webMethods API Gateway Quick Start

Version 10.15

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WEBMETHODS

This document applies to webMethods API Gateway 10.15 and to all subsequent releases.

Specifications contained herein are subject to change and these changes will be reported in subsequent release notes or new editions.

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Table of Contents

1 Let's get you started.....5
API Gateway Overview.....6
Quick Start Milestones.....6

2 Install API Gateway.....7
How Do I Install API Gateway?.....8
How Do I Install API Gateway using an Image in Windows system?.....10
How Do I Install API Gateway using an Image in Linux system?.....12
How Do I Launch and Log on to API Gateway?.....13

3 Create an API.....15
How Do I Create an API?.....16
How Do I Create an API by Importing from a File?.....16
How Do I View API Details?.....17
How Do I Enforce Policies to Protect My APIs?.....18
How Do I Enable Transaction Logs?.....18

4 Publish an API.....21
How Do I Configure Destination for Publishing APIs?.....22
How Do I Publish an API?.....22
How Do I View the published API?.....23

5 Try an API.....25
How Do I Request API Key to Access a Protected API?.....26
How Do I Test a REST API in Developer Portal?.....26

6 API Analytics.....29
How Do I View API Analytics?.....30

7 Quick Start.. In a Jiffy!.....31
Quick Start Cheat-sheet.....32

1 Let's get you started

- API Gateway Overview 6
- Quick Start Milestones 6

Welcome to API Gateway.

To get you started, this quick start takes you through the process of the installation and basic operations that can be performed with API Gateway. In addition, it explains how to install Developer Portal and publish an API to Developer Portal. You can also publish APIs to configured service registries.

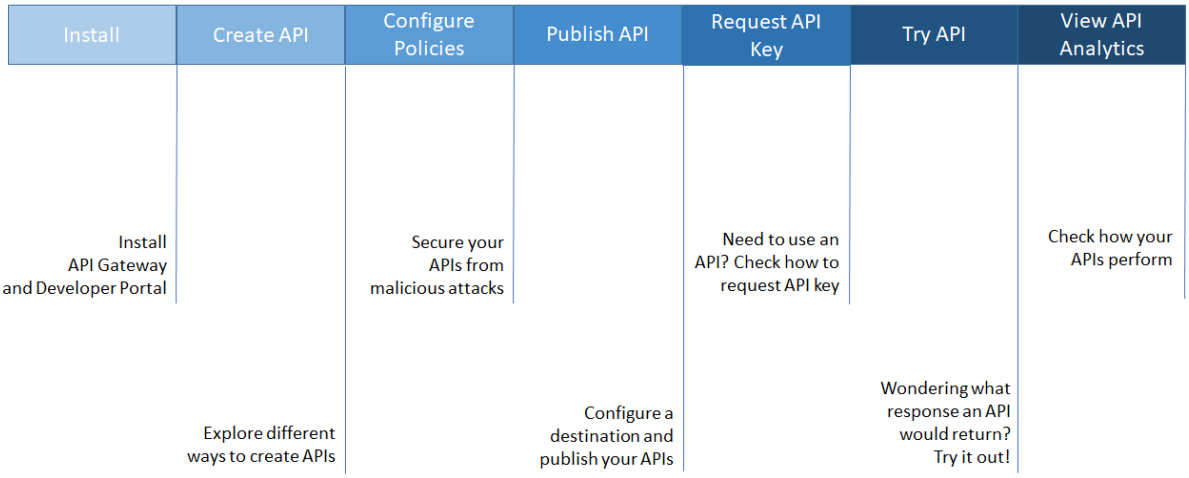
The sections of this document explain the basic functions with mandatory steps and necessary screenshots wherever applicable. For detailed instructions and about more functions that can be performed using API Gateway, see *webMethods API Gateway User Guide*.

API Gateway Overview

- Secures your APIs from malicious attacks.
- Monitors the traffic that flows to and from your APIs.
- Manages the entire lifecycle of APIs, from their creation to publication.
- Collects API usage data for analytics.

Quick Start Milestones

The following diagram depicts the quick start milestones:



2 Install API Gateway

- How Do I Install API Gateway? 8
- How Do I Install API Gateway using an Image in Windows system? 10
- How Do I Install API Gateway using an Image in Linux system? 12
- How Do I Launch and Log on to API Gateway? 13

How Do I Install API Gateway?

This section describes the steps required to install API Gateway using Software AG Installer.

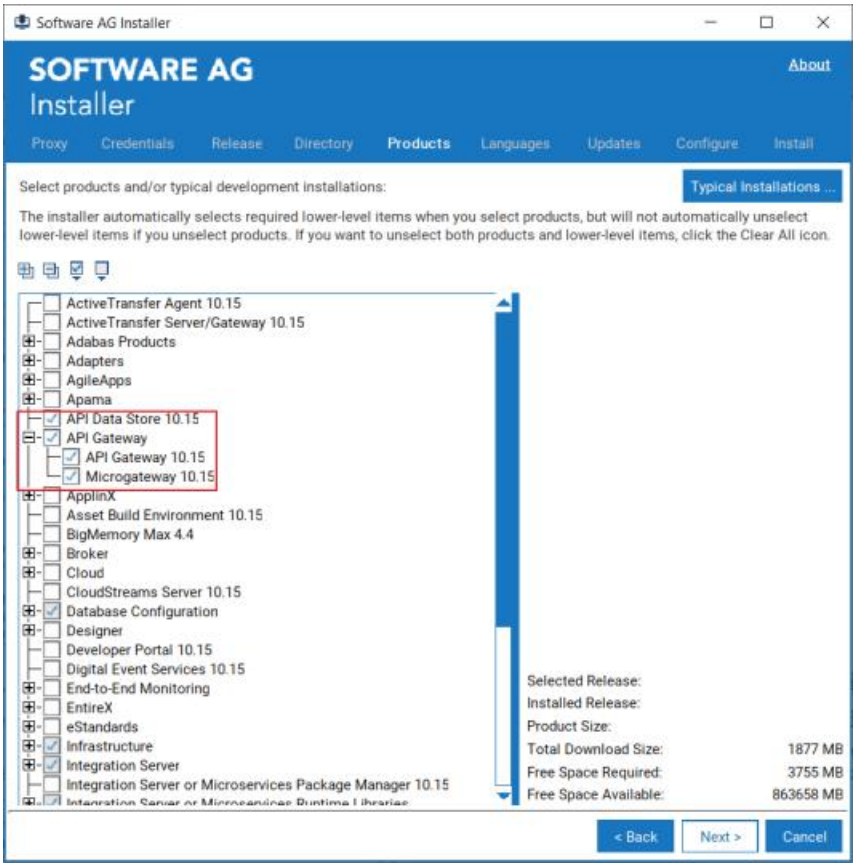
Note:
You can also install the application through other channels like automated scripts or Docker store. Also, webMethods.io API does not require the installation through Software AG Installer.

