



TGH

Making Integrations Simpler



IMPLEMENT API PROXY COMPONENT IN BOOMI

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Implement API Proxy component in Boomi

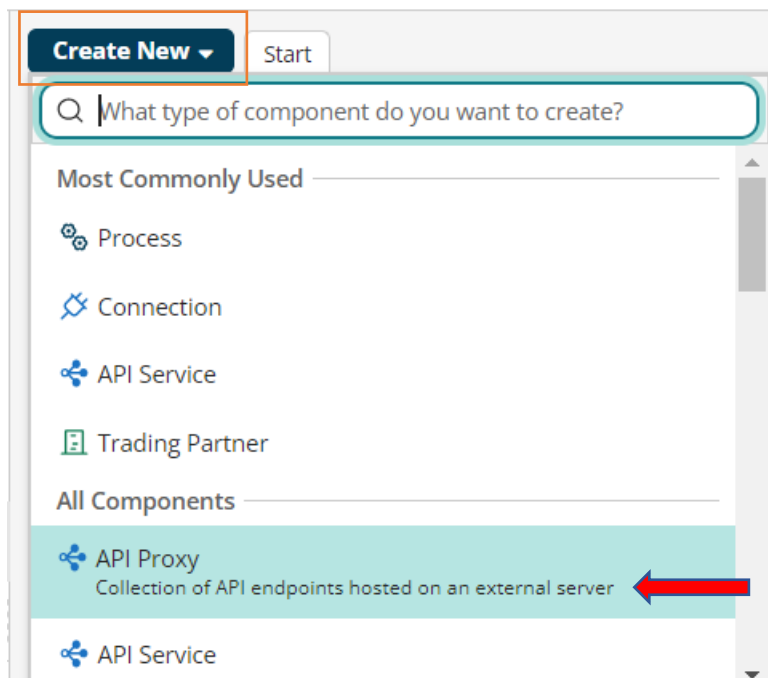
API Proxy components are deployable components that allow for the direct proxying of a request through an API Gateway to a service which is not served through an Atom, Molecule, or Atom Cloud.

Problem Statement:

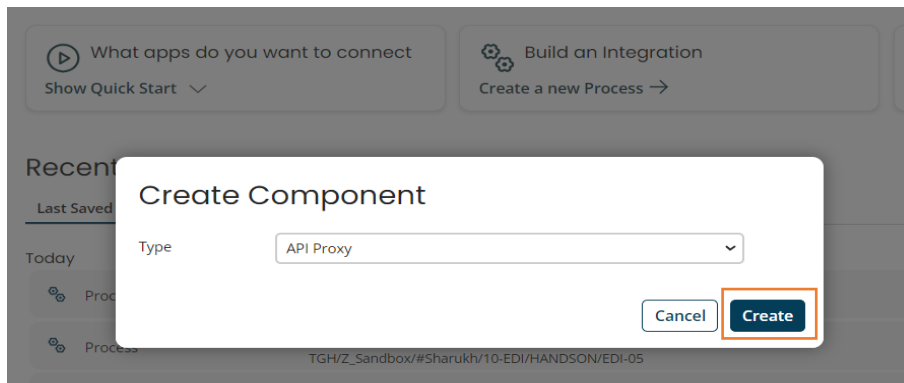
“How to implement API Proxy component in Boomi”.

In this use-case, we will make use of a Open API Specification URL to consume the mock API. Let us see how to configure API Proxy Component in Boomi.

