

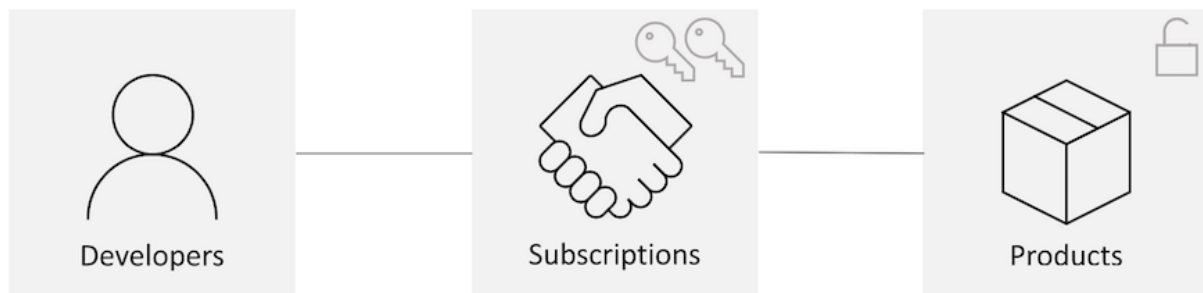
Subscription

Subscription keys are a very common and easy way to secure APIs published through an API Management.

A valid subscription key is expected to be included in the HTTP request when calls are made to the APIs that developers need to consume. Failing which the API Management gateway will immediately reject the calls and it would not reach the back-end service.

How to Subscribe to a product

Steps to follow for a successful subscription to a product



1. Select the Product you desire to subscribe to from the product list

virtusa

HomeAPIs**Products**DocumentationReportsProfileSign out

Products

🔍 Search products

Name	Description
Virtusa Artificial Intelligence Public	This subscription will include all Virtusa exposed artificial intelligence services
Virtusa Business Public	Virtusa Business Public APIs

Powered by [Azure API Management](#).

2. Type in the product name in the space provided and click on “Subscribe” in order to submit the request for the subscription of the product needed to be used.

Virtusa

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Virtusa Business Public

Virtusa Business Public APIs

Virtusa Business Public

Your subscriptions

You don't have subscriptions yet.

Your new product subscription name

Subscribe

APIs in the product

Search APIs

Name	Description
Allocation API Resources Management - Public - v1	
Allocation Public API - v1	Allocation details
ALM Mapping API Public - v1	Virtusa Alm-mapping. Source: Oracle PAAS REST-API
Approval Matrix API Public - v1	
ATC API Public - v1	Virtusa ATC API Source Fusion
Azure AD Token API - v1	
Candidate publisher API Public - v1	candidate publisher API publisher
Candidates API Public - v1	

3. After the subscription is approved, you will be provided with two subscription keys which can be used to access any API in the subscribed product.

User profile

Account details

Email	XXXXXX@XXXXXX.XXXXXX
First name	XXXXXX
Last name	XXXXXX
Registration date	01/20/2020

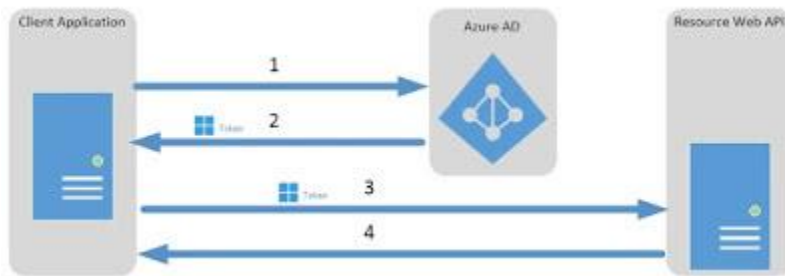
Subscriptions

Subscription details		Product	State	Action
Name	Virtusa Business Public APIs	Rename	Virtusa Business Public	Submitted Cancel
Requested on				
	11/24/2020			
Primary key	XXXXXXXXXXXXXXXXXXXXXXXXXXXX	Show Regenerate		
Secondary key	XXXXXXXXXXXXXXXXXXXXXXXXXXXX	Show Regenerate		

Powered by Azure API Management.

