

API integration with Lambda Function

API gateway: Create an API gateway, choosing **'REST API'** as API type.

APIs > Create

Choose the protocol

Select whether you would like to create a REST API or a WebSocket API.

☒ **REST** ☐ WebSocket

Create new API

In Amazon API Gateway, a REST API refers to a collection of resources and methods that can be invoked through HTTPS endpoints.


☒ **New API** ☐ Clone from existing API ☐ Import from Swagger or Open API 3 ☐ Example API

Settings

Choose a friendly name and description for your API.

API name*	<input type="text" value="API_StockInventory"/>
Description	<input type="text" value="Meant for CRUD operations"/>
Endpoint Type	<input type="text" value="Regional"/> ⓘ

- Now navigate to API we created. In 'Resources' tab under 'Actions' you can see options **'Create Resources'** to create child resource

Resources **Actions**  **New Child Resource**

Use this page to create a new child resource for your resource. ⓘ

Configure as [proxy resource](#) ☐ ⓘ

Resource Name*	<input type="text" value="Manage_Inventory"/>
Resource Path*	<input type="text" value="/ manage_inventory"/>

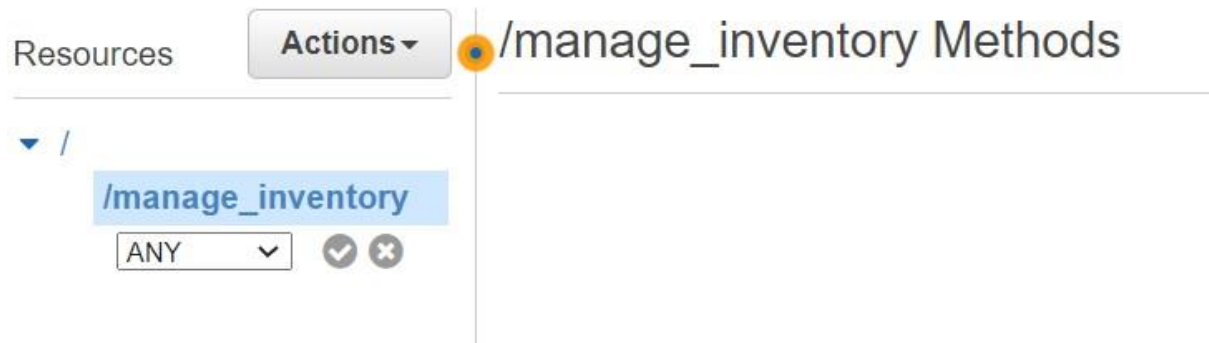
You can add path parameters using brackets. For example, the resource path {username} represents a path parameter called 'username'. Configuring /(proxy+) as a proxy resource catches all requests to its sub-resources. For example, it works for a GET request to /foo. To handle requests to /, add a new ANY method on the / resource.

Enable API Gateway CORS ☐ ⓘ

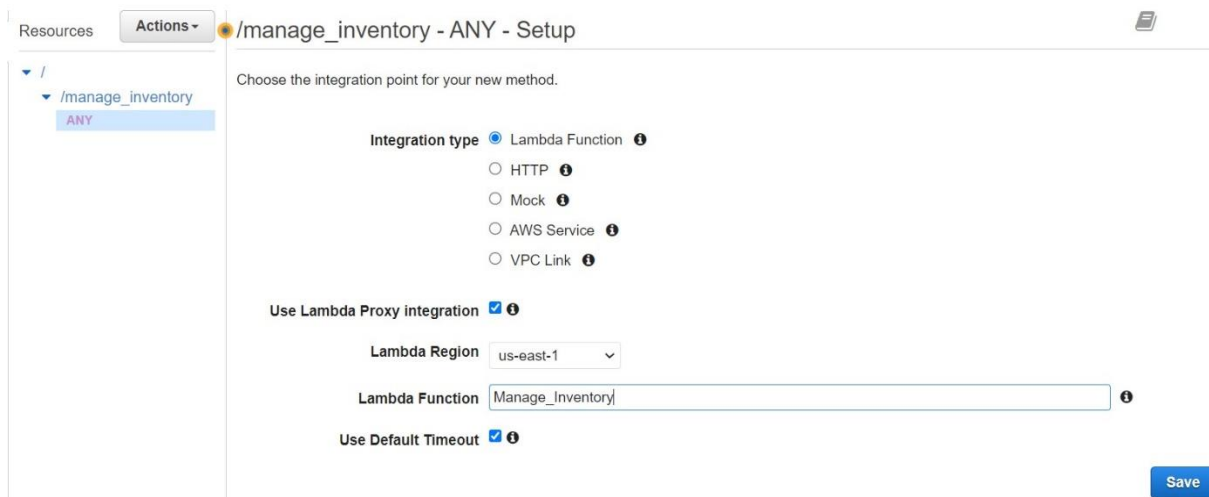
* Required

[Cancel](#) [Create Resource](#)

- Create a method 'ANY' under resource we created using option 'Action'.



