ORACLE Database 12c: Administration Workshop (5 Days)

This Oracle Database 12c: Administration Workshop training class teaches the day-to-day administration tasks required of an Oracle database administrator, assists students in preparation for certification as an Oracle Certified Associate (OCA) database administrator, and introduces students to many of the administration sub-specialties that they may wish to pursue next.

This training is appropriate for database administrators, application designers and developers, web server administrators, system administrators, implementation specialists, data center support engineers, chief Information Officers (CIO), and other information technology (IT) management professionals.

This course helps prepare students for the Oracle Database 12c Administrator Certified Associate (OCA) certification and for Exam: 1Z0-062: Oracle Database 12c: Installation And Administration.

Course Topics

1. Learn to manage the database instance.
2. Learn about database architecture.
3. Learn to manage database services.
4. Learn to work with the oracle network environment.
5. Learn about diagnostics and support.
6. Learn to manage tablespaces.
7. Learn about data file and temp file management techniques.
8. Learn to manage security and privileges.

Course Outline

Introduction: Managing the Database Instance
    The Database Management Tools
    EM Database Express
    EM Cloud Control
    SQL Developer
    Database Administration Duties

Introduction: Database Architecture Review
    Database Instance Configurations
    Memory Structures
    Process Structures
    Storage Architecture

Introduction: Starting and Stopping Database Services
    Start and Stop The Database Listener
    About Database Startup/Shutdown
    SYSOPER
    SYSDBA
    Database State and Stages
    Startup with EM Cloud Control
    Startup with SQL*PLUS
    Shutdown with EM Cloud Control
    Shutdown with SQL*PLUS
    Using MS Windows Services

Introduction: Oracle Network Environment
    Oracle NET Services Architecture
    Oracle NET Configuration Assistant
    Oracle NET Manager
    Using EM Cloud Control
    Advanced Network Compression
    Troubleshooting Network Problems

Introduction: Diagnostics and Oracle Support
    About Database Diagnostics
    Fault Diagnosability Infrastructure
    Database Instance Health Snapshot
    The Support Workbench
    Proactive Database Health Checks
    Package Diagnostic Data
    Working with The Knowledge Base

Storage: Tablespace Management
    Starter Tablespaces
    Create Tablespace with EM CC
    Create Tablespace with SQL
    Manage Tablespaces with EM CC

Manage Tablespaces with EM DE
Manage Tablespaces with SQL
DROP Tablespace
ALTER Tablespace

Storage: Advanced Tablespace Management
Managing Temporary Tablespaces
Temp Tablespace Groups with EM
Temp Tablespace Groups with SQL
Default Permanent Tablespaces
Bigfile Tablespaces
Managing The SYSAUX Tablespace

Storage: Data Files and Temp Files Management
Manage Data Files with EM
Access Metadata with SQL
Manage Data Files with SQL
Manage Temp Files
Oracle-Managed Files (OMF)

Storage: Undo Data and Undo Tablespaces
About Undo Space Management
Configure Undo Management
Guarantee Undo Retention
Monitor Undo Space with SQL
Use The EM Undo Advisor

Security and Schemas: Security Overview and Database Privileges
Database Security Principles
Database System Privileges
Database Object Privileges
Super Administrator Roles
Privilege Analysis

Security and Schemas: User Security
Create and Manage User Accounts
Manage Users with EM
Manage Users with SQL
CREATE User
ALTER User
DROP User
Grant and Revoke Privileges
Resource Limits Via Profiles
ALTER Profile
DROP Profile
Password Management Via Profiles
Role-Based Security Management
Alter User...Default Role
Set Role

Delegating Privilege Authorization
with Admin Option and System Privileges
with Grant Option and Object Privileges
Principle Of Least Privilege Checklist

Security and Schemas: Database Auditing
Auditing Database Activity
Traditional Auditing
Unified Auditing
Create Audit Policy

Security and Schemas: SQL Loader
Loader Concepts
Loader From The Command Line
Control File Options
Load Methods
Loader Express Mode
Loader From EM

Security and Schemas: Export and Import
Manage Directory Objects
The Data Pump Architecture
Data Pump Export
Data Pump Import
Data Pump Dictionary Views
Using The EM Cc Interface

Performance and Availability: Managing Performance and SQL Tuning
Management Advisory Framework
Performance Monitoring and AWR
The SQL Tuning Advisor
Monitoring Exceptions with Metrics

Performance and Availability: Data Concurrency
About System and User Locks
Monitor and Manage User Locks
Monitor Locks with Data Dictionary
Manage Locks with EM

Performance and Availability: Backup and Recovery Concepts
Backup and Recovery Structures
Managing Redo Data
Configuring for Recoverability
Instance Recovery
Recoverability Checklist

Class Prerequisites
Experience in the following *is required* for this Oracle class:
- SQL fundamentals.
- Install, architecture and internals experience.