Practice: Provisioning an Autonomous Data Warehouse Instance with Oracle Machine Learning

Get your free cloud account: click [here](#).

Overview

In this practice, you provision an Oracle Autonomous Data Warehouse service instance with Oracle Machine Learning.

Tasks

1. Log into your [Oracle Cloud Free Tier Account](#)

    a. Click the hamburger icon beside Oracle Cloud on the top left and explore the options available

    b. Click **Autonomous Data Warehouse**

    c. You are now logged in to the Autonomous Databases console.

    d. Select the compartment and click Create Autonomous Database to start creating your Autonomous Data Warehouse instance.

2. Provide the following details to create the Autonomous Data Warehouse instance.

    a. Select or enter the following values in the Create Autonomous Database wizard:

    > Workload Type: **DATA WAREHOUSE**
    > Display Name: **MYADWC**
    >
    > *(You can enter a unique name using the naming convention)*
    >
    > Database Name: **MYORCL**
    >
    > *(You can enter a unique name using the naming convention)*
    >
    > CPU Core Count: **1 (Always Free)**
    >
    > Storage (TB): **0.02 (Always Free)**
    >
    > Password: *Set the password for your Autonomous Data Warehouse **ADMIN** user.*
    >
    > LICENSE TYPE: Select **License Included**.
    >
    > TAGS: Ignore this section.
    >
    > **Note:** The password must be 12 to 60 characters and contain at least one uppercase letter, one lowercase letter, and one number. The password cannot contain the double quote (") character. It must be different from the last four passwords.

b. After you have filled the wizard, click **Create Autonomous Database.**

    Note:

    - Initially, the status of the service instance will read "Provisioning."

    - If there was duplication in the name you had provided for the instance or the database, then the status will read "Unavailable." If this happens, you will need to terminate this instance and start over again.

    - Provisioning might take anywhere between 10 to 40 minutes to complete depending on resource availability. Allow sufficient time for this process to complete.

c. Refresh the Instances page after a while to see if your instance is created. The page will auto refresh and show the updated status after the process completes.

d. Check if the Status for your instance is **Available,** indicating your instance is ready to use.

3. Follow these steps to access the administration console of your service instance.

    a. Go to the Cloud Console and navigate to the Autonomous Databases home page, where all service instances will be listed.

    b. Find your service instance, click the **action** menu as shown below, and select **Service Console** or click the instance display name and then click Service Console**.**

