

Test OData Service using SAP Gateway Client

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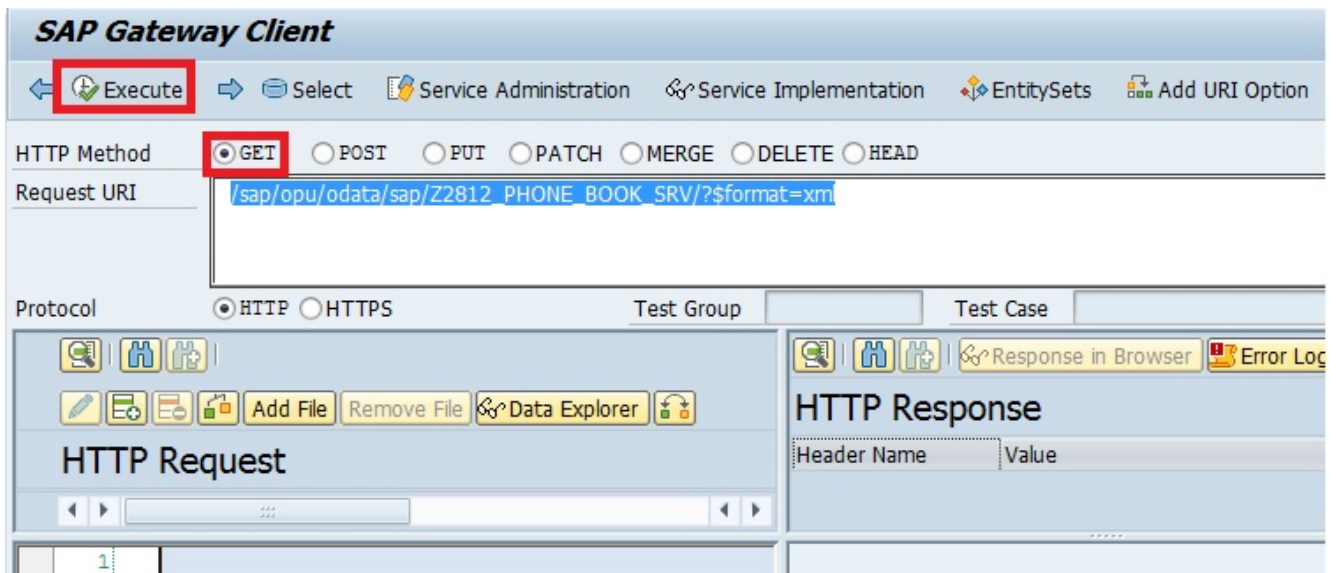
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Accessing Gateway Client

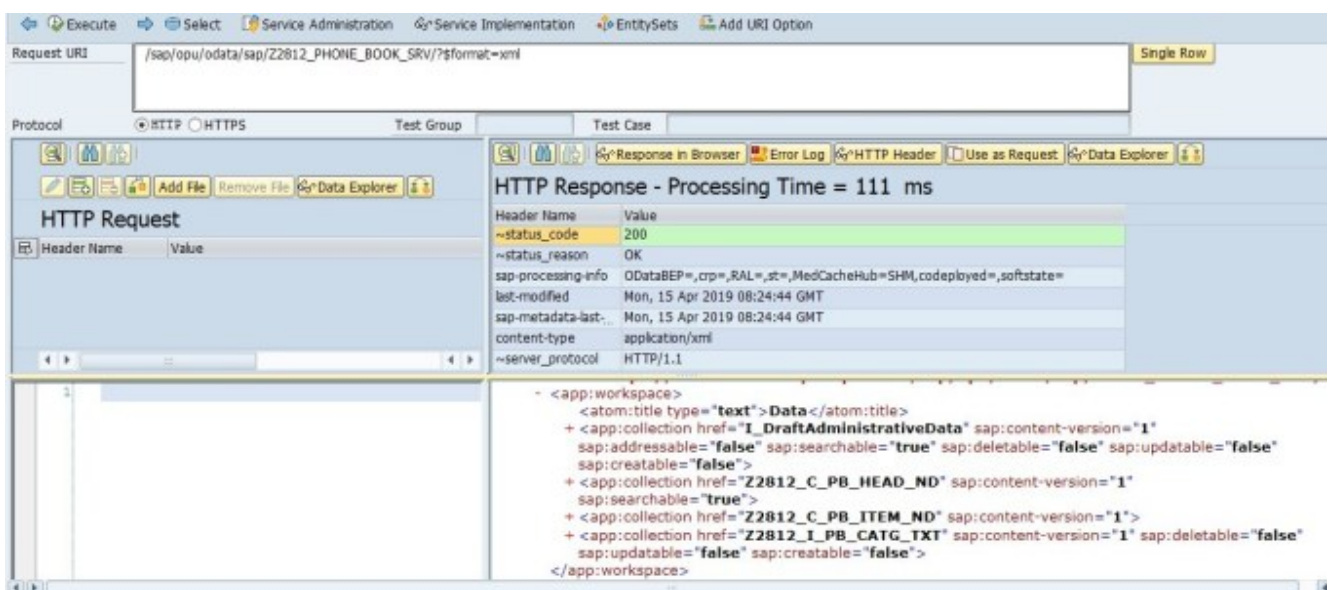
1. From *Service Implementation* view of **SEGW** project. Select the service and click on **SAP Gateway Client**
2. From Gateway Service Activate and Maintenance Screen (**/IWFND/MAINT_SERVICE**), select the service, select the **ICF Node** and click on **SAP Gateway Client**
3. Go to transaction **/IWFND/GW_CLIENT**

