

Course Duration: 24 hours (3 Days)

Oracle Database Migration to AWS: A Comprehensive Hands-On Training

This three-day course provides participants with a deep understanding of Oracle database migration to AWS. The training covers **pre-migration assessment, schema conversion, data migration, and post-migration validation**, with hands-on labs using AWS Database Migration Service (DMS) and Schema Conversion Tool (SCT). Attendees will learn about various AWS target options (Amazon RDS, Aurora, EC2) and gain practical experience in planning and executing a successful migration with minimal downtime.

Course objectives

By the end of this course, participants will be able to:

- Understand Oracle database architecture and AWS target options (RDS, Aurora, EC2).
- Evaluate migration strategies and choose the best approach for their use case.
- Use AWS Schema Conversion Tool (SCT) to convert Oracle schemas.
- Perform data migration using AWS Database Migration Service (DMS).
- Configure Change Data Capture (CDC) for minimal downtime migrations.
- Optimize performance, validate migration, and establish operational best practices.

Prerequisites

- Completed AWS Cloud Practitioner Essentials, or AWS Technical Essentials, and Architecting on AWS.
- Familiarity with the **Linux command line** and basic terminal commands
- Familiarity with cloud computing concepts

Target Audience

- Database Administrators (DBAs)
- Cloud Architects
- Solutions Architects
- Migration Engineers
- IT Professionals planning an Oracle-to-AWS migration

Course outline

Module 1: Cloud Migration Fundamentals

- Drivers and outcomes of cloud migration
- Planning for a successful cloud migration
- The three-phase migration process

Module 2: Assessing Migration Readiness

- The assess phase
- Cloud readiness assessment tools
- IT landscape evaluation & business case

Group Exercise: Using AWS Cloud Adoption Readiness Tool (CART)

Module 3: Preparing for a Migration

- Mobilize phase
- Migration-related workstreams

Module 4: Discovering the Portfolio and Understanding Migration Strategies

- Detailed portfolio discovery workstream
- Evaluating cloud readiness
- Cloud migration strategies

Group Exercise: Choose a migration strategy (scenario-based)

Module 5: Understanding and Choosing Portfolio Discovery Tools

- Migration Evaluator
- AWS Migration Hub and AWS Application Discovery Service

Module 6: Planning and Designing a Migration

- Plan the migration overall
- Building the migration factory

- Design the migration for each application

Group Exercise: Build a migration plan

Group Exercise: Design for migration

Hands-On Lab: Using AWS Migration Evaluator & AWS Application Discovery Service

Module 7: Schema Conversion Using AWS SCT

- Introduction to AWS Schema Conversion Tool (SCT)
- Converting Oracle schema to PostgreSQL/MySQL on AWS

Hands-On Lab: Using AWS SCT for Oracle Schema Conversion

Module 8: Data Migration Execution

- Configuring AWS DMS for full load migration

Hands-On Lab: Performing Full Load Migration to AWS RDS/Aurora

Module 10: Configuring Change Data Capture (CDC) for Minimal Downtime

- How CDC works in AWS DMS
- Configuring CDC for near-zero downtime migrations

Hands-On Lab: Setting Up CDC in AWS DMS

Module 11: Performance Tuning & Optimization

- Post-migration performance adjustments
- Query tuning and indexing on AWS

Module 12: Integrating, Validating, and Cutting Over Applications

- Migrate and modernize phase
- Cutover strategy

Module 13: Migration Best Practices