Pre-requisite

- Ensure that you have the Software AG Installer and the license file copied to the system in which you want to install API Gateway.

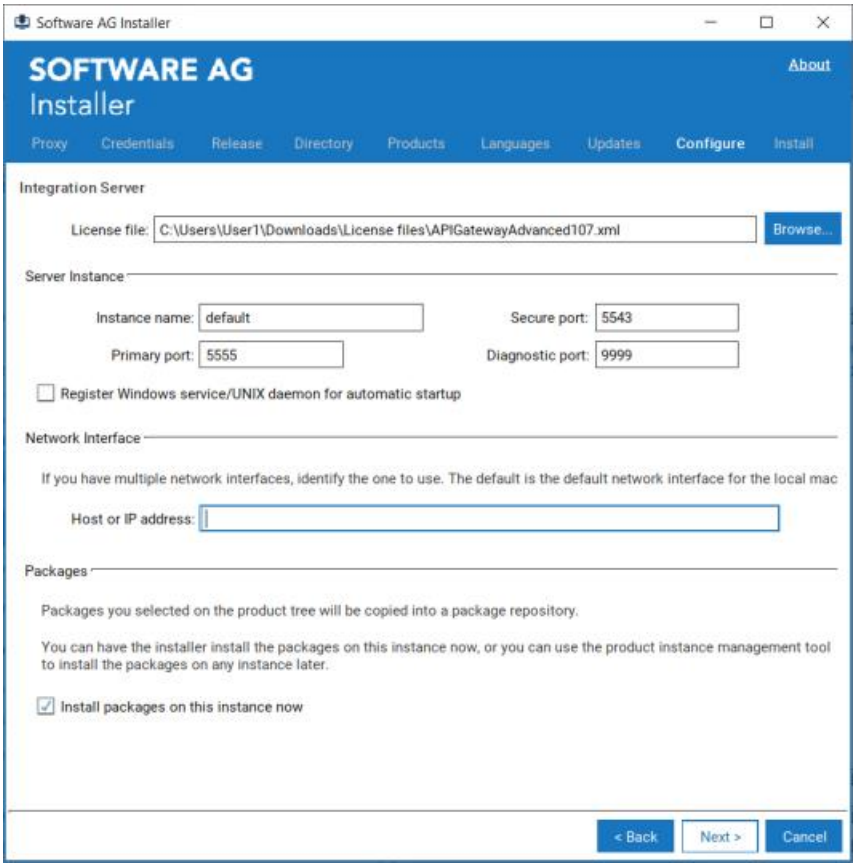
To install API Gateway

1. Double-click to open the Software AG Installer.
2. In the **Credentials** tab, provide your Empower credentials in the **Username** and **Password** fields and click **Next**.
3. In the **Directory** tab, modify the installation folders, if required, and click **Next**.
4. In the **Products** tab, select `API Gateway` from the list of Software AG products and click **Next**.



5. Read through the license agreement and select the checkbox below the agreement to provide your consent. Click **Next**.

6. In the **Configure** tab, click **Browse** to select the license file, from your local folder. The default primary ports *5555* for the Integration Server instance and *9999* for the diagnostic port appear. Modify the ports, if required, and click **Next**.



7. Select **Embedded Database** in the **Database Connection** section and click **Next**.

8. Modify the default values of HTTP port and HTTPS port, if required. They are, by default, *9072* and *9073* respectively. Click **Next**.

9. Modify the default values of API Gateway Data Store HTTP port and TCP/IP port, if required. They are, by default *9240* and *9340* respectively. Click **Next**.

10. Check the specified configuration and click **Install**.

    API Gateway is installed.

How Do I Install API Gateway using an Image in Windows system?

