

# Wso2 Web Api Manager

Dhamodharan S

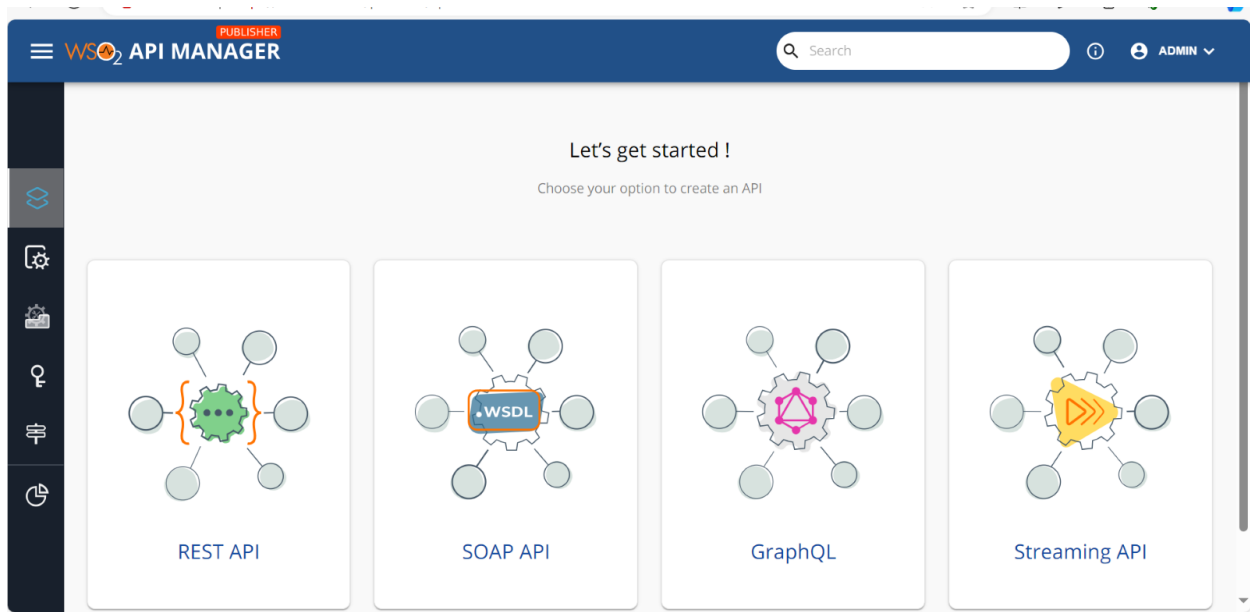
Here are the steps to create an api using wso2 web api manger.

Step1: api-manager.bat --run (for Windows) to run the command to install wso2 web api manger in cmd (wso2 /bin/)

```
Microsoft Windows [Version 10.0.19045.4046]
(c) Microsoft Corporation. All rights reserved.

C:\Users\dhamodharan.sundar\Downloads\wso2am-4.2.0\wso2am-4.2.0\bin>api-manager.bat --run
Starting WSO2 Carbon (in unsupported JDK)
[ERROR] CARBON is supported only between JDK 11 and JDK 17
JAVA_HOME environment variable is set to C:\Program Files\Java\jdk-21
CARBON_HOME environment variable is set to C:\Users\DHAMOD~1\SUN\DOWNLO~1\WSO2AM~1.0\WSO2AM~1.0\bin\..
[2024-02-19 21:23:12,802] INFO {org.wso2.config.mapper.ConfigParser} - Configurations Changed in :repository/resources/security\listenerprofiles.xml
[2024-02-19 21:23:12,802] INFO {org.wso2.config.mapper.ConfigParser} - Configurations Changed in :repository/resources/security\sslprofiles.xml
[2024-02-19 21:23:12,802] INFO {org.wso2.config.mapper.ConfigParser} - Overriding files in configuration directory C:\Users\DHAMOD~1\SUN\DOWNLO~1\WSO2AM~1.0\WSO2AM~1.0\bin\..
[2024-02-19 21:23:20,943] INFO - CarbonCoreActivator Starting WSO2 Carbon...
[2024-02-19 21:23:20,943] INFO - CarbonCoreActivator Operating System : Windows 10 10.0, amd64
[2024-02-19 21:23:20,943] INFO - CarbonCoreActivator Java Home : C:\Program Files\Java\jdk-21
[2024-02-19 21:23:20,943] INFO - CarbonCoreActivator Java Version : 21.0.2
[2024-02-19 21:23:20,943] INFO - CarbonCoreActivator Java VM : Java HotSpot(TM) 64-Bit Server VM 21.0.2+13-LTS-58,Oracle Corporation
[2024-02-19 21:23:20,943] INFO - CarbonCoreActivator Carbon Home : C:\Users\DHAMOD~1\SUN\DOWNLO~1\WSO2AM~1.0\WSO2AM~1.0\bin\..
[2024-02-19 21:23:20,943] INFO - CarbonCoreActivator Java Temp Dir : C:\Users\DHAMOD~1\SUN\DOWNLO~1\WSO2AM~1.0\WSO2AM~1.0\bin\..\tmp
[2024-02-19 21:23:20,943] INFO - CarbonCoreActivator User : dhamodharan.sundar, en-IN, Asia/Calcutta
[2024-02-19 21:23:21,280] INFO - DefaultCryptoProviderComponent 'CryptoService.Secret' property has not been set. 'org.wso2.carbon.crypto.provider.SymmetricKeyInternalCryptoProvider' won't be registered as an internal crypto provider. Please set the secret if the provider needs to be registered.
[2024-02-19 21:23:21,613] INFO - KafkaEventAdapterServiceDS Successfully deployed the Kafka output event adaptor service
[2024-02-19 21:23:21,793] INFO - TemplateDeployerServiceTrackerDS Successfully deployed the execution manager tracker service
[2024-02-19 21:23:23,550] INFO - ServiceComponent Eventing Hub ServiceComponent is activated
[2024-02-19 21:23:24,209] WARN - Digester Match [Server/Service/Engine/Host/Valve] failed to set property [maxDays] to []
[2024-02-19 21:23:25,885] INFO - ConsentManagerComponent ConsentManagerComponent is activated.
[2024-02-19 21:23:26,073] INFO - BinaryDataReceiverServiceComponent Binary Data Receiver server activated
[2024-02-19 21:23:26,087] INFO - DataBridgeDS Successfully deployed Agent Server
[2024-02-19 21:23:26,266] INFO - TenantAssociationServiceComponent Organization management related TenantAssociationManagementListener registered successfully.
[2024-02-19 21:23:26,601] INFO - EmbeddedRegistryService Configured Registry in 54ms
[2024-02-19 21:23:26,636] INFO - EmbeddedRegistryService Connected to mount at configregistry in 6ms
[2024-02-19 21:23:26,637] INFO - EmbeddedRegistryService Connected to mount at govregistry in 6ms
[2024-02-19 21:23:26,744] INFO - EmbeddedRegistryService Connected to mount at configregistry in 0ms
[2024-02-19 21:23:26,744] INFO - EmbeddedRegistryService Connected to mount at govregistry in 0ms
[2024-02-19 21:23:26,751] INFO - RegistryCoreServiceComponent Registry Mode : READ-WRITE
[2024-02-19 21:23:26,955] INFO - JmxReporterBuilder Creating JMX reporter for Metrics with domain 'org.wso2.carbon.metrics'
[2024-02-19 21:23:26,957] INFO - AbstractReporter Started JMX reporter for Metrics
[2024-02-19 21:23:29,692] INFO - SolrClient Default Embedded Solr Server Initialized
[2024-02-19 21:23:30,130] INFO - UserStoreMgtDSComponent Carbon UserStoreMgtDSComponent activated successfully.
[2024-02-19 21:23:31,853] INFO - UserStoreConfigurationDeployer User Store Configuration Deployer initiated.
```

