  
  
Get-PartnerOffer -Country $countryCode -OfferId $offerId
```

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<a href="#"><code>{baseUrl}/v1/offers/{offer-id}?country={country-id}</code></a> HTTP/1.1

### URI parameter

NAME	TYPE	REQUIRED	DESCRIPTION
offer-id	guid	Y	A GUID that corresponds to the offer.
country-id	string	Y	The country/region ID.

### Request headers

- A `locale-id` formatted as a string is required. For more information, see [Partner Center REST headers](#).

### Request body

None.

### Request example

```
GET https://api.partnercenter.microsoft.com/v1/offers/<offer-id>?country=<country-id> HTTP/1.1  
Authorization: Bearer <token>  
Accept: application/json  
MS-RequestId: ac943950-ba3d-47a0-bd2a-c5617a7fefef8  
MS-CorrelationId: 7c1f6619-c176-4040-a88f-2c71f3ba4533  
X-Locale: <locale-id>  
Connection: Keep-Alive
```

## REST response

If successful, this method returns an `Offer` resource in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 1918
Content-Type: application/json
MS-CorrelationId: 7c1f6619-c176-4040-a88f-2c71f3ba4533
MS-RequestId: ac943950-ba3d-47a0-bd2a-c5617a7fefeb
Date: Mon, 23 Nov 2015 23:13:01 GMT

{
  "id": "031C9E47-4802-4248-838E-778FB1D2CC05",
  "name": "Office 365 Business Premium",
  "description": "For businesses with 1 to 300 users that need the latest desktop version of Office, plus anywhere access to email, filesharing, and online conferencing.",
  "minimumQuantity": 1,
  "maximumQuantity": 300,
  "rank": 56,
  "uri": "/3c95518e-8c37-41e3-9627-0ca339200f53/Offers/031C9E47-4802-4248-838E-778FB1D2CC05",
  "locale": "en-us",
  "country": "US",
  "category": {
    "id": "SmallBusiness_Key",
    "name": "Small Business",
    "rank": 30,
    "locale": "en-us",
    "country": "US",
    "attributes": {
      "objectType": "OfferCategory"
    }
  },
  "prerequisiteOffers": [],
  "isAddOn": false,
  "isAvailableForPurchase": true,
  "billing": "license",
  "isAutoRenewable": true,
  "product": {
    "id": "f245ecc8-75af-4f8e-b61f-27d8114de5f3",
    "name": "Office 365 Business Premium",
    "unit": "Licenses"
  },
  "unitType": "Licenses",
  "links": {
    "learnMore": {
      "uri": "http://g.microsoftonline.com/0BXPS00en/909",
      "method": "GET",
      "headers": []
    }
  },
  "attributes": {
    "objectType": "Offer"
  }
}
```

# Get an order by ID

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Gets an [Order](#) resource that matches the customer and order ID.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- An order ID.

## C#

To get a customer's order by ID:

1. Use your **IAggregatePartner.Customers** collection and call the **ById()** method.
2. Call the [Orders](#) property, followed by the **ByID()** method once more.
3. Call [Get\(\)](#) or [GetAsync\(\)](#).

```
// IAggregatePartner partnerOperations;
// string selectedCustomerId;
// string selectedOrderId;

var order = partnerOperations.Customers.ById(selectedCustomerId).Orders.ById(selectedOrderId).Get();
```

Sample: [Console test app](#). Project: [PartnerSDK](#).FeatureSample Class: GetOrder.cs

## Java

The [Partner Center Java SDK](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To get a customer's order by ID:

1. Use your **IAggregatePartner.getCustomers** function and call the **byId()** function.

2. Call the `getOrders` function, followed by the `byID()` function once more.

3. Call the `get()` function.

```
// IAggregatePartner partnerOperations;
// String selectedCustomerId;
// String selectedOrderId;

Order order =
partnerOperations.getCustomers().byId(selectedCustomerId).getOrders().byId(selectedOrderId).get();
```

## PowerShell

The [Partner Center PowerShell module](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To get a customer's order by ID, execute the `Get-PartnerCustomerOrder` command, and specify the `CustomerId` and `OrderId` parameters.

```
# $selectedCustomerId
# $selectedOrderId

Get-PartnerCustomerOrder -CustomerId $selectedCustomerId -OrderId $selectedOrderId
```

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>/baseURL/v1/customers/{customer-tenant-id}/orders/{id-for-order}</code> HTTP/1.1

### URI parameters

This table lists the required query parameters to get an order by ID.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	string	Yes	A GUID formatted string corresponding to the customer.
id-for-order	string	Yes	A string corresponding to the order ID.

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

None.

### Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/<customer-tenant-id>/orders/<id-for-order> HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 0e5fc923-8e3c-4560-9100-ce7283c3e081
MS-CorrelationId: 8a53b025-d5be-4d98-ab20-229d1813de76
Connection: Keep-Alive
```

## REST response

If successful, this method returns an [Order](#) resource in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

### Response example

HTTP/1.1 200 OK  
Content-Length: 823  
Content-Type: application/json  
MS-RequestId: 0e5fc923-8e3c-4560-9100-ce7283c3e081  
MS-CorrelationId: 8a53b025-d5be-4d98-ab20-229d1813de76  
Date: Thu, 15 Mar 2018 22:05:30 GMT

```
{  
    "id": "YxH1q4KScfvfkJQjgRI8QY1DznnUWZTH1",  
    "referenceCustomerId": "b0d70a69-4c42-4b27-b17b-91a835d8686a",  
    "billingCycle": "one_time",  
    "currencyCode": "USD",  
    "currencySymbol" : "$",  
    "lineItems": [  
        {  
            "lineItemNumber": 0,  
            "offerId": "DZH318Z0BQ4Z:002L:DZH318Z0CMNP",  
            "friendlyName": "Reserved_VM_Instance_Standard_NC12_AU_East_1_Year",  
            "quantity": 1,  
            "links": {  
                "sku": {  
                    "uri": "/products/DZH318Z0BQ4Z/skus/002L?country=US",  
                    "method": "GET",  
                    "headers": []  
                }  
            }  
        },  
        ],  
        "creationDate": "2018-03-13T22:49:54.3396949Z",  
        "status": "completed",  
        "links": {  
            "provisioningStatus": {  
                "uri": "/customers/b0d70a69-4c42-4b27-b17b-  
91a835d8686a/orders/YxH1q4KScfvfkJQjgRI8QY1DznnUWZTH1/provisioningstatus",  
                "method": "GET",  
                "headers": []  
            },  
            "self": {  
                "uri": "/customers/b0d70a69-4c42-4b27-b17b-  
91a835d8686a/orders/YxH1q4KScfvfkJQjgRI8QY1DznnUWZTH1",  
                "method": "GET",  
                "headers": []  
            }  
        },  
        "attributes": {  
            "objectType": "Order"  
        }  
    }  
}
```

# Get subscription provisioning status

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

How to get the subscription provisioning status for a customer subscription.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A subscription identifier.
- Delegated admin permissions on the subscription are required to perform this operation.

## C#

To get the provisioning status of a subscription, begin by using the [IAggregatePartner.Customers.ById](#) method with the customer ID to identify the customer. Then, get an interface to subscription operations by calling the [Subscriptions.GetById](#) method with the subscription ID. Next, use the [ProvisioningStatus](#) property to obtain an interface to the current subscription's provisioning status operations, and then call the [Get](#) or [GetAsync](#) method to retrieve the [SubscriptionProvisioningStatus](#) object.

```
// IAggregatePartner partnerOperations;
// string customerId;
// string subscriptionId;

// Retrieve a subscription's provisioning status.
var provisioningStatus =
    partnerOperations.CustomersById(customerId).Subscriptions.GetById(subscriptionID).ProvisioningStatus.Get();
```

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>/baseURL/v1/customers/{customer-id}/subscriptions/{subscription-id}/provisioningstatus</code> HTTP/1.1

## URI parameters

Use the following path parameters to identify the customer and subscription.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-id	string	Yes	A GUID formatted string that identifies the customer.
subscription-id	string	Yes	A GUID formatted string that identifies the subscription.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/0c39d6d5-c70d-4c55-bc02-f620844f3fd1/subscriptions/34828C05-C16C-4D6F-9CFC-4D2650EF19A1/provisioningstatus HTTP/1.1
Accept: application/json, text/plain, /*
Authorization: Bearer <token>
MS-RequestId: d0e38dfd-a2c5-4a14-ac06-12d30f0ec54e
MS-CorrelationId: e937630b-8341-4d70-8f73-450d32ee0189
X-Locale: en-US
Host: api.partnercenter.microsoft.com
```

## REST response

If successful, the response body contains a [SubscriptionProvisioningStatus](#) resource.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 177
Content-Type: application/json; charset=utf-8
MS-CorrelationId: e937630b-8341-4d70-8f73-450d32ee0189
MS-RequestId: d0e38dfd-a2c5-4a14-ac06-12d30f0ec54e
MS-CV: InswEQre402koceL.0
MS-ServerId: 030020344
Date: Thu, 20 Apr 2017 19:23:39 GMT

{
  "skuId": "6FD2C87F-B296-42F0-B197-1E91E994B900",
  "status": "success",
  "quantity": 5,
  "endDate": "2018-05-10T00:00:00Z",
  "attributes": {
    "objectType": "SubscriptionProvisioningStatus"
  }
}
```

## Remarks

- During a seat change assignment, the status field in [SubscriptionProvisioningStatus](#) is set to "pending".
- The status field is updated every fifteen minutes.

# Get subscription registration status

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center

How to get the subscription registration status for a customer subscription that has been enabled for purchasing Azure Reserved VM Instances.

To purchase an Azure Reserved VM Instance using the Partner Center API, you must have at least one existing CSP Azure subscription. The [Register a subscription](#) method allows you to register your existing CSP Azure subscription, enabling it for purchasing Azure Reserved VM Instances. This method allows you to retrieve the status of that registration.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select CSP from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A subscription ID.

## C#

To get the registration status of a subscription, begin by using the [IAggregatePartner.Customers.GetById](#) method with the customer ID to identify the customer. Then, get an interface to subscription operations by calling the [Subscription.GetById\(\)](#) method with the subscription ID to identify the subscription. Next, use the **RegistrationStatus** property to obtain an interface to the current subscription's registration status operations, and call the **Get** or **GetAsync** method to retrieve the **SubscriptionRegistrationStatus** object.

```
// IAggregatePartner partnerOperations;
// var selectedCustomerId;
// var selectedSubscriptionId;

// Retrieve a subscription's registration status details.
var subscriptionRegistrationDetails =
    partnerOperations.Customers.GetById(selectedCustomerId).Subscriptions.GetById(selectedSubscriptionId).RegistrationStatus.Get();
```

## REST request

### Request syntax

METHOD	REQUEST URI
--------	-------------

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/customers/{customer-id}/subscriptions/{subscription-id}/registrationstatus</code> HTTP/1.1

## URI parameters

Use the following path parameters to identify the customer and subscription.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-id	string	Yes	A GUID formatted string that identifies the customer.
subscription-id	string	Yes	A GUID formatted string that identifies the subscription.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/<customer-id>/subscriptions/<subscription-id>/registrationstatus HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: ca7c39f7-1a80-43bc-90d8-ee7d1cad3123
MS-CorrelationId: ec8f62e5-1d92-47e9-8d5d-1924af105123
Content-Type: application/json
Content-Length: 1029
Expect: 100-continue
Connection: Keep-Alive
```

## REST response

If successful, the response body contains a [SubscriptionRegistrationStatus](#) resource.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 177
Content-Type: application/json; charset=utf-8
MS-CorrelationId: ca7c39f7-1a80-43bc-90d8-ee7d1cad3123
MS-RequestId: ec8f62e5-1d92-47e9-8d5d-1924af105123
MS-CV: InswEQre402koceL.0
MS-ServerId: 030020344

{
    "subscriptionId": "<subscription-id>",
    "status": "NotRegistered",
    "attributes": {
        "objectType": "SubscriptionRegistrationStatus"
    }
}
```

# Make a one-time purchase

6/19/2020 • 5 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center for Microsoft Cloud for US Government

How to make a one-time purchase of software and reservation products such as software subscriptions, perpetual software, and Azure Reserved Virtual Machine (VM) Instances, using the Partner Center API.

### NOTE

Software subscriptions are not available in the following markets:

UNAVAILABLE MARKETS	UNAVAILABLE MARKETS (CONTINUED...)	UNAVAILABLE MARKETS (CONTINUED...)
Åland Islands	Greenland	Papua New Guinea
American Samoa	Grenada	Pitcairn Islands
Andorra	Guadeloupe	Reunion
Anguilla	Guam	Russian Federation
Antarctica	Guernsey	Saba
Antigua and Barbuda	Guinea	Saint Barthélemy
Aruba	Guinea-Bissau	Saint Lucia
Benin	Guyana	Saint Martin
Bhutan	Haiti	Saint Pierre and Miquelon
Bonaire	Heard Island and McDonald Islands	Saint Vincent and the Grenadines
Bouvet Island	Isle of Man	Samoa
Brazil	Jan Mayen	San Marino
British Indian Ocean Territory	Jersey	São Tomé and Príncipe
British Virgin Islands	Kiribati	Seychelles
Burkina Faso	Kosovo	Sierra Leone
Burundi	Laos	Sint Eustatius
Cambodia	Lesotho	Sint Maarten
Central African Republic	Liberia	Solomon Islands
Chad	Madagascar	Somalia

UNAVAILABLE MARKETS	UNAVAILABLE MARKETS (CONTINUED...)	UNAVAILABLE MARKETS (CONTINUED...)
China	Malawi	South Georgia and South Sandwich Islands
Christmas Island	Maldives	South Sudan
Cocos (Keeling) Islands	Mali	St Helena, Ascension, Tristan da Cunha
Comoros	Marshall Islands	Suriname
Congo	Martinique	Svalbard
Congo (DRC)	Mauritania	Swaziland
Cook Islands	Mayotte	Timor-Leste
Djibouti	Micronesia	Togo
Dominica	Montserrat	Tokelau
Equatorial Guinea	Mozambique	Tonga
Eritrea	Myanmar	Turks and Caicos Islands
Falkland Islands	Nauru	Tuvalu
French Guiana	New Caledonia	U.S. Outlying Islands
French Polynesia	Niger	Vanuatu
French Southern Territories	Niue	Vatican City
Gabon	Norfolk Island	Wallis and Futuna
Gambia	Northern Mariana Islands	Yemen
Gibraltar	Palau	

#### NOTE

To purchase perpetual software, you must have been previously qualified. Contact support for more information.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

# Making a one-time purchase

To make a one-time purchase, use the following steps:

1. [Enablement](#) - (Azure Reserved VM Instance only) Register an active CSP Azure subscription to enable it for purchasing any reservation product.
2. [Discovery](#) - Find and select the products and SKUs you want to purchase and check their availability.
3. [Order submission](#) - Create a shopping cart with the items in your order and submit it.
4. [Get order details](#) - Review the details of an order, all the orders for a customer, or view orders by billing cycle type.

After you have made your one-time purchase, the following scenarios show you how to manage the lifecycle of your products by getting information about your entitlements, and how to retrieve balance statements, invoices, and invoice summaries.

- [Lifecycle management](#)
- [Invoice and reconciliation](#)

## Enablement

Once you have identified the active subscription that you want to add the Azure Reserved VM Instance to, you must register the subscription so that it is enabled. To register an existing [Subscription](#) resource so that it is enabled, see [Register a subscription](#).

After registering your subscription, you should confirm that the registration process is completed by checking the registration status. To do this step, see [Get subscription registration status](#).

## Discovery

Once the subscription is enabled, you're ready to select products and SKUs and check their availability using the following Partner Center API models:

- [Product](#) - A grouping construct for purchasable goods or services. A product by itself isn't a purchasable item.
- [SKU](#) - A purchasable Stock Keeping Unit (SKU) under a product. SKUs represent the different shapes of the product.
- [Availability](#) - A configuration in which a SKU is available for purchase (such as country, currency, and industry segment).

Before making a one-time purchase, complete the following steps:

1. Identify and retrieve the Product and SKU that you want to purchase. You can do this step by listing the products and SKUs first, or if you already know the IDs of the product and SKU, selecting them.
  - [Get a list of products](#)
  - [Get a product using the product ID](#)
  - [Get a list of SKUs for a product](#)
  - [Get a SKU using the SKU ID](#)
2. Check the inventory for a SKU. This step is only needed for SKUs that are tagged with an [InventoryCheck](#) prerequisite.
  - [Check Inventory](#)

3. Retrieve the [availability](#) for the [SKU](#). You will need the [CatalogItemId](#) of the availability when placing the order. To get this value, use one of the following APIs:

- [Get a list of availabilities for a SKU](#)
- [Get an availability using the availability ID](#)

## Order submission

To submit your order, follow these steps:

1. Create a cart to hold the collection of catalog items that you intend to buy. When you create a [Cart](#), the [cart line items](#) are automatically grouped based on what can be purchased together in the same [Order](#).
  - [Create a shopping cart](#)
  - [Update a shopping cart](#)
2. Check out the cart. Checking out a cart results in the creation of an [Order](#).
  - [Checkout the cart](#)

## Get order details

Once you have created your order, you can retrieve the details of an individual order using the order ID, or get a list of orders for a customer. There is a delay of up to 15 minutes between the time an order is submitted and when it will appear in a list of a customer's orders.

- To get the details of an individual order using the order ID. See, [Get an order by ID](#).
- To get a list of orders for a customer using the customer ID. See, [Get all of a customer's orders](#).
- To get a list of orders for a customer by [billing cycle type](#) allowing you to list orders (one-time charges) and annual or monthly billed orders separately. See, [Get a list of orders by customer and billing cycle type](#).

## Lifecycle management

As part of managing the lifecycle of your one-time purchases in Partner Center, you can retrieve information about your [Entitlements](#), and get reservation details using the reservation order ID. For examples of how to do this, see [Get entitlements](#).

## Invoice and reconciliation

The following scenarios show you how to programmatically view your customer's [invoices](#), and get your account balances and summaries that include one-time charges.

### Balance and payment

To get current account balance in your default currency type that is a balance of both recurring and one-time charges, see [Get your current account balance](#)

### Multi-currency balance and payment

To get your current account balance and a collection of invoice summaries containing an invoice summary with both recurring and one-time charges for each of your customer's currency types, see [Get invoice summaries](#).

### Invoices

To get a collection of invoices that show both recurring and one time charges, see [Get a collection of invoices](#).

### Single Invoice

To retrieve a specific invoice using the invoice ID, see [Get an invoice by ID](#).

## **Reconciliation**

To get a collection of invoice line item details (Reconciliation line items) for a specific invoice ID, see [Get invoice line items](#).

## **Download an invoice as a PDF**

To retrieve an invoice statement in PDF form using an invoice ID, see [Get an invoice statement](#).

# Purchase an add-on to a subscription

4/25/2020 • 5 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud for US Government

How to purchase an add-on to an existing subscription.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A subscription ID. This is the existing subscription for which to purchase an add-on offer.
- An offer ID that identifies the add-on offer to purchase.

## Purchasing an add-on through code

When you purchase an add-on to a subscription you are updating the original subscription order with the order for the add-on. In the following, `customerId` is the customer ID, `subscriptionId` is the subscription ID, and `addOnOfferId` is the offer ID for the add-on.

Here are the steps:

1. Get an interface to the operations for the subscription.

```
var subscriptionOperations =
    partnerOperations.Customers.ById(customerId).Subscriptions.ById(subscriptionId);
```

2. Use that interface to instantiate a subscription object. This gets you the parent subscription details, including the order id.

```
var parentSubscription = subscriptionOperations.Get();
```

3. Instantiate a new [Order](#) object. This order instance is used to update the original order used to purchase the subscription. Add a single line item to the order that represents the add-on.

```
var orderToUpdate = new Order()
{
    ReferenceCustomerId = customerId,
    LineItems = new List<OrderLineItem>()
    {
        new OrderLineItem()
        {
            LineItemNumber = 0,
            OfferId =addOnOfferId,
            FriendlyName = "Some friendly name",
            Quantity = 2,
            ParentSubscriptionId = subscriptionId
        }
    }
};
```

4. Update the original order for the subscription with the new order for the add-on.

```
Order updatedOrder =
partnerOperations.Customers.ById(customerId).Orders.ById(parentSubscription.OrderId).Patch(orderToUpdate);
```

## C#

To purchase an add-on, begin by obtaining an interface to the subscription operations by calling the [IAggregatePartner.Customers.ById](#) method with the customer ID to identify the customer, and the [Subscriptions.ById](#) method to identify the subscription that has the add-on offer. Use that [interface](#) to retrieve the subscription details by calling [Get](#). Why do you need the subscription details? Because you need the order id of the subscription order. That's the order to be updated with the add-on.

Next, instantiate a new [Order](#) object and populate it with a single [LineItem](#) instance that contains the information to identify the add-on, as shown in the following code snippet. You'll use this new object to update the subscription order with the add-on. Finally, call the [Patch](#) method to update the subscription order, after first identifying the customer with [IAggregatePartner.Customers.ById](#) and the order with [Orders.ById](#).

```

// IAggregatePartner partnerOperations;
// string customerId;
// string subscriptionId;
// string addOnOfferId;

// Get an interface to the operations for the subscription.
var subscriptionOperations = partnerOperations.Customers.ById(customerId).Subscriptions.ById(subscriptionId);

// Get the parent subscription details.
var parentSubscription = subscriptionOperations.Get();

// In order to buy an add-on subscription for this offer, we need to patch/update the order through which the
// base offer was purchased
// by creating an order object with a single line item which represents the add-on offer purchase.
var orderToUpdate = new Order()
{
    ReferenceCustomerId = customerId,
    LineItems = new List<OrderLineItem>()
    {
        new OrderLineItem()
        {
            LineItemNumber = 0,
            OfferId = addOnOfferId,
            FriendlyName = "Some friendly name",
            Quantity = 2,
            ParentSubscriptionId = subscriptionId
        }
    }
};

// Update the order to apply the add on purchase.
Order updatedOrder =
partnerOperations.Customers.ById(customerId).OrdersById(parentSubscription.OrderId).Patch(orderToUpdate);

```

**Sample:** [Console test app](#). **Project:** Partner Center SDK Samples **Class:** AddSubscriptionAddOn.cs

## REST request

### Request syntax

METHOD	REQUEST URI
PATCH	<a href="#"><i>{baseUrl}</i></a> /v1/customers/{customer-tenant-id}/orders/{order-id} HTTP/1.1

### URI parameters

Use the following parameters to identify the customer and order.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	guid	Y	The value is a GUID formatted <b>customer-tenant-id</b> that identifies the customer.
order-id	guid	Y	The order identifier.

### Request headers

For more information, see [Partner Center REST headers](#).

## Request body

The following tables describe the properties in the request body.

## Order

NAME	TYPE	REQUIRED	DESCRIPTION
Id	string	N	The order ID.
ReferenceCustomerId	string	Y	The customer ID.
LineItems	array of objects	Y	An array of <a href="#">OrderLineItem</a> objects.
CreationDate	string	N	The date the order was created, in date-time format.
Attributes	object	N	Contains "ObjectType": "Order".

## OrderLineItem

NAME	TYPE	REQUIRED	DESCRIPTION
LineItemNumber	number	Y	The line item number, starting with 0.
OfferId	string	Y	The offer ID of the add-on.
SubscriptionId	string	N	The ID of the add-on subscription purchased.
ParentSubscriptionId	string	Y	The ID of the parent subscription that has the add-on offer.
FriendlyName	string	N	The friendly name for this line item.
Quantity	number	Y	The number of licenses.
PartnerIdOnRecord	string	N	The MPN ID of the partner of record.
Attributes	object	N	Contains "ObjectType": "OrderLineItem".

## Request example

```
PATCH https://api.partnercenter.microsoft.com/v1/customers/4d3cf487-70f4-4e1e-9ff1-
b2bfce8d9f04/orders/CF3B0E37-BE0B-4CDD-B584-D1A97D98A922 HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 17a2658e-d2cc-439b-a2f0-2aef9344fbc
MS-CorrelationId: 60efdd24-17ef-4080-9b02-4fc315f916ff
X-Locale: en-US
Content-Type: application/json
Host: api.partnercenter.microsoft.com
Content-Length: 414
Expect: 100-continue

{
    "Id": null,
    "ReferenceCustomerId": "4d3cf487-70f4-4e1e-9ff1-b2bfce8d9f04",
    "LineItems": [
        {
            "LineItemNumber": 0,
            "OfferId": "2828BE95-46BA-4F91-B2FD-0BEF192ECF60",
            "SubscriptionId": null,
            "ParentSubscriptionId": "1C2B75C1-74A5-472A-A729-7F8CEFC477F9",
            "FriendlyName": "Some friendly name",
            "Quantity": 2,
            "PartnerIdOnRecord": null,
            "Attributes": {
                "ObjectType": "OrderLineItem"
            }
        }
    ],
    "CreationDate": null,
    "Attributes": {
        "ObjectType": "Order"
    }
}
```

## REST response

If successful, this method returns the updated subscription order in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center Error Codes](#).

### Response example

HTTP/1.1 200 OK  
Content-Length: 1135  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: 60efdd24-17ef-4080-9b02-4fc315f916ff  
MS-RequestId: 17a2658e-d2cc-439b-a2f0-2aefd9344fbc  
MS-CV: WtFy3zI8V0u2lnT9.0  
MS-ServerId: 020021921  
Date: Wed, 25 Jan 2017 23:01:08 GMT

```
{  
    "id": "cf3b0e37-be0b-4cdd-b584-d1a97d98a922",  
    "referenceCustomerId": "4d3cf487-70f4-4e1e-9ff1-b2bfce8d9f04",  
    "billingCycle": "none",  
    "lineItems": [  
        {  
            "lineItemNumber": 0,  
            "offerId": "195416C1-3447-423A-B37B-EE59A99A19C4",  
            "subscriptionId": "1C2B75C1-74A5-472A-A729-7F8CEFC477F9",  
            "friendlyName": "new offer purchase",  
            "quantity": 5,  
            "links": {  
                "subscription": {  
                    "uri": "/customers/4d3cf487-70f4-4e1e-9ff1-b2bfce8d9f04/subscriptions/1C2B75C1-74A5-472A-A729-7F8CEFC477F9",  
                    "method": "GET",  
                    "headers": []  
                }  
            }  
        }, {  
            "lineItemNumber": 1,  
            "offerId": "2828BE95-46BA-4F91-B2FD-0BEF192ECF60",  
            "subscriptionId": "968BA1CF-C146-4ADF-A300-308DCF718EEE",  
            "friendlyName": "Some friendly name",  
            "quantity": 2,  
            "links": {  
                "subscription": {  
                    "uri": "/customers/4d3cf487-70f4-4e1e-9ff1-b2bfce8d9f04/subscriptions/968BA1CF-C146-4ADF-A300-308DCF718EEE",  
                    "method": "GET",  
                    "headers": []  
                }  
            }  
        }  
    ],  
    "creationDate": "2017-01-25T14:53:12.093-08:00",  
    "links": {  
        "self": {  
            "uri": "/customers/4d3cf487-70f4-4e1e-9ff1-b2bfce8d9f04/orders/cf3b0e37-be0b-4cdd-b584-d1a97d98a922",  
            "method": "GET",  
            "headers": []  
        }  
    },  
    "attributes": {  
        "etag": "eyJpZCI6ImNmM2IwZTM3LWJlMGItNGNkZC1iNTg0LWQxYTk3ZDk4YTkyMiIsInZlcnPb24i0jJ9",  
        "objectType": "Order"  
    }  
}
```

# Purchase catalog items

4/24/2020 • 3 minutes to read • [Edit Online](#)

## Applies To

- Partner Center

The following scenario demonstrates the generic process for purchasing items from the catalog by using the Partner Center API.

## Discovery

Select products and SKUs and check their availability using the following Partner Center API models:

- **Product** - A grouping construct for purchasable goods or services. A product by itself isn't a purchasable item.
- **SKU** - A purchasable Stock Keeping Unit (SKU) under a product. These represent the different shapes of the product.
- **Availability** - A configuration in which a SKU is available for purchase (such as country, currency and industry segment).

To purchase an item from the catalog, complete the following steps:

1. Identify and retrieve the Product and SKU that you want to purchase.
  - [Get a list of products](#)
  - [Get a product using the product ID](#)
  - [Get a list of SKUs for a product](#)
  - [Get a SKU using the SKU ID](#)
2. Check the inventory for a SKU. This step is only needed for SKUs that are tagged with an **InventoryCheck** value in the [purchasePrerequisites](#) property.
  - [Check Inventory](#)
3. Retrieve the [availability](#) for the [SKU](#). You will need the [CatalogItemId](#) of the availability when placing the order. To get this value, use one of the following APIs:
  - [Get a list of availabilities for a SKU](#)
  - [Get an availability using the availability ID](#)

## Order submission

To submit your catalog item order, do the following:

1. Create a [Cart](#) to hold the collection of catalog items that you intend to buy. When you create a cart, the [cart line items](#) are automatically grouped based on what can be purchased together in the same [Order](#).
  - [Create a shopping cart](#)
  - [Update a shopping cart](#)
2. Check out the cart. Checking out a cart results in the creation of an [Order](#).
  - [Checkout the cart](#)

## Get order details

You can retrieve the details of an individual order using the order ID, or get a list of orders for a customer. There is a delay of up to 15 minutes between the time an order is submitted and when it will appear in a list of a customer's orders.

- See [Get an order by ID](#) to get the details of an individual order using the order IDs.
- See [Get all of a customer's orders](#) to get a list of orders for a customer using the customer ID.
- See [Get a list of orders by customer and billing cycle type](#) to get a list of orders for a customer by [billing cycle type](#) allowing you to list catalog item orders (one-time charges) and annual or monthly billed orders separately.

## Lifecycle management

As part of managing the lifecycle of your catalog items in Partner Center, you can retrieve information about your catalog item [Entitlements](#), and get reservation details using the reservation order ID. For examples of how to do this, see [Get entitlements](#).

## Invoice and reconciliation

The following scenarios show you how to programmatically view your customer's [invoices](#), and get your account balances and summaries that include one-time charges for catalog items.

### Balance and payment

To get current account balance in your default currency type that is a balance of both recurring and one-time (catalog item) charges, see [Get your current account balance](#).

### Multi-currency balance and payment

To get your current account balance and a collection of invoice summaries containing an invoice summary with both recurring and one-time charges for each of your customer's currency types, see [Get invoice summaries](#).

### Invoices

To get a collection of invoices that show both recurring and one-time charges, see [Get a collection of invoices](#).

### Single Invoice

To retrieve a specific invoice using the invoice ID, see [Get an invoice by ID](#).

### Reconciliation

To get a collection of invoice line item details (Reconciliation line items) for a specific invoice ID, see [Get invoice line items](#).

### Download an invoice as a PDF

To retrieve an invoice statement in PDF form using an invoice ID, see [Get an invoice statement](#).

# Reactivate a suspended subscription

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## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Reactivates a [Subscription](#) that was previously suspended for nonpayment.

In the Partner Center dashboard, this operation can be performed by first [selecting a customer](#). Then, select the subscription in question that you wish to rename. To finish, choose the **Active** button, then select **Submit**.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A subscription ID.

## C#

To reactivate a customer's subscription, first [Get the subscription](#), then change the subscription's **Status** property. For information on **Status** codes, consult [SubscriptionStatus enumeration](#). Once the change is made, use your **IPartner.Customers** collection and call the **ById()** method. Then call the **Subscriptions** property, followed by the **ById()** method. Then, finish by calling the **Patch()** method.

```
// IPartner partnerOperations;
// var selectedCustomer as Customer;
// var selectedSubscription as Subscription;

updatedSubscription =
    partnerOperations.Customers.ById(selectedCustomerId).Subscriptions.ById(selectedSubscription.Id).Patch(
        new Subscription()
    {
        Status = SubscriptionStatus.Active
   });
```

Sample: [Console test app](#). Project: FeatureSamplesApplication. Class: UpdateSubscription

## REST request

### Request syntax

METHOD	REQUEST URI
PATCH	<a href="#"><i>/baseURL</i></a> /v1/customers/{customer-tenant-id}/subscriptions/{id-for-subscription} HTTP/1.1

## URI parameter

This table lists the required query parameter to reactivate the subscription.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	guid	Y	A GUID corresponding to the customer.
id-for-subscription	guid	Y	A GUID corresponding to the subscription.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

A full **Subscription** resource is required in the request body. Ensure that the **Status** property has been updated.

## Request example

```

PATCH https://api.partnercenter.microsoft.com/v1/customers/<customer-tenant-id>/subscriptions/<id-for-subscription> HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: ca7c39f7-1a80-43bc-90d8-ee7d1cad3831
MS-CorrelationId: ec8f62e5-1d92-47e9-8d5d-1924af105f2c
Content-Type: application/json
Content-Length: 1029
Expect: 100-continue
Connection: Keep-Alive

{
  "Id": "83ef9d05-4169-4ef9-9657-0e86b1eab1de",
  "FriendlyName": "nickname",
  "Quantity": 2,
  "UnitType": "none",
  "ParentSubscriptionId": null,
  "CreationDate": "2015-11-25T06:41:12Z",
  "EffectiveStartDate": "2015-11-24T08:00:00Z",
  "CommitmentEndDate": "2016-12-12T08:00:00Z",
  "Status": "active",
  "AutoRenewEnabled": false,
  "BillingType": "none",
  "PartnerId": null,
  "ContractType": "subscription",
  "OrderId": "6183db3d-6318-4e52-877e-25806e4971be",
  "Attributes": {
    "Etag": "<etag>",
    "ObjectType": "Subscription"
  }
}

```

## REST response

If successful, this method returns updated **Subscription** resource properties in the response body.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

## Response example

```
PATCH https://api.partnercenter.microsoft.com/v1/customers/<customer-tenant-id>/subscriptions/<subscriptionID>
HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-Contract-Version: v1
MS-RequestId: ca7c39f7-1a80-43bc-90d8-ee7d1cad3831
MS-CorrelationId: ec8f62e5-1d92-47e9-8d5d-1924af105f2c
Content-Type: application/json
Content-Length: 1029
Expect: 100-continue
Connection: Keep-Alive

{
  "Id": "83ef9d05-4169-4ef9-9657-0e86b1eab1de",
  "FriendlyName": "nickname",
  "Quantity": 2,
  "UnitType": "none",
  "ParentSubscriptionId": null,
  "CreationDate": "2015-11-25T06:41:12Z",
  "EffectiveStartDate": "2015-11-24T08:00:00Z",
  "CommitmentEndDate": "2016-12-12T08:00:00Z",
  "Status": "active",
  "AutoRenewEnabled": false,
  "BillingType": "none",
  "PartnerId": null,
  "ContractType": "subscription",
  "Links": {
    "Offer": {
      "Uri": "/v1/offers/0CCA44D6-68E9-4762-94EE-31ECE98783B9",
      "Method": "GET",
      "Headers": []
    },
    "Entitlement": {
      "Uri": "/entitlements?key=<key>",
      "Method": "GET",
      "Headers": []
    },
    "Self": {
      "Uri": "/subscriptions?key=<key>",
      "Method": "GET",
      "Headers": []
    }
  },
  "OrderId": "6183db3d-6318-4e52-877e-25806e4971be",
  "Attributes": {
    "Etag": "<etag>",
    "ObjectType": "Subscription"
  }
}
```

# Register a subscription

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## Applies To

- Partner Center

Register an existing [Subscription](#) so that it is enabled for ordering Azure reservations.

To purchase an Azure reservation you must have at least one existing CSP Azure subscription. This method allows you to register your existing CSP Azure subscription, enabling it for purchasing Azure reservations.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A subscription ID.

## C#

To register a customer's subscription, retrieve an interface to subscription operations by calling the **IAggregatePartner.Customers.ById** method with the customer ID to identify the customer. Then, call the **Subscription.ById()** method with the subscription ID to identify the subscription that you are registering.

Finally, call the **Registration.Register()** method to register the subscription and retrieve a URI that can be used to get the subscription registration status. For more information, see [Get subscription registration status](#).