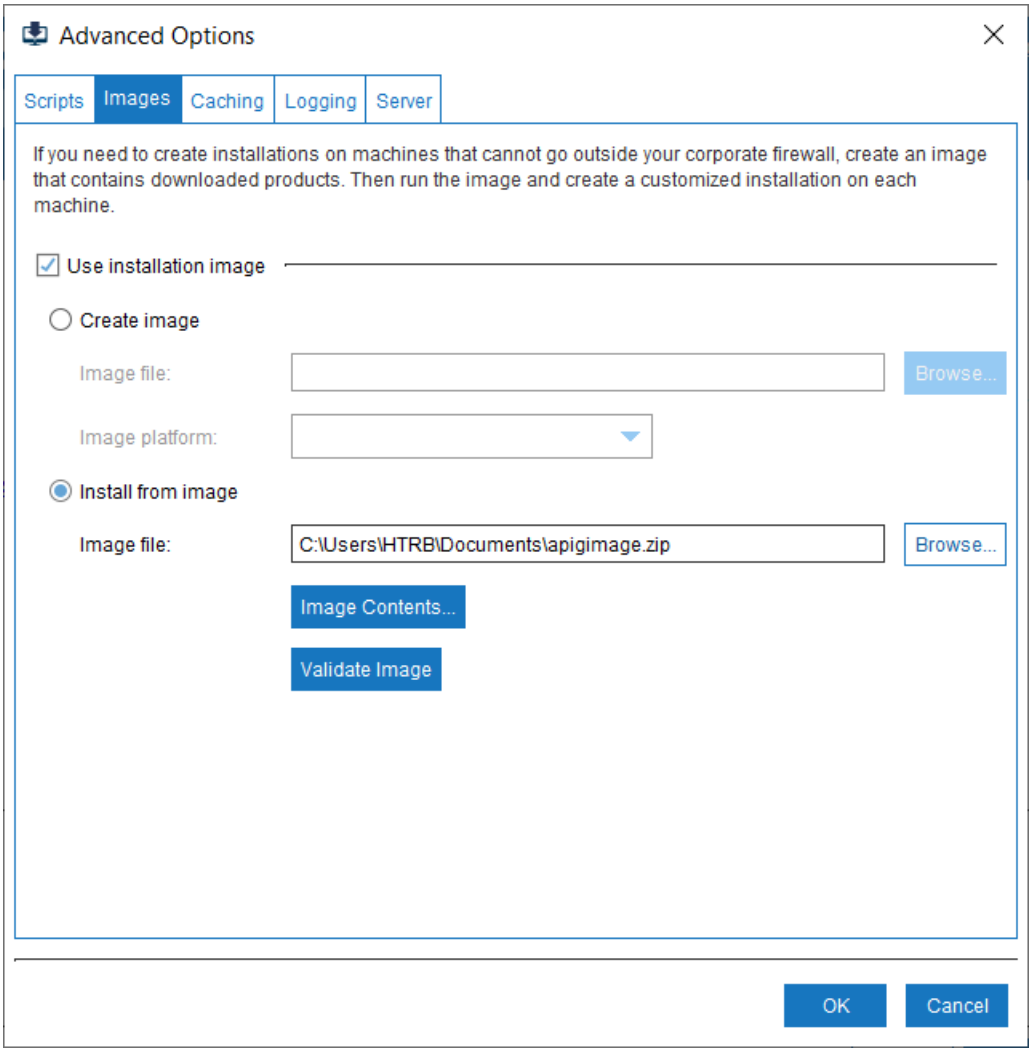
This section describes the steps required to install API Gateway using an installation image in a Windows system.

Pre-requisite

- Ensure that you have the Software AG Installer, the installation image, and the license file copied to the system in which you want to install API Gateway.

To install API Gateway using an installation image

1. Double-click to open the Software AG Installer.
2. Click **Advanced Options** and select the **Images** tab.
3. Select **Use Installation Image** and select **Install from image**.
4. Click **Browse** and select the installation image file.



5. Click **Ok** and click **Next**.
6. Select **API Gateway** from the **Products** tab and click **Next**.
7. Read through the license agreement and select the checkbox below the agreement to provide your consent. Click **Next**.

8. In the **Configure** tab, click **Browse** to select the license file, from your local folder. The default load balancer ports appear. Modify the ports, if required, and click **Next**.

9. Check the specified configuration and click **Install**.

   API Gateway is installed.

How Do I Install API Gateway using an Image in Linux system?

This section describes the steps required to install API Gateway using an installation image in a Linux system.

Pre-requisite

- Ensure that you have the Software AG Installer bin file (SoftwareAGInstaller-Linux_x86_64.bin), the installation image, and the license file copied to the system in which you want to install.

To install API Gateway using an installation image

1. Run the following command in your Linux console:

   ```
   sh SoftwareAGInstalleryyyymm-operating_system.bin
   -readImage full_path_to_image_file -console
   ```

   For example,

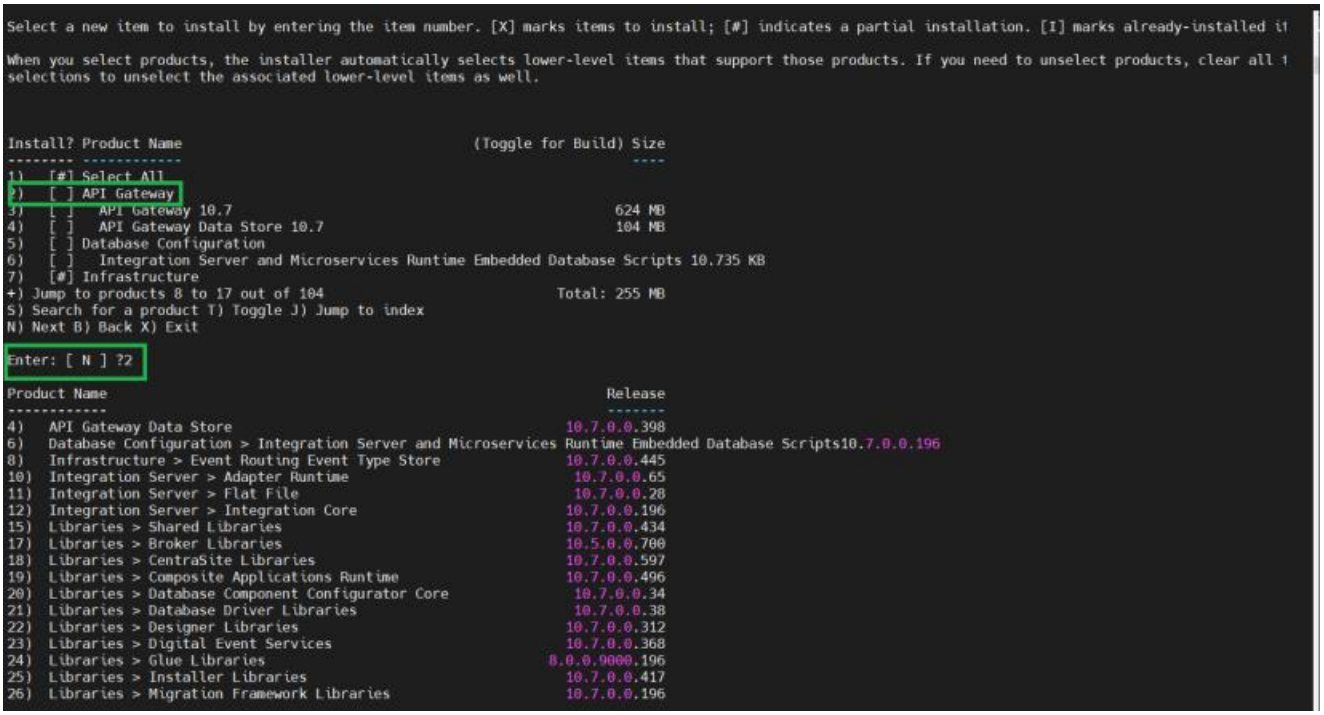
   ```
   sh "/home/APIGateway/SoftwareAGInstaller-Linux_x86_64.bin"
   -readImage "/home/APIGateway/Image/apig_64bit.zip" -console
   ```