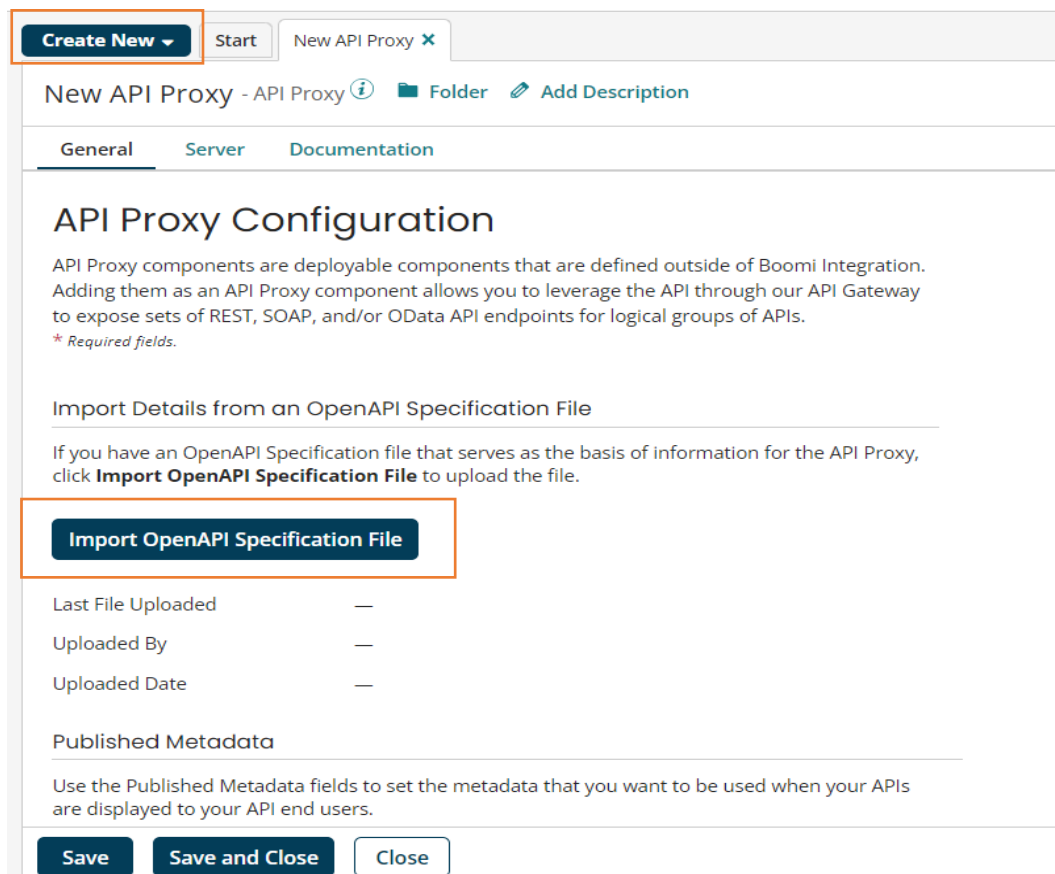
Step 1: On the Build page click on create new drop-down to create component.



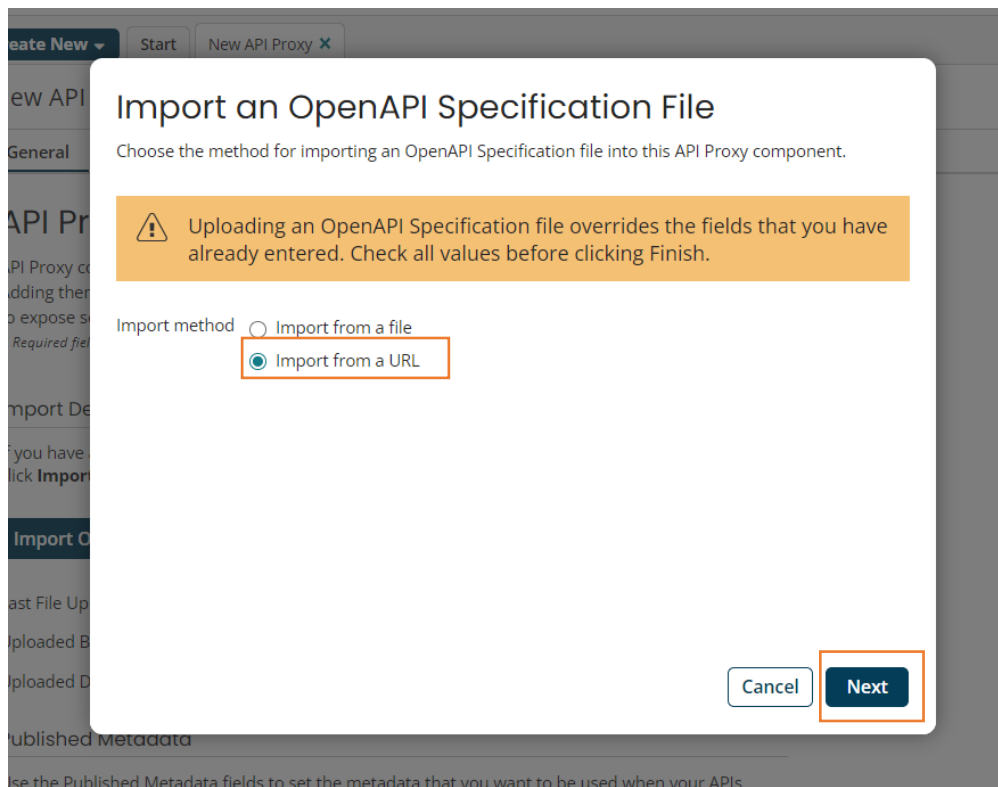
Step 02: Select API Proxy component and click create.



Once you click on create button API Proxy component is created as shown below, then rename the component as appropriate. Here we will be renaming as “DEMO | API Proxy”.