```
// IAggregatePartner partnerOperations;
// var selectedCustomerId;
// var selectedSubscriptionId;

// Retrieve the subscription registration details.
var subscriptionRegistrationDetails =
    partnerOperations.Customers.ById(selectedCustomerId).Subscriptions.ById(selectedSubscriptionId).Registration.
    Register();
```

## REST request

### Request syntax

METHOD	REQUEST URI
POST	<code>{baseUrl}/v1/customers/{customer-id}/subscriptions/{subscription-id}/registrations</code> HTTP/1.1

### URI parameters

Use the following path parameters to identify the customer and subscription.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-id	string	Yes	A GUID formatted string that identifies the customer.
subscription-id	string	Yes	A GUID formatted string that identifies the subscription.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
POST https://api.partnercenter.microsoft.com/v1/customers/<customer-id>/subscriptions/<subscription-id>/registrations HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: ca7c39f7-1a80-43bc-90d8-ee7d1cad3123
MS-CorrelationId: ec8f62e5-1d92-47e9-8d5d-1924af105123
Content-Type: application/json
Content-Length: 1029
Expect: 100-continue
Connection: Keep-Alive
```

## REST response

If successful, the response contains a **Location** header with a URI that can be used to retrieve the subscription registration status. Save this URI for use with other related REST APIs. For an example of how to retrieve the status, see [Get subscription registration status](#).

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

## Response example

```
HTTP/1.1 202 Accepted
Content-Length: 0
Location: /customers/<customer-id>/subscriptions/<subscription-id>/registrationstatus
MS-CorrelationId: ca7c39f7-1a80-43bc-90d8-ee7d1cad3123
MS-RequestId: ec8f62e5-1d92-47e9-8d5d-1924af105123
MS-CV: iqQqN0FnaE2y0HcD.0
MS-ServerId: 030020525
```

# Suspend a subscription

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## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Suspends a [Subscription](#) resource that matches the customer and subscription ID due to fraud or non-payment.

In the Partner Center dashboard, this operation can be performed by first [selecting a customer](#). Then, select the subscription in question that you wish to rename. To finish, choose the **Suspended** button, then select **Submit**.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A subscription ID.

## C#

To suspend a customer's subscription, first [Get the subscription](#), then change the subscription's **Status** property. For information on **Status** codes, consult [SubscriptionStatus enumeration](#). Once the change is made, use your **IAggregatePartner.Customers** collection and call the **ById()** method. Then call the **Subscriptions** property, followed by the **ById()** method. Then, finish by calling the **Patch()** method.

```
// IAggregatePartner partnerOperations;
// var selectedCustomerId as string;
// Subscription selectedSubscription;

updatedSubscription =
    partnerOperations.Customers.ById(selectedCustomerId).Subscriptions.ById(selectedSubscription.Id).Patch(
        new Subscription()
    {
        Status = SubscriptionStatus.Suspended
    });

```

Sample: [Console test app](#). Project: PartnerSDK.FeatureSample Class: UpdateSubscription.cs

## REST request

### Request syntax

METHOD	REQUEST URI
PATCH	<code>{baseUrl}/v1/customers/{customer-tenant-id}/subscriptions/{id-for-subscription}</code> HTTP/1.1

## URI parameter

This table lists the required query parameter to suspend the subscription.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	guid	Y	A GUID corresponding to the customer.
id-for-subscription	guid	Y	A GUID corresponding to the subscription.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

A full **Subscription** resource is required in the request body. Ensure that the **Status** property has been updated.

## Request example

```

PATCH https://api.partnercenter.microsoft.com/v1/customers/<customer-tenant-id>/subscriptions/<id-for-subscription> HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: ca7c39f7-1a80-43bc-90d8-ee7d1cad3831
MS-CorrelationId: ec8f62e5-1d92-47e9-8d5d-1924af105f2c
If-Match: <etag>
Content-Type: application/json
Content-Length: 1029
Expect: 100-continue
Connection: Keep-Alive

{
    "Id": "83ef9d05-4169-4ef9-9657-0e86b1eab1de",
    "FriendlyName": "nickname",
    "Quantity": 2,
    "UnitType": "none",
    "ParentSubscriptionId": null,
    "CreationDate": "2015-11-25T06:41:12Z",
    "EffectiveStartDate": "2015-11-24T08:00:00Z",
    "CommitmentEndDate": "2016-12-12T08:00:00Z",
    "Status": "suspended",
    "AutoRenewEnabled": false,
    "BillingType": "none",
    "PartnerId": null,
    "ContractType": "subscription",
    "OrderId": "6183db3d-6318-4e52-877e-25806e4971be",
    "Attributes": {
        "Etag": "<etag>",
        "ObjectType": "Subscription"
    }
}

```

## REST response

If successful, this method returns updated **Subscription** resource properties in the response body.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

## Response example

```
PATCH https://api.partnercenter.microsoft.com/v1/customers/<customer-tenant-id>/subscriptions/<subscriptionID>
HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-Contract-Version: v1
MS-RequestId: ca7c39f7-1a80-43bc-90d8-ee7d1cad3831
MS-CorrelationId: ec8f62e5-1d92-47e9-8d5d-1924af105f2c
Content-Type: application/json
Content-Length: 1029
Expect: 100-continue
Connection: Keep-Alive

{
    "Id": "83ef9d05-4169-4ef9-9657-0e86b1eab1de",
    "FriendlyName": "nickname",
    "Quantity": 2,
    "UnitType": "none",
    "ParentSubscriptionId": null,
    "CreationDate": "2015-11-25T06:41:12Z",
    "EffectiveStartDate": "2015-11-24T08:00:00Z",
    "CommitmentEndDate": "2016-12-12T08:00:00Z",
    "Status": "suspended",
    "AutoRenewEnabled": false,
    "BillingType": "none",
    "PartnerId": null,
    "ContractType": "subscription",
    "Links": {
        "Offer": {
            "Uri": "/v1/offers/0CCA44D6-68E9-4762-94EE-31ECE98783B9",
            "Method": "GET",
            "Headers": []
        },
        "Entitlement": {
            "Uri": "/entitlements?key=<key>",
            "Method": "GET",
            "Headers": []
        },
        "Self": {
            "Uri": "/subscriptions?key=<key>",
            "Method": "GET",
            "Headers": []
        }
    },
    "OrderId": "6183db3d-6318-4e52-877e-25806e4971be",
    "Attributes": {
        "Etag": "<etag>",
        "ObjectType": "Subscription"
    }
}
```

# Transition a subscription

4/25/2020 • 3 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Upgrades a customer's subscription to a specified target subscription.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- Two subscription IDs, one for the initial subscription and one for the target subscription.

## C#

To upgrade a customer's subscription, first [get that's customer's subscription](#). Then, obtain a list of upgrades for that subscription by calling the **Upgrades** property followed by the **Get()** or **GetAsync()** methods. Choose a target upgrade from that list of upgrades, and then call the **Upgrades** property of the initial subscription, followed by the **Create()** method.

```
// IAggregatePartner partnerOperations;
// string selectedCustomerId;
// string subscriptionIdForUpgrade;
// Upgrade targetOffer;

UpgradeResult upgradeResult =
partnerOperations.Customers.ById(selectedCustomerId).Subscriptions.ById(subscriptionIdForUpgrade).Upgrades.Create(targetOffer);
```

Sample: [Console test app](#). Project: PartnerSDK.FeatureSamples Class: UpgradeSubscription.cs

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/customers/{customer-tenant-id}/subscriptions/{id-for-subscription}/upgrades</code> HTTP/1.1

METHOD	REQUEST URI
POST	<i>{baseUrl}</i> /v1/customers/{customer-tenant-id}/subscriptions/{id-for-target}/upgrades HTTP/1.1

## URI parameter

Use the following query parameter to transition the subscription.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	guid	Y	A GUID corresponding to the customer.
id-for-subscription	guid	Y	A GUID corresponding to the initial subscription.
id-for-target	guid	Y	A GUID corresponding to the target subscription.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/{customer-tenant-id}/subscriptions/{id-for-subscription}/upgrades HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 18752a69-1aa1-4ef7-8f9d-eb3681b2d70a
MS-CorrelationId: 81b08ffe-4cf8-49cd-82db-5c2fb0a8e132
X-Locale: en-US

POST https://api.partnercenter.microsoft.com/v1/customers/{customer-tenant-id}/subscriptions/{id-for-target}/upgrades HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 750fd5ea-904b-4c3e-b476-60d0feacab0d
MS-CorrelationId: 81b08ffe-4cf8-49cd-82db-5c2fb0a8e132
X-Locale: en-US
Content-Type: application/json
Content-Length: 1098
Expect: 100-continue

{
  "TargetOffer": {
    "Id": "796B6B5F-613C-4E24-A17C-EBA730D49C02",
    "Name": "Office 365 Enterprise E3",
    "Description": "The best plan for businesses that need full productivity, communication and collaboration tools with the familiar Office suite, including Office Online.",
    "MinimumQuantity": 1,
    "MaximumQuantity": 10000000,
    "Rank": 61,
    "Uri": "/3c95518e-8c37-41e3-9627-0ca339200f53/Offers/796B6B5F-613C-4E24-A17C-EBA730D49C02",
    "Locale": "en-us",
    "Country": "US",
    "Category": {
      "Id": "Enterprise_Key",
      "Name": "Enterprise",
      "Rank": 100
    }
  }
}
```

```

        "RdrRk": 20,
        "Locale": "en-us",
        "Country": "US",
        "Attributes": {
            "ObjectType": "OfferCategory"
        },
        "PrerequisiteOffers": [],
        "IsAddOn": false,
        "IsAvailableForPurchase": true,
        "Billing": "license",
        "IsAutoRenewable": true,
        "Product": {
            "Id": "6fd2c87f-b296-42f0-b197-1e91e994b900",
            "Name": "Office 365 Enterprise E3",
            "Unit": "Licenses"
        },
        "UnitType": "Licenses",
        "Links": {
            "LearnMore": {
                "Uri": "http://g.microsoftonline.com/0BXPS00en/1015",
                "Method": "GET",
                "Headers": []
            }
        }
    },
    "Attributes": {
        "ObjectType": "Offer"
    }
},
"UpgradeType": 1,
"IsEligible": true,
"Quantity": 1,
"UpgradeErrors": [],
"Attributes": {
    "ObjectType": "Upgrade"
}
}
}

```

## REST response

If successful, this method returns an **Upgrade** result resource in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

### Response example

```

HTTP/1.1 200 OK
Content-Length: 138
Content-Type: application/json
MS-CorrelationId: 81b08ffe-4cf8-49cd-82db-5c2fb0a8e132
MS-RequestId: 18752a69-1aa1-4ef7-8f9d-eb3681b2d70a
Date: Fri, 29 Jan 2016 20:42:26 GMT

{
    "totalCount": 1,
    "items": [
        {
            "targetOffer": {
                "id": "91FD106F-4B2C-4938-95AC-F54F74E9A239",
                "name": "Office 365 Enterprise E1",
                "description": "For businesses that need communication and collaboration tools and the ability to read and do lightweight editing of documents with Office Online.",
                "minimumQuantity": 1,
                "maximumQuantity": 10000000
            }
        }
    ]
}

```

```

    "maximumQuantity": 100000000,
    "rank": 48,
    "uri": "/3c95518e-8c37-41e3-9627-0ca339200f53/Offers/91FD106F-4B2C-4938-95AC-F54F74E9A239",
    "locale": "en-us",
    "country": "US",
    "category": {
        "id": "Enterprise_Key",
        "name": "Enterprise",
        "rank": 20,
        "locale": "en-us",
        "country": "US",
        "attributes": {
            "objectType": "OfferCategory"
        }
    },
    "prerequisiteOffers": [],
    "isAddOn", false,
    "isAvailableForPurchase": true,
    "billing": "license",
    "isAutoRenewable": true,
    "isInternal": false,
    "conversionTargetOffers": [],
    "partnerQualifications": ["none"],
    "product": {
        "id": "18181a46-0d4e-45cd-891e-60aabd171b4e",
        "name": "Office 365 Enterprise E1",
        "unit": "Licenses"
    },
    "unitType": "Licenses",
    "links": {
        "learnMore": {
            "uri": "http://g.microsoftonline.com/0BXPS00en/1013",
            "method": "GET",
            "headers": []
        },
        "self": {
            "uri": "/offers/91FD106F-4B2C-4938-95AC-F54F74E9A239?country=US",
            "method": "GET",
            "headers": []
        }
    },
    "attributes": {
        "objectType": "Offer"
    }
},
"upgradeType": "upgrade_only",
"isEligible": false,
"quantity": 1,
"upgradeErrors": [
    {
        "code": 2,
        "description": "Subscription cannot be upgraded because the source subscription state is not active. Additional Details contains the current source subscription state.",
        "attributes": {
            "objectType": "UpgradeError"
        }
    }
],
"attributes": {
    "objectType": "Upgrade"
}
},
"attributes": {
    "objectType": "Collection"
}
}

HTTP/1.1 200 OK
Content-Length: 448
Content-Type: application/json
MS-CorrelationId: 81b08ffe-4cf8-49cd-82db-5c2fb0a8e132

```

MS-RequestId: 750fd5ea-904b-4c3e-b476-60d0feacab0d

MS-CV: RnK86LBbDkWP/w2R.0

MS-ServerId: 102031201

Date: Fri, 29 Jan 2016 20:44:21 GMT

```
{  
    "sourceSubscriptionId": "896a2862-67e2-4f3d-bb3f-c50c42b5fad8",  
    "targetSubscriptionId": "2add8a55-454a-4ae5-a4c9-5107dc6e9768",  
    "upgradeType": 1,  
    "upgradeErrors": [],  
    "licenseErrors": [],  
    "attributes": {  
        "objectType": "UpgradeResult"  
    }  
}
```

# Update a cart

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## Applies To

- Partner Center

How to update an order for a customer in a cart.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A Cart ID for an existing cart.

## C#

To update an order for a customer, get the cart using the **Get()** method by passing the customer and cart ID's using the **ById()** function. Make the necessary changes to the cart. Now call the **Put** method by using customer and cart ID's using the **ById()** method.

Finally, call the **Put()** or **PutAsync()** method to create the order.

```
IAggregatePartner partnerOperations;
string customerId;
string cartId;

var cart = partnerOperations.Customers.ById(customerId).Cart.ById(cartId).Get();

cart.LineItems.ToArray()[0].Quantity++;

var updatedCart = partnerOperations.Customers.ById(customerId).Cart.ById(cartId).Put(cart);
```

## REST request

### Request syntax

METHOD	REQUEST URI
PUT	<code>/baseURL/v1/customers/{customer-id}/carts/{cart-id}</code> HTTP/1.1

### URI parameters

Use the following path parameters to identify the customer, and specify the cart to be updated.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-id	string	Yes	A GUID formatted customer-id that identifies the customer.
cart-id	string	Yes	A GUID formatted cart-id that identifies the cart.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

This table describes the [Cart](#) properties in the request body.

PROPERTY	TYPE	REQUIRED	DESCRIPTION
id	string	No	A cart identifier that is supplied upon successful creation of the cart.
creationTimeStamp	DateTime	No	The date the cart was created, in date-time format. Applied upon successful creation of the cart.
lastModifiedTimeStamp	DateTime	No	The date the cart was last updated, in date-time format. Applied upon successful creation of the cart.
expirationTimeStamp	DateTime	No	The date the cart will expire, in date-time format. Applied upon successful creation of cart.
lastModifiedUser	string	No	The user who last updated the cart. Applied upon successful creation of cart.
lineitems	Array of objects	Yes	An Array of <a href="#">CartLineItem</a> resources.

This table describes the [CartLineItem](#) properties in the request body.

PROPERTY	TYPE	REQUIRED	DESCRIPTION
id	string	No	A Unique identifier for a cart line item. Applied upon successful creation of cart.
catalogId	string	Yes	The catalog item identifier.

PROPERTY	TYPE	REQUIRED	DESCRIPTION
friendlyName	string	No	Optional. The friendly name for the item defined by the partner to help disambiguate.
quantity	int	Yes	The number of licenses or instances.
currencyCode	string	No	The currency code.
billingCycle	Object	Yes	The type of billing cycle set for the current period.
participants	List of Object String pairs	No	A collection of participants on the purchase.
provisioningContext	Dictionary<string, string>	No	A context used for provisioning of offer.
orderGroup	string	No	A group to indicate which items can be placed together.
error	Object	No	Applied after cart is created in case of an error.

### Request example

```

PUT /v1/customers/d6bf25b7-e0a8-4f2d-a31b-97b55fcf774d/carts/65faf57b-0205-47ee-92b3-08dcf233ea73/ HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 4fa6dad6-a89f-4875-8247-8294a10ae1cf
MS-CorrelationId: 0e93c70c-977a-4a88-9580-7cf084c73286
X-Locale: en-US
MS-PartnerCenter-Client: Partner Center .NET SDK
Content-Type: application/json
Host: api.partnercenter.microsoft.com
Content-Length: 496
Expect: 100-continue

{
  {
    "Id": "b4c8fdea-cbe4-4d17-9576-13fcacbf9605",
    "CreationTimestamp": "2018-03-15T17:15:02.3840528Z",
    "LastModifiedTimestamp": "2018-03-15T17:15:02.3840528Z",
    "ExpirationTimestamp": "0001-01-01T00:00:00",
    "LastModifiedUser": "2713ccd7-ea3b-470a-9cfb-451d5d0482cc",
    "LineItems": [
      {
        "Id": 0,
        "CatalogItemId": "DG7GMGF0DWTL:0001:DG7GMGF0DSJB",
        "FriendlyName": "A_sample_Azure_RI",
        "Quantity": 2,
        "BillingCycle": "one_time",
        "ProvisioningContext": {
          "SubscriptionId": "3D5ECED6-1151-44C7-AEE6-70A4BB725666",
          "Scope": "shared",
          "Duration": "1Year"
        }
      }
    ],
  }
}

```

## REST response

If successful, this method returns the populated [Cart](#) resource in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

### Response example

```
HTTP/1.1 201 Created
Content-Length: 764
Content-Type: application/json; charset=utf-8
MS-CorrelationId: 0e93c70c-977a-4a88-9580-7cf084c73286
MS-RequestId: 4fa6dad6-a89f-4875-8247-8294a10ae1cf
X-Locale: en-US,en-US
MS-CV: sF/wRa2ih0CzbABc.0
MS-ServerId: 000001
Date: Thu, 15 Mar 2018 17:15:01 GMT
{
    "id": "b4c8fdea-cbe4-4d17-9576-13fcacbf9605",
    "creationTimestamp": "2018-03-15T17:15:02.3840528Z",
    "lastModifiedTimestamp": "2018-03-15T17:15:02.3840528Z",
    "lastModifiedUser": "2713ccd7-ea3b-470a-9cfb-451d5d0482cc",
    "lineItems": [
        {
            "id": 0,
            "catalogItemId": "DG7GMGF0DWTL:0001:DG7GMGF0DSJB",
            "friendlyName": "A_sample_Azure_RI",
            "quantity": 2,
            "currencyCode": "USD",
            "billingCycle": "one_time",
            "ProvisioningContext": {
                "subscriptionId": "3D5ECED6-1151-44C7-AEE6-70A4BB725666",
                "scope": "shared",
                "duration": "1Year"
            }
            "orderGroup": "0"
        }
    ],
    "links": {
        "self": {
            "uri": "/v1/customers/d6bf25b7-e0a8-4f2d-a31b-97b55fcfc774d/carts/b4c8fdea-cbe4-4d17-9576-13fcacbf9605/",
            "method": "GET",
            "headers": []
        }
    },
    "attributes": {
        "objectType": "Cart"
    }
}
```

# Update autorenew for a commercial marketplace subscription

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## Applies To

- Partner Center

Update the autorenew property for a commercial marketplace [Subscription](#) resource that matches the customer and subscription ID.

In the Partner Center dashboard, this operation is performed by first [selecting a customer](#). Then, select the subscription that you wish to update. Finally, toggle the **Auto-renew** option, then select **Submit**.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A subscription ID.

## C#

To update a customer's subscription, first [Get the subscription](#), then set the subscription's **autoRenewEnabled** property. Once the change is made, use your **IAggregatePartner.Customers** collection and call the **ById()** method. Then call the **Subscriptions** property, followed by the **ById()** method. Then, finish by calling the **Patch()** method.

```
// IAggregatePartner partnerOperations;
// var selectedCustomerId as string;
// Subscription selectedSubscription;

// turn off auto renew.
selectedSubscription.AutoRenewEnabled = false;
var updatedSubscription =
    partnerOperations.Customers.ById(selectedCustomerId).Subscriptions.ById(selectedSubscription.Id).Patch(selecte
dSubscription);
```

Sample: [Console test app](#). Project: PartnerSDK.FeatureSample Class: UpdateSubscription.cs

## REST request

### Request syntax

METHOD	REQUEST URI
PATCH	<code>/baseURL/v1/customers/{customer-tenant-id}/subscriptions/{id-for-subscription}</code> HTTP/1.1

## URI parameter

This table lists the required query parameter to suspend the subscription.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	GUID	Y	A GUID corresponding to the customer.
id-for-subscription	GUID	Y	A GUID corresponding to the subscription.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

A full commercial marketplace **Subscription** resource is required in the request body. Ensure that the **AutoRenewEnabled** property has been updated.

## Request example

```

PATCH https://api.partnercenter.microsoft.com/v1/customers/<customer-tenant-id>/subscriptions/<id-for-
subscription> HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: ca7c39f7-1a80-43bc-90d8-ee7d1cad3831
MS-CorrelationId: ec8f62e5-1d92-47e9-8d5d-1924af105f2c
If-Match: <etag>
Content-Type: application/json
Content-Length: 1029
Expect: 100-continue
Connection: Keep-Alive

{
    "id": "6e7aa601-629e-461b-8933-0898c3cc3c7c",
    "offerId": "DZH318Z0BXWC:0001:DZH318Z0BMJX",
    "offerName": "offer Name",
    "friendlyName": "friendly Name",
    "quantity": 1,
    "unitType": "License(s)",
    "hasPurchasableAddons": false,
    "creationDate": "2019-01-04T01:00:12.6647304Z",
    "effectiveStartDate": "2019-01-09T00:21:45.9263727+00:00",
    "commitmentEndDate": "2019-02-08T00:21:45.9263727+00:00",
    "status": "active",
    "autoRenewEnabled": false,
    "isTrial": false,
    "billingType": "license",
    "billingCycle": "monthly",
    "termDuration": "P1M",
    "refundOptions": [
        {
            "type": "Full",
            "expiresAt": "2019-01-10T00:21:45.9263727+00:00"
        }
    ],
    "isMicrosoftProduct": false,
    "partnerId": "",
    "contractType": "subscription",
    "publisherName": "publisher Name",
    "orderId": "ImxjLNL4_f0c-2KoyOxGTZcrlIquzls11",
    "attributes": {"objectType": "Subscription"}
}

```

## REST response

If successful, this method returns updated [Subscription](#) resource properties in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

### Response example

HTTP/1.1 200 OK  
Content-Length: 1322  
Content-Type: application/json; charset=utf-8  
MS-RequestId: ca7c39f7-1a80-43bc-90d8-ee7d1cad3831  
MS-CorrelationId: ec8f62e5-1d92-47e9-8d5d-1924af105f2c  
X-Locale: en-US

```
{  
    "id": "6e7aa601-629e-461b-8933-0898c3cc3c7c",  
    "offerId": "DZH318Z0BXWC:0001:DZH318Z0BMJX",  
    "offerName": "offer Name",  
    "friendlyName": "friendly Name",  
    "quantity": 1,  
    "unitType": "License(s)",  
    "hasPurchasableAddons": false,  
    "creationDate": "2019-01-04T01:00:12.6647304Z",  
    "effectiveStartDate": "2019-01-09T00:21:45.9263727+00:00",  
    "commitmentEndDate": "2019-02-08T00:21:45.9263727+00:00",  
    "status": "active",  
    "autoRenewEnabled": false,  
    "isTrial": false,  
    "billingType": "license",  
    "billingCycle": "monthly",  
    "termDuration": "P1M",  
    "refundOptions": [  
        {  
            "type": "Full",  
            "expiresAt": "2019-01-10T00:21:45.9263727+00:00"  
        }  
    ],  
    "isMicrosoftProduct": false,  
    "partnerId": "",  
    "contractType": "subscription",  
    "links": {  
        "product": {  
            "uri": "/products/DZH318Z0BXWC?country=US",  
            "method": "GET",  
            "headers": []  
        },  
        "sku": {  
            "uri": "/products/DZH318Z0BXWC/skus/0001?country=US",  
            "method": "GET",  
            "headers": []  
        },  
        "availability": {  
            "uri": "/products/DZH318Z0BXWC/skus/0001/availabilities/DZH318Z0BMJX?country=US",  
            "method": "GET",  
            "headers": []  
        },  
        "self": {  
            "uri": "/customers/5921f00a-32c0-4457-aaa1-e8018c650895/subscriptions/6e7aa601-629e-461b-8933-0898c3cc3c7c",  
            "method": "GET",  
            "headers": []  
        }  
    },  
    "publisherName": "publishe rName",  
    "orderId": "ImxjLNL4_f0c-2KoyOxGTZcrIquzls11",  
    "attributes": {  
        "etag": "",  
        "objectType": "Subscription"  
    }  
}
```

# Provide support

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## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

This section describes the ways that Cloud Solution Provider partners can use Partner Center to programmatically manage support and service requests.

## Admin services for a customer

- [Get the managed services for a customer by ID](#)

## Manage service requests

- [Get service request support topics](#)
- [Get all service requests for a customer](#)
- [Get service request details by ID](#)
- [Update a service request](#)

For more information, see [Scenarios](#), specifically the [Background](#) section.

# Create a service request

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## Applies to:

- Partner Center
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

How to create a partner center service request.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A support topic ID. If you do not have a support topic ID, see [Get service request support topics](#).

## C#

To create a service request:

1. Create and populate a **ServiceRequest** object with the title, description, severity, and support topic id. To add additional information, the **ServiceRequest** object supports an optional collection of **Notes**, but does not support links to files for uploading.
2. Once the object is created, call the **IAggregatePartner.ServiceRequests.Create** method, passing it the newly created ServiceRequest object and a string containing the locale of the organization creating the service request (the agent locale).

### C# example

```
// IAggregatePartner partnerOperations;
// string supportTopicId;

ServiceRequest serviceRequestToCreate = new ServiceRequest()
{
    Title = "TrialSR",
    Description = "Ignore this SR",
    Severity = ServiceRequestSeverity.Critical,
    SupportTopicId = supportTopicId
};

ServiceRequest serviceRequest = partnerOperations.ServiceRequests.Create(serviceRequestToCreate, "en-US");
```

Sample: [Console test app](#). Project: Partner Center SDK Samples Class: CreatePartnerServiceRequest.cs

## REST request

### Request syntax

METHOD	REQUEST URI
POST	<a href="#"><i>/baseURL</i></a> /v1/servicerequests/{agent-locale} HTTP/1.1

METHOD	REQUEST URI
--------	-------------

#### URI parameter

Use the following URI parameter to identify the agent locale.

NAME	TYPE	REQUIRED	DESCRIPTION
agent-locale	string	Y	The locale of the organization creating the service request.

#### Request headers

For more information, see [Partner Center REST headers](#).

#### Request body

This table describes the required and optional properties in the request body.

NAME	TYPE	REQUIRED	DESCRIPTION
Title	string	Y	The service request title.
Description	string	Y	The description.
Severity	string	Y	The severity: "unknown", "critical", "moderate", or "minimal".
SupportTopicId	string	Y	The id of the support topic.
SupportTopicName	string	N	The name of the support topic.
Id	string	N	The id of the service request.
Status	string	N	The status of the service request: "none", "open", "closed", or "attention_needed".
Organization	<a href="#">ServiceRequestOrganization</a>	N	Organization for which the service request is created.
PrimaryContact	<a href="#">ServiceRequestContact</a>	N	Primary Contact on the service request.
LastUpdatedBy	<a href="#">ServiceRequestContact</a>	N	"Last Updated By" contact for changes to the service request.
ProductName	string	N	The name of the product that corresponds to the service request.

NAME	TYPE	REQUIRED	DESCRIPTION
ProductId	string	N	The id of the product.
CreatedDate	date	N	The date of the service request's creation.
LastModifiedDate	date	N	The date that the service request was last modified.
LastClosedDate	date	N	The date that the service request was last closed.
FileLinks	array of <a href="#">FileInfo</a> resources	N	The collection of File Links that pertain to the service request.
NewNote	<a href="#">ServiceRequestNote</a>	N	A note can be added to an existing service request.
Notes	array of <a href="#">ServiceRequestNotes</a>	N	A collection of notes added to the service request.
CountryCode	string	N	The country corresponding to the service request.
Attributes	object	N	Contains "ObjectType": "ServiceRequest".

This table describes the required properties in the request body.

#### Request example

```
POST https://api.partnercenter.microsoft.com/v1/servicerequests/en-US HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 55f86bfb-d3bb-4fe4-9f01-2fdaef11a81f
MS-CorrelationId: ae43859b-591d-47ea-9fd1-028b4c799118
X-Locale: en-US
Content-Type: application/json
Host: api.partnercenter.microsoft.com
Content-Length: 474
Expect: 100-continue

{
    "Id": null,
    "Title": "TrialsSR",
    "Description": "Ignore this SR",
    "Severity": "critical",
    "SupportTopicId": "32444671",
    "SupportTopicName": null,
    "Status": "none",
    "Organization": null,
    "PrimaryContact": null,
    "LastUpdatedBy": null,
    "ProductName": null,
    "ProductId": null,
    "CreatedDate": "0001-01-01T00:00:00",
    "LastModifiedDate": "0001-01-01T00:00:00",
    "LastClosedDate": "0001-01-01T00:00:00",
    "NewNote": null,
    "Notes": null,
    "CountryCode": null,
    "FileLinks": null,
    "Attributes": {
        "ObjectType": "ServiceRequest"
    }
}
```

## REST response

If successful, this method returns the **Service Request** resource properties in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

### Response example

HTTP/1.1 201 Created  
Content-Length: 721  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: ae43859b-591d-47ea-9fd1-028b4c799118  
MS-RequestId: 55f86fbf-d3bb-4fe4-9f01-2fdaef11a81f  
MS-CV: vB9EuWs/ukaxQmuV.0  
MS-ServerId: 101112616  
Date: Thu, 22 Dec 2016 20:31:14 GMT

```
{  
    "title": "TrialsSR",  
    "description": "Ignore this SR",  
    "severity": "critical",  
    "supportTopicId": "32444671",  
    "id": "616122292874576",  
    "status": "none",  
    "organization": {  
        "id": "3b33e682-00c3-41ee-9dd2-a548adf56438",  
        "name": "TEST_TEST_BugBash1",  
        "phoneNumber": "2398391056"  
    },  
    "primaryContact": {  
        "organization": {  
            "id": "3b33e682-00c3-41ee-9dd2-a548adf56438",  
            "name": "TEST_TEST_BugBash1",  
            "phoneNumber": "2398391056"  
        },  
        "contactId": "bb4ebcf5-d84c-4b35-8469-f4cfa4ac909e",  
        "lastName": "Account",  
        "email": "admin@testtestbugbash1.onmicrosoft.com",  
        "phoneNumber": "2066017143"  
    },  
    "createdDate": "0001-01-01T00:00:00",  
    "lastModifiedDate": "0001-01-01T00:00:00",  
    "lastClosedDate": "0001-01-01T00:00:00",  
    "countryCode": "US",  
    "attributes": {  
        "objectType": "ServiceRequest"  
    }  
}
```

# Get a subscription's support contact

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

How to get a subscription's support contact.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A subscription identifier.

## C#

To get a subscription's support contact, start by using the [IAggregatePartner.Customers.ById](#) method with the customer ID to identify the customer. Then, get an interface to subscription operations by calling the [SubscriptionsById](#) method with the subscription ID. Next, use the [SupportContact](#) property to obtain an interface to support contact operations, and then call the [Get](#) or [GetAsync](#) method to retrieve the [SupportContact](#) object.

