Adding an Oracle Parameter Group

Overview:

This document provides details of how to create and add an Oracle Parameter Group to your RDS instance on AWS. This process is needed to enable Auditing used exclusively in the Lab 5 assignment.

Steps:

You will use the AWS Educate account to enter the AWS Console and then navigate to the RDS console to set-up a parameter group with specific audit_trail values. The parameter group will then be added to the existing RDS instance. Finally, the instance must be rebooted for the parameter settings to become available. The detailed steps include:

1. Login to your AWS Educate Account and Navigate to your SDEV 350 classroom. See figure 1.

Course Name ↓↑	Description	Educator ↓↑	Course End Date ↓↑	Credit Allocated Per Student ↓↑	Status
Database Security	This is a test set-up for our summer classroom. Please provide access asap.	James Robertson	05/06/2019	$50	Accepted Go to classroom ➜

Figure 1 Navigate to your AWS Educate Classroom

2. Click on the AWS Console button to continue. See Figure 2.

Figure 2 Select the AWS Console

3. Once in the AWS Console, Navigate to the RDS Dashboard and click on the Parameter Groups link on the left menu. See figure 3.
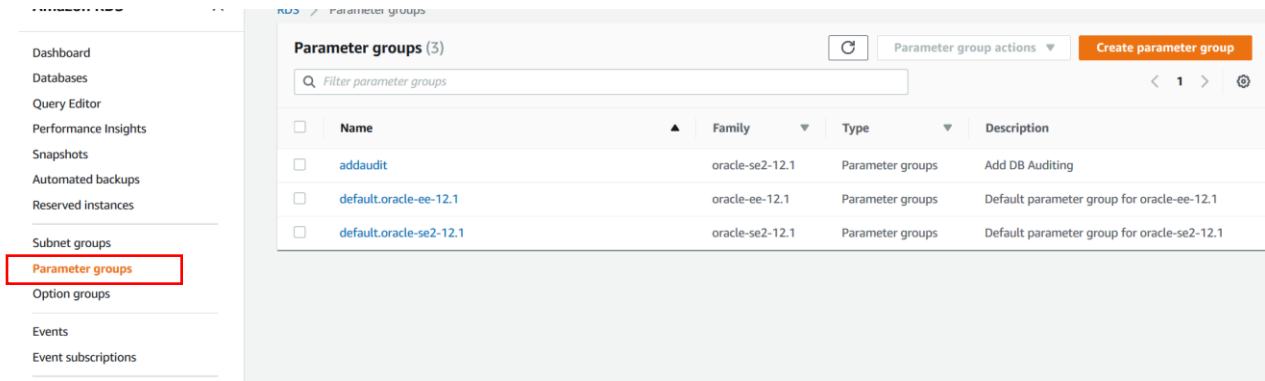
Figure 3 Select the Parameter Groups

4. Select the "Create Parameter Group" button on the upper left of the screen. See figure 4.
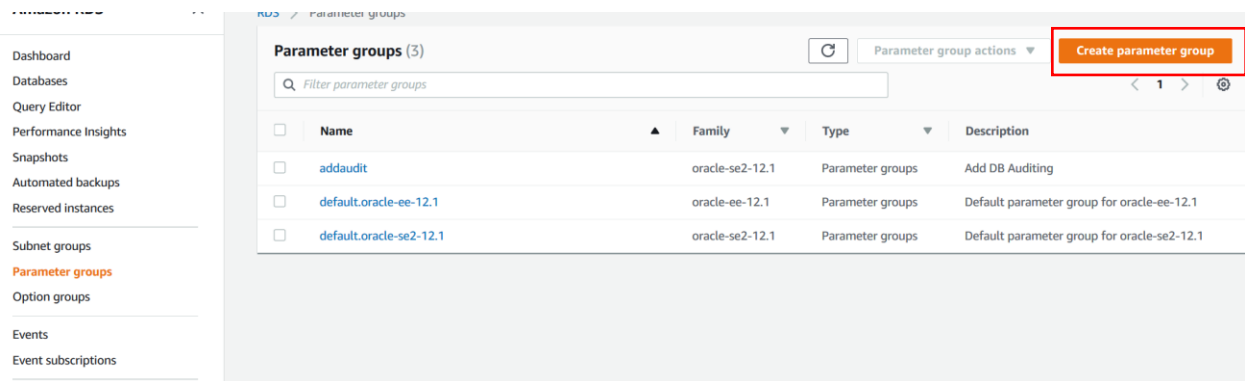

Figure 4 Creating a Parameter Group

5. Accept the default Parameter group family, and then provide a unique Group name and description. Click on "Create" as shown in figure 5.

