

## Oracle DBA Admin

### Overview of Oracle Database and Evaluation of Oracle Database

What is Database and Why Oracle Database is so important?  
What is the need for a Database?  
Type of Database Management System  
What is Relational Database Management System?

### Popular Relational Database Management System

How to Use RDBMS?  
Hands-On Of Using RDBMS  
What is Converged Database?  
Overview of oracle database 19c and evaluation of database  
Journey to automation

### Hands on of Installing Oracle Database 19c

Require Personal Laptop with Minimum 8 GB of RAM/ VM for each person  
Installing Oracle Database 19c  
You Can Check by oracle-database-preinstall-19c  
Configure sysctl.conf  
Installation Packages  
Create Group and Users  
Configure Listener  
Configure Control File  
Configure Redo File  
Configure Data File  
QUIZ

### Oracle Database File Management (Check Hands On)

Parameter File  
Data File  
Environment File  
Alter Log File  
Listener and TNS File  
Control File  
Redo Log File  
Password File

### Database Process Management (Theory and Check By Handson)

Check by SQL Query  
Client and Server Processes from SystemProcess Monitor Process (PMON) Listener  
Registration Process (LREG) System Monitor Process (SMON) Database Writer Process  
(DBW)  
Log Writer Process (LGWR)



Checkpoint Process (CKPT)

Manageability Monitor Processes (MMON and MMNL) Recoverer Process (RECO)

### **Oracle database Memory Architecture**

Introduction to Oracle Database Memory Structures

System global area (SGA)

Program global area (PGA)

User global area (UGA)

Automatic memory management

Database Buffer Cache

Redo Log Buffer

Library Cache

### **Oracle Database Architecture**

Recap and Overview of Oracle DB Architecture

Exam and Quiz

### **Oracle Real Application Cluster**

What is SCAN IP

Cluster Interconnection

Shared Storage

OCR and OLR

Node Eviction

Hands On Guideline for Oracle DB RAC Installation and Checking

QUIZ and EXAM

### **Oracle Database Automatic Storage Management**

What is ASM

Volume Manager and File System

What is ASM Instance

Redundancy in ASM

About Mirroring and Failure Groups

About Oracle ASM Disks

QUIZ

### **Oracle Database Backup, Restore and Recover**

Hot Backup

Cold Backup

Handson of RMAN

Recovery control file handson

Incremental Backup

Handos of Cold Backup and Restore



## **Oracle Database Administration and Maintenance**

### **Oracle Database User Management (Hands-On)**

- System Users
- Create Users (Demo)
- User Privileges
- DDL, DML Commands (Demo)
- Managing User Role
- Viewing User Roles and Privileges (Demo)
- Revoking Roles and Privileges (Demo)
- User Profiles

### **Tablespace Management (Hands-On)**

- Assign Tablespace Quotas to Users
- Creating Tablespace
- Managing the SYSAUX Tablespace
- Using Read-Only Tablespaces
- Altering and Maintaining Tablespaces
- Renaming Tablespaces
- Dropping Tablespaces
- Specifying Nonstandard Block Sizes for Tablespaces
- Migrating the SYSTEM Tablespace to a Locally Managed Tablespace
- Temporary Tablespace

### **Undo Management**

- Introduction to Automatic Undo Management
- Setting the Minimum Undo Retention Period
- Sizing a Fixed-Size Undo Tablespace
- Managing Undo Tablespaces
- Managing Temporary Undo
- Undo Space Data Dictionary Views

### **Redo Log Management (Demo)**

- What Is the Redo Log?
- Creating Redo Log Groups and Members
- Forcing Log Switches
- Verifying Blocks in Redo Log Files
- Clearing a Redo Log File
- Redo Log Data Dictionary Views

### **Control File Management**

- Guidelines for Control Files
- Creating Control Files
- Backing Up Control Files
- Recovering a Control File Using a Current Copy
- Dropping Control Files
- Control Files Data Dictionary Views

### **How to Monitor Oracle Database**

- Daily Activity Monitoring Activities
- Some Monitoring Demo
- EM For Monitoring

### **Oracle Database in