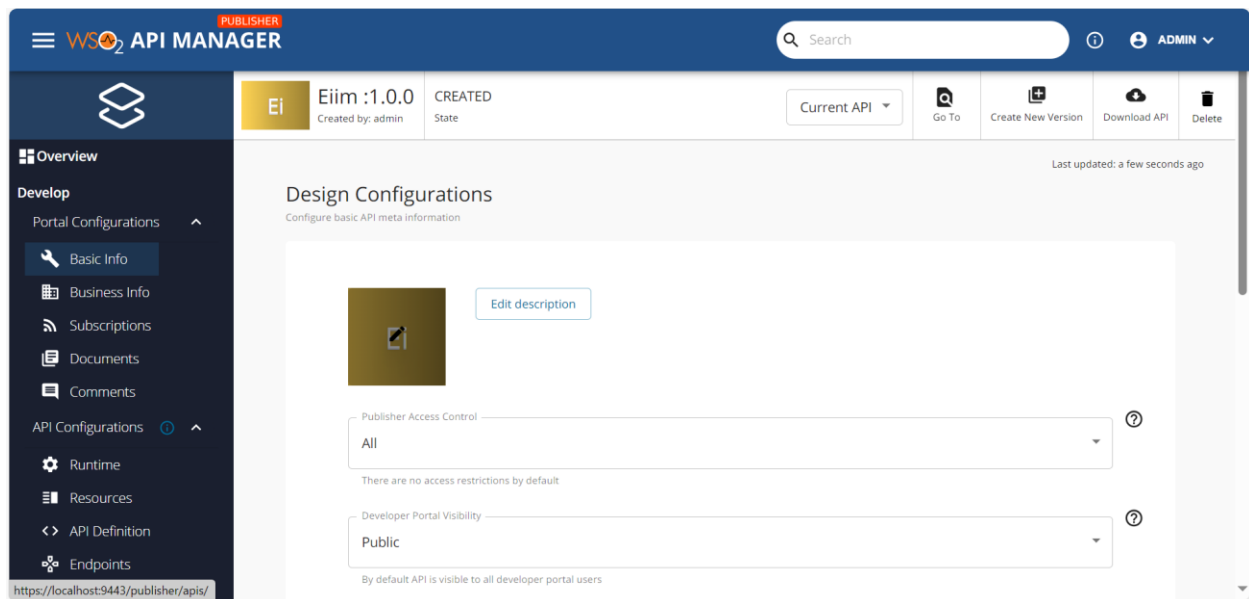
Step 2: This is the publisher portal of ws02 and Create and Publish an Api(Rest)



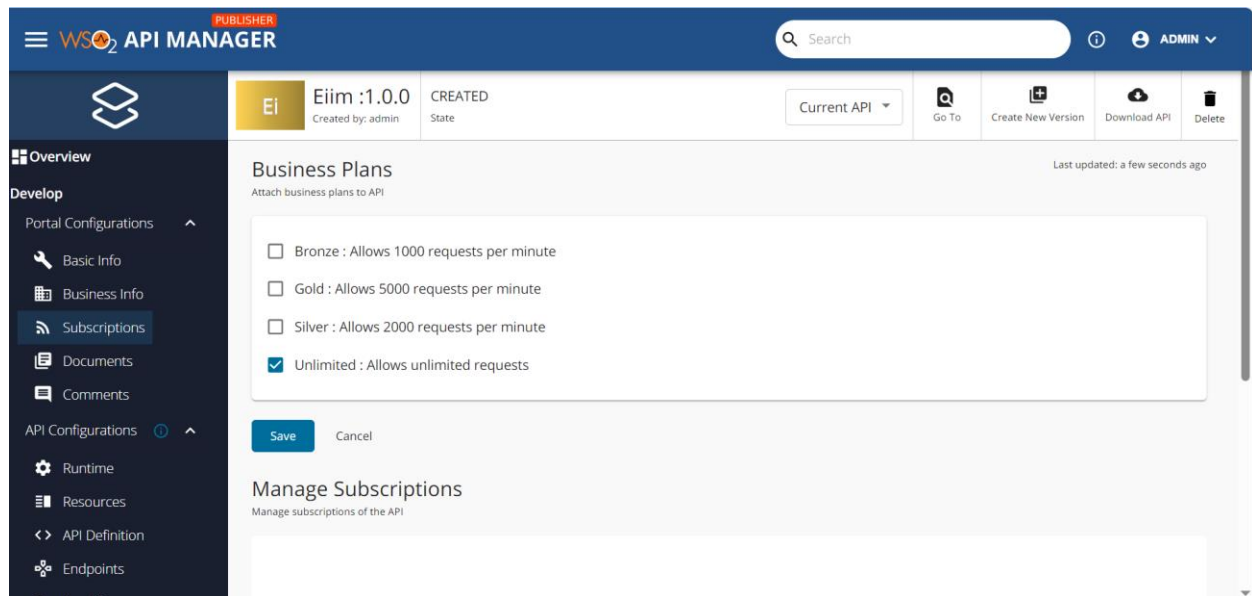
Step 3: Fill the details for creating Api like name,Endpoint,version.

