A close-up of a logo

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**Classroom Session: Chaining of Requests (Create, Update, and Delete) for Change Request with OAuth in Postman**

**Learning Objective:** The objective of this session is to learn how to create, update, and delete change requests in ServiceNow using OAuth for authentication in Postman, and how to chain these requests by reusing the sys\_id from one request to the next.

**Expected Completion Time:**

* Best Case: 45 minutes
* Average Case: 60 minutes

### Setting Up OAuth in ServiceNow

#### Precondition Steps:

**Step 1: Login to ServiceNow Developer Instance**

1. Open your web browser and navigate to your ServiceNow developer instance URL.
2. Login with your credentials.

**Step 2: Create an OAuth API Endpoint for External Clients**

1. Click on All -> Search & Ckick “**Rest** **API** **Explorer**” , Navigate to **System OAuth > Application Registry**.
2. Click on "New" at the top right corner.
3. Select "Create an OAuth API endpoint for external clients".
4. Fill in the required details:
   * Name: Provide a name for your OAuth API endpoint.
   * Client ID: The system generates a unique client ID. Copy this ID: *37014ccc42b14210c41ba689ab4d004f*.
   * Client Secret: Click on "Toggle password visibility" to reveal and copy the client secret: YSTGp8FDHW.
5. Click on "Submit" to save your new OAuth API endpoint.

**Step 3: Generate Access Token**

1. Follow the instructions provided in the ServiceNow support article to generate an access token:
   * [ServiceNow OAuth Token Generation Guide](https://support.servicenow.com/kb?id=kb_article_view&sysparm_article=KB0778194).

### Configuring Postman to Use OAuth

#### Step-by-Step Guide:

**Part 1: Generate Access token**

**Step 1: Create a Collection**

1. Create a new collection.

**Step 2: Create a New Request**

1. Click on "New" and select "HTTP Request".
2. Name your request appropriately, e.g., "Generate OAuth".

**Step 3: Set Up the Request URL**

1. Set the request type to POST.
2. Enter the ServiceNow API endpoint for creating a change request:

**POST** https://<your\_instance>.service-now.com/oauth\_token.do

Replace <your\_instance> with your ServiceNow instance name.

**Step 4: Authentication**

1. Go to the "Authorization" tab.
2. NoAuth

**Step 5: Body**

1. Switch to the "**Body**" tab.
2. Select raw and choose **x-www-form-urlencoded** from the menu.
3. Fill in the details:
   1. **grand\_type:** Client Credentials
   2. **client\_id**: 37014ccc42b14210c41ba689ab4d004f
   3. **client\_secret**: YSTGp8FDHW
   4. **username**: admin
   5. **password**:<your instance password>

**Step 6: Save the Response as a Variable**

1. Create a Global variable as **Acces\_Token**
2. Go to the "**Scripts**" tab and add the following script to save the response as a variable:
   1. *var* resp=pm.response.json()
   2. *var* token=resp.access\_token
   3. pm.globals.set("Access\_token",token)

**Step 7: Send the Request**

1. Click "Send".
2. Observe the response in the lower pane and ensure it contains token.

**Part 2: Create the Change Request**

**Step 1: Create a New Request**

1. Click on "New" and select "HTTP Request".
2. Name your request appropriately, e.g., "Create Change Request".

**Step 3: Set Up the Request URL**

1. Set the request type to **POST**.
2. Enter the ServiceNow API endpoint for creating a change request:

POST https://<your\_instance>.service-now.com/api/now/table/change\_request

Replace <your\_instance> with your ServiceNow instance name.

**Step 4: Authentication**

1. Go to the "Authorization" tab.
2. Select "Bearer Token".
3. {{Access Token}} Pass the token Variable name in the token Field.
4. Click on Save.

**Step 5: Body**

1. Switch to the "Body" tab.
2. Select raw and choose JSON from the drop-down menu.
3. Enter the JSON payload for creating a change request. Example:

    {

  "short\_description": "Automated change request creation",

  "description": "Software"

  }

**Step 7: Save the Response as a Variable**

1. Go to the "**Scripts**" tab and add the following script to save the response as a variable:

*var* resp=pm.response.json();

*var* sys\_id=resp.result.sys\_id

pm.globals.set("System\_ID", sys\_id);

**Step 8: Send the Request**

1. Click "Send".
2. Observe the response in the lower pane and ensure it contains the details of the newly created change request, including the sys\_id.

**Part 3: Read the Change Request**

**Step 1: Create a New Request**

1. Click on "New" and select "HTTP Request".
2. Name your request appropriately, e.g., "Read Change Request".

**Step 2: Set Up the Request URL**

1. Set the request type to **GET**.
2. Enter the ServiceNow API endpoint for reading a change request:

**GET** https://<your\_instance>.service-now.com/api/now/table/change\_request/{{changeRequestSysId}}

Replace <your\_instance> with your ServiceNow instance name. The {{changeRequestSysId}} is the global variable set in the previous step.

**Step 3: Authentication**

1. Go to the "Authorization" tab.
2. Select "Bearer Token".
3. {{Access Token}} Pass the token Variable name in the token Field.
4. Click on Save.

**Step 4: Send the Request**

1. Click "Send".
2. Observe the response in the lower pane to ensure it contains the details of the change request.
3. Ensure the response body contains updated short\_description.

**Part 4: Update the Change Request**

**Step 1: Create a New Request**

1. Click on "New" and select "HTTP Request".
2. Name your request appropriately, e.g., "Update Change Request".

**Step 2: Set Up the Request URL**

1. Set the request type to PUT.
2. Enter the ServiceNow API endpoint for updating a change request:

**PUT** https://<your\_instance>.service-now.com/api/now/table/change\_request/{{changeRequestSysId}}

Replace <your\_instance> with your ServiceNow instance name. The {{changeRequestSysId}} is the global variable set in the previous step.

**Step 3: Authentication**

1. Go to the "Authorization" tab.
2. Select "Bearer Token".
3. {{Access Token}} Pass the token Variable name in the token Field.
4. Click on Save.

**Step 4: Body**

1. Switch to the "Body" tab.
2. Select raw and choose JSON from the drop-down menu.
3. Enter the **JSON** payload for updating the change request. Example:

    {

  "short\_description": "Automated change request Updation",

  "description": "Software updation"

  }

**Step 5: Send the Request**

1. Click "Send".
2. Observe the response in the lower pane and ensure it contains the updated details of the change request.

**Part 5: Delete the Change Request**

**Step 1: Create a New Request**

1. Click on "New" and select "HTTP Request".
2. Name your request appropriately, e.g., "Delete Change Request".

**Step 2: Set Up the Request URL**

1. Set the request type to DELETE.
2. Enter the ServiceNow API endpoint for deleting a change request:

**DELETE** https://<your\_instance>.service-now.com/api/now/table/change\_request/{{changeRequestSysId}}

Replace <your\_instance> with your ServiceNow instance name. The {{changeRequestSysId}} is the global variable set in the previous steps.

**Step 3: Authentication**

1. Go to the "Authorization" tab.
2. Select "Bearer Token".
3. {{Access Token}} Pass the token Variable name in the token Field.

Click on Save **Step 4: Send the Request**

1. Click "Send".
2. Observe the response in the lower pane to ensure the change request has been successfully deleted.

### Expected Outcome:

Upon completion, you should be able to:

* Set up OAuth authentication in ServiceNow and Postman.
* Chain API requests in Postman to create, read, update, and delete change requests.
* Handle and troubleshoot common mistakes in OAuth setup and API requests.