- Integrate the Lambda function with the method('ANY') we created as like below.



- Deploy the API with the stage name say 'BETA', using option 'Action'.

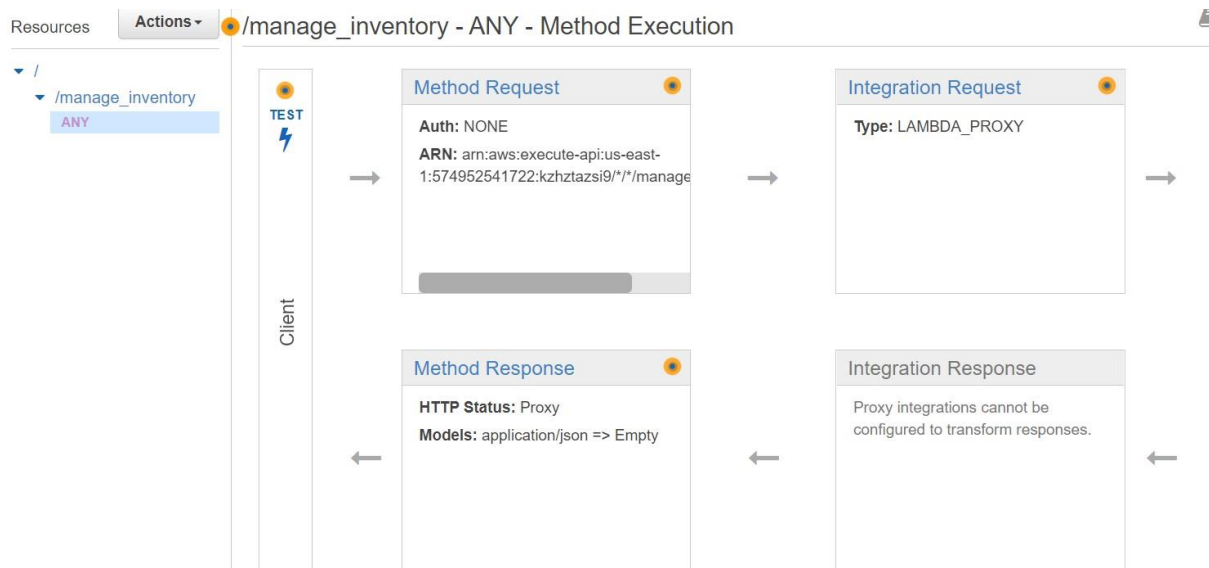
Deploy API

Choose a stage where your API will be deployed. For example, a test version of your API could be deployed to a stage named beta.


Deployment stage	<input type="text" value="[New Stage]"/>
Stage name*	<input type="text" value="BETA"/>
Stage description	<input type="text"/>
Deployment description	<input type="text"/>

Cancel Deploy

- Now set API key authentication for the method we created. Navigate to method('ANY') we created.






- Click 'Method Request' option and set 'API Key Required' as 'true'.



Resources **Actions**  [← Method Execution](#) /manage_inventory - ANY - Method Request



▼ /
▼ /manage_inventory
 ANY


Provide information about this method's authorization settings and the parameters it can receive.

Settings 



Authorization NONE  

Request Validator NONE  

API Key Required  

▶ URL Query String Parameters 

▶ HTTP Request Headers

▶ Request Body  

▶ SDK Settings


- Create a usage plan in 'Usage plan' tab as like below for setting quota limit to our API key.


Usage Plans **Create** Create Usage Plan


Usage Plans help you meter API usage. With Usage Plans, you can enforce a throttling and quota limit on each API key. Throttling limits define the maximum number of requests per second available to each key. Quota limits define the number of requests each API key is allowed to make over a period.


Name*


Description


Throttling 


Enable throttling ☒ 

Rate* requests per second 

Burst* requests 

Quota 

Enable quota ☒ 

requests per 

- Map our API with the usage plan created as like below.

BETA_UsagePaln Actions ▾ Configure Tags

Details **API Keys** Marketplace

ID b9hd1j Edit

Name BETA_UsagePaln

Description No description.

Rate 100 requests per second ⓘ

Burst 200 requests ⓘ

Quota 5,000 requests per month starting on the 1st day ⓘ

Associated API Stages

Add API Stage

API	Stage	Method Throttling		
ManageStock_API ▾ ⚠	Beta ▾		✓	✕

- Now create an API key in 'API keys' tab.

API Keys Actions ▾ Create API Key

Name*

API key* ☒ Auto Generate ☐ Custom

Description

* Required

- Map the Usage Plan we created with the API key as like below.

API Keys Actions ▾ stock_authkey Delete API Key Configure Tags

[stock_authkey](#)

ID 9ovmz1yh74

Name stock_authkey

API key [Show](#)

Description No description.

Enabled Enabled ⓘ

Edit

Associated Usage Plans

Add to Usage Plan

Usage Plan	API	Stage		
Manage_Inventory-UsagePlan			✓	✕

- Redeploy the API to ensure the modifications done was made effective.