The screenshot shows the "Create an API" form in the WSO2 API Manager Publisher Portal. The form is titled "Create an API" and includes a subtitle: "Create an API by providing a Name, a Version, a Context and Backend Endpoint (optional)". The form fields are: Name\* (Eiim), Context\* (/eiim), Version\* (1.0.0), and Endpoint (https://jsonplaceholder.typicode.com/). A note below the Context field states: "API will be exposed in /eiim/1.0.0 context at the gateway". A checkbox is present next to the Endpoint field. At the bottom, there are three buttons: "Create", "Create & Publish", and "Cancel". A small asterisk indicates mandatory fields.

Step 4: Check the api design and edit if needed in portal configurations



Step 5: Check the business plans Select based on needed



Step 6: Check run time configurations select based on needed

WSO2 API MANAGER

SEARCH

ADMIN

Overview

Develop

Portal Configurations

Basic Info

Business Info

Subscriptions

Documents

Comments

API Configurations

Runtime

Resources

API Definition

Endpoints

Local Scopes

Ei

Eiim :1.0.0

CREATED

Current API

Go To

Create New Version

Download API

Delete

Runtime Configurations

Last updated: a few seconds ago

Request

Backend

Transport Level Security

Transports

☒ HTTP ☒ HTTPS

☐ Mutual SSL

