

Oracle Database 12c: High Availability New Features

Duration: 3 Days

What you will learn

This Oracle Database 12c: High Availability New Features introduces the Oracle Database 12c high availability new features contained in Oracle Grid Infrastructure. This includes Clusterware, Automatic Storage Management [ASM] and Cloud FS), Oracle Real Application Clusters (RAC), Oracle Data Guard and Oracle Global Data Services. In this course, you will be introduced to Oracle Database Exadata Cloud Service.

Learn To:

Configure and administer the Oracle Database 12c high availability new features contained in Oracle Clusterware Infrastructure (including Automatic Storage Management [ASM] and Cloud FS).

Describe the new features contained in Oracle Data Guard.

Describe Oracle Global Data Services (GDS).

Gain an understanding of the Oracle Database Exadata Cloud Service.

Benefits to You

By enrolling in this course, you'll be the first to practice using Oracle's new clustering technologies. Gain valuable experience through hands-on demos and labs.

Product Areas Covered:

Oracle Grid Infrastructure (including Clusterware, Automatic Storage Management [ASM] and Cloud FS.)

Oracle Real Application Clusters (RAC).

Oracle Data Guard.

Oracle Global Data Services (GDS).

Gain an understanding of the Oracle Database Exadata Cloud Service.

Explore these New and Enhanced Features:

Flex Clusters

Flex ASM

Policy-based Cluster Management

What-If Command Evaluation

Cloud Filesystem New Features and Enhancements

Application Continuity

Data Guard Far Sync

Global Data Services

Audience

Administrator
Data Warehouse Administrator
Database Administrators
Sales Consultants
Support Engineer
Technical Administrator

Related Training

Required Prerequisites

Working knowledge of Oracle Database 11g: Release 2, including Clusterware, ASM and RAC

Course Objectives

Learn how to perform essential administration tasks for each new feature.

Learn how to perform essential installation and configuration tasks for each new feature.

Describe Oracle Global Data Services (GDS).

Describe the Oracle Database 12c high availability new features contained in Oracle Grid Infrastructure

Gain an understanding of the Oracle Database Exadata Cloud Service

Course Topics

Introduction

Course Overview
Course Objectives

Flex Clusters

Flex Cluster Architecture
Configuring Flex Clusters
Installing Flex Clusters with OUI
Flex Clusters and Node Failure

Policy-Based Cluster Management

Policy-Based Cluster Management Overview
Server Categorization
Policy Set

What-If Command Evaluation

Overview
Supported Events
Performing What-If Command Evaluation on Application Resources with CRSCTL
Performing What-If Command Evaluation on Oracle Clusterware Resources with CRSCTL
Formatting the Output for What-If Command Evaluation on Oracle Clusterware Resources

Performing What-If Command Evaluation with SRVCTL
Evaluating Failure Consequences with SRVCTL

Other Clusterware New Features

Shared GNS Background and Architecture
Configuring shared GNS
Migrating to shared GNS
Moving GNS to Another Cluster
Cluster Health Monitor Enhancements Overview
Cluster Health Monitor Services
Grid Infrastructure Management Repository Overview
Managing Cluster Health Monitor

Flex ASM

Flex ASM Architecture
ASM Deployment Alternatives
Configuring Flex ASM
Managing Flex ASM
Monitoring Flex ASM Connections
Relocating an ASM Client

Other ASM New Features

Fast Mirror Resync Enhancements
Rebalance Enhancements
Proactively Validating Data Integrity
ASM-Based Password Files
Bulk File Ownership Changes
Changing ASM Privileges on Open Files
ASM File Access Control Available on Windows

Cloud FS New Features

Introducing Oracle Cloud File System
High Availability NFS: Overview
Cloud FS Snapshot Enhancements
Cloud FS Support for All Oracle Database Files
Cloud FS Auditing: Overview
Cloud FS Plug-in Infrastructure: Overview
Using Cloud FS Replication in Conjunction with Cloud FS Security and Encryption
Generic API for Cloud FS Tagging

Application Continuity

What is AC?
What problem does it solve?
Benefits of AC
How AC works
AC Architecture
Side Effects
Restrictions
Application requirements

RAC New Features

RAC and Flex ASM

RAC and Pluggable Database
RAC and Policy-Based Cluster Management
RAC and What-If Command Evaluation
RAC and Application Continuity
Valid node checking for listener registration on RAC deployments
Oracle home user support for RAC on Windows

Data Guard New Features

Far Sync Standby and Data Guard Transport Enhancements
Active Data Guard Enhancements
Database Rolling Upgrades
Other Data Guard Enhancements
Data Guard Broker Enhancements

Global Data Services

Introduction
Logical components
Physical components
Global Service Overview
Global Service Attributes
Global Services and RAC
Global Services and Data Guard Broker
Global Connection Load Balancing

Oracle Database Exadata Cloud Service Overview

Introducing Exadata Cloud Service
Service Architecture, Availability, Scalability, Access and Security
Management Responsibilities
Storage Configuration & Management Details
Simple Web-Based Provisioning & Management
REST APIs
Patching Exadata Cloud Service
Migrating to Exadata Cloud Service