How to call an API

All APIs (Application Programmers Interfaces) require OAuth 2.0 authorization. Therefore, to call any API successfully, an Access token is required to pass the authorization process.



As shown in the image, the client is required to request for an access token (JWT token) via the Azure AD (Active Directory) token API by passing the necessary credentials (client_id, client_secret, tenant_id, subscription key) to the Azure Active Directory, where credentials will be validated and an access token will be returned to the client.

The client is now entitled to call an API successfully by sending the API request along with the Access token and subscription key. The client will be returned with a 200 OK response and other necessary data depending on the type of the request, only after validating the token.

Steps to follow for a successful API call

1. Select an API from the list of APIs

virtusa

APIs

Search APIs

Group by tag



Name	Description
Allocation API Resources Management - Public - v1	
Allocation Public API - v1	Allocation details
ALM Mapping API Public - v1	Virtusa Alm-mapping. Source: Oracle PAAS REST-API
Approval Matrix API Public - v1	
ATC API Public - v1	Virtusa ATC API Source Fusion
Azure AD Token API - v1	
Candidate publisher API Public - v1	candidate publisher API publisher
Candidates API Public - v1	
City API Public - v1	virtusa City API
Competency API Public - v1	
CPC API Public - v1	Azure Logic App.
Currencies API - v1	Source Fusion
Demo Conference API	A sample API with information related to a technical conference. The available resources include Speakers, Sessions and Topics. A single write operation is available to provide feedback on a session.

2. Select any operation from the list under the API. You will see the Request URL of the operation, any request parameters if required and a sample response. Click on “Try it” to test the API operation and you will then be directed to the developer console.

virtusa Home APIs Products Documentation Reports Profile Sign out

City API Public - v1 City API Public

Search operations

API version: v1 API definition Changelog

virtusa City API

Group by tag

GET Get a City

GET Get All Cities

Try it

Get All Cities

Request

GET https://virtueagintegrationsapim-dev3.azure-api.net/cities-api/v1/cities

Response: 200 OK

[{"treeNodeId": "000005", "country": "sri lanka", "city": "colombo"}]

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3. Select Authorization code from the dropdown menu under the authorization section corresponding to the authorization server.

virtusa Home

City API Public - v1 City API Public

Search operations

API version: v1 API definition Changelog

virtusa City API

Group by tag

GET Get a City

GET Get All Cities

Get a City

Request

GET https://virtueagintegrationsapim-dev3.azure-api.net/cities-api/v1/cities/{treeNodeId}

Request parameters

Name	In	Required	Type
treeNodeId	template	true	

Response: 200 OK

[{"treeNodeId": "000005", "country": "sri lanka", "city": "colombo"}]

