Oracle Database 12c R2: ASM Administration Ed 2

This Oracle Database 12c R2: 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

This Oracle Database 12c R2: 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 ASM File System and its components.
- Gain an understanding of ASM New Features.
- 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.

Prerequisites

Suggested Prerequisite

- Working knowledge of Oracle Database 11g: Release 2 on Linux Operating System
- Oracle Database 12c R2: Clusterware Administration
- Oracle Database 12c R2: RAC Administration
- Oracle Database 12c R2: Clusterware Administration
- Working knowledge of Oracle Clusterware, ASM & RAC on Linux

Required Prerequisite

- Oracle Database 12c R2: Clusterware Administration
- Oracle Database 12c R2: RAC Administration Ed 2

Audience

- Administrator
- Administrator
- Database Administrators
- Database Administrators

Course Objectives

- Describe the Automatic Storage Management (ASM) architecture
- Describe the components of ASM
- Understand ASM Deployment Alternatives
- Explain and apply Automatic Storage Management (ASM) initialization parameters
- Manage ASM instances and associated processes
- Monitor ASM using the V$ASM dynamic performance views
- Manage Flex ASM
- Understand Flex ASM architecture and components
- Manage Flex ASM Disk Group
- Create and delete Automatic Storage Management (ASM) disk groups
- Employ ASM space management techniques
- 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
- Use different client tools to access ASM files
- Describe the format of a fully qualified ASM file name

Course Topics

Oracle ASM Overview

- ASM Placement in Storage Stack
- ASM Utilities
- ASM Instance Designs
- ASM Key Components
- ASM Software Installation
- Overview of ASM
- ASM Cluster Configuration for Oracle RAC

Administering ASM Instance

- ASM Instance Parameters
- Managing ASM instance with various tools
- Instance Startup and Shutdown
- Operating with Different releases of Oracle ASM and Database Instances
- Adjusting ASM Instance Parameters in SPFILEs
- ASM Instance Connection modes
- ASM OS Groups and Role Separation
- ASM System Privileges

Flex ASM

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

Administering ASM Disk Groups Part 1 & Part 2

- Disk Group Management
- Extending an Existing Disk Group
- Viewing Connected Clients
- ASM Disk Group Overview
- Disk Group Metadata
- Compatibility Attributes
- Dropping Disks from an Existing Disk Group
- Disk Group Attributes

Administering ASM Disk Groups Part 1 & Part 2

- Adding and Dropping in the same command
- Replacing Disks in Disk Group
- Resizing Disks in Disk Groups
- Mounting and Dismounting Disk Groups
- ASM Disk Group Rebalance and Priority Ordered Rebalance
- Undropping Disks in Disk Groups
- Dropping Disk Groups
- Renaming Disk Groups

Flex ASM Disk Group

- ASM Flex Disk Groups Characteristics
- ASM File Groups
- ASM Quota Groups
- ASM Database-Oriented Storage Management
- Administering File Groups and Quota Groups
- Prioritized Rebalancing for File Groups

Administering ASM Files, Directories, and Templates

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

Administering Oracle ASM Cluster File System

- ACFS Snapshots
- Oracle ACFS Administration
- Oracle ASM Dynamic Volume Manager
- Overview of Oracle ACFS
- Oracle ACFS Integration with Oracle ASM
- Clusterware Resources and ACFS Administration
- ACFS and Dismount or Shutdown Operations

ACFS/ADVM Enhancements

- Oracle ACFS Metadata Collection
- Oracle ACFS Scrubbing
- Oracle ACFS Defragger
- Oracle ACFS Spare Files
- Oracle ACFS Automatic Resize
- 4K Sector Support for Oracle ACFS and Metadata
- Oracle ACFS Compression
- Oracle Metadata Acceleration

Oracle Database Exadata Cloud Service Overview

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