

Exercise - Create a backend API

15 minutes

In this exercise you learn how to perform the following actions:

- Create an API Management (APIM) instance
- Import an API
- Configure the backend settings
- Test the API

Prerequisites

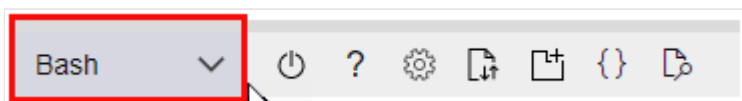
- An **Azure account** with an active subscription. If you don't already have one, you can sign up for a free trial at <https://azure.com/free> .

Sign in to Azure

1. Sign in to the [Azure portal](#) and open the Cloud Shell.



2. After the shell opens be sure to select the **Bash** environment.



Create an API Management instance

1. Let's set some variables for the CLI commands to use to reduce the amount of retyping. Replace `<myLocation>` with a region that makes sense for you. The APIM name needs to be a globally unique name, and the following script generates a random string. Replace `<myEmail>` with an email address you can access.

Bash

```
myApiName=az204-apim-$RANDOM  
myLocation=<myLocation>
```

```
myEmail=<myEmail>
```

2. Create a resource group. The following commands create a resource group named *az204-apim-rg*.

Bash

```
az group create --name az204-apim-rg --location $myLocation
```

3. Create an APIM instance. The `az apim create` command is used to create the instance. The `--sku-name Consumption` option is used to speed up the process for the walkthrough.

Bash

```
az apim create -n $myApiName \  
  --location $myLocation \  
  --publisher-email $myEmail \  
  --resource-group az204-apim-rg \  
  --publisher-name AZ204-APIM-Exercise \  
  --sku-name Consumption
```

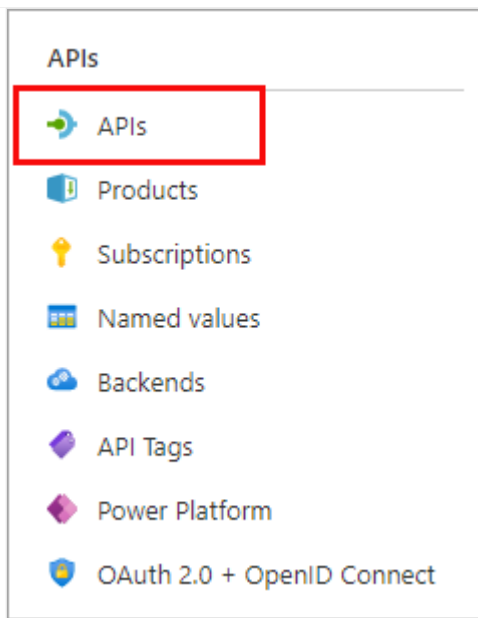
ⓘ Note

The operation should complete in about five minutes.

Import a backend API

This section shows how to import and publish an OpenAPI specification backend API.

1. In the Azure portal, search for and select **API Management services**.
2. On the **API Management** screen, select the API Management instance you created.
3. Select **APIs** in the **API management service** navigation pane.



4. Select **OpenAPI** from the list and select **Full** in the pop-up.

Create from OpenAPI specification

Basic **Full**

* OpenAPI specification or (maximum size 4 MiB)

* Display name

* Name

Description

URL scheme ☐ HTTP ☐ HTTPS ☒ Both

API URL suffix

Base URL

Tags

Products

i To publish the API, you must associate it with a product. [Learn more.](#)

Version this API? ☐

Use the values from the table below to fill out the form. You can leave any fields not mentioned their default value.

[Expand table](#)

Setting	Value	Description
OpenAPI Specification	<code>https://conferenceapi.azurewebsites.net?format=json</code>	References the service implementing the API, requests are forwarded to this address. Most of the necessary information in the form is automatically populated after you enter this.
Display name	<i>Demo Conference API</i>	This name is displayed in the Developer portal.
Name	<i>demo-conference-api</i>	Provides a unique name for the API.
Description	Automatically populated	Provide an optional description of the API.
API URL suffix	<i>conference</i>	The suffix is appended to the base URL for the API management service. API Management distinguishes APIs by their suffix and therefore the suffix must be unique for every API for a given publisher.

5. Select **Create**.

Configure the backend settings

The *Demo Conference API* is created and a backend needs to be specified.

1. Select **Settings** in the blade to the right and enter `https://conferenceapi.azurewebsites.net/` in the **Web service URL** field.
2. Deselect the **Subscription required** checkbox.

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Design Settings Test Revisions Change log

General

* Display name Demo Conference API

* Name demo-conference-api

Description 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.

Web service URL **https://conferenceapi.azurewebsites.net/**

URL scheme ☐ HTTP ☐ HTTPS ☒ Both

API URL suffix conference

Base URL http(s)://az204-apim-19520.azure-api.net/conference

Tags e.g. Booking

Products No products selected

Subscription

Subscription required ☐

Header name Ocp-Apim-Subscription-Key

Query parameter name subscription-key

Save Discard

3. Select **Save**.

Test the API

Now that the API has been imported and the backend configured it's time to test the API.

1. Select **Test**.

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Design Settings **Test** Revisions Change log

Search operations Please select an operation

2. Select **GetSpeakers**. The page shows **Query parameters** and **Headers**, if any. The `ocp-Apim-Subscription-Key` is filled in automatically for the subscription key associated with this API.

3. Select **Send**.

Backend responds with **200 OK** and some data.

Clean up Azure resources

When you're finished with the resources you created in this exercise you can use the command below to delete the resource group and all related resources.

Bash

```
az group delete --name az204-apim-rg
```

Next unit: Knowledge check

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