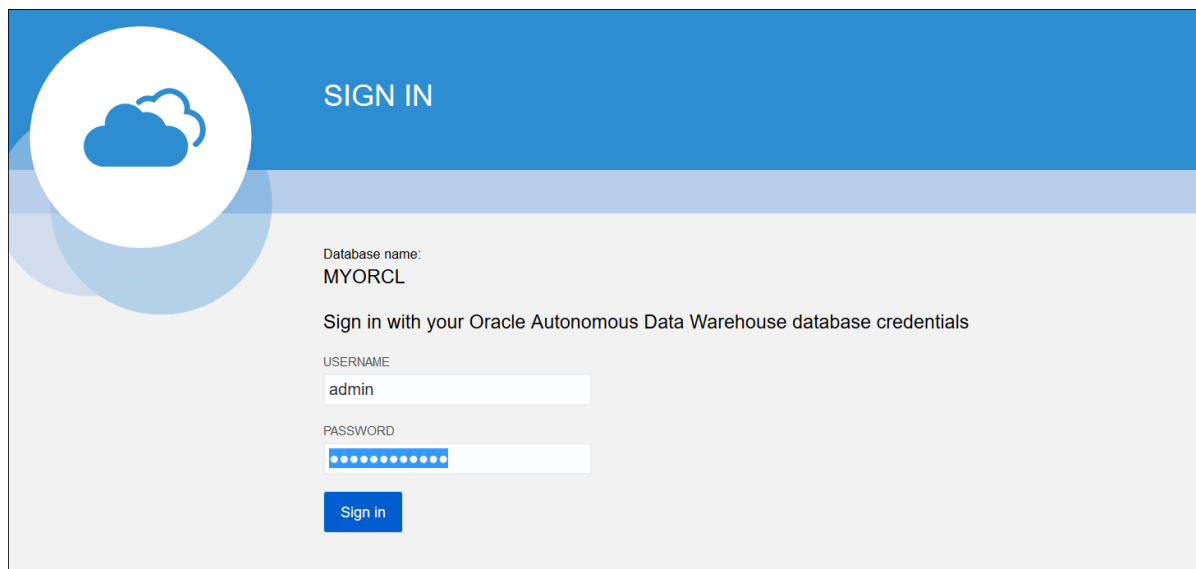Autonomous Databases *in* *Compartment*

Autonomous Database delivers fast performance and requires no database administration. It performs all routine database maintenance tasks while the system is running, without human intervention. Autonomous Databases located in the Oracle cloud can run on dedicated or shared infrastructure. Learn more.
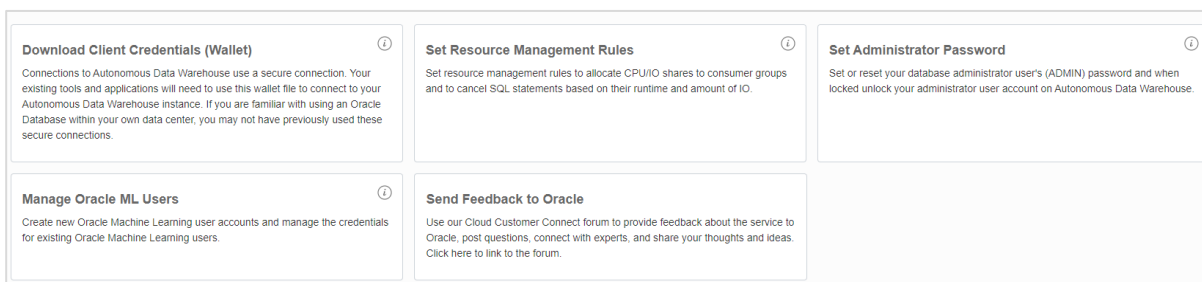
Create Autonomous Database

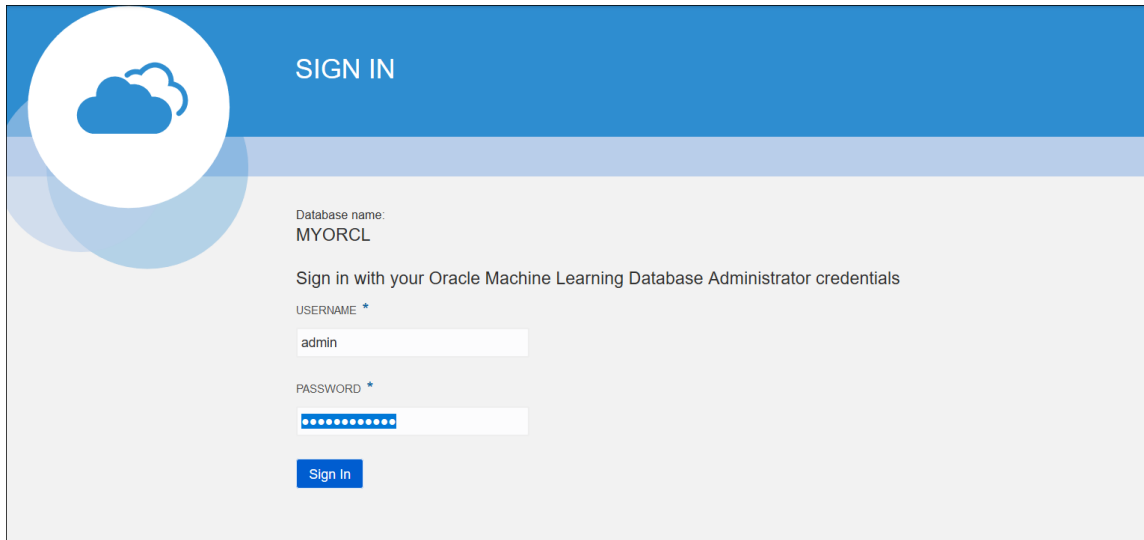| Display Name	State	Dedicated	OCPUs	Storage	Workload Type	Autonomous Data Guard	Created	▼
DB 202108111732 *Always Free*	● Available	No	1	20 GB	Data Warehouse	—	Wed, Aug 11, 2021, 12:06	View Details ⋮
							Displaying 1 Autonomous D	Service Console ❯
								Move Resource
								Copy OCID
								Add Tags
								Terminate

Using Oracle Machine Learning with Autonomous Database

c. If you are required to log in to the service with your admin password, you will see the admin home page of your ADW service instance.
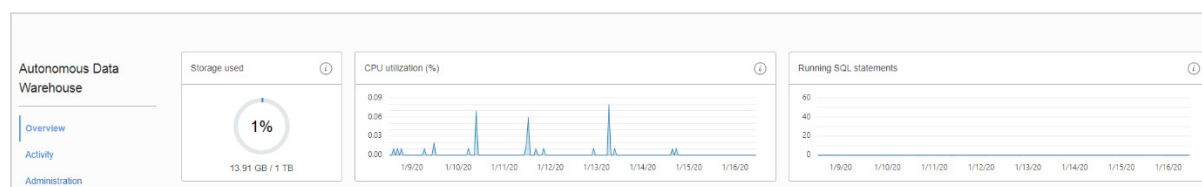
4. Access the Oracle Machine Learning home page by following these steps.