Application Level Security

☒ OAuth2 ☐ Basic ☐ Api Key

☒ Mandatory ☐ Optional

Backend Throughput

Maximum Throughput

☒ Unlimited ☐ Specify

Endpoints

Production

https://jsonplaceholder.typicode.com/

Sandbox

https://jsonplaceholder.typicode.com/

WSO2 API MANAGER

SEARCH

ADMIN

Comments

API Configurations

Runtime

Resources

API Definition

Endpoints

Local Scopes

Policies

Properties

Monetization

Deploy

Deployments

Test

Try Out

Publish

Lifecycle

Mutual SSL

Application Level Security

☒ OAuth2 ☐ Basic ☐ Api Key

☒ Mandatory ☐ Optional

Choose whether Application level security is mandatory or optional

Key Manager Configuration

☒ Allow all ☐ Allow selected

Authorization Header

Authorization

CORS Configuration

Endpoints

Production

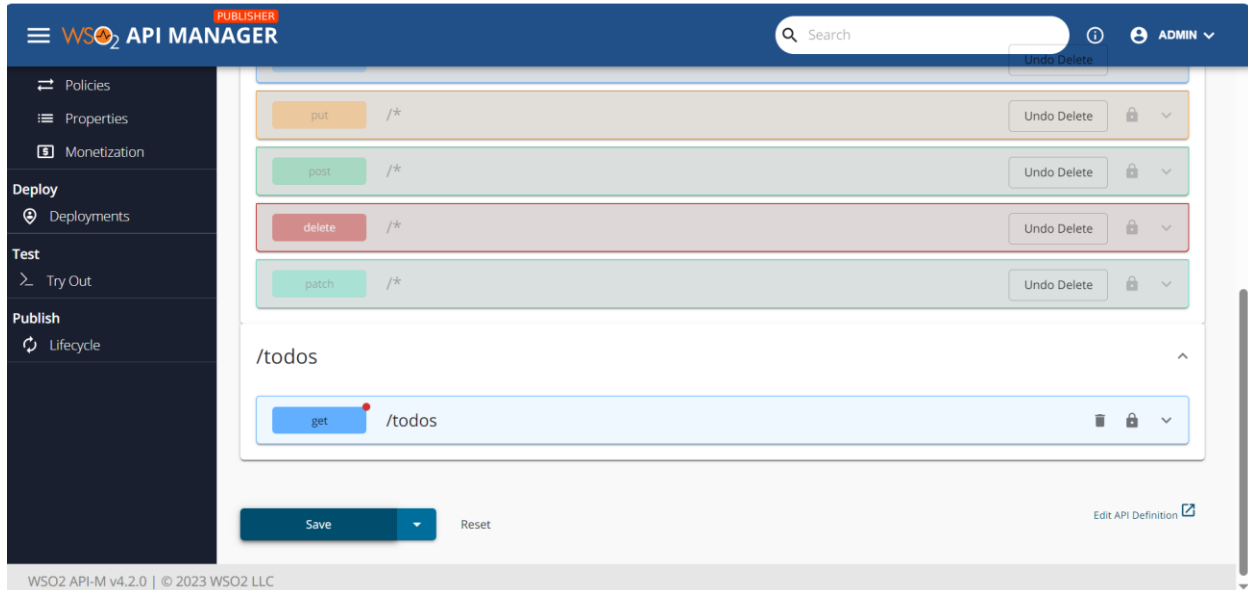
https://jsonplaceholder.typicode.com/

Sandbox

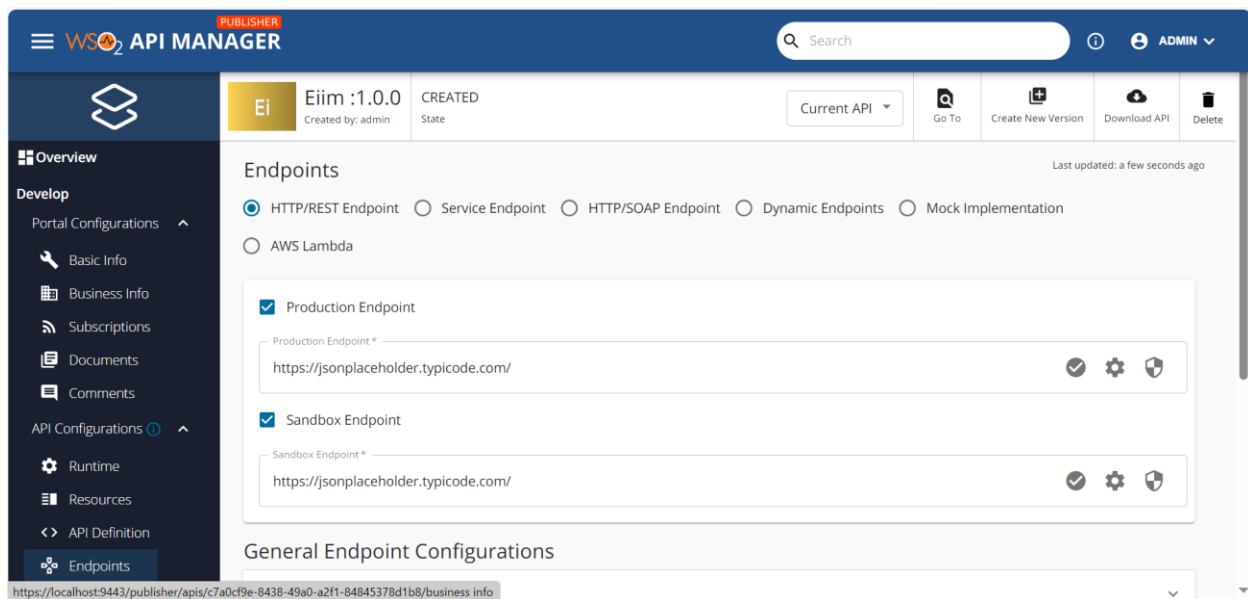
https://jsonplaceholder.typicode.com/

Edit API Endpoints

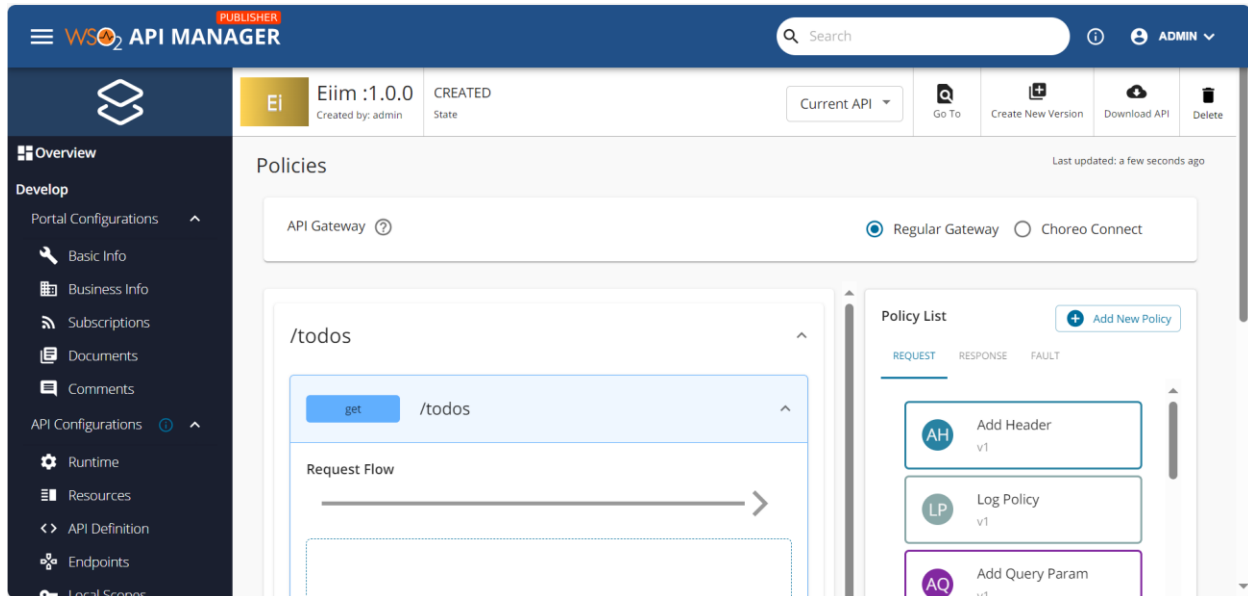
Step 7: Give the URL pattern where you want to access the data and select the HTTP Verb needed , I have given todos and created a GET method (Verb) for it



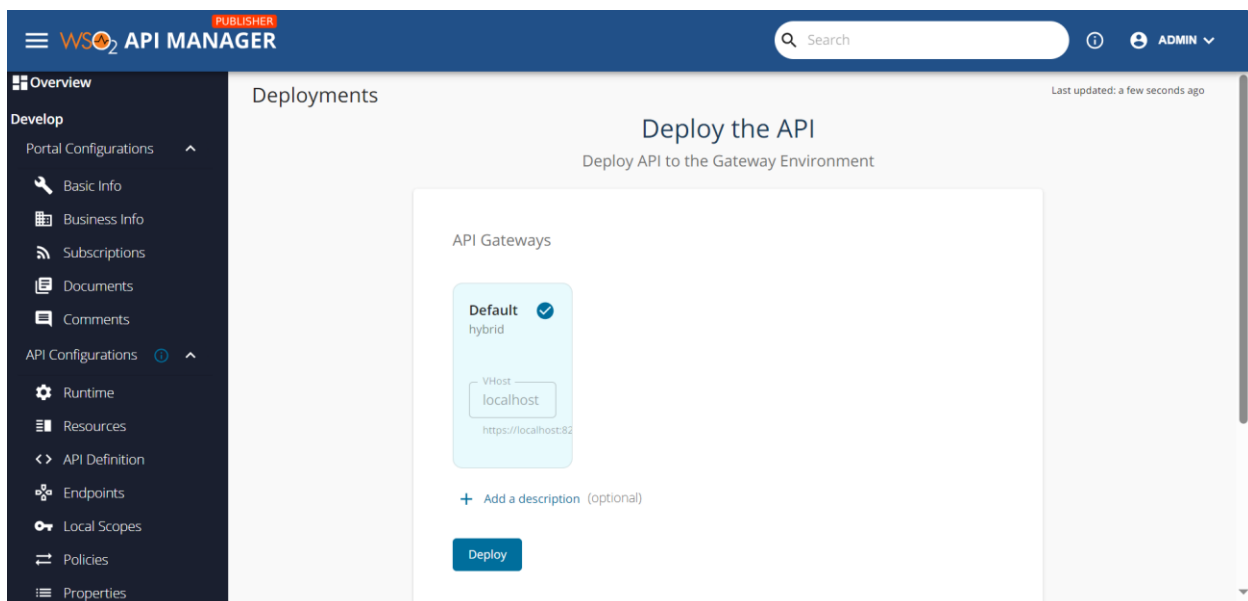
Step 8: Check the Endpoints What type of endpoint needed based on your requirement.