If you navigate to gateway client from gateway builder or service maintenance then, service link will be auto-populated in **Request URI**. If you directly access using transaction, then it will show the last request used by you. You can select service using the **SELECT** option from the toolbar.

Execute the GET method for service link directly without any entity set or metadata option.



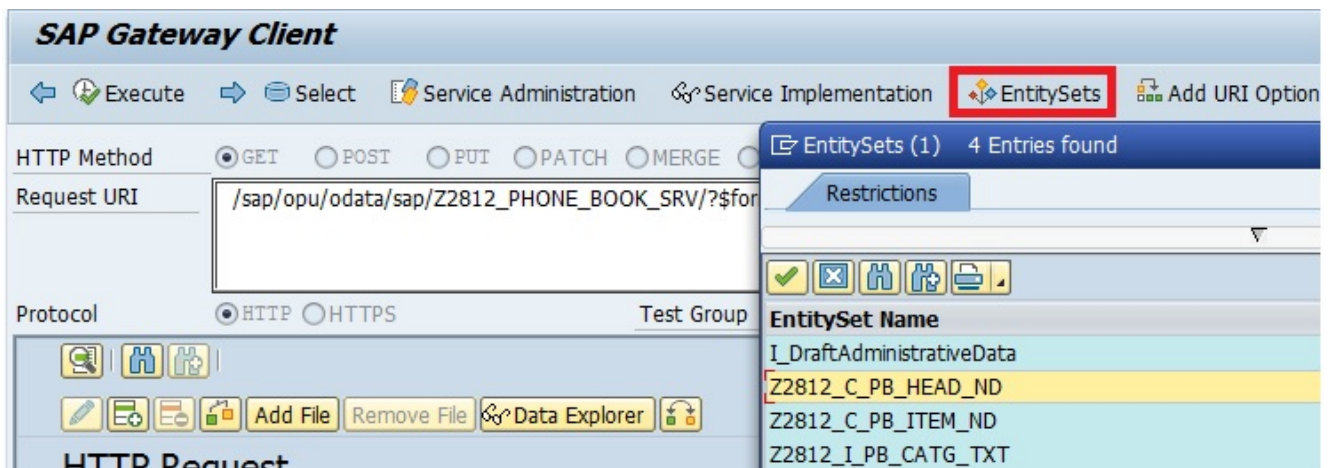
As a result it will display the list of Entity Sets for that particular service.



