

Extracting Canary Tag Properties to Power BI using Web API call /getTagProperties

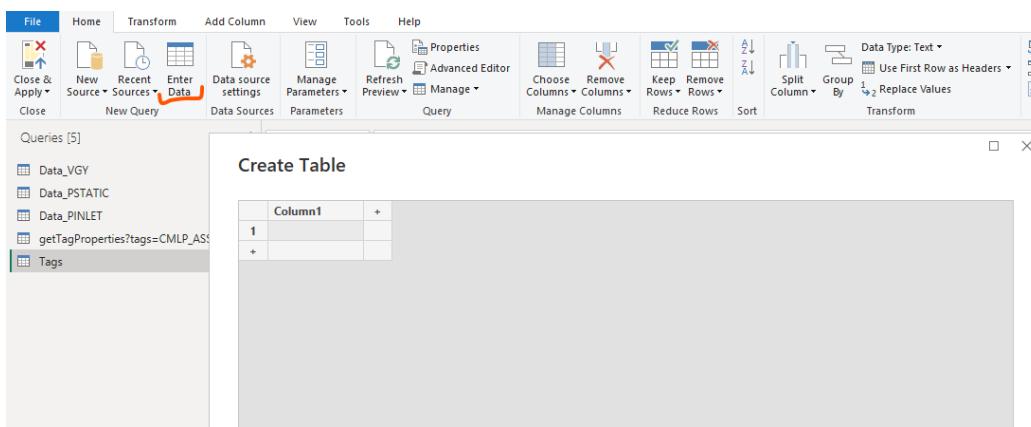
Problem Statement

Currently /GetTagProperties call does not support path, deep & search parameters and passing array of tags using Power BI URL is challenging. So how to extract tag properties for multiple Tags using /GetTagProperties call from Power BI

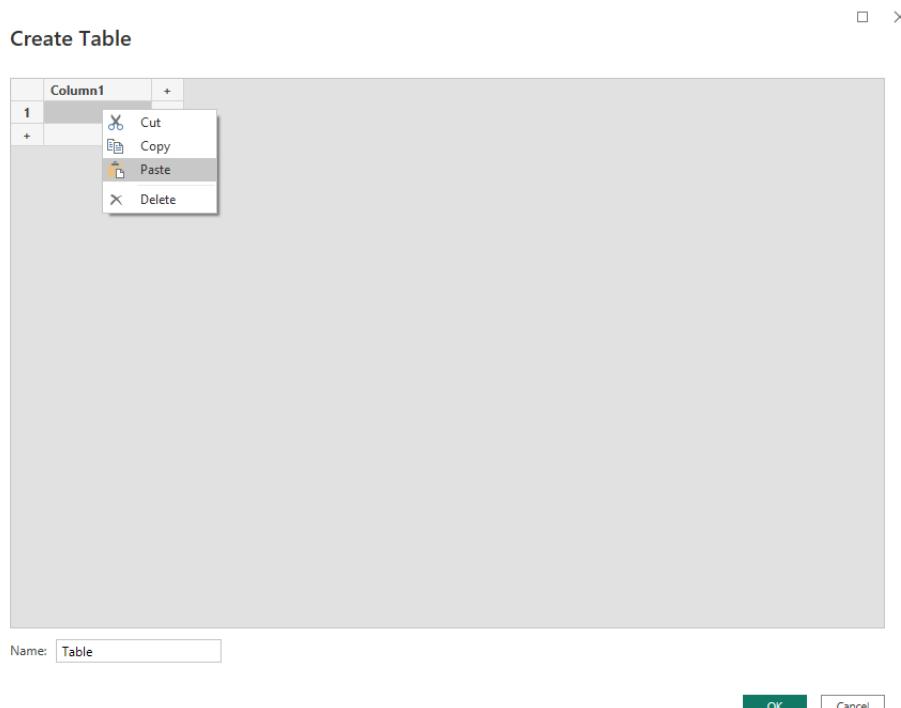
Procedure

1. Create a table of tags for which properties need to be extracted

- a. Click on Enter Data in Home page



- b. Paste tags & press OK



Queries [6]