a. Go to the Administration tab and click **Manage Oracle ML Users** to go to the OML user management page. This page will allow you to manage OML users.
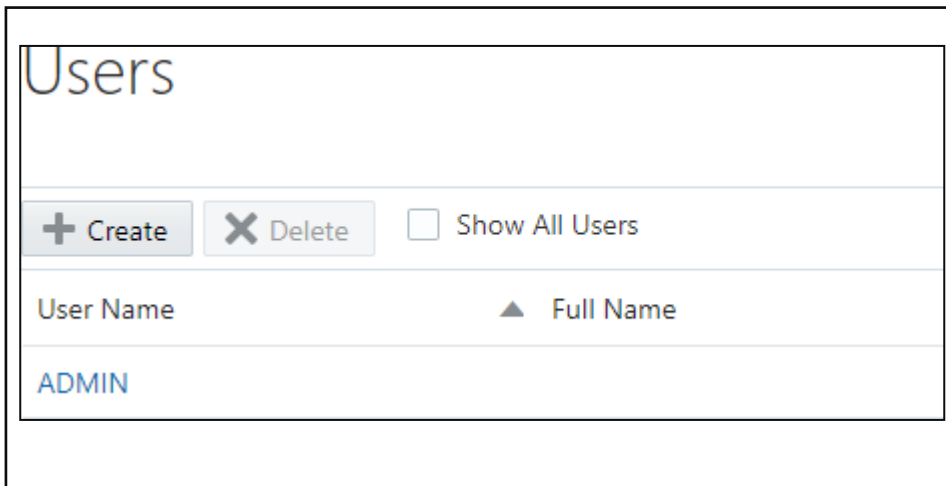
b. This will open a new tab within your browser. If asked for a username and password, enter **admin** as the username and use the password you specified when provisioning your ADW instance. Click **Sign In**.

Note: You do not have to go to this page using the same steps every time. You can bookmark the URL and access it directly later.

c. Click **Create** to create a new OML user. Note that this will create a new database user. This newly created user will be able to use the OML notebook application. Note that you can also enter an email address to send an email confirmation to your user.

d. Enter the required information for this user, and name the user **omluser1.**

e. Click the **Create** button available in the top-right corner of the page to create the user.

f. After you click **Create,** you will see the user listed in the **Users** section.

Note: You will receive a Welcome Email within a few minutes after providing a valid email address.

5. Exploring the OML home page

a. Click the **Home** icon in the top-right corner of the Oracle Machine Learning User Administration page to go to the OML home page.

b. Use your new user account **omluser1** to sign in.

After you have successfully signed in to OML, the application home page will be displayed.
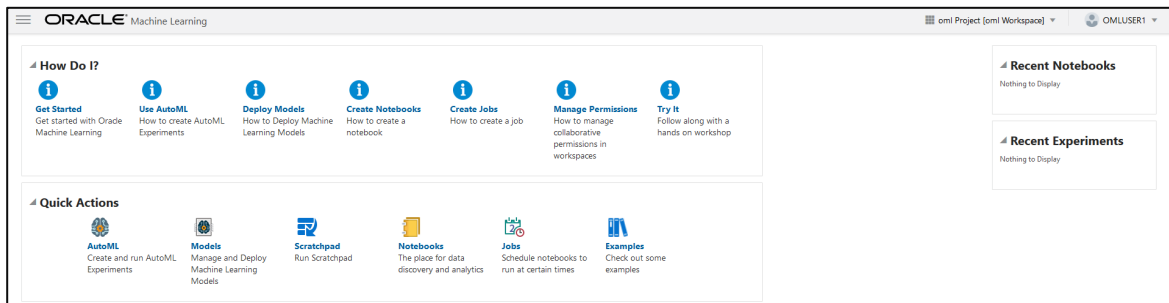
Note: The grey menu bar at the top of the screen provides links to the main OML menus for the application (left corner) and the workspace/project and user maintenance on the right-hand side.

c. On the home page, the main focus is the **Quick Actions** panel. The main icons in this panel provide shortcuts to the main OML pages for running queries and managing your saved queries.

Note: All your work is automatically saved, i.e. there is no **Save** button when you are writing scripts and/or queries. Click the username on the top-right corner and sign out.

d. Follow the same steps and create a second user. Give the user any name and sign in to OML. After you are signed in, log off.