```
// IAggregatePartner partnerOperations;
// string customerId;
// string subscriptionId;

// Retrieve subscription's support contact.
var supportContact =
    partnerOperations.Customers.ById(customerId).SubscriptionsById(subscriptionId).SupportContact.Get();
```

Sample: [Console test app](#). Project: Partner Center SDK Samples Class: GetSubscriptionSupportContact.cs

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/customers/{customer-id}/subscriptions/{subscription-id}/supportcontact</code> HTTP/1.1

### URI parameter

Use the following path parameters to identify the customer and subscription.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-id	string	Yes	A GUID formatted string that identifies the customer.
subscription-id	string	Yes	A GUID formatted string that identifies the trial subscription.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/0c39d6d5-c70d-4c55-bc02-f620844f3fd1/subscriptions/C8D8FBAB-6A62-44DC-BE50-B7C74E43A296/supportcontact HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: d052776c-e8fd-4803-b6a3-1659055ac3c4
MS-CorrelationId: a6c552a8-1922-4d0c-bb94-335a33334d14
X-Locale: en-US
Host: api.partnercenter.microsoft.com
```

## REST response

If successful, the response body contains the [SupportContact](#) resource.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center error codes](#).

### Response example

HTTP/1.1 200 OK  
Content-Length: 328  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: a6c552a8-1922-4d0c-bb94-335a33334d14  
MS-RequestId: d052776c-e8fd-4803-b6a3-1659055ac3c4  
MS-CV: bLbUhqy0+ESOX1v4.0  
MS-ServerId: 201022015  
Date: Tue, 20 Jun 2017 19:30:19 GMT

```
{  
    "supportTenantId": "3B33E682-00C3-41EE-9DD2-A548ADF56438",  
    "supportMpnId": "4391507",  
    "name": "Trey Research",  
    "links": {  
        "self": {  
            "uri": "/customers/0C39D6D5-C70D-4C55-BC02-F620844F3FD1/subscriptions/C8D8FBAB-6A62-44DC-BE50-  
B7C74E43A296/supportcontact",  
            "method": "Get",  
            "headers": []  
        }  
    },  
    "attributes": {  
        "objectType": "SupportContact"  
    }  
}
```

# Get all service requests for a customer

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## Applies To

- Partner Center
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Gets all of a customer's service requests.

In the Partner Center dashboard, this operation can be performed by first [selecting a customer](#). Then, select **Service management** on the left sidebar. The customer's service requests are displayed under **Support tickets**.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## C#

To display a list of all of a customer's service requests, use your **IAggregatePartner.Customers** collection and call the [ById\(\)](#) method. Then call the **ServiceRequests** property, followed by the [Get\(\)](#) or [GetAsync\(\)](#) methods.

```
// IAggregatePartner partnerOperations;
// string customerId as string;

ResourceCollection<ServiceRequest> serviceRequests =
partnerOperations.Customers.ById(customerId).ServiceRequests.Get();
```

Sample: [Console test app](#). Project: PartnerCenterSDK.FeaturesSamples Class: CustomerManagedServices.cs

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/customers/{customer-tenant-id}/servicerequests</code> HTTP/1.1

### URI parameter

Use the following query parameter to get all service requests for the customer.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	guid	Y	A GUID corresponding to the customer..

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/<customer-tenant-id>/servicerequests HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 53d5d48c-9693-46b6-8071-2eed07797d6c
MS-CorrelationId: 998e31a1-3f17-4471-a9ee-7678dd72e033
```

## REST response

If successful, this method returns a collection of **Service Request** resources in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 742
Content-Type: application/json
MS-CorrelationId: 998e31a1-3f17-4471-a9ee-7678dd72e033
MS-RequestId: 53d5d48c-9693-46b6-8071-2eed07797d6c
Date: Tue, 24 Nov 2015 07:19:21 GMT

{
  "totalCount": 1,
  "items": [
    {
      "title": "Test",
      "severity": 0,
      "id": "615112491169010",
      "status": 1,
      "primaryContact": {
        "lastName": "LastName",
        "firstName": "FirstName"
      },
      "createdDate": "2015-11-24T01:07:00.863",
      "lastModifiedDate": "2015-11-24T01:17:10.61",
      "lastClosedDate": "0001-01-01T00:00:00",
      "attributes": {
        "objectType": "ServiceRequest"
      }
    }
  ],
  "attributes": {
    "objectType": "Collection"
  }
}
```

# Get service request details by ID

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## Applies To

- Partner Center
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

How to retrieve the details of an existing customer service request using the service request identifier.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A service request ID.

## C#

To retrieve the details of an existing customer service request, call the [IServiceRequestCollection.GetById](#) method, and pass in a [ServiceRequest.Id](#) to identify and return an interface to the specific [ServiceRequest](#) object.

```
// IAggregatePartner partnerOperations;
// ServiceRequest existingServiceRequest as ServiceRequest;

ServiceRequest serviceRequestDetails =
    partnerOperations.ServiceRequests.GetById(existingServiceRequest.Id).Get();

Console.WriteLine(string.Format("The primary contact for the service request {0} is {1} {2}.",
    serviceRequestDetails.Title,
    serviceRequestDetails.PrimaryContact.FirstName,
    serviceRequestDetails.PrimaryContact.LastName,
));
```

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<a href="#">{baseUrl}/v1/servicerequests/{servicerequest-id}</a> HTTP/1.1

### URI parameter

Use the following URI parameter to get the specified service request.

NAME	TYPE	REQUIRED	DESCRIPTION
servicerequest-id	guid	Y	A GUID that identifies the service request.

### Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/servicerequests/616122292874576 HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: f9a030bd-e492-4c1a-9c70-021f18234981
MS-CorrelationId: fd969070-4e5f-4c6b-a3c6-1941283b39ae
X-Locale: en-US
Content-Type: application/json
Host: api.partnercenter.microsoft.com
Content-Length: 0
```

## REST response

If successful, this method returns a **Service Request** resource in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST Error Codes](#).

## Response example

HTTP/1.1 200 OK  
Content-Length: 566  
Content-Type: application/json; charset=utf-8  
MS-CorrelationId: fd969070-4e5f-4c6b-a3c6-1941283b39ae  
MS-RequestId: f9a030bd-e492-4c1a-9c70-021f18234981  
MS-CV: rjLONPum/Uq94UQA.0  
MS-ServerId: 030011719  
Date: Mon, 09 Jan 2017 23:31:15 GMT

```
{  
    "title": "TrialsSR",  
    "description": "Ignore this SR",  
    "severity": "critical",  
    "supportTopicId": "32444671",  
    "supportTopicName": "Cannot manage my profile",  
    "id": "616122292874576",  
    "status": "open",  
    "organization": {  
        "id": "3b33e682-00c3-41ee-9dd2-a548adf56438",  
        "name": "TEST_TEST_BugBash1"  
    },  
    "productId": "15960",  
    "createdDate": "2016-12-22T20:31:17.24Z",  
    "lastModifiedDate": "2017-01-09T23:31:15.373Z",  
    "lastClosedDate": "0001-01-01T00:00:00",  
    "notes": [  
        {"createdByName": "Account",  
         "createdDate": "2017-01-09T23:31:15.373",  
         "text": "Sample Note"}  
    ],  
    "attributes": {  
        "objectType": "ServiceRequest"  
    }  
}
```

# Get service request support topics

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## Applies To

- Partner Center
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Gets a collection of items representing valid topics for service requests.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.

## C#

To get a collection of service request topics, use your **IPartnerOperations** collection to retrieve the **ServiceRequests** property of the resulting object, followed by the **SupportTopics** property and the **Get()** or **GetAsync()** methods.

```
// IPartner partnerOperations;  
  
ResourceCollection<SupportTopic> supportTopicsCollection =  
partnerOperations.ServiceRequests.SupportTopics.Get();
```

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<a href="#"><i>{baseUrl}</i>/v1/servicerequests/supporttopics</a> HTTP/1.1

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

None.

### Request example

```
GET https://api.partnercenter.microsoft.com/v1/servicerequests/supporttopics HTTP/1.1  
Authorization: Bearer <token>  
Accept: application/json  
MS-RequestId: 4c1e8b6c-d136-4931-9df9-d85ec08ccffe  
MS-CorrelationId: f447b215-f9bc-48da-a05a-3b5322d86a9c  
X-Locale: en-US
```

# REST response

If successful, this method returns a collection of the valid topics for a support request.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 4982
Content-Type: application/json
MS-CorrelationId: f447b215-f9bc-48da-a05a-3b5322d86a9c
MS-RequestId: 4c1e8b6c-d136-4931-9df9-d85ec08ccffe
Date: Fri, 29 Jan 2016 22:31:36 GMT

{
    "totalCount":14,
    "items":>[
        {
            "name":"Partner Center Issues",
            "description":"Office 365 questions from the CSP (Cloud Solution Provider) partners using Partner Center",
            "id":32444667,
            "attributes":{
                "objectType":"SupportTopic"
            }
        },
        {
            "name":"Cannot manage my profile",
            "description":"Issues that are related to errors or problems with managing a profile",
            "id":32444671,
            "attributes":{
                "objectType":"SupportTopic"
            }
        },
        ],
        "attributes":{
            "objectType":"Collection"
        }
    }
```

# Get the managed services for a customer by ID

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## Applies To

- Partner Center
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Gets the managed services for a customer. In other words, get links to all of the customer's subscriptions for which you have delegated admin privileges. You can use these links to provide support and file service requests with Microsoft.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select CSP from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).

## C#

To display a list of all the managed services for a customer, use your `IAggregatePartner.Customers` collection and call the `ById()` method. Then call the `ManagedServices` property, followed by the `Get()` or `GetAsync()` methods.

```
// IAggregatePartner partnerOperations;
// var selectedCustomerID as Customer;

ResourceCollection<ManagedService> managedServices =
    partnerOperations.Customers.ById(selectedCustomerId).ManagedServices.Get();
```

Sample: [Console test app](#). Project: PartnerCenterSDK.FeaturesSamples Class: CustomerManagedServices.cs

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/customers/{customer-tenant-id}/managedservices HTTP/1.1</code>

### URI parameter

Use the following query parameter to get the customer's managed services.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	guid	Y	A GUID corresponding to the customer.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None.

## Request example

```
GET https://api.partnercenter.microsoft.com/v1/customers/<customer-tenant-id>/managedservices HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 4ff57220-f17b-4d8f-8e09-78334c57ba00
MS-CorrelationId: 03d6064a-f048-4aee-8892-ed46dc5c8bee
```

## REST response

If successful, this method returns a collection of **Managed Service** objects in the response body.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

## Response example

HTTP/1.1 200 OK  
Content-Length: 10588  
Content-Type: application/json  
MS-CorrelationId: 03d6064a-f048-4aee-8892-ed46dc5c8bee  
MS-RequestId: 4ff57220-f17b-4d8f-8e09-78334c57ba00  
Date: Mon, 23 Nov 2015 18:02:12 GMT

```
{  
    "totalCount": 2,  
    "items": [  
        {  
            "id": "Exchange",  
            "name": "Exchange",  
            "groupName": "Office",  
            "links": {  
                "adminService": {  
                    "uri": "https://portal.office.com/Partner/BeginClientSession.aspx?CTID=<ctid>&CSDEST=Exchange&InitialDomain=<domain>&PrimaryDomain=<domain>",  
                    "method": "GET",  
                    "headers": []  
                },  
                "serviceHealth": {  
                    "uri": "https://portal.office.com/Partner/BeginClientSession.aspx?CTID=<ctid>&CSDEST=ServiceStatus",  
                    "method": "GET",  
                    "headers": []  
                },  
                "serviceTicket": {  
                    "uri": "https://portal.office.com/Partner/BeginClientSession.aspx?CTID=<ctid>&CSDEST=Support",  
                    "method": "GET",  
                    "headers": []  
                }  
            },  
            "attributes": {  
                "objectType": "ManagedService"  
            }  
        },  
        {  
            "id": "MicrosoftCommunicationsOnline",  
            "name": "SkypeforBusiness",  
            "groupName": "Office",  
            "links": {  
                "adminService": {  
                    "uri": "https://portal.office.com/Partner/BeginClientSession.aspx?CTID=<ctid>&CSDEST=MicrosoftCommunicationsOnline",  
                    "method": "GET",  
                    "headers": []  
                },  
                "serviceHealth": {  
                    "uri": "https://portal.office.com/Partner/BeginClientSession.aspx?CTID=<ctid>&CSDEST=ServiceStatus",  
                    "method": "GET",  
                    "headers": []  
                },  
                "serviceTicket": {  
                    "uri": "https://portal.office.com/Partner/BeginClientSession.aspx?CTID=<ctid>&CSDEST=Support",  
                    "method": "GET",  
                    "headers": []  
                }  
            },  
            "attributes": {  
                "objectType": "ManagedService"  
            }  
        }  
    ]  
}
```

# Update a service request

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## Applies To

- Partner Center
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

How to update an existing customer service request that a Cloud Solution Provider has filed with Microsoft on the customer's behalf.

In the Partner Center dashboard, this operation can be performed by first [selecting a customer](#). Then, select **Service management** on the left sidebar. Under the **Support requests** header, select the service request in question. To finish, make the desired changes to the service request then select **Submit**.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A service request ID.

## C#

To update a customer's service request, call the **IServiceRequestCollection.GetById** method with the service request id to identify and return the service request interface. Then call the **IServiceRequest.Patch** or **PatchAsync** method to update the service request. To provide the updated values, create a new, empty **ServiceRequest** object and set only the property values that you want to change. Then pass that object in the call to the Patch or PatchAsync method.

```
// IAggregatePartner partnerOperations;
// ServiceRequest existingServiceRequest;

ServiceRequest updatedServiceRequest =
    partnerOperations.ServiceRequests.GetById(existingServiceRequest.Id).Patch(new ServiceRequest
{
    NewNote = note
});
```

Sample: [Console test app](#). Project: Partner Center SDK Samples Class: UpdatePartnerServiceRequest.cs

## REST request

### Request syntax

METHOD	REQUEST URI
PATCH	<a href="#"><i>{baseUrl}</i></a> /v1/servicerequests/{servicerequest-id} HTTP/1.1

### URI parameter

Use the following URI parameter to update the service request.

NAME	TYPE	REQUIRED	DESCRIPTION
servicerequest-id	guid	Y	A GUID that identifies the service request.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

The request body should contain a [ServiceRequest](#) resource. The only required values are those to be updated.

## Request example

```
PATCH https://api.partnercenter.microsoft.com/v1/servicerequests/616122292874576 HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: f9a030bd-e492-4c1a-9c70-021f18234981
MS-CorrelationId: fd969070-4e5f-4c6b-a3c6-1941283b39ae
X-Locale: en-US
Content-Type: application/json
Host: api.partnercenter.microsoft.com
Content-Length: 508
Expect: 100-continue

{
  "Id": null,
  "Title": null,
  "Description": null,
  "Severity": "unknown",
  "SupportTopicId": null,
  "SupportTopicName": null,
  "Status": "none",
  "Organization": null,
  "PrimaryContact": null,
  "LastUpdatedBy": null,
  "ProductName": null,
  "ProductId": null,
  "CreatedDate": "0001-01-01T00:00:00",
  "LastModifiedDate": "0001-01-01T00:00:00",
  "LastClosedDate": "0001-01-01T00:00:00",
  "NewNote": {
    "CreatedBy": null,
    "CreatedDate": null,
    "Text": "Sample Note"
  },
  "Notes": null,
  "CountryCode": null,
  "FileLinks": null,
  "Attributes": {
    "ObjectType": "ServiceRequest"
  }
}
```

## REST response

If successful, this method returns a [Service Request](#) resource with updated properties in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST Error Codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 566
Content-Type: application/json; charset=utf-8
MS-CorrelationId: fd969070-4e5f-4c6b-a3c6-1941283b39ae
MS-RequestId: f9a030bd-e492-4c1a-9c70-021f18234981
MS-CV: rjLONPum/Uq94UQA.0
MS-ServerId: 030011719
Date: Mon, 09 Jan 2017 23:31:15 GMT
```

```
{
    "title": "TrialSR",
    "description": "Ignore this SR",
    "severity": "critical",
    "supportTopicId": "32444671",
    "supportTopicName": "Cannot manage my profile",
    "id": "616122292874576",
    "status": "open",
    "organization": {
        "id": "3b33e682-00c3-41ee-9dd2-a548adf56438",
        "name": "TEST_TEST_BugBash1"
    },
    "productId": "15960",
    "createdDate": "2016-12-22T20:31:17.24Z",
    "lastModifiedDate": "2017-01-09T23:31:15.373Z",
    "lastClosedDate": "0001-01-01T00:00:00",
    "notes": [
        {
            "createdByName": "Account",
            "createdDate": "2017-01-09T23:31:15.373",
            "text": "Sample Note"
        }
    ],
    "attributes": {
        "objectType": "ServiceRequest"
    }
}
```

# Update a subscription's support contact

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

How to update a subscription's support contact to one of the partner's value added resellers.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials only.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- A subscription identifier.
- Information about the new support contact: tenant identifier, Microsoft Partner Network identifier, and name. The support contact must be one of the partner's value added resellers.

## C#

To update a subscription's support contact, first instantiate and populate a **SupportContact** object with the new values. Then use the **IAggregatePartner.Customers.ById** method with the customer ID to identify the customer. Next, get an interface to subscription operations by calling the **Subscriptions.ById** method with the subscription ID. Then, use the **SupportContact** property to obtain an interface to support contact operations. Finally, call the **Update** or **UpdateAsync** method with the populated SupportContact object to update the support contact.

```
// IAggregatePartner partnerOperations;
// string customerId;
// string subscriptionId;

// Instantiate a SupportContact object and populate it with the new support contact information.
var supportContact = new SupportContact()
{
    Name = "Support contact's name",
    SupportTenantId = "Support contact's tenant ID",
    SupportMpnId = "Support contact's MPN ID"
};

// Update the support contact with a new object that has valid VAR values.
var updatedSupportContact =
    partnerOperations.Customers.ById(customerId).Subscriptions.ById(subscriptionID).SupportContact.Update(supportContact);
```

Sample: [Console test app](#). Project: Partner Center SDK Samples Class: `UpdateSubscriptionSupportContact.cs`

# REST request

## Request syntax

METHOD	REQUEST URI
PUT	<code>{baseURL}/v1/customers/{customer-id}/subscriptions/{subscription-id}/supportcontact</code> HTTP/1.1

## URI parameter

Use the following path parameters to identify the customer and subscription.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-id	string	Yes	A GUID formatted string that identifies the customer.
subscription-id	string	Yes	A GUID formatted string that identifies the trial subscription.

## Request headers

For more information, see [Partner Center REST headers](#).

## Request body

You must include a populated [SupportContact](#) resource in the request body. The support contact must be an existing reseller with a relationship to the partner.

## Request example

```
PUT https://api.partnercenter.microsoft.com/v1/customers/0c39d6d5-c70d-4c55-bc02-f620844f3fd1/subscriptions/C8D8FBAB-6A62-44DC-BE50-B7C74E43A296/supportcontact HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: b72d732a-eed7-4a60-82d1-1b2e6cba0ed2
MS-CorrelationId: 84eff9e1-6a8c-42aa-8678-c00b0d3fb26f
X-Locale: en-US
Content-Type: application/json
Host: api.partnercenter.microsoft.com
Content-Length: 320
Expect: 100-continue

{
    "SupportTenantId": "3B33E682-00C3-41EE-9DD2-A548ADF56438",
    "SupportMphId": "4391507",
    "Name": "Trey Research",
    "Links": {
        "Self": {
            "Uri": "/customers/0C39D6D5-C70D-4C55-BC02-F620844F3FD1/subscriptions/C8D8FBAB-6A62-44DC-BE50-B7C74E43A296/supportcontact",
            "Method": "Get",
            "Headers": []
        }
    },
    "Attributes": {
        "ObjectType": "SupportContact"
    }
}
```

# REST response

If successful, the response body contains the [SupportContact](#) resource.

## Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center error codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 328
Content-Type: application/json; charset=utf-8
MS-CorrelationId: b0cd9bcc-742e-4c76-9e34-a96d3bdc7673
MS-RequestId: 7591ca22-d4e3-409d-bfa6-09806eaff4f3
MS-CV: W8Tzj6NGckKHcq+E.0
MS-ServerId: 030020344
Date: Wed, 21 Jun 2017 01:01:17 GMT

{
  "supportTenantId": "3B33E682-00C3-41EE-9DD2-A548ADF56438",
  "supportMpnId": "4391507",
  "name": "Trey Research",
  "links": {
    "self": {
      "uri": "/customers/0C39D6D5-C70D-4C55-BC02-F620844F3FD1/subscriptions/C8D8FBAB-6A62-44DC-BE50-
B7C74E43A296/supportcontact",
      "method": "Get",
      "headers": []
    }
  },
  "attributes": {
    "objectType": "SupportContact"
  }
}
```

# Utilities

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## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

This section describes the ways that partners can use Partner Center to programmatically manage utility functions.

- [Validate an address](#)
- [Get address formatting rules by market](#)
- [Verify domain availability](#)
- [Delete a customer account from the integration sandbox](#)

For more information, see [Scenarios](#), specifically the [Background](#) section.

# Validate an address

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## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

How to validate an address using the address validation API.

The address validation API should only be used for pre-validation of customer profile updates. Use it with the understanding that if the country is the United States, Canada, China, or Mexico, the state field is validated against a list of valid states for the respective country. In all other countries, this test does not occur, and the API only checks that the state is a valid string.

## Prerequisites

Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.

## C#

To validate an address, first instantiate a new **Address** object and populate it with the address to validate. Then, retrieve an interface to **Validations** operations from the **IAggregatePartner.Validations** property, and call the **IsAddressValid** method with the address object.

```

// IAggregatePartner partnerOperations;

// Create an address to validate.
Address address = new Address()
{
    AddressLine1 = "One Microsoft Way",
    City = "Redmond",
    State = "WA",
    PostalCode = "98052",
    Country = "US"
};

// Validate the address.
bool result = partnerOperations.Validations.IsAddressValid(address);

// If the address is valid, the result should equal true.
Console.WriteLine("Result: " + result.ToString());

// The following is an example that causes address validation to fail.
try
{
    // Change to an invalid postal code for this address.
    address.PostalCode = "98007";

    // Validate the address.
    result = partnerOperations.Validations.IsAddressValid(address);

    Console.WriteLine("ERROR: The code should have thrown an exception - BadRequest(400).");
}
catch (PartnerException exception)
{
    if (exception.ErrorCategory == PartnerErrorCategory.BadInput)
    {
        Console.WriteLine(exception.ErrorCategory.ToString());
        Console.WriteLine("Exception:");
        Console.WriteLine("Message: {0}", exception.Message);
    }
    else
    {
        throw;
    }
}

```

## Java

To validate an address, first instantiate a new **Address** object and populate it with the address to validate. Then, retrieve an interface to **Validations** operations from the **IAggregatePartner.getValidations** function, and call the **isAddressValid** method with the address object.

The [Partner Center Java SDK](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

```

// IAggregatePartner partnerOperations;

// Create an address to validate.
Address address = new Address();

address.setAddressLine1("One Microsoft Way");
address.setCity("Redmond");
address.setState("WA");
address.setCountry("US");
address.setPostalCode("98052");

try
{
    // Validate the address
    Boolean validationResult = partnerOperations.getValidations().isAddressValid(address);

    System.out.println(validationResult ? "The address is valid." : "Invalid address");
}
catch (Exception exception)
{
    System.out.println("Address is invalid");

    if (! StringHelper.isNullOrEmpty(exception.getMessage()))
    {
        System.out.println(exception.getMessage());
    }
}

```

## PowerShell

The [Partner Center PowerShell module](#) is commonly used by partners to manage their Partner Center resources. It's an open-source project maintained by the partner community. Since this module is maintained by the partner community, it isn't officially supported by Microsoft. You can [get help from the community](#) or [open an issue on GitHub](#) if you experience a problem.

To validate an address, execute the [Test-PartnerAddress](#) with the address parameters populated.

```
Test-PartnerAddress -AddressLine1 '700 Bellevue Way NE' -City 'Bellevue' -Country 'US' -PostalCode '98004' -
State 'WA'
```

## REST request

### Request syntax

METHOD	REQUEST URI
POST	<a href="#"><code>{baseUrl}/v1/validations/address</code></a> HTTP/1.1

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

This table describes the required properties in the request body.

NAME	TYPE	REQUIRED	DESCRIPTION
addressline1	string	Y	The first line of the address.

NAME	TYPE	REQUIRED	DESCRIPTION
addressline2	string	N	The second line of the address. This property is optional.
city	string	Y	The city.
state	string	Y	The state.
postalcode	string	Y	The postal code.
country	string	Y	The two-character ISO alpha-2 country code.

## Request example

```
POST https://api.partnercenter.microsoft.com/v1/validations/address HTTP/1.1
Content-Type: application/json
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 0b30452a-8be2-4b8b-b25b-2d4850f4345f
MS-CorrelationId: 8a853a1a-b0e6-4cb0-ae87-d6dd32ac3a0c
X-Locale: en-US
Host: api.partnercenter.microsoft.com
Content-Length: 129

{
  "AddressLine1": "One Microsoft Way",
  "City": "Redmond",
  "State": "WA",
  "PostalCode": "98052",
  "Country": "US"
}
```

## REST response

If successful, the method returns a status code 200 as demonstrated in the Response - validation succeeded example shown below.

If the request fails, the method returns a status code 400 as demonstrated in the Response - validation failed example shown below. The response body contains a JSON payload with additional information about the error.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

### Response - validation succeeded example

```
HTTP/1.1 200 OK
Content-Length: 0
MS-CorrelationId: 8a853a1a-b0e6-4cb0-ae87-d6dd32ac3a0c
MS-RequestId: 0b30452a-8be2-4b8b-b25b-2d4850f4345f
MS-CV: IqhjoWVq0K181d0.0
MS-ServerId: 030011719
Date: Mon, 13 Mar 2017 23:56:12 GMT
```

## Response - validation failed example

```
HTTP/1.1 400 Bad Request
Content-Length: 418
Content-Type: application/json; charset=utf-8
MS-CorrelationId: 8a853a1a-b0e6-4cb0-ae87-d6dd32ac3a0c
MS-RequestId: 0b30452a-8be2-4b8b-b25b-2d4850f4345f
MS-CV: pdlItMyvtkmGHDWt.0
MS-ServerId: 101112012
Date: Tue, 14 Mar 2017 01:57:55 GMT

{
  "code": 2007,
  "description": "{\"code\":\"60071\",\"reason\":\"ZipCityInvalid - Details: Field - 'City' is corrected from OldValue: 'Redmond' to NewValue: 'BELLEVUE'.\", \"corrected_address\": {\"country\": \"US\", \"region\": \"WA\", \"city\": \"BELLEVUE\", \"address_line1\": \"One Microsoft Way\", \"postal_code\": \"98007\"}, \"object_type\": \"AddressValidation\", \"resource_status\": \"Active\"}",
  "data": [],
  "source": "PartnerFD"
}
```

# Get address formatting rules by market

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## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Get the expected address format based on the iso code for the market.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<a href="#"><i>{baseUrl}</i></a> /v1/countryvalidationrules/{isocode-id} HTTP/1.1

### URI parameter

NAME	TYPE	REQUIRED	DESCRIPTION
isocode-id	string	Y	The two-character ISO country code.

### Request headers

For more information, see [Partner Center REST headers](#).

### Request body

None.

### Request example

```
GET https://api.partnercenter.microsoft.com/v1/countryvalidationrules/{isocode-id} HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: 124b0e41-a093-4fec-b871-3eeb45fd734b
MS-CorrelationId: 5cf6d34d-b936-47af-87f0-0f0217425dcc
```

## REST response

If successful, this method returns a **CountryInformation** object in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

## Response example

```
HTTP/1.1 200 OK
Content-Length: 1856
Content-Type: application/json
MS-CorrelationId: 5cf634d-b936-47af-87f0-0f0217425dcc
MS-RequestId: 124b0e41-a093-4fec-b871-3eeb45fd734b
Date: Wed, 25 Nov 2015 06:36:47 GMT

{
    "iso2Code": "US",
    "defaultCulture": "en-US",
    "isStateRequired": true,
    "states": {
        "value": [ "AK", "AL", "AR", "AZ", "CA", "CO", "CT", "DC", "DE", "FL", "GA", "HI", "IA", "ID", "IL", "IN",
                  "KS", "KY", "LA", "MA", "MD", "ME", "MI", "MN", "MO", "MS", "MT", "NC", "ND", "NE", "NH", "NJ", "NM", "NV",
                  "NY", "OH", "OK", "OR", "PA", "RI", "SC", "SD", "TN", "TX", "UT", "VA", "VT", "WA", "WI", "WV", "WY" ]
    },
    "supportedLanguages": {
        "value": [ "en",
                  "es" ]
    },
    "supportedCultures": {
        "value": [ "en-US",
                  "es-US" ]
    },
    "isPostalCodeRequired": true,
    "postalCodeRegex": "^\\d{5}(-\\d{4})?\\d{4}\\)$",
    "isCityRequired": true,
    "isVatIdSupported": false,
    "taxIdFormat": "US#####",
    "taxIdSample": "US999965",
    "phoneNumberRegex": "^(1[\\-\\/\\.]?)(\\(\\d{3}\\)\\)|\\d{3})\\d{3}\\d{4}$",
    "isRegistrationNumberSupported": false,
    "isTaxIdSupported": true,
    "resellerAgreementRegion": "AOC",
    "geographicRegion": "NorthAndLatinAmerica",
    "countryCallingCodes": {
        "value": [ "1" ]
    },
    "attributes": {
        "objectType": "CountryInformation"
    }
}
```

# Verify domain availability

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## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

How to determine if a domain is available for use.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A domain (for example `contoso.onmicrosoft.com`).

## C#

To verify if a domain is available, first call [IAggregatePartner.Domains](#) to obtain an interface to domain operations. Then call the [ByDomain](#) method with the domain to check. This method retrieves an interface to the operations available for a specific domain. Finally, call the [Exists](#) method to see if the domain already exists.

```
// IAggregatePartner partnerOperations;
// const string domain = "contoso.onmicrosoft.com";

bool result = partnerOperations.Domains.ByDomain(domain).Exists();
```

Sample: [Console test app](#). Project: Partner Center SDK Samples Class: CheckDomainAvailability.cs

## REST request

### Request syntax

METHOD	REQUEST URI
HEAD	<a href="#"><code>/baseURL/v1/domains/{domain}</code></a> HTTP/1.1

### URI parameter

Use the following query parameter to verify domain availability.

NAME	TYPE	REQUIRED	DESCRIPTION
domain	string	Y	A string that identifies the domain to check.

### Request headers

For more information, see [Partner Center REST headers](#).

## Request body

None

## Request example

```
HEAD https://api.partnercenter.microsoft.com/v1/domains/contoso.onmicrosoft.com HTTP/1.1
Authorization: Bearer <token>
Accept: application/json
MS-RequestId: cf5b00d6-9240-431c-a973-cc06c904e5bf
MS-CorrelationId: ec57501a-a4c3-45ee-ab2b-da4250545fc9
X-Locale: en-US
Host: api.partnercenter.microsoft.com
Connection: Keep-Alive
```

## REST response

If the domain exists, it isn't available for use and a response status code 200 OK is returned. If the domain isn't found, it's available for use and a response status code 404 Not Found is returned.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

### Response example for when the domain is already in use

```
HTTP/1.1 200 OK
Content-Length: 0
MS-CorrelationId: ec57501a-a4c3-45ee-ab2b-da4250545fc9
MS-RequestId: cf5b00d6-9240-431c-a973-cc06c904e5bf
MS-CV: 7UXAHds8J0mNUCSp.0
MS-ServerId: 201022015
Date: Tue, 31 Jan 2017 22:22:35 GMT
```

### Response example for when the domain is available

```
HTTP/1.1 404 Not Found
Content-Length: 0
MS-CorrelationId: 54770745-17f0-433c-bd7b-0265e5b38f98
MS-RequestId: 1169a4cd-3be7-4e29-9cb3-0f78ffa2e91e
MS-CV: RRmc+bEw9U2e97CC.0
MS-ServerId: 202010406
Date: Tue, 31 Jan 2017 22:36:01 GMT
```

# Delete a customer account from the integration sandbox

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## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

This article explains how to delete a customer account from the Testing in Production (Tip) integration sandbox.

### IMPORTANT

When you delete a customer account, all resources associated with that customer tenant will be purged.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.
- A customer ID (`customer-tenant-id`). If you don't know the customer's ID, you can look it up in the Partner Center [dashboard](#). Select **CSP** from the Partner Center menu, followed by **Customers**. Select the customer from the customer list, then select **Account**. On the customer's Account page, look for the **Microsoft ID** in the **Customer Account Info** section. The Microsoft ID is the same as the customer ID (`customer-tenant-id`).
- All Azure Reserved Virtual Machine Instances and software purchase orders must be cancelled before deleting a customer from the Tip integration sandbox.

## C#

To delete a customer from the Tip integration sandbox:

1. Pass your Tip account credentials to the [CreatePartnerOperations](#) method to get an **IPartner** interface to partner operations.
2. Use the partner operations interface to retrieve the collection of entitlements:
  - a. Call the [Customers.ById\(\)](#) method with the customer identifier to specify the customer.
  - b. Call the **Entitlements** property.
  - c. Call the **Get** or **GetAsync** method to retrieve the **Entitlement** collection.
3. Make sure that all Azure Reserved Virtual Machine Instances and software purchase orders for that customer are cancelled. For each **Entitlement** in the collection:
  - a. Use the **entitlement.ReferenceOrder.Id** to get a local copy of the corresponding **Order** from the customer's collection of orders.