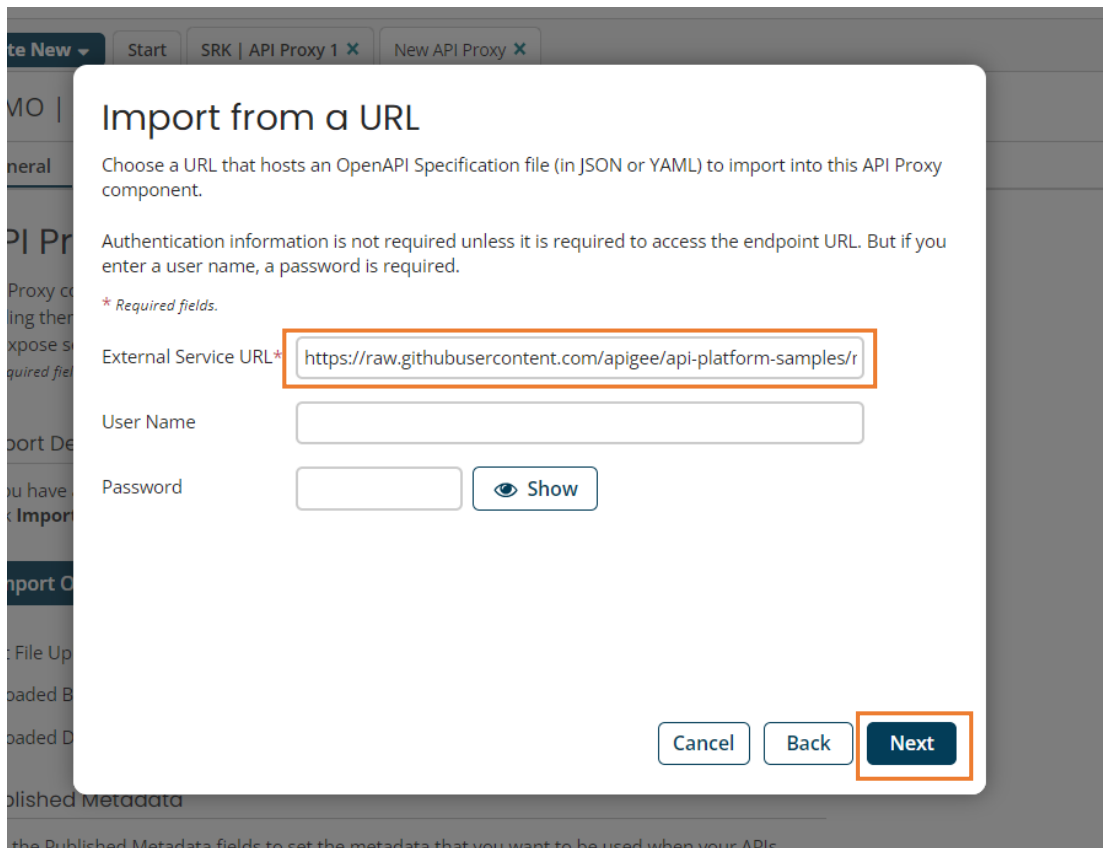
Step 03: Click on the import OpenAPI Specification file, then a new pop-up will appear. Here we can import by two methods. And we are going with the second method i.e, import from a URL, then click next.



Mock API URL :-

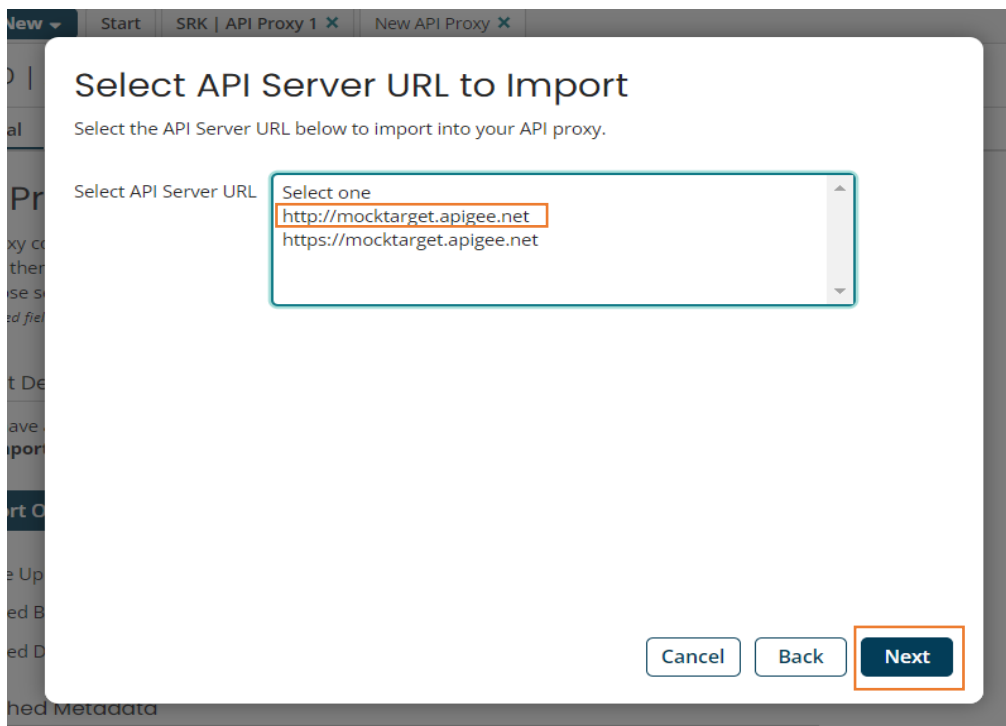
URL: <https://raw.githubusercontent.com/apigee/api-platform-samples/master/default-proxies/helloworld/openapi/mocktarget3.0.yaml>