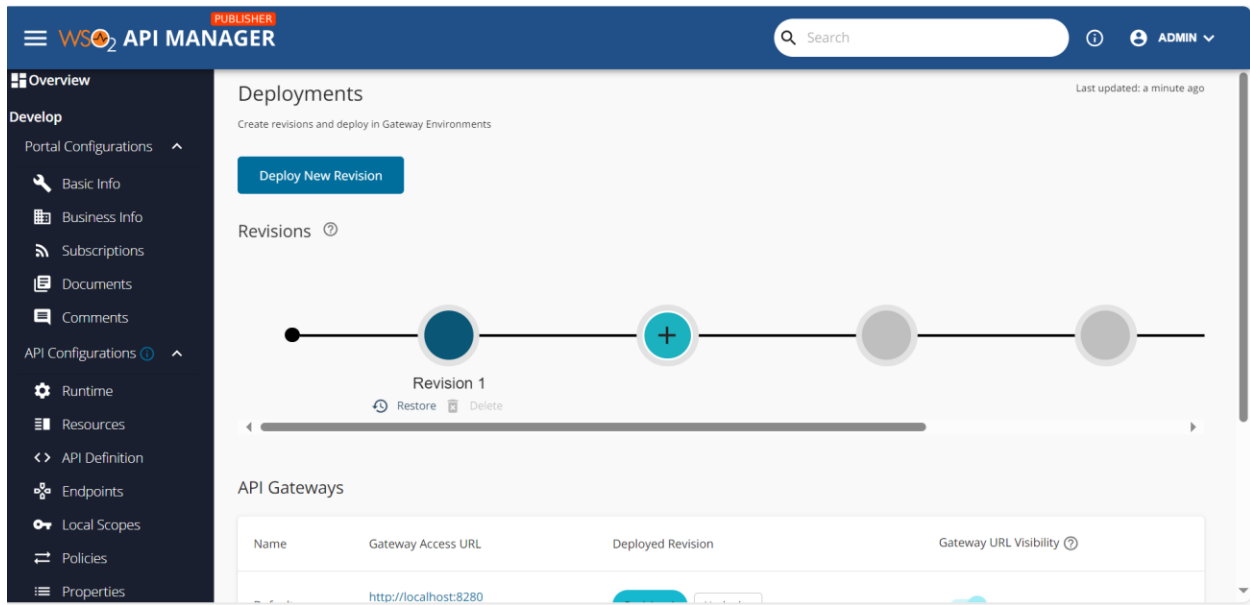
Step 9 : Check the policies.



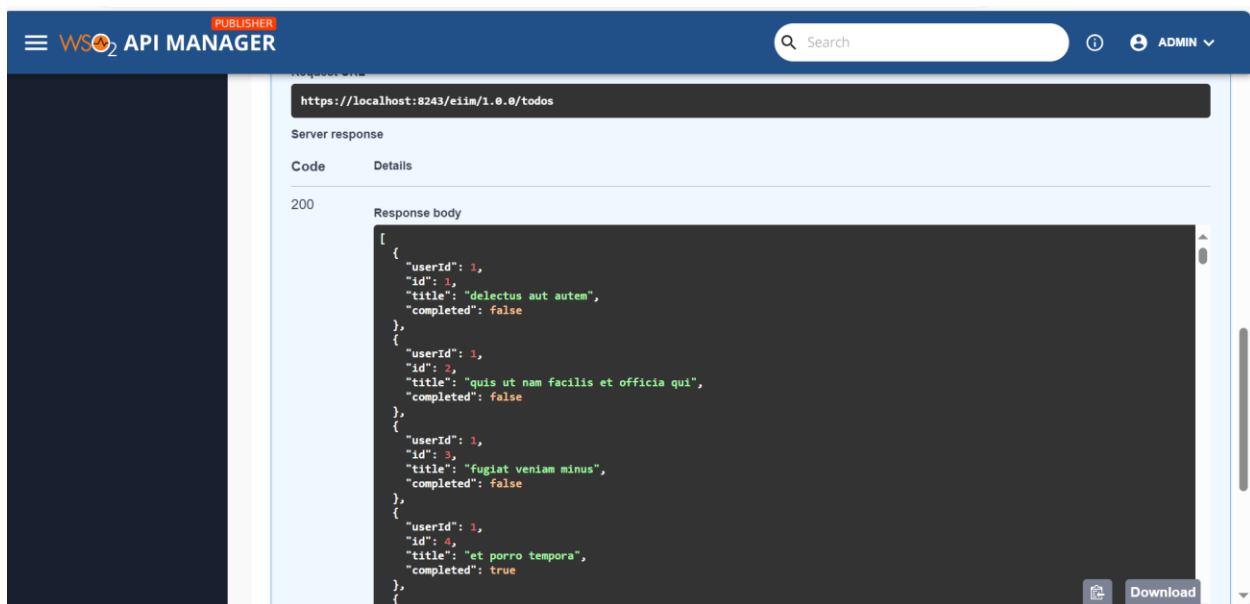
Step 10: Now you can deploy the API that you have designed and developed.



