Connecting Erwin Data Modeler to Oracle Autonomous Database

Pedro Torres

This step by step tutorial guides how to configure Erwin Data Modeler connectivity to Oracle Autonomous Database (ADB).



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

Autonomous Database	Autonomous Databases in PEDROTOR Compartment							
Autonomous Database	Create Autonomous Data	Create Autonomous Database						
Dedicated Infrastructure (i)	Display Name	Database Name	State	Dedicated Infrastructure	OCPU Count	Storage (TB)	Workload Type	Created 👻
	ADWPTR	ADWPTR	Available	No	1	1	Data Warehouse	Thu, Mar 12, 2020, 16:26:11 UTC
Autonomous Container Database								Displaying 1 Autonomous Database \langle Page 1 \rangle
Autonomous Exadata Intrastructure								
List Scope	Þ							
Compartment	26							
PEDROTOR \$								
oraclepartnersas (root)/Team/PEDROTOR								
Filters								
Workload Type								
Data Warehouse								

*Note: Please check here for the Oracle documentation to provision ADW.

1. Download the corresponding credentials zip file to the system that has Erwin Data Modeler installed. These credential files will be used to connect Erwin Data Modeler to ADB.

	Search for resources and services	
Autonomous Database » Autonomous D	atabase Details	
	ADWPTR	Database Connection Help Close
	DB Connection Perform	You will need the client credentials and connection information to connect to your database. The client credentials include the wallet, which is required for all types of connections.
ADW	Autonomous Database	Download Client Credentials (Wallet) To download your client credentials, select the type of wallet, then click Download Wallet. You will be asked to create a password for the wallet.
	General Inform	Wallet Type ③ Instance Wallet
	Database Name: ADWP Workload Type: Data Wa Compartment: oraclepar OCID:zdbxmq Show Created: Thu, Mar 12, 20	Download Wallet Rotate Wallet Wallet last rotated: -
	OCPU Count: 1	Close

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

2. Download and Install Erwin Data Modeler – https://erwin.com/order-fulfillment/



3. Validate if you are using Windows version for 32-bit or 64-bit. Control Panel -> System and Security -> System

🗾 System						×
🗧 🔶 🐇 🛧 🔛 🖌 Control F	Panel → System and Security → Sy		ٽ ~	Search Control Panel	Q,	
Control Panel Home	View basic information	about your computer				?
🌍 Device Manager	Windows edition					
👎 Remote settings	Windows Server 2019 Stan	dard				
Advanced system settings	© 2018 Microsoft Corpora	tion. All rights reserved.		Windows Server* 2019		
	System					
	Processor:	Intel(R) Xeon(R) Platinum 8167M CPU @ 2.00GHz 2	2.00 GHz			
	Installed memory (RAM):	30.0 GB				
	System type:	64-bit Operating System, x64-based processor				
	Pen and Touch:	Pen and Touch Support with 10 Touch Points				

4. In this case is for 64 bits



- 5. The following instructions assume you are using 62-bit. If you are using 32-bit, the instructions are the same, except to download the 32-bit Erwin Data Modeler.
- 6. Download Oracle Client 19.3 of this Oracle.com web page:

https://www.oracle.com/database/technologies/oracle19c-windows-downloads.html

Oracle Database 19c Client (19.3) for Microsoft Windows x64 (64-bit)					
Download	Description				
WINDOWS.X64_193000_client_home.zip	(64-bit) (924,022,453 bytes) (sha256sum - a7d5ba7d3dac84fcebc5ddb50aeed3125b52d94f26bab9924bdab6f6d00d2c7e)				
WINDOWS.X64_193000_client.zip	(64-bit) (1,043,502,535 bytes) (sha256sum - 3fa278fe33e0cd3bbed6c84f34b5698962c1feeb74cced1c9713435ebdb2a24f)				

7. Install the Client.



8. Navigate to where you downloaded the Oracle ADB credentials. Unzip the contents to a directory.

📕 l ⊋ 🚹 = l			Wallet_ADW	/PTR			
File Home Share View							
🔆 Favorites	Name	Date modified	Туре	Size			
📃 Desktop	cwallet.sso	3/12/2020 7:51 PM	SSO File	7 KB			
📕 Downloads	🍺 ewallet	3/12/2020 7:51 PM	Personal Informati	7 KB			
📳 Recent places	keystore.jks	3/12/2020 7:51 PM	JKS File	4 KB			
	jdbc.properties	3/12/2020 7:51 PM	PROPERTIES File	1 KB			
🖳 This PC	readme.md	3/12/2020 7:51 PM	MD File	1 KB			
膧 Desktop	🥘 sqlnet	3/13/2020 10:27 PM	ORA File	1 KB			
Documents	🥮 tnsnames	4/6/2020 10:00 PM	ORA File	2 KB			
Downloads	truststore.jks	3/12/2020 7:51 PM	JKS File	4 KB			

9. I will use Physical according the TNSNAMES.ora in the wallet file



10. In the Windows environment variables dialog, create the TNS_ADMIN variable and set it to the directory location where you unzipped the ADB credentials.