- b. Set the **Order.Status** property to "Cancelled".
  - c. Use the **Patch()** method to update the order.
4. Cancel all orders. For example, the following code sample uses a loop to poll each order until its status is "Cancelled".

```
// IPartnerCredentials tipAccountCredentials;
// Customer tenant Id to be deleted.
// string customerTenantId;

IPartner tipAccountPartnerOperations =
    PartnerService.Instance.CreatePartnerOperations(tipAccountCredentials);

// Get all entitlements whose order must be cancelled.
ResourceCollection<Entitlement> entitlements =
    tipAccountPartnerOperations.Customers.ById(customerTenantId).Entitlements.Get();

// Cancel all orders
foreach (var entitlement in entitlements)
{
    var order =
        tipAccountPartnerOperations.Customers.ById(customerTenantId).Orders.ById(entitlement.ReferenceOrder.Id)
        .Get();
    order.Status = "Cancelled";
    order =
        tipAccountPartnerOperations.Customers.ById(customerTenantId).Orders.ById(order.Id).Patch(order);
}

// Keep polling until the status of all orders is "Cancelled".
bool proceed = true;
do
{
    // Check if all the orders were cancelled.
    foreach (var entitlement in entitlements)
    {
        var order =
            tipAccountPartnerOperations.Customers.ById(customerTenantId).Orders.ById(entitlement.ReferenceOrder.Id)
            .Get();
        if (!order.Status.Equals("Cancelled", StringComparison.OrdinalIgnoreCase))
        {
            proceed = false;
        }
    }

    // Wait for a few seconds.
    Thread.Sleep(5000);
}
while (proceed == false);

tipAccountPartnerOperations.Customers.ById(customerTenantId).Delete();
```

5. Make sure all orders are cancelled by calling the **Delete** method for the customer.

**Sample:** [Console test app](#). **Project:** Partner Center PartnerCenterSDK.FeaturesSamples **Class:** DeleteCustomerFromTipAccount.cs

## REST request

### Request syntax

METHOD	REQUEST URI
DELETE	<a href="#"><code>/baseURL/v1/customers/{customer-tenant-id}</code></a> HTTP/1.1

#### URI parameter

Use the following query parameter to delete a customer.

NAME	TYPE	REQUIRED	DESCRIPTION
customer-tenant-id	GUID	Y	The value is a GUID formatted <b>customer-tenant-id</b> that allows the reseller to filter the results for a given customer that belongs to the reseller.

#### Request headers

For more information, see [Partner Center REST headers](#).

#### Request body

None.

#### Request example

```
DELETE https://api.partnercenter.microsoft.com/v1/customers/<customer-tenant-id> HTTP/1.1
Accept: application/json
MS-RequestId: 655890ba-4d2b-4d09-a95f-4ea1348686a5
MS-CorrelationId: 1438ea3d-b515-45c7-9ec1-27ee0cc8e6bd
Content-Length: 0
```

## REST response

If successful, this method returns an empty response.

#### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Partner Center REST error codes](#).

#### Response example

```
HTTP/1.1 204 No Content
Content-Length: 0
MS-CorrelationId: 1438ea3d-b515-45c7-9ec1-27ee0cc8e6bd
MS-RequestId: 655890ba-4d2b-4d09-a95f-4ea1348686a5
Date: Wed, 16 Mar 2016 00:43:02 GMT
```

# Partner security requirements status

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Applies to:

- Partner Center

This article describes lists the REST APIs related to multi-factor authentication (MFA) in Partner Center. These APIs help you enforce MFA for each user account in your partner tenant.

## Partner security requirements overview

- [Overview](#)

## Understand MFA adoption status

- [Get portal requests without MFA](#)
- [Get API request summary](#)
- [Get API request details](#)

# Get portal requests without MFA

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Applies to:

- Partner Center API

This article explains how to obtain a list of the most recent requests from users who access Partner Center portal without completing multi-factor authentication (MFA).

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials.

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<a href="#"><i>{baseUrl}</i>/v1/nonMfaCompliantPartnerPrincipals</a>

### Request headers

- See [Partner Center REST headers](#) for more information.

### Request body

None.

### Request example

```
GET https://api.partnercenter.microsoft.com/v1/nonMfaCompliantPartnerPrincipals HTTP/1.1
Authorization: Bearer <token>
Host: api.partnercenter.microsoft.com
Accept: application/json
MS-RequestId: 8f489776-a3f3-47cb-91c3-538e1f70f560
MS-CorrelationId: e72e1dc3-4abd-4ce0-908b-d23fdaedcb28
Connection: keep-alive
```

## REST response

If successful, this method returns a collection of [Portal request](#) resources in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

### Response example

```
HTTP/1.1 200 OK
Content-Length: 296
Content-Type: application/json
MS-CorrelationId: 4cb80cbe-566b-4d8b-8b8f-af1454b73089
MS-RequestId: 566330a7-1e4b-4848-9c23-f135c70fd810
Date: Thu, 23 Apr 2020 22:10:30 GMT
{
    "totalCount": 1,
    "items": [
        {
            "objectId": "adc77aa5-7968-4c57-9f48-361018265c1a",
            "tenantId": "6e6aef4a-4ca9-40a8-b5bf-b53a1923c540",
            "upn": "portalnonmfa@yourdomain.onmicrosoft.com",
            "lastNonMfaCompliantRequestDateTime": "2020-04-21T22:09:53.051"
        }
    ],
    "attributes": {
        "objectType": "Collection"
    }
}
```

# Get MFA adoption status

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Applies to:

- Partner Center API

This article explains how to get the multi-factor authentication (MFA) adoption status for each partner within a tenant.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials.

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<code>{baseUrl}/v1/applicationmfaadoptionstatus&gt;</code>

### Request headers

- See [Partner Center REST headers](#) for more information.

### Request body

None.

### Request example

```
GET https://api.partnercenter.microsoft.com/v1/applicationmfaadoptionstatus HTTP/1.1
Authorization: Bearer <token>
Host: api.partnercenter.microsoft.com
Content-Type: application/json
```

## REST response

If successful, this method returns a collection of [API request summarized by Application](#) resources in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

### Response example

```
HTTP/1.1 200 OK
Content-Length: 313
Content-Type: application/json
MS-CorrelationId: 4cb80cbe-566b-4d8b-8b8f-af1454b73089
MS-RequestId: 566330a7-1e4b-4848-9c23-f135c70fd810
Date: Thu, 21 May 2020 22:29:17 GMT
[
  {
    "loginDate": "2020-05-20",
    "mfaCompliantRequestCount": 7,
    "totalRequestCount": 7,
    "applicationId": "14f38d7d-c4fc-448a-b2df-0fc60e75465a",
    "applicationName": ""
  },
  {
    "loginDate": "2020-05-19",
    "mfaCompliantRequestCount": 7,
    "totalRequestCount": 14,
    "applicationId": "60a00bf2-0644-4279-83b3-87ddf96f2509",
    "applicationName": ""
  }
]
```

# Get App and User API requests

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Applies to:

- Partner Center API

This article explains how to obtain a list of all partner user requests within a tenant using REST APIs.

## NOTE

This API only returns the most recent API requests made by APP + User credential with maximum 10K limit.

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with App+User credentials.

## REST request

### Request syntax

METHOD	REQUEST URI
GET	<a href="#"><i>{baseUrl}</i>/v1/partnerRequests</a>

### Request headers

- See [Partner Center REST headers](#) for more information.

### Request body

None.

### Request example

```
GET https://api.partnercenter.microsoft.com/v1/partnerRequests HTTP/1.1
Authorization: Bearer <token>
Host: api.partnercenter.microsoft.com
Content-Type: application/json
```

## REST response

If successful, this method returns a collection of [API request details](#) resources in the response body.

### Response success and error codes

Each response comes with an HTTP status code that indicates success or failure and additional debugging information. Use a network trace tool to read this code, error type, and additional parameters. For the full list, see [Error Codes](#).

### Response example

```
HTTP/1.1 200 OK
Content-Length: 2960
Content-Type: application/json
MS-CorrelationId: 4cb80cbe-566b-4d8b-8b8f-af1454b73089
MS-RequestId: 566330a7-1e4b-4848-9c23-f135c70fd810
Date: Thu, 21 May 2020 22:29:17 GMT
{
    "totalCount": 2,
    "items": [
        {
            "requestId": "6c583d8d-46cd-420c-ae3d-35b6dfdcdb21",
            "correlationId": "",
            "operationName": "Get /v{version}/nonMfaCompliantPartnerPrincipals",
            "requestDateTime": "2020-05-21T21:02:10.31",
            "sourceIpAddress": "13.88.20.150",
            "objectId": "c69854fe-5fb4-4527-a28f-f24f1acaffd6",
            "tenantId": "6e6aef4a-4ca9-40a8-b5bf-b53a1923c540",
            "upn": "admin@yourdomain.onmicrosoft.com",
            "applicationId": "60a00bf2-0644-4279-83b3-87ddf96f2509",
            "mfaCompliant": true
        },
        {
            "requestId": "09f8e434-a9ce-43ea-a9ac-270fbb22371a",
            "correlationId": "",
            "operationName": "Get /v{version}/customers/{customer_id}/subscriptions?order_id={order_id_value}&mpn_id={mpn_id_value}",
            "requestDateTime": "2020-05-21T22:18:35.73",
            "sourceIpAddress": "13.88.20.150",
            "objectId": "adc77aa5-7968-4c57-9f48-361018265c1a",
            "tenantId": "6e6aef4a-4ca9-40a8-b5bf-b53a1923c540",
            "upn": "portalanonmfa@yourdomain.onmicrosoft.com",
            "applicationId": "60a00bf2-0644-4279-83b3-87ddf96f2509",
            "mfaCompliant": false
        }
    ],
    "attributes": {
        "objectType": "Collection"
    }
}
```

# Partner Center REST API reference

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## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

## Partner Center REST API

The Partner Center REST API helps Cloud Solution Provider (CSP) partners integrate their existing CRM or billing software with the Microsoft systems that manage customer accounts, place orders, manage subscriptions, and handle support requests.

For more information about what the API can do, including sample code, see the [Scenarios](#) topic, including the background overview.

Before you begin coding, read the [Get started](#) topic. This article contains information about setting up your test and production accounts, getting authentication working, and finding the sample code.

## Topics

TOPIC	DESCRIPTION
<a href="#">Partner Center REST URLs</a>	Defines the REST API endpoints for different versions of Partner Center.
<a href="#">Partner Center REST headers</a>	Defines the request and response headers used by the REST API.
<a href="#">Partner Center REST resources</a>	Defines the JSON constructs that represent the objects needed to use the REST API.
<a href="#">Partner Center REST events</a>	Defines the REST resource change events that are supported by Partner Center webhooks.
<a href="#">Partner Center supported languages and locales</a>	Lists the locales, languages, and country/region codes that are supported in the Partner Center APIs.
<a href="#">Partner Center webhooks</a>	How to receive events, authenticate a callback, and use the Partner Center webhook APIs to create, view, and update an event registration.

# Partner Center REST URLs

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## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Partner Center is available in different countries and regions around the world. Some versions of Partner Center might require different end points for your apps to work correctly.

The following table describes the base URLs to use with the different versions of Partner Center:

PARTNER CENTER VERSION	BASE URL
Partner Center Partner Center for Microsoft Cloud Germany Partner Center for Microsoft Cloud for US Government	<a href="https://api.partnercenter.microsoft.com">https://api.partnercenter.microsoft.com</a>
Partner Center operated by 21Vianet	<a href="https://partner.partnercenterapi.microsoft">https://partner.partnercenterapi.microsoft</a>

## NOTE

The token authority for Partner Center for Microsoft Cloud Germany Azure AD Library is: <https://login.microsoftonline.de>.

# Partner Center REST headers

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## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

The following HTTP request and response headers are supported by the Partner Center REST API. Not all API calls accept all headers.

## REST request headers

The following HTTP request headers are supported by the Partner Center REST API.

HEADER	DESCRIPTION	VALUE TYPE
Authorization:	Required. The authorization token in the form Bearer <token>.	string
Accept:	Specifies the request and response type, "application/json".	string
MS-RequestId:	A unique identifier for the call, used to ensure id-potency. If there's a timeout, the retry call should include the same value. Upon receiving a response (success or business failure), the value should be reset for the next call.	GUID

HEADER	DESCRIPTION	VALUE TYPE
MS-CorrelationId:	A unique identifier for the call, useful in logs and network traces for troubleshooting errors. The value should be reset for every call. All operations should include this header. For more information, see the Correlation ID information in <a href="#">Test and debug</a> .	GUID
MS-Contract-Version:	Required. Specifies the version of the API requested; generally api-version: v1 unless otherwise specified in the <a href="#">Scenarios</a> section.	string
If-Match:	Used for concurrency control. Some API calls require passing the ETag via the If-Match header. The ETag is usually on the resource and therefore, requires GET-ting the latest. For more information, see the ETag information in <a href="#">Test and debug</a> .	string
MS-PartnerCenter-Application	Optional. Specifies the name of the application that is using the Partner Center REST API.	string
X-Locale:	Optional. Specifies the language in which the rates are returned. Default is "en-US". For a list of supported values, see <a href="#">Partner Center supported languages and locales</a> .	string

## REST response headers

The following HTTP response headers may be returned by the Partner Center REST API.

HEADER	DESCRIPTION	VALUE TYPE
Accept:	Specifies the request and response type, "application/json".	string
MS-RequestId:	A unique identifier for the call, used to ensure id-potency. If there's a timeout, the retry call should include the same value. Upon receiving a response (success or business failure), the value should be reset for the next call.	GUID
MS-CorrelationId:	A unique identifier for the call. This value is useful for troubleshooting logs and network traces to find the error. The value should be reset for every call. All operations should include this header.	GUID

# Partner Center REST resources

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## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

This section provides definitions for the JSON elements needed to create requests and parse responses using the Partner Center REST API. For more information about how to use these elements, including sample code, see the [Scenarios](#) section and the [Partner Center samples](#) section.

## In this section

<a href="#">Analytics</a>	<ul style="list-style-type: none"><li>• PartnerLicensesDeploymentInsights</li><li>• PartnerLicensesUsageInsights</li><li>• CustomerLicensesDeploymentInsights</li><li>• PartnerLicensesUsageInsights</li></ul>
<a href="#">Auditing</a>	<ul style="list-style-type: none"><li>• AuditRecord</li></ul>
<a href="#">Azure Rate Card</a>	<ul style="list-style-type: none"><li>• AzureRateCard</li><li>• AzureMeter</li><li>• AzureOfferTerm</li></ul>
<a href="#">Azure Utilization Record</a>	<ul style="list-style-type: none"><li>• AzureUtilizationRecord</li><li>• AzureResource</li><li>• AzureInstanceData</li></ul>
<a href="#">Cart</a>	<ul style="list-style-type: none"><li>• Cart</li><li>• CartLineItem</li><li>• CartError</li></ul>
<a href="#">Conversions</a>	<ul style="list-style-type: none"><li>• Conversion</li><li>• ConversionError</li><li>• ConversionResult</li></ul>
<a href="#">CountryInformation</a>	<ul style="list-style-type: none"><li>• CountryInformation</li><li>• CountryValidationRules</li></ul>

<a href="#">Customer</a>	<ul style="list-style-type: none"> <li>• Customer</li> <li>• CustomerCompanyProfile</li> <li>• CustomerBillingProfile</li> <li>• CustomerRelationshipRequest</li> </ul>
<a href="#">Customer Usage Budgeting</a>	<ul style="list-style-type: none"> <li>• CustomerMonthlyUsageRecord</li> <li>• CustomerUsageSummary</li> <li>• PartnerUsageSummary</li> <li>• SpendingBudget</li> </ul>
<a href="#">Entitlement</a>	<ul style="list-style-type: none"> <li>• Entitlement</li> <li>• ReferenceOrder</li> <li>• EntitlementType</li> <li>• Artifact</li> <li>• ArtifactType</li> <li>• VirtualMachineReservedInstanceArtifact</li> <li>• VirtualMachineReservedInstanceArtifactDetails</li> <li>• VirtualMachineReservation</li> </ul>
<a href="#">Invoice</a>	<ul style="list-style-type: none"> <li>• Invoice</li> <li>• InvoiceDetail</li> <li>• InvoiceLineItem</li> <li>• InvoiceSummary</li> <li>• InvoiceSummaryDetail</li> <li>• InvoiceSummaries</li> <li>• LicenseBasedLineItem</li> <li>• UsageBasedLineItem</li> <li>• InvoiceStatement</li> </ul>
<a href="#">License</a>	<ul style="list-style-type: none"> <li>• License</li> <li>• LicenseUpdate</li> <li>• LicenseAssignment</li> <li>• LicenseWarning</li> <li>• ProductSku</li> <li>• ServicePlan</li> <li>• SubscribedSku</li> </ul>
<a href="#">ManagedService</a>	<ul style="list-style-type: none"> <li>• ManagedService</li> <li>• ManagedServiceLinks</li> </ul>
<a href="#">Offer</a>	<ul style="list-style-type: none"> <li>• Offer</li> <li>• OfferCategory</li> <li>• OfferLinks</li> <li>• OfferProduct</li> </ul>
<a href="#">Order</a>	<ul style="list-style-type: none"> <li>• Order</li> <li>• OrderLineItem</li> <li>• OrderLinks</li> <li>• OrderLineItemLinks</li> <li>• OrderStatus</li> </ul>

<a href="#">Profile</a>	<ul style="list-style-type: none"> <li>• BillingProfile</li> <li>• LegalBusinessProfile</li> <li>• MpnProfile</li> <li>• OrganizationProfile</li> <li>• SupportProfile</li> </ul>
<a href="#">Products</a>	<ul style="list-style-type: none"> <li>• Product</li> <li>• ItemType</li> <li>• ProductLinks</li> <li>• Sku</li> <li>• Availability</li> <li>• InventoryCheckRequest</li> <li>• InventoryItem</li> <li>• InventoryRestriction</li> <li>• BillingCycleType</li> </ul>
<a href="#">Relationships</a>	<ul style="list-style-type: none"> <li>• PartnerRelationship</li> <li>• RelationshipRequest</li> </ul>
<a href="#">SelfServePolicy</a>	<ul style="list-style-type: none"> <li>• ServiceCostsSummary</li> <li>• ServiceCostsLineItem</li> <li>• ServiceCostsSummaryLinks</li> </ul>
<a href="#">ServiceCosts</a>	<ul style="list-style-type: none"> <li>• ServiceCostsSummary</li> <li>• ServiceCostsLineItem</li> <li>• ServiceCostsSummaryLinks</li> </ul>
<a href="#">ServiceRequest</a>	<ul style="list-style-type: none"> <li>• ServiceRequest</li> <li>• ServiceRequestContact</li> <li>• ServiceRequestNote</li> <li>• ServiceRequestOrganization</li> <li>• SupportTopic</li> </ul>
<a href="#">Subscription</a>	<ul style="list-style-type: none"> <li>• Subscription</li> <li>• SubscriptionLinks</li> <li>• SubscriptionProvisioningStatus</li> <li>• SubscriptionRegistrationStatus</li> <li>• SupportContact</li> <li>• RegisterSubscription</li> </ul>
<a href="#">Subscription Usage</a>	<ul style="list-style-type: none"> <li>• SubscriptionDailyUsageRecord (<i>Obsolete</i>)</li> <li>• SubscriptionMonthlyUsageRecord</li> <li>• SubscriptionUsageSummary</li> </ul>
<a href="#">Upgrade</a>	<ul style="list-style-type: none"> <li>• Upgrade</li> <li>• UpgradeError</li> <li>• UpgradeResult</li> <li>• UserLicenseError</li> </ul>

User	<ul style="list-style-type: none"><li>• User</li><li>• CustomerUser</li><li>• UserCredentials</li><li>• UserMember</li></ul>
Utility Resources	<ul style="list-style-type: none"><li>• Address</li><li>• Contact</li><li>• FieldFilter</li><li>• FileInfo</li><li>• Link</li><li>• PasswordProfile</li><li>• ResourceLinks</li><li>• ResourceAttributes</li><li>• SecureString</li><li>• ValidationCode</li></ul>

# Agreement resources

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## Applies to:

- Partner Center

The **Agreement** resource is currently supported by Partner Center in the Microsoft public cloud only. It isn't applicable to:

- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

The **Agreement** resource represents a Microsoft cloud customer agreement.

## Agreement

The **Agreement** resource represents the details of certification provided by the partner.

PROPERTY	TYPE	DESCRIPTION
userId	string	Object identifier of the logged-in user in the partner tenant who is providing confirmation on behalf of the partner organization. When using App+User authentication to create an Agreement resource, Partner Center automatically derives the <b>userId</b> attribute value from the App+User token.
primaryContact	Contact	Information about the user from the customer organization that accepted the agreement, including: <b>firstName</b> , <b>lastName</b> , <b>email</b> , and <b>phoneNumber</b> (optional).
dateAgreed	string in UTC date time format	The date when the customer accepted the agreement.
templateId	string	Unique identifier of the agreement that the customer accepted.
type	string	Agreement type. Currently, supported values include <b>MicrosoftCloudAgreement</b> and <b>MicrosoftCustomerAgreement</b> .
agreementLink	string	URL for the agreement template.

# Agreement metadata resources

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## Applies to:

- Partner Center

The **AgreementMetaData** resource is currently supported by Partner Center only in the *Microsoft public cloud*. This resource isn't applicable to:

- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

The **AgreementMetaData** collection provides metadata about all the agreement types. Partners can use this collection to provide confirmation of customer acceptance of agreements. The **AgreementMetaData** collection returns metadata for both agreement types (**Microsoft Cloud Agreement** and **Microsoft Customer Agreement**).

## AgreementMetaData

Agreement metadata returned includes the following properties:

PROPERTY	TYPE	DESCRIPTION
templateId	string	Unique identifier of an agreement template.
type	string	Agreement type. Currently, supported values include <b>MicrosoftCloudAgreement</b> and <b>MicrosoftCustomerAgreement</b> (preview).
agreementLink	string	URL for the agreement template.

# Agreement document resources

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## Applies to:

- Partner Center

The **AgreementDocument** resource is currently supported by Partner Center only in the *Microsoft public cloud*.

This resource not applicable to:

- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

The **AgreementDocument** resource represents a Microsoft agreement document that is available for preview and download.

## AgreementDocument

An **AgreementDocument** resource includes the following properties:

PROPERTY	TYPE	DESCRIPTION
country	string	The country or market to which this document applies.
language	string	The language in which this document is localized.
displayUri	string	A link to preview the agreement document in a browser.
downloadUri	string	A link to download the agreement document (in Microsoft Word format).

# Direct signing (direct acceptance) status of a customer agreement

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## Applies to:

- Partner Center

The **DirectSignedCustomerAgreementStatus** resource is currently supported by Partner Center only in the Microsoft public cloud.

This resource is *not applicable* to:

- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

The **DirectSignedCustomerAgreementStatus** resource represents the status of the direct acceptance of a customer agreement.

## DirectSignedCustomerAgreementStatus

A **DirectSignedCustomerAgreementStatus** resource includes the following properties:

PROPERTY	TYPE	DESCRIPTION
isSigned	boolean	Indicates if the customer agreement has been directly signed (accepted) by the customer.

# Analytics resources

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## Applies to:

- Partner Center

The resources defined here contain data used to report on usage, deployment, and consumption.

## PartnerLicensesDeploymentInsights

The **PartnerLicensesDeploymentInsights** resource contains partner-level insights about license deployment.

PROPERTY	TYPE	DESCRIPTION
proratedDeploymentPercent	number	The percentage of licenses deployed.
licensesSold	number	The number of licenses sold.
processedDateTime	string in UTC date-time format	The date and time when the data was aggregated.
serviceName	string	The service name (for example: o365, crm).
channel	string	The channel name of the service (for example: reseller).
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes. Includes "objectType": "PartnerLicensesDeploymentInsights"

## PartnerLicensesUsageInsights

The **PartnerLicensesUsageInsights** resource contains partner-level insights about license usage.

PROPERTY	TYPE	DESCRIPTION
proratedLicensesUsagePercent	number	The percentage of licenses deployed.
workloadName	string	The workload name (for example: exchange).
processedDateTime	string in UTC date-time format	The date and time when the data was aggregated.
serviceName	string	The service name (for example: o365, crm).
channel	string	The channel name of the service (for example: reseller).

PROPERTY	TYPE	DESCRIPTION
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes. Includes "objectType": "PartnerLicensesUsageInsights"

## CustomerLicensesDeploymentInsights

The **CustomerLicensesDeploymentInsights** resource contains customer-level insights about license deployment.

PROPERTY	TYPE	DESCRIPTION
licensesDeployed	number	The number of licenses deployed.
licensesSold	number	The number of licenses sold.
deploymentPercent	number	The adjusted percentage of licenses deployed.
customerId	string	The customer identifier.
customerName	string	The customer name.
productName	string	The product name.
serviceCode	string	The service code of the license.
processedDateTime	string in UTC date-time format	The date and time when the data was aggregated.
serviceName	string	The service name (for example: o365, crm).
channel	string	The channel name of the service (for example: reseller).
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes. Includes "objectType": "CustomerLicensesDeploymentInsights"

## CustomerLicensesUsageInsights

The **CustomerLicensesUsageInsights** resource contains customer-level insights about license usage.

PROPERTY	TYPE	DESCRIPTION
workloadCode	string	The workload code.
workloadName	number	The workload name (for example: Exchange).

PROPERTY	TYPE	DESCRIPTION
usagePercent	number	The adjusted percentage of licenses used.
licensesActive	number	The number of active licenses.
licensesQualified	number	The number of qualified licenses.
customerId	string	The customer identifier.
customerName	string	The customer name.
productName	string	The product name.
serviceCode	string	The service code of the license.
processedDateTime	string in UTC date-time format	The date and time when the data was aggregated.
serviceName	string	The service name (for example: o365, crm).
channel	string	The channel name of the service (for example: reseller).
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes. Includes "objectType": "CustomerLicensesUsageInsights"

# Auditing resources

4/22/2020 • 2 minutes to read [Edit Online](#)

## Applies to:

- Partner Center

You can use the following resources with audit operations.

## AuditRecord

Represents a record of an operation performed by a partner user or application.

PROPERTY	TYPE	DESCRIPTION
customerId	string	A GUID-formatted string that identifies the customer.
customerName	string	The customer name.
userPrincipalName	string	The user principal name or user identifier. Typically, this property is an Internet-style login name for a user in an email address format based on Internet standard RFC 822.
applicationId	string	A string that identifies the application that performed the operation.
resourceType	string	The type of resource acted upon by the operation. Possible values: <code>customer</code> , <code>customer_user</code> , <code>order</code> , <code>subscription</code> , <code>license</code> , <code>third_party_add_on</code> , <code>mpn_association</code> , <code>transfer</code> , <code>application</code> , <code>application_credential</code> , <code>partner_user</code> , <code>partner_relationship</code> .
resourceOldValue	string	The old value of the resource.
resourcenewValue	string	The new value of the resource.

PROPERTY	TYPE	DESCRIPTION
operationType	string	The type of operation performed. Possible values: <code>update_customer_qualification</code> , <code>update_subscription</code> , <code>upgrade_subscription</code> , <code>convert_trial_subscription</code> , <code>add_customer</code> , <code>update_customer_billing_profile</code> , <code>update_customer_partner_contract_company_name</code> , <code>update_customer_spending_budget</code> , <code>delete_customer</code> (sandbox integration accounts only), <code>remove_partner_customer_relationship</code> , <code>create_order</code> , <code>update_order</code> , <code>create_customer_user</code> , <code>delete_customer_user</code> , <code>update_customer_user</code> , <code>update_customer_user_licenses</code> , <code>reset_customer_user_password</code> , <code>update_customer_user_principal_name</code> , <code>restore_customer_user</code> , <code>create_mpn_association</code> , <code>update_mpn_association</code> , <code>update_sfb_customer_user_licenses</code> , <code>update_transfer</code> , <code>create_partner_relationship</code> , <code>register_application</code> , <code>unregister_application</code> , <code>add_application_credential</code> , <code>remove_application_credential</code> , <code>create_partner_user</code> , <code>update_partner_user</code> , <code>remove_partner_user</code> .
operationDate	string in UTC date-time format	The date and time when the operation was performed.
operationStatus	string	The status of the operation being audited. Possible values: <code>succeeded</code> , <code>failed</code> , or <code>progress</code> , which means the operation is still in progress.
customizedData	array of objects	Additional information. Each object contains two JSON key-value pairs: the first is <code>key</code> and a string value, the second is <code>value</code> and a string value. The number of objects in the array depends on the type of operation that was performed.
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes.

# Azure rate card resources

4/22/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

The Azure Rate Card provides real-time prices for Azure offers. Azure pricing is quite dynamic and changes frequently. Microsoft publishes updates on Partner Center, but the REST API provides the fastest way for Cloud Solution Provider partners to get current prices.

To track usage and help predict your monthly bill and the bills for individual customers, you can combine a Rate Card query to [Get prices for Microsoft Azure](#) with a request to [Get a customer's utilization records for Azure](#).

Prices differ by market and currency, and this API takes location into consideration. By default, the API uses your partner profile settings in Partner Center and your browser language, and those settings are customizable. The location awareness is especially relevant if you manage sales in multiple markets from a single, centralized office.

## AzureRateCard

Describes the properties of an Azure Rate Card resource.

PROPERTY	TYPE	DESCRIPTION
currency	string	The currency in which the rates are provided.
isTaxIncluded	boolean	All rates are pretax, so this property returns as <code>false</code> .
locale	string	The culture in which the resource information is localized.
meters	array of objects	Array of <a href="#">AzureMeter</a> objects.
offerTerms	array of objects	Array of <a href="#">AzureOfferTerm</a> objects.
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes. Contains <code>"objectType": "AzureRateCard"</code>

## Operations on the AzureRateCard resource

- [Get prices for Microsoft Azure](#)

## AzureMeter

PROPERTY	TYPE	DESCRIPTION
id	string	Meter's unique identifier.

PROPERTY	TYPE	DESCRIPTION
name	string	Friendly name of the meter.
rates	object	Meter rates. The key is the meter quantity (string) and the value is the meter rate (number).
tags	array of strings	Optional meter tags. This array can be empty.
category	string	Category of the resource.
subcategory	string	Subcategory of the resource.
region	string	Region of the id.
unit	string	The type of quantity (hours, bytes, etc.)
includedQuantity	number	Meter quantity that is included free of charge.
effectiveDate	string	The date this meter is in effect.

## AzureOfferTerm

PROPERTY	TYPE	DESCRIPTION
name	string	Friendly name of the offer term.
discount	number	The discount applied, if any.
excludedMeterIds	array of strings	Meters excluded from the offer, if any.
effectiveDate	string	The date the offer is in effect.

# Azure utilization record resources

4/24/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

The Azure utilization record contains details about the utilization of an Azure subscription resource. If you are a cloud service provider partner who owns the billing relationship for your customers' Azure subscriptions, you can use this REST API to provide a scalable way to track usage incurred on the subscriptions in order to send an invoice to your customers at the end of every billing cycle.

To track usage and help predict your monthly bill and the bills for individual customers, you can combine a Rate Card query to [Get prices for Microsoft Azure](#) with a request to [Get a customer's utilization records for Azure](#).

Prices differ by market and currency, and this API takes location into consideration. By default, the API uses your partner profile settings in Partner Center and your browser language, and those settings are customizable. The location awareness is especially relevant if you manage sales in multiple markets from a single, centralized office.

## AzureUtilizationRecord

Describes the properties of an Azure utilization record resource.

PROPERTY	TYPE	REQUIRED	DESCRIPTION
usageStartTime	string	Yes	The start of the usage aggregation time range. The response is grouped by the time of consumption (when the resource was actually used vs. when was it reported to the billing system).
usageEndTime	string	Yes	The end of the usage aggregation time range. The response is grouped by the time of consumption. That is, when the resource was actually used vs. when was it reported to the billing system.
resource	object	Yes	Contains an <a href="#">AzureResource</a> object.
quantity	number	Yes	The quantity consumed of the <a href="#">AzureResource</a> .

PROPERTY	TYPE	REQUIRED	DESCRIPTION
unit	string	No	The type of quantity (hours, bytes, etc.) This property is optional
infoFields	object	Yes	Key-value pairs of instance level details. This object may be empty.
instanceData	object	No	Contains an <a href="#">AzureInstanceData</a> object that contains key-value pairs of instance level details. This property is optional and may not be included.
attributes	<a href="#">ResourceAttributes</a>	Yes	The metadata attributes. Contains "objectType": "AzureUtilizationRecord"

### Operations on the AzureUtilizationRecord resource

- [Get a customer's utilization records for Azure](#)

## AzureResource

Describes the properties of an Azure Resource.

PROPERTY	TYPE	REQUIRED	DESCRIPTION
id	string	Yes	Unique identifier of the Azure resource. Also known as resourceId or resource GUID.
name	string	No	Friendly name of the resource being consumed. This property is optional.
category	string	No	The category of the consumed resource. This property is optional.
subcategory	string	No	The subcategory of the consumed resource. This property is optional.
region	string	No	The region of the consumed resource. This property is optional.

## AzureInstanceData

Describes the properties of an Azure Instance Data resource.

PROPERTY	TYPE	REQUIRED	DESCRIPTION
resourceUri	string	Yes	The fully qualified Azure resource ID, which includes the resource groups and the instance name.
location	string	Yes	Region in which the service was run.
partNumber	object	Yes	Unique namespace used to identify the resource for commercial marketplace third-party usage. This property may be an empty string.
orderNumber	number	Yes	Unique namespace used to identify the third-party order for commercial marketplace. This property may be an empty string.
tags	array of strings	No	Resource tags specified by the user. This property is optional and may not be included.
additionalInfo	array of strings	No	Additional data for an Azure resource. This property is optional and may not be included.

# Cart resources

4/23/2020 • 5 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

A partner places an order when a customer wants to buy a subscription from a list of offers.

## Cart

Describes a cart.

PROPERTY	TYPE	DESCRIPTION
id	string	A cart identifier that is supplied upon successful creation of the cart.
creationTimeStamp	DateTime	The date the cart was created, in date-time format. Applied upon successful creation of the cart.
lastModifiedTimeStamp	DateTime	The date the cart was last updated, in date-time format. Applied upon successful creation of the cart.
expirationTimeStamp	DateTime	The date the cart will expire, in date-time format. Applied upon successful creation of cart.
lastModifiedUser	string	The user who last updated the cart. Applied upon successful creation of cart.
lineItems	Array of objects	An Array of <a href="#">CartLineItem</a> resources.
status	string	The status of the cart. Possible values are "Active" (can be updated/submitted) and "Ordered" (has already been submitted).

## CartLineItem

Represents one item contained in a cart.

PROPERTY	TYPE	DESCRIPTION
id	string	A unique identifier for a cart line item. Applied upon successful creation of cart.
catalogItemId	string	The catalog item identifier.