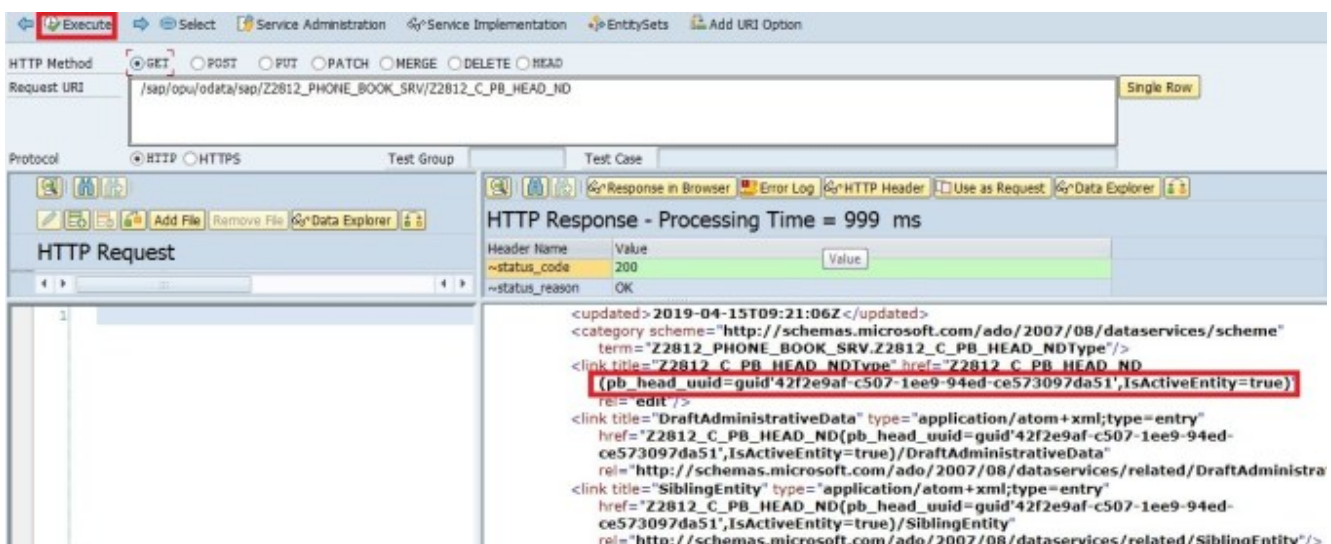
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Read

If Service link is already mentioned in Request URI, then click on **Entity Sets** and select the set that you want to read.



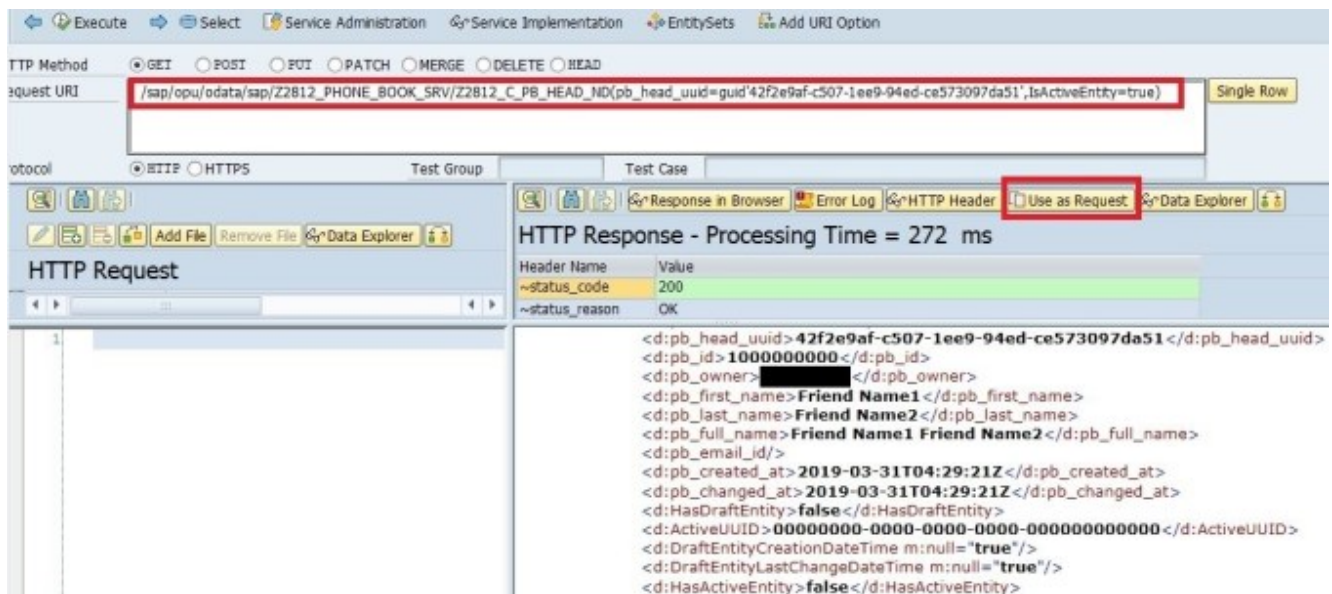
Execute the selected service and entity set using the **GET** method. It will display the list of **entities**. Each entity is represented by *XML tag <entry>*. Link to the specific entity can be seen as value for “href” within *XML tag <link>*, copy that and use it with the entity set link. Alternatively, you can find complete URL in *XML tag <id>*.



