

ADWC supports connections from standard drivers including JDBC, ODBC, and ADO.NET. Analytic tools may use 3rd party drivers from providers such as Simba. In order to work with ADW, the driver must support Oracle Wallets and SSL encryption. Not all analytic tools package the latest driver versions, so you may be required to update the driver to connect successfully.

This document describes how to generally setup and configure Simba drivers, for tool vendors using this provider. Please check the analytic tool documentation in case they have specific connectivity interfaces.

Connector Vendor	Version
<ul style="list-style-type: none"><li>• Simba</li></ul>	ODBC 1.1.6 driver and higher
<ul style="list-style-type: none"><li>• Oracle Client</li></ul>	12.1.0.2 or higher

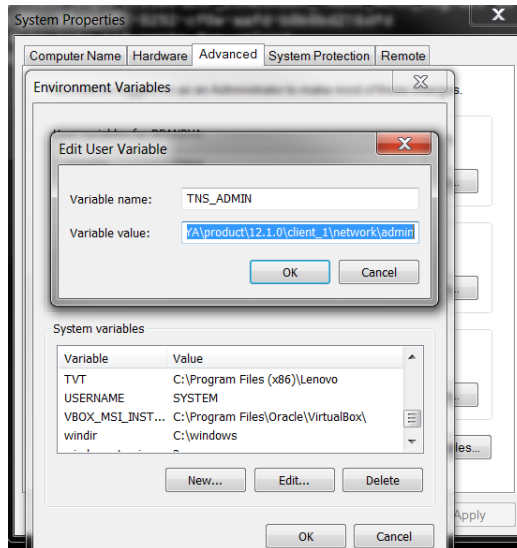
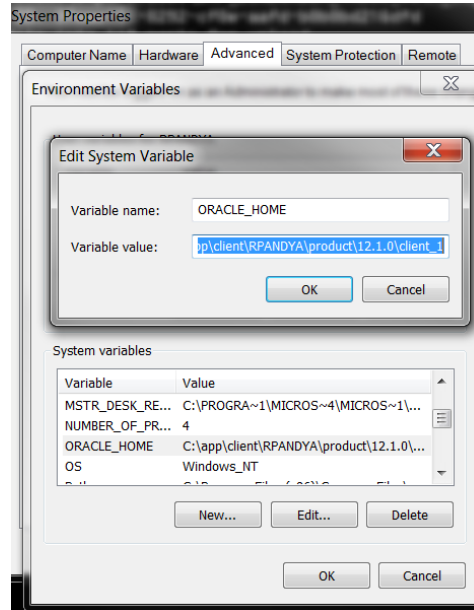
#### Simba ODBC Driver Configuration:

1. This document assumes that the Autonomous Data Warehouse has been provisioned and the corresponding credentials.zip file has been downloaded to the system that has the Simba ODBC Driver installed. For the Oracle documentation to provision ADWC please check [here](#). Also check [Downloading Client Credentials \(Wallets\)](#).
2. Download and install the latest version of Oracle Client or the Instant client from [here](#).
3. Unzip the downloaded file and follow the instructions to install an Oracle Instant Client or an Oracle Client. Complete installation guidelines can be found [here](#).
4. Steps 4, 5 and 6 configure and test the Oracle Database Client. Edit the `sqlnet.ora` file, replacing “`*/network/admin`” with the name of the folder containing the client credentials.

For example:

```
WALLET_LOCATION = (SOURCE = (METHOD = file) (METHOD_DATA =  
(DIRECTORY="D:\home\adwc_credentials")))  
  
SSL_SERVER_DN_MATCH=yes
```

