

# Oracle Database 19c: ASM Administration Workshop

**Course Duration: 24 Hours (3 Days)**

## Overview

The Oracle Database 19c: ASM Administration Workshop is a comprehensive course designed to educate learners on the automation and management of storage solutions using Oracle Automatic Storage Management (ASM). This course is crucial for database administrators who manage and configure storage for Oracle databases. Beginning with an ASM Overview, students will learn the fundamentals and components, such as ASM Disk Groups, and proceed to hands-on administration of ASM instances, including starting and stopping node listeners. The course covers Flex ASM, which allows the ASM instance to run on a separate node from the database server, enhancing flexibility and failover capabilities. Modules on Administering ASM Disk Groups delve into advanced features, Disk group compatibility attributes, and Rebalance operations. Students also explore the administration of ASM files, directories, templates, and Oracle Automatic Storage Management Cluster File System (ACFS) for a more robust storage solution. Emphasizing on oracle 19c asm advancements, the workshop includes lessons on ACFS/ADVM enhancements, such as 4K sector support, and Encrypting ACFS file systems. Advanced topics provide deeper insights into asm oracle 19c, including Point-In-Time Database Clones and cleanup procedures. By the end of the course, participants will possess the skills necessary to efficiently manage ASM with Oracle Database 19c, ensuring optimized storage performance and reliability.

## Audience Profile

The Oracle Database 19c: ASM Administration Workshop is designed for professionals responsible for managing databases and storage structures within an Oracle environment.

- Database Administrators
- Data Warehouse Administrators
- Technical Administrators
- Support Engineers
- System Analysts
- IT Infrastructure Engineers
- Storage Administrators
- Database Designers
- Data Center Support Engineers
- Oracle ASM Data Management Professionals
- Oracle Consultants
- Cloud Database Operators
- Database Architects

## Course Syllabus

## **Lesson 1: ASM Overview**

- Introduction to ASM
- ASM Components: ASM Disk Groups

## **Lesson 2: Administering ASM Instances**

- Managing ASM Instances
- Starting and Stopping the Node Listener

## **Lesson 3: Understanding Flex ASM**

## **Lesson 4: Administering ASM Disk Groups – Part I**

- Managing ASM Disk Groups – Part I
- Features Enabled by Disk Group Compatibility Attributes
- Understanding REBALANCE POWER

## **Lesson 5: Administering ASM Disk Groups – Part II**

- Managing ASM Disk Groups – Part II
- Checking the Consistency of Disk Group Metadata

## **Lesson 6: Managing Flex ASM Disk Groups**

## **Lesson 7: Administering ASM Files, Directories, and Templates**

- Managing ASM Files, Directories, and Templates
- Understanding ASM Directories

## **Lesson 8: Administering Oracle ACFS**

- Managing Oracle ACFS
- Linux/UNIX Extensions

## **Lesson 9: ACFS/ADVM Enhancements**

- Overview of ACFS/ADVM Enhancements
- 4K Sector and Metadata Support Considerations

## **Lesson 10: Oracle ASM Advanced Topics**

- Exploring Advanced Oracle ASM Features
- Encrypting ACFS File Systems

**Lesson 11: Creating Point-in-Time Database Clones**

**Lesson 12: Cleanup and Catch-Up Scripts**