Step 11: You can deploy the API in revisions. (like after updated if u deploy u can give it revision 2).



Step 12 : Execute the GET request and See you will get response as status code 200 and OK.



Step 13 : Now publish your API.

WSO2 API MANAGER

PUBLISHER

Search

ADMIN

Overview

Develop

Deploy

Test

Publish

Portal Configurations

API Configurations

Deployments

Try Out

Lifecycle

Ei

Eiim :1.0.0

CREATED

State

Current API

Go To

Create New Version

Download API

Delete

Lifecycle

Last updated: 10 hours ago

PRE-RELEASED

PUBLISHED

DEPRECATED

RETIRED

CREATED

BLOCKED

Publish

Pre-Release

Requirements

Requirements for next state transition

Publish

Endpoint provided

Business Plan(s) selected

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WSO2 API MANAGER

PUBLISHER

Search

ADMIN

API Configurations

Deploy

Test

Publish

Deployments

Try Out

Lifecycle

PUBLISHED

DEPRECATED

RETIRED

CREATED

BLOCKED

Block

Pre-Release

Demote to Created

Deprecate

History

User	Action	Time
admin	LC has changed from CREATED to PUBLISHED	a few seconds ago

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WSO2 API MANAGER PUBLISHER

Search

ADMIN

**Ei** Eiim :1.0.0 PUBLISHED  
Created by: admin State

Current API

Go To View in Dev Portal Create New Version Download API Delete

**Overview**

Develop

Portal Configurations

API Configurations

Deploy

Deployments

Test

Try Out

Publish

Lifecycle

Overview

Last updated: 13 minutes ago

Develop Deploy Test Published (Current API)

Endpoint Business Plan View in devportal

Context:

Description	-
Provider	admin
Context	/eiim
Version	1.0.0
Type	HTTP

Configuration

Transports	HTTP, HTTPS
API Security	OAuth2
Access Control	None
Workflow Status	-

https://localhost:9443/publisher/apis/

Step 14 : Now navigate to developer console and do subscription before using it.

WSO2 API MANAGER DEVELOPER PORTAL

APIs Applications

All Search APIs

ADMIN

**APIs**

**Ei**

**Eiim**

By : admin

1.0.0 /eiim

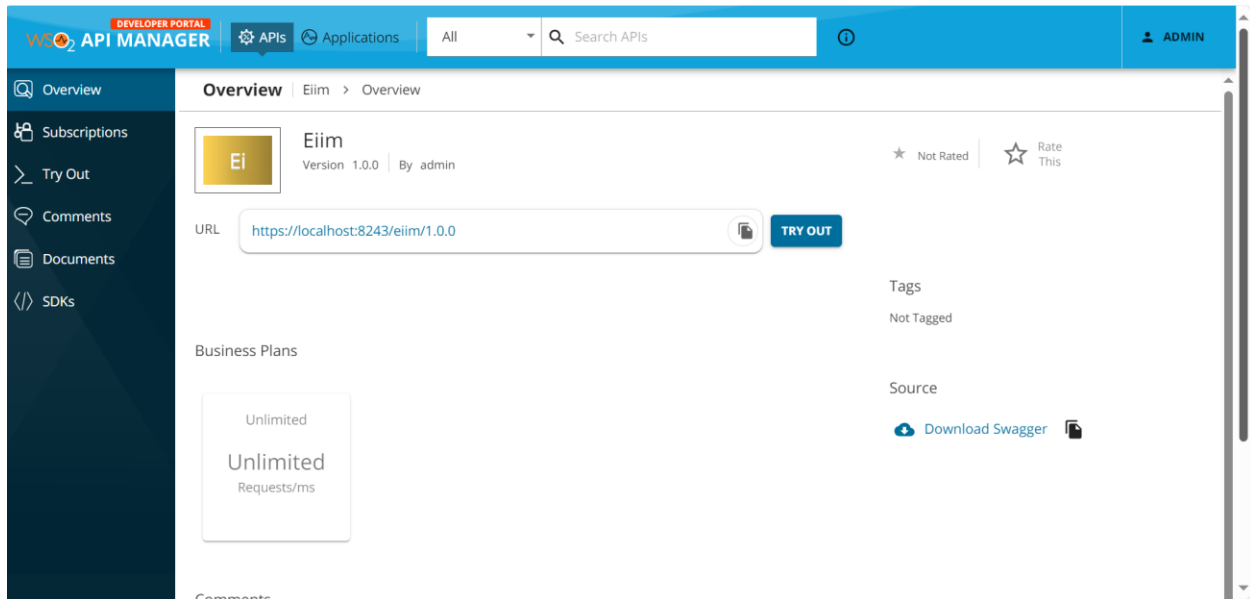
Version Context

★★★★★

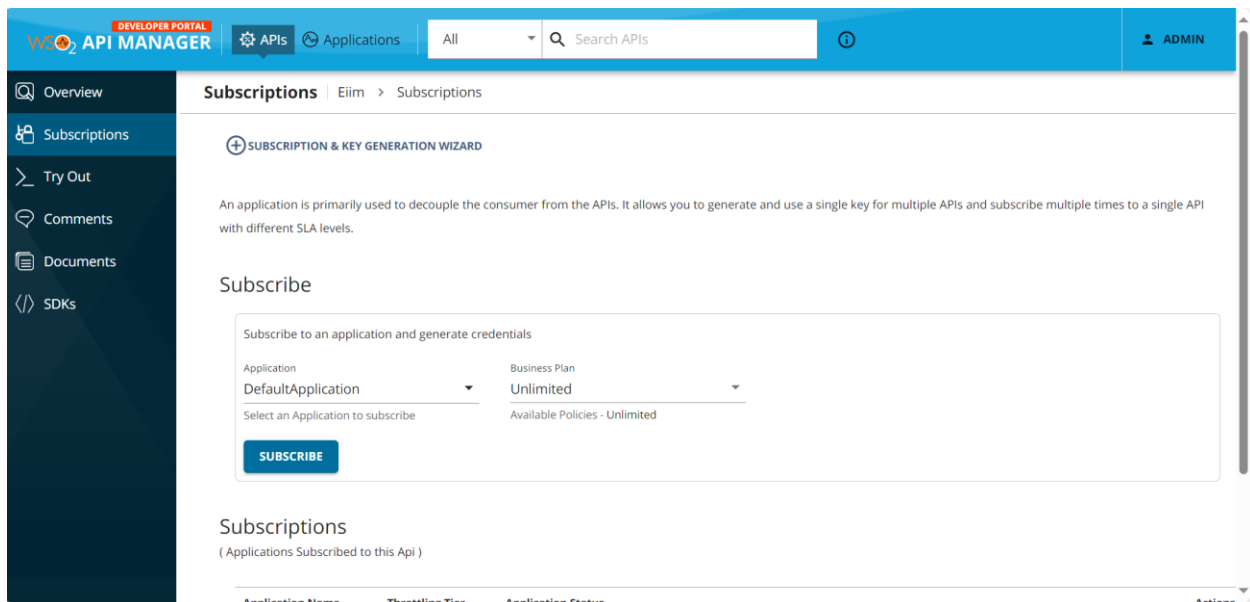
0.0/5.0 (0users)

