AWS DMS Workshop

SQL Lab: Oracle to PostgreSQL



AWS ASEAN Team

Revised 2017.10.24



About

This workshop is composed of three parts:

- Part 1: Introduction to core concepts of AWS Database Migration Services (AWS DMS) and the AWS Schema Conversion Tool (AWS SCT)
- Part 2: Lab providing hands-on with a SQL use case,
 specifically migrating Oracle DB -> Postgres DB
- Part 3: Lab providing hands-on with a NoSQL use case,
 specifically migrating MongoDB -> Amazon DynamoDB



Agenda

- Oracle DB
- PostgreSQL DB
- Lab Activities

Oracle DB



What is Oracle DB?

- Oracle® Database is a <u>relational database</u> management system developed by Oracle. Amazon RDS makes it easy to set up, operate, and scale Oracle Database deployments in <u>the cloud</u>.
- Amazon Web Services supports Oracle databases and offer enterprises a number of solutions for migrating and deploying their enterprise applications on the AWS cloud.
- AWS DMS and AWS SCT offer support for Oracle DB as both source and target

PostgreSQL DB



What is PostgreSQL?

- PostgreSQL has become the preferred open source <u>relational database</u> for many enterprise developers and start-ups, powering leading geospatial and mobile applications.
- AWS DMS and AWS SCT offer support for Oracle DB as both source and target



Lab Activities



Lab Setup: Bootstrapping Your Account

- Create new EC2 key within ap-northeast-1 region
 - Name: workshop
- Launch CloudFormation template:
 - Creates RDS OracleDB source instance from snapshot
 - Provisions an empty RDS PostgreSQL target
- Once launched, all resources will be provisioned in your account, immediately incurring cost!

Lab Steps: Run AWS Schema Conversion Tool

- Access via AmazonAppStream 2.0
 - Consult workshop staff if you did not receive an email with your AppStream login details
- (Optional) Install AWS SCT, database tools locally

Lab Steps: Create AWS DMS components

- Created in following order
 - Replication Instance
 - Endpoints
 - Tasks
- Once completed, troubleshoot any migration errors

Lab Teardown

- Always destroy your Lab Resources after lab completion
- First, teardown AWS DMS resources
 - Destroy in reverse order of creation
 - Tasks, then Endpoints, then Replication Instances
- Next, teardown CloudFormation stack
- Finally, delete workshop key pairs



Next:

NoSQL Lab: MongoDB to DynamoDB

