### **Step-by-Step Guide: Creating a Script to Fetch Data from Jobber Using API**

1. **Set Up Your Environment:**
   * If you’re using Google Apps Script, go to [Google Apps Script](https://script.google.com/) and create a new project.
   * This environment allows you to write scripts that interact with various Google services, including Google Sheets, and external APIs like Jobber’s.
2. **Store Your Access Token Securely:**
   * Before writing the script, ensure your Jobber access token is stored securely. You can store it in a Google Sheet or as a script property.
   * Example: Store the access token in a Google Sheet’s cell.



1. **Write the Script to Fetch Data:**
   * Start by writing a function that sends a POST request to Jobber’s GraphQL API. The function will use the stored access token to authenticate the request.

### **1. fetchTotalNumberOfSchedules()**

* **Purpose**: This is the primary function of the script, responsible for fetching the total number of job schedules from the Jobber API and writing this data to a Google Sheet.
* **Key Actions**:
  + Retrieves the stored access token using the getStoredAccessToken() function.
  + Constructs and sends a GraphQL query to the Jobber API to fetch the total count of job schedules.
  + Logs the request details and handles the API response.
  + Writes the total number of schedules to a Google Sheet named "TotalSchedules."

### **2. getStoredAccessToken()**

* **Purpose**: Retrieves the stored access token from a Google Sheet and checks if it is still valid.
* **Key Actions**:
  + Opens the Google Sheet where tokens are stored and retrieves the access token from a specific cell.
  + Checks if the token is expired using the isTokenExpired() function.
  + If the token is expired or not found, it calls the refreshAccessToken() function to obtain a new token.

### **3. isTokenExpired()**

* **Purpose**: Determines if the stored access token has expired.
* **Key Actions**:
  + Opens the Google Sheet to retrieve the timestamp of the last token update.
  + Compares the current time with the timestamp to see if more than one hour has passed since the last update.
  + Returns true if the token is expired, otherwise returns false.

### **4. refreshAccessToken()**

* **Purpose**: Refreshes the access token using the stored refresh token when the current access token expires.
* **Key Actions**:
  + Retrieves the stored refresh token from the Google Sheet.
  + Constructs a payload for the OAuth token endpoint to request a new access token and refresh token.
  + Sends a POST request to the Jobber API’s token endpoint.
  + If successful, updates the stored tokens in the Google Sheet using the updateJobberTokens() function.

### **5. updateJobberTokens(tokens)**

* **Purpose**: Updates the stored access and refresh tokens in the Google Sheet.
* **Key Actions**:
  + Opens the Google Sheet and updates the timestamp of the token update.
  + Stores the new access token and refresh token in their respective cells.

### **6. getStoredRefreshToken()**

* **Purpose**: Retrieves the stored refresh token from the Google Sheet.
* **Key Actions**:
  + Opens the Google Sheet where tokens are stored and retrieves the refresh token from a specific cell.
  + Returns the refresh token for use in refreshing the access token.

### **Summary of Script Flow:**

1. **Initialization**: fetchTotalNumberOfSchedules() is called, retrieving the access token.
2. **Token Management**: The script checks if the token is valid and refreshes it if necessary.
3. **Data Fetching**: The script sends a GraphQL query to the Jobber API to fetch the total number of job schedules.
4. **Data Storage**: The total number of schedules is written to a Google Sheet for further use or reporting.
5. **Logging and Error Handling**: The script includes logging throughout to track its operations and handle any errors that may occur.

**WORKING SCRIPTS**

[Richboro - Invoices Script](https://docs.google.com/document/d/116lpe4dtUhfzOzM6I7HT7kfYrxzryY_29iDvXqnHdpE/edit?usp=sharing)

[Richboro - Quotes Script](https://docs.google.com/document/d/1jRPZr9zJH_KpXOcwaLnyC5F4e_OBqrdGY4CLtSjYxn8/edit?usp=sharing)

[Richboro - Requests Script](https://docs.google.com/document/d/1knaUrWufvkzbc-nUTCXCRggzqoSFYe3j4DdAF_HB0NQ/edit?usp=sharing)

[Richboro - Jobs Script](https://docs.google.com/document/d/1rpzPX4iQ4npGqSAwJED00Fo8Y5Mq10FA97iS3lQy-mE/edit?usp=sharing)

[Richboro - ClientsData Script](https://docs.google.com/document/d/1dm4vY4yBo1R11vrw-nl8AF5rSKAIchA_WT_DLOQ28J4/edit?usp=sharing)

[Richiboro - Schedules Script](https://docs.google.com/document/d/1AAyJMK5Qg3v3GMJfwbuQtp62XmsFnme2gkbSfTz7Hn4/edit?usp=sharing)