AWS - RDS

Course Duration: 16 Hours (2 Days)

Overview

The AWS-RDS certification pertains to Amazon Web Services' Relational Database Service. It's about validating knowledge and skills related to managing, scaling, migrating, and Troubleshooting RDS implementations. This service is critical in today's data-driven industries as it simplifies the set-up, operation, and scaling of a relational database in the cloud, providing cost-efficient resizable capacity. It enables businesses to focus more on their core operations by automating time-consuming tasks like Hardware provisioning, Database setup, Patching, and Backups. AWS-RDS includes popular databases such as Oracle, MySQL, PostgreSQL, and more, making it versatile for different industry needs.

Audience Profile

- IT professionals looking to expand their skill set
- Database administrators seeking understanding of AWS RDS
- Developers aiming to leverage AWS for their database requirements
- Solution architects designing and managing applications on RDS
- Individuals planning to take AWS certification exams

Course Syllabus

Day 1: Introduction to AWS and RDS

- Overview of Cloud Computing and AWS
- Understanding Managed Database Services
- Introduction to Amazon RDS
- Benefits and Use Cases of Amazon RDS

Day 1: Exploring RDS Database Engines

- Supported Database Engines (MySQL, PostgreSQL, Oracle, SQL Server, MariaDB)
- Choosing the Right Database Engine for Your Use Case
- Creating Your First RDS Database Instance
- Configuring Database Parameters

Day 2: Managing RDS Instances

- Configuring Security Groups and Network Settings
- Backing Up and Restoring RDS Instances

- Monitoring Performance and Analyzing Logs
- Scaling and Replicating RDS Instances

Day 2: Advanced RDS Concepts

- Ensuring High Availability with Multi-AZ Deployments
- Using Read Replicas for Improved Read Scalability
- Performance Tuning and Optimization Strategies
- Migrating Data to and from RDS

Day 2: Security and Compliance

- Implementing Data Security in Amazon RDS
- Managing IAM Authentication and Database Users
- Enabling Encryption at Rest and in Transit
- Compliance and Auditing Best Practices