2. Provide the full path of the folder in which you want to install the application and press **Enter**.

   For example,

   ```
   Select the installation directory. Enter X to exit the installer.
   Installation directory: [ /opt/softwareag ] ? /home/APIGateway
   ```

3. Provide the number adjacent to API Gateway from the list of products and press **Enter**.



4. Provide the full path of the license file and press **Enter**.

   For example,

   ```
   Integration Server
   License file:[  ] ? "/home/APIGateway/APIGatewaylicense.xml"
   ```

5. Provide the required port numbers and press **Enter**.

   The default port numbers appear next to each field. You may use the same or provide port numbers of your choice. For example,

   ```
   Secure port:[ 5543 ] ? 5543
   Primary port:[ 5555 ] ? 5555
   Diagnostic port:[ 9999 ] ? 9999
   ```

   The list of products that will be installed appears.

6. Check the provided configurations, the list of products, type `N` and press **Enter**.

   After installation, the list of installed products appears.

7. Type `F` to finish the process and press **Enter**.

   API Gateway installation is complete.

How Do I Launch and Log on to API Gateway?

To launch and log on to API Gateway

1. Perform one of the following based on your operating system:

   - **Windows** - Go to , type `Start Integration Server`, and press **Enter**.
   - **Linux** - Run `startup.sh` from the `../SoftwareAG/profiles/IS_default/bin/` path. For example,

     ```
     /home/admin/SoftwareAG/profiles/IS_default/bin/startup.sh
     ```

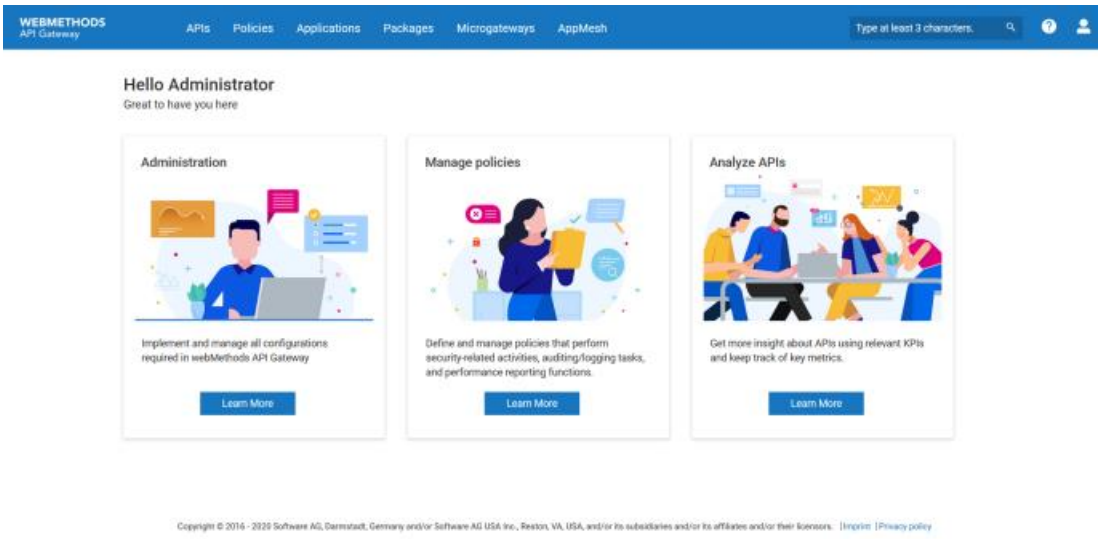
2. Type the following URL in your browser's address bar and press **Enter**: http://*`defaulthost`*:*`defaultport`*.

   For example, `http://localhost:9072`. Port is the HTTP port of API Gateway configured during installation; by default, *9072*.

3. Provide your **Username** and **Password**, and click **Log in**.

   The default user name is `Administrator` and password is `manage`.

   The home page appears.