Execute the whole entity link with **GET** method. It will display the entity details.

Example:

```
/sap/opu/odata/SAP/Z2812_PHONE_BOOK_SRV/Z2812_C_PB_HEAD_ND(pb_head_uuid=guid'42f2e9af-c507-1ee9-94ed-ce573097da51',IsActiveEntity=true)
```



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Update

1. First, read the entity you want to update.
2. Next, click on option '**Use as Request**' on the **HTTP response** side. It will result in
 - Copying of the response body to the **HTTP Request** window.

- And header attributes such as **X-CSRF-Token** and **Content-Type**

3. Update the new value to the required field tag.
4. Select the **PUT** method and click on **Execute**
5. Data will be updated.

The screenshot displays the SAP NetWeaver Test Client interface. The 'Execute' button is highlighted in the top toolbar. The 'HTTP Method' dropdown is set to 'PUT'. The 'Request URI' is `/sap/opu/odata/sap/Z2B12_PHONE_BOOK_SRV/Z2B12_C_PB_HEAD_ND(pb_head_uuid=guid'42f2e9af-c507-1ee9-94ed-ce573097da51',IsActiveEntity=true)`. The 'HTTP Request' section shows the following headers:

Header Name	Value
X-CSRF-Token	4XGFb8P74hM4X6J0gTS4ug==
Content-Type	application/atom+xml;type=entry; charset=utf-8

The 'HTTP Response' section shows a status code of 200 and a processing time of 452 ms. The XML response is as follows:

```
<?xml version="1.0" encoding="UTF-8"?>
<entry
  xmlns:m="http://schemas.microsoft.com/ado/2007/08/
  xml:base="https://ldai1er9.wdf.sap.corp:44300/sap/opu
  xmlns:d="http://schemas.microsoft.com/ado/2007/08/d
  xmlns="http://www.w3.org/2005/Atom">
  <id>https://ldai1er9.wdf.sap.corp:44300/sap/opu/o
    (pb_head_uuid=guid'42f2e9af-c507-1ee9-94ed-
    ce573097da51',IsActiveEntity=true)</id>
```

In the XML body, the email address has been updated to `email.updated@oData.request`.

Updated data for the processed entity

Details	
Group description	Cell Content
Client	600
Key	42F2E9AFC5071EE994EDCE573097DA51
Phone Book ID	1000000000
Created By	
First Name	Friend Name1
Last Name	Friend Name2
Email Address	email.updated@oData.request
Created at	20.190.331.042.921
Changed at	20.190.415.093.930

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Create

1. First, read the entity you want to update.
2. Next, click on option '**Use as Request**' on the **HTTP response** side. It will result in
 - Copying of the response body to the **HTTP Request** window.
 - And header attributes such as **X-CSRF-Token** and **Content-Type**
3. Delete all the reference to the copied entity, between **<entry>** and **<content>** tag.
4. Provide initial and new values to required fields tag.

5. Select **POST** method and click on **Execute**
6. The record will be created in DB.

Sample request for Creation.