		= Table.TransformColumnTypes(Source,{{"Name", type text}})								
<input type="checkbox"/>	Data_VGY									
<input type="checkbox"/>	Data_PSTATIC									
<input type="checkbox"/>	Data_PINLET									
<input type="checkbox"/>	getTagProperties?tags=CMLP_ASSET NE...									
<input type="checkbox"/>	Tags									
<input checked="" type="checkbox"/>	Table	<table border="1"> <thead> <tr> <th>A^B C Name</th> </tr> </thead> <tbody> <tr><td>1 CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BD...</td></tr> <tr><td>2 CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BO...</td></tr> <tr><td>3 CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BS-F...</td></tr> <tr><td>4 CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BT-F...</td></tr> <tr><td>5 CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-MS...</td></tr> <tr><td>6 CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-PC-F...</td></tr> <tr><td>7 CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-ST-F...</td></tr> </tbody> </table>	A ^B C Name	1 CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BD...	2 CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BO...	3 CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BS-F...	4 CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BT-F...	5 CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-MS...	6 CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-PC-F...	7 CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-ST-F...
A ^B C Name										
1 CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BD...										
2 CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BO...										
3 CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BS-F...										
4 CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BT-F...										
5 CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-MS...										
6 CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-PC-F...										
7 CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-ST-F...										

2. Create a Custom Column with Web API Call

- a. Go to add column tab and click on custom Column and create a /getTagProperties call for each value in Name Column

Table.TransformColumnTypes(Source,{{"Name", type text}})

A ^B C Name
1 CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BD...
2 CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.S...
3 CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.S...
4 CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.S...
5 CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.S...
6 CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.S...
7 CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.S...

Custom Column

Add a column that is computed from the other columns.

New column name: Custom

Custom column formula:

```
= Json.Document(Web.Contents("http://[REDACTED].api/v2/getTagProperties?tags=&[Name]"))
```

Available columns: Name

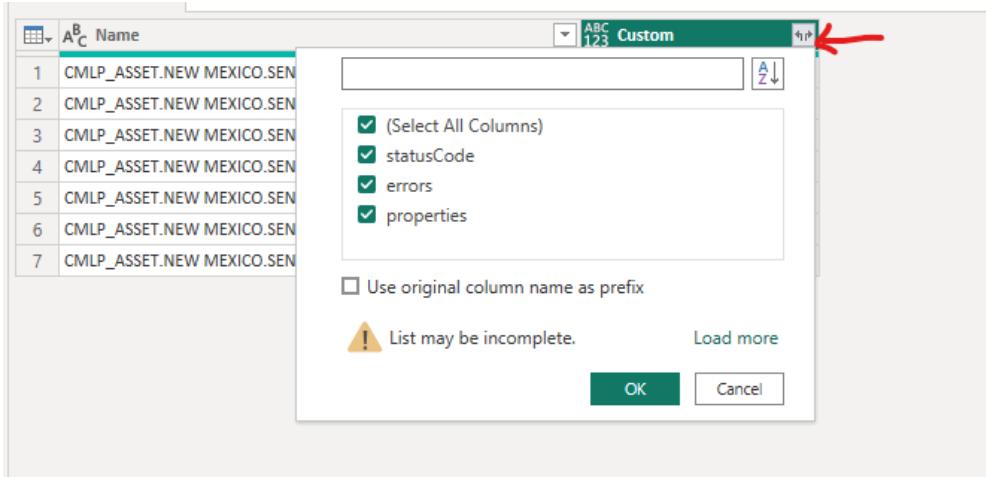
Learn about Power Query formulas

✓ No syntax errors have been detected.