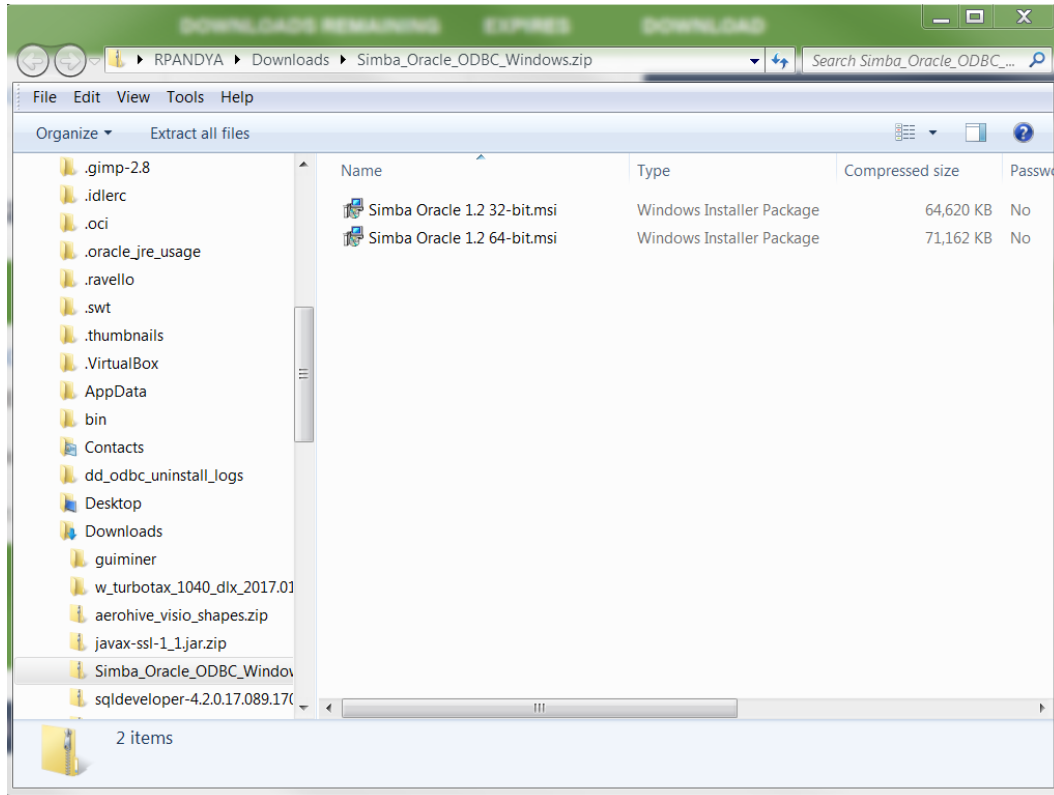
5. Set the `ORACLE_HOME` and `TNS_ADMIN` environment variable and set it to the location of the secure folder containing the credentials file you saved in Step 3. These can optionally be user environment variables as well if it is not a multi user environment.



6. The `tnsnames.ora` file provided with the credentials zip file contains three database service names identifiable as `high`, `medium` and `low`. The predefined service names provide different levels of performance and concurrency for Autonomous Data Warehouse.
7. Test the Oracle Client with Oracle SQL\*Plus

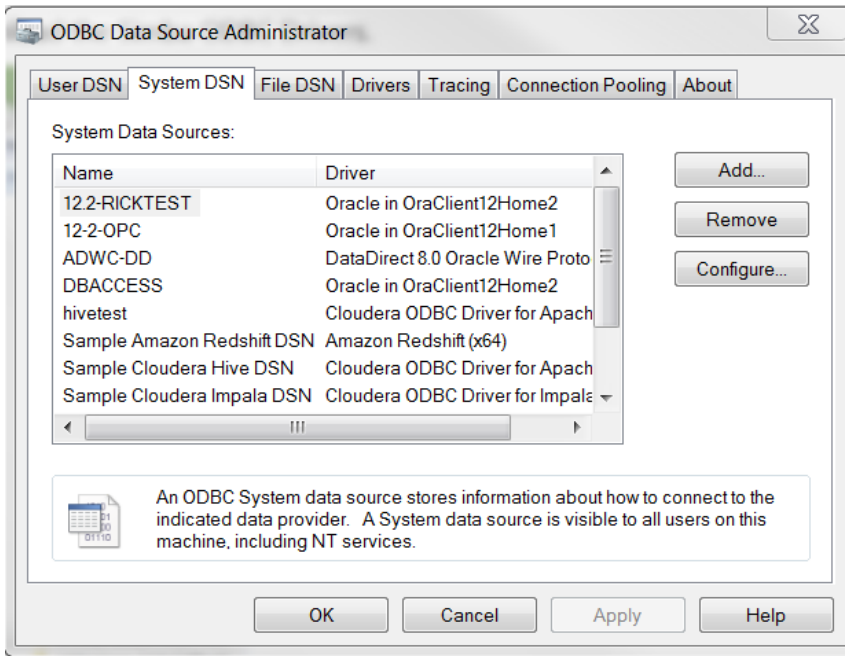
```
sqlplus password/\ "Password\ "@ConnectionString
or
sqlplus /nolog
sql> set define off
sql> connect username/password@connectString
```