I have removed my host-name with <hostname> in <entry> tag (sensitive data) In general, no action is required for this as request body is copied from the response.

```
<?xml version="1.0" encoding="utf-8"?>
<entry
xml:base="https:<hostname>/sap/opu/odata/sap/Z2812_PHONE_BOOK_
SRV/"
xmlns="http://www.w3.org/2005/Atom"
xmlns:m="http://schemas.microsoft.com/ado/2007/08/dataservices
/metadata"
xmlns:d="http://schemas.microsoft.com/ado/2007/08/dataservices
">
  <content type="application/xml">
    <m:properties>
      <d:Activation_ac>false</d:Activation_ac>
      <d:Copy_ac>true</d:Copy_ac>
      <d>Edit_ac>true</d>Edit_ac>
      <d>Email_ac>true</d>Email_ac>
      <d:Preparation_ac>false</d:Preparation_ac>
      <d:Validation_ac>false</d:Validation_ac>
      <d:pb_email_id_fc>3</d:pb_email_id_fc>
      <d:pb_first_name_fc>3</d:pb_first_name_fc>
      <d:pb_head_uuid_fc>1</d:pb_head_uuid_fc>
      <d:pb_last_name_fc>3</d:pb_last_name_fc>
    <d:pb_head_uuid>00000000-0000-0000-0000-000000000000</d:pb_head_uuid>
      <d:pb_id>0000000000</d:pb_id>
      <d:pb_owner>Gateway</d:pb_owner>
      <d:pb_first_name>oData</d:pb_first_name>
      <d:pb_last_name>Create</d:pb_last_name>
      <d:pb_full_name>Create oData</d:pb_full_name>
      <d:pb_email_id>email.created@oData.request</d:pb_email_id>
      <d:pb_created_at>2019-04-15T00:00:01Z</d:pb_created_at>
      <d:pb_changed_at>2019-04-15T00:00:01Z</d:pb_changed_at>
```



```

    <d:HasDraftEntity>>false</d:HasDraftEntity>
<d:ActiveUUID>00000000-0000-0000-0000-000000000000</d:ActiveUU
ID>
    <d:DraftEntityCreationDateTime m:null="true"/>
    <d:DraftEntityLastChangeDateTime m:null="true"/>
    <d:HasActiveEntity>>false</d:HasActiveEntity>
    <d:IsActiveEntity>true</d:IsActiveEntity>
</m:properties>
</content>
</entry>

```

The screenshot displays the SAP Web IDE interface for testing an OData service. The 'Execute' button is highlighted in the top toolbar. The 'POST' method is selected for the request. The request URI is `https://[redacted]/sap/opu/odata/SAP/Z2812_PHONE_BOOK_SRV/Z2812_C_PB_HEAD_NO`. The response shows a status code of 201 (Created) and a detailed XML body. The XML body includes the following elements:

```

<?xml version="1.0" encoding="UTF-8"?>
<entry xmlns="http://www.w3.org/2005/Atom"
  xmlns:d="http://schemas.microsoft.com/ado/2007/08/dataservices"
  xmlns:m="http://schemas.microsoft.com/ado/2007/08/dataservice"
  id="https://[redacted]/sap/opu/odata/SAP/Z2812_C_PB_HEAD_NO(pb_head_uuid=guid'42f2e9af-c4ef-1ee9-97ed-da70c47d955e',IsActiveEntity=true)">
  <title type="text">Z2812_C_PB_HEAD_NO(pb_head_uuid=guid'42f2e9af-c4ef-1ee9-97ed-da70c47d955e',IsActiveEntity=true)</title>
  <m:properties>
    <d:Activation_ac>>false</d:Activation_ac>
    <d:Copy_ac>true</d:Copy_ac>
    <d>Edit_ac>true</d>Edit_ac>
    <d>Email_ac>true</d>Email_ac>
    <d:Preparation_ac>>false</d:Preparation_ac>
    <d:Validation_ac>>false</d:Validation_ac>
    <d:pb_email_id_fc>3</d:pb_email_id_fc>
  </m:properties>
</entry>

```

New entry created in DB

Details	
Group description	Cell Content
Client	600
Key	42F2E9AFC4EF1EE997EDDA70C47D955E
Phone Book ID	1000000013
Created By	
First Name	oData
Last Name	Create
Email Address	email.created@oData.request
Created at	20.190.415.110.841
Changed at	20.190.415.110.841

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Delete

1. First, read the entity you want to update.
2. Next, click on option '**Use as Request**' on the **HTTP response** side. It will result in
 - Copying of the response body to the **HTTP Request** window.
 - And header attributes such as **X-CSRF-Token** and **Content-Type**
3. Select the **DELETE** method and click on **Execute**
4. The record will be deleted.

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