OK Cancel

	A ^B C Name	ABC 123 Custom
1	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BD...	Record
2	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BO...	Record
3	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BS-F...	Record
4	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BT-F...	Record
5	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-MS...	Record
6	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-PC-F...	Record
7	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-ST-F...	Record

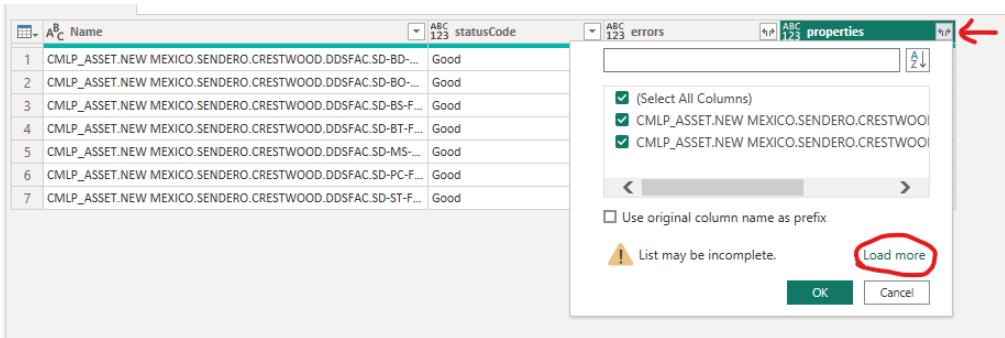
3. Press button on the right top corner to pivot record data in custom field



a. If Web API Call is a success, then status code for all rows will be 'Good'

	Name	statusCode	errors	properties
1	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BD...	Good	List	Record
2	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BO...	Good	List	Record
3	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BS-F...	Good	List	Record
4	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BT-F...	Good	List	Record
5	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-MS-...	Good	List	Record
6	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-PC-F...	Good	List	Record
7	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-ST-F...	Good	List	Record

4. pivot record data in Properties column by clicking on button on top right of column. Also click on load more if all tags don't show up, make sure all tags are checked and then press OK button.



5. Previous step will create columns for each tag.

- Let them remain selected and right click on one of them.

- Click on 'Unpivot Only Select Columns' option. This will create value column for each attribute

6. pivot record data by clicking on button on top right corner of Value Column and then selecting the properties needed.

The screenshot shows a database interface with a pivot dialog open over a table of asset data.

Pivot Dialog:

- Title Bar:** ABC Name, ABC 123 statusCode, ABC 123 errors, ABC Attribute, ABC 123 Value
- Content:**
 - Checklist of columns to include: (Select All Columns), Source ItemId, Historian ItemId, Description, Eng Units, Latitude, Longitude, Producer, Pad, Region, Desc, Type, ID, System, Shale.
 - Checkboxes: Use original column name as prefix, List may be incomplete, Load more.
 - Buttons: OK, Cancel.

Resulting Table:

	ABC statusCode	ABC errors	ABC Attribute	ABC Source ItemId	ABC Historian ItemId	ABC Description	ABC Eng Units
1	CMLP_ASSET NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BD...	Good	List	CMLP_ASSET NEW MEXICO SEN	localhost.CMLP.SD-BD-FAC_PINLET	Inlet Pressure	psig
2	CMLP_ASSET NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BO...	Good	List	CMLP_ASSET NEW MEXICO SEN	localhost.CMLP.SD-BO-FAC_PINLET	Inlet Pressure	psig
3	CMLP_ASSET NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BF...	Good	List	CMLP_ASSET NEW MEXICO SEN	localhost.CMLP.SD-BF-FAC_PINLET	Inlet Pressure	psig
4	CMLP_ASSET NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BT...	Good	List	CMLP_ASSET NEW MEXICO SEN	localhost.CMLP.SD-BT-FAC_PINLET	Inlet Pressure	psig
5	CMLP_ASSET NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-MS...	Good	List	CMLP_ASSET NEW MEXICO SEN	localhost.CMLP.SD-MS-FAC_PINLET	Inlet Pressure	psig
6	CMLP_ASSET NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-PC...	Good	List	CMLP_ASSET NEW MEXICO SEN	localhost.CMLP.SD-PC-FAC_PINLET	Inlet Pressure	psig
7	CMLP_ASSET NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-ST...	Good	List	CMLP_ASSET NEW MEXICO SEN	localhost.CMLP.SD-ST-FAC_PINLET	Inlet Pressure	psig