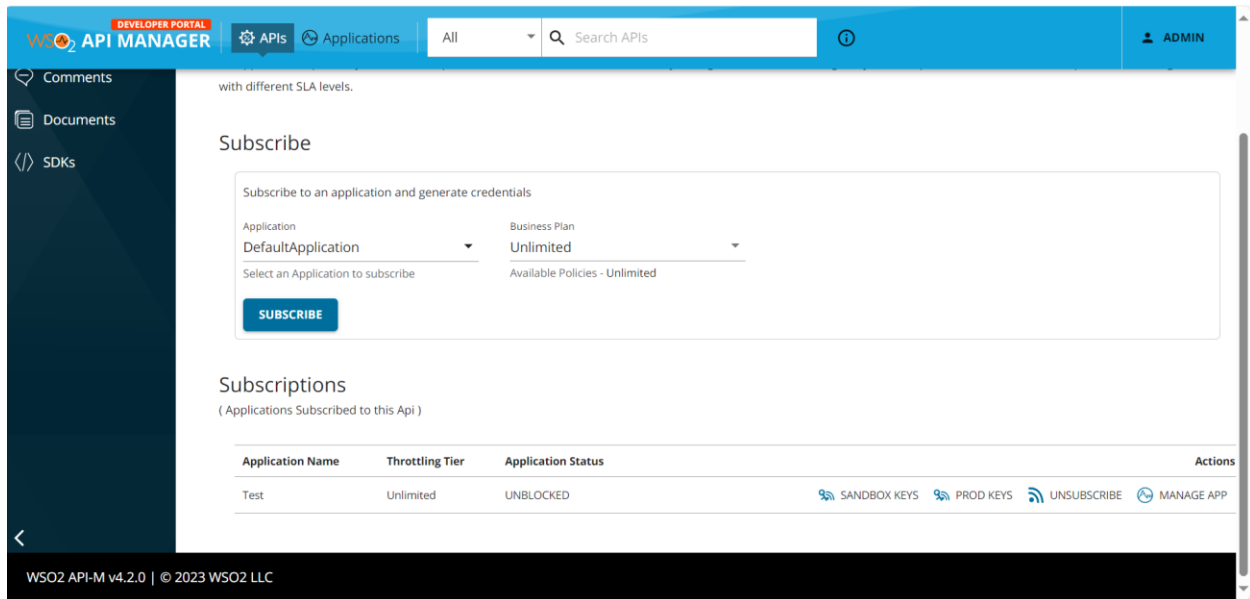
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https://localhost:9443/devportal/apis/c7a0cf9e-8438-49a0-a2f1-84845378d...