6. Connect to the ADW database using SQL Developer by following these steps.

Downloading the credentials wallet

a. Because ADW only accepts secure connections to the database, you need to download a wallet file containing your credentials first. The wallet is downloaded from the ADW service console.

b. On the Instances page, find your database and click **Service Console** in the actions menu.

Using Oracle Machine Learning with Autonomous Database
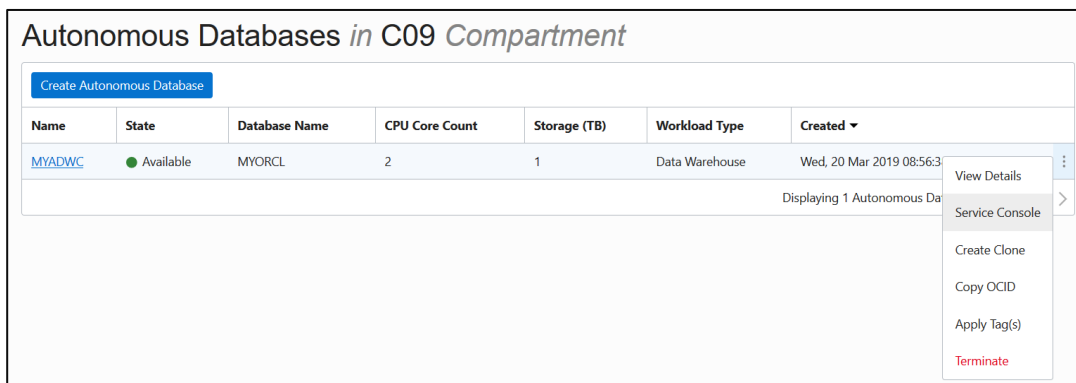
c. This will open a new browser tab for the service console. If required, **Sign in** to the service console with the following information.

Username**:** admin

Password: The administrator password you specified during provisioning

d. Click the **Administration** tab and click **Download Client Credentials** to download the wallet.

Note: Specify a password of your choice for the wallet. You will need this password when connecting to the database later. Note that this password is separate from the admin password. You will need this password as your keystore password when connecting JDBC thin applications.
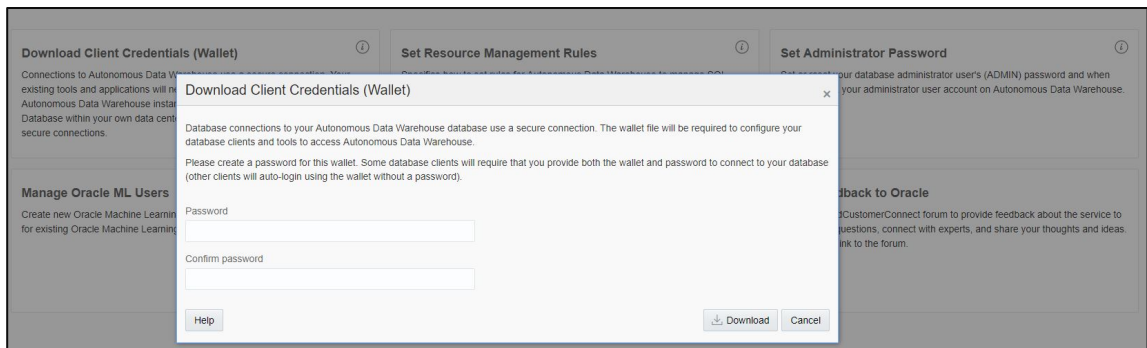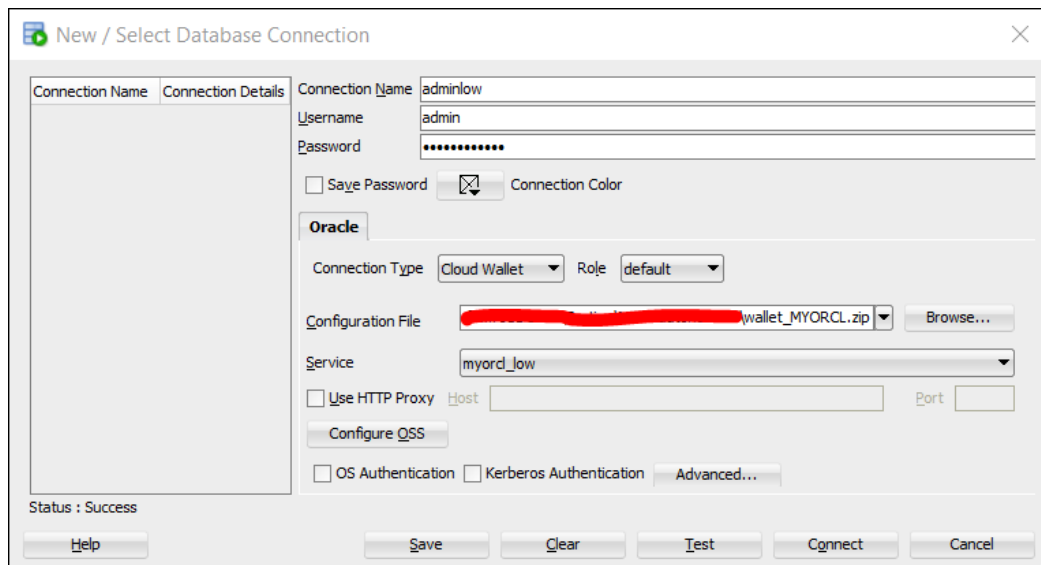

