

Certification Matrix	Version
Tableau Desktop	2018.1 (April 2018)
Tableau Server	2018.1 (April 2018)
OCI Driver	Oracle Instant Client/Client version 12.1.0.2 and higher

- This document assumes that the Autonomous Data Warehouse has been provisioned and the corresponding wallet zip file has been downloaded to the system that has the Oracle Instant Client or the Oracle Client is installed. For the Oracle documentation to provision ADWC please check [here](#).
- Tableau Desktop/Server connects to Oracle Database using TNS connectivity. For databases that support TCP, Tableau relies on Oracle Easy Connect method. Since ADWC is a secured service, Tableau Desktop/Server relies on Oracle Client on Instant Client method to connect to ADWC service. Instructions on how to install and configure Oracle Client is available [here](#).
- After configuring the Oracle Client, follow the instructions on how to prepare the OCI client for to connect to ADWC service. Please refer to the [Preparing for OCI, ODBC, JDBC OCI Connections section](#) of the ADWC documentation.
- Before Tableau can consume Oracle Client, the system environment variable, TNS_ADMIN have to be setup. Typically TNS_ADMIN default value is <ORACLE_HOME> > Network > Admin directory.

The pictorial illustration below shows how to configure Tableau Desktop 2018.1 on a Windows environment.

1. Open the TNSNames.ora file that you downloaded and locate the net_Service_name for your service. By default you will see three net_service_name definitions in the tnsnames.ora file. Here is a potential example of the tnsnames.ora entry.

```
ADWCDemo_high = (description= (address=(protocol=tcps)(port=1522)(host=adwc.uscom-east-1.oraclecloud.com))(connect_data=(service_name=yk2ddvkx2pyiekt_virtualitydemo_high.adwc.oraclecloud.com))(security=(ssl_server_cert_dn="CN=adwc.uscom-east-1.oraclecloud.com,OU=Oracle BMCS US,O=Oracle Corporation,L=Redwood City,ST=California,C=US"))) )
```

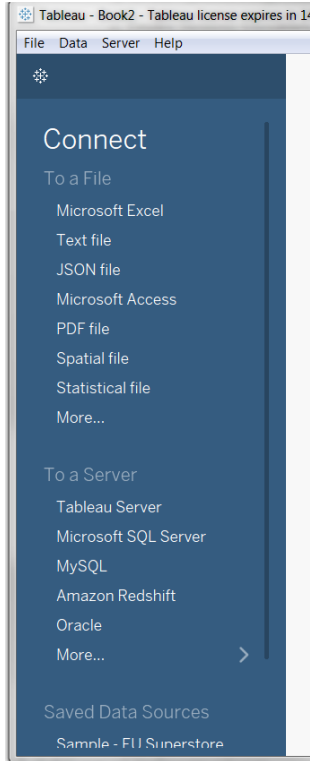
```
ADWCDemo_low = (description= (address=(protocol=tcps)(port=1522)(host=adwc.uscom-east-1.oraclecloud.com))(connect_data=(service_name=yk2ddvkx2pyiekt_virtualitydemo_low.adwc.oraclecloud.com))(security=(ssl_server_cert_dn="CN=adwc.uscom-east-1.oraclecloud.com,OU=Oracle BMCS US,O=Oracle Corporation,L=Redwood City,ST=California,C=US"))) )
```

```
ADWCDemo_medium = (description= (address=(protocol=tcps)(port=1522)(host=adwc.uscom-east-1.oraclecloud.com))(connect_data=(service_name=yk2ddvkx2pyiekt_virtualitydemo_medium.adwc.oraclecloud.com))(security=(ssl_server_cert_dn="CN=adwc.uscom-east-1.oraclecloud.com,OU=Oracle BMCS US,O=Oracle Corporation,L=Redwood City,ST=California,C=US"))) )
```

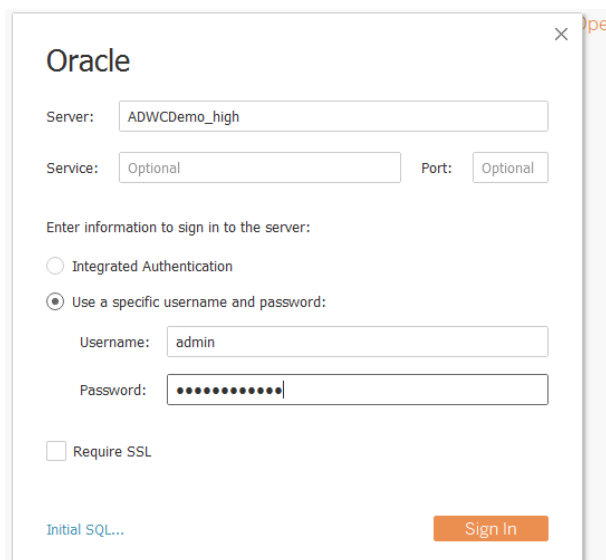
2. Test to make sure that your TNS_ADMIN environment variable is set correctly. Open up a CMD prompt and issue the following command `echo %TNS_ADMIN%`. The output of the command should produce a valid directory pathway to the TNS_ADMIN directory.

```
C:\Users\RPANDYA>echo %TNS_ADMIN%  
C:\app\client\RPANDYA\product\12.1.0\client_1\network\admin
```

3. Open the Tableau Desktop and Choose Oracle as a data source under the 'To a Server' section.



4. Use the net_service_name from the tnsnames .ora in the Server section. Also provide the database username and the password and press Sign In.



5. You are now ready to analyze/visualize.

The screenshot shows the Tableau interface with the following components:

- Connections:** ADWCDemo_high (Oracle)
- Schema:** SH
- Table:** CHANNELS (SH.CHANNELS) (SH)
- Table Structure:** CHANNELS (SH.CHANNELS) (SH) with columns: Channel Id, Channel Desc, Channel Class, Channel Class..., Channel Total, Channel Total ...
- Data Table:**

Channel Id	Channel Desc	Channel Class	Channel Class...	Channel Total	Channel Total ...
3.00	Direct Sales	Direct		12.00	1.00
9.00	Tele Sales	Direct		12.00	1.00
5.00	Catalog	Indirect		13.00	1.00
4.00	Internet	Indirect		13.00	1.00
2.00	Partners	Others		14.00	1.00