AWS Database Migration Services

Workshop: Oracle to PostgreSQL Migration

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Objective

In this lab, you will be performing a migration from Oracle to PostgreSQL using SCT and DMS

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Setup: EC2 Key Pair

In this step, you will generate an EC2 key pair for use in the Database Migration Workshop labs.

Make sure you are have selected the **Asia Pacific (Tokyo)** region by visiting the following link:

http://bit.ly/ap-northeast-1-keypairs

If no EC2 key pairs have been created in this region yet, you will see the following screen:

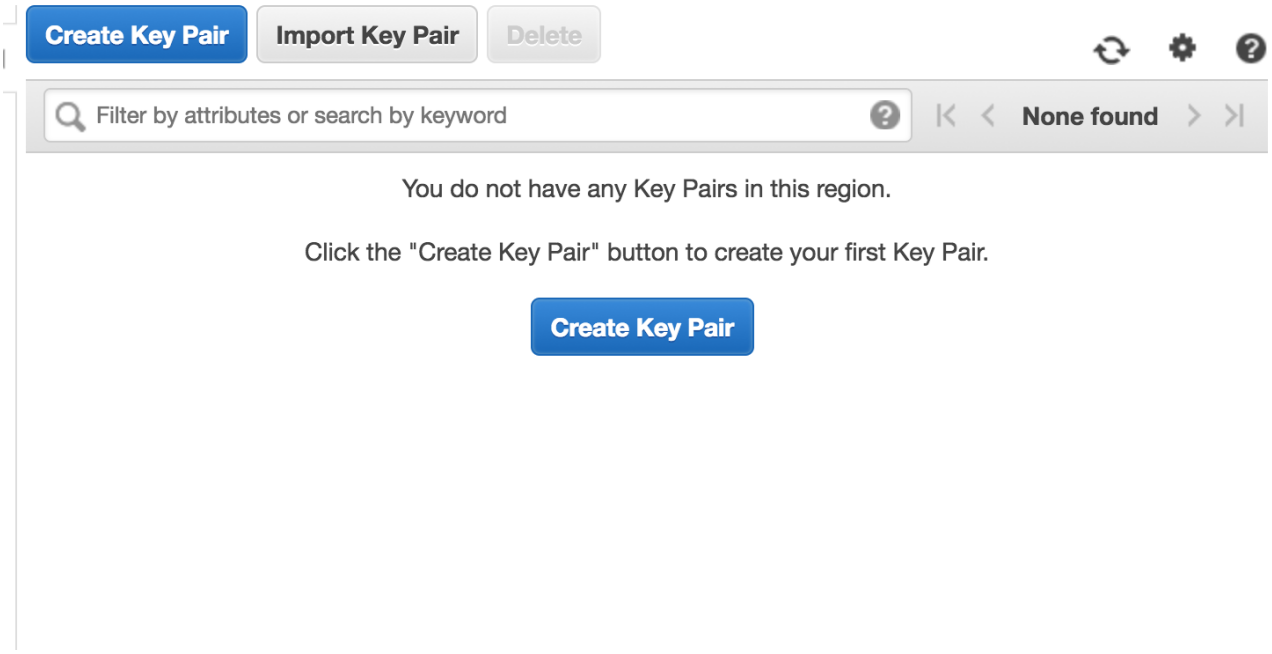

Figure 1: *Create New Key Pair*

> *For this workshop, we recommend the creation of a new EC2 key pair to be used associated with workshop resources. We will later delete this key pair along with the workshop resources.*

You should click the **Create Key Pair** button and enter **workshop** as the name for the new key pair as shown below, clicking the **Create** button to complete the creation of the new key pair.