e. Click **Download** to download the wallet file to your client machine.

f. Start SQL Developer and create a connection for your database using the default administrator account, **ADMIN**. Click the **Create Connection** icon in the Connections toolbox on the top left of the SQL Developer home page.
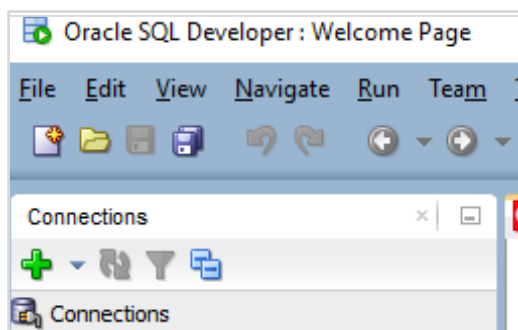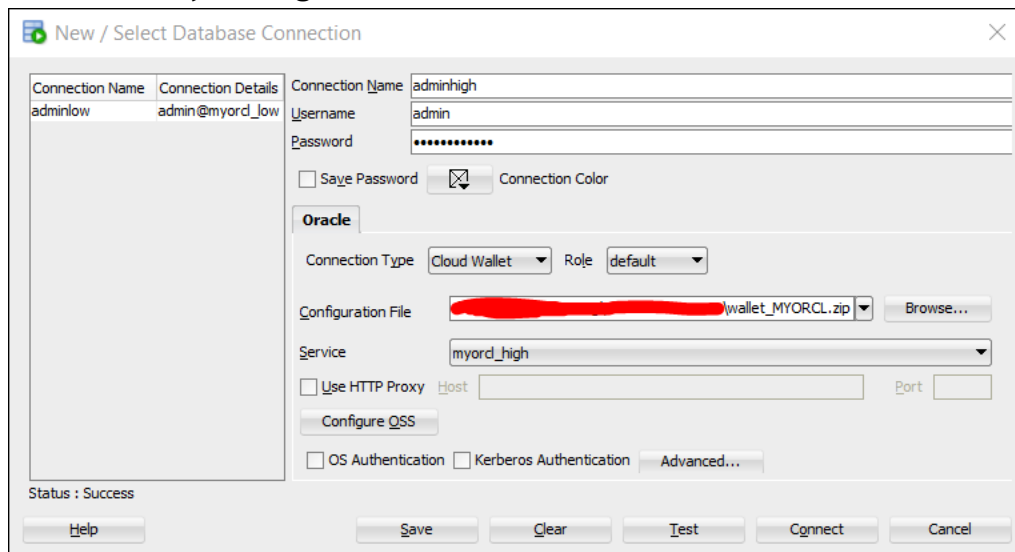

g. Enter the connection details as follows:

Connection Name: **adminlow**
Username: **admin**

Password: The password you specified during provisioning

Connection Type: **Cloud Wallet**

Configuration File: Enter the full path to the wallet file you downloaded before, or **click** the Browse button to point to the location of the file.

Service: There are three preconfigured database services for each database. Pick **yorcl_low** for this practice.

h. Test your connection by clicking the **Test** button. If it succeeds, save your connection information by clicking **Save.**

i. Connect to your database by clicking the **Connect** button.

j. Create another connection named **adminhigh** using the same information as in the previous step, but this time pick **myorcl_high** as the service name. Test your connection by clicking the **Test** button. If it succeeds, save your connection information by clicking **Save**.

k. Connect to your database by clicking the **Connect** button.

This completes the practice for provisioning an Oracle Autonomous Data Warehouse service instance with Oracle Machine Learning.

Using Oracle Machine Learning with Autonomous Database