PROPERTY	TYPE	DESCRIPTION
friendlyName	string	Optional. The friendly name for the item defined by the partner to help disambiguate.
quantity	int	The number of licenses or instances.
currencyCode	string	The currency code.
billingCycle	Object	The type of billing cycle set for the current period.
termDuration	string	An ISO 8601 representation of the term's duration. The current supported values are P1M (1 month), P1Y (1 year) and P3Y (3 years).
participants	List of Object String pairs	A collection of PartnerId on Record (MPNID) on the purchase.
provisioningContext	Dictionary<string, string>	Additional context used when provisioning the purchased item. To determine which values are needed for a particular item, refer to the SKU's provisioningVariables property.
orderGroup	string	A group to indicate which items can be submitted together in the same order.
addonItems	List of <b>CartLineItem</b> objects	A collection of cart line items for addons. These items will be purchased towards the base subscription that results from the root cart line item's purchase.
error	Object	Applied after cart is created if an error occurred.
renewsTo	Array of objects	An array of <a href="#">RenewsTo</a> resources.

## RenewsTo

Represents one item contained in a cart line item.

PROPERTY	TYPE	REQUIRED	DESCRIPTION
termDuration	string	No	An ISO 8601 representation of the renewal term's duration. The current supported values are <b>P1M</b> (1 month) and <b>P1Y</b> (1 year).

## CartError

Represents an error that occurs after a cart is created.

PROPERTY	TYPE	DESCRIPTION
errorCode	<a href="#">CartErrorCode</a>	The type of cart error.
errorDescription	string	The error description, including any notes about supported values, default values, or limits.

## CartErrorCode

An [Enum](#) with values that indicate a type of cart error.

VALUE	POSITION	DESCRIPTION
Unknown	0	Default value.
CurrencyIsNotSupported	10000	The currency is not supported for the specified market.
CatalogItemIdIsNotValid	10001	The catalog item ID is not valid.
QuotaNotAvailable	10002	There is not enough quota available.
InventoryNotAvailable	10003	The inventory is not available for the selected offer.
ParticipantsIsNotSupportedForPartner	10004	Setting participants is not supported for this partner.
UnableToProcessCartLineItem	10006	Unable to process the cart line item.
SubscriptionIsNotValid	10007	The subscription is not valid.
SubscriptionIsNotEnabledForRI	10008	The subscription is not enabled for Azure reservations.
SandboxLimitExceeded	10009	The sandbox limit has been exceeded.

## CartCheckoutResult

Represents the result of a cart checkout.

PROPERTY	TYPE	DESCRIPTION
orders	List of <a href="#">Order</a> objects.	The collection of orders.
orderErrors	List of <a href="#">OrderError</a> objects.	The collection of order errors.

## OrderError

Represents an error that occurs during a cart checkout when an order is created.

PROPERTY	TYPE	DESCRIPTION

PROPERTY	TYPE	DESCRIPTION
orderGroupId	string	The order group ID of the order with the error.
code	int	The error code.
description	string	The description of the error.

## OrderErrorCode

An [Enum](#) with values that indicate a type of order error.

VALUE	POSITION	DESCRIPTION
PartnerTokenMissing	800001	Partner Token missing in request context.
InvalidInput	800002	Invalid request input.
ServiceException	800003	Unexpected service error.
InvalidOfferId	800004	Invalid offer ID.
CreateOrderError	800005	Create order is not successful.
ProvisioningStatusNotFound	800007	Unable to retrieve provisioning information.
CartIdNotFound	800008	Unable to retrieve cart ID.
CartItemErrorInCreateOrder	800009	Error in Cart item(s).
InventoryNotAvailable	800010	Inventory is not available for this catalog item.
AzureSubscriptionNotValid	800011	This subscription is not a valid Azure subscription.
SubscriptionIsNotActive	800012	This subscription is not an active subscription.
SubscriptionIsNotEnabledForRI	800013	This subscription is not enabled for RI purchase.
PendingAdjustment	800014	There is a pending adjustment requested for this order.
MpnIdNotFound	800015	MPN Id is not found.
NotValidIndirectResellerMpnId	800016	MPN Id is not a valid Indirect Reseller.
InvalidQuantity	800017	The quantity is not available for this catalog item.
SandboxLimitExceeded	800018	The sandbox limit has been met.

Value	Position	Description
SandboxTenantOnly	800019	This operation is only enabled for sandbox tenants.
CatalogItemNotEligibleForPurchase	800020	The catalog item is not eligible for purchase.
SubscriptionIsNotValid	800021	This subscription is not a valid subscription.
ManualReviewRequired	800022	You may be eligible for this transaction. Please contact Support for help.
InsufficientFunds	800023	You are not eligible for this transaction because your Credit Line is not reaching minimum threshold for this purchase. Please update your order (or) contact Support for help.
ReviewCancelled	800024	You are not eligible for this transaction.
LineOfCreditNotDefined	800025	You are not eligible for this transaction because your Credit Line is not reaching minimum threshold for this purchase. Please update your order (or) contact Support for help.
RiskError	800026	You are not eligible for this transaction.
SubscriptionNotRegistered	800030	This subscription is not registered.
PurchaseSystemNotSupported	800031	Purchase system not supported.
ConditionFailed	800036	Pre-condition failed.
AssetIdNotFound	800037	Asset ID not found.
AssetFutureBillingInfoNotFound	800038	Asset FutureBillingInfo not found.
ResellerProgramStatusNotActive	800039	Reseller program status is not active.
AssetStatusChangeNotValid	800040	Asset status cannot be changed to {0} from {1}.
ItemAlreadyActivated	800041	This item has already been activated.
NotSupported	800042	Not supported.
PricingAccessForbidden	800043	Access to pricing information is not granted.
OrderInProgress	800060	Your order is in progress. Please check your order history for recent orders in few minutes.
OrderCannotBeCancelled	800061	Order cannot be cancelled.

VALUE	POSITION	DESCRIPTION
ReviewRejected	800062	You are not eligible for this transaction.
CancelLegacyOrder	800063	This order {0} cannot be cancelled. Use PATCH <code>/customers/{1}/subscriptions/&lt;subscription&gt;</code> to suspend subscriptions.
CartProcessedByAnotherRequest	800064	Cart {0} is being processed by another request.
CartCheckOutNotAllowedWhenStatusIsOrdered	800065	Cannot checkout an already submitted cart {0}.

# Conversions resources

4/19/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Conversion resources support the conversion of a trial subscription to a paid subscription.

## Conversion

Contains information used to convert a trial subscription to a paid subscription.

PROPERTY	TYPE	DESCRIPTION
offerId	string	The offer identifier of the original, trial offer.
targetOfferId	string	The offer identifier for the target offer.
orderId	string	The order identifier.
quantity	int	The number of licenses. The default is the number of licenses in the trial subscription.
billingCycle	string	Indicates how often the partner is charged for the subscription. Possible values: <b>Monthly</b> (partner is billed monthly), <b>Annual</b> (partner is billed annually), or <b>None</b> (Partner isn't billed. Used for trial subscriptions).

## ConversionError

Represents an error that occurred during conversion.

PROPERTY	TYPE	DESCRIPTION
code	string	The error code associated with the issue. Possible values: <b>Other</b> (general error), <b>ConversionsNotFound</b> (can't find any conversions for the trial subscription to convert to).
description	string	The friendly text describing the issue.

## ConversionResult

Represents the result of performing a subscription conversion.

PROPERTY	TYPE	DESCRIPTION
subscriptionId	string	The subscription identifier.
offerId	string	The original offer identifier.
targetOfferId	string	The offer identifier for the target offer.
error	<a href="#">ConversionError</a>	The error encountered while attempting the conversion, if applicable..

# Country information resources

4/23/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

The following resources are descriptive metadata for a country/region.

## CountryInformation

PROPERTY	TYPE	DESCRIPTION
ExtensionData	string	The extension data.
Iso2Code	string	An ISO-2 code.
Iso3Code	string	An ISO-3 code.
DefaultCulture	string	The default culture.
IsStateRequired	boolean	Indicates whether a state/province is required or not.
SupportedStatesList	array of strings	If a state/province is required, returns the full list for that country/region.
SupportedLanguagesList	array of strings	A list of supported languages.
SupportedCulturesList	array of strings	A list of supported cultures.
IsPostalCodeRequired	boolean	Indicates whether a ZIP code or postal code is required or not.
PostalCodeRegex	string	The regular expression that defines the ZIP/postal code .
IsCityRequired	boolean	Indicates whether a city is required or not.
IsVatIdSupported	boolean	Indicates whether a VAT ID is required or not.
TaxIdFormat	string	The tax ID format.
TaxIdSample	string	The tax ID sample.

PROPERTY	TYPE	DESCRIPTION
VatIdRegex	string	The tax ID regular expression.
PhoneNumberRegex	string	The phone number regular expression.
IsRegistrationNumberSupported	boolean	Indicates whether a registration number is supported or not.
IsTaxIdSupported	boolean	Indicates whether a tax ID is supported or not. This is different than IsVatIdSupported.
ResellerAgreementRegion	string	The reseller agreement region.
GeographicRegion	string	The geographic region.
CountryCallingCodesList	array of strings	The calling codes supported in the country/region.
Attributes	ResourceAttributes	The metadata attributes corresponding to the CountryInformation resource.

## CountryValidationRules

Describes the address formatting rules for a country/region.

PROPERTY	TYPE	DESCRIPTION
Iso2Code	string	An ISO-2 code.
DefaultCulture	string	The default culture.
IsStateRequired	boolean	Indicates whether a state/province is required or not.
SupportedStatesList	array of strings	If a state/province is required, returns the full list for that country/region.
SupportedLanguagesList	array of strings	A list of supported languages.
SupportedCulturesList	array of strings	A list of supported cultures.
IsPostalCodeRequired	boolean	Indicates whether a ZIP code or postal code is required or not.
PostalCodeRegex	string	The regular expression that defines the ZIP/postal code .
IsCityRequired	boolean	Indicates whether a city is required or not.
IsVatIdSupported	boolean	Indicates whether a VAT ID is required or not.

PROPERTY	TYPE	DESCRIPTION
TaxIdFormat	string	The tax ID format.
TaxIdSample	string	The tax ID sample.
VatIdRegex	string	The tax ID regular expression.
PhoneNumberRegex	string	The phone number regular expression.
IsTaxIdSupported	boolean	Indicates whether a tax ID is supported or not. This property is different than IsVatIdSupported.
IsTaxIdOptional	boolean	Indicates whether a tax ID is optional or not.
CountryCallingCodesList	array of strings	The calling codes supported in the country/region.
Attributes	ResourceAttributes	The metadata attributes corresponding to the CountryInformation resource.

# Customer resources

4/19/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

## Customer

The **Customer** resource represents a customer or reseller. Most broadly, a customer resource can be any person, employee, or organization that wishes to do business with Microsoft and Microsoft's resellers. Customers also have a company profile and a billing profile.

### NOTE

The **Customer** resource has a rate limit of 500 requests per minute per tenant identifier.

PROPERTY	TYPE	DESCRIPTION
id	string	The customer ID.
commerceId	string	The commerce ID.
companyProfile	<a href="#">CustomerCompanyProfile</a>	Additional information about the company or organization.
billingProfile	<a href="#">CustomerBillingProfile</a>	Additional information used for billing.
relationshipToPartner	string	Defines the licensing program that the partner uses for this customer: "none", "reseller", "advisor", "syndication" or "microsoft_support".
allowDelegatedAccess	boolean	Whether the partner has been granted delegated admin privileges by this customer. This property is only available when getting a customer by ID, not by list.
userCredentials	<a href="#">UserCredentials</a>	The user credentials.
customDomains	array of strings	List of custom domains of a customer.
associatedPartnerId	string	The indirect reseller associated to this customer account. This value can be set only by indirect CSP partners.

PROPERTY	TYPE	DESCRIPTION
links	<a href="#">ResourceLinks</a>	The resource links contained within the profile.
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes corresponding to the profile.

## CustomerCompanyProfile

The **CustomerCompanyProfile** resource is additional information about the company or organization.

PROPERTY	TYPE	DESCRIPTION
tenantId	string	The customer's tenant identifier for Azure AD. This is also called a MicrosoftID.
domain	string	The customer's name, such as contoso.onmicrosoft.com.
companyName	string	The name of the company or organization.
links	<a href="#">ResourceLinks</a>	The resource links contained within the profile.
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes corresponding to the profile.

## CustomerBillingProfile

The **CustomerBillingProfile** resource is additional information used for billing the customer.

PROPERTY	TYPE	DESCRIPTION
id	string	The profile identifier.
firstName	string	The first name of the billing contact at the customer's company. This is the person that invoices and other billing communication will be directed to.
lastName	string	The last name of the billing contact.
email	string	The billing contact's email address
culture	string	Their preferred culture for communication and currency, such as "en-us".
language	string	Their preferred language for communication.

PROPERTY	TYPE	DESCRIPTION
companyName	string	The name of the company or organization.
defaultAddress	<a href="#">Address</a>	The address that bills are sent to, where the billing contact works.
links	<a href="#">ResourceLinks</a>	The resource links contained within the profile.
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes corresponding to the profile.

## CustomerRelationshipRequest

The **CustomerRelationshipRequest** resource contains the URL used by the customer to establish a reseller relationship with a partner.

PROPERTY	TYPE	DESCRIPTION
url	string	The URL used by the customer to establish a relationship with a partner.
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes corresponding to the relationship request.

# Customer usage resources

4/19/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Customers with usage-based subscriptions may have a monthly use budget. This budget sets a limit on the customer's maximum usage and allows the partner to track their usage over time.

### NOTE

Customer usage numbers are estimates (not final values), which should not be used for billing purposes.

## CustomerMonthlyUsageRecord

**CustomerMonthlyUsageRecord** represents the estimated monetary cost of a customer's usage in the current month.

PROPERTY	TYPE	DESCRIPTION
Budget	SpendingBudget	The spending budget allocated for the customer.
PercentUsed	decimal	The percentage used out of the allocated budget.
ResourceId	string	The unique identifier of the resource.
ResourceName	string	The name of the resource.
TotalCost	decimal	The estimated total cost of usage for the resources in the subscription.
CurrencyLocale	string	The customer's currency locale. Available for Microsoft Azure (MS-AZR-0145P) subscriptions.
CurrencyCode	string	Gets or sets the currency code. Available for Azure plans.
USDTotalCost	decimal	Gets or sets the estimated total cost in USD. Available for Azure plans.
IsUpgraded	bool	Gets or sets a value indicating whether the customer's Azure subscription is upgraded. The value <b>true</b> represents customers who have an Azure plan.

PROPERTY	TYPE	DESCRIPTION
LastModifiedDate	date	The date the usage data was last modified.
Attributes	ResourceAttributes	The metadata attributes corresponding to the usage record.

## CustomerUsageSummary

**CustomerUsageSummary** represents a summary of the customer's usage for an entire billing period.

PROPERTY	TYPE	DESCRIPTION
Budget	SpendingBudget	The spending budget allocated for the customer.
ResourceId	string	The unique identifier of the resource. In the context of <b>CustomerMonthlyUsageRecord</b> , this id is the customer id.
ResourceName	string	The name of the resource. In the context of <b>CustomerMonthlyUsageRecord</b> , this is the customer name.
BillingStartDate	date	The start date of the current billing period.
BillingEndDate	date	The end date of the current billing period.
TotalCost	decimal	The estimated total cost of usage for the resources in the subscription.
CurrencyLocale	string	The customer's currency locale. Available for Microsoft Azure (MS-AZR-0145P) subscriptions.
CurrencyCode	string	Gets or sets the currency code. Available for Azure plans.
USDTotalCost	decimal	Gets or sets the estimated total cost in USD. Available for Azure plan subscription resources.
LastModifiedDate	date	The date the usage data was last modified.
Links	ResourceLinks	The resource links corresponding to the usage summary.
Attributes	ResourceAttributes	The metadata attributes corresponding to the usage summary.

## PartnerUsageSummary

**PartnerUsageSummary** represents a partner-level summary of usage budgeting for all customers.

PROPERTY	TYPE	DESCRIPTION
EmailsToNotify	array of strings	The list of email addresses for notifications.
CustomerOverBudget	integer	The number of customers that are over budget.
CustomersTrendingOver	integer	The number of customers that are close to going over budget.
CustomersWithUsageBasedSubscriptions	integer	The number of customers with a usage-based subscription.
ResourceId	string	The unique identifier of the resource. In the context of <code>CustomerMonthlyUsageRecord</code> , this id is the customer id.
ResourceName	string	The name of the resource. In the context of <code>CustomerMonthlyUsageRecord</code> , this is the customer name.
BillingStartDate	date	The start date of the current billing period.
BillingEndDate	date	The end date of the current billing period.
TotalCost	decimal	The estimated total cost of all customer usage based on current usage from the start of the billing period.
CurrencyLocale	string	The currency locale.
LastModifiedDate	date	The date the usage data was last modified.
Links	ResourceLinks	The resource links corresponding to the usage summary.
Attributes	ResourceAttributes	The metadata attributes corresponding to the usage summary.

## SpendingBudget

**SpendingBudget** represents the budget allocated to this customer for usage-based subscriptions.

PROPERTY	TYPE	DESCRIPTION
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PROPERTY	TYPE	DESCRIPTION
Amount	decimal	The allocated budget. If the value is null, there is no spending budget allocated to this customer.
Attributes	ResourceAttributes	The metadata attributes corresponding to the budget.

# Device deployment resources

4/19/2020 • 3 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center for Microsoft Cloud Germany

The following resources are related to device deployment.

## ConfigurationPolicy

**ConfigurationPolicy** provides information about a configuration policy.

PROPERTY	TYPE	DESCRIPTION
id	string	A GUID-formatted string that identifies the policy.
name	string	The friendly name for the policy.
category	string	The category.
description	string	The policy description.
devicesAssignedCount	number	The number of devices assigned to this policy.
policySettings	array of strings	The policy settings: "none", "remove_oem_preinstalls", "oobe_user_not_local_admin", "skip_express_settings", "skip_oem_registration", "skip_eula".
createdDate	string in UTC date-time format	The date and time the policy was created.
lastModifiedDate	string in UTC date-time format	The date and time the policy was last modified.
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes.

## Device

**Device** provides information about a device.

PROPERTY	TYPE	DESCRIPTION
id	string	A GUID-formatted string that identifies the device.

PROPERTY	TYPE	DESCRIPTION
serialNumber	string	The serial number uniquely associated with the device.
productKey	string	The product key uniquely associated with the device.
hardwareHash	string	The hardware hash uniquely associated with the device.
modelName	string	The model name associated with the device.
oemManufacturerName	string	The name of the OEM manufacturer associated with the device.
policies	array of objects	The list of policies assigned to the device.
uploadedDate	string in UTC date-time format	The date and time the device details were uploaded.
allowedOperations	array of strings	The list of HTTP methods allowed on a device sync as GET, PATCH, DELETE.
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes.

## BatchUploadDetails

**BatchUploadDetails** describes the status of a device batch upload of information about each device in a list of devices.

PROPERTY	TYPE	DESCRIPTION
batchTrackingId	string	A GUID-formatted string that is associated with the batch of devices uploaded.
status	string	The status of the batch upload: "unknown", "queued", "processing", "finished", "finished_with_errors".
startedTime	string in UTC date-time format	The date and time that the batch upload process started.
completedTime	string in UTC date-time format	The date and time that the batch upload process completed.
devicesStatus	array of <a href="#">DeviceUploadDetails</a> resources	An array of objects that specify the status of each device information upload.
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes.

## DeviceUploadDetails

**DeviceUploadDetails** describes the status of an upload of information about a device.

PROPERTY	TYPE	DESCRIPTION
deviceID	string	A GUID-formatted string that is associated with the device.
serialNumber	string	The serial number uniquely associated with the device.
productKey	string	The product key uniquely associated with the device.
status	string	The status of the device information upload: "in-progress", "finished", "finished_with_errors".
errorCode	string	The HTTP status error code returned if the device upload fails.
errorDescription	string	The HTTP error description if the device upload fails.
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes.

## DeviceBatch

**DeviceBatch** represents a collection of devices.

PROPERTY	TYPE	DESCRIPTION
id	string	A GUID-formatted string that is associated with the batch of devices.
createdBy	string	The name of the tenant that created the collection.
creationDate	string in UTC date-time format	The data and time that the collection was created.
deviceCount	number	The number of devices in the collection.
devicesLink	<a href="#">Link</a>	A link to the devices contained in this batch.
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes.

## DeviceBatchCreationRequest

**DeviceBatchCreationRequest** provides the information required to create a device batch and populates it with devices.

PROPERTY	TYPE	DESCRIPTION
batchId	string	A GUID-formatted string that is associated with the batch of devices.
devices	array of <a href="#">Device</a> objects	Each object specifies a device. The following combinations of fields for identifying a device are accepted: hardwareHash + productKey, hardwareHash + serialNumber, hardwareHash + productKey + serialNumber, hardwareHash only, productKey only, serialNumber + oemManufacturerName + modelName.
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes.

## DevicePolicyUpdateRequest

**DevicePolicyUpdateRequest** provides the information required to update a list of devices with a policy.

PROPERTY	TYPE	DESCRIPTION
devices	array of <a href="#">Device</a> objects	Each object specifies a device. The following properties are required: Id, Policies.
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes.

# Entitlement resources

4/24/2020 • 3 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

## Entitlement

This resource represents the products to which the customer has right to use because of partner purchase on items from the catalog.

PROPERTY	TYPE	DESCRIPTION
referenceOrder	ReferenceOrder	The order reference that resulted in the entitlement.
productId	string	The ID of the product.
skuid	string	The ID of the SKU.
quantity	int	The quantity of entitlements (excludes Unfulfilled/Transferred entitlements).
quantityDetails	IEnumerable< <a href="#">QuantityDetail</a> >	The list of entitlement quantity details (the number of items and status of each quantity).
entitlementType	string	The type of entitlement. (Updated to string from <a href="#">EntitlementType</a> in SDK 1.8.)
entitledArtifacts	IEnumerable< <a href="#">Artifact</a> >	The list of artifacts associated with the entitlement.
IncludedEntitlements	IEnumerable< <a href="#">Entitlement</a> >	The list of entitlements, which are implicitly included as a result of the ProductId / Skuid purchase from catalog.
ExpiryDate	string in UTC date-time format	The entitlement expiry date (if applicable).

## ReferenceOrder

The order reference of an entitlement.

PROPERTY	TYPE	DESCRIPTION
id	string	The ID of the referenced order.
lineitemId	string	The ID of the referenced order line item.
alternateId	string	The alternate ID of the referenced order line item.

## QuantityDetail

Represents the details of an entitlement quantity.

PROPERTY	TYPE	DESCRIPTION
quantity	int	The number of items.
status	string	The status of quantity.

## EntitlementType

### IMPORTANT

Deprecated in SDK v1.9

An [Enum](#) with values that indicate the type of entitlement.

VALUE	DESCRIPTION
Software	Indicates entitlement type related to software.
VirtualMachineReservedInstance	Indicates entitlement type related to Azure Reserved Virtual Machine Instances.

## Artifact

The artifact associated with the entitlement.

PROPERTY	TYPE	DESCRIPTION
artifactType	string	The type of artifact. (Updated to string from <a href="#">ArtifactType</a> in SDK V1.8)

PROPERTY	TYPE	DESCRIPTION
dynamicAttributes	Dictionary<string, object>	Dynamic attributes containing artifact type specific values. For example when artifactType = "reservedinstance", this property will contain "reservationType" = "virtualmachines" or "reservationType" = "sqldatabases" denoting virtual machine reserved instance or Azure SQL reserved instance. (Available starting in SDK v1.9)

## ArtifactType

### IMPORTANT

Deprecated in SDK v1.9

An [Enum](#) with values that indicate the type of entitlement artifact.

VALUE	DESCRIPTION
VirtualMachineReservedInstance	Indicates the artifact aids with retrieval of Azure Reserved Virtual Machine Instances.

## ReservedInstanceArtifact

The artifact associated with an Azure Reserved Instance entitlement. It inherits from the [Artifact](#) class.

PROPERTY	TYPE	DESCRIPTION
link	<a href="#">Link</a>	The link to get all associated artifact details.
resourceID	string	The ID of the Azure reservation order or resource.

## ReservedInstanceArtifactDetails

Represents the entity returned upon invocation of the Azure Reserved Instance artifact link.

PROPERTY	TYPE	DESCRIPTION
type	string	The type of artifact.
reservations	IEnumerable	Indicates the Azure resource or reservation order identifier.

## Reservation

Represents an individual reservation.

PROPERTY	TYPE	DESCRIPTION
reservationId	string	The ID of the reservation.
scopeType	string	The type of scope associated with the virtual machine reservation.
displayName	string	The display name of the reservation.
appliedScopes	IEnumerable	The list of applied scopes associated with the reservation. (Only available when scopeType isn't shared.)
quantity	int	The number of virtual machines in the reservation.
expiryDateTime	string in UTC date-time format	The expiry date of the reservation.
effectiveDateTime	string in UTC date-time format	The effective date of the reservation.
provisioningState	string	The provisioning state of the reservation.

## VirtualMachineReservedInstanceArtifact

### IMPORTANT

Deprecated in SDK v1.9

The artifact associated with an Azure Reserved Virtual Machine Instance entitlement. It inherits from the [Artifact](#) class.

PROPERTY	TYPE	DESCRIPTION
link	<a href="#">Link</a>	The link to get all associated artifact details.
resourceID	string	The ID of the Azure reservation order or resource.

## VirtualMachineReservedInstanceArtifactDetails

### IMPORTANT

Deprecated in SDK v1.9

Represents the entity returned upon invocation of the Azure Reserved Virtual Machine Instance artifact link.

PROPERTY	TYPE	DESCRIPTION
type	<a href="#">ArtifactType</a>	The type of artifact.

PROPERTY	TYPE	DESCRIPTION
virtualMachineReservations	IEnumerable< <a href="#">VirtualMachineReservation</a> >	Indicates the Azure resource or reservation order identifier.

## VirtualMachineReservation

### IMPORTANT

Deprecated in SDK v1.9

Represents an individual virtual machine reservation.

PROPERTY	TYPE	DESCRIPTION
reservationId	string	The ID of the reservation.
scopeType	string	The type of scope associated with the virtual machine reservation.
displayName	string	The display name of the reservation.
appliedScopes	IEnumerable	The list of applied scopes associated with the reservation. (Only available when scopeType isn't shared.)
quantity	int	The number of virtual machines in the reservation.
expiryDateTime	string in UTC date-time format	The expiry date of the reservation.
effectiveDateTime	string in UTC date-time format	The effective date of the reservation.
provisioningState	string	The provisioning state of the reservation.

# Invoice resources

4/24/2020 • 12 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

The following invoice-related resources are available through the Partner Center APIs.

## Invoice

PROPERTY	TYPE	DESCRIPTION
id	string	The invoice identifier.
invoiceDate	string in UTC date-time format	The date the invoice was generated.
billingPeriodStartDate	string in UTC date-time format	Billing period start date in UTC.
billingPeriodEndDate	string in UTC date-time format	Billing period end date in UTC.
totalCharges	number	The total charges. Includes charges for transactions and any adjustments.
paidAmount	number	The amount paid by the partner. Negative if a payment was received.
currencyCode	string	A code that indicates the currency used for all invoice item amounts and totals.
currencySymbol	string	The currency symbol used for all invoice item amounts and totals.
pdfDownloadLink	string	A link to download the invoice in PDF format. This link isn't returned as part of the search results, and is populated only if the invoice is accessed by ID. This link auto-expires in 30 minutes.
invoiceDetails	array of <a href="#">InvoiceDetail</a> objects	The invoice details.
amendments	array of <a href="#">Invoice</a> objects	The amendments to this invoice.
documentType	string	The document type of the invoice: "Credit Note", "Invoice".

PROPERTY	TYPE	DESCRIPTION
amendsOf	string	The reference number of the document of which this document is an amendment.
invoiceType	string	The type of invoice: "recurring", "one_time".
links	<a href="#">ResourceLinks</a>	The resource links.
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes.

## InvoiceDetail

An invoice contains a collection of billed items, and each item is represented by an `InvoiceDetail` resource.

PROPERTY	TYPE	DESCRIPTION
invoiceLineItemType	string	The type of invoice detail: "none", "usage_line_items", "billing_line_items".
billingProvider	string	The billing provider: "none", "office", "azure" or "azure_data_market".
links	<a href="#">ResourceLinks</a>	The resource links.
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes.

## InvoiceLineItem

Each individual charge within an invoice is represented as an `InvoiceLineItem`.

PROPERTY	TYPE	DESCRIPTION
invoiceLineItemType	string	The type of invoice line item: "none", "usage_line_items", "billing_line_items".
billingProvider	string	The billing provider: "none", "office", "azure" or "azure_data_market".
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes.

## InvoiceSummary

Describes a summary of the balance and total charges of an invoice.

PROPERTY	TYPE	DESCRIPTION
balanceAmount	number	The balance of the invoice. This is the total amount of unpaid bills.

PROPERTY	TYPE	DESCRIPTION
currencyCode	string	A code that indicates the currency used for the balance amount.
currencySymbol	string	The currency symbol used.
accountingDate	string in UTC date-time format	The date the balance amount was last updated.
firstInvoiceCreationDate	string in UTC date-time format	The date the first invoice for the customer was created.
lastPaymentDate	string in UTC date-time format	The date of the last payment.
lastPaymentAmount	number	The amount of the last payment.
latestInvoiceDate	string in UTC date-time format	The date the last invoice for the customer was created.
details	array of <a href="#">InvoiceSummaryDetail</a> objects	The invoice summary detail.
links	<a href="#">ResourceLinks</a>	The resource links.
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes.

## InvoiceSummaryDetail

Represent a summary of the individual details for an invoice type (for example, recurring, one\_time).

PROPERTY	TYPE	DESCRIPTION
invoiceType	string	The type of invoice: "recurring", "one_time".
summary	<a href="#">InvoiceSummary</a> object	The summary of the invoice per invoice type.

## InvoiceSummaries

Represent a collection of type [InvoiceSummary](#) that contain the individual details for an invoice type per currency.

PROPERTY	TYPE	DESCRIPTION
collectionOfSummary	array of <a href="#">InvoiceSummary</a> objects	The summary of the invoice per invoice type per currency.

## LicenseBasedLineItem

Represents an invoice billing line item for licensed based subscriptions.

PROPERTY	TYPE	DESCRIPTION
amount	string	Gets or sets the total amount. Total amount = unit price * quantity.
attributes	string	Gets the attributes.
billingCycleType	string	Gets or sets the billing cycle type.
billingProvider	string	Gets the billing provider.
chargeEndDate	string in UTC date-time format	Gets or sets the end date for the charge.
chargeStartDate	string in UTC date-time format	Gets or sets the start date for the charge.
chargeType	string	Gets or sets the type of charge.
currency	string	Gets or sets the currency used for this line item.
customerId	string	Gets or sets the customer unique identifier in the Microsoft billing platform.
customerName	string in UTC date-time format	Gets or sets the customer name.
domainName	string	Gets or sets domain name.
durableOfferId	string	Gets or sets the durable offer unique identifier.
invoiceLineItemType	string	Gets the type of invoice line item.
mpnId	number	Gets or sets the MPN ID associated to this line item. For direct resellers, this is the MPN Id of the reseller. For indirect resellers, this is the MPN ID of the Value Added Reseller (VAR).
offerId	string	Gets or sets the offer unique identifier.
offerName	string	Gets or sets the offer name.
orderId	string	Gets or sets the order unique identifier.
partnerId	string	Gets or sets the partner Azure active directory tenant ID.
quantity	number	Gets or sets the number of units associated with this line item.
subscriptionDescription	string	Gets or sets the subscription description.

PROPERTY	TYPE	DESCRIPTION
subscriptionEndDate	string in UTC date-time format	Gets or sets the date when subscription expires.
subscriptionId	string	Gets or sets the subscription unique identifier.
subscriptionName	string	Gets or sets the subscription name.
subscriptionStartDate	string in UTC date-time format	Gets or sets the date when the subscription starts.
subtotal	number	Gets or sets the amount after discount.
syndicationPartnerSubscriptionNumber	string	Gets or sets the syndication partner subscription number.
tax	number	Gets or sets the taxes charged.
tier2MpnId	number	Gets or sets the MPN ID of the Tier 2 partner associated to this line item.
totalForCustomer	number	Gets or sets the total amount after discount and tax.
totalOtherDiscount	number	Gets or sets the discount associated with this purchase.
unitPrice	number	Gets or sets the unit price.

## UsageBasedLineItem

Represents an invoice billing line item for usage based subscriptions.

PROPERTY	TYPE	DESCRIPTION
attributes	string	Gets the attributes.
billingCycleType	string	Gets or sets the billing cycle type.
billingProvider	string	Gets the billing provider.
chargeEndDate	string in UTC date-time format	Gets or sets the end date for the charge.
chargeStartDate	string in UTC date-time format	Gets or sets the start date for the charge.
chargeType	string	Gets or sets the type of charge.
consumedQuantity	number	Gets or sets the total units consumed.

PROPERTY	TYPE	DESCRIPTION
consumptionDiscount	string	Gets or sets the discount on consumption.
consumptionPrice	string	Gets or sets the price of quantity consumed.
currency	string	Gets or sets the currency associated with the prices.
customerName	string	Gets or sets the customer name.
customerId	string	Gets or sets the customer unique identifier.
detailLineItemId	number	Gets or sets the detail line item ID. Uniquely identifies the line items for cases where calculation is different for units consumed. Example: Total consumed = 1338, 1024 is charged with one rate, 314 is charge with a different rate.
domainName	string	Gets or sets domain name.
includedQuantity	number	Gets or sets the units included in the order.
invoiceLineItemType	string	Gets the type of invoice line item.
invoiceNumber	string	Gets or sets the invoice number.
listPrice	number	Gets or sets the price of each unit.
mpnId	number	Gets or sets the MPN ID associated to this line item. For direct resellers, this is the MPN ID of the reseller. For indirect resellers, this is the MPN ID of the Value Added Reseller (VAR).
orderId	string	Gets or sets the order unique identifier.
overageQuantity	number	Gets or sets the quantity consumed above allowed usage.
partnerBillableAccountId	string	Gets or sets the partner billable account ID.
partnerId	string	Gets or sets the partner Azure active directory tenant ID.
partnerName	string	Gets or sets the partner's name.
postTaxEffectiveRate	number	Gets or sets the effective price after taxes.

