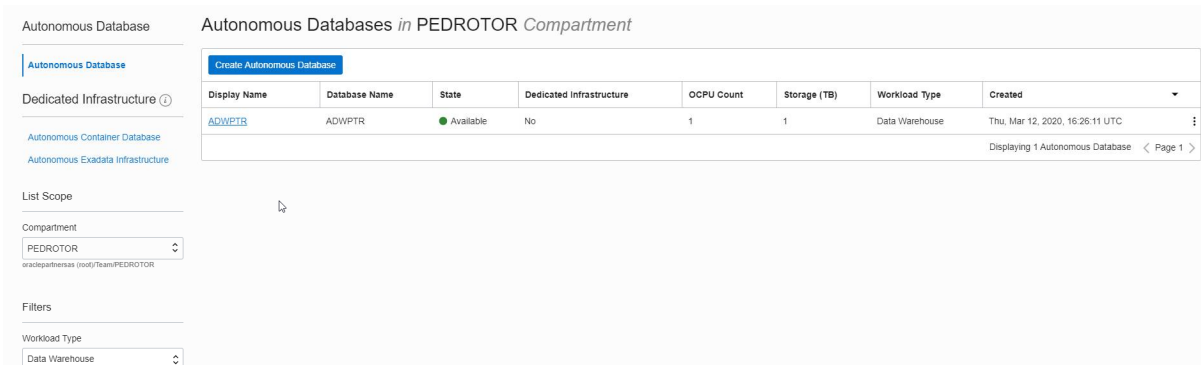


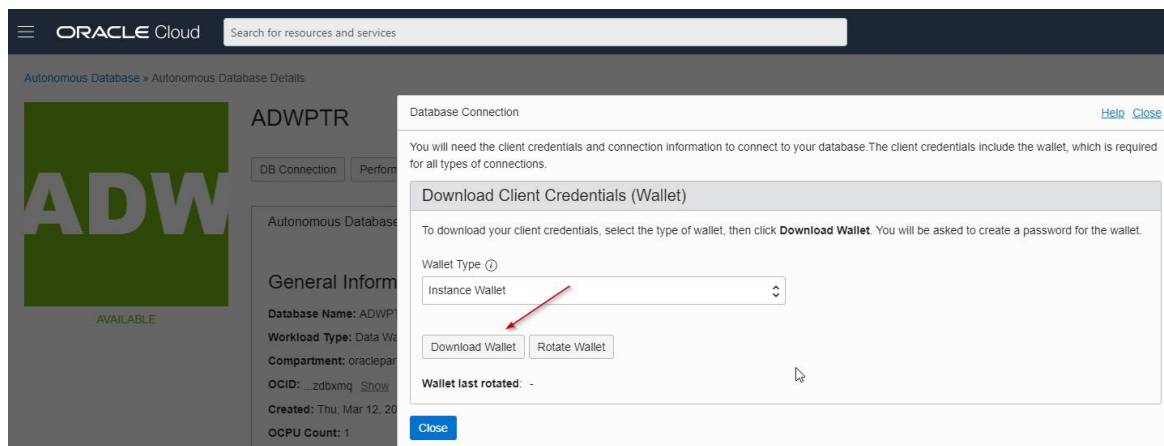


This document assumes that an ADB, such as Autonomous Data Warehouse (ADW) or Autonomous Transaction Processing (ATP), or Autonomous JSON Database (AJD) was provisioned.



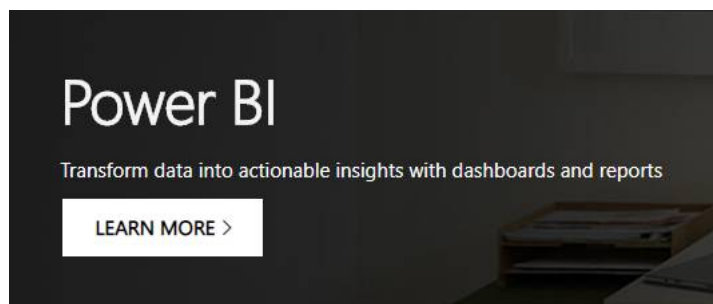
\*Note: Please check here for the Oracle documentation to [provision ADW](#).