Step 04: Paste the above URL in the External service URL and click next again next.



The screenshot shows a modal dialog titled "Import from a URL". The text inside says: "Choose a URL that hosts an OpenAPI Specification file (in JSON or YAML) to import into this API Proxy component." Below this, it states: "Authentication information is not required unless it is required to access the endpoint URL. But if you enter a user name, a password is required." A note indicates "* Required fields." There are three input fields: "External Service URL*" which contains the text "https://raw.githubusercontent.com/apigee/api-platform-samples/r", "User Name" which is empty, and "Password" which is empty with a "Show" button next to it. At the bottom right, there are three buttons: "Cancel", "Back", and "Next". The "Next" button is highlighted with an orange border.

Step 05: Select <http://mocktarget.apigee.net> as API Server URL and click next.




The screenshot shows a modal dialog titled "Select API Server URL to Import". The text inside says: "Select the API Server URL below to import into your API proxy." Below this, there is a label "Select API Server URL" and a dropdown menu. The dropdown menu is open, showing two options: "http://mocktarget.apigee.net" and "https://mocktarget.apigee.net". The first option is highlighted with an orange border. At the bottom right, there are three buttons: "Cancel", "Back", and "Next". The "Next" button is highlighted with an orange border.

Step 06: It will automatically takes the API type, title, published version, etc.,. Then click Finish.

Summary

The following fields will be imported with the selected values. Click Finish to import them into your API Proxy.



Uploading an OpenAPI Specification file overrides the fields that you have already entered. Check all values before clicking Finish.

Field	Value
Published Version Number	1.0.0
Published Api Title	Mock Target API
Published Description	OpenAPI Specification for the Apigee mock target service endpoint.
Api Type	REST
Api Server URL	http://mocktarget.apigee.net

Cancel
Back
Finish

Step 07: Then we need to give Base API path and save it.

API Type

Specify the API Type of your API Proxy so that it is displayed with the correct API path.

API Type

☒ REST
☐ SOAP
☐ OData

Service Configuration

Set the base portion of the URL for requests to the API defined by the API object. The full URL is generated when the API component is deployed.

Base API Path

Demo

The Base URL Path must be unique for each environment that the API component is deployed.