PROPERTY	TYPE	DESCRIPTION
postTaxTotal	number	Gets or sets the total charges after tax. Pretax Charges + Tax Amount
preTaxCharges	number	Gets or sets the price charged before taxes.
preTaxEffectiveRate	number	Gets or sets the effective price before taxes.
region	string	Gets or sets the region associated with the resource instance.
resourceGuid	string	Gets or sets the resource identifier.
resourceName	string	Gets or sets the resource name. Example: Database (GB/month).
serviceName	string	Gets or sets the service name. Example: Azure Data Service.
serviceType	string	Gets or sets the service type. Example: Azure SQL Azure DB.
sku	string	Gets or sets the service SKU.
subscriptionDescription	string	Gets or sets the subscription description.
subscriptionId	string	Gets or sets the subscription unique identifier.
subscriptionName	string	Gets or sets the subscription name.
taxAmount	number	Gets or sets the amount of tax charged.
tier2MpnId	number	Gets or sets the MPN ID of the Tier 2 partner associated to this line item.
unit	string	Gets or sets the unit of measure for Azure usage.

## InvoiceStatement

Represents the operations available on an invoice statement in application/pdf.

PROPERTY	TYPE	DESCRIPTION
httpResponseMessage	object	ByteArrayContent with contentType = application/pdf.

## OneTimeInvoiceLineItem

Represents an invoice billing line item for licensed-based subscriptions.

PROPERTY	TYPE	DESCRIPTION
PartnerId	string	Gets or sets the partner tenant ID.
CustomerId	string	Gets or sets the customer tenant ID.
CustomerName	string	Gets or sets the customer name.
CustomerDomainName	string	Gets or sets the customer domain name.
CustomerCountry	string	Gets or sets the customer country.
InvoiceNumber	string	Gets or sets the invoice number.
MpnId	string	Gets or sets the MPN ID associated to this line item.
ResellerMpnId	int	Gets or sets the order unique identifier.
OrderDate	DateTime	Gets or sets the date when order created.
ProductId	string	Gets or sets the product unique identifier.
Skuid	string	Gets or sets the SKU unique identifier.
AvailabilityId	string	Gets or sets the availability unique identifier.
ProductName	string	Gets or sets the product name.
SkuName	string	Gets or sets the SKU name.
ChargeType	string	Gets or sets the type of charge.
UnitPrice	decimal	Gets or sets the unit price.
EffectiveUnitPrice	decimal	Gets or sets the effective unit price.
UnitType	string	Gets or sets the unit type.
Quantity	int	Gets or sets the number of units associated with this line item.
Subtotal	decimal	Gets or sets the amount after discount.
TaxTotal	decimal	Gets or sets the taxes charged.
TotalForCustomer	decimal	Gets or sets the total amount after discount and tax.

PROPERTY	TYPE	DESCRIPTION
Currency	string	Gets or sets the currency used for this line item.
PublisherName	string	Gets or sets the publisher name associated with this purchase.
PublisherId	string	Gets or sets the publisher ID associated with this purchase.
SubscriptionDescription	string	Gets or sets the subscription description associated with this purchase.
SubscriptionId	string	Gets or sets the subscription ID associated with this purchase.
ChargeStartDate	DateTime	Gets or sets the charge start date associated with this purchase.
ChargeEndDate	DateTime	Gets or sets the charge end date associated with this purchase.
TermAndBillingCycle	string	Gets or sets the term and billing cycle associated with this purchase.
AlternateId	string	Gets or sets the Alternate ID (quote ID).
PriceAdjustmentDescription	string	Gets or sets the price adjustment description.
DiscountDetails	string	<b>Deprecated.</b> Gets or sets the discount details associated with this purchase.
PricingCurrency	string	Gets or sets the pricing currency code.
PCToBCEXchangeRate	decimal	Gets or sets the pricing currency to the billing currency exchange rate.
PCToBCEXchangeRateDate	DateTime	Gets or sets the exchange rate date at which the pricing currency to the billing currency exchange rate was determined.
BillableQuantity	decimal	Gets or sets the units purchased. For each design column named as <b>BillableQuantity</b> .
MeterDescription	string	Gets or sets the meter description for consumption line item.
ReservationOrderId	string	Gets or sets the reservation order identifier for an Azure RI Purchase.

PROPERTY	TYPE	DESCRIPTION
BillingFrequency	string	Gets or sets the billing frequency.
InvoiceLineItemType	InvoiceLineItemType	Returns the type of invoice line item.
BillingProvider	BillingProvider	Returns the billing provider.

## DailyRatedUsageLineItem

Represents unbilled, billed reconciliation line items for daily rated usage.

PROPERTY	TYPE	DESCRIPTION
PartnerId	string	Gets or sets the partner tenant ID.
PartnerName	string	Gets or sets the partner name.
CustomerId	string	Gets or sets the tenant ID of the customer that usage belongs to.
CustomerName	string	Gets or sets the name of the customer company that usage belongs to.
CustomerDomainName	string	Gets or sets the domain name of the customer that usage belongs to.
InvoiceNumber	string	Gets or sets the ID of the invoice that usage belongs to.
ProductId	string	Gets or sets the product unique identifier.
Skuid	string	Gets or sets the SKU unique identifier.
AvailabilityId	string	Gets or sets the availability unique identifier.
SkuName	string	Gets or sets the SKU name for the service.
ProductName	string	Gets or sets the name of the product.
PublisherName	string	Gets or sets the name of publisher.
PublisherId	string	Gets or sets the ID of the publisher.
SubscriptionId	string	Gets or sets the subscription ID.
SubscriptionDescription	string	Gets or sets the subscription description.
ChargeStartDate	DateTime	Gets or sets the charge start date.

PROPERTY	TYPE	DESCRIPTION
ChargeEndDate	DateTime	Gets or sets the charge end date.
UsageDate	DateTime	Gets or sets the usage date.
MeterType	string	Gets or sets the meter type.
MeterCategory	string	Gets or sets the meter category.
MeterId	string	Gets or sets the meter ID (GUID).
MeterSubCategory	string	Gets or sets the meter sub category.
MeterName	string	Gets or sets the meter name.
MeterRegion	string	Gets or sets the meter region.
UnitOfMeasure	string	Gets or sets the unit of measure.
ResourceLocation	string	Gets or sets the location of resource.
ConsumedService	string	Gets or sets the consumed service name.
ResourceGroup	string	Gets or sets the name of resource group.
ResourceUri	string	Gets or sets the uri of the resource instance that the usage is about.
Tags	string	Gets or sets the customer added tags.
AdditionalInfo	string	Gets or sets the service-specific metadata. For example, an image type for a virtual machine.
ServiceInfo1	string	Gets or sets internal Azure Service Metadata.
ServiceInfo2	string	Gets or sets service information for example, an image type for a virtual machine and ISP name for ExpressRoute.
CustomerCountry	string	Gets or sets the country of the customer.
MpnId	string	Gets or sets the MPN ID associated to this line item.
ResellerMpnId	string	Gets or sets the Reseller MPN ID of the Tier 2 partner associated to this line item.

PROPERTY	TYPE	DESCRIPTION
ChargeType	string	Gets or sets the type of charge.
UnitPrice	decimal	Gets or sets the price of unit.
Quantity	decimal	Gets or sets the quantity of usage.
UnitType	string	Gets or sets the unit type (such as 1 hour).
BillingPreTaxTotal	decimal	Gets or sets the extended cost or total cost before tax in local currency of the customer or billing currency.
BillingCurrency	string	Gets or sets ISO currency in which the meter is charged in local currency of the customer or billing currency.
PricingPreTaxTotal	decimal	Gets or sets the extended cost or total cost before tax in USD or catalog currency used for rating.
PricingCurrency	string	Gets or sets ISO currency in which the meter is charged in USD or catalog currency used for rating.
EntitlementId	string	Gets or sets the entitlement (Azure subscription) ID.
EntitlementDescription	string	Gets or sets the entitlement (Azure subscription) description.
PCToBCEExchangeRate	string	Gets or sets the pricing currency to the billing currency exchange rate.
PCToBCEExchangeRateDate	DateTime	Gets or sets the pricing currency to the billing currency exchange rate date.
EffectiveUnitPrice	decimal	Gets or sets the effective unit price.
RateOfPartnerEarnedCredit	decimal	Gets or sets the rate of partner earned credit.
hasPartnerEarnedCredit	bool	Gets or sets is partner earned credit applied.
InvoiceLineItemType	InvoiceLineItemType	Returns the type of invoice line item.
BillingProvider	BillingProvider	Returns the billing provider.

# License resources

4/24/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Describes resources related to licenses.

## License

Describes a user license.

### NOTE

Unsupported on Partner Center operated by 21Vianet.

PROPERTY	TYPE	DESCRIPTION
servicePlans	array of ServicePlan resources	The collection of service plans that correspond to the license
productSKU	ProductSku	The sku of the product that corresponds to the license.
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes corresponding to the license.

## LicenseUpdate

Provides information used to assign or remove licenses from a user.

PROPERTY	TYPE	DESCRIPTION
licensesToAssign	array of objects	Array of <a href="#">LicenseAssignment</a> objects.
licensesToRemove	array of strings	The product SKU identifiers of the licenses to remove.
licenseWarnings	array of objects	Array of <a href="#">LicenseWarning</a> objects.
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes.

## LicenseAssignment

Provides information needed for a license update operation.

PROPERTY	TYPE	DESCRIPTION
excludedPlans	array of strings	The service plan identifiers to be excluded from availability to the user.
skuld	string	The product SKU identifier for the license.

## LicenseWarning

Contains warning information that occurred during a license update operation.

PROPERTY	TYPE	DESCRIPTION
code	string	The warning code.
message	string	The warning message.
servicePlans	array of strings	The service plan names associated with the warning.

## ProductSku

Describes product details.

PROPERTY	TYPE	DESCRIPTION
id	string	The product identifier.
name	string	The user principal identifier.
skuPartNumber	string	The SKU part number name for the product. For example, for Office 365 Plan E3, this value is EnterprisePack . This property can be used in place of id if the id isn't available.
targetType	string	The target type of the product. This property identifies whether the product is applicable to a User or a Tenant .
licenseGroupId	string	Identifies via a group identifier the authority or service that manages the productSku license. Products are segregated under license groups for better manageability. group1 - All products whose licenses can be managed by Azure Active Directory (AAD). group2 - Minecraft product licenses.

## ServicePlan

Identifies a deployable service within a product SKU. A product can have many service plans.

PROPERTY	TYPE	DESCRIPTION
id	string	The service plan identifier.
displayName	string	The localized display name for the service plan.
serviceName	string	The service name.
capabilityStatus	string	The service plan status of the service plan.
targetType	string	The target type of the service plan. This property identifies whether the product is applicable to a "User" or a "Tenant".

## SubscribedSku

Describes a subscribed product owned by a tenant.

PROPERTY	TYPE	DESCRIPTION
availableUnits	integer	The number of units available for assignment. This value is calculated as total units - consumed units.
activeUnits	integer	The number of units active for assignment.
consumedUnits	integer	The number of units consumed.
suspendedUnits	integer	The number of units suspended.
totalUnits	integer	The total number of units. This value is calculated as the sum of the active and warning units.
warningUnits	integer	The number of warning units.
productSku	ProductSku	The product sku.
servicePlans	array of ServicePlan resources	The collection of service plans of a product.
capabilityStatus	string	The sku status of a product.
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes corresponding to the resource.

# Managed service resources

4/23/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Managed services are services to which a partner has delegated admin privileges. Partners can provide support for and file service requests on the behalf of their managed services.

## ManagedService

Describes a managed service.

PROPERTY	TYPE	DESCRIPTION
Id	string	The managed service id.
Name	string	The name of the managed service.
GroupName	string	The name of the group to which the service belongs.
Links	ManagedServiceLinks	The resource links corresponding to the managed service.
Attributes	ResourceAttributes	The metadata attributes corresponding to the agreement.

## ManagedServiceLinks

Contains the links that allow the partner with delegated admin permissions to provide support for the service.

PROPERTY	TYPE	DESCRIPTION
AdminService	Link	The admin service URI.
ServiceHealth	Link	The service health URI.
ServiceTicket	Link	The service ticket URI.
Self	Link	The self URI.
Next	Link	The next page of items.
Previous	Link	The previous page of items.

# Offer resources

4/23/2020 • 3 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Describes a product listed in the reseller catalog that they can offer to their customers.

## Offer

PROPERTY	TYPE	DESCRIPTION
id	string	The offer identifier.
name	string	The offer name.
description	string	A description of the offer.
minimumQuantity	int	The minimum quantity available.
maximumQuantity	int	The maximum quantity available.
rank	int	The offer rank or priority compared to other categories in the same product line. This property should be set only if there is more than one offer for a given product line.
uri	string	The offer URI.
locale	string	The locale in which the offer applies.
country	string	The country/region where the offer applies.
category	<a href="#">OfferCategory</a>	The category of the offer.

PROPERTY	TYPE	DESCRIPTION
limitUnitOfMeasure	string	A value that indicates the type of purchase limitation. Possible values include: "None" - There are no restrictions on the number of subscriptions based on the offer purchased. "Concurrent" - The number of subscriptions that can exist on the customer tenant at a given time, this includes subscriptions that are active or canceled. This value applies mostly to small business offers where license counts are less than 300. De-provisioned subscriptions don't count. "LifeTime" - The number of subscriptions that can exist for the lifetime of the customer tenant. This value is most applicable to Trials. De-provisioned subscriptions don't count.
limit	int	The amount of subscriptions that can be purchased of this offer based on the limitUnitOfMeasure.
prerequisiteOffers	string	The prerequisite offers.
isAddOn	boolean	A value indicating whether this instance is an addon.
hasAddOns	boolean	A value indicating whether this offer has any addons.
isAvailableForPurchase	boolean	A value indicating whether this instance is available for purchase.
billing	string	Specifies the billing type for the line item purchase: "none", "usage", or "license".
supportedBillingCycles	array of strings	Indicates the billing cycles supported for this offer. Supported values are the member names found in <a href="#">BillingCycleType</a>
isAutoRenewable	boolean	A value indicating whether the offer renews automatically.
upgradeTargetOffers	array of strings	The list of offers that this offer can be upgraded to.
conversionTargetOffers	array of strings	The list of offers that this offer can be converted to.

PROPERTY	TYPE	DESCRIPTION
reselleeQualifications	array of strings	The qualifications required by the customer in order for a partner to purchase the offer for that customer.
resellerQualifications	array of strings	The qualifications required by the partner in order to purchase the offer for a customer.
salesGroupId	string	A string used to group offers into separate orders.
isTrial	boolean	A value indicating whether this is a trial offer.
product	<a href="#">OfferProduct</a>	Gets the offer product.
unitType	string	The type of the unit.
links	<a href="#">OfferLinks</a>	The offer's "learn more" link.
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes corresponding to the offer.

## OfferCategory

Describes the categorization of an offer. This includes the rank or priority of this offer category compared to others in the same product line.

PROPERTY	TYPE	DESCRIPTION
id	string	The category identifier.
name	string	The category name.
rank	int	The category rank or priority compared to other categories in the same offer. This property should be set only if there is more than one offer category for a given offer.
locale	string	The locale in which the offer applies.
country	string	The country/region where the offer applies.
links	<a href="#">ResourceLinks</a>	The resource links corresponding to the OfferCategory.
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes corresponding to the OfferCategory.

## OfferLinks

Contains links for learning more information about the offer.

PROPERTY	TYPE	DESCRIPTION
learnMore	Link	The "learn more" link.
self	Link	The self URI
next	Link	The next page of items.
previous	Link	The previous page of items.

## OfferProduct

A product or service which may have more than one offer associated with it, each with different sets of features and targeted at different customer needs.

PROPERTY	TYPE	DESCRIPTION
Id	string	The category identifier.
Name	string	The category name.
Unit	string	The product unit.

# Order resources

4/24/2020 • 3 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

A partner places an order when a customer wants to buy a subscription from a list of offers.

### NOTE

The Order resource has a rate limit of 500 requests per minute per tenant identifier.

## Order

Describes a partner's order.

PROPERTY	TYPE	DESCRIPTION
id	string	An order identifier that is supplied upon successful creation of the order.
alternateId	string	A friendly identifier for the order.
referenceCustomerId	string	The customer identifier.
billingCycle	string	Indicates the frequency with which the partner is billed for this order. Supported values are the member names found in <a href="#">BillingCycleType</a> . The default is "Monthly" or "OneTime" at order creation. This field is applied upon successful creation of the order.
transactionType	string	Read-only. The transaction type of the order. Supported values are 'UserPurchase', 'SystemPurchase', or 'SystemBilling'
lineItems	array of <a href="#">OrderLineItem</a> resources	An itemized list of the offers the customer is purchasing including the quantity.
currencyCode	string	Read-only. The currency used when placing the order. Applied upon successful creation of the order.

PROPERTY	TYPE	DESCRIPTION
currencySymbol	string	Read-only. The currency symbol associated with the currency code.
creationDate	datetime	Read-only. The date the order was created, in date-time format. Applied upon successful creation of the order.
status	string	Read-only. The status of the order. Supported values are the member names found in <a href="#">OrderStatus</a> .
links	<a href="#">OrderLinks</a>	The resource links corresponding to the Order.
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes corresponding to the Order.

## OrderLineItem

An order contains an itemized list of offers, and each item is represented as an OrderLineItem.

PROPERTY	TYPE	DESCRIPTION
lineItemNumber	int	Each line item in the collection gets a unique line number, counting up from 0 to count-1.
offerId	string	The ID of the offer.
subscriptionId	string	The ID of the subscription.
parentSubscriptionId	string	Optional. The ID of the parent subscription in an add-on offer. Applies to PATCH only.
friendlyName	string	Optional. The friendly name for the subscription defined by the partner to help disambiguate.
quantity	int	The number of licenses or instances.
termDuration	string	An ISO 8601 representation of the term's duration. The current supported values are <b>P1M</b> (1 month), <b>P1Y</b> (1 year) and <b>P3Y</b> (3 years).
transactionType	string	Read-only. The transaction type of the line item. Supported Values are 'new', 'renew', 'addQuantity', 'removeQuantity', 'cancel', 'convert', or 'customerCredit'.

PROPERTY	TYPE	DESCRIPTION
partnerIdOnRecord	string	When an indirect provider places an order on behalf of an indirect reseller, populate this field with the MPN ID of the <b>indirect reseller only</b> (never the ID of the indirect provider). This ensures proper accounting for incentives.
provisioningContext	Dictionary<string, string>	Information required for provisioning for some items in the catalog. The provisioningVariables property in a SKU indicates which properties are required for specific items in the catalog.
links	<a href="#">OrderLineItemLinks</a>	Read-only. The resource links corresponding to the order line item.
renewsTo	<a href="#">RenewsTo</a>	Renewal term duration details.

## RenewsTo

Represents the renewal term duration details.

PROPERTY	TYPE	REQUIRED	DESCRIPTION
termDuration	string	No	An ISO 8601 representation of the renewal term's duration. The current supported values are <b>P1M</b> (1 month) and <b>P1Y</b> (1 year).

## OrderLinks

Represents the resource links corresponding to the order.

PROPERTY	TYPE	DESCRIPTION
provisioningStatus	<a href="#">Link</a>	When populated, the link to retrieve provisioning status for the order.
self	<a href="#">Link</a>	The link to retrieve the order resource.

## OrderLineItemLinks

Represents the full subscription associated with the order.

PROPERTY	TYPE	DESCRIPTION
provisioningStatus	<a href="#">Link</a>	When populated, the link to retrieve the <a href="#">provisioning status</a> of the line item.

PROPERTY	TYPE	DESCRIPTION
sku	<a href="#">Link</a>	The link to retrieve SKU information for the catalog item bought.
subscription	<a href="#">Link</a>	When populated, the link to the full subscription information.
activationLinks	<a href="#">Link</a>	When populated, the GET resource for links to activate the subscription.

## OrderStatus

An [Enum](#) with values that indicate the state of the order.

VALUE	POSITION	DESCRIPTION
unknown	0	Enum initializer.
completed	1	Indicates that the order is completed.
pending	2	Indicates that the order is still pending.
cancelled	3	Indicates that the order has been cancelled.

## OrderLineItemProvisioningStatus

Represents the provisioning status of an [OrderLineitem](#).

PROPERTY	TYPE	DESCRIPTION
lineItemNumber	int	The unique line number of the order line item. Values range from 0 to count-1.
status	string	The provisioning status of the order line item. Values include: "Fulfilled": Fulfillment of the order is successfully completed and the user will be able to use the reservations "Unfulfilled": Not fulfilled due to cancellation "PrefulfillmentPending": Your request is still processing, fulfillment is not yet complete
quantityProvisioningInformation	List< <a href="#">QuantityProvisioningStatus</a> >	A list of quantity provisioning status information for the order line item.

## QuantityProvisioningStatus

Represents the provisioning status by quantity.

PROPERTY	TYPE	DESCRIPTION
quantity	int	The number of items.
status	string	The status of the number of items.

# Profile resources

4/23/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Describes the behavior of a Cloud Solution Provider's profiles.

## BillingProfile

Describes a partner's billing profile.

PROPERTY	TYPE	DESCRIPTION
companyName	string	The billing company name.
address	Address	The billing address address of the company or organization.
primaryContact	Contact	The primary contact for the company or organization.
purchaseOrderNumber	string	The company or organization's purchase order number.
taxId	string	The company or organization's tax Id.
billingCurrency	string	The currency used by the company or organization.
profileType	string	The partner profile type.
links	ResourceLinks	The resource links corresponding to the profile.
attributes	ResourceAttributes	The metadata attributes corresponding to the profile.

## LegalBusinessProfile

Describes a partner's legal business profile.

PROPERTY	TYPE	DESCRIPTION
companyName	string	The legal company name.

PROPERTY	TYPE	DESCRIPTION
address	Address	The address of the company or organization.
primaryContact	Contact	The primary contact for the company or organization.
companyApproverAddress	Address	The company approver address.
companyApproverEmail	string	The company approver email.
vettingStatus	string	The vetting status. This value is the string representation of the one of the member names found in <a href="#">VettingStatus</a> .
vettingSubStatus	string	The vetting sub-status. This value is the string representation of the one of the member names found in <a href="#">VettingSubStatus</a> .
profileType	string	The partner profile type.
links	ResourceLinks	The resource links corresponding to the profile.
attributes	ResourceAttributes	The metadata attributes corresponding to the profile.

## MpnProfile

Describes a partner's Microsoft Partner Network profile.

PROPERTY	TYPE	DESCRIPTION
partnerName	string	The company or organization name.
mpnId	string	The Microsoft Partner Network Id.
profileType	string	The partner profile type.
links	ResourceLinks	The resource links corresponding to the profile.
attributes	ResourceAttributes	The metadata attributes corresponding to the profile.

## OrganizationProfile

Describes a partner's organization profile.

PROPERTY	TYPE	DESCRIPTION
id	string	The organization's Id.
companyName	string	The name of the company or organization.
defaultAddress	Address	The default address of the company or organization.
tenantId	string	The tenant identifier.
domain	string	The company or organization's domain.
email	string	Gets or sets the parent subscription.
language	string	The preferred language for communication.
culture	string	The preferred culture for communication and currency, such as "en-us".
profileType	string	The partner profile type.
links	ResourceLinks	The resource links corresponding to the profile.
attributes	ResourceAttributes	The metadata attributes corresponding to the profile.

## SupportProfile

Describes a partner's support profile.

PROPERTY	TYPE	DESCRIPTION
email	string	The email address associated with the profile.
telephone	string	The phone number associated with the profile.
website	string	The support website.
profileType	string	The partner profile type.
links	ResourceLinks	The resource links corresponding to the profile.
attributes	ResourceAttributes	The metadata attributes corresponding to the profile.

# Products resources

4/24/2020 • 5 minutes to read • [Edit Online](#)

## Applies To

- Partner Center

Resources that represent purchasable goods or services. Includes resources for describing the product type and shape (SKU), and for checking the availability of the product in an inventory.

## Product

Represents a purchasable good or service. A product by itself isn't a purchasable item.

PROPERTY	TYPE	DESCRIPTION
id	string	The ID for this product.
title	string	The product title.
description	string	The product description.
productType	<a href="#">ItemType</a>	An object that describes the type categorization(s) of this product.
isMicrosoftProduct	bool	Indicates whether this is a Microsoft product.
publisherName	string	The name of the product's publisher if available.
links	<a href="#">ProductLinks</a>	The resource links contained within the product.

## ItemType

Represents the type of a product.

PROPERTY	TYPE	DESCRIPTION
id	string	The type identifier.
displayName	string	The display name for this type.
subType	<a href="#">ItemType</a>	Optional. An object that describes a sub-type categorization for this item type.

## ProductLinks

Contains a list of links for a [Product](#).

PROPERTY	TYPE	DESCRIPTION
skus	<a href="#">Link</a>	The link for accessing the underlying SKUs.
links	<a href="#">ResourceLinks</a>	The resource links contained within this resource.

## Sku

Represents a purchasable Stock Keeping Unit (SKU) under a product. These represent the different shapes of the product.

PROPERTY	TYPE	DESCRIPTION
id	string	The ID for this SKU. This ID is unique only within the context of its parent product.
title	string	The title of the SKU.
description	string	The description of the SKU.
productId	string	The ID of the parent <a href="#">Product</a> that contains this SKU.
minimumQuantity	int	The minimum quantity allowed for purchase.
maximumQuantity	int	The maximum quantity allowed for purchase.
isTrial	bool	Indicates whether this SKU is a trial item.
supportedBillingCycles	array of strings	The list of supported billing cycles for this SKU. Supported values are the member names found in <a href="#">BillingCycleType</a> .
purchasePrerequisites	array of strings	The list of prerequisite steps or actions that are needed prior to purchasing this item. The supported values are: "InventoryCheck" - Indicates that the item's inventory should be evaluated before attempting to purchase this item. "AzureSubscriptionRegistration" - Indicates that an Azure subscription is needed and must be registered before attempting to purchase this item.

PROPERTY	TYPE	DESCRIPTION
inventoryVariables	array of strings	The list of variables needed to execute an inventory check on this item. The supported values are: "CustomerId" - The ID of the customer that the purchase would be for. "AzureSubscriptionId" - The ID of the Azure subscription that would be used for an Azure reservation purchase. "ArmRegionName" - The region for which to verify inventory. This value must match the "ArmRegionName" from the SKU's DynamicAttributes.
provisioningVariables	array of strings	The list of variables that must be provided into the provisioning context of a <a href="#">cart line item</a> when purchasing this item. The supported values are: Scope - The scope for an Azure reservation purchase: "Single", "Shared". "SubscriptionId" - The ID of the Azure subscription that would be used for an Azure reservation purchase. "Duration" - The duration of the Azure reservation: "1Year", "3Year".
dynamicAttributes	key/value pairs	The dictionary of dynamic properties that apply to this item. Please note that the properties in this dictionary are dynamic and can change without notice. You should not create strong dependencies on particular keys existing in the value of this property.
links	<a href="#">ResourceLinks</a>	The resource links contained within the SKU.

## Availability

Represents a configuration in which a SKU is available for purchase (such as country, currency, and industry segment).

PROPERTY	TYPE	DESCRIPTION
id	string	The ID for this availability. This ID is unique only within the context of its parent <a href="#">product</a> and <a href="#">SKU</a> . <b>Note</b> This ID can change over time. You should only rely on this value within a short time span after retrieving it.
productId	string	The ID of the <a href="#">product</a> that contains this availability.
skuid	string	The ID of the <a href="#">SKU</a> that contains this availability.

PROPERTY	TYPE	DESCRIPTION
catalogItemId	string	The unique identifier for this item in the catalog. This is the ID that must be populated into the <a href="#">OrderLineItem.OfferId</a> or <a href="#">CartLineItem.CatalogItemId</a> properties when purchasing the parent <a href="#">SKU</a> . <b>Note</b> This ID can change over time. You should only rely on this value within a short time after retrieving it. It should only be accessed and used at the time of purchase.
defaultCurrency	string	The default currency supported for this availability.
segment	string	The industry segment for this availability. Supported values are: Commercial, Education, Government, NonProfit.
country	string	The country or region (in ISO country code format) where this availability applies.
isPurchasable	bool	Indicates whether this availability is purchasable.
isRenewable	bool	Indicates whether this availability is renewable.
product	<a href="#">Product</a>	The product this availability corresponds to.
sku	<a href="#">Sku</a>	The SKU this availability corresponds to.
terms	array of <a href="#">Term</a> resources	The collection of terms that are applicable to this availability.
links	<a href="#">ResourceLinks</a>	The resource links contained within the availability.

## Term

Represents a term for which the availability can be purchased.

PROPERTY	TYPE	DESCRIPTION
duration	string	An ISO 8601 representation of the term's duration. The current supported values are P1M (1 month), P1Y (1 year) and P3Y (3 years).
description	string	The description of the term.

## InventoryCheckRequest

Represents a request to check inventory against certain catalog items.

PROPERTY	TYPE	DESCRIPTION
targetItems	array of <a href="#">InventoryItem</a>	The list of catalog items that the inventory check will evaluate.
inventoryContext	key/value pairs	The dictionary of context values that are needed to carry out the inventory check(s). Each <a href="#">SKU</a> of the products will define which values (if any) are needed to carry out this operation.
links	<a href="#">ResourceLinks</a>	The resource links contained within the inventory check request.

## InventoryItem

Represents a single item in an inventory check operation. This resource is used for specifying the target items in an input request and is also used to represent the output results of the inventory check operation.

PROPERTY	TYPE	DESCRIPTION
productId	string	(Required) The ID of the <a href="#">product</a> .
skuid	string	The ID of the <a href="#">SKU</a> . When using this resource as input to an inventory request, this value is optional. If this value isn't provided, then all SKUs under the product will be considered as target items of the inventory check operation.
isRestricted	bool	Indicates whether this item was found to have a restricted inventory.
restrictions	array of <a href="#">InventoryRestriction</a>	The details of any restrictions that are found for this item. This property will only be populated if <a href="#">isRestricted</a> = "true".

## InventoryRestriction

Represents the details of an inventory restriction. This is only applicable for inventory check output results, not for input requests.

PROPERTY	TYPE	DESCRIPTION
reasonCode	string	The code that identifies the reason for the restriction.
description	string	The description of the inventory restriction.

PROPERTY	TYPE	DESCRIPTION
properties	key/value pairs	The dictionary of properties that may provide further details on the restriction.

## BillingCycleType

An [Enum](#) with values that indicate a type of billing cycle.

VALUE	POSITION	DESCRIPTION
Unknown	0	Enum initializer.
Monthly	1	Indicates that the partner will be charged monthly.
Annual	2	Indicates that the partner will be charged annually.
None	3	Indicates that the partner will not be charged. This value may be used for trial items.
OneTime	4	Indicates that the partner will be charged one time.

# Relationships resources

4/24/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center

Describes resources related to relationships.

## PartnerRelationship

Represents a relationship between two partners.

PROPERTY	TYPE	DESCRIPTION
id	string	The partner identifier. The partner identifier specifies the tenant id of the partner who is in the recipient (from) side of the relationship.
location	string	The location of the partner.
mpnId	string	The Microsoft Partner Network (MPN) identifier of the partner.
name	string	The name of the partner.
relationshipType	string	The type of relationship.
state	string	The state of the relationship (for example <code>active</code> ).
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes.

## RelationshipRequest

Provides the URL by which a customer can establish a relationship with a partner.

PROPERTY	TYPE	DESCRIPTION
url	string	The relationship request URL.
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes.

# SelfServePolicy resource

4/29/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center

A partner sets self serve policies for a customer.

## SelfServePolicy

Describes a cart.

PROPERTY	TYPE	DESCRIPTION
id	string	A self serve policy identifier that is supplied upon successful creation of the self serve policy.
SelfServeEntity	SelfServeEntity	The self serve entity that is being granted access.
Grantor	Grantor	The grantor that is granting access.
Permissions	Array of Permission	An Array of <a href="#">Permission</a> resources.

## SelfServeEntity

Represents the entity being granted permissions.

PROPERTY	TYPE	DESCRIPTION
SelfServeEntityType	string	The entity being granted access, accepted values: Customer.
TenantID	string	The tenant identifier of the entity being granted access.

## Grantor

Represents the grantor granting the permissions.

PROPERTY	TYPE	DESCRIPTION
GrantorType	string	The grantor granting access, accepted values: BillToPartner.
TenantID	string	The tenant identifier of the entity granting access.

## Permission

Represents a permission in the self serve policy.

PROPERTY	TYPE	DESCRIPTION
Resource	string	The resource access is being granted too: AzureReservedInstances.
Action	string	The action access is being granted for: Purchase

# Service costs resources

4/19/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center

Describes resources related to services purchased by a customer.

## ServiceCostsSummary

**ServiceCostsSummary** contains a summary that aggregates all services purchased by the specified customer during the billing period.

PROPERTY	TYPE	DESCRIPTION
details	array of <a href="#">ServiceCostsSummaryDetail</a> objects	The service cost summary detail list, distinguished by invoice type.
links	<a href="#">ResourceLinks</a>	The resource links.
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes.

### IMPORTANT

The fields in the following table are being deprecated. To retrieve recurring and one-time service cost summaries, use the **details** field instead. The **details** field is described in the previous table. Refer to the **details** field's corresponding data values but not the root-level fields.

PROPERTY	TYPE	DESCRIPTION
billingStartDate	date	The start of the billing period.
billingEndDate	date	The end of the billing period.
pretaxTotal	double	The pre-tax total of all costs for the customer.
tax	double	The total tax incurred over all items purchased by the customer.
afterTaxTotal	double	The net total cost for all items purchased by the customer.
currencyCode	string	Represents the currency used for the costs.
currencySymbol	string	The currency symbol used for the costs.

PROPERTY	TYPE	DESCRIPTION
customerId	string	The ID of the customer making the purchase.

## ServiceCostsSummaryDetail

**ServiceCostsSummaryDetail** describes a service cost summary that aggregates all services purchased by the specified customer during the billing period (from either recurring or one-time invoices).

PROPERTY	TYPE	DESCRIPTION
invoiceType	string	The invoiceType that service cost summary has been generated.
summary	<a href="#">ServiceCostsSummary</a>	The service cost summary aggregated by a customer under one invoice type.