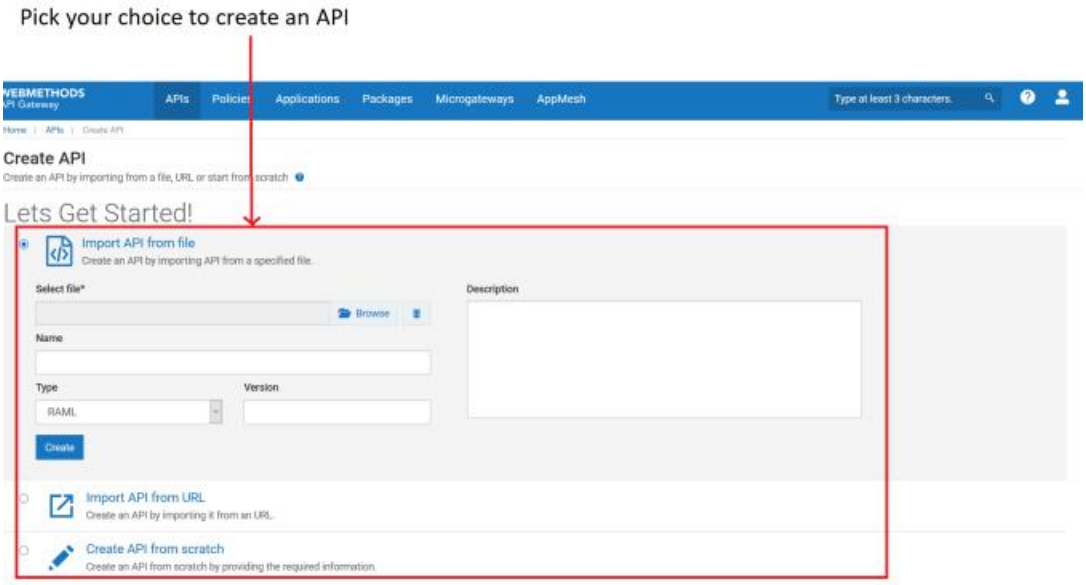
3 Create an API

- How Do I Create an API? 16
- How Do I Create an API by Importing from a File? 16
- How Do I View API Details? 17
- How Do I Enforce Policies to Protect My APIs? 18
- How Do I Enable Transaction Logs? 18

How Do I Create an API?

To create an API

1. Click **APIs** on the title navigation bar of the home page.
2. Click **Create API**.

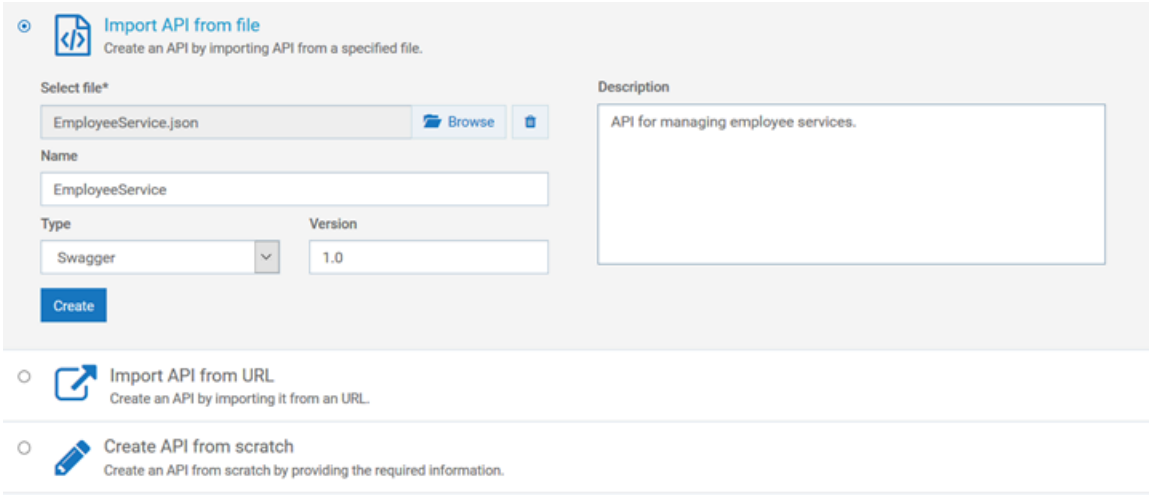


For more information, see the section Manage APIs in the *webMethods API Gateway User's Guide*.

How Do I Create an API by Importing from a File?

To create an API by importing a file

1. In the **Create API** page, select **Import API** from file.
2. Click **Browse** and select the file to import.



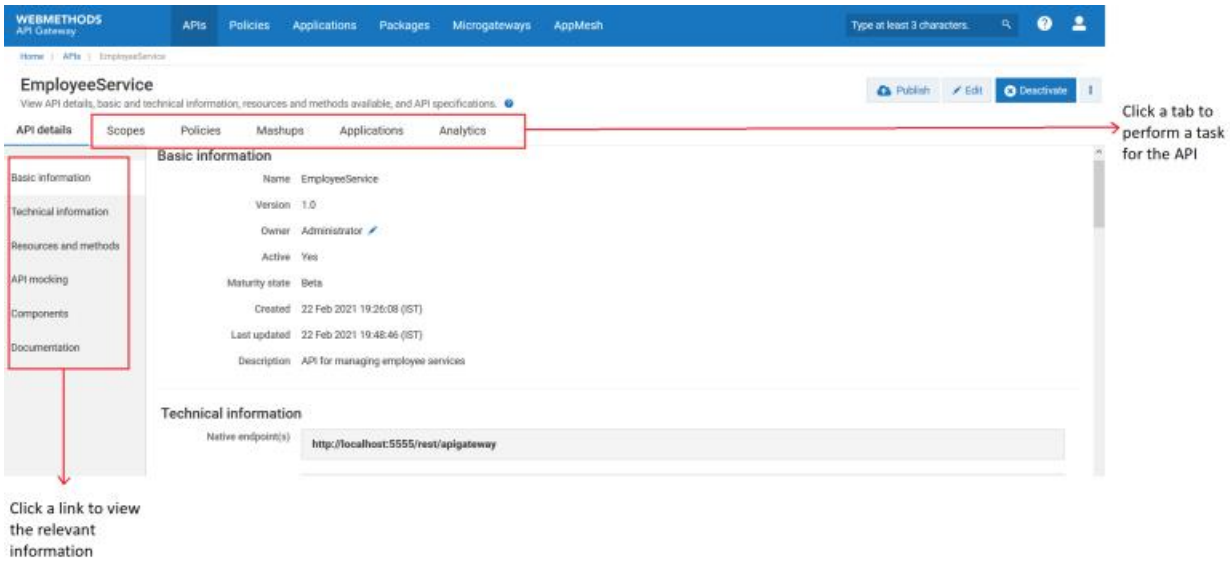
3. Provide the API name in the **Name** field, if required.

