**Lab Exercise 3– Creating Two Target Endpoints Based on a Query Parameter in a Single ProxyEndpoint**

**Objective:**

* Create one API proxy.
* Route traffic to two different backend APIs based on the value of a query parameter type.
* Use:
  + /typeapi?type=json → routes to json-target
  + /typeapi?type=xml → routes to xml-target

**Step 1: Create the API Proxy Skeleton**

1. Go to **Apigee Edge** or **Apigee X UI**.
2. Select **Develop > API Proxies > +Proxy**.
3. Choose **Reverse Proxy**.
4. Name: TypeRouterAPI
5. Base Path: /typeapi
6. Target URL (dummy): http://example.com
7. Click **Next**, then **Done**.

**Step 2: Update default.xml (ProxyEndpoint)**

**File path:** apiproxy/proxies/default.xml

Replace content with:

<ProxyEndpoint name="default">

<PreFlow name="PreFlow">

<Request/>

<Response/>

</PreFlow>

<HTTPProxyConnection>

<BasePath>/typeapi</BasePath>

<VirtualHost>default</VirtualHost>

</HTTPProxyConnection>

<RouteRule name="RouteToJson">

<Condition>(request.queryparam.type = "json")</Condition>

<TargetEndpoint>json-target</TargetEndpoint>

</RouteRule>

<RouteRule name="RouteToXml">

<Condition>(request.queryparam.type = "xml")</Condition>

<TargetEndpoint>xml-target</TargetEndpoint>

</RouteRule>

<RouteRule name="default">

<TargetEndpoint>default</TargetEndpoint>

</RouteRule>

</ProxyEndpoint>

**Step 3: Create TargetEndpoint - json-target**

**File path:** apiproxy/targets/json-target.xml

<TargetEndpoint name="json-target">

<PreFlow name="PreFlow">

<Request/>

<Response/>

</PreFlow>

<HTTPTargetConnection>

<URL>https://httpbin.org/json</URL>

</HTTPTargetConnection>

</TargetEndpoint>

**Step 4: Create TargetEndpoint - xml-target**

**File path:** apiproxy/targets/xml-target.xml

<TargetEndpoint name="xml-target">

<PreFlow name="PreFlow">

<Request/>

<Response/>

</PreFlow>

<HTTPTargetConnection>

<URL>https://httpbin.org/xml</URL>

</HTTPTargetConnection>

</TargetEndpoint>

**Step 5: Deploy and Test the Proxy**

1. Deploy the proxy to the test environment:
   * From Apigee UI > Deploy > Select Environment: test > Click **Deploy**.
2. Test via curl or Postman:

**🔹 Test JSON Target**

curl "https://your-org.apigee.net/typeapi?type=json"

**🔹 Test XML Target**

curl "https://your-org.apigee.net/typeapi?type=xml"

**🔹 Test Default (Fallback)**

curl "https://your-org.apigee.net/typeapi"

**Outcome**

* type=json → goes to https://httpbin.org/json
* type=xml → goes to https://httpbin.org/xml