HOW TO USE A VERACITY CONTAINER AS DATA SOURCE IN POWER BI AND HOW TO SET IT UP FROM VAP – VERACITY ADAPTER FOR POWER BI

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When you develop your Power BI report to use data from a Veracity container there are some steps to be aware of. When this description is written there are limitations in functionality both from Microsoft Power BI REST API used by VAP and from Veracity. This document describes how you currently can set it up both from a Veracity Container, from Power BI and from VAP (version number in the footer).

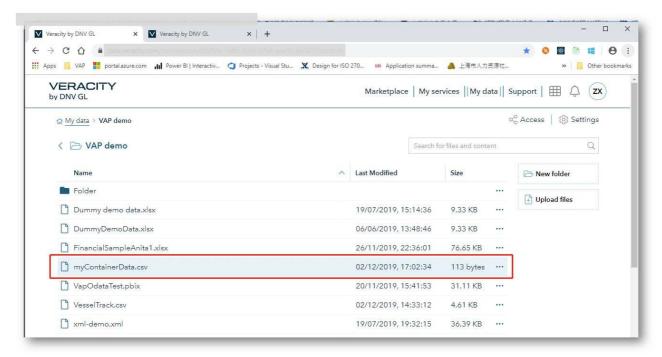
When you build a Power BI report on top of data from a container, the data source, access key and file name are stored as settings in your Power BI report. The Veracity container access key used when building the report has a maximum validity of 6 months. Once the key in your report expires, it will not be possible to refresh the report. Here you will learn the steps you have to take to make sure VAP can always refresh your report.

1.1 Upload data source file to your container

We assume you have Data Steward access to a container on Veracity (if not, please contact Veracity). Make sure you have uploaded at least one file to your Container. We will use myContainerData.csv as an example.

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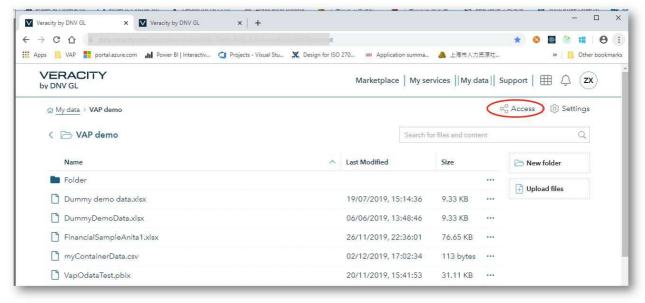


1.2 Share access to VAP service account

A Veracity container access key has a maximum validity of 6 months.

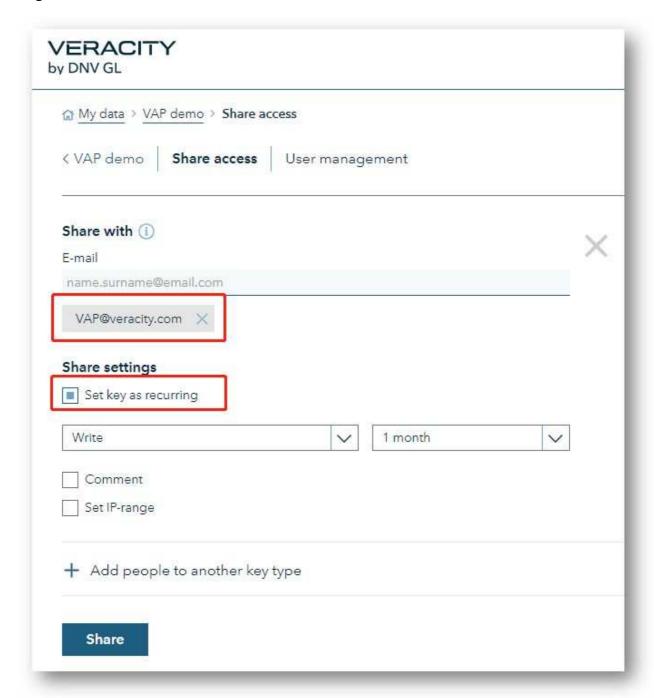
When you develop a Power BI report and use data from a Veracity container, VAP needs to have access to your container in order to refresh the report.

To allow VAP to get a new access token/key to the container automatically you have to share a key from your container to the VAP Service account VAP@veracity.com. Please click Access as shown in the image below.



When sharing the key, please select 'Set key as recurring', set access level to 'Read and list' and set duration to 1hour. Then click Share.

