1 INTRODUCTION

In order to access the Nielsen API Portal services, there are three steps that need to be followed sequentially by the user:

1. User Registration
2. Application Creation & API Plan Subscription
3. API Key Access & Use

This document depicts step-by-step instructions for each the above steps.

2 USER REGISTRATION

User Registration is required for first time users. Please follow the below steps to complete User Registration:

Step 1: Open a web browser (Mozilla Firefox, Google Chrome, Internet Explorer v11.0 and Safari) and navigate to https://portal.developer.nielsen.com

Step 2: Click on the “Register” link as shown in below picture:
Step 2: Enter details in the “Register A New User” form and click “Create New Account” button. Make sure to enter a valid Email ID as the registration process will send a system generated email to validate the email address entered and provide instructions to activate the account.

Step 4: Check your mail box for system generated mail from “Nielsen API Portal <NielsenAPIPortalSupport@nielsen.com>”. Click the activation link or copy and paste in the browser window. This will lead to a new page with successful activation message and log-in form as shown below: .
Step 5: Click on Log in and provide the password that you want to set and click "SAVE".

Step 5: Your changes will be saved and you will be redirected to home.
3  APPLICATION CREATION AND API PLAN SUBSCRIPTION

Step 1: After signing in, click on the "MY APPs" menu:

Step 2: Register an Application to access the APIs. Click "Add a New App" link as show below:
Step 3: Provide a name in the “App Name” text field and select the product(s) that you would like to subscribe to then click “Create App”. Application name can be any user defined name i.e. Test App1.

Step 4: After successfully saving the Application, you will be returned to the MY APPs page, and you will see your new app in “Pending” status. An approval email is sent to the system administrator to review and approve your subscription request.
Once that request is processed, your App status will change from "Pending" to "Approved".

### MY APPS

- TestApp1

**Step 5:** Click on the App name and you can get the API Key in the consumer key field.  
*Note:* Consumer Key is a synonym for API Key.

#### TestApp1's Keys

<table>
<thead>
<tr>
<th>Key</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Key</td>
<td>[Redacted]</td>
</tr>
<tr>
<td>Consumer Secret</td>
<td>[Redacted]</td>
</tr>
<tr>
<td>Key Issued</td>
<td>Wed, 03/16/2016 - 01:27</td>
</tr>
<tr>
<td>Subscription End Date</td>
<td>Sat, 12/31/2016 - 00:00</td>
</tr>
</tbody>
</table>

### 4 API KEY ACCESS & USE

**Step 1:** If already logged in, please proceed to Step 2, else Log in to the portal by accessing the URL [https://portal.developer.nielsen.com](https://portal.developer.nielsen.com) and click on “LOGIN” on the top right corner of the page. Provide the user name, password and click “Log in” button.

**NIELSEN INSIGHTS AT YOUR FINGERTIPS**

Nielsen's API suite helps power your applications with programmatic access to Nielsen data feeds on consumer trends, media consumption, purchase habits and more.

- **AD MEASUREMENT**
  - Thousands of Campaigns and Ads

- **SEGMENTATION**
  - Hundreds of market segments
Step 2: After successful logging in, go to “My Apps” and click on App Name. Copy the Consumer Key(apikey).

Step 3: Click on the APIs button at the top of the page and select the API for which you requested access.

5 TESTING AN API USING THE API EXPLORER

Step 1: From the selected APIs page, click the Operation which you want to test.
Step 2: Input your Consumer Key (found on the "MY Apps page") into the apikey textbox.

Step 3: Update the necessary input parameters and click "Try It Out".

Step 7: This is an additional step which depicts how to access these APIs through browser. After, you can copy the API URL from the "CURL" tab and paste it in a browser, append the API key as Header/Query parameter shown below.
6 OAUTH OVERVIEW

OAuth is an authorization method to provide access to resources over an HTTP protocol. OAuth is an open standard for authorization that enables client applications to access server resources on behalf of a specific Resource Owner. OAuth also enables Resource Owners (end users) to authorize limited third-party access to their server resources without sharing their credentials. For example, a Gmail user could allow LinkedIn or Flickr to have access to their list of contacts without sharing their Gmail username and password.

7 OAUTH FEATURES OF API GATEWAY

The following features are implemented in the Nielsen API Portal for API with OAuth 2.0:

- Authentication Flow – If a user tries to access the APIs, it will ask for the user credentials to provide the access token. Once the token is generated, you can access the APIs.
- Authorization Flow – when the user tries to access the API along with the token, this flow ensures the validity of the token.

8 ACCESSING NIELSEN APIS WITH OAUTH ENABLEMENT

8.1 Getting an Access Token

To get an access token, you need the below details

- Client_Id
- Client_Secret
- Redirect URI
  
- Authorization URI
  
  (https://federate.answers.nielsen.com/as/authorization.oauth2)
- Token URI (https://federate.answers.nielsen.com/as/token.oauth2)
- User’s credentials for Answer’s login.

Once a user purchases an API subscription, they will get all the details mentioned above. To access an API, one can build his/her own application or can use SOAP UI.

8.2 Getting an Token through SOAP UI

1) Set the Authentication as Oauth 2.0 in SOAP UI
2) Client on “Get Token” and give all the details in the below mentioned window

Note: Client Identification and Client Secret are different for different users. It will be provided to each client separately.

3) After giving all the details, you click on “Get Access Token”
4) Below Answer’s login page will be returned. You will need to provide the login id and password.
5) Once you give valid credentials and click submit, the access token will be generated in the Authentication tab and refresh token would be generated in the “http log” area.

Access token

Refresh token

6) Click on “Advanced” settings in Authentication tab and you can select to pass the access token in a query string or as header parameter
7) In some Nielsen APIs, you can pass the token in a query string and in some you need to pass it in the header.
8) You can also pass the access token in the request parameter field of SOAP UI.

8.3 **Access token generation programmatically**

With all the required parameter at your hand a user can also get the access token programmatically. This can be done through any java code or .net code and jsp code.
Below attached jsp sample code can be referred to get the authorization code –

![AuthorizationCode.txt](attachment:AuthorizationCode.txt)

Below attached jsp sample code can be referred as to get the access token after getting the authorization code –

![GettingAccessToken.txt](attachment:GettingAccessToken.txt)
8.4 Passing the access token through APIX portal

If the access token has to be passed through header parameter, then the access token has to be passed in as Authorization field and in the below format ---

**HEADER PARAMETERS**

<table>
<thead>
<tr>
<th>Name</th>
<th>Values</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authorization (required)</td>
<td>Bearer xxx</td>
<td>string</td>
<td>This is the access token used for OAuth validation. The format for the Authorization field would be &quot;Bearer XXXXXX&quot;, where XXXXXX is your access token</td>
</tr>
</tbody>
</table>

8.5 Refresh Token

If you get an error stating that your access token is expired, you can use the refresh token to get a new access token by calling the access token URI provided to you with your client credentials. Access token life span is 120 min, so to use the API after this time, you will need to get another access token.

You can use SOAP UI or any REST client to send a POST call to the Access token URI provided to you. Below are the parameters which you require to get a new access token with the use of refresh token—

1) Access Token URI (https://federate.answers.nielsen.com/as/token.oauth2)
2) Refresh token
3) Grant_type = "refresh_token"
4) Client_id
5) Client_secret