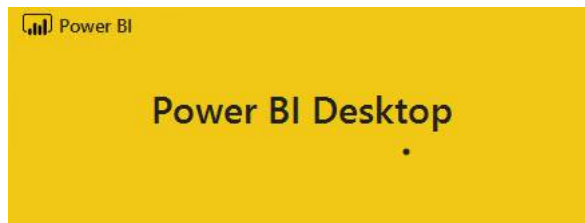
1. Download the corresponding credentials zip file to the system that has Desktop Power BI installed. These credential files will be used to connect Power BI Desktop to ADB.



\*Note: Also check Downloading Client Credentials (Wallets).

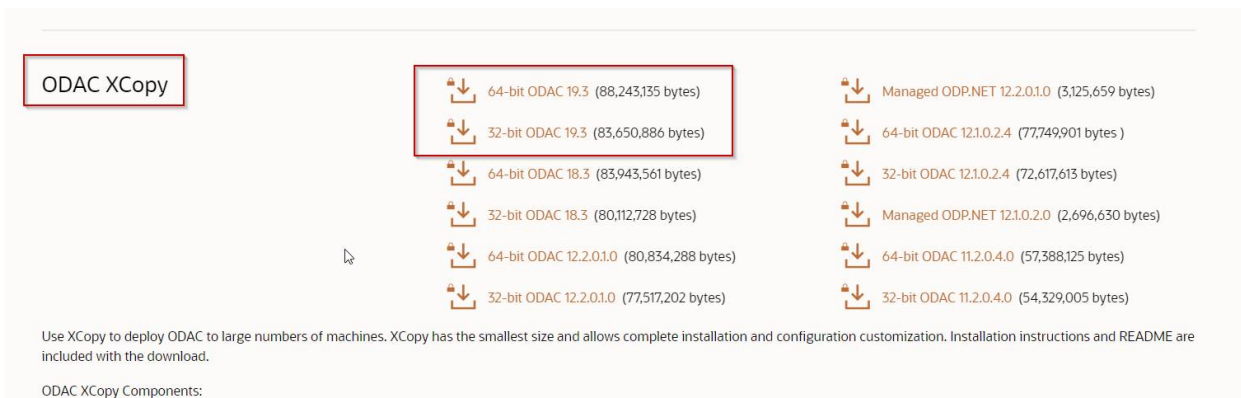
2. Download and Install Microsoft Power BI Desktop – <https://www.microsoft.com/en-US/download/details.aspx?id=58494>





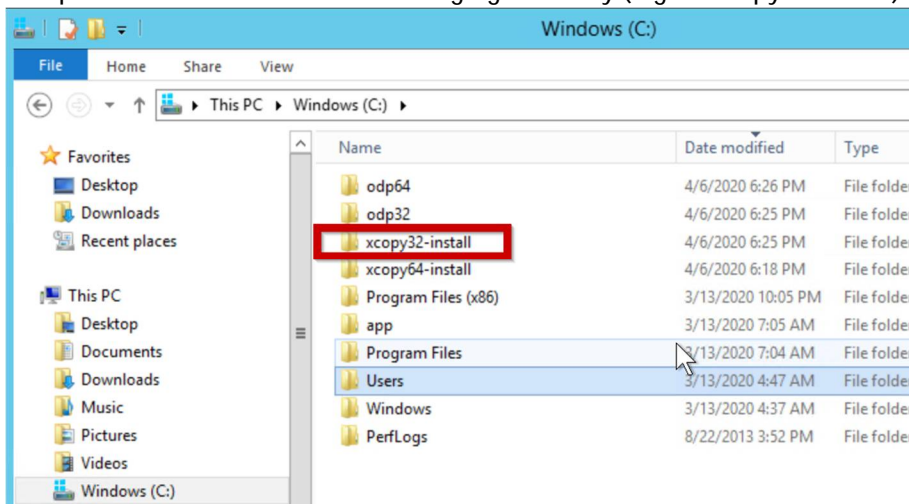
3. Validate if you are using Microsoft Power BI Desktop for 32-bit or 64-bit. To determine Power BI Desktop bitness, select File > Help > About.  
The following instructions assume you are using 32-bit. If you are using 64-bit, the instructions are the same, except to download the 64-bit ODAC xcopy and to use the 64-bit tools contained within it.
4. Download 32-bit ODAC 19.3 from the ODAC Xcopy section in the middle of this Oracle.com web page:

<https://www.oracle.com/database/technologies/dotnet-odacdeploy-downloads.html>



This procedure guides how to connect Microsoft Power BI Desktop to ADB to retrieve data. You will download and enable managed ODP.NET for data access.