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2 THERE ARE TWO WAYS TO CONNECT TO A VERACITY DATA SOURCE WHEN BUILDING A POWER BI REPORT

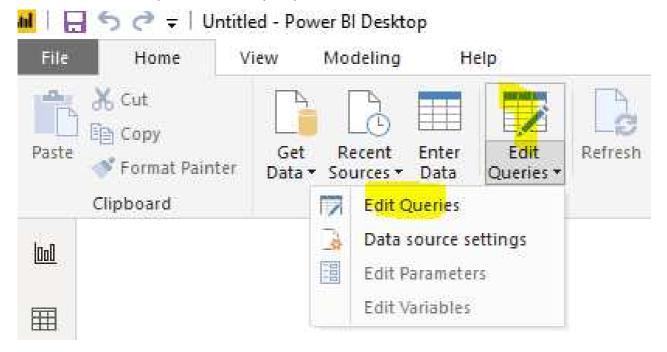
You can select either 'Web' or use 'OData feed'. This section will describe what to do for both cases. Both alternatives require workaround actions due to limitations from Microsoft, but both ways let you connect to the data in the container, renew the access key and change the file name of your data file. These two options let VAP change the data source information stored in your Power BI file.

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2.1 Alternative 1 - from Get data from 'Web'

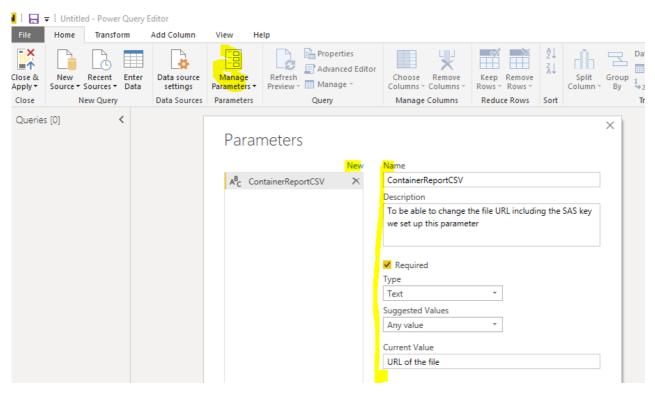
The current limitation from Microsoft is that the data source information stored in your Power BI file can only be changed if you define a Parameter when building your report in Power BI. Because of this we must do some workaround steps as described here.

Select the menu 'Edit Queries' to define your parameter.

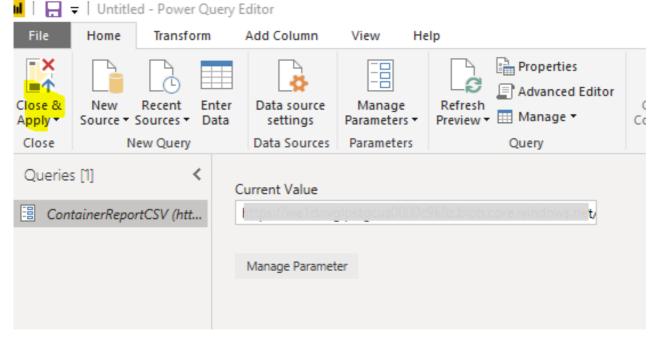


The next selection is 'Manage Parameters' - select 'New Parameter'. Define a Parameter and add the file URL in the field named 'Current Value'. How to find the file URL is described in section 3. You can give the parameter a name of your choice, preferably something that describes the content of the file as it will be the default name on your data table. Set other options as in below image.

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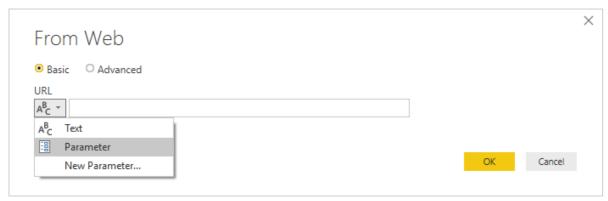


Then save your parameter and click 'Close & Apply'

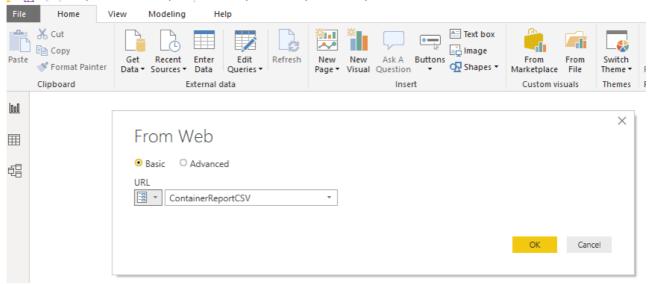


We are now ready to connect to the data and start building the report. Select 'Get data', then 'Web' and 'Parameter':

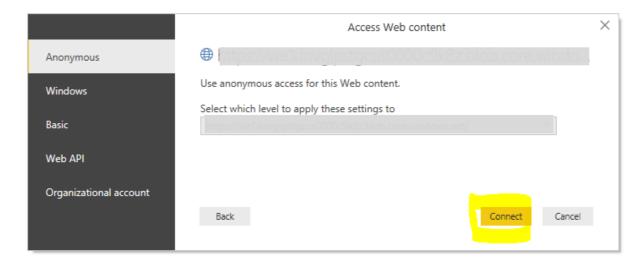
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From the dropdown menu you will find your newly created parameter. Please select it and click 'OK'.