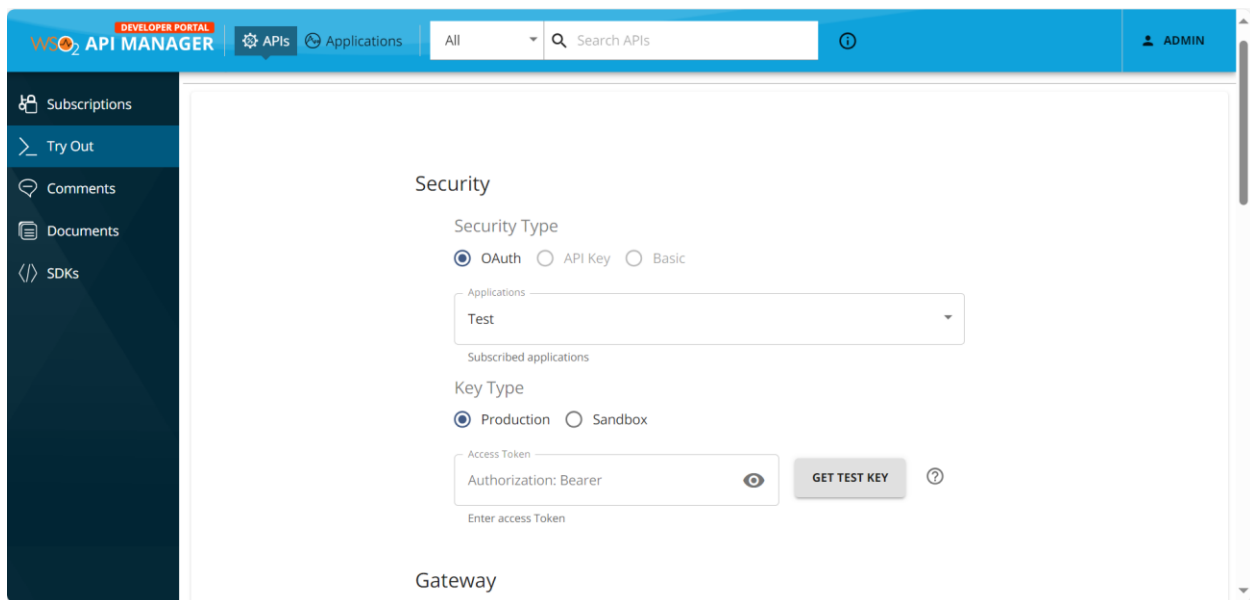


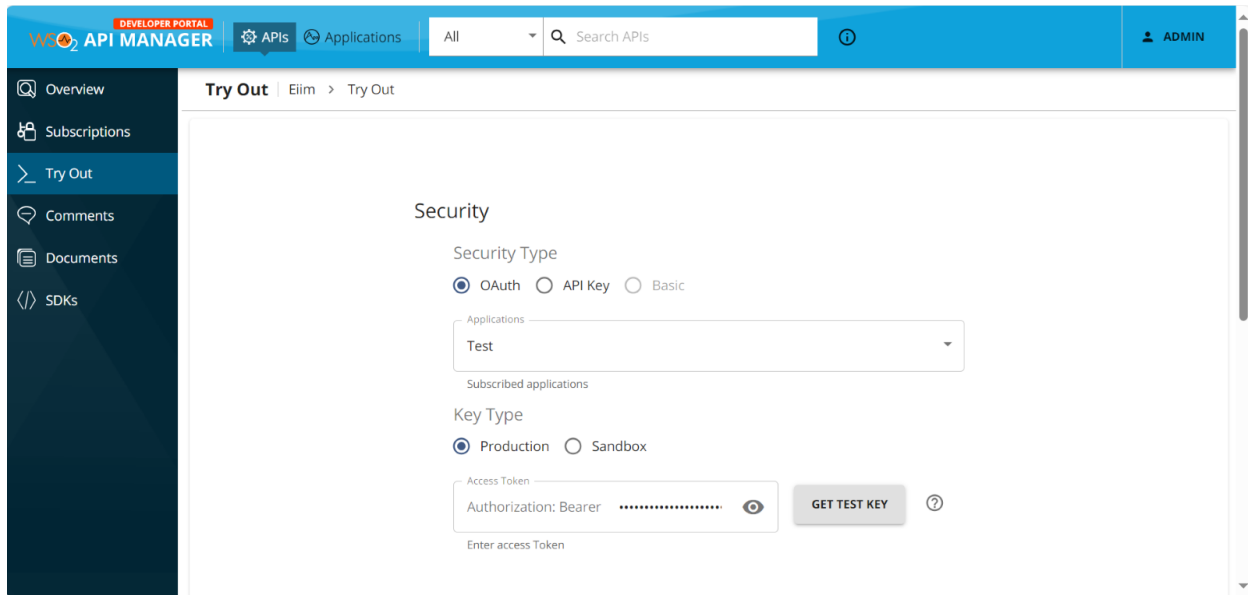
Step 15 : Copy the Auto generated Access Token.



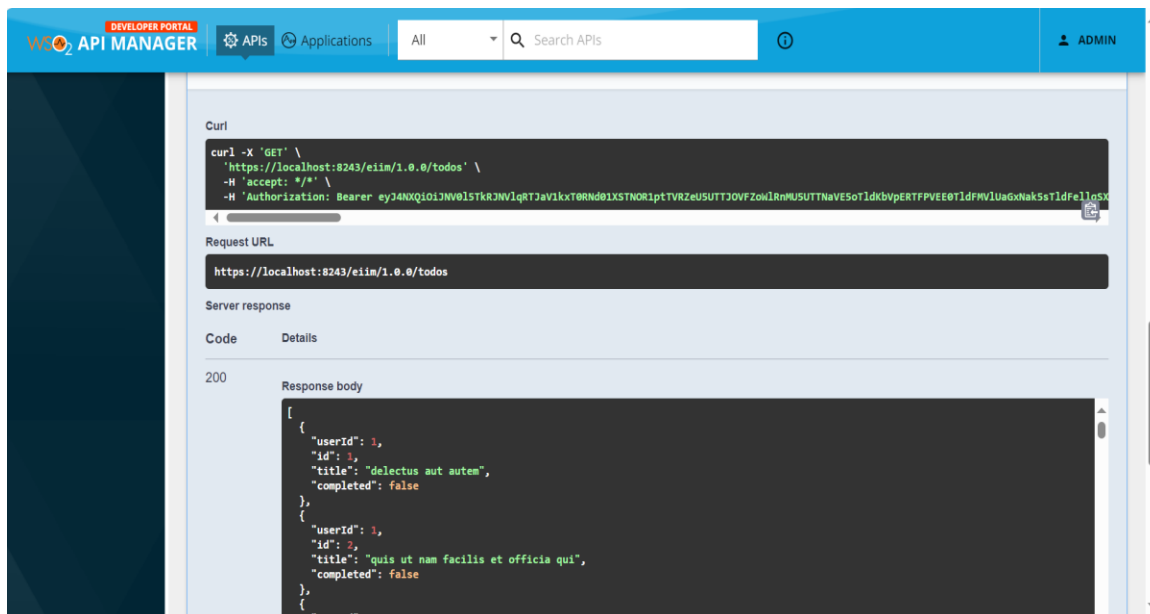


Step 16 : Now Tryout your Published API with get method





Step 17 : Now you will get the response and status code as 200 OK.



Step 18 : Make sure you have provided the access token and send the Request and you should get response

The screenshot displays the REST Client application interface. On the left sidebar, under 'My Workspace', the 'Environments' section is expanded, showing a collection named 'REST API basics: CRUD, test & variable'. Within this collection, the 'GET Get data' environment is selected. The main panel shows the details of this environment, including the method 'GET', the URL 'https://localhost:8243/elim/1.0.0/todos', and the 'Authorization' tab. The 'Authorization' tab is set to 'Bearer ...' with a token 'eyJ4NXQlOjJNV015TkRjJmV1kxT0R0...'. The 'Body' tab is selected, showing a JSON response in 'Pretty' format: 

```
1 {
2   {
3     "userId": 1,
4     "id": 1,
5     "title": "delectus aut autem",
6     "completed": false
7   },
8   {
```

 The status bar at the bottom indicates a successful response with status '200 OK', time '81 ms', and size '25.1 KB'. The bottom of the interface includes a toolbar with options like 'Postbot', 'Runner', 'Start Proxy', 'Cookies', 'Trash', and 'Console'.