



# LAB- Consuming Restful Services

In this lab, you will be working on **01-consuming-rest-start** project under **02-consuming-webservices** section

In this lab you will understand

- a) How to consume a restful webservice
- b) How to extract uri params from http request and pass uri params to a restful service

## STEP 1

1) Execute **rest.bat** given to you in lab-docs folder . This will start a rest service which starts listening on port **7070** and base path is **/rest**

2) Give requests to **http://localhost:7070/rest/products** and observe that you get all products in Json format

Give requests to **http://localhost:7070/rest/products/Mac** will give you products whose name contains Mac. Try the same for

**http://localhost:7070/rest/products/Hp** and **http://localhost:7070/rest/products/Moto**

Open POSTMAN and give a POST request to **http://localhost:7070/rest/products** and pass the following product Json in the body :

```
{
  "name": "Sony VAIO",
  "description": "SONY Laptop ",
  "originalPrice": 4000,
  "offer": {
    "offerPrice": 2000,
    "offerValidUntil": 1466098094993
  },
  "brandName": "Sony",
  "images": [
    "image15.jpeg",
    "image16.jpeg",
    "image17.jpeg"
  ]
}
```



Observe that the product is created successfully.

Test by giving GET request to `http://localhost:7070/rest/products`. You should see 7 products

5) Now we want to consume this rest service

open `01-consuming-rest-start.xml` in `src/main/app`

Configure a flow with http listener at port 8081 and path `/products`

Drag Http endpoint. Observe that this is Outbound (Http Requestor)

Configure the Http Request connector configuration as shown below :

Generic	
Name:	HTTP_Request_Configuration

  

URL Configuration	
Protocol:	<input checked="" type="radio"/> HTTP <input type="radio"/> HTTPS
Host:	localhost
Port:	7070
Base Path:	/rest

Configure the path of http outbound endpoint as `/products`

Now run the application and give a request to `http://localhost:8081/products`. You should see all the products



6) Now modify the path of http outbound endpoint such that it will get the products whose name matches the name passed as **query** parameter "**productname**"

[ **Hint : use the url as**

`/products/#{message.inboundProperties.'http.query.params'.productname}` ]

Deploy the application give request to

**http://localhost:8081/products/?productname=Mac** and observe that you will get all the product whose name contains Mac

7) Now Drag a variable transformer between the Http endpoints and configure a flow variable with name "pname" value as

`/#{message.inboundProperties.'http.query.params'.productname}`

8) Modify the URL of http outbound endpoint such that it picks the product name from flow variable "pname"

[ **Hint : use the url as** `products/#{flowVars.pname}` ]

Deploy the application give request to

**http://localhost:8081/products/?productname=Mac** and observe that you will get all the product whose name contains Mac

9) Modify the path of inbound endpoint as `/products/{productname}` . In this path `{productname}` is the uri parameter

Now modify the flow variable value such that it extracts the product name from URI param

[Hint : `#{message.inboundProperties.'http.uri.params'.productname}`]

Deploy the application give request to **http://localhost:8081/products/Mac** and observe that you will get all the product whose name contains Mac



10) Now modify the outbound endpoint url as `/products/{pname}` .

Pass the value for pname by clicking on add parameter button as shown below :

The screenshot shows a configuration interface with three main sections: General Settings, URL Settings, and Parameters. In the General Settings section, the 'Connector Configuration' dropdown is set to 'HTTP\_Request\_Configuration'. The URL Settings section shows the 'Path' as '/products/{pname}' and the 'Method' as 'GET'. The Parameters section shows a single parameter with the name 'pname' and the value '#{flowVars.fvarname}'. There is an 'Add Parameter' button below the parameter list.

Deploy the application give request to **`http://localhost:8081/products/Mac`** and observe that you will get all the product whose name contains Mac

## This is the end of the Exercise