Oracle Database 12c: Managing Multitenant Architecture

Duration: 2 Days

What you will learn

This Oracle Database 12c: Managing Multitenant Architecture training helps you gain a conceptual understanding of the multitenant architecture. You'll practice plugging and unplugging databases in multi-tenant container databases, while learning how to create common and local users and administer database security to meet your business requirements. In this course, you will be introduced to Oracle Database Cloud Service.

Learn To:

Understand the multitenant architecture.
Create and manage a multitenant container database and pluggable databases.
Manage storage within a multitenant container database and pluggable databases.
Manage security within a multitenant container database and pluggable databases.
Monitor performance and manage resources within a multitenant container database and pluggable databases.
Perform backup, recover and flashback operations on a multitenant container database and pluggable databases.
Manage the CDB and PDBs in specific configurations like Data Guard, Database Vault.
Perform particular operations like Oracle Data Pump transportation, loading, encryption, auditing.
Gain an understanding of the Oracle Database 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.

Multitenant Architecture

During the Oracle Database 12c Administration Workshop, you'll explore all aspects of the multi-tenant architecture, providing detailed information on the components of an Oracle multi-tenant container database and any associated pluggable databases. You'll learn why and how to create and manage a multi-tenant container database and any associated pluggable databases with storage structures appropriate for the business applications.

Backup and Recover Pluggable Databases

During the Oracle Database 12c Backup and Recovery Workshop, you'll be presented with multi-tenant container database and pluggable databases backup, recovery and flashback procedures.

Manage and Monitor Resources

To provide an acceptable response time to users and manage resources effectively, you'll learn how to monitor performance and manage resources within the multi-tenant container database.

Audience
Data Warehouse Administrator
Database Administrators
Database Designers
Technical Administrator

Related Training
Required Prerequisites
Working knowledge of tools like SQL*Plus or Enterprise Manager Cloud Control
Knowledge of non-CDB configuration and management
Working knowledge of SQL and use of PL/SQL packages
Oracle Database 12c: Administration Workshop Ed 2
Oracle Database 12c: Backup and Recovery Workshop Ed 2

Suggested Prerequisites
Basic knowledge of Linux operating system
Oracle Database 12c: Install and Upgrade Workshop

Course Objectives
Configure resource manager to share resources within a multitenant container database between containers and within a pluggable database
Implement unified auditing in a multitenant container database and its pluggable databases
Use Oracle Data Pump, SQL*Loader in pluggable databases
Monitor the multitenant container database and pluggable databases
Describe the multitenant architecture
Create a multitenant container database
Create a pluggable database using different methods
Plug a non-CDB into a multitenant container database
Manage multitenant container databases and pluggable databases
Administer multitenant container database and pluggable database storage structures
Create and administer common and local user accounts
Manage common and local privileges and roles
Configure multitenant container databases and pluggable databases backup and recovery operations

Manage the multitenant container database and pluggable databases performance

Gain an understanding of the Oracle Database Cloud Service

Course Topics

Introduction
Course Objectives
Course Schedule
Tools

Container and Pluggable Database Architecture
Challenges and Benefits
Multitenant Architecture
Provisioning PDBs
Terminology

CDB and PDB Creation
Using Tools
Configuring and Creating a CDB
Creating PDBs
Dropping PDBs
Migrating PDBs

Managing a CDB and PDBs
Connection
Managing a CDB and PDBs
Managing PDBs Open Mode and Settings
Configuring CDB and PDBs Initialization Parameters

Managing Storage in a CDB and PDBs
Managing Permanent Tablespaces in CDB and PDBs
Managing Temporary Tablespaces in CDB and PDBs

Managing Security in a CDB and PDBs
Managing Common and Local Users
Managing Common and Local Privileges
Managing Common and Local Roles
Understanding Shared and Non-Shared Objects
Managing Common and Local Profiles

Managing Availability
Managing Backups
Managing Recovery Operations
Managing Flashback Database
Duplicating PDBs
Special Situations and Views
Managing Performance
Managing Resource Allocation
Maximizing Consolidated Database Replay

Miscellaneous
Exporting and Importing Data
Loading Data
Auditing Operations
Scheduling Jobs
Using Other Products

Oracle Database Cloud Service: Overview
Database as a Service Architecture, Features and Tooling
Software Editions: Included Database Options and Management Packs
Accessing the Oracle Database Cloud Service Console & Automated Database Provisioning
Managing the Compute Node Associated With a Database Deployment
Managing Network Access to Database as a Service & Scaling a Database Deployment
Patching Database as a Service & Using the Oracle Database Cloud Service Console to Manage Patches
Migrating from On-premises to Oracle Cloud Database
Gather Information for Migration