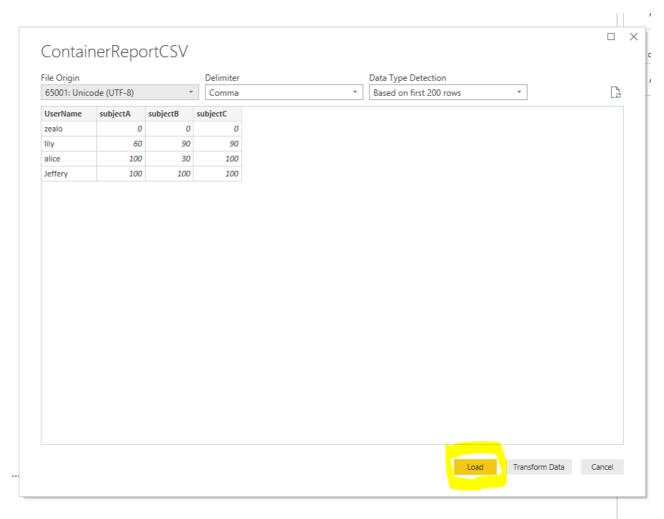


Finally make sure 'Anonymous' is selected and then 'Connect'.



You have successfully connected to the file in the Container when you see the values and can click 'Load'.

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If you have several files in the container you have to repeate all these steps for each file.

2.2 The second example we use OData Feed

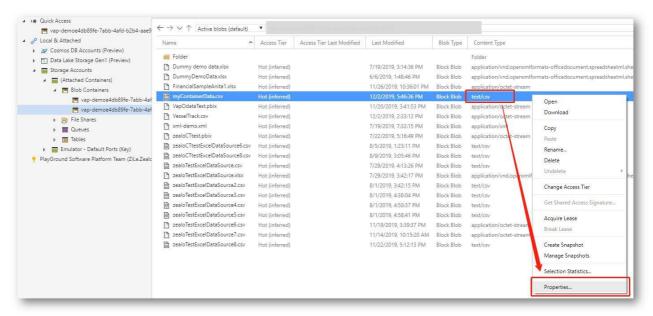
The current limitation from Microsoft is that the data source information stored in your Power BI file can be changed if you select OData Feed when building the report in Power BI Desktop. But when using OData feed the file content type cannot be text or csv.

There coms the current Veracity Container limitation into play. You cannot change the file content type when uploading a file into you're a Veracity container. That's why we must do some workaround steps as described here.

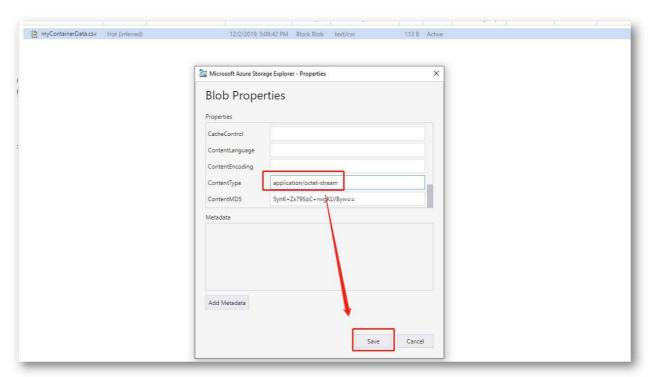
2.2.1 Change file content type

Open Microsoft Azure Storage Explorer to check your file. If the Content Type is not **application/octet-stream**, it must be modified. Please click the file, then select Properties. From the example below you see the content type is text/csv and how to modify it.