Authorization

No auth

✓ authorization_code

Subscription key subscription key

Parameters

treeNodeId value

+ Add parameter

Headers

Cache-Control no-cache Remove

+ Add header

HTTP

JavaScript C# Java

PHP Python Ruby

Objective C

HTTP request

GET https://virtueagintegrationsapim-dev3.azure-api.net/ci

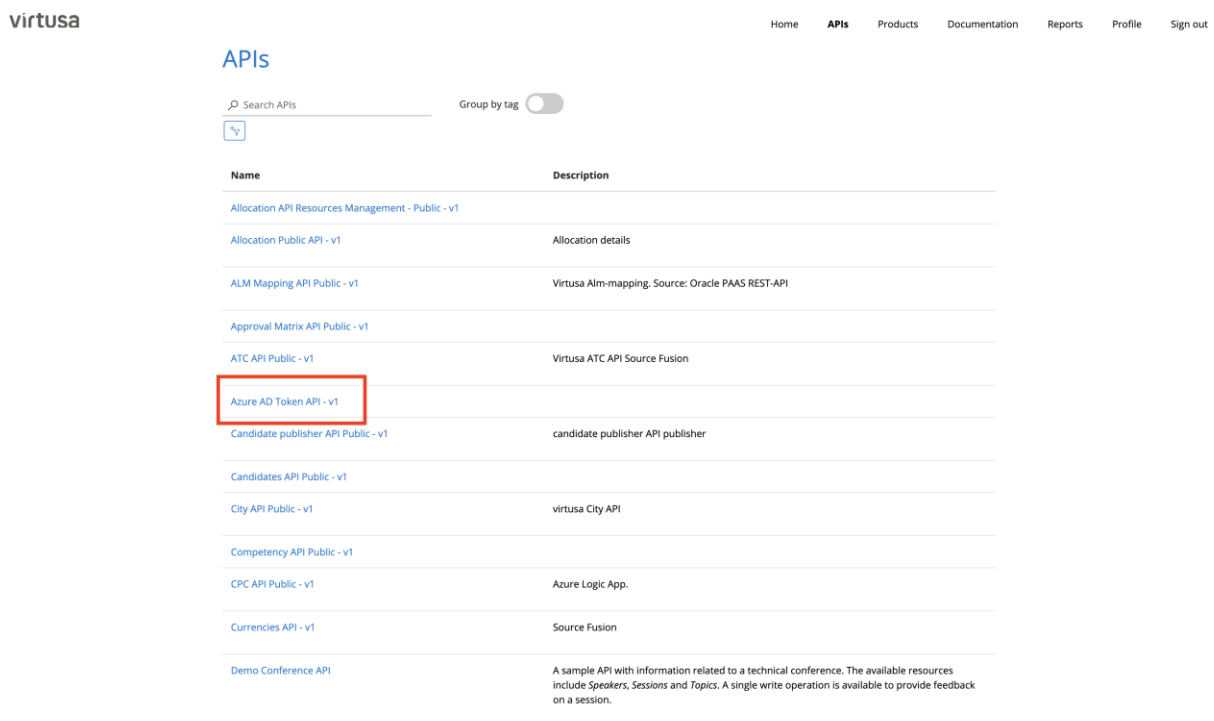
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4. You will be prompted to sign in to the Azure AD if you already have not.
5. After signing-in, an authorization header will be added to the carrying the access token from Azure AD.
6. Fill in any required parameters and click on Send.

How to get Azure AD token using token API

Steps to follow to get an Azure AD Access token

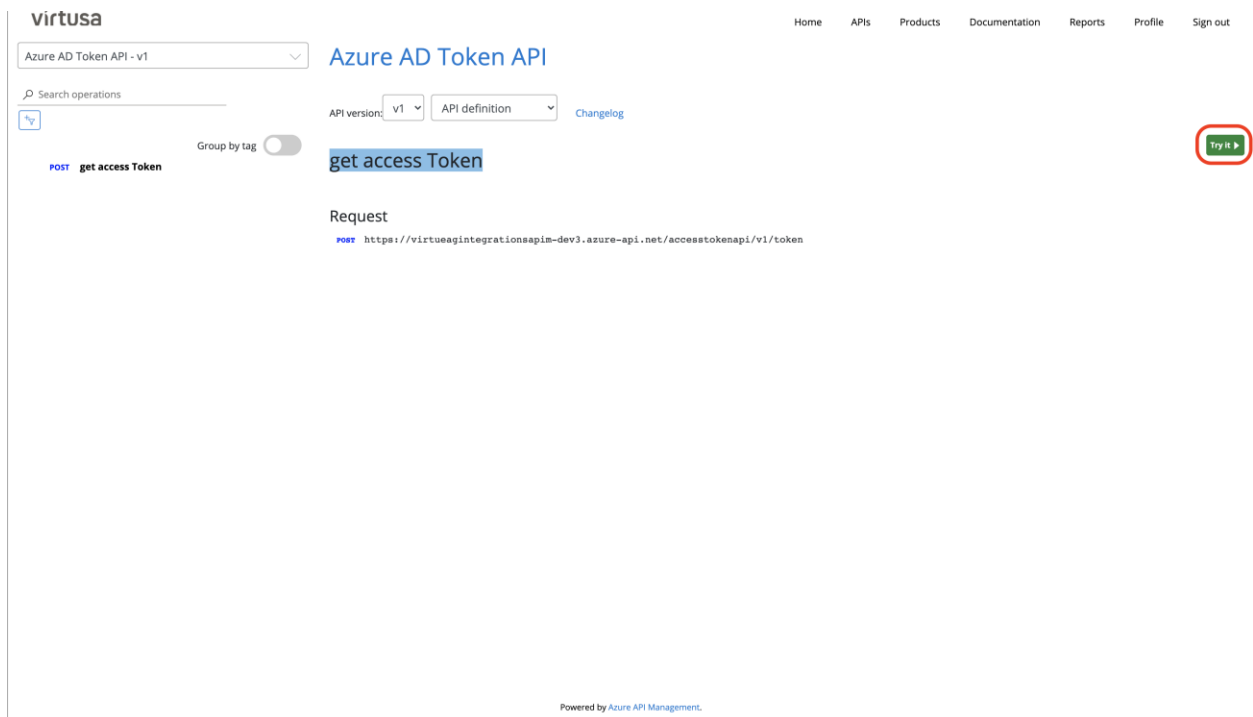
1. Select the Azure AD Token API from the API list