Figure 5 Naming the Parameter Group

6. Click on the parameter group you just created and filter for audit parameters as shown in figure 6.

RDS > Parameter groups > addmyaudit

addmyaudit

Parameters

	Name ▼	Values ▼	Allowed values	Modifiable ▼
☐	audit_file_dest	/rdsdbdata/admin/{dbName}/adump		false
☐	audit_sys_operations		TRUE, FALSE	false
☐	audit_syslog_level			false
☐	audit_trail		DB, OS, NONE, XML, EXTENDED	true

Figure 6 Filtering Audit parameters

7. Select the audit_trail parameter and select "edit parameters" as shown in figure 7.

Parameters   **Edit parameters**

🔍 audit_trail   ✕   ＜ 1 ＞ ⚙

☑	Name ▼	Values ▼	Allowed values	Modifiable ▼	Source ▼	Apply type ▼	Data type ▼	Description
☑	audit_trail		DB, OS, NONE, XML, EXTENDED	true	engine-default	static	list	enable system auditing

Figure 7 Select Edit Parameters

8. Select the audit_trail parameter record, enter DB, EXTENDED in the values and select "Save Changes" as shown in figure 8.

Figure 8 Add DB, EXTENDED as Audit_Trail parameters

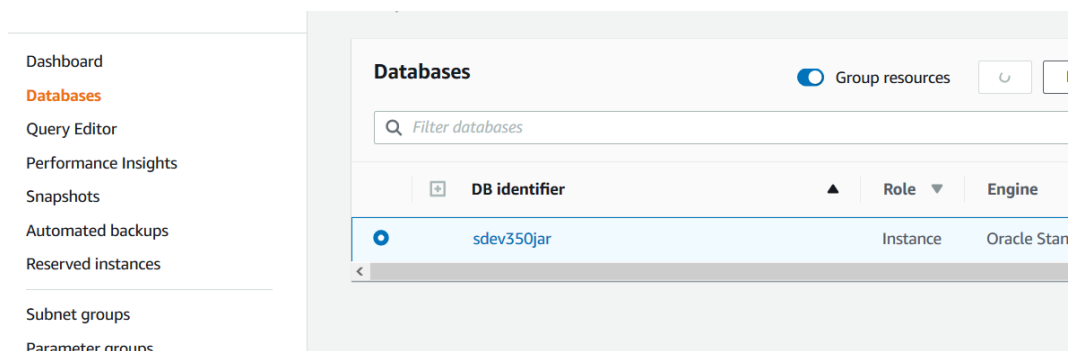9. Return the Databases by clicking on the Databases link on the left. See figure 9.

Figure 9 Selecting Databases

10. Select the SDEV 350 instance created for the class and then select Modify. See results shown in figure 10.

Figure 10 Modify the SDEV 350 instance

11. Scroll down to the Database Options section and use the drop down menu to select the Parameter group you just created. See figure 11.

Figure 11 Selecting the DB Parameter group

12. Scroll down and select Continue. See figure 12.

Figure 12 Select Continue

13. Select "Apply Immediately" and then select "Modify DB instance" as shown in figure 13.

Figure 13 Apply Immediately

14. You will see the status of your DB instance change from available to "modifying". The updates may take 15-30 minutes to complete. See figure 14.

Figure 14 DB instance modifying

15. Once the DB becomes available again you will be able to reconnect and see if the parameters change was effective. To test, run the following query from SQL Developer:

```
show parameter audit_trail;
```

A successful response will show an output similar to this:

```
NAME          TYPE    VALUE
----------- ------ ------------
```

```
audit_trail string DB, EXTENDED
```

Congratulations. You have successfully modified your database to include Audit Trail features.

If for some reason you see "None" for the parameter values, double check the steps to see that there were no issues and the parameters were saved and you applied the parameter group to the SDEV 350 instance.