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Change to application/octet-stream, then click Save button



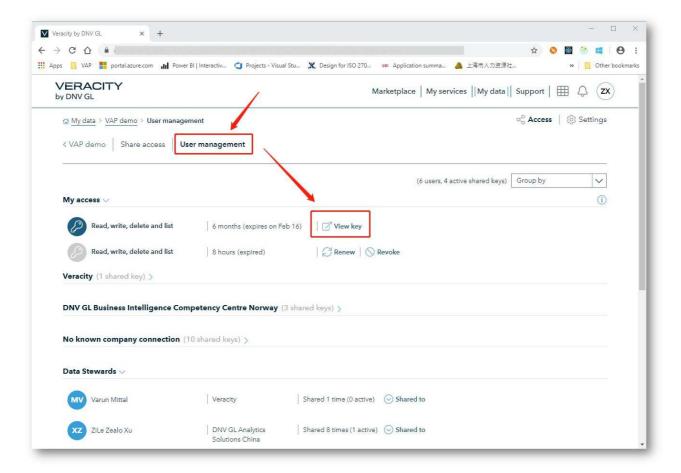
3 FOR VERACITY CONTAINER WE NEED THE FILE URL TO BE USED IN YOUR POWER BI REPORT

You will later use the key when building the report from Power BI Desktop.

3.1 First, we need to find the key

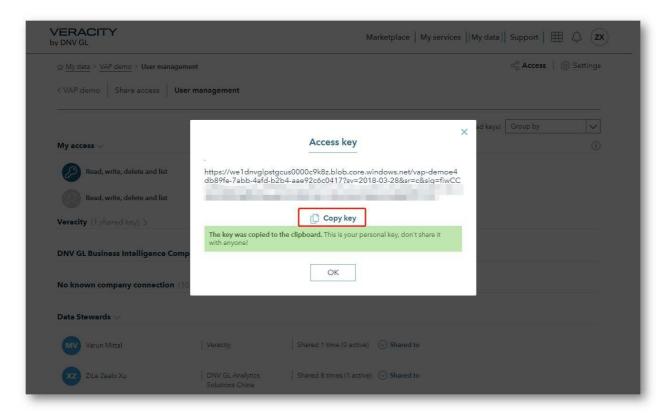
Click User management, then click "View key" to copy your key.

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Click Copy key

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The key you copied contains of 3 parts

- 1. Resource part: https://we1dnvglpstqcus0000c9k8z.blob.core.windows.net
- 2. Container part: /vap-demoe4db89fe-7abb-4afd-b2b4-aae92c6c0417
- 3. Key part: ?sv=2018-wCCK7E5WgdTJqby7KPNNkw6gxKVzSmerSw4w.....

3.2 Second you need to add the filename and path into the key

Now we have the key to the container. But to build a Power BI report you also need the filename to your data source.

Please add / type your file name and path into the key. In our example the filename is myContainerData.csv and the folder name simply is just Folder.

So the file URL to be used in your Power BI Desktop when building your report should consist of: Resource part + Container part + Folder + filename + key

The correct file URL is:

 $\frac{https://we1dnvglpstgcus0000c9k8z.blob.core.windows.net/vap-demoe4db89fe-7abb-4afd-b2b4-aae92c6c0417/Folder/myContainerData.csv?sv=2018\&sr=c\&sig=fiwCCK7E5WgdTJq.....$

Please note the URL is case-sensitive

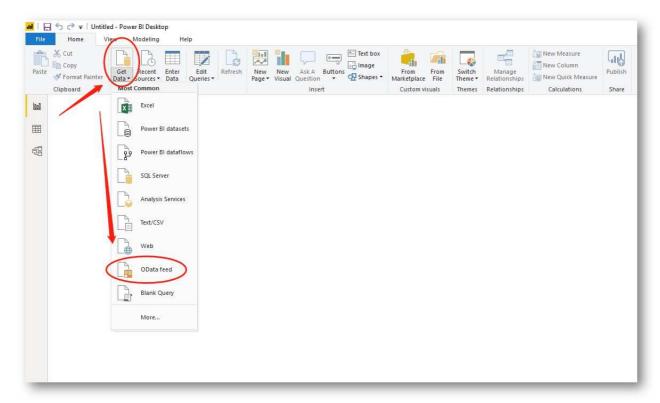
4 CREATE YOUR POWER BI REPORT USING THE FILE URL

Go to Power BI Desktop, to create your report.

4.1 We will continue using OData feed and select it from Get Data

Click Get Data in Home panel, then select OData feed, if you cannot find it, please click More...