ł	Environment Variables	X
Licer veriables for or		
User variables for op		
Variable	Value	
ORACLE_HOME	C:\Users\opc\Downloads\WT_193000_cl	
TEMP	%USERPROFILE%\AppData\Local\Temp	
TMP	%USERPROFILE%\AppData\Local\Temp	
TNS_ADMIN	C:\Users\opc\DATA\Wallet\Wallet_ADW	
L		_
	New Edit Delete	
System variables		
Variable	Value	~
ComSpec	C:\Windows\system32\cmd.exe	
FP_NO_HOST_C	. NO	
NUMBER_OF_P	2	
ORACLE_HOME		~
	· · · · · · · · · · · · · · · · · · ·	
	New Edit Delete	
	OK Cancel	I

*Note: The tnsnames.ora net service names will be used to connect to ADB.

11. Modify the sqlnet.ora file. Change the directory location where the wallet (cwallet.sso) has been unzipped. It is recommended you remove the quotes around the directory location as well.



12. Validate that the Oracle Database Client can communicate with ADW, and since it is installed on the same system as the Erwin Data Modeler, it ensures that Erwin to ADW is also configured correctly. (you can use SqlDeveloper to validate)

6					Oracle SQL Developer :
<u>File Edit V</u> iew <u>N</u> avigate <u>R</u> un Tea <u>m</u> <u>T</u> ools <u>W</u> indow	<u>H</u> elp				
🕒 🗁 🗐 🖤 🔍 🔾 🗸 🚳					
Connections	🖸 Weld	come Page 🛛 🔛 ADWP	TR × 🔠 I	ADWPTR~1	× 🖽 SALES ×
🕂 - 🔞 🝸 👯 🔁	Columns	Data Model Constraints	s Grants St	atistics Trigg	gers Flashback Dependencies Details P
Oracle Connections	🔊 🖈	🛃 🗙 🗣 🖳 i Sor	rt Filter:		
ADWPTR		ID REGION	SALES	CLIENTS	
🖨 🖓 Tables (Filtered)	1	1 APAC	11834000	1300	
	2	2 EMEA	51321000	7000	
		3 LATAM	13621000	3500	
		4 NORTH AMERICA	15003271	5257	
E Functions					

13. Open Erwin Data Modeler and create a file.

	Disease Mardal Mart Astissa	Table Uble	erwin DM
Nodel Pione View Model Pitty Sub-Catego Templates Pitty Sub-Catego Model Explorer X Model Explorer X	Jagram Model Mark Accord	Annotation	Cut Copy Deleter ard Editing Q - S @ ⊡ B - [= 1] ♥ → D B = - [♥ - [
			New Model X Type Uogical Physical @Logical/Physical @Match template Target Server Database: Oracle Database: Oracle Version: 11g/12c/18c/19c Template @efsult> Obefsult> @ efsult> Oreserver the template binding Ck

14. Use reverse Engineer



15. Select the objects that you need validate in your Reverse Engineer file.

Reverse Engineer - Set Options	
Reverse Engineer From	Options
Database O Script File	Reverse Engineer
File: Browse	System Objects Use DBA Views Tables/Views Owned By
NSM Options Glossary CSV File: Browse	All O Current User Owners (comma separated):
Items to Reverse Engineer	
Option Set: Open Save Save As Delete Default Option Set - Database V	Table Filter (comma separated) Add double quotes(" ") for exact match
Model Database Directory Package Directory Rollback Segment Directory Synonym on External Objects Directory Directory	In Infer From Primary Keys Indexes Relations Names Case Conversion of Physical Names © None Iower Output R Force Case Conversion of Logical Names © None Iower Output R Mart Mart Browse Output File: Browse © File Mart Target Model: Browse Option Set: Speed Option Set
	< Back Next Cancel

16. Connect to user that you need to do reverse Engineer and retrieve the information (in this case PTORRESR):

Oracle Connection						
Database:	Oracle 11g/12c/	Orade 11g/12c/18c/19c				
Authentication:	Database Authe	ntication	~			
User Name:	PTORRESR					
Password:	•••••	•••••				
Patame	eters	Val	ue			
Connection String:		adwptr_low				
Connect As STSDD/	4					
Recent Connections:						
adwptr_low (Or	rade 11g/12c/18	c/19c) using PTORR	ESR			
adwptr_low (Or	racle 11g/12c/18	c/19c) using ADMIN				
<						
Connect	Disconnect	Close	Help			

17. Validate report from the ADW