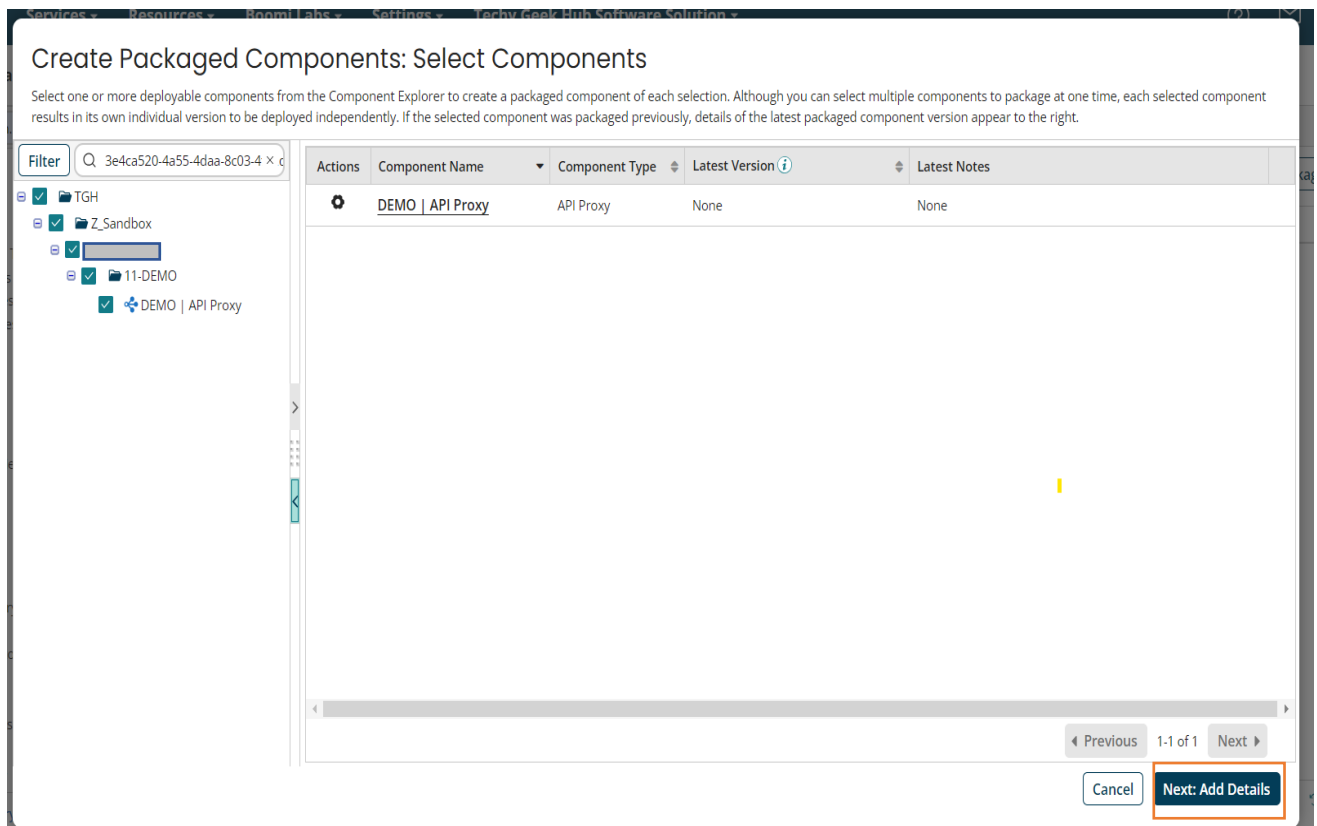
Save

Save and Close

Close

Create package and deploy to Environment:

Step 08: Create packaged component of the API Proxy component.



Step 09: Deploy it to an environment.

Deploy: Select Packaged Components

Environment: | Deployment Notes:

Select one or more packaged components from the Component Explorer. By default, the latest version of each packaged component is selected. Packaged components can be created from the [Packaged Components](#) page. You can deploy a maximum of 250 packaged components at one time.

Filter

- ☒ TGH
- ☒ Z_Sandbox
- ☒
- ☒ 11-DEMO
- ☒ DEMO | API Proxy

Actions	Name	Type	Selected Version	Deployed Version
	DEMO API Proxy	API Proxy	1.0 View details Select different package	N/A

Cancel
Back: Select Environment
Next: Review

Step 10: To use Gateway, in the Shared Web Server the API type should be Advanced and Authentication Type should be Gateway.

Atom Information

Startup Properties

Log Files

Java Information

Runtime:

Deployed Processes

Listeners

Queue Management

Certificates

Installed Libraries

Settings & Configuration:

Properties

Shared Web Server

Shared Web Server ?

Configure the selected Atom's web server settings for web service publishing.

General

Basic Settings

API Type Advanced ?

Listening Port Configuration

Default ?	Port	SSL ?	Authentication Type	External Port	External SSL ?	B
<input checked="" type="radio"/>	9090	<input type="checkbox"/>	Gateway		<input type="checkbox"/>	h

[+ Add Port](#)

Advanced Settings

Implementing in Gateway:

Step 11: Click on services drop-down and select API Management. Then click on configure APIs and Applications > Deployed API. Here we can see our deployed API Proxy component.

API Management | **Configure Server** ▾ Configure APIs and Applications ▾ Publish Approve Dashboard ▾

Deployed APIs ⁱ

View and configure your deployed APIs.

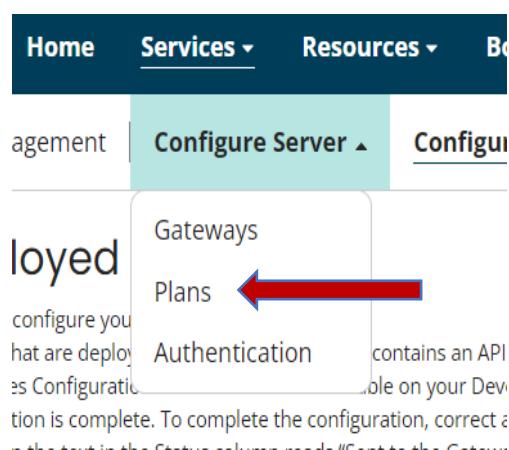
For APIs that are deployed to an environment that contains an API Gateway, any API that indicates a "Requires Configuration" status will not be available on your Developer Portal until the configuration is complete. To complete the configuration, correct all of the indicated errors in the row. When the text in the Status column reads "Sent to the Gateway," this deployed API is available on your Developer Portal.

If your API is deployed to an environment without an API Gateway, the status column reads "Sent to the Atom" when the configuration is corrected.

