Oracle® Database 12c: Install and Upgrade Workshop

Duration: 2 Days
Method: Instructor-Led

Certification: Oracle® Database 12c Administrator Certified Associate — Exam: Oracle® Database 12c: Installation and Administration Code: 1Z0-062

Course Description

This course gives you detailed information to help you install Oracle® Database 12c software. Expert Oracle® instructors will teach you how to create a container database and provision pluggable databases.

Target Audience

This course is intended for:

- Database Administrators
- Data Warehouse Administrators
- Support Engineers
- Technical Administrators

Prerequisites

To attend this course, candidates should have any of the following:

- Basic knowledge of Linux® Operating System
- Working knowledge of SQL and use of PL/SQL® packages
- Completed the Oracle® Database: Introduction to SQL course

Course Objectives

Upon successful completion of this course, candidates will be able to:

- Install Oracle® Grid Infrastructure for a Standalone Server
- Use Oracle® Restart to manage components
- Upgrade database to Oracle® Database 12c
- Create a container database
- Create an Oracle® Database
- Install Oracle® Database 12c Software

Course Content

Module 1: Oracle® Database 12c Overview

- Oracle® Database 12c Introduction
- Oracle® Database Architecture Overview
- Oracle® Database Instance Configurations
- Oracle® Database Memory Structures
- Process Structures
- Database Storage Architecture
- Logical and Physical Database Structures
- Container and Pluggable Database Overview

Module 2: Installing Oracle® Grid Infrastructure for a Standalone Server

- Overview of Oracle® Grid Infrastructure for a Standalone Server
- System Requirements for Oracle® Grid Infrastructure
- Configuring Storage for Oracle® Automatic Storage Management (ASM)
- Installing Oracle® Grid Infrastructure for a Standalone Server
- Upgrading Oracle® Grid Infrastructure for a Standalone Server

Module 3: Installing Oracle® Database Software

- Planning Your Installation
- System Requirements for Oracle® Database
- Preparing the Operating System
- Using 4 KB Sector Disks
- Setting Environment Variables
- Checking the System Requirements
- Using the Oracle® Universal Installer (OUI)
- Performing a Silent Mode Installation

Module 4: Creating an Oracle® Database by Using DBCA

- Planning the Database Storage Structure
- Choosing non-CDB or CDB
- Types of Databases (based on workload)
- Choosing the Appropriate Character Set
- Understanding How Character Sets are Used
- Setting the NLS_LANG Initialization Parameter
- Using the Database Configuration Assistant (DBCA)

Module 5: Using Oracle® Restart

- Oracle® Restart Overview
- Oracle® Restart Process startup
- Controlling Oracle® Restart
- Choosing the Correct SRVCTL Utility
- Oracle® Restart Configuration
- Using the SRVCTL Utility
- Obtaining Help for the SRVCTL Utility
- Starting Components by Using the SRVCTL Utility

Module 6: Introduction to Upgrading to Oracle® Database 12c

- Upgrade Methods
- Data Migration Methods
- Supported Releases for Direct Upgrade
- Overview of Upgrade Process
- Performing a Rolling Upgrade
- Upgrading a CBD

Module 7: Preparing to Upgrade to Oracle® Database 12c

- Developing a Test Plan
- Performance Testing
- Requirements for Databases Using Oracle® Label Security or Oracle® Database Vault
- Requirement for Databases Using Oracle® Warehouse Builder
- Using the Pre-Upgrade Information Tool
- Backing Up the Database
- Installing the Oracle® Database 12c Software
- Preparing the New Oracle® Home

Module 8: Upgrading to Oracle® Database 12c

- Upgrading by Using the Database Upgrade Assistant (DBUA)
- Manually Upgrading to Oracle® Database 12c
- Migrating a non-CDB to a CDB

Module 9: Performing Post-Upgrade Tasks

- Performing Post-Upgrade Tasks Following a Manual Upgrade
- Migrating to Unified Auditing

Module 10: Migrating Data by Using Oracle® Data Pump

- Data Pump Overview
- Migrating by Using Data Pump
- Importing by Using a Network Link