## ServiceCostLineItem

**ServiceCostLineItem** describes a single item purchased by the customer.

### IMPORTANT

The following properties *only apply to* service cost line items where the product is a *one-time purchase*: `productId`, `productName`, `skuid`, `skuName`, `availabilityId`, `publisherId`, `publisherName`, `termAndBillingCycle`, `discountDetails`. These properties *don't apply to* service line items where the product is a *recurring purchase*. For example, these properties *don't apply to* subscription-based Office 365 and Azure.

PROPERTY	TYPE	DESCRIPTION
startDate	string in UTC date-time format	The start date for the charge.
endDate	string in UTC date-time format	The end date for the charge.
subscriptionFriendlyName	string	The friendly name for the subscription.
subscriptionId	string	The subscription identifier.
orderId	string	The order identifier.
offerId	string	The offer identifier.
offerName	string	The offer name.
resellerMPNId	string	Only used in 2-tier partner scenarios. Refers to the MPN identifier.
chargeType	string	The associated charge type.
quantity	number	The quantity of units used or purchased.

PROPERTY	TYPE	DESCRIPTION
unitPrice	number	The price per unit.
pretaxTotal	number	The total charge for this item before taxes.
tax	number	The total tax charge incurred for this item.
afterTaxTotal	number	The net total cost for this item.
currencyCode	string	Represents the currency used for the costs.
currencySymbol	string	The currency symbol used for the costs.
customerId	string	The ID of the customer making the purchase.
customerName	string	The name of the customer making the purchase.
invoiceNumber	string	The invoice number that this line item belongs to.
productId	string	The product identifier.
skuid	string	The Sku identifier.
availabilityId	string	The availability identifier.
productName	string	The product name.
skuName	string	The sku name.
publisherName	string	The publisher name.
publisherId	string	The publisher identifier.
termAndBillingCycle	string	The term and billing cycle.
discountDetails	string	The discount details.

## ServiceCostsSummaryLinks

PROPERTY	TYPE	DESCRIPTION
serviceCostLineItems	<a href="#">Link</a>	The URI to retrieve the line items.
self	<a href="#">Link</a>	The self URI.

# Service request resources

4/23/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Partners can file service requests on behalf of their partners to report disruptions services provided by Microsoft or to request other technical support that they are incapable of providing.

## ServiceRequest

Describes a service request filed by a partner, including how that request is progressing.

PROPERTY	TYPE	DESCRIPTION
Title	string	The service request title.
Description	string	The description.
Severity	string	The severity: "unknown", "critical", "moderate", or "minimal".
SupportTopicId	string	The id of the support topic.
SupportTopicName	string	The name of the support topic.
Id	string	The id of the service request.
Status	string	The status of the service request: "none", "open", "closed", or "attention_needed".
Organization	ServiceRequestOrganization	Organization for which the service request is created.
PrimaryContact	ServiceRequestContact	Primary Contact on the service request.
LastUpdatedBy	ServiceRequestContact	"Last Updated By" contact for changes to the service request.
ProductName	string	The name of the product that corresponds to the service request.
ProductId	string	The id of the product.
CreatedDate	date	The date of the service request's creation.

PROPERTY	TYPE	DESCRIPTION
LastModifiedDate	date	The date that the service request was last modified.
LastClosedDate	date	The date that the service request was last closed.
FileLinks	array of <a href="#">FileInfo</a> resources	The collection of File Links that pertain to the service request.
NewNote	<a href="#">ServiceRequestNote</a>	A note can be added to an existing service request.
Notes	array of <a href="#">ServiceRequestNotes</a>	A collection of notes added to the service request.
CountryCode	string	The country corresponding to the service request.
Attributes	ResourceAttributes	The metadata attributes corresponding to the service request.

## ServiceRequestContact

Describes a contact that creates or modifies a service request.

PROPERTY	TYPE	DESCRIPTION
Organization	<a href="#">ServiceRequestOrganization</a>	Organization for which the service request is created.
ContactId	string	The contact's unique id.
LastName	string	The last name of the contact.
FirstName	string	The first name of the contact.
Email	string	The email of the contact.
PhoneNumber	string	The phone number of the contact.

## ServiceRequestNote

Describes a note attached to a service request.

PROPERTY	TYPE	DESCRIPTION
CreatedByName	string	The name of the creator of the note.
CreatedDate	date	The date and time when the note was created.

PROPERTY	TYPE	DESCRIPTION
Text	string	The text of the note.

## ServiceRequestOrganization

Describes the organization for which the service request is created.

PROPERTY	TYPE	DESCRIPTION
Id	string	The unique id of the organization.
Name	string	The name of the organization.
PhoneNumber	string	The phone number of the organization.

## SupportTopic

Describes a support topic. Service requests specify a support topic to ensure that they are processed quickly and effectively.

PROPERTY	TYPE	DESCRIPTION
Name	string	The name of the support topic.
Description	string	The description of the support topic.
Id	string	The unique id of the support topic.
Attributes	ResourceAttributes	The metadata attributes corresponding to the service request.

# Subscription resources

4/19/2020 • 4 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

A subscription lets a customer use a service for a certain period of time. Not all fields will apply to all subscriptions. Many fields only apply at certain points in the life cycle, such as if a subscription is suspended or cancelled.

## Subscription

### NOTE

The **Subscription** resource has a rate limit of 500 requests per minute per tenant identifier.

The **Subscription** resource represents the life cycle of a subscription and includes properties that define the states throughout the subscription life cycle.

PROPERTY	TYPE	DESCRIPTION
id	string	The subscription identifier.
offerId	string	The offer identifier.
entitlementId	string	The entitlement identifier (an Azure subscription ID).
offerName	string	The offer name.
friendlyName	string	The friendly name for the subscription defined by the partner to help disambiguate.
quantity	number	The quantity. For example, in case of license-based billing, this property is set to the license count.
unitType	string	The units defining quantity for the subscription.
parentSubscriptionId	string	Gets or sets the parent subscription identifier.
creationDate	string	Gets or sets the creation date, in date-time format.

PROPERTY	TYPE	DESCRIPTION
effectiveStartDate	string in UTC date time format	Gets or sets the effective start date for this subscription, in date-time format. It is used to back date a migrated subscription or to align it with another.
commitmentEndDate	string in UTC date time format	The commitment end date for this subscription, in date-time format. For subscriptions which are not auto-renewable, this represents a date far, far away in the future.
status	string	The subscription status: "none", "active", "pending", "suspended", or "deleted".
autoRenewEnabled	boolean	Gets a value indicating whether the subscription is renewed automatically.
billingType	string	Specifies how the subscription is billed: "none", "usage", or "license".
billingCycle	string	Indicates the frequency with which the partner is billed for this order. Supported values are the member names found in <a href="#">BillingCycleType</a> .
hasPurchasableAddons	boolean	Gets or sets a value indicating whether the subscription has purchasable add-ons.
isTrial	boolean	A value indicating whether this is a trial subscription.
isMicrosoftProduct	boolean	A value indicating whether this is a Microsoft product.
publisherName	string	The publisher name.
actions	array of strings	Gets or sets the actions that are allowed. Possible values: "edit", "cancel"
partnerId	string	The MPN ID of the reseller of record, used in the indirect partner model.
suspensionReasons	array of strings	Read-only. If the subscription was suspended, indicates why.
contractType	string	Read-only. The type of contract: "subscription", "productKey", or "redemptionCode".
refundOptions	array of <a href="#">RefundOption</a> resources	Read-Only. The set of refund options available for this subscription.

PROPERTY	TYPE	DESCRIPTION
links	<a href="#">SubscriptionLinks</a>	Gets or sets the subscription links.
orderId	string	The ID of the order that was placed to begin the subscription.
termDuration	string	An ISO 8601 representation of the term's duration. The current supported values are <b>P1M</b> (1 month), <b>P1Y</b> (1 year) and <b>P3Y</b> (3 years).
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes corresponding to the subscription.
renewalTermDuration	string	An ISO 8601 representation of the term's duration. The current supported values are <b>P1M</b> (1 month) and <b>P1Y</b> (1 year).

## SubscriptionLinks

The **SubscriptionLinks** resource describes the collection of links attached to a subscription resource.

PROPERTY	TYPE	DESCRIPTION
offer	<a href="#">Link</a>	Gets or sets the offer.
parentSubscription	<a href="#">Link</a>	Gets or sets the parent subscription.
product	<a href="#">Link</a>	Gets the product associated with the subscription.
sku	<a href="#">Link</a>	Gets the product sku associated with the subscription.
availability	<a href="#">Link</a>	Gets the product sku availability associated with the subscription.
activationLinks	<a href="#">Link</a>	Gets the list of activation links associated with the subscription.
self	<a href="#">Link</a>	The self URI.
next	<a href="#">Link</a>	The next page of items.
previous	<a href="#">Link</a>	The previous page of items.

## SubscriptionProvisioningStatus

The **SubscriptionProvisioningStatus** resource provides information about the provisioning status of a subscription.

PROPERTY	TYPE	DESCRIPTION
skuld	string	A GUID formatted string that identifies the product SKU.
status	string	Indicates the provisioning status: "success", "pending" or "failed".
quantity	number	Provides the subscription quantity after provisioning.
endDate	string in UTC date time format	The end date of the subscription.
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes.

## SubscriptionRegistrationStatus

The **SubscriptionRegistrationStatus** resource describes the collection of links attached to a subscription resource.

PROPERTY	TYPE	DESCRIPTION
subscriptionId	string	The subscription identifier.
status	string	Indicates the registration status: "registered", "registering" or "notregistered".

## SupportContact

The **SupportContact** resource represents a support contact for a customer's subscription.

PROPERTY	TYPE	DESCRIPTION
supportTenantId	string	A GUID formatted string that indicates the support contact's tenant identifier.
supportMpnId	string	The contact's Microsoft Partner Network (MPN) identifier.
name	string	The name of the support contact.
links	<a href="#">ResourceLinks</a>	The support contact related links.
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes. Contains "objectType": "SupportContact".

## RegisterSubscription

The **RegisterSubscription** resource returns a link that can be used to query the registration status of a subscription. The registration status is returned in the response body of a successfully accepted request to register an Azure subscription.

PROPERTY	TYPE	DESCRIPTION
httpResponseMessage	object	Returns HTTP Status Code 202 "Accepted", with a Location header containing a link to query the registration status. For example, <div style="border: 1px solid black; padding: 2px; display: inline-block;">"/customers/{customer-id}/subscriptions/{subscription-id}/registrationstatus"</div>

## RefundOption

The **RefundOption** resource represents a possible refund option for the subscription.

PROPERTY	TYPE	DESCRIPTION
type	string	The type of refund. The supported values are "Partial" and "Full"
expiresAfter	string in UTC date time format	The timestamp when this option expires. If null, this means it has no expiration.

## AzureEntitlement

The **AzureEntitlement** resource represents the Azure entitlements for the subscription.

PROPERTY	TYPE	DESCRIPTION
id	string	The entitlement identifier
friendlyName	string	The friendly name of the entitlement.
status	string	The status of entitlement.
subscriptionId	string	The subscription identifier the entitlement belongs to.

# Subscription usage resources

4/19/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

You can use the following subscription usage resources to get usage information for a specific subscription with usage-based billing. These subscriptions have daily and monthly usage records, along with a usage summary for each pay period.

## SubscriptionDailyUsageRecord

The *SubscriptionDailyUsageRecord* resource is obsolete and may produce inaccurate results. We recommend that you update your applications to use the APIs described in [Get a customer's utilization records for Azure](#) and [Get prices for Microsoft Azure](#) instead.

The **SubscriptionDailyUsageRecord** resource describes how much a subscription is used in a single day.

PROPERTY	TYPE	DESCRIPTION
DateUsed	string	The day, in date-time format, that the subscription was used.
ResourceId	string	GUID. The unique ID of the resource.
ResourceName	string	The name of the resource.
TotalCost	decimal	The estimated total cost of using the resources in the subscription on the specified day.
CurrencyLocale	string	The locale in which the subscription was used, determines the currency to use on the invoice.
LastModifiedDate	string	The day, in date-time format, that this record was last modified.
Attributes	ResourceAttributes	The metadata attributes corresponding to the resource.

## SubscriptionMonthlyUsageRecord

The **SubscriptionMonthlyUsageRecord** resource describes how much a subscription is used in a single month.

PROPERTY	TYPE	DESCRIPTION
----------	------	-------------

PROPERTY	TYPE	DESCRIPTION
Status	string	The status of the subscription: "none", "active", "suspended", or "deleted".
PartnerOnRecord	string	"The MPN ID of the partner on record."
OfferId	string	GUID. The id of the offer related to this subscription.
Id	string	GUID. The id of the subscription or resource.
Name	string	The name of the subscription or resource.
TotalCost	decimal	The estimated total cost of using the resources in the subscription in the specified month.
CurrencyLocale	string	The locale in which the subscription was used, determines the currency to use on the invoice. Available for Microsoft Azure (MS-AZR-0145P) subscriptions.
CurrencyCode	string	Gets or sets the currency code. Available for Azure plan subscription resources.
USDTotalCost	decimal	Gets or sets the estimated total cost in USD. Available for Azure plans.
LastModifiedDate	string	The day, in date-time format, that this record was last modified.
Attributes	ResourceAttributes	The metadata attributes corresponding to the resource.

## SubscriptionUsageSummary

The **SubscriptionUsageSummary** resource describes how much a specific subscription was used in the current billing period.

PROPERTY	TYPE	DESCRIPTION
ResourceId	string	GUID. The id of the subscription or resource. In the context of CustomerMonthlyUsageRecord this id is the customer id.
ResourceName	string	The name of the subscription or resource. In the context of CustomerMonthlyUsageRecord this name is the customer name.

PROPERTY	TYPE	DESCRIPTION
BillingStartDate	date	The start date of the current billing period, in date-time format.
BillingEndDate	date	The end date of the current billing period, in date-time format.
TotalCost	double	The estimated total cost of using the resources in the subscription during the specified billing period.
CurrencyLocale	string	The locale in which the subscription was used, determines the currency to use on the invoice. Available for Microsoft Azure (MS-AZR-0145P) subscriptions.
CurrencyCode	string	Gets or sets the currency code. Available for Azure plans.
USDTotalCost	decimal	Gets or sets the estimated total cost in USD. Available for Azure plan subscription resources.
LastModifiedDate	string	The day, in date-time format, that this record was last modified.
Links	ResourceLinks	The resource links corresponding to the SubscriptionUsageSummary.
Attributes	ResourceAttributes	The metadata attributes corresponding to the SubscriptionUsageSummary.

# Upgrade resources

4/23/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Describes the resources used to upgrade a user from a source subscription to a target subscription.

## Upgrade

Describes the behavior of an individual upgrade resource.

PROPERTY	TYPE	DESCRIPTION
TargetOffer	Offer	The offer of the target subscription.
UpgradeType	string	The type of upgrade: "none", "upgrade_only", or "upgrade_with_license_transfer".
IsEligible	boolean	Identifies if the upgrade can be performed.
Quantity	integer	The quantity of the new offer to be purchased. Defaults to the source subscription quantity.
UpgradeErrors	array of UpgradeErrors	Reasons the upgrade cannot be performed, if applicable.
Attributes	ResourceAttributes	The metadata attributes corresponding to the upgrade.

## UpgradeError

Describes a reason why an upgrade cannot be performed.

PROPERTY	TYPE	DESCRIPTION
----------	------	-------------

PROPERTY	TYPE	DESCRIPTION
Code	string	The error code associated with the issue: "other", "delegated_admin_permissions_disabled", "subscription_status_not_active", "conflicting_service_types", "concurrency_conflicts", "user_context_required", "subscription_add_ons_present", "subscription_does_not_have_any_upgrade_paths", "subscription_target_offer_not_found", or "subscription_not_provisioned".
Description	string	Friendly text describing the error.
AdditionalDetails	string	Additional details regarding the error.
Attributes	ResourceAttributes	The metadata attributes corresponding to the error.

## UpgradeResult

Describes a the result of the subscription upgrade process.

PROPERTY	TYPE	DESCRIPTION
SourceSubscriptionId	string	The identifier of the source subscription.
TargetSubscriptionID	string	The identifier of the target subscription.
UpgradeType	string	The type of upgrade: "none", "upgrade_only", or "upgrade_with_license_transfer".
UpgradeErrors	array of UpgradeErrors	Errors encountered while attemption to perform the upgrade, if applicable.
LicenseErrors	array of UserLicenseErrors	Errors encountered while attempted to migrate user licenses, if applicable.
Attributes	ResourceAttributes	The metadata attributes corresponding to the license.

## UserLicenseError

Describes errors arising from failed user license transfer.

PROPERTY	TYPE	DESCRIPTION
UserObjectId	string	The unique identified of the user object.
Name	string	The name of the user.

PROPERTY	TYPE	DESCRIPTION
Email	string	The email of the user.
Errors	array of ServiceFaults	A list of exceptions thrown when trying to perform user license transfer.
Attributes	ResourceAttributes	The metadata attributes corresponding to the license.

# User resources

4/23/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Describes an individual Partner Center user, their personal and account information, and the permissions they have within Partner Center.

## User

Describes an individual user.

PROPERTY	TYPE	DESCRIPTION
id	string	The user identifier.
userPrincipalName	string	The user principal identifier.
firstName	string	The first name of the user.
lastName	string	The last name of the user.
displayName	string	The displayed name of the user.
passwordProfile	<a href="#">PasswordProfile</a>	The user's password profile.
phoneNumber	string	The user's phone number.
lastDirectorySyncTime	string in UTC date time format	The last time that information for this user was synced between Azure Active Directory and on-premises Active Directory. A date time value only appears if Azure AD Connect sync is enabled. Otherwise, the value is null.
userDomainType	string	The user domain type: "none", "managed," or "federated".
state	string	The state of the user: "active", "inactive" (for a deleted user).
softDeletionTime	string in UTC date time format	Represents the start of the thirty day period after which data associated with a deleted user is permanently deleted and therefore unrecoverable.

PROPERTY	TYPE	DESCRIPTION
links	<a href="#">ResourceLinks</a>	The resource links.
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes.

## CustomerUser

Describes a customer user.

PROPERTY	TYPE	DESCRIPTION
usageLocation	string	The location where the user intends to use the license.
id	string	The user identifier.
userPrincipalName	string	The user principal identifier.
firstName	string	The first name of the user.
lastName	string	The last name of the user.
displayName	string	The displayed name of the user.
immutableId	string	The immutable id of the user.
passwordProfile	<a href="#">PasswordProfile</a>	The user's password profile.
phoneNumber	string	The user's phone number.
lastDirectorySyncTime	string in UTC date time format	The last time that information for this user was synced between Azure Active Directory and on-premises Active Directory. A date time value only appears if Azure AD Connect sync is enabled. Otherwise, the value is null.
userDomainType	string	The user domain type: "none", "managed," or "federated".
state	string	The state of the user: "active", "inactive" (for a deleted user).
softDeletionTime	string in UTC date time format	Represents the start of the thirty day period after which data associated with a deleted user is permanently deleted and therefore unrecoverable.
links	<a href="#">ResourceLinks</a>	The resource links.
attributes	<a href="#">ResourceAttributes</a>	The metadata attributes.

## UserCredentials

Describes a user's login credentials.

PROPERTY	TYPE	DESCRIPTION
userName	string	The name of the user.
password	SecureString	The user's securely stored password.

## UserMember

Describes a user's member information.

PROPERTY	TYPE	DESCRIPTION
displayName	string	The displayed name for the user.
userPrincipalName	string	The name of the user principal.
roleId	string	The identifier of the user's role.
id	string	The identifier of the member.
attributes	ResourceAttributes	The metadata attributes.

# Utility resources

4/23/2020 • 2 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

The Partner Center REST API contains many resources which describe general-purpose data models used throughout the SDK.

## Address

An address to use for the customer or for partner profiles. For more information about the supported formats and properties in different countries/regions, see [Get address formatting rules by market](#).

PROPERTY	TYPE	LENGTH (MIN, MAX)	DESCRIPTION
AddressLine1	string	(1, 200)	The first line of the address.
AddressLine2	string	(0, 200)	The second line of the address. This property is optional.
City	string	n/a	The city.
State	string	(0, 2)	The state.
PostalCode	string	n/a	The ZIP code or postal code.
Country	string	(2, 2)	The country/region in ISO country code format.
Region	string	n/a	The region.
FirstName	string	(1, 50)	The first name of a contact at the customer's company/organization.
LastName	string	(1, 50)	The last name of a contact at the customer's company/organization.
PhoneNumber	string	n/a	The phone number of a contact at the customer's company/organization. This property is optional.

## Contact

Describes contact information for a specific individual.

PROPERTY	TYPE	DESCRIPTION
FirstName	string	The contact's first name.
LastName	string	The contact's last name.
Email	string	The contact's email address.
PhoneNumber	string	The contact's phone number.

## FieldFilter

Describes a filter that can be applied to search results.

PROPERTY	TYPE	DESCRIPTION
Operator	string	The filter operator: "equals", "not_equals", "greater_than", "greater_than_or_equals", "less_than", "less_than_or_equals", "substring", "and", "or", "starts_with", "not_starts_with".

## FileInfo

Represents an external file uploaded to Partner Center.

PROPERTY	TYPE	DESCRIPTION
Comment	string	A comment associated with the file upload.
FileExtension	string	The file extension.
FileNameWithoutExtension	string	The name of the file, extension not included.
FileSize	long	The size of the file.
Id	string	The unique ID for the file upload.

## Link

Contains a URI link and associated information.

PROPERTY	TYPE	DESCRIPTION
URI	string	The URI.
Method	string	The method represented by the URI.
Headers	Array of KeyValuePairs	The headers for the link.

## PasswordProfile

Describes a specific password and if that password needs to be changed.

### NOTE

Unsupported on Partner Center operated by 21Vianet.

PROPERTY	TYPE	DESCRIPTION
Password	SecureString	The password.
ForceChangePassword	boolean	Determines if the password needs to be forcibly changed on next login.

## ResourceLinks

Contains a list of links for a resource.

PROPERTY	TYPE	DESCRIPTION
Self	Link	The self URI.
Next	Link	The next page of items.
Previous	Link	The previous page of items.
Attributes	ResourceAttributes	The metadata attributes corresponding to the user.

## ResourceAttributes

Contains attribute metadata for a resource.

PROPERTY	TYPE	DESCRIPTION
Etag	string	The etag, also known as the object version.
ObjectType	string	The type of object of the base resource.

## SecureString

Stores secured information, such as a password.

PROPERTY	TYPE	DESCRIPTION
Length	int	The length of the secured string.

## ValidationCode

Represents a partner's Government Community Cloud validation code.

PROPERTY	TYPE	DESCRIPTION
PartnerId	GUID	Partner identifier
OrganizationName	string	The organization name provided during the validation process
ValidationId	int	A unique identifier for validation
MaxCreates	nullable int	The maximum customers allowed to be created with this validation code
RemainingCreates	nullable int	Remaining customer creates under this validation ID
ETag	string	The specific version of this resource. Changes when resource is changed.

# Partner Center REST error codes

4/25/2020 • 2 minutes to read • [Edit Online](#)

## Applies to:

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

The Partner Center REST APIs return a JSON object that contains a status code. This code that indicates whether your request was successful or why it failed.

## Success responses

A 2xx status code indicates that the client's request was successfully received, understood, and accepted.

## Error codes

The following 4xx and 5xx status codes indicate an error:

- 400: Bad request
- 401: Unauthorized
- 403: Forbidden
- 404: Not found
- 405: Method not allowed
- 406: Not acceptable
- 409: Conflict, error code
- 412: Precondition failed
- 429: Too many requests
- 500: Internal server error
- 501: Not implemented
- 502: Bad gateway
- 503: Service unavailable
- 504: Gateway timeout

## Error responses

Any response with a 4xx or 5xx status code includes an error message with additional details about the error condition(s) encountered.

The following table and code sample describes the schema of an error response:

NAME	TYPE	DESCRIPTION
code	string	Always returned. Indicates the kind of error that occurred. Non-null.
description	string	Always returned. Describes the error in detail, and provides additional debugging information. Non-null, non-empty. Maximum length is 1024 characters.
data	array	Only returned for some error types. A list of error objects.
source	string	Always returned. The source of the error.

```
{
  "code": <string>,
  "description": <string>,
  "data": [
    ],
  "source": <string>
}
WWW-Authenticate: OAuth realm=urn:cpsvc:cpid:{some cid}
```

# Partner Center webhook events

4/23/2020 • 4 minutes to read • [Edit Online](#)

## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Partner Center webhook events are resource change events delivered in the form of HTTP POSTs to a registered URL. To receive an event from Partner Center, you host a callback where Partner Center can POST the event. The event is digitally signed so you can validate that it was sent from Partner Center.

For information on how to receive events, authenticate a callback, and use the Partner Center webhook APIs to create, view, and update an event registration, see [Partner Center Webhooks](#).

## Supported Events

The following webhook events are supported by Partner Center.

### Test Event

This event allows you to self-onboard and test your registration by requesting a test event and then tracking its progress. You will be able to see the failure messages that are being received from Microsoft while trying to deliver the event. This will only apply to "test-created" events and data older than 7 days will be purged.

#### NOTE

There is a throttle limit of 2 requests per minute when posting a test-created event.

### Properties

PROPERTY	TYPE	DESCRIPTION
EventName	string	The name of the event. In the form {resource}-{action}. For this event, the value is "test-created".
ResourceUri	URI	The URI to get the resource. Uses the syntax: <code>"<a href="#">{baseUrl}</a>/webhooks/v1/registration/validationEvents/{CorrelationId}"</code>
ResourceName	string	The name of the resource that will trigger the event. For this event, the value is "test".
AuditUri	URI	(Optional) The URI to get the audit record, if it exists. Uses the syntax: <code>"<a href="#">{baseUrl}</a>/auditactivity/v1/auditrecords/{AuditId}"</code>

PROPERTY	TYPE	DESCRIPTION
ResourceChangeUtcDate	string in the UTC date-time format	The date and time when the resource change occurred.

#### Example

```
{
  "EventName": "test-created",
  "ResourceUri":
    "http://api.partnercenter.microsoft.com/webhooks/v1/registration/validationEvents/{{CorrelationId}}",
  "ResourceName": "test",
  "AuditUri": null,
  "ResourceChangeUtcDate": "2017-11-16T16:19:06.3520276+00:00"
}
```

### Subscription Updated Event

This event is raised when the specified subscription changes. A Subscription Updated event is generated when there is an internal change in addition to when changes are made through the Partner Center API. This event will be only be generated when there are commerce level changes, for example, when the number of licenses are modified and when the state of the subscription changes. It will not be generated when resources are created within the subscription.

#### NOTE

There is a delay of up to 48 hours between the time a subscription changes and when the Subscription Updated event is triggered.

#### Properties

PROPERTY	TYPE	DESCRIPTION
EventName	string	The name of the event. In the form {resource}-{action}. For this event, the value is "subscription-updated".
ResourceUri	URI	The URI to get the resource. Uses the syntax: <a href="#"><i>{baseUrl}</i></a> /webhooks/v1/customers/{{CustomerID}}/subscriptions/{{SubscriptionId}}
ResourceName	string	The name of the resource that will trigger the event. For this event, the value is "subscription".
AuditUri	URI	(Optional) The URI to get the audit record, if it exists. Uses the syntax: <a href="#"><i>{baseUrl}</i></a> /auditactivity/v1/auditrecords/{{AuditId}}
ResourceChangeUtcDate	string in the UTC date-time format	The date and time when the resource change occurred.

#### Example

```
{
  "EventName": "subscription-updated",
  "ResourceUri":
    "http://api.partnercenter.microsoft.com/webhooks/v1/customers/{{CustomerId}}/subscriptions/{{SubscriptionId}}"
  ,
  "ResourceName": "subscription",
  "AuditUri": "https://api.partnercenter.microsoft.com/v1/auditrecords/{{AuditId}}",
  "ResourceChangeUtcDate": "2017-11-16T16:19:06.3520276+00:00"
}
}
```

## Threshold Exceeded Event

This event is raised when the amount of Microsoft Azure usage for any customer exceeds their usage spending budget (their threshold). For more information, see [Set an Azure spending budget for your customers](#).

### Properties

PROPERTY	TYPE	DESCRIPTION
EventName	string	The name of the event. In the form {resource}-{action}. For this event, the value is "usagerecords-thresholdExceeded".
ResourceUri	URI	The URI to get the resource. Uses the syntax: <a href="#">"{baseUrl}/webhooks/v1/customers/usagerecords"</a>
ResourceName	string	The name of the resource that will trigger the event. For this event, the value is "usagerecords".
AuditUri	URI	(Optional) The URI to get the audit record, if it exists. Uses the syntax: <a href="#">"{baseUrl}/auditactivity/v1/auditrecords/{{AuditId}}"</a>
ResourceChangeUtcDate	string in the UTC date-time format	The date and time when the resource change occurred.

### Example

```
{
  "EventName": "usagerecords-thresholdExceeded",
  "ResourceUri": "https://api.partnercenter.microsoft.com/v1/customers/usagerecords",
  "ResourceName": "usagerecords",
  "AuditUri": null,
  "ResourceChangeUtcDate": "2018-02-17T00:05:39.5485487+00:00"
}
```

## Referral Created Event

This event is raised when the referral is created.

### Properties

PROPERTY	TYPE	DESCRIPTION
----------	------	-------------

PROPERTY	TYPE	DESCRIPTION
EventName	string	The name of the event. In the form {resource}-{action}. For this event, the value is "referral-created".
ResourceUri	URI	The URI to get the resource. Uses the syntax: " <a href="#">{baseUrl}</a> /engagements/v1/referrals/{{ReferralID}}"
ResourceName	string	The name of the resource that will trigger the event. For this event, the value is "referral".
AuditUri	URI	(Optional) The URI to get the audit record, if it exists. Uses the syntax: " <a href="#">{baseUrl}</a> /auditactivity/v1/auditrecords/{{AuditId}}"
ResourceChangeUtcDate	string in the UTC date-time format	The date and time when the resource change occurred.

#### Example

```
{
  "EventName": "referral-created",
  "ResourceUri": "https://api.partnercenter.microsoft.com/engagements/v1/referrals/{{ReferralID}}",
  "ResourceName": "referral",
  "AuditUri": null,
  "ResourceChangeUtcDate": "2018-02-17T00:05:39.5485487+00:00"
}
```

## Referral Updated Event

This event is raised when the referral is updated.

#### Properties

PROPERTY	TYPE	DESCRIPTION
EventName	string	The name of the event. In the form {resource}-{action}. For this event, the value is "referral-updated".
ResourceUri	URI	The URI to get the resource. Uses the syntax: " <a href="#">{baseUrl}</a> /engagements/v1/referrals/{{ReferralID}}"
ResourceName	string	The name of the resource that will trigger the event. For this event, the value is "referral".
AuditUri	URI	(Optional) The URI to get the audit record, if it exists. Uses the syntax: " <a href="#">{baseUrl}</a> /auditactivity/v1/auditrecords/{{AuditId}}"

PROPERTY	TYPE	DESCRIPTION
ResourceChangeUtcDate	string in the UTC date-time format	The date and time when the resource change occurred.

#### Example

```
{
  "EventName": "referral-updated",
  "ResourceUri": "https://api.partnercenter.microsoft.com/engagements/v1/referrals/{{ReferralID}}",
  "ResourceName": "referral",
  "AuditUri": null,
  "ResourceChangeUtcDate": "2018-02-17T00:05:39.5485487+00:00"
}
```

## Invoice Ready Event

This event is raised when the new invoice is ready.

PROPERTY	TYPE	DESCRIPTION
EventName	string	The name of the event. In the form {resource}-{action}. For this event, the value is "invoice-ready".
ResourceUri	URI	The URI to get the resource. Uses the syntax: <a href="#">"/baseURL/v1/invoices/{{InvoiceId}}"</a>
ResourceName	string	The name of the resource that will trigger the event. For this event, the value is "invoice".
AuditUri	URI	(Optional) The URI to get the audit record, if it exists. Uses the syntax: <a href="#">"/baseURL/auditactivity/v1/auditrecords/{{AuditId}}"</a>
ResourceChangeUtcDate	string in the UTC date-time format	The date and time when the resource change occurred.

#### Example

```
{
  "EventName": "invoice-ready",
  "ResourceUri": "https://api.partnercenter.microsoft.com/v1/invoices/{{InvoiceId}}",
  "ResourceName": "invoice",
  "AuditUri": null,
  "ResourceChangeUtcDate": "2018-02-17T00:05:39.5485487+00:00"
}
```

# Partner Center supported languages and locales

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## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

Some Partner Center APIs require a value indicating a locale, country or region. For example, the [Partner Center REST header X-Locale](#) requires a value often in the format "language-country" ("en-US" indicates "English - United States").

In the Partner Center managed APIs, the [CountryValidationRules](#) class and the [OfferCategory.Locale](#), [ServiceRequest.CountryCode](#), or [CustomerBillingProfile.Culture](#) properties require string values that indicate a language or country/region (in the form of an ISO2 language code or ISO3 country/region code), a locale, or a culture (a language ID combined with a country/region code).

The following table lists the cultures and International Standards Organization (ISO) country codes that are supported in the Partner Center APIs.