APIs by Name APIs by Gateway APIs by URL

Details	API Name	Environment	API Version	Authentication	Plans ⁱ	Custom
View	DEMO API Proxy - API Proxy		1.0.0	API Key Controlled	❗ Incomplete	No
View	DeveloperPortal_API Service - API Service		V1.0	DP_basic	2 Plans (Keyless)	No
View	SOAP Endpoint API Service - API Service		V1	API Key Controlled	❗ Incomplete	No
View	SRK API Proxy 1 - API Proxy		1.0.0	DP_basic	1 Plan (Keyless)	No
View	SRK API Proxy 2 - API Proxy		1.0.6	DP_basic	1 Plan (Keyless)	No

Step 12: To create a new Plan, click on Configure Server > Plans then create a new Plan.



API Management | **Configure Server** ▾

Plans ⁱ

A plan is a collection of policies that set limits to API API Deployment. Create the plans you will need, the process.

[+ Create a Plan](#)

[Bulk Move Plans](#)

[Expand All](#) | [Collapse All](#)

~ 10 calls per min

Step 13: Here we name the plan as DEMO_Unlimited, and keep everything as unlimited and save it.

API Management | **Configure Server** | Configure APIs and Applications

Create a Plan

Choose from the options provided to create a new Plan. Once created, a plan can be associated with any API Deployment.

* Required fields.

Plan Name* 25 characters remaining

Description 280 characters remaining

Message Size ☒ Unlimited
☐ Maximum of KB

Rate Limit ☒ Unlimited
☐ Maximum of calls per

Quota Limit ☒ Unlimited
☐ Maximum of calls per

Step 14: To provide Authentication, click on Configure Server > Authentication > New Authentication Source.

Then in Authentication Source Name we will be giving “DEMO_Basic_Auth” and in Identity provider type we will select “Basic authentication (Gateway)”.

Services | Resources

Configure Server | **Con**

Gateways

Plans

Authentication

Add an Authentication Source

* Required fields.

Authentication Source Name* 35 characters remaining

Description 250 characters remaining

Identity Provider Type*

Step 15: To configure Basic Authentication we will start from Right hand side i.e., Roles. Click on add role > in role name we will pass “Trainee”.

DEMO_Basic_Auth

Source Configuration for Basic Authentication ⓘ

General
Users
Groups
Roles

Create and update roles associated with this Authentication Source. Create users and groups before associating the users to specific groups and groups to specific roles that limit access to a specific set of APIs.

+ Add Role

Actions	Role Name	Description
There are no roles assigned to this Authentication Source.		

Step 16: Click on Groups > add group. Pass the group name as “Developers” > next > Select the Role which we have already assigned(Trainee) > next > finish.

DEMO_Basic_Auth

Source Configuration for Basic Authentication

General
Users
Groups
Roles

Create and update groups associated with this Authentication Source. Create users and groups before associating the users to specific groups and groups to specific roles that limit access to a specific set of APIs.

+ Add Group

Actions	Group Name	Roles
There are no groups assigned to this Authentication Source.		

Select Roles

Select the roles to assign to this group. A role can be assigned to multiple groups.

1 item selected.

Search for a role

☒ Trainee

Cancel Back **Next**

Step 16: Click on the users , add users, then we need to create user name and password and click next.

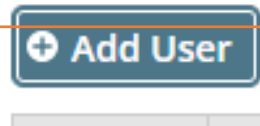
General

Users

Groups

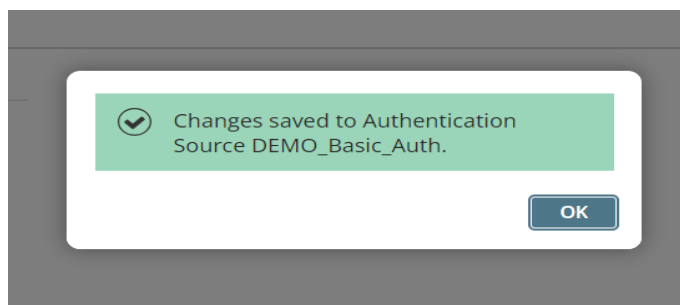
Roles

Create and update users associated with this Authentic before associating the users to specific groups and group specific set of API.



Actions	User Name
<h3>Add a User</h3> <p><i>* Required fields.</i></p> <p>User Name* <input type="text" value="1234"/> <small>46 characters remaining.</small></p> <p>Password* <input type="password" value="1234"/> <button>Hide</button> <small>46 characters remaining.</small></p> <p>Status i <input checked="" type="checkbox"/> Enable</p> <p><input type="button" value="Cancel"/> <input type="button" value="Next"/></p>	

After that select the Group (Developers) then click finish then save it. At last, you will see the below response.



Step 17: We need to add the created authentication to our deployed API. Click on API key Controlled

Deployed APIs [?]

