Connecting Excel to the CS Lucas data repository

Connecting Excel to the CS Lucas data repository to retrieve data sets for building dashboards. This data can be combined with other data sets and other data sets outside the CS Lucas. The purpose is to deliver comprehensive insights that support critical decision-making in real-time.

These instructions detail creating an Excel template for retrieving datasets from the CS Lucas repository. The template may be shared with others with the necessary credentials so that they may retrieve the data, render it, and make further enhancements.

Pre-requisite

To access the data repository, you need the following:

User ID:	A user ID of an account to access the repository. This account must be activated for OTP (MFA). See MFA activation: https://www.cslucas.com/user-guide/multi-factor-authentication/
Token:	A 275-character text used for authentication, valid for 4 hours but token expiry can be configured. See Instructions: Get API Token.
Dataset:	The name of the required dataset from the repository. An inventory of all repositories and a sample dataset can be found here: Data Repository.
URL	A URL used to connect to the repository API. This URL contains all the above information. Construct this using Get API Token.
Power BI	You need to install Power BI Desktop. This guide is based on Version 2.138.782.0

The instructions use place markers and sample values for illustrative purposes. Replace them as appropriate.

Placeholder	Values
Domain	Production: api2p-live.cslucas.com/prod UAT: api2p-live.cslucas.com/uat
Userid	cslpowerbiuser
OTP_Token	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpc3MiOjJDUyBMdWNhcyIsImp0aSI6IjVhNGIwNzQ1LTU3MGYtNDVjZS05MjVhLTYwYzViMmVkYTAyNCIsImlhdCI6MTc0MjgxMDg0Niwic3ViIjoiYTlmMGE1YzAtY2Y4NS00N2NjLTk0NzQtZWNlZTdlNWEyZDI1IiwiZXhwIjoxNzQ0MDIwNDQ2fQ.oTf2M5ZABkOSXerHJUPBpyW_gN7K4I6KYlNptUrMno
As_at_date	Enter the date in this format: YYYY-MM-DD
Others	None
Dataset	ds1426
URL	https://api2p-live.cslucas.com/dataset_name/uat?userid=cslpowerbiuser&otp_token=eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpc3MiOjJDUyBMdWNhcyIsImp0aSI6IjVhNGIwNzQ1LTU3MGYtNDVjZS05MjVhLTYwYzViMmVkYTAyNCIsImlhdCI6MTc0MjgxMDg0Niwic3ViIjoiYTlmMGE1YzAtY2Y4NS00N2NjLTk0NzQtZWNlZTdlNWEyZDI1IiwiZXhwIjoxNzQ0MDIwNDQ2fQ.oTf2M5ZABkOSXerHJUPBpyW_gN7K4I6KYlNptUrMno&as_at_date=now&others=none
Source	= Json.Document(Web.Contents(Text.Combine({"https://",Domain,"/ds1426?userid=",Userid,"&otp_token=",Text.From(OTP_Token),"&as_at_date=",Text.From(As_at_date),"&others=",Text.From(Others),""}))

Connecting Excel

Step 1: Create the parameters

- Open Excel
- Select **Data** menu **> Get Data > Launch Power Query Editor**
- On the **Home** Tab, click on **Manage Parameters**
- Click on **New**
- Enter the following values to create **Domain** parameter.

  Name: Domain (Case sensitive. Ensure the parameter name matches the <Source> in Step 4 below.)

  Description: [blank]

  Required: Checked

  Type: Text

  Suggested Value: Any values

  Current value: <Domain>

- Click **New** to create the User ID parameter using the current value used in the <User ID>
- Repeat creation for the **OTP_Token** parameter.

  Mark Required as Uncheck

  Set current value = <Token>

- Repeat creation for the **As_at_date** parameter.

  Mark Required as Uncheck

  Set current value = <As_at_date>. Enter the date in this format: YYYY-MM-DD. E.g. 2017-07-02

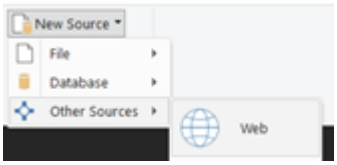
- Repeat creation for the **Others** parameter.