4. Provide the required **Description**, **API Type**, **Version**, and click **Create**.

   The API is created and appears in the APIs list under the **APIs** tab.

How Do I View API Details?

The details of API are displayed once an API is created.



You can also click the **APIs** from the title navigation bar and select the required API from the available list of APIs to view its details.

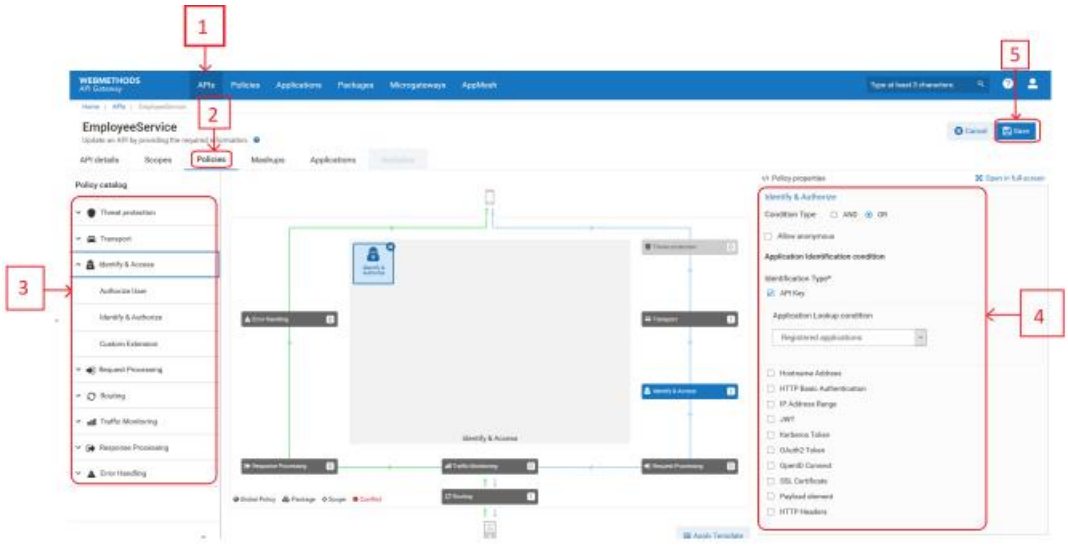
How Do I Enforce Policies to Protect My APIs?

This section explains the steps to secure your API using the API Key check policy. This policy enables you to identify and validate the client's identity for exposing an API. After configuring policies, you must configure transaction logger to save API Gateway transaction event logs.

To enforce policies on APIs

1. Click **APIs** in the title navigation bar and select the required API.

2. Click **Policies** and click **Edit**.



3. Select the policy stage and the required policy.

   The details of the policy appear.

4. Provide the properties for the selected policy and click **Save**.

   The policy is applied to the API.

   For more information, see the section Policies in the *webMethods API Gateway User's Guide*.

How Do I Enable Transaction Logs?

You must enable the **Transaction Logging** policy, which is a global policy, to log the request and response payloads performed against an API. The policy is disabled, by default. Since it is a global policy, the policy is applied to all APIs across the application, when you enable the policy.

Important:
This step is mandatory to view the performance metrics of APIs in the **Analytics** tab.

To enable transaction logs

1. Click **Policies** in the title navigation bar of the home page and click **Global Polices**.

2. Enable the **Transaction logging** policy by clicking the button adjacent to the policy name.

4 Publish an API

- How Do I Configure Destination for Publishing APIs? 22
- How Do I Publish an API? 22
- How Do I View the published API? 23

How Do I Configure Destination for Publishing APIs?

You have to specify and configure details of the destination where you want to publish your APIs. You cannot publish an API, if a destination is not configured.