View and configure your deployed APIs.

For APIs that are deployed to an environment that contains an API Gateway, any API that indicates a "Requires Configuration" status will not be available on your Developer Portal until the configuration is complete. To complete the configuration, correct all of the indicated errors in the row. When the text in the Status column reads "Sent to the Gateway," this deployed API is available on your Developer Portal.

If your API is deployed to an environment without an API Gateway, the status column reads "Sent to the Atom" when the configuration is corrected.

APIs by Name **APIs by Gateway** APIs by URL

>

Details	API Name	Environment	API Version	Authentication	Plans	Custom URL
View	DEMO API Proxy - API Proxy		1.0.0	API Key Controlled	! Incomplete	No

Step 18: Select Authentication type as Authentication provider and Authentication source "Demo_Basic_Auth".

Authentication Information for DEMO | API Proxy

Specify who can call this API based on your authentication requirements.

* Required fields.

> General Settings

Authentication Type

Authentication Type

☐ API Key Controlled authentication
 ☒ Authentication provider

Authentication Source* [?]

< Restrictions by Role

Save

Cancel

Step 19: We need to add a plan to the deployed API. Click on the incomplete > search for the created plan (DEMO_Unlimited) > add to API deployments.

Deployed APIs ^①

View and configure your deployed APIs.

For APIs that are deployed to an environment that contains an API Gateway, any API that indicates a "Requires Configuration" status will not be available on your Developer Portal until the configuration is complete. To complete the configuration, correct all of the indicated errors in the row. When the text in the Status column reads "Sent to the Gateway," this deployed API is available on your Developer Portal.

If your API is deployed to an environment without an API Gateway, the status column reads "Sent to the Atom" when the configuration is corrected.

APIs by Name **APIs by Gateway** APIs by URL

Details	API Name	Environment	API Version	Authentication	Plans ^①	Custom URL? ^①
View	DEMO API Proxy - API Proxy		1.0.0	DEMO_Basic_Auth	Incomplete	No

Step 20: Our plan has been added to the deployed API, then turn ON the toggle button so that we make a keyless Plan and save it.

Plans for DEMO | API Proxy on

A Plan is a collection of policies that set limits to API requests and link a valid API Key to a specific API Deployment. Choose the Plans you wish to provide on this API Deployment, or [create a new Plan](#).

Alternatively, turn on **Use a Keyless Plan** to allow the deployed API to be called without an API Key. We recommend Keyless Plans only for the scenario when existing applications do not insert the required X-API-KEY header and cannot be reconfigured.

Add a plan ☒ Make One Plan Keyless

Keyless	Name	Maximum Message Size	Rate Limit	Quota Limit	Usage	Description	Remove
<input checked="" type="checkbox"/>	DEMO_Unlimited	Unlimited	Unlimited	Unlimited	0	—	

Step 21: Go to Configure API and Application and click on deployed API. Then click on view, a new tab will open as shown below. Click on the Rest and copy the Base URL path that is <http://localhost:8077/ws/rest/Demo>.

General **REST**

REST information about this API.

Gateway information: (1 atom)

Base URL Path <http://localhost:8077/ws/rest/Demo>

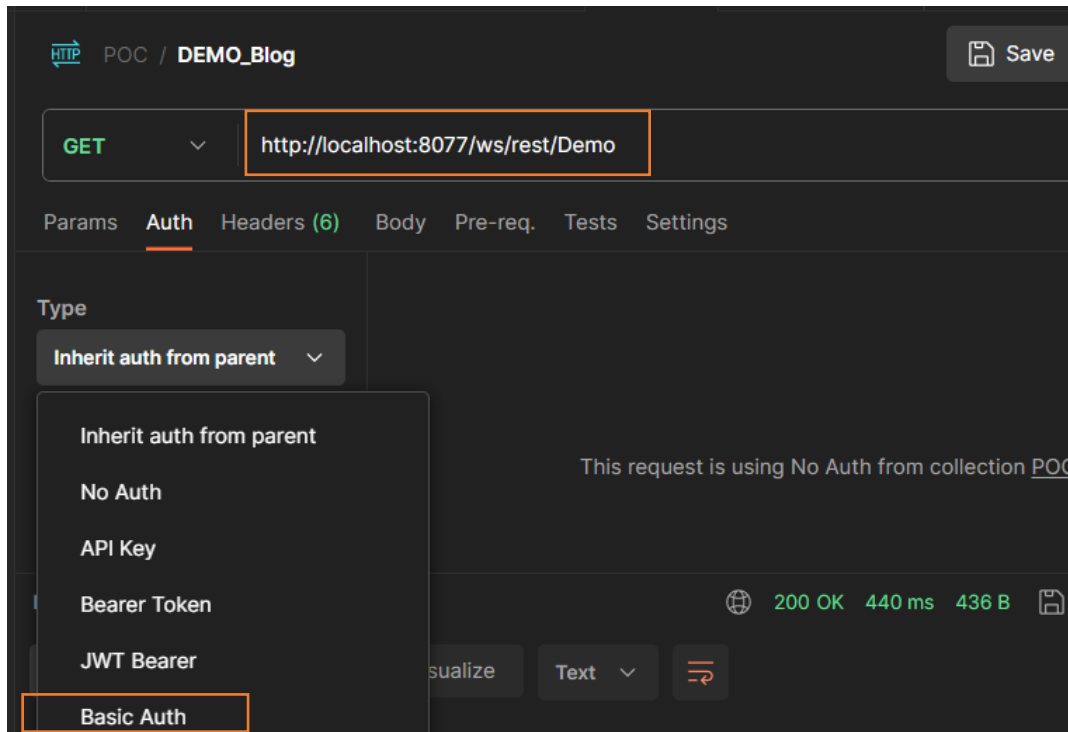
Swagger Reference <http://localhost:8077/ws/rest/Demo/swagger.json>