    Mark Required as Uncheck

    Set current value = None

Step 2 – Connect to the Repository

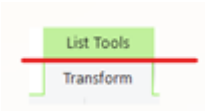
- Click on **New Source** (ribbon)
- Select **Other Source > Web**



- In the From Web dialogue, paste the <URL> in the URL field.
- Click OK. In a moment, the data will be populated in a single column.

Step 3 – Transform the data

- Select the “Transform” ribbon above the Menu bar.



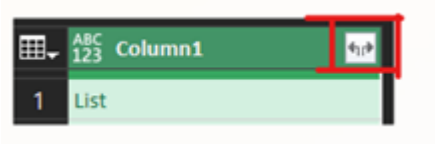
- On the ribbon, click on **To Table Convert**. In the pop up,

    Select or Enter delimiter: None

    How to handle extra column: Show as errors

    Click **OK**

- Click on the Expand icon to the right edge of the grid header



- Select on Extract value. In the pop-up

  For the delimiter to use for concatenating list values, select Tab

  Click **OK**

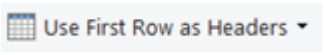
- In the **Home** ribbon, select **Split Column > By Delimiter**

  Select or Enter delimiter: Tab

  Click **OK**

  The data now resemble a table.

- In the **Home** ribbon, select **Use First Row as Headers**.

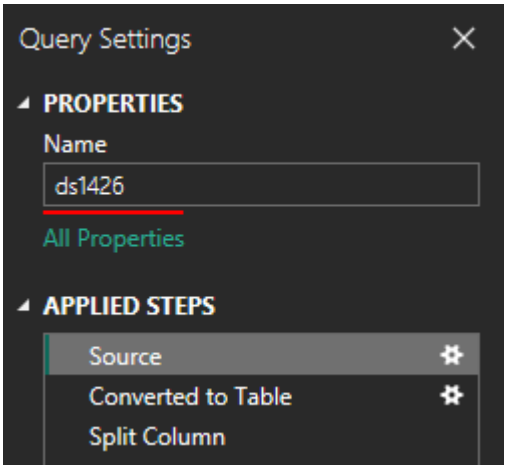


Step 4: Update Source to consume the parameters

- Select the **View** tab

- In the ribbon, select **Query Settings**. The Query setting panel appears on the right.

- Change the name to the name of the dataset. E.g. ds1426



– Under Applied steps, click on Source

– Expand the formula bar if necessary with the down arrow **(v)** to the right

– Select the entire content of the formula bar and replace it with <Source>. Include the "=" sign. Change the dataset name (illustrated here as ds1426) as appropriate.

– Save by clicking on the left check box.

– Select the **Home** menu, and in the ribbon, select **Close and Load**. The data loaded will be on a spreadsheet.

– Save the spreadsheet

Step 5: Apply a new OTP and Token

– Select the **Data** menu

– Select **Get Data > Launch Power Query Editor**

– To change OTP, select the relevant items on the left panel

– Enter the latest to replace the current value.

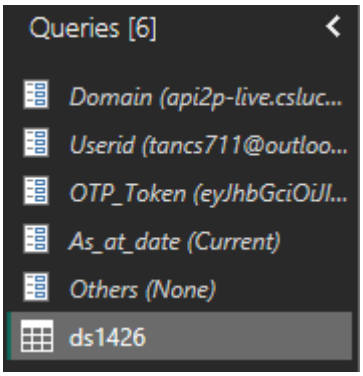
– To change the Token, select the relevant items on the left panel

– Paste the new Token to replace the current value.

– Select the **Home** menu, and in the ribbon

– Click on **Refresh preview**

– On the left panel, click on the name of the dataset. You should see the preview data



– select **Close and Load**

– Click on **Refresh All**

– The spreadsheet will be populated with the refreshed data.

You may now save the spreadsheet.