



AWS Partner: Advanced Migrating to AWS (Technical)

Data Sheet

Course description

In this course, you will learn advanced technical concepts and best practices that help in performing large-scale migrations to the AWS Cloud. The course provides prescriptive guidance on how to migrate workloads at scale. You will be able to identify use cases for rehosting, replatforming, and refactoring legacy applications to the AWS Cloud. You will learn how to use Cloud Migration Factory on AWS to automate and manage large-scale migrations. You will identify tools to migrate heterogeneous databases to the AWS Cloud. You also learn how to modernize workloads and incrementally refactor legacy applications using AWS Migration Hub Refactor Spaces. The course also provides an overview of enterprise workloads migration and modernization patterns.

- Course level: Advanced
- Duration: 1 day

Activities

This course includes presentations, hands-on labs, and assessments.

Course objectives

In this course, you will learn to:

- Identify how rehost and replatform migration strategies apply to customer migration use cases
- Describe how to plan and perform large-scale rehosting migrations using Cloud Migration Factory on AWS
- Identify use cases for modernizing enterprises through migrating to reliable and secure cloud infrastructures
- Identify heterogeneous database migration patterns based on the type of database
- Use Cloud Migration Factory to automate large-scale migrations that involve rehosting
- Use Refactor Spaces to modernize workloads and incrementally refactor legacy applications
- Provide an overview of enterprise workloads migration and modernization patterns
- Use AWS Migration Hub Refactor Spaces to modernize workloads and incrementally refactor legacy applications

Intended audience

This course is intended for:

- Solutions architects (cloud administrators) who have experience migrating workloads or applications to the AWS Cloud and can architect solutions and proofs of concept
- Systems operators who are responsible for day-to-day running, supporting, and operating customer systems and services, including the use of automation
- Migration engineers who are responsible for migrating workloads and applications
- Application administrators (developers and DevOps engineers) who build application products and services by using AWS products and services on behalf of customers to keep applications running smoothly and cost-efficiently

Prerequisites

We recommend that attendees to this course have:

- *AWS Partner: Accreditation (Technical)*
- *AWS Partner: Well-Architected Best Practices (Technical)*
- *AWS Partner: Containers on AWS (Technical)*
- *AWS Partner: Migration Essentials (Technical)*
- AWS Solutions Architect Associate or AWS SysOps Administrator Associate Certification
- Experience with Amazon Web Services (AWS) migrations
- Experience with command line interfaces and text editing in Linux environments

Course outline

Module 0: Introduction

- Agenda
- Target audience and prerequisites

Module 1: Common Migration Patterns and Modernization Pathways

- Migration and modernization project challenges
- Common migration methodologies (The 7 Rs)
- Migration and modernization patterns

Module 2: Planning and Performing Large-Scale Migrations

- Rehosting AWS MGN workflow
- How AWS MGN works
- Automating migration with Cloud Migration Factory on AWS
- Common challenges with large-scale migrations
- Automation benefits

- When to use Cloud Migration Factory on AWS
- Cloud Migration Factory on AWS workflow
- Best practices for migrations at scale
- AWS End-of-Support Migration Program
- Why EMP
- EMP compatibility package model
- EMP decision tree

Lab 1: Cloud Migration Factory on AWS

Module 3: Advanced Database and Data Migrations

- Database migration methodology and strategy
- Database workload migration options
- Database migration tools overview
- Migrations with AWS DMS and AWS SCT – Primer
- AWS DMS Schema Conversion
- AWS SCT compared to AWS DMS – architectural overview
- How to use AWS DMS and AWS SCT in heterogenous migration customer scenarios
- Microsoft SQL Server migration to AWS overview
- Oracle migration to AWS overview
- Case study example Microsoft SQL Server to Amazon Aurora
- Data warehouse migration journey
- Migration process to Amazon Redshift overview
- Data warehouse migration using AWS SCT
- AWS DMS compared to AWS SCT Extractors
- Data migration
- NAS migration assessment
- Amazon FSx and FSx for ONTAP, how to choose
- Storage migration and on-premises source to AWS service mapping
- HDFS storage migration using AWS DataSync

Module 4: Refactor and Modernize Applications

- Windows and Microsoft application modernization tools
- Windows modernization pathways
- Application modernization tools
- AWS Microservice Extractor for .NET
- AWS Toolkit for .NET Refactoring
- Modernize with containers
- Why containers?
- Container architecture comparison (on-premises servers, VMs, and containers)
- Containerizing challenges
- Modernize applications into containers
- AWS App2Container benefits and workflow
- A2C tools
- AWS Migration Hub Refactor Spaces
- What does it orchestrate?
- Basic application refactor example

- Example target architecture

Lab 2: AWS Migration Hub Refactor Spaces

Module 5: Migration Resources and Additional Training

- Course review
- Migration resources
- AWS Partner links
- Where to find additional support