OpenApi Reference <http://localhost:8077/ws/rest/Demo/openapi.json>

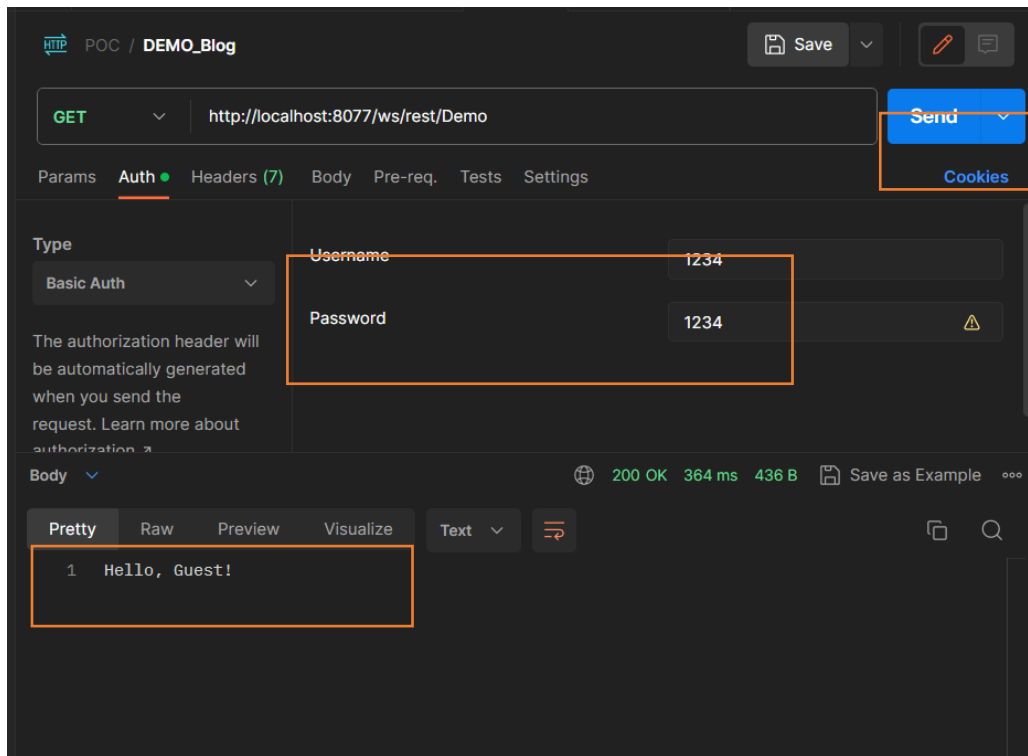
Developer Portal Link <http://localhost:18077/#catalog;api=26303fa2-2d22-469b-9ca5-702a7a8d7aa9;sort=name>

Consuming in Postman:

Step 22: Open Postman (API testing tool) and paste the copied Base URL path and in Auth (Authentication) select the Basic Auth.



Step 23: Pass the user's name and password, then click on send button. You will get the below output as response.



References:

1. https://help.boomi.com/docs/atomsphere/api%20management/topics/int-api_proxy_components_24a9612a-2e4a-4ae9-ba66-88ba1b3f9c97/
2. <https://docs.apigee.com/api-platform/tutorials/create-api-proxy-openapi-spec#testtheapiproxy>



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TGH Software Solutions Pvt. Ltd.

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At TGH, we specialize in driving digital transformation through seamless Integration Technologies.

Operating as an INTEGRATION FACTORY, we serve as a one-stop shop for all your integration needs. Our expert team is well-versed in enterprise software and legacy system integration, along with leading iPaaS technologies like Boomi, MuleSoft, Workato, OIC, and more.

We're committed to enhancing business processes and solving problems through our integration expertise.



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