Extracting Data from SAP BW

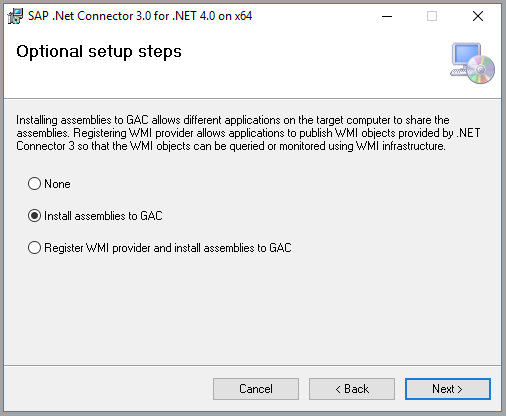
using Azure Data Factory Using Open Hub Connector

# Prerequisites:

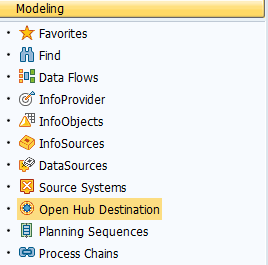
1. Download the Self-hosted IR from [here](https://wenbofdemo.blob.core.windows.net/sapselfir/IntegrationRuntime_3.13.6937.4%20(64-bit).msi?st=2019-01-09T00%3A38%3A51Z&se=2019-03-10T00%3A38%3A00Z&sp=rl&sv=2017-07-29&sr=b&sig=ueyYzpJBk4t1dniVSq30FDB0PWpShie9XZpsDYoOv0w%3D).
2. [download the SAP .NET Connector 3.0](https://support.sap.com/en/product/connectors/msnet.html)  from SAP’s website using the following link. Please use the 64-bit one since our self-hosted IR only has 64 bit.

[SAP .NET Connector 3.0](https://support.sap.com/en/product/connectors/msnet.html)

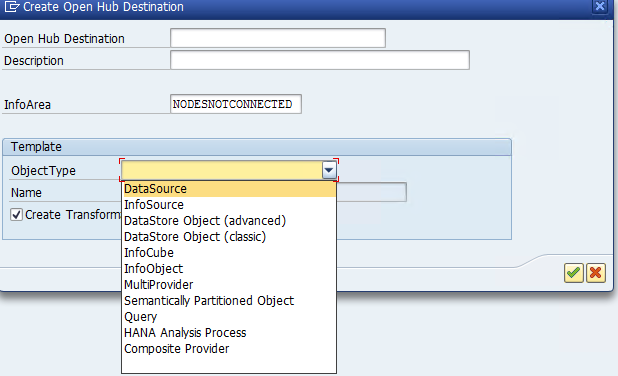
1. Install the Sap .NET Connector 3.0 on the same machine as where the self-hosted IR is installed. When installing, in the optional setup steps window, please make sure you select the Install Assemblies to GAC option as shown in the following image.



1. If your data is already in the SAP Open Hub Destination (Destination Type as Data Table), you can skip this one and go ahead with the next step. Otherwise, please try to create SAP Open Hub destination with steps as below:
   1. Using SAP GUI to logon to your SAP BW system
   2. Go to TCODE RSA1
   3. Choose Open Hub Destination in the Modeling Pane.

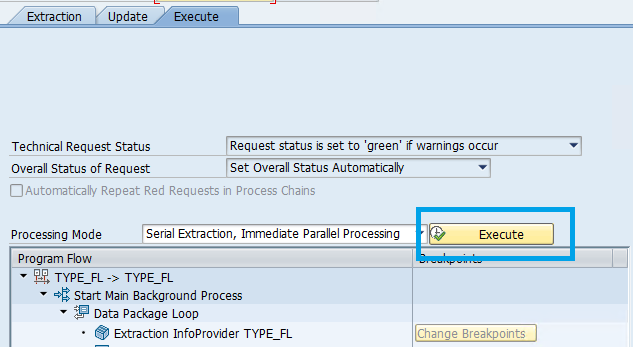


* 1. Right click one targeted Info Area, right Click -> click Create Open Hub Destination… you can see that there are many ObjectType supported including cube.



Choose the one you need and go ahead to finish the creation and activation.

* 1. Expand the Open Hub destination you created, you will see a DTP created as well by default. Switch to the Execute Tab and click Execute, waiting for the data landed from source object(such as cube) you have chosen to the open hub destination table successfully, the you can go ahead to extract using Azure Data Factory SAP BW Open Hub Connector.



# Walkthrough:

1. Create a V2 Data Factory in the **West Central US**
2. Go to Author & Monitor of the Data Factory, append the flag as below into the url of the ADF authoring page.

&feature.saphub=true

//the URl will look like below:

https://ms-adf.azure.com/authoring/pipeline/pipeline1?factory=%2Fsubscriptions%<xxxxxxxx>%2FresourceGroups%2F<xxxxxxx>%2Fproviders%2FMicrosoft.DataFactory%2Ffactories%2F<xxxxxx>&feature.saphub=true

1. Create Pipeline.
2. Create a copy
3. In the source creation, create a new dataset, choose the Dataset Type as SAP BW Open Hub
4. In the Connection Tab of the Dataset, create new linked service
5. Choose the self-hosted IR created using the installation file provided in the 1st step of the prerequisite; fill in the other properties of the linked service as similar as the existing old SAP BW connector, test connection and click Finish to create.
6. In the Open Hub Destination Field of the Dataset Property, choose the Open Hub destination you have created for the targeted data.
7. Then you can go ahead and finish the copy.

# Properties Breakdown

SAP Open Hub Linked Service

|  |  |  |
| --- | --- | --- |
| **Property​** | **Description ​** | **Required ​** |
| **type ​** | The type property must be set to SapOpenHub. ​ | Yes ​ |
| **server​** | Name of the server on which the SAP BW instance resides.​ | Yes​ |
| **systemNumber​** | System number of the SAP BW system.​ Allowed value: two-digit decimal number represented as a string.​ | Yes​ |
| **clientId​** | Client number of the system.​ Allowed value: three-digit decimal number represented as a string.​ | Yes​ |
| **language​** | Language that the system uses. By default, it is EN for English.​ | No​ |
| **userName ​** | The user name used in Basic authentication type. ​ | Yes​ |
| **password ​** | The password used in Basic authentication type. ​ | Yes​ |
| **connectVia ​** | The [Integration Runtime](https://docs.microsoft.com/en-us/azure/data-factory/concepts-integration-runtime) to be used to connect to the data store.  A self-hosted Integration Runtime is required for this connector. ​ | Yes​ |

Dataset Properties

|  |  |  |
| --- | --- | --- |
| **Property** | **Description** | **Required** |
| **type** | The type property must be set to SapOpenHubTable. | Yes |
| **openHubDestinationName** | The name of the Open Hub Destination | No |
| **excludeLastRequest** | Whether to exclude the records of the last request. Default value is true. | No |
| **baseRequestId** | The ID of request for delta loading. Once it is set, only data with requestId larger than the value of this property will be retrieved. | No |