COUNTRY/REGION	ISO ALPHA 2 COUNTRY CODE	ISO ALPHA 3 COUNTRY CODE	SUPPORTED CULTURE(S)
Afghanistan	AF	AFG	ps-AF / en-US
Åland Islands	AX	ALA	sv-SE / en-US
Albania	AL	ALB	sq-AL / en-US
Algeria	DZ	DZA	ar-DZ / en-US
American Samoa	AS	ASM	en-US
Andorra	AD	AND	ca-ES / en-US
Angola	AO	AGO	pt-PT / en-US
Anguilla	AI	AIA	en-US
Antarctica	AQ	ATA	en-US
Antigua and Barbuda	AG	ATG	en-US
Argentina	AR	ARG	es-AR / en-US
Armenia	AM	ARM	hy-AM / en-US
Aruba	AW	ABW	nl-NL / en-US

Country/Region	ISO Alpha 2 Country Code	ISO Alpha 3 Country Code	Supported Culture(s)
Australia	AU	AUS	en-AU / en-US
Austria	AT	AUT	de-AT / en-US
Azerbaijan	AZ	AZE	az-Latn-AZ / en-US
Bahamas	BS	BHS	en-GB / en-US
Bahrain	BH	BHR	ar-BH / en-US
Bangladesh	BD	BGD	bn-BD / en-US
Barbados	BB	BRB	en-GB / en-US
Belarus	BY	BLR	be-BY / en-US
Belgium	BE	BEL	fr-BE / nl-BE / en-US
Belize	BZ	BLZ	en-BZ / en-US
Benin	BJ	BEN	fr-FR / en-US
Bermuda	BM	BMU	en-GB / en-US
Bhutan	BT	BTN	en-US
Bolivia	BO	BOL	es-BO / en-US
Bonaire	BQ	BES	nl-NL / en-US
Bosnia and Herzegovina	BA	BIH	bs-Latn-BA / en-US
Botswana	BW	BWA	en-GB / en-US
Bouvet Island	BV	BVT	nb-NO / en-US
Brazil	BR	BRA	pt-BR / en-US
British Indian Ocean Territory	IO	IOT	en-US
British Virgin Islands	VG	VGB	en-US
Brunei	BN	BRN	ms-BN / en-US
Bulgaria	BG	BGR	bg-BG / en-US
Burkina Faso	BF	BFA	fr-FR / en-US
Burundi	BI	BDI	fr-FR / en-US

Country/Region	ISO Alpha 2 Country Code	ISO Alpha 3 Country Code	Supported Culture(s)
Cabo Verde	CV	CPV	pt-CV / en-US
Cambodia	KH	KHM	km-KH / en-US
Cameroon	CM	CMR	fr-FR / en-US
Canada	CA	CAN	fr-CA / en-US
Cayman Islands	KY	CYM	en-GB / en-US
Central African Republic	CF	CAF	fr-FR / en-US
Chad	TD	TCD	fr-FR / en-US
Chile	CL	CHL	es-CL / en-US
China	CN	CHN	zh-CN / en-US
Christmas Island	CX	CXR	en-US
Cocos (Keeling) Islands	CC	CCK	en-US
Colombia	CO	COL	es-CO / en-US
Comoros	KM	COM	fr-FR / en-US
Congo	CG	COG	fr-FR / en-US
Congo (DRC)	CD	COD	fr-FR / en-US
Cook Islands	CK	COK	en-US
Costa Rica	CR	CRI	es-CR / en-US
Côte d'Ivoire	CI	CIV	fr-FR / en-US
Croatia	HR	HRV	hr-HR / en-US
Curaçao	CW	CUW	nl-NL / en-US
Cyprus	CY	CYP	el-GR / en-US
Czechia	CZ	CZE	cs-CZ / en-US
Denmark	DK	DNK	da-DK / en-US
Djibouti	DJ	DJI	fr-FR / en-US
Dominica	DM	DMA	en-US

Country/Region	ISO Alpha 2 Country Code	ISO Alpha 3 Country Code	Supported Culture(s)
Dominican Republic	DO	DOM	es-DO / en-US
Ecuador	EC	ECU	es-EC / en-US
Egypt	EG	EGY	ar-EG / en-US
El Salvador	SV	SLV	es-SV / en-US
Equatorial Guinea	GQ	GNQ	es-ES / en-US
Eritrea	ER	ERI	ar-SA / en-US
Estonia	EE	EST	et-EE / en-US
eSwatini	SZ	SWZ	en-US
Ethiopia	ET	ETH	am-ET / en-US
Falkland Islands	FK	FLK	en-US
Faroe Islands	FO	FRO	fo-FO / en-US
Fiji	FJ	FJI	en-GB / en-US
Finland	FI	FIN	fi-FI / sv-FI / en-US
France	FR	FRA	fr-FR / en-US
French Guiana	GF	GUF	fr-FR / en-US
French Polynesia	PF	PYF	fr-FR / en-US
French Southern Territories	TF	ATF	fr-FR / en-US
Gabon	GA	GAB	fr-FR / en-US
Gambia	GM	GMB	en-US
Georgia	GE	GEO	ka-GE / en-US
Germany	DE	DEU	de-DE / en-US
Ghana	GH	GHA	en-GB / en-US
Gibraltar	GI	GIB	en-US
Greece	GR	GRC	el-GR / en-US
Greenland	GL	GRL	da-DK / en-US

Country/Region	ISO Alpha 2 Country Code	ISO Alpha 3 Country Code	Supported Culture(s)
Grenada	GD	GRD	en-US
Guadeloupe	GP	GLP	fr-FR / en-US
Guam	GU	GUM	en-US
Guatemala	GT	GTM	es-GT / en-US
Guernsey	GG	GGY	en-US
Guinea	GN	GIN	fr-FR / en-US
Guinea-Bissau	GW	GNB	pt-PT / en-US
Guyana	GY	GUY	en-US
Haiti	HT	HTI	fr-FR / en-US
Heard Island and McDonald Islands	HM	HMD	en-US
Honduras	HN	HND	es-HN / en-US
Hong Kong SAR	HK	HKG	zh-HK / en-US
Hungary	HU	HUN	hu-HU / en-US
Iceland	IS	ISL	is-IS / en-US
India	IN	IND	en-IN / hi-IN / en-US
Indonesia	ID	IDN	id-ID / en-US
Iraq	IQ	IRQ	ar-IQ / en-US
Ireland	IE	IRL	en-IE / en-US
Isle of Man	IM	IMN	en-US
Israel	IL	ISR	he-IL / en-US
Italy	IT	ITA	it-IT / en-US
Jamaica	JM	JAM	en-JM / en-US
Jan Mayen	XJ	XJA	nb-NO / en-US
Japan	JP	JPN	ja-JP / en-US
Jersey	JE	JEY	en-US

COUNTRY/REGION	ISO ALPHA 2 COUNTRY CODE	ISO ALPHA 3 COUNTRY CODE	SUPPORTED CULTURE(S)
Jordan	JO	JOR	ar-JO / en-US
Kazakhstan	KZ	KAZ	kk-KZ / en-US
Kenya	KE	KEN	sw-KE / en-US
Kiribati	KI	KIR	en-US
Korea	KR	KOR	ko-KR / en-US
Kosovo	XK	XKS	en-US
Kuwait	KW	KWT	ar-KW / en-US
Kyrgyzstan	KG	KGZ	ky-KG / en-US
Laos	LA	LAO	lo-LA / en-US
Latvia	LV	LVA	lv-LV / en-US
Lebanon	LB	LBN	ar-LB / en-US
Lesotho	LS	LSO	en-US
Liberia	LR	LBR	en-US
Libya	LY	LBY	ar-LY / en-US
Liechtenstein	LI	LIE	de-LI / en-US
Lithuania	LT	LTU	lt-LT / en-US
Luxembourg	LU	LUX	de-LU / fr-LU / en-US
Macao SAR	MO	MAC	zh-MO / en-US
Macedonia, FYRO	MK	MKD	mk-MK / en-US
Madagascar	MG	MDG	fr-FR / en-US
Malawi	MW	MWI	en-US
Malaysia	MY	MYS	en-MY / en-US
Maldives	MV	MDV	dv-MV / en-US
Mali	ML	MLI	fr-FR / en-US
Malta	MT	MLT	mt-MT / en-US

Country/Region	ISO Alpha 2 Country Code	ISO Alpha 3 Country Code	Supported Culture(s)
Marshall Islands	MH	MHL	en-US
Martinique	MQ	MTQ	fr-FR / en-US
Mauritania	MR	MRT	ar-SA / en-US
Mauritius	MU	MUS	en-GB / en-US
Mayotte	YT	MYT	fr-FR / en-US
Mexico	MX	MEX	es-MX / en-US
Micronesia	FM	FSM	en-US
Moldova	MD	MDA	ro-RO / en-US
Monaco	MC	MCO	fr-MC / en-US
Mongolia	MN	MNG	mn-MN / en-US
Montenegro	ME	MNE	sr-Latn-ME / en-US
Montserrat	MS	MSR	en-US
Morocco	MA	MAR	ar-MA / en-US
Mozambique	MZ	MOZ	pt-PT / en-US
Myanmar	MM	MMR	en-US
Namibia	NA	NAM	en-GB / en-US
Nauru	NR	NRU	en-US
Nepal	NP	NPL	ne-NP / en-US
Netherlands Antilles	AN	ANT	en-US
Netherlands, The	NL	NLD	nl-NL / en-US
New Caledonia	NC	NCL	fr-FR / en-US
New Zealand	NZ	NZL	en-NZ / en-US
Nicaragua	NI	NIC	es-NI / en-US
Niger	NE	NER	fr-FR / en-US
Nigeria	NG	NGA	ha-Latn-NG / en-US

Country/Region	ISO Alpha 2 Country Code	ISO Alpha 3 Country Code	Supported Culture(s)
Niue	NU	NIU	en-US
Norfolk Island	NF	NFK	en-US
Northern Mariana Islands	MP	MNP	en-US
Norway	NO	NOR	nb-NO / en-US
Oman	OM	OMN	ar-OM / en-US
Pakistan	PK	PAK	ur-PK / en-US
Palau	PW	PLW	en-US
Palestinian Authority	PS	PSE	ar-SA / en-US
Panama	PA	PAN	es-PA / en-US
Papua New Guinea	PG	PNG	en-US
Paraguay	PY	PRY	es-PY / en-US
Peru	PE	PER	es-PE / en-US
Philippines	PH	PHL	en-PH / en-US
Pitcairn Islands	PN	PCN	en-US
Poland	PL	POL	pl-PL / en-US
Portugal	PT	PRT	pt-PT / en-US
Puerto Rico	PR	PRI	es-PR / en-US
Qatar	QA	QAT	ar-QA / en-US
Réunion	RE	REU	fr-FR / en-US
Romania	RO	ROU	ro-RO / en-US
Russia	RU	RUS	ru-RU / en-US
Rwanda	RW	RWA	rw-RW / en-US
Saba	XS	XSA	nl-NL / en-US
Saint Kitts and Nevis	KN	KNA	en-GB / en-US
Saint Lucia	LC	LCA	en-US

Country/Region	ISO Alpha 2 Country Code	ISO Alpha 3 Country Code	Supported Culture(s)
Saint Martin	MF	MAF	fr-FR / en-US
Saint Pierre and Miquelon	PM	SPM	fr-FR / en-US
Saint Vincent and the Grenadines	VC	VCT	en-US
Saint-Barthélemy	BL	BLM	fr-FR / en-US
Samoa	WS	WSM	en-US
San Marino	SM	SMR	it-IT / en-US
São Tomé and Príncipe	ST	STP	pt-PT / en-US
Saudi Arabia	SA	SAU	ar-SA / en-US
Senegal	SN	SEN	wo-SN / en-US
Serbia	RS	SRB	sr-Latn-RS / sr-Cyril-RS / en-US
Seychelles	SC	SYC	en-US
Sierra Leone	SL	SLE	en-US
Singapore	SG	SGP	en-SG / zh-SG / en-US
Sint Eustatius	XE	XSE	nl-NL / en-US
Sint Maarten	SX	SXM	en-US
Slovakia	SK	SVK	sk-SK / en-US
Slovenia	SI	SVN	sl-SI / en-US
Solomon Islands	SB	SLB	en-US
Somalia	SO	SOM	ar-SA / en-US
South Africa	ZA	ZAF	en-ZA / en-US
South Georgia and South Sandwich Islands	GS	SGS	en-US
South Sudan	SS	SSD	en-US
Spain	ES	ESP	es-ES / ca-ES / eu-ES / gl-ES / en-US

COUNTRY/REGION	ISO ALPHA 2 COUNTRY CODE	ISO ALPHA 3 COUNTRY CODE	SUPPORTED CULTURE(S)
Sri Lanka	LK	LKA	si-LK / en-US
St Helena, Ascension, Tristan da Cunha	SH	SHN	en-US
Suriname	SR	SUR	nl-NL
Svalbard	SJ	SJM	nb-NO / en-US
Sweden	SE	SWE	sv-SE / en-US
Switzerland	CH	CHE	de-CH / fr-CH / it-CH / en-US
Taiwan	TW	TWN	zh-TW / en-US
Tajikistan	TJ	TJK	tg-Cyrl-TJ / en-US
Tanzania	TZ	TZA	en-GB / en-US
Thailand	TH	THA	th-TH / en-US
Timor-Leste	TL	TLS	pt-PT / en-US
Togo	TG	TGO	fr-FR / en-US
Tokelau	TK	TKL	en-US
Tonga	TO	TON	en-US
Trinidad and Tobago	TT	TTO	en-TT / en-US
Tunisia	TN	TUN	ar-TN / en-US
Turkey	TR	TUR	tr-TR / en-US
Turkmenistan	TM	TKM	tk-TM / en-US
Turks and Caicos Islands	TC	TCA	en-US
Tuvalu	TV	TUV	en-US
Uganda	UG	UGA	en-GB / en-US
Ukraine	UA	UKR	uk-UA / en-US
United Arab Emirates	AE	ARE	ar-AE / en-US
United Kingdom	GB	GBR	en-GB / en-US

COUNTRY/REGION	ISO ALPHA 2 COUNTRY CODE	ISO ALPHA 3 COUNTRY CODE	SUPPORTED CULTURE(S)
U.S. Outlying Islands	UM	UMI	en-US
U.S. Virgin Islands	VI	VIR	en-US
United States	US	USA	en-US / es-US
Uruguay	UY	URY	es-UY / en-US
Uzbekistan	UZ	UZB	uz-Latn-UZ / en-US
Vanuatu	VU	VUT	en-US
Vatican City	VA	VAT	it-IT / en-US
Venezuela	VE	VEN	es-VE / en-US
Vietnam	VN	VNM	vi-VN / en-US
Wallis and Futuna	WF	WLF	fr-FR / en-US
Yemen	YE	YEM	ar-YE / en-US
Zambia	ZM	ZMB	en-GB / en-US
Zimbabwe	ZW	ZWE	en-ZW / en-US

# Partner Center webhooks

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## Applies To

- Partner Center
- Partner Center operated by 21Vianet
- Partner Center for Microsoft Cloud Germany
- Partner Center for Microsoft Cloud for US Government

The Partner Center Webhook APIs allow partners to register for resource change events. These events are delivered in the form of HTTP POSTs to the partner's registered URL. To receive an event from Partner Center, partners will host a callback where Partner Center can POST the resource change event. The event will be digitally signed so that the partner can verify that it was sent from Partner Center.

Partners can select from Webhook events, like the following examples, that are supported by Partner Center.

- **Test Event ("test-created")**

This event allows you to self-onboard and test your registration by requesting a test event and then tracking its progress. You can see the failure messages that are being received from Microsoft while trying to deliver the event. This restriction only applies to "test-created" events. Data older than seven days will be purged.

- **Subscription Updated Event ("subscription-updated")**

This event is raised when the subscription changes. These events will be generated when there is an internal change in addition to when changes are made through the Partner Center API.

**NOTE**

There is a delay of up to 48 hours between the time a subscription changes and when the Subscription Updated event is triggered.

- **Threshold Exceeded Event ("usagerecords-thresholdExceeded")**

This event is raised when the amount of Microsoft Azure usage for any customer exceeds their usage spending budget (their threshold). For more information, see [Set an Azure spending budget for your customers](#).

- **Referral Created Event ("referral-created")**

This event is raised when the referral is created.

- **Referral Updated Event ("referral-updated")**

This event is raised when the referral is updated.

- **Invoice Ready Event ("invoice-ready")**

This event is raised when the new invoice is ready.

Future Webhook events will be added for resources that change in the system that the partner isn't in control of, and further updates will be made to get those events as close to "real time" as possible. Feedback from Partners on which events add value to their business will be useful in determining what new events to add.

For a complete list of Webhook events supported by Partner Center, see [Partner Center webhook events](#).

## Prerequisites

- Credentials as described in [Partner Center authentication](#). This scenario supports authentication with both standalone App and App+User credentials.

## Receiving events from Partner Center

To receive events from Partner Center, you must expose a publicly accessible endpoint. Because this endpoint is exposed, you must validate that the communication is from Partner Center. All Webhook events that you receive are digitally signed with a certificate that chains to the Microsoft Root. A link to the certificate used to sign the event will also be provided. This will allow the certificate to be renewed without you having to redeploy or reconfigure your service. Partner Center will make 10 attempts to deliver the event. If the event is still not delivered after 10 attempts, it will be moved into an offline queue and no further attempts will be made at delivery.

The following sample shows an event posted from Partner Center.

```
POST /webhooks/callback
Content-Type: application/json
Authorization: Signature
VOhcjRqA4f7u/4R29ohEzwRZibZdzfgG5/w4fHUnu8FHauBEVch8m2+50gjLZRL33CIQpmqr2t0FsGF0UdmCR20dY7rrAh/6QUW+u+jRUCV1s6
2M76jbVpTTGShmrANxn18gz4LsbY260LASDHufd6ab4oejerx1Ey9sFC+xwVTa+J4qGgeyIepeu4YCM0oB2RFS9rRB2F1s10eAAPEhG7olp8B0
0Jss3PQrpLG0oAr5+fnQp8GOK8IdKF1/abUIyyvHxEjL7617DVQN5pIJg4YC+pLs8pi6sTKv0dSVyCnjf+uYQWwmmWujSHfyU37j2Fzz16PJy
WH41K8ZXJJkw==
X-MS-Certificate-Url: https://3psostorageacct.blob.core.windows.net/cert/pcnotifications-
dispatch.microsoft.com.cer
X-MS-Signature-Algorithm: rsa-sha256
Host: api.partnercenter.microsoft.com
Accept-Encoding: gzip, deflate
Content-Length: 195

{
  "EventName": "test-created",
  "ResourceUri": "http://localhost:16722/v1/webhooks/registration/test",
  "ResourceName": "test",
  "AuditUri": null,
  "ResourceChangeUtcDate": "2017-11-16T16:19:06.3520276+00:00"
}
```

### NOTE

The Authorization header has a scheme of "Signature". This is a base64 encoded signature of the content.

## How to authenticate the callback

To authenticate the callback event received from Partner Center, follow these steps:

- Verify the required headers are present (Authorization, x-ms-certificate-url, x-ms-signature-algorithm).
- Download the certificate used to sign the content (x-ms-certificate-url).
- Verify the Certificate Chain.
- Verify the "Organization" of the certificate.
- Read the content with UTF8 encoding into a buffer.
- Create an RSA Crypto Provider.

7. Verify the data matches what was signed with the specified hash algorithm (for example SHA256).

8. If the verification succeeds, process the message.

#### NOTE

By default, the signature token will be sent in an Authorization header. If you set `SignatureTokenToMsSignatureHeader` to true in your registration, the signature token will be sent in the x-ms-signature header instead.

## Event model

The following table describes the properties of a Partner Center event.

### Properties

NAME	DESCRIPTION
EventName	The name of the event. In the form {resource}-{action}. For example, "test-created".
ResourceUri	The URI of the resource that changed.
ResourceName	The name of the resource that changed.
AuditUrl	Optional. The URI of the Audit record.
ResourceChangeUtcDate	The date and time, in UTC format, when the resource change occurred.

### Sample

The following sample shows the structure of a Partner Center event.

```
{
  "EventName": "test-created",
  "ResourceUri": "http://api.partnercenter.microsoft.com/webhooks/v1/registration/validationEvents/c0bfd694-3075-4ec5-9a3c-733d3a890a1f",
  "ResourceName": "test",
  "AuditUrl": null,
  "ResourceChangeUtcDate": "2017-11-16T16:19:06.3520276+00:00"
}
```

## Webhook APIs

### Authentication

All calls to the Webhook APIs are authenticated using the Bearer token in the Authorization Header. Acquire an access token to access <https://api.partnercenter.microsoft.com>. This token is the same token that is used to access the rest of the Partner Center APIs.

### Get a list of events

Returns a list of the events that are currently supported by the Webhook APIs.

### Resource URL

```
https://api.partnercenter.microsoft.com/webhooks/v1/registration/events
```

### Request example

```
GET /webhooks/v1/registration/events
content-type: application/json
authorization: Bearer eyJ0e......
accept: */
host: api.partnercenter.microsoft.com
```

## Response example

```
HTTP/1.1 200
Status: 200
Content-Length: 183
Content-Type: application/json; charset=utf-8
Content-Encoding: gzip
Vary: Accept-Encoding
MS-CorrelationId: c0bcf3a3-46e9-48fd-8e05-f674b8fd5d66
MS-RequestId: 79419bbb-06ee-48da-8221-e09480537dfc
X-Locale: en-US

[ "subscription-updated", "test-created", "usagerecords-thresholdExceeded" ]
```

## Register to receive events

Registers a tenant to receive the specified events.

### Resource URL

```
https://api.partnercenter.microsoft.com/webhooks/v1/registration
```

## Request example

```
POST /webhooks/v1/registration
Content-Type: application/json
Authorization: Bearer eyJ0e......
Accept: */
Host: api.partnercenter.microsoft.com
Accept-Encoding: gzip, deflate
Content-Length: 219

{
    "WebhookUrl": "{{YourCallbackUrl}}",
    "WebhookEvents": [ "subscription-updated", "test-created" ]
}
```

## Response example

```
HTTP/1.1 200
Status: 200
Content-Length: 346
Content-Type: application/json; charset=utf-8
Content-Encoding: gzip
Vary: Accept-Encoding
MS-CorrelationId: 718f2336-8b56-4f42-93ac-54896047c59a
MS-RequestId: f04b1b5e-87b4-4d95-b087-d65fffec0bd2

{
    "SubscriberId": "e82cac64-dc67-4cd3-849b-78b6127dd57d",
    "WebhookUrl": "{{YourCallbackUrl}}",
    "WebhookEvents": [ "subscription-updated", "test-created" ]
}
```

## View a registration

Returns the Webhooks event registration for a tenant.

#### Resource URL

```
https://api.partnercenter.microsoft.com/webhooks/v1/registration
```

#### Request example

```
GET /webhooks/v1/registration
Content-Type: application/json
Authorization: Bearer ...
Accept: /*
Host: api.partnercenter.microsoft.com
Accept-Encoding: gzip, deflate
```

#### Response example

```
HTTP/1.1 200
Status: 200
Content-Length: 341
Content-Type: application/json; charset=utf-8
Content-Encoding: gzip
Vary: Accept-Encoding
MS-CorrelationId: c3b88ab0-b7bc-48d6-8c55-4ae6200f490a
MS-RequestId: ca30367d-4b24-4516-af08-74bba6dc6657
X-Locale: en-US

{
    "WebhookUrl": "{{YourCallbackUrl}}",
    "WebhookEvents": ["subscription-updated", "test-created"]
}
```

#### Update an event registration

Updates an existing event registration.

#### Resource URL

```
https://api.partnercenter.microsoft.com/webhooks/v1/registration
```

#### Request example

```
PUT /webhooks/v1/registration
Content-Type: application/json
Authorization: Bearer eyJ0eXAiOR...
Accept: /*
Host: api.partnercenter.microsoft.com
Accept-Encoding: gzip, deflate
Content-Length: 258

{
    "WebhookUrl": "{{YourCallbackUrl}}",
    "WebhookEvents": ["subscription-updated", "test-created"]
}
```

#### Response example

```
HTTP/1.1 200
Status: 200
Content-Length: 346
Content-Type: application/json; charset=utf-8
content-encoding: gzip
Vary: Accept-Encoding
MS-CorrelationId: 718f2336-8b56-4f42-93ac-54896047c59a
MS-RequestId: f04b1b5e-87b4-4d95-b087-d65fffec0bd2

{
    "SubscriberId": "e82cac64-dc67-4cd3-849b-78b6127dd57d",
    "WebhookUrl": "{{YourCallbackUrl}}",
    "WebhookEvents": [ "subscription-updated", "test-created" ]
}
```

## Send a test event to validate your registration

Generates a test event to validate the Webhooks registration. This test is intended to validate that you can receive events from Partner Center. Data for these events will be deleted seven days after the initial event is created. You must be registered for the "test-created" event, using the registration API, before sending a validation event.

### NOTE

There is a throttle limit of 2 requests per minute when posting a validation event.

### Resource URL

```
https://api.partnercenter.microsoft.com/webhooks/v1/registration/validationEvents
```

### Request example

```
POST /webhooks/v1/registration/validationEvents
MS-CorrelationId: 3ef0202b-9d00-4f75-9cff-15420f7612b3
Authorization: Bearer ...
Accept: /*
Host: api.partnercenter.microsoft.com
Accept-Encoding: gzip, deflate
Content-Length:
```

### Response example

```
HTTP/1.1 200
Status: 200
Content-Length: 181
Content-Type: application/json; charset=utf-8
Content-Encoding: gzip
Vary: Accept-Encoding
MS-CorrelationId: 04af2aea-d413-42db-824e-f328001484d1
MS-RequestId: 2f498d5a-a6ab-468f-98d8-93c96da09051
X-Locale: en-US

{ "correlationId": "04af2aea-d413-42db-824e-f328001484d1" }
```

### Verify that the event was delivered

Returns the current state of the validation event. This verification can be helpful for troubleshooting event delivery issues. The Response contains a result for each attempt that is made to deliver the event.

### Resource URL

```
https://api.partnercenter.microsoft.com/webhooks/v1/registration/validationEvents/{correlationId}
```

## Request example

```
GET /webhooks/v1/registration/validationEvents/04af2aea-d413-42db-824e-f328001484d1
MS-CorrelationId: 3ef0202b-9d00-4f75-9cff-15420f7612b3
Authorization: Bearer ...
Accept: */*
Host: api.partnercenter.microsoft.com
Accept-Encoding: gzip, deflate
```

## Response example

```
HTTP/1.1 200
Status: 200
Content-Length: 469
Content-Type: application/json; charset=utf-8
Content-Encoding: gzip
Vary: Accept-Encoding
MS-CorrelationId: 497e0a23-9498-4d6c-bd6a-bc4d6d0054e7
MS-RequestId: 0843bdb2-113a-4926-a51c-284aa01d722e
X-Locale: en-US

{
  "correlationId": "04af2aea-d413-42db-824e-f328001484d1",
  "partnerId": "00234d9d-8c2d-4ff5-8c18-39f8afc6f7f3",
  "status": "completed",
  "callbackUrl": "{{YourCallbackUrl}}",
  "results": [
    {
      "responseCode": "OK",
      "responseMessage": "",
      "systemError": false,
      "dateTimeUtc": "2017-12-08T21:39:48.2386997"
    }
  ]
}
```

## Example for Signature Validation

### Sample Callback Controller signature (ASP.NET)

```
[AuthorizeSignature]
[Route("webhooks/callback")]
public IHttpActionResult Post(PartnerResourceChangeCallBack callback)
```

### Signature Validation

The following example shows how to add an Authorization Attribute to the controller that is receiving callbacks from Webhook events.

```
namespace Webhooks.Security
{
    using System;
    using System.Collections.Generic;
    using System.IO;
    using System.Linq;
    using System.Net;
    using System.Net.Http;
    using System.Net.Http.Headers;
    using System.Security.Cryptography;
    using System.Security.Cryptography.X509Certificates;
    using System.Text;
    using System.Threading;
    using System.Threading.Tasks;
    using System.Web.Http;
```

```

using System.Web.Http.Controllers;
using Microsoft.Partner.Logging;

/// <summary>
/// Signature based Authorization
/// </summary>
public class AuthorizeSignatureAttribute : AuthorizeAttribute
{
    private const string MsSignatureHeader = "x-ms-signature";
    private const string CertificateUrlHeader = "x-ms-certificate-url";
    private const string SignatureAlgorithmHeader = "x-ms-signature-algorithm";
    private const string MicrosoftCorporationIssuer = "O=Microsoft Corporation";
    private const string SignatureScheme = "Signature";

    /// <inheritdoc/>
    public override async Task OnAuthorizationAsync(HttpActionContext actionContext, CancellationToken cancellationToken)
    {
        ValidateAuthorizationHeaders(actionContext.Request);

        await VerifySignature(actionContext.Request);
    }

    private static async Task<string> GetContentAsync(HttpRequestMessage request)
    {
        // By default the stream can only be read once and we need to read it here so that we can hash the body to validate the signature from microsoft.
        // Load into a buffer, so that the stream can be accessed here and in the api when it binds the content to the expected model type.
        await request.Content.LoadIntoBufferAsync();

        var s = await request.Content.ReadAsStreamAsync();
        var reader = new StreamReader(s);
        var body = await reader.ReadToEndAsync();

        // set the stream position back to the beginning
        if (s.CanSeek)
        {
            s.Seek(0, SeekOrigin.Begin);
        }

        return body;
    }

    private static void ValidateAuthorizationHeaders(HttpRequestMessage request)
    {
        var authHeader = request.Headers.Authorization;
        if (string.IsNullOrWhiteSpace(authHeader?.Parameter) &&
string.IsNullOrWhiteSpace(GetHeaderValue(request.Headers, MsSignatureHeader)))
        {
            throw new HttpResponseException(request.CreateErrorResponse(HttpStatusCode.Unauthorized,
$"Authorization header missing."));
        }

        var signatureHeaderValue = GetHeaderValue(request.Headers, MsSignatureHeader);
        if (authHeader != null
            && !string.Equals(authHeader.Scheme, SignatureScheme, StringComparison.OrdinalIgnoreCase)
            && !string.IsNullOrWhiteSpace(signatureHeaderValue)
            && !signatureHeaderValue.StartsWith(SignatureScheme, StringComparison.OrdinalIgnoreCase))
        {
            throw new HttpResponseException(request.CreateErrorResponse(HttpStatusCode.Unauthorized,
$"Authorization scheme needs to be '{SignatureScheme}'."));
        }

        if (string.IsNullOrWhiteSpace(GetHeaderValue(request.Headers, CertificateUrlHeader)))
        {
            throw new HttpResponseException(request.CreateErrorResponse(HttpStatusCode.BadRequest,
$"Request header {CertificateUrlHeader} missing."));
        }
    }
}

```

```

        if (string.IsNullOrWhiteSpace(GetHeaderValue(request.Headers, SignatureAlgorithmHeader)))
        {
            throw new HttpResponseException(request.CreateErrorResponse(HttpStatusCode.BadRequest,
$"Request header {SignatureAlgorithmHeader} missing."));
        }
    }

    private static string GetHeaderValue(HttpHeaders headers, string key)
    {
        headers.TryGetValues(key, out var headerValues);

        return headerValues?.FirstOrDefault();
    }

    private static async Task VerifySignature(HttpRequestMessage request)
    {
        // Get signature value from either authorization header or x-ms-signature header.
        var base64Signature = request.Headers.Authorization?.Parameter ?? GetHeaderValue(request.Headers,
MsSignatureHeader).Split(' ')[1];
        var signatureAlgorithm = GetHeaderValue(request.Headers, SignatureAlgorithmHeader);
        var certificateUrl = GetHeaderValue(request.Headers, CertificateUrlHeader);
        var certificate = await GetCertificate(certificateUrl);
        var content = await GetContentAsync(request);
        var alg = signatureAlgorithm.Split('-'); // for example RSA-SHA1
        var isValid = false;

        var logger = GetLoggerIfAvailable(request);

        // Validate the certificate
        VerifyCertificate(certificate, request, logger);

        if (alg.Length == 2 && alg[0].Equals("RSA", StringComparison.OrdinalIgnoreCase))
        {
            var signature = Convert.FromBase64String(base64Signature);
            var csp = (RSACryptoServiceProvider)certificate.PublicKey.Key;

            var encoding = new UTF8Encoding();
            var data = encoding.GetBytes(content);

            var hashAlgorithm = alg[1].ToUpper();

            isValid = csp.VerifyData(data, CryptoConfig.MapNameToOID(hashAlgorithm), signature);
        }

        if (!isValid)
        {
            // log that we were not able to validate the signature
            logger?.TrackTrace(
                "Failed to validate signature for webhook callback",
                new Dictionary<string, string> { { "base64Signature", base64Signature }, {
"certificateUrl", certificateUrl }, { "signatureAlgorithm", signatureAlgorithm }, { "content", content } });

            throw new HttpResponseException(request.CreateErrorResponse(HttpStatusCode.Unauthorized,
"Signature verification failed"));
        }
    }

    private static ILogger GetLoggerIfAvailable(HttpRequestMessage request)
    {
        return request.GetDependencyScope().GetService(typeof(ILogger)) as ILogger;
    }

    private static async Task<X509Certificate2> GetCertificate(string certificateUrl)
    {
        byte[] certBytes;
        using (var webClient = new WebClient())
        {
            certBytes = await webClient.DownloadDataTaskAsSynchronous(certificateUrl);
        }
    }
}

```

```
        }

        return new X509Certificate2(certBytes);
    }

    private static void VerifyCertificate(X509Certificate2 certificate, HttpRequestMessage request,
ILogger logger)
{
    if (!certificate.Verify())
    {
        logger?.TrackTrace("Failed to verify certificate for webhook callback.", new
Dictionary<string, string> { { "Subject", certificate.Subject }, { "Issuer", certificate.Issuer } });

        throw new HttpResponseMessage(request.CreateErrorResponse(HttpStatusCode.Unauthorized,
"Certificate verification failed."));
    }

    if (!certificate.Issuer.Contains(MicrosoftCorporationIssuer))
    {
        logger?.TrackTrace($"Certificate not issued by {MicrosoftCorporationIssuer}.", new
Dictionary<string, string> { { "Issuer", certificate.Issuer } });

        throw new HttpResponseMessage(request.CreateErrorResponse(HttpStatusCode.Unauthorized,
$"Certificate not issued by {MicrosoftCorporationIssuer}."));
    }
}
}
```

# .NET SDK release notes

5/5/2020 • 2 minutes to read • [Edit Online](#)

The following release notes are available for new versions of [Microsoft Partner Center .NET SDK](#). You can find [.NET SDK samples](#) on GitHub. You can find the [Partner Center .NET API reference](#) in the .NET API Browser.

## Version 1.15.3

[Microsoft Partner Center .NET SDK](#) v1.15.3 is now general availability. Updated REST APIs and [GitHub samples](#) are also available. The following changes are included in this version:

- Partner Agreement
  - Added the ability for indirect providers to [verify Microsoft Partner Agreement status of indirect resellers](#).
- Products
  - The following two interfaces were incorrectly placed under the Microsoft.Store.PartnerCenter.Products namespace. Now, they are located under the Microsoft.Store.PartnerCenter.Customers.Products namespace.
    - ICustomerProductByReservationScope
    - ICustomerSkuByReservationScope