

## Oracle Database 12c: ASM Administration

**Duration:** 2 Days

### What you will learn

This Oracle Database 12c: ASM Administration training teaches you about Oracle ASM architecture. Expert Oracle University instructors will help you develop a deeper understanding of both standard ASM and Flex ASM applications. In this course, you will be introduced to Oracle Database Exadata Cloud Service.

### Learn To:

Administer ASM files, directories, templates, and disk groups.

Manage and administer Oracle Cloud File System and its components.

Configure and manage advanced CloudFS features like ACFS Auditing and Encryption, ACFS Replication and High Availability NFS.

Gain an understanding of the Oracle Database Exadata Cloud Service.

### Benefits to You

Ensure fast, reliable, secure and easy to manage performance. Optimize database workloads, lower IT costs and deliver a higher quality of service by enabling consolidation onto database clouds by learning about the Oracle Database 12c Grid Infrastructure, specifically Oracle ASM.

### Audience

Administrator

Database Administrators

### Related Training

#### *Required Prerequisites*

Working knowledge of Oracle Database 11g: Release 2 on Linux Operating System

#### *Suggested Prerequisites*

Oracle Database 12c: Clusterware Administration

Oracle Database 12c: RAC Administration Ed 1

Oracle Grid Infrastructure 11g: Manage Clusterware and ASM - Release 2

Working knowledge of Oracle Clusterware, ASM & RAC on Linux

### Course Objectives

Gain an understanding of the Oracle Database Exadata Cloud Service

Manage Flex ASM

Employ ASM space management techniques

Create and delete Automatic Storage Management (ASM) disk groups

Set the attributes of an existing ASM disk group

Perform ongoing maintenance tasks on ASM disk groups

Explain key performance and scalability considerations for ASM disk groups

Describe the Automatic Storage Management (ASM) architecture

Use different client tools to access ASM files

Describe the format of a fully qualified ASM file name

Describe the components of ASM

Explain and apply Automatic Storage Management (ASM) initialization parameters

Manage ASM instances and associated processes

Monitor ASM using the V\$ASM dynamic performance views

Understand Flex ASM architecture and components

Understand ASM Deployment Alternatives

## Course Topics

### **Oracle ASM Overview**

Overview of ASM

ASM Placement in Storage Stack

ASM Cluster Configuration for Oracle RAC

ASM System Privileges

ASM OS Groups and Role Separation

ASM Components

Software

Configure disks as ASM candidate disks

### **Oracle ASM Instance Administration**

ASM Instance Administration

Instance Parameters

ASM\_DISKGROUPS

Adjusting ASM Instance Parameters in SPFILEs

Instance Startup and Shutdown

Relevant V\$Views

## **Flex ASM**

- Flex ASM Architecture
- Background and Overview
- ASM Deployment Alternatives
- Configuring Flex ASM
- Managing Flex ASM
- Relocating an ASM Client

## **Administering ASM Disk Groups**

- ASM Disk Group Overview
- Disk Group Attributes
- Compatibility Attributes
- Disk Group Management
- Disk Group Metadata
- Viewing Connected Clients
- Disk Group Rebalance
- ASM Fast Mirror Resync

## **Administering ASM Files, Directories, and Templates**

- Interaction Between Database Instances and ASM
- Accessing ASM Files
- Fully Qualified ASM File Names
- ASM File Creation
- View ASM Aliases, Files, and Directories
- ASM Directories Overview
- Managing ASM Directories
- Managing Alias File Names

## **Administering Oracle Cloud File System**

- Oracle Cloud File System Components
- Overview of Oracle ACFS
- Oracle ASM Dynamic Volume Manager
- High Availability NFS (HANFS) Overview
- Oracle ACFS Integration with Oracle ASM
- Oracle ACFS Administration
- Clusterware Resources and ACFS Administration
- ACFS and Dismount or Shutdown Operations

## **Oracle Database Exadata Cloud Service Overview**

- Introducing Exadata Cloud Service
- Service Configuration Options & Service Connection Options
- Service Architecture & Availability
- Management Responsibilities
- Storage Configuration & Management Details
- Simple Web-Based Provisioning & Management
- REST APIs
- Migrating to Exadata Cloud Service