Oracle Database 12c R2: ASM Administration Ed 2

Duration: 2 Days

What you will learn

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.

Related Training

Required Prerequisites

Oracle Database 12c R2: Clusterware Administration

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

Oracle Database 12c R2: Clusterware Administration

Oracle Database 12c R2: RAC Administration Ed 2

Suggested Prerequisites
Oracle Database 12c R2: Clusterware Administration

Oracle Database 12c R2: RAC Administration

Working knowledge of Oracle Clusterware, ASM & RAC on Linux

Course Objectives

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

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

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

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

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

Administering ASM Disk Groups Part 1 & Part 2
ASM Disk Group Overview
Disk Group Attributes
Compatibility Attributes
Disk Group Management
Disk Group Metadata
Viewing Connected Clients
Extending an Existing Disk Group
Dropping Disks from an Existing Disk Group

Administering ASM Disk Groups Part 1 & Part 2
Adding and Dropping in the same command
Undropping Disks in Disk Groups
Replacing Disks in Disk Group
Renaming Disk Groups
Resizing Disks in Disk Groups
Mounting and Dismounting Disk Groups

Dropping Disk Groups
ASM Disk Group Rebalance and Priority Ordered Rebalance

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

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

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

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