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

Create Table

- 1. Create a table of tags for which properties need to be extracted
  - a. Click on Enter Data in Home page

File	Home	Transf	orm	Add Co	olumn	View To	ols	Help										
Close & Apply • Close	New Source •	Recent Sources	Enter Data	Data sett	source tings	Manage Parameters • Parameters	Refre Previe	Broperties Advanced Editor sh w ▼ ■ Manage ▼ Query	Choose Columns	Remove Columns -	Keep Rows •	Remove Rows •	A↓ Z↓ A↓	Split Column <del>-</del>	Group By	Data Type: Text • Use First Row as He 2 Replace Values Transform	aders 🔻	₽ <b>₽</b>
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Data	_VGY				Crea	te Table												×
🛄 Data	PINLET				0	Column1	+											
🔲 getT	- agProper	ties?taos=	CMLP A	St	1													
Tags	;		-		+													

b. Paste tags & press OK

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	Column1	1	+	
1		~	<u>.</u>	
+		00	Cut	
		Ē	Сору	
		Ĉ	Paste	
		×	Delete	
		-	Denete	
Name:	Table			

Queries [6]	✓ f <sub>X</sub> = Table.TransformCo	<pre>lumnTypes(Source,{{"Name", type text}})</pre>
<ul> <li>Data_VGY</li> <li>Data_PSTATIC</li> </ul>		
Data_PINLET		
getTagProperties?tags=CMLP_ASSET NE	C Name	
III Tags	MLP_ASSET.NEW MEXICO.SENDERO.CREST	NOOD.DDSFAC.SD-BD
🛄 Table	MLP_ASSET.NEW MEXICO.SENDERO.CREST	WOOD.DDSFAC.SD-BO
	MLP_ASSET.NEW MEXICO.SENDERO.CREST	WOOD.DDSFAC.SD-BS-F
	MLP_ASSET.NEW MEXICO.SENDERO.CREST	WOOD.DDSFAC.SD-BT-F
	MLP_ASSET.NEW MEXICO.SENDERO.CREST	WOOD.DDSFAC.SD-MS
	MLP_ASSET.NEW MEXICO.SENDERO.CREST	NOOD.DDSFAC.SD-PC-F
	MLP_ASSET.NEW MEXICO.SENDERO.CREST	NOOD.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

1,	A <sup>B</sup> C Name		
	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-B	D	
2	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.S		×
	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.S	Custom Column	
	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.S		
	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.S	Add a column that is computed from the other columns.	
	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.S	New column name	
	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.S	Custom	
		Custom column formula ①	Available columns
		= Json.Document(Web.Contents("http://compared.api/ v2/getTagProperties?tags="&[Name])))	Name <- Insert
		Learn about Power Query formulas	OK Cancel

	A <sup>B</sup> <sub>C</sub> Name	ABC 123 Custom 112
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 <sup>B</sup> <sub>C</sub> Name	ABC 123 Custom
1	CMLP_ASSET.NEW MEXICO.SEN	₽↓
2	CMLP_ASSET.NEW MEXICO.SEN	
3	CMLP_ASSET.NEW MEXICO.SEN	<ul> <li>(Select All Columns)</li> </ul>
4	CMLP_ASSET.NEW MEXICO.SEN	✓ statusCode
5	CMLP_ASSET.NEW MEXICO.SEN	errors
6	CMLP_ASSET.NEW MEXICO.SEN	properties
7	CMLP_ASSET.NEW MEXICO.SEN	
		Use original column name as prefix
		List may be incomplete. Load more
		OK Cancel

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

	A <sup>B</sup> <sub>C</sub> Name	ABC statusCode	ABC 123 errors ♠₽	ABC properties 123
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.

	A <sup>B</sup> <sub>C</sub> Name	<ul> <li>ABC 123 statusCode</li> </ul>	<ul> <li>ABC 123 errors</li> </ul>	ht ABC propert	ies 🛛 💀 🍯
1	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BD-	Good			₽↓
2	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BO-	Good			
3	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BS-	F Good	(Select All Co	lumns)	
4	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BT-	F Good	CMLP_ASSET	NEW MEXICO.SENDER	D.CRESTWOOI
5	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-MS-	Good	CMLP_ASSET	NEW MEXICO.SENDER	D.CRESTWOOI
6	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-PC-	F Good	(		
7	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-ST-	F Good	<		>
			Use original col	umn name as prefix	
			List may be in	ncomplete.	Load more
				ОК	Cancel

	A <sup>B</sup> <sub>C</sub> Name	ABC 123 statusCode	ABC 123 errors 10 ABC 123 properties 10
1	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BD	Good	Search Columns to Expand 2↓
2	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BO	Good	
3	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BS-F	Good	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTW(
4	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BT-F	Good	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTW(
5	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-MS	Good	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTW(
6	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-PC-F	Good	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTW(
7	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-ST-F	Good	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTW(
			CMLP_ASSET.NEW MEXICO.SENDERO.CRESTW(
			>
			Use original column name as prefix
			OK Cancel

- 5. Previous step will create columns for each tag.
  - a. Let them remain selected and right click on one of them.

