

## Oracle Database 12c: Install and Upgrade Workshop

**Duration:** 2 Days

### What you will learn

This Oracle Database 12c: Install and Upgrade Workshop 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.

Learn To:

Install Oracle Grid Infrastructure for a Standalone Server.

Use Oracle Restart to manage components.

Upgrade an existing Oracle Database to Oracle Database 12c.

Create a container database and provision pluggable databases.

### 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.

### Gain Hands-On Experience

Get practical experience installing the Oracle Grid Infrastructure software and Oracle Database software by using Oracle Universal Installer. Expert Oracle instructors will teach you how to stop and start Oracle Restart using SRVCTL to manage components.

### Audience

Data Warehouse Administrator

Database Administrators

Support Engineer

Technical Administrator

### Related Training

#### *Required Prerequisites*

Working knowledge of SQL and use of PL/SQL packages

#### *Suggested Prerequisites*

Basic knowledge of Linux Operating System

### Course Objectives

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 Topics

### 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

### 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

### 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

### 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)

## **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

## **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

## **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

## **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

## **Performing Post-Upgrade Tasks**

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

## **Migrating Data by Using Oracle Data Pump**

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