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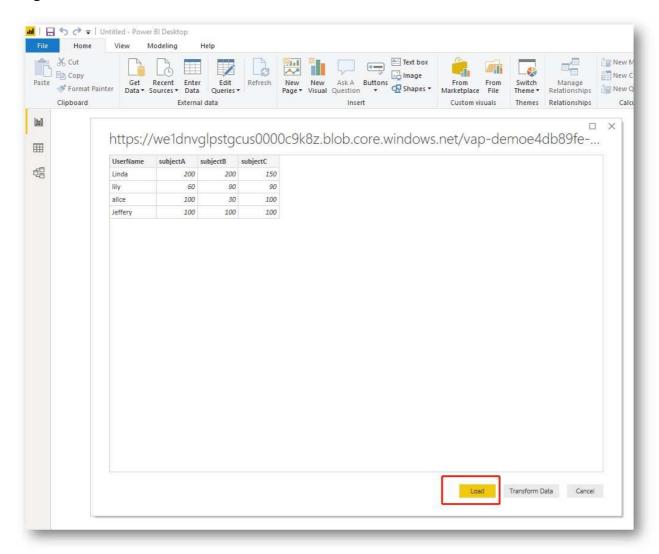


Paste the file URL into the URL area.



It's successfully set up if you can see the data shown. Please click Load the data to be used.

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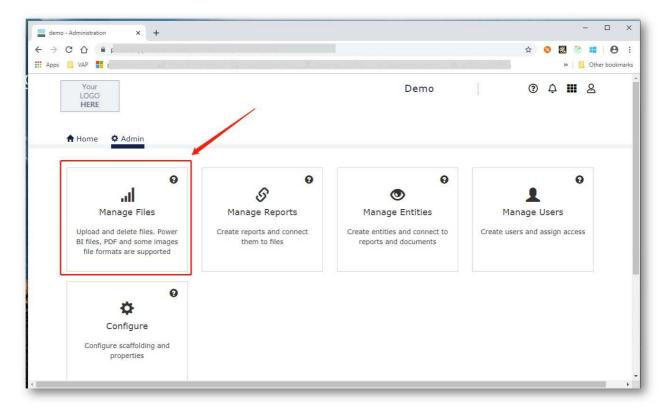
4.2 Build your visuals and save the file as usual

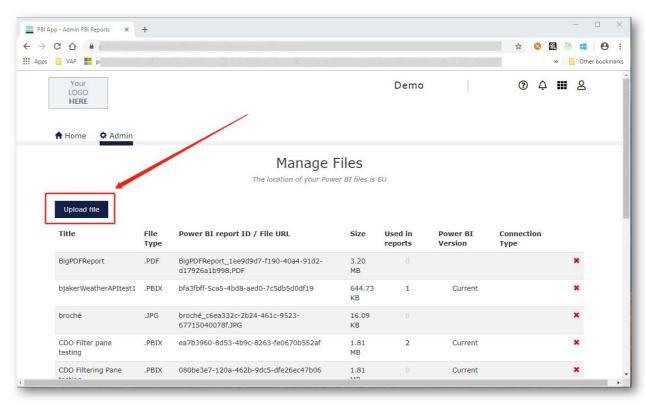
Save the file to your favorite storage folder as a .pbix file.

5 UPLOAD THE POWER BI FILE IN VAP

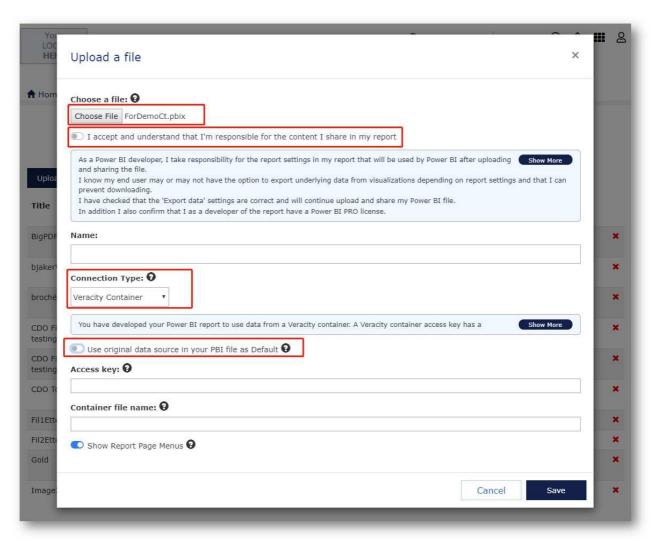
Log in to your VAP service. Click 'Manage Files' to upload the file.

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Choose your .pbix file

Click show more to read the terms and tick on "I accept and understand that I'm responsible for the content I share in my report". Give it a name.

5.1 Tick on "Use original data source in your PBI file as Default"

Now the original data source will be used, and the access key is only available 6 months after you created the Power BI report.

5.2 Tick off "Use original data source in your PBI file as Default"

When you want VAP to renew the access key each time a user views your report you have to specify it. You can also specify a new file name to let VAP change the original file name you used when building your report.