8. The Simba driver relies on the ORACLE\_HOME and TNS\_ADMIN environment variables to implicitly access the tnsnames.ora and sqlnet.ora attributes.
9. Download the Simba Driver

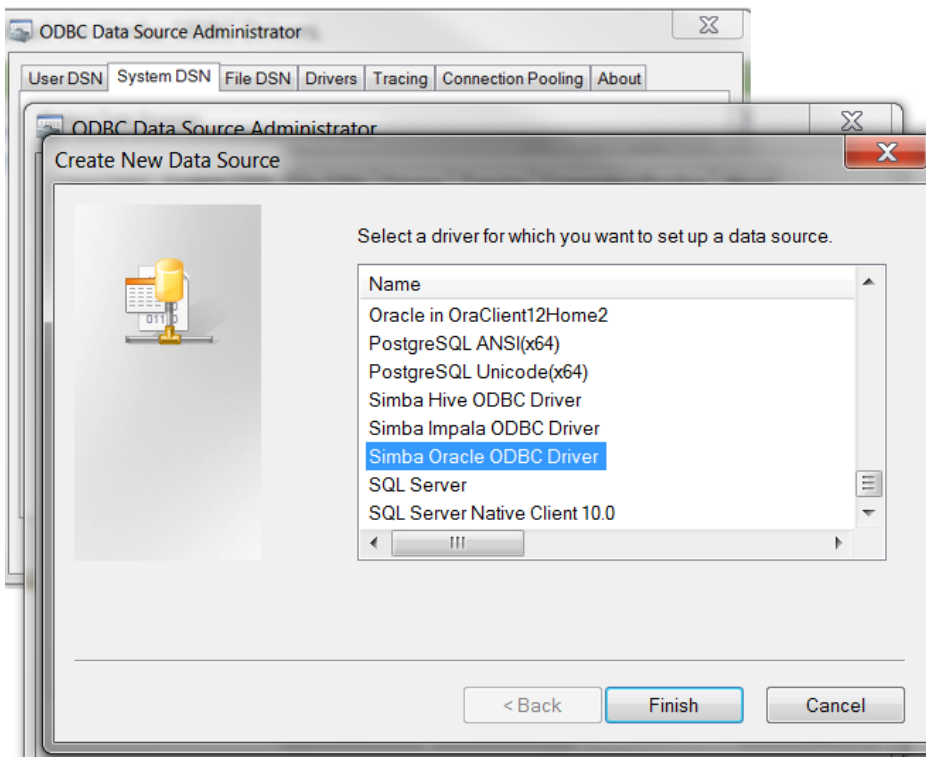


10. Please refer to the Simba documentation [here](#) to install and configure the Simba ODBC driver based on your OS.
11. This document describes how to install and configure the driver on Windows 64 bit OS. Invoke the 64-bit Microsoft ODBC Administrator to create a DSN (system or file) using tnsnames entry. More information about configuring the Simba ODBC driver can be found [here](#)
12. Here are some pictorial examples for your reference. MSFT 64 bit Windows OS has been used for the example below.

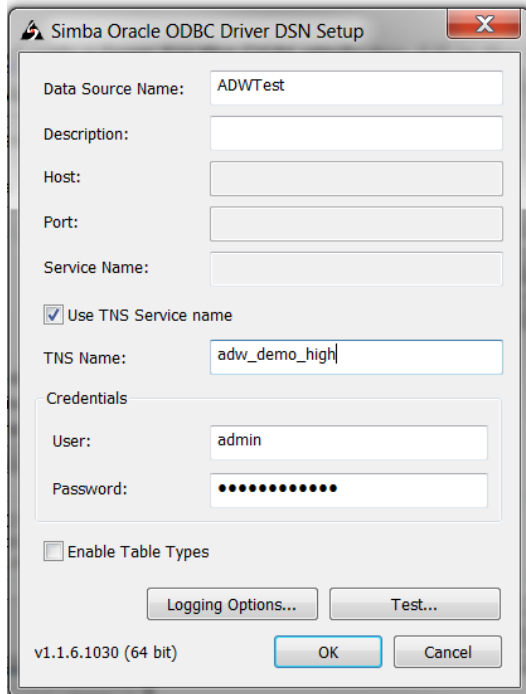
Once unzipped and installed, open the 64 bit ODBC Administrator on Windows to configure system DSN that uses the Simba driver.



