

# Data Warehousing on AWS

## Course Benefits & Agenda



**Overview**

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**Course Benefits**

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**Agenda**

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## Overview

Data Warehousing on AWS introduces you to concepts, strategies, and best practices for designing a cloud-based data warehousing solution using Amazon Redshift, the petabyte-scale data warehouse in AWS. This course demonstrates how to collect, store, and prepare data for the data warehouse by using other AWS services such as Amazon DynamoDB, Amazon EMR, Amazon Kinesis, and Amazon S3. Additionally, this course demonstrates how to use Amazon QuickSight to perform analysis on your data.

## Course Benefits

This course teaches you how to:

- Discuss the core concepts of data warehousing.
- Discuss the intersection between data warehousing and big data solutions.
- Launch an Amazon Redshift cluster and use the components, features, and functionality to implement a data warehouse in the cloud.
- Use other AWS data and analytic services, such as Amazon DynamoDB, Amazon EMR, Amazon Kinesis, and Amazon S3, to contribute to the data warehousing solution.
- Evaluate approaches and methodologies for designing data warehouses.
- Identify data sources and determine requirements for accessing the data.
- Architect the data warehouse.
- Use important commands, such as COPY, UNLOAD, and VACUUM, to manage the data in the data warehouse.
- Identify performance issues, optimize queries, and tune the database for better performance
- Use Amazon Redshift Spectrum to analyze data directly from an Amazon S3 bucket.
- Use features and services, such as Amazon Redshift database auditing, Amazon CloudWatch, Amazon CloudTrail, and Amazon Simple Notification Service (Amazon SNS), to monitor and audit the data warehouse.
- Use Amazon QuickSight to perform data analysis and visualization tasks against the data warehouse.

## Agenda

### Day 1

Module	Topic
Module 1	Introduction to Data Warehousing on AWS
Module 2	Introduction to Amazon Redshift
Lab 1	Introduction to Amazon Redshift
Module 3	Launching Clusters
Lab 2	Launching an Amazon Redshift Cluster
Module 4	Introduction to Data Warehousing on AWS
Module 5	Introduction to Amazon Redshift

### Day 2

Module	Topic
Module 6	Designing the Database Schema
Lab 3	Optimizing Database Schemas
Module 7	Identifying Data Sources
Lab 4	Loading Real-Time Data into Redshift Database
Module 8	Loading Data
Lab 5	Loading Data with the COPY command

## Agenda

### Day 3

Module	Topic
Module 9	Writing Queries and Tuning Performance
Lab 6	Configuring Workload Management
Module 10	Amazon Redshift Spectrum
Lab 7	Using Amazon Redshift Spectrum
Module 11	Maintaining Clusters