



# Autonomous Data Warehouse Cloud

Updated: June 19, 2018

## Lab 7: Scaling and Performance

In this lab you will scale up your Oracle Autonomous Data Warehouse Cloud service with additional CPUs. You will also watch a demo that shows the impact of scaling the service online on performance and concurrency.

### Objectives

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- Scale up an ADW service
- Understand the impact of online scaling the ADW service on performance and concurrency

### Required Artifacts

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- The lab requires an Oracle Autonomous Data Warehouse Cloud subscription.
  - Locate your **Cloud Account Name**, **Username**, and **Password**

## Lab Steps

### Step 1: Scaling your ADW instance

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- Login to **ADW Cloud Console** and access the **ADW Details** page of your service by following the instructions from **Lab 2 - Step 1: Sign in to ADW Cloud Console**.

Database - Autonomous Data Warehouses - Autonomous Data Warehouse Details

## ADW Finance Mart

Service Console | Scale Up/Down | Admin Password | Restore | Stop | Terminate

**ADW**  
AVAILABLE

Autonomous Data Warehouse Information

Display Name: ADW Finance Mart	Created: Tue, 12 Jun 2018 09:02:57 GMT
Database Name: ADWFINANCE	CPU Core Count: 2
Compartment: ADW_Compartment	Storage (TB): 8
OCID: ...lyvq	Show Copy

Resources

Backups

Create Manual Backup

Name	State	Type	Started	Ended
No items found.				

Showing 0 item(s) < Page 1 >

- Click on **Scale Up/Down**.

Database - Autonomous Data Warehouses - Autonomous Data Warehouse Details

## ADW Finance Mart

Service Console | **Scale Up/Down** | Admin Password | Restore | Stop | Terminate

**ADW**  
AVAILABLE

Autonomous Data Warehouse Information

Display Name: ADW Finance Mart	Created: Fri, 01 Jun 2018 12:36:58 GMT
Database Name: ADWFINANCE	CPU Core Count: 2
Compartment: ADWCSQA	Storage (TB): 8
OCID: ...oc23q	Show Copy

Resources

Backups

Create Manual Backup

Name	State	Type	Started	Ended
No items found.				

Showing 0 item(s) < Page 1 >

- On the **Scale Up/Down** pop-up, fill-in the following information to scale down the CPUs to 1 and click **Update**:
  - **CPU Core Count: 1**
  - **Storage (TB): [Do Not Modify]**

Scale Up/Down [close](#)

**CPU CORE COUNT**

1

The number of CPU cores to enable.  
Maximum cores per database: 128.  
Available cores are subject to your tenancy's service limits.

**STORAGE (TB)**

1

The available storage, up to 128 TB.

**Update**

- Notice the **Scaling in Progress** status.



- Once the scaling operation completes, the instance status will be set back to **Available**.

**Note:** The applications can continue running during the scale operation without downtime.



- Note the new **CPU Core Count** in **Autonomous Data Warehouse Information** tab.

ADW Finance Mart

[Service Console](#) [Scale Up/Down](#) [Admin Password](#) [Restore](#) [Stop](#) [Terminate](#)

Autonomous Data Warehouse Information

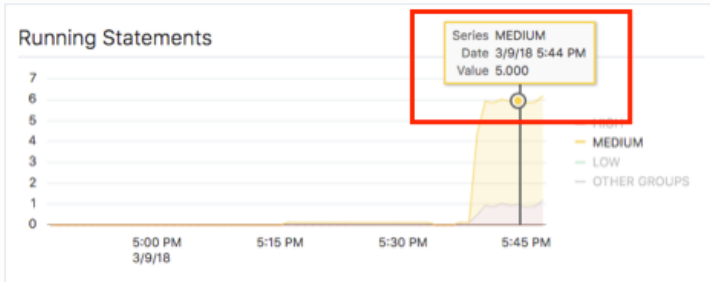
Display Name: ADW Finance Mart	Created: Tue, 19 Jun 2018 16:39:10 GMT
Database Name: ADWFINANCE	<b>CPU Core Count: 1</b>
Compartment: ADW-Window-instances	Storage (TB): 1
OCID: ...xw5aka <a href="#">Show</a> <a href="#">Copy</a>	

## Step 2: Benefits of Dynamic Scaling on Performance and Concurrency

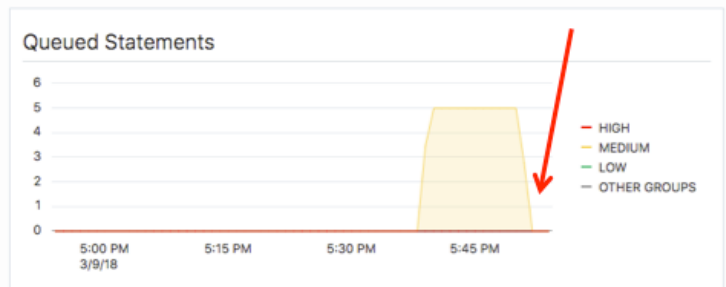
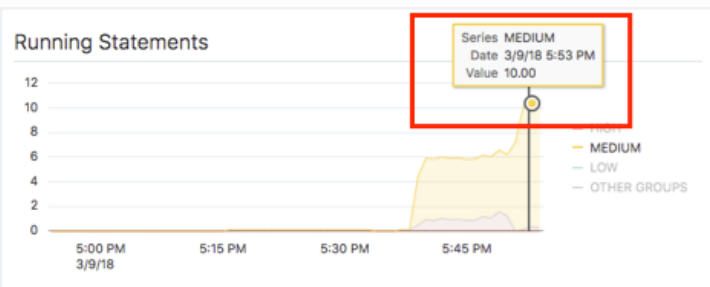
- [Click here](#) to watch a demo of the performance impact of scaling up your instance. In the demo you will

see that scaling up provides more concurrency for your users.

- The demo will show a workload that has 10 concurrent users running with the MEDIUM database service. You will see that on a 2 CPU ADW instance, 5 queries are running whereas 5 queries are waiting in the queue for resources.



- While the workload is running the database will be scaled up from 2 CPUs to 4 CPUs. You will see that the queries waiting in the queue are now able to start and there are no sessions waiting in the queue anymore.



- ADW allows you to dynamically scale your service online when you require more concurrency and performance
- You've successfully completed this lab.