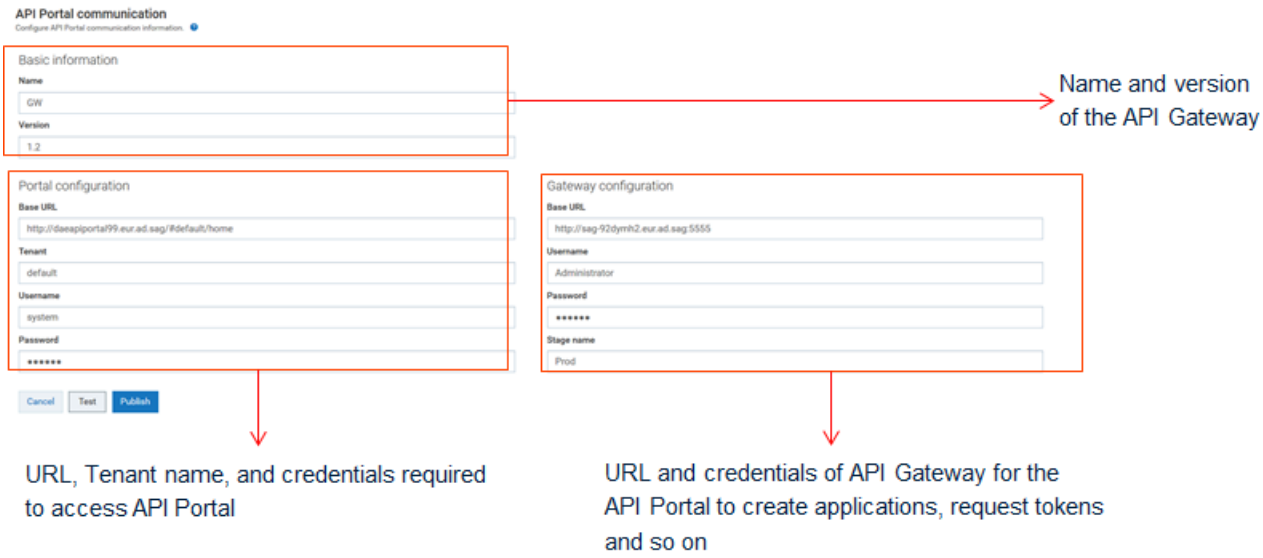
Pre-requisite

- Ensure that you have launched the required Developer Portal instance. For information on launching Developer Portal, webMethods Developer Portal Quick Start.

To configure the destination for publishing your APIs

1. Select **Administration** from the menu options icon ( ) in the title navigation bar.

2. Select the **Destinations** tab, expand **API Portal** in the left pane, and select **Configuration**.



3. Click **Test** to test the connection and click **Publish**.

   The destination details are saved.

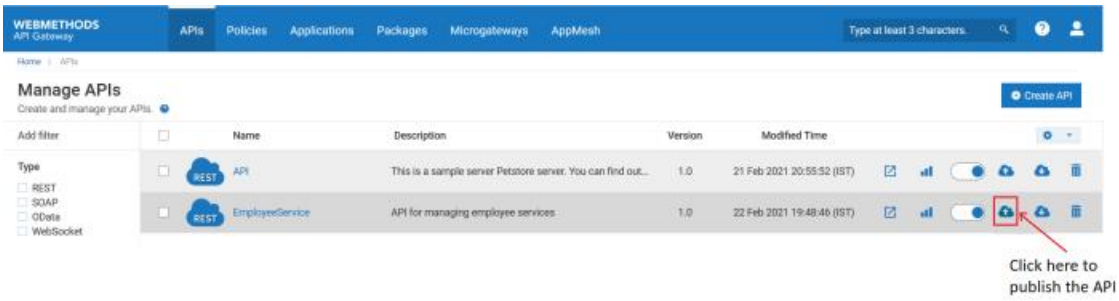
   For more information, see *webMethods API Gateway Administration*

How Do I Publish an API?

To publish an API to the configured destination

1. Click **APIs** on the title navigation bar of the home page.

2. Click the **Publish** icon next to the API that you want to publish.



3. Select **API Portal** and select the required communities. The default community is public and all users have access to this community.

4. Click **Publish**.

   The API is published to Developer Portal.

   For more information, see the Publish APIs section in the *webMethods API Gateway User's Guide*.

How Do I View the published API?

You can view the published API in Developer Portal Gallery.

To view the API in Developer Portal

1. Log on to Developer Portal and click **API gallery** in the navigation bar.

   The API gallery appears.

2. Click **View details** of your API to view API details.

5 Try an API

- How Do I Request API Key to Access a Protected API? 26
- How Do I Test a REST API in Developer Portal? 26

How Do I Request API Key to Access a Protected API?

When you have enforced an API with the Identify and Authorize policy with API Key, your consumers have to follow these steps to get access to your APIs.

The Identify & Authorize policy is used to identify the application, authenticate the request based on policy configured and authorizes it against all applications registered in API Gateway.

To request an API key

1. Log on to **Developer Portal** and click **API gallery**.
2. Click **View details** for the required API. The details of the selected API appear.
3. Click **Get access token** to request an access token to access and use the API.

   This option is available only for the latest API version.

   The access tokens are supplied to the client by the resource owner.

How Do I Test a REST API in Developer Portal?

When you have enforced an API with the Identify and Authorize policy with API Key, your consumers have to follow these steps to get access to your APIs in order to test them. If you have specified an Approval Configuration in API Gateway, the access tokens are automatically approved if the Identify and Authorize policy is applied with OAuth, JWT, or API Key.

To test a REST API

1. In the **API gallery** page, click **View details** for the required API and click **Try API**.
2. Select the required stage of the API that you want to test, in the **Environment** field.

   The applications associated with the selected stage appear in the **Applications** field.
3. Select an **Application** to test.

   The associated resources appear.
4. Select a resource.

   The methods associated with the resource that can be tested appear.
5. Click a method and type a value for the path parameters and a query parameter and its corresponding value.

6. In the **Authorization** tab, select the required **Authorization Type** and provide the corresponding API key to identify and validate your identity.

7. Type in the required **Header names** and corresponding values in the **Headers** tab and click **Send**.

   The request and the response of the API appear.

   API Gateway saves the details of access requests made to use an API and reports the data required to analyze the performance and usages of APIs through the **API Analytics** dashboard.