Click on Add to configure a new system DSN under the System DSN tab. Locate the Simba ODBC Driver from the list of drivers presented to you and press finish.

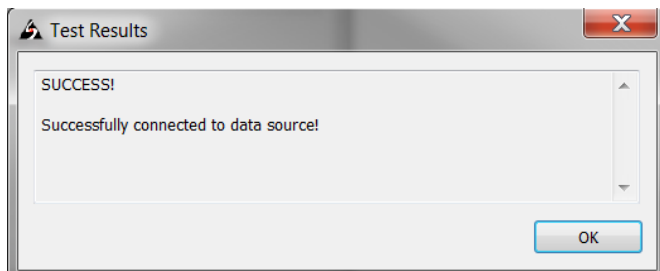


You will be presented with a form for the DSN attributes. Fill in the DSN name, your TNS name (this can be found in the tnsnames.ora file in TNS\_ADMIN location) and optionally the username and the password. You can also test the connection here before saving it.



The screenshot shows the 'Simba Oracle ODBC Driver DSN Setup' dialog box. It contains the following fields and options:

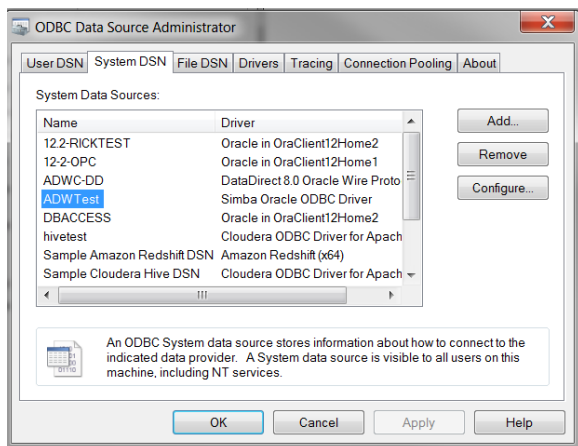
- Data Source Name: ADWTest
- Description: (empty)
- Host: (empty)
- Port: (empty)
- Service Name: (empty)
- Use TNS Service name
- TNS Name: adw\_demo\_high
- Credentials section:
  - User: admin
  - Password: (masked with dots)
- Enable Table Types
- Buttons: Logging Options..., Test...
- Version: v1.1.6.1030 (64 bit)
- Buttons: OK, Cancel



The screenshot shows the 'Test Results' dialog box with the following content:

- Message: SUCCESS!
- Message: Successfully connected to data source!
- Button: OK

You are now ready to use this system DSN for your application!



The screenshot shows the 'ODBC Data Source Administrator' window. The 'System DSN' tab is selected, and the 'System Data Sources' list is visible. The 'ADWTest' entry is highlighted. The list contains the following entries:

Name	Driver
12-2-RICKTEST	Oracle in OraClient12Home2
12-2-OPC	Oracle in OraClient12Home1
ADWC-DD	DataDirect 8.0 Oracle Wire Proto
<b>ADWTest</b>	Simba Oracle ODBC Driver
DBACCESS	Oracle in OraClient12Home2
hivetest	Cloudera ODBC Driver for Apache
Sample Amazon Redshift DSN	Amazon Redshift (x64)
Sample Cloudera Hive DSN	Cloudera ODBC Driver for Apache

Buttons: Add..., Remove, Configure...

Buttons: OK, Cancel, Apply, Help

Text: An ODBC System data source stores information about how to connect to the indicated data provider. A System data source is visible to all users on this machine, including NT services.

Note: These instructions are for reference purposes only. As versions of this driver changes, there may be different configuration methods. Please refer to the vendor website for latest details. Please refer to the vendor documentation on all the configuration options that are available for you to set.