Autonomous Data Warehouse (ADW) supports connections from standard drivers including JDBC, ODBC, and ADO.NET. Analytic tools may use 3rd party drivers from providers such as Data Direct. 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 successfully connect.

This document describes how to generally setup and configure DataDirect ODBC driver (DataDirect Oracle Wire Protocol), for tool vendors using this provider. Please check the analytic tool documentation in case they have specific connectivity interfaces.

Connector Vendor	Version
Progress DataDirect	DataDirect 8.0 (v8.00.02.2091 Oracle Wire Protocol)
Progress DataDirect	DataDirect Connect for Oracle driver version 5.1.4

DataDirect Oracle Wire Configuration:

- Download the credentials file from the ADW administration console and unzip the file. The location of this files directory will now be referred to as the 'wallet_directory'. Oracle credentials file is a zipped file that contains all the wallet formats as well as a predefined tnsnames.ora and sqlnet.ora that will be required to make a tnsnames based connection. This credentials file is protected by a password based encryption. You will use this password later on during the driver configuration. It will be referred to as KeyStore/TrustStore password.
- Please refer to the Progress DataDirect documentation <u>here</u> to install and configure the DataDirect Oracle Wire driver based on your OS. DataDirect Oracle Wire driver is available for Windows (32 bit and 64 bit), Unix/Linux and Mac OS.
- This document shows 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 DataDirect Oracle Wire driver can be found <u>here</u>
- 4. Below is a pictorial example for your reference. MSFT 64 bit Windows OS has been used for the example below.

Download the DataDirect ODBC Drivers.



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

2.2-RICKTEST 0 2-2-OPC 0	racle in OraClient12Home2		
DWC-DD D IBACCESS C ivetest C ample Amazon Redshift DSN A ample Cloudera Hive DSN C ample Cloudera Impala DSN C	Dracle in OraClient12Home1 DataDirect 8.0 Oracle Wire Proto Dracle in OraClient12Home2 Houdera ODBC Driver for Apach Amazon Redshift (x64) Houdera ODBC Driver for Apach Houdera ODBC Driver for Impale	≡ 	Remove Configure

Click on Add to configure a new system DSN under the System DSN tab. Locate the DataDirect 8.0 Oracle Wire Protocol from the list of drivers presented to you and press finish.

-	ODBC Data Source Administrato		
L	Create New Data Source		X
		Select a driver for which you want to set up a data source	
		Name	
	011	Amazon Redshift (x64)	Ξ
		Cloudera ODBC Driver for Apache Hive	
		Cloudera ODBC Driver for Impala	
		DataDirect 8.0 Oracle Wire Protocol	
		IBM INFORMIX ODBC DRIVER (64-bit)	
		MicroStrategy Congle BigQuery ODBC Driver Desktop	
		MicroStrategy Hive ODBC Driver Desktop	-
		۲ الله ۱	•
		< Back Finish Ca	ncel

You will be presented with a form for the DSN attributes. Fill in the DSN name, your TNS service name (this can be found in the tnsnames.ora file in TNS_ADMIN location) and complete path to the tnsnames.ora (*<wallet_directory*>\tnsnames.ora)

DBC Oracle W	ire Protocol Dri	ver Setup	-	? ×
Pooling General	Bulk Clie Advanced	nt Monitoring Security	Advanced Securit Performance	y About Failover
Data Source	Name: DDA	NDWTest		Help
Description:				
Standard Co Host	onnection			
Port Numbe	er:			
SID:				
Service Na	ime:			
TNSNames Server Nar TNSName	s Connection ne: virtu s File name: D\[lalitydemo_high Downloads\walle	t_directory∖tnsname	S.013
Edition Nar	ne:			
	TestConnect	ОК	Cancel	Apply

Next click on the Security tab and choose Encryption Method to be 1-SSL in the Encryption section. Also supply the path and name of the wallet to be used. Data Direct prefers the ewallet.p12 wallet file. The path should be <*wallet_directory*>\ewallet.p12. Supply this information for both the Trust Store as well as the Key Store sections. The password to be supplied here is *the KeyStore/TrustStore password*. You may optionally supply the Database username in the Authentication section.

ODBC Oracle Wire Protocol Driver Set	up 🛛 🖓 🔜 🗙
Pooling Bulk Client Monit General Advanced Se	oring Advanced Security About curity Performance Failover
Authentication User Name:	Help
Authentication Method: 1 - Er	crypt Password 👻
GSS Client Library: native)
Encryption Encryption Method: 1-SS	SL 🔻
Crypto Protocol Version TLSv1.2 TLSv1. SSLv3 SSLv2	1 V TLSv1
Validate Server Certificate	
Trust Store: D:\Do	wnloads\wallet_directory\ewal
Trust Store Password:	••••
Key Store: vnloa	ds\wallet_directory\ewalletp12
Key Store Password:	••••
Key Password:	
Host Name In Certificate:	
TestConnect	K Cancel Apply

Test your connection by pressing the Test Connect button. Supply the database username and password to test the connection

Logon to Oracle W	ire Protocol	X
-Standard Connec	tion	ок
Host		Cancel
Port Number:		
SID:		Help
Service Name:		
- TNSNames Conr	nection	
Server Name:	virtualitydemo_high	
User Name:	admin	
Password:	••••••	
Test Connect Connection esta	blished!	

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

ODBC Data Source Administrator					
User DSN System DSN File D	SN Drivers Tracing Connection	n Pooling	About		
System Data Sources:					
Name	Driver	•	Add		
122-RICKTEST 12-2-OPC ADWC-DD ADWTest DBACCESS hivetest Sample Amazon Redshift DSI Sample Cloudera Hive DSN	Oracle in OraClient12Home2 Oracle in OraClient12Home1 DataDirect 8.0 Oracle Wire Proto DataDirect 8.0 Oracle Wire Proto Oracle in OraClient12Home2 Cloudera ODBC Driver for Apach N Amazon Redshift (x64) Cloudera ODBC Driver for Apach		Remove Configure		
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.					
OK Cancel Apply Help					

DataDirect Connect for JDBC Oracle Driver Configuration

- 1. Download and install Progress DataDirect JDBC Oracle driver. The driver is available for Windows as well as Unix/Linux OS platforms.
- 2. Refer the configuration instructions for connecting to Oracle database here.
- 3. Since ADW is a secured service that uses TCPS connection protocol, refer the configuration guidelines for enabling a wallet authenticated JDBC Thin URI connection <u>here</u>

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.