6 API Analytics

■ How Do I View API Analytics? 30

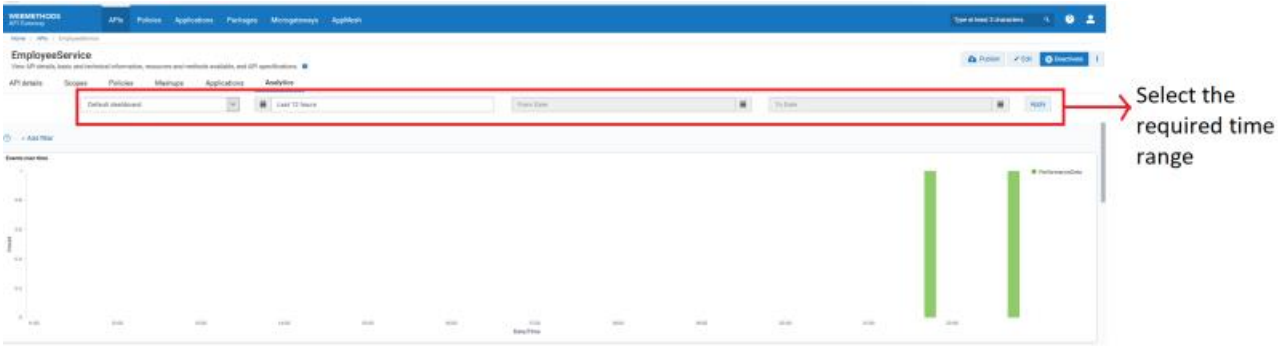
How Do I View API Analytics?

You must enable the Transaction Logging policy to capture the analytics data of APIs. For information on enabling the policy, see "How Do I Enable Transaction Logs?" on page 18.

To view API analytics

1. Go to **APIs**, select your API from the list of APIs, and click the **Analytics** tab.

   You can view the performance analytics data of the selected API.



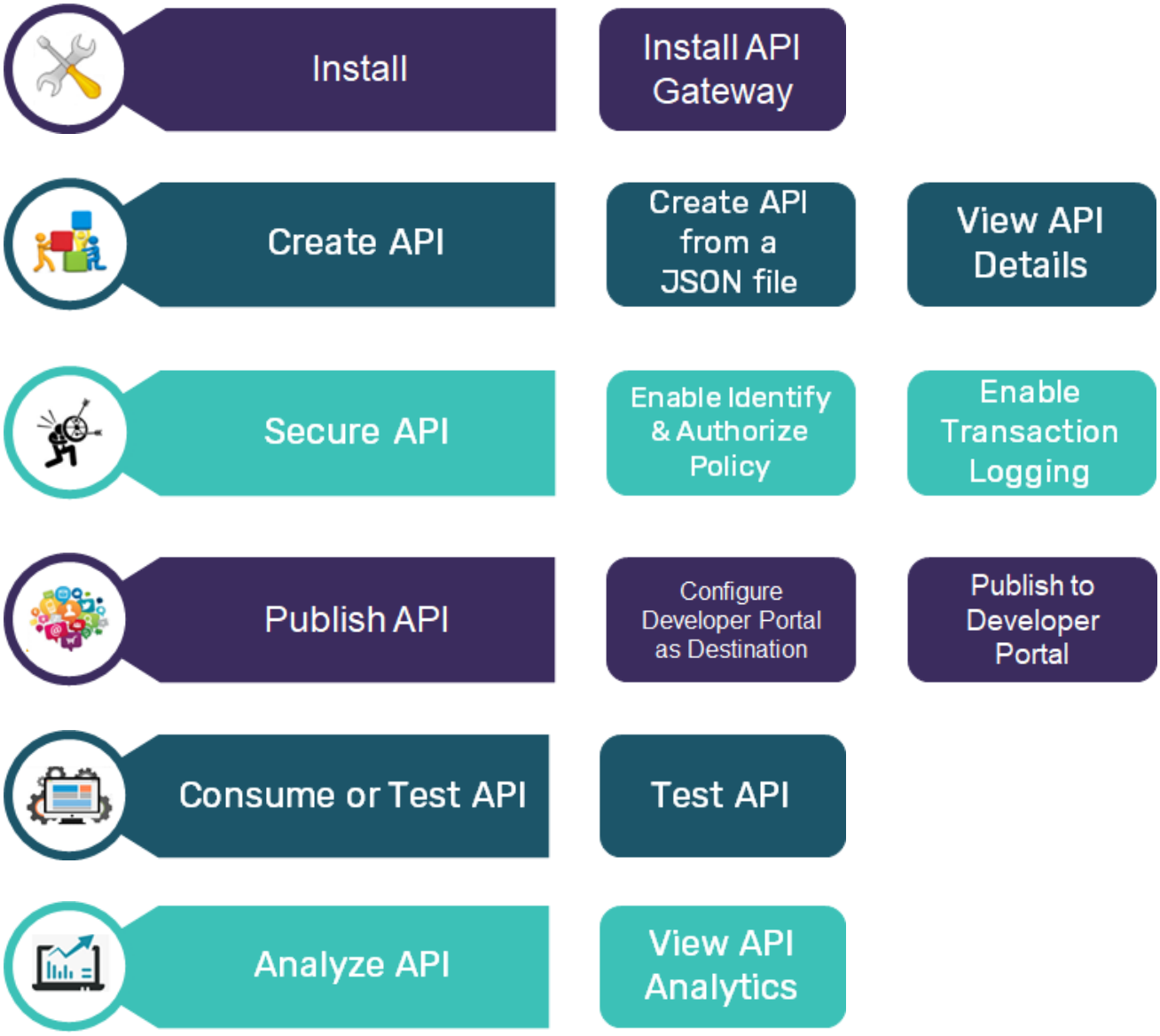
   The tab displays the data for events incurred in last 12 hours.

2. Select **Custom** and select the period that you want to view analytics and click **Apply filter**.

   The **Analytics** dashboard is refreshed based on your input criteria.

   For more information, see the API Analytics section in the *webMethods API Gateway User's Guide*.

7 Quick Start.. In a Jiffy!

■ Quick Start Cheat-sheet 32

Quick Start Cheat-sheet