5. Unzip the download contents to a staging directory (e.g. c:\xcopy32-install).



6. Open a Windows command prompt **\*in administrator mode\***. Navigate to the staging directory, then execute the next command to install managed ODP.NET:

```
install.bat odp.net4 <installation directory> odp32
```







# Oracle database

Server  
adwptr\_low

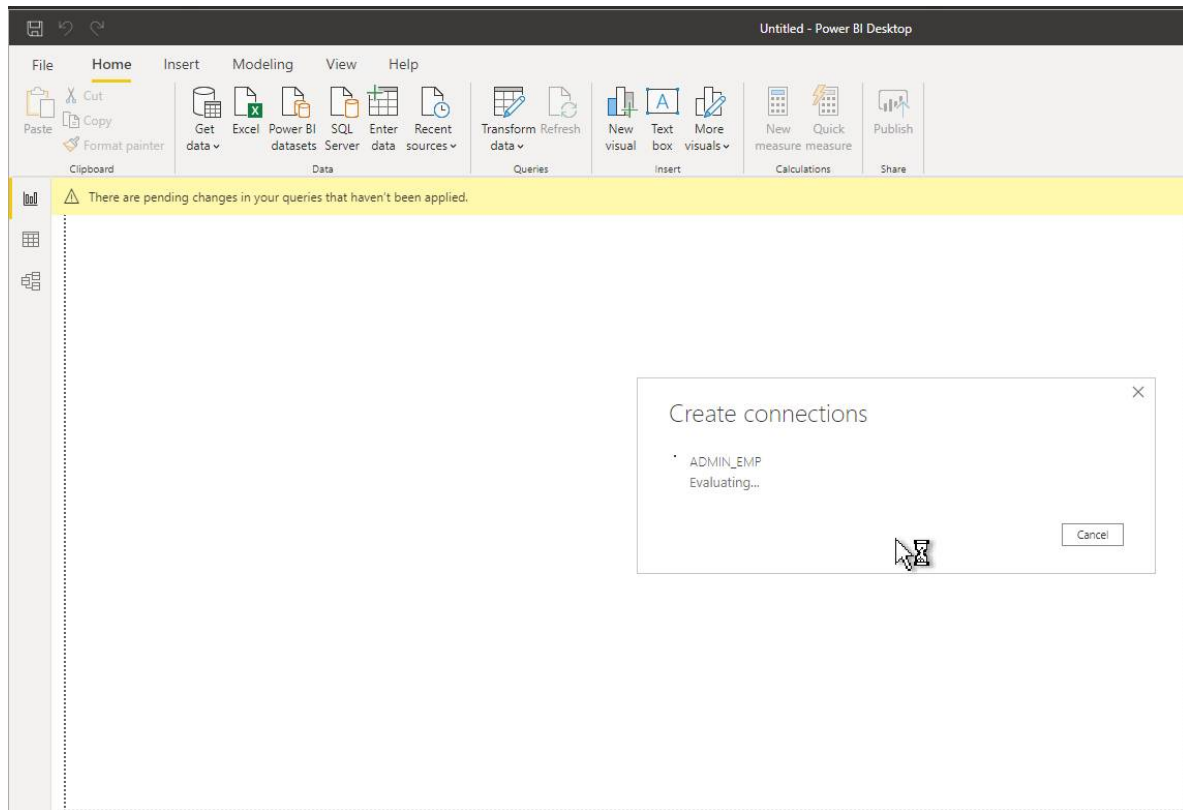
Data Connectivity mode

- Import
- DirectQuery

Advanced options

OK

Cancel



15. Open in Navigator the tables that you need data to create your own Microsoft Power BI Desktop Document (.pbix) and load the data.