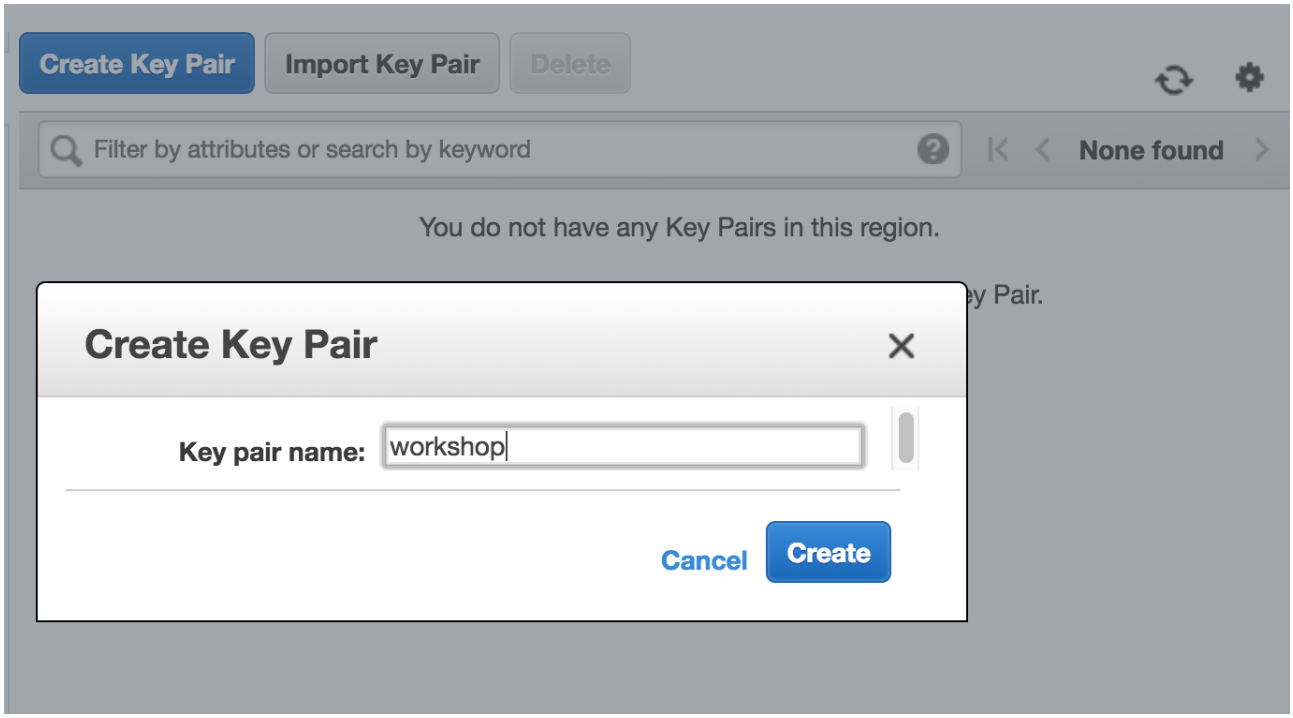

Figure 2: *Create New Key Pair - Dialog*

You should now see a new EC2 key pair labeled **workshop**:

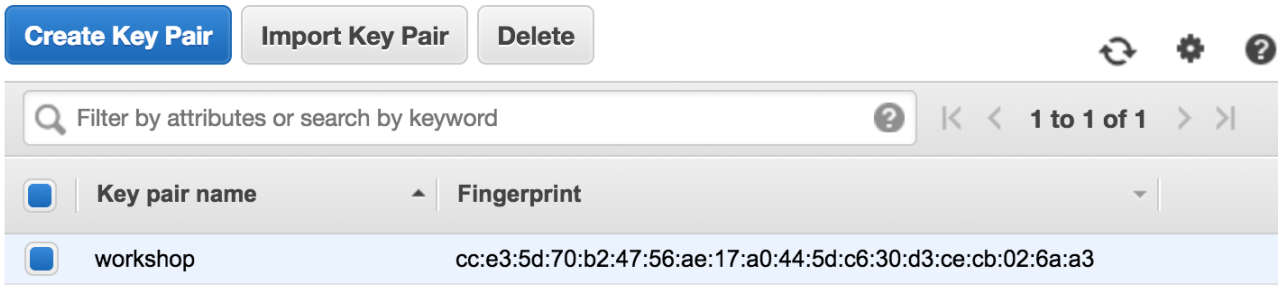

Figure 3: *Create New Key Pair - Created*

The private key for this EC2 key pair will have automatically downloaded to your browser's default directory, and this file will be called **workshop.pem**.

Setup: AWS CloudFormation Stack

In this step, you will launch a AWS CloudFormation template that will setup the following resources needed for this lab:

- Source Database: Amazon RDS Oracle (this database will be pre-populated with sample database installed from https://github.com/awslabs/aws-database-migration-samples)
- Target Database: Amazon RDS PostgreSQL

  **CAUTION: The resources that you will be spinning up will continue to run until the CloudFormation stack is deleted or the individual resources are shutdown -- the steps for teardown are located Teardown: AWS Cloudformation Stack

To launch this template, use the following link: http://bit.ly/aws-dms-workshop-lab-1

Setup: Accessing Amazon AppStream Tools

Setup: AWS Schema Conversion Tool

In this step, you will install the AWS Schema Conversion Tool locally.

> *For those participants not wishing to install the AWS Schema Conversion Tool locally, you can use the Schema Conversion Tool via Amazon AppStream 2.0 resources that will have been temporarily provisioned for your use during this lab. See Setup: Accessing Amazon AppStream 2.0 Tools*

Often, a key aspect of database migrations between two different platforms involves the conversion of data schema. This is accomplished with the AWS Schema Conversion Tool, a client-side application that you can download for free and map any schema changes between the platforms.

Setup: SQL Database Management Tool (Optional)

In this step, we will install a database management tool of your choice locally.

> *For those participants not wishing to install a database management tool locally, you can use the DBeaver tool via Amazon AppStream 2.0 resources that will have been provisioned for you temporarily. See Setup: Accessing Amazon AppStream 2.0 Tools*

Some popular and free tools include:

- SQL WorkbenchJ: http://www.sql-workbench.net/downloads.html
- DBeaver: http://dbeaver.jkiss.org/
- SQuirrel: http://squirrel-sql.sourceforge.net/

In this lab, we will be using SQL WorkbenchJ screenshots to demonstrate the lab activities.

Setup: JDBC Drivers

If you have chosen to locally install the AWS Schema Conversion Tool and your preferred database management tool, you will also need to download the database-specific JDBC drivers to connect to the database resources in this workshop. These JDBC drivers can be found at the following links:

- http://bit.ly/postgres-jdbc
- http://bit.ly/oracle-jdbc

  The Oracle JDBC requires that you accept the associated license agreement before downloading -- the actual file required from the linked page is called ***ojdbc7.jar***

You will need to download both drivers to your local hard drive for later use by both the AWS Schema Conversion Tool and your preferred database management tool.

Teardown: AWS CloudFormation Stack