The screenshot shows the Virtusa API catalog interface. At the top, there is a navigation bar with the Virtusa logo and links for Home, APIs, Products, Documentation, Reports, Profile, and Sign out. Below the navigation bar, the title 'APIs' is displayed. A search bar and a 'Group by tag' toggle are also visible. The main content is a table listing various APIs. The 'Azure AD Token API - v1' is highlighted with a red rectangular box. The table has two columns: 'Name' and 'Description'.

Name	Description
Allocation API Resources Management - Public - v1	
Allocation Public API - v1	Allocation details
ALM Mapping API Public - v1	Virtusa Alm-mapping. Source: Oracle PAAS REST-API
Approval Matrix API Public - v1	
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Candidates API Public - v1	
City API Public - v1	virtusa City API
Competency API Public - v1	
CPC API Public - v1	Azure Logic App.
Currencies API - v1	Source Fusion
Demo Conference API	A sample API with information related to a technical conference. The available resources include <i>Speakers</i> , <i>Sessions</i> and <i>Topics</i> . A single write operation is available to provide feedback on a session.

2. Select the POST operation “get access token” under the API and click on “Try it”. You will be then directed to the developer console.



3. The HTTP request should be made along with the subscription key for the purpose of authorization.

Add the headers Content-Type = application/x-www-form-urlencoded and Ocp-Apim-Subscription-Key and the Client_id, client_secret, grant_type in the request body section of the request as shown in the image below. Then select Send.

bk1pa3Z3MUJzQUx4SGlybV9laVJjaHVfSEM1aGciLCJ0aWQiOiI0NDc4ODky
MC05Yjk3LTRmOGltODlwYS0yMTFiMTMzZDk1MzgiLCJ1bmlxdWVfbmFtZSI
6Im1pamlhbmdAbWljcm9zb2Z0LmNvbSIsInV0aSI6ImFQaTJxOVZ6ODBXdH
NsYjRBMzBCQUEiLCJ2ZXliOilxLjAifQ.agGfaegYRnGj6DM_-
N_eYulnQdXHhrsus45QDuApirETDR2P2aMRxRioOCR2YVwn8pmpQ1LoAh
ddcYMWisrw_qhaQr0AYsDPWRtJ6x0hDk5teUgbix3gazb7F-
TVcC1gXpc9y7j77Ujxcq9z0r5IF65Y9bpNSefn9Te6GZYG7BgKEixqC4W6Lqjt
cjuOuW-
ouy6LSSox71Fj4Ni3zkGfxX1T_jiOvQTd6BBItSrShDm0bTMefoyX8oqfMEA2zi
KjwvBFRojO0uK4rJLgLYH4qvkR0bdf9etdstqKMo5gecarWHNzWi_tghQu9aE
3Z3EZdYNI_ZGM-Bbe3pkCfvEOyA