# Navigator

Display Options ▾

- GGSYS
- GSMADMIN\_INTERNAL
- GSMCATUSER
- GSMUSER
- LBACSYS
- MDDATA
- OMLSPROXY
- ORACLE\_OCM
- ORDS\_METADATA
- ORDS\_PUBLIC\_USER
- ▶ PTR [2]
  - ADMIN\_EMP
  - SALES
- REMOTE\_SCHEDULER\_AGENT
- SH
- SSB
- SYSSUMF
- SYSDATA
- SYSDG
- SYSKM

SALES

ID	REGION	SALES	CLIENTS
1	APAC	11834000	1300
2	EMEA	51321000	7000
3	LATAM	13621000	3500
4	NORTH AMERICA	15003271	5257

Select Related Tables

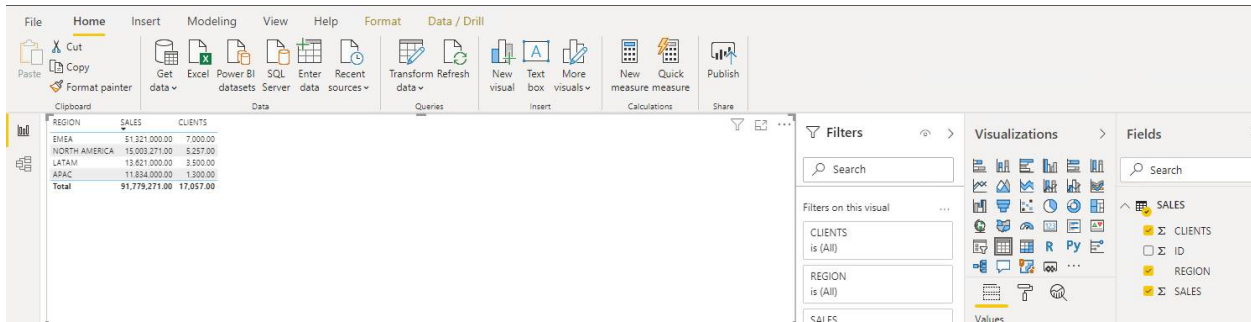
Load Transform Data Cancel

## 16. Create your own graph or retrieve the data in other Table

CLIENTS by REGION

REGION	CLIENTS
EMEA	7000
NORTH AMERICA	5257
LATAM	3500
APAC	1300





REGION	SALES	CLIENTS
EMEA	51,321,000.00	7,000.00
NORTH AMERICA	15,003,271.00	5,257.00
LATAM	13,621,000.00	3,500.00
APAC	11,834,000.00	1,300.00
<b>Total</b>	<b>91,779,271.00</b>	<b>17,057.00</b>

## 17. ODP.NET Performance Tuning for Large Data Retrievals

Typically, BI and ETL applications retrieve large data amounts from a source database for further processing. To speed up Oracle data retrieval via Power BI Desktop, the ODP.NET FetchSize can be increased from its default 128K value (131,072 bytes) to as large as int.MaxValue. The FetchSize determines the amount of data ODP.NET fetches into its internal cache upon each database round trip. It's possible to improve performance by an order of magnitude by significantly increasing FetchSize when retrieving large result sets.

To increase the FetchSize, modify the .NET machine.config file. Modifying the machine.config requires Windows Administrator privileges. This file is generally located in the following directory:  
**C:\WINDOWS\Microsoft.NET\Framework\v4.0.30319\Config.**

Add an <oracle.manageddataaccess.client> section in the machine.config file for managed ODP.NET. This section should be placed within the <configuration> section and after the <configSections> </configSections>. Here's an example setting the FetchSize to 4 MB:

```
<configuration>
<configSections>
...
</configSections>

<oracle.manageddataaccess.client>
  <version number="*">
    <settings>
      <setting name="FetchSize" value="4194304" />
    </settings>
  </version>
</oracle.manageddataaccess.client>

</configuration>
```

Once done, restart Power BI Desktop so that ODP.NET will use the new setting.