	A <sup>B</sup> <sub>C</sub> Name	ABC 123 statusCode	ABC 123 errors	ABC CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC	ABC CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFA
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	null	Record
3	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BS-F	Good	List	null	
4	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BT-F	Good	List	null	
5	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-MS	Good	List	null	
6	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-PC-F	Good	List	null	
7	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-ST-F	Good	List	null	

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

	A <sup>B</sup> <sub>C</sub> Name	ABC statusCode	ABC errors	ABC CMLP_ASSET.NEW MEXICO.SENDERO.CREST	En	Сору	IEXICO.SENDERO.CRESTWOOD.DDSF/
1	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BD	Good	List	Record	4114		
2	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BO	Good	List		×	Remove Columns	
3	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BS-F.	Good	List			Remove Other Columns	
4	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BT-F.	Good	List		₽2	Add Column From Examples	
5	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-MS	Good	List			Remove Errors	
6	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-PC-F	Good	List			Fill >	
7	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-ST-F.	Good	List			Merge Columns	
						United Columns	
					<b>*</b>	Unpivot Columns	
						Unpivot Other Columns	
						Unpivot Only Selected Columns <	-
						Move +	
					_		_

	A <sup>B</sup> <sub>C</sub> Name	r ABC statusCode ▼	ABC 123 errors	A <sup>B</sup> <sub>C</sub> Attribute	ABC Value	٩Þ
1	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BD	Good	List	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BD	Record	
2	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BO	Good	List	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BO	Record	
3	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BS-F	Good	List	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BS-F	Record	
4	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BT-F	Good	List	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BT-F	Record	
5	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-MS-	Good	List	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-MS	Record	
6	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-PC-F	Good	List	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-PC-F	Record	
7	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-ST-F.	Good	List	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-ST-F	Record	

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

с	* 123 statu	IsCode ABC errors	ABC Attribute	■ ABC 123 Value		
MLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSF	AC.SD-BD Good	List	CMLP_ASSET.NEW MEXICO.SEN	2↓		
MLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSF	AC.SD-BO Good	List	CMLP_ASSET.NEW MEXICO.SEN	-		
MLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSF	AC.SD-BS-F Good	List	CMLP_ASSET.NEW MEXICO.SEN	<ul> <li>(Select All Columns)</li> </ul>		
MLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSF	AC.SD-BT-F Good	List	CMLP_ASSET.NEW MEXICO.SEN	Source ItemId		
MLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSF	AC.SD-MS Good	List	CMLP_ASSET.NEW MEXICO.SEN	Historian Itemid		
MLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSF	AC.SD-PC-F Good	List	CMLP_ASSET.NEW MEXICO.SEN	Description		
MLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSF	AC.SD-ST-F Good	List	CMLP_ASSET.NEW MEXICO.SEN	Eng Units		
				Congredue     Producer		
				Pad		
				Region		
				☑ Desc		
				Type		
				ID ID		
				System		
				✓ Shale		
				Use original column name as prefix		
				1 List may be incomplete. Load more		
				OK Cancel		

	-	ABC 123 statusCode	ABC 123 errors	A <sup>B</sup> <sub>C</sub> Attribute	ABC 123 Source ItemId	ABC Historian ItemId	ABC Description	ABC Eng Units
1	OD.DDSFAC.SD-BD	Good	List	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BD	localhost.CMLP.SD-BD-FAC_PINLET	localhost.CMLP.SD-BD-FAC_PINLET	Inlet Pressure	psig
2	OD.DDSFAC.SD-BO	Good	List	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BO	localhost.CMLP.SD-BO-FAC_PINLET	localhost.CMLP.SD-BO-FAC_PINLET	Inlet Pressure	psig
3	OD.DDSFAC.SD-BS-F	Good	List	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BS-F.	localhost.CMLP.SD-BS-FAC_PINLET	localhost.CMLP.SD-BS-FAC_PINLET	Inlet Pressure	psig
4	OD.DDSFAC.SD-BT-F	Good	List	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-BT-F	localhost.CMLP.SD-BT-FAC_PINLET	localhost.CMLP.SD-BT-FAC_PINLET	Inlet Pressure	psig
5	OD.DDSFAC.SD-MS	Good	List	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-MS	localhost.CMLP.SD-MS-FAC_PINLET	localhost.CMLP.SD-MS-FAC_PINLET	Inlet Pressure	psig
6	OD.DDSFAC.SD-PC-F	Good	List	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-PC-F	localhost.CMLP.SD-PC-FAC_PINLET	localhost.CMLP.SD-PC-FAC_PINLET	Inlet Pressure	psig
7	OD.DDSFAC.SD-ST-F	Good	List	CMLP_ASSET.NEW MEXICO.SENDERO.CRESTWOOD.DDSFAC.SD-ST-F	localhost.CMLP.SD-ST-FAC_PINLET	localhost.CMLP.SD-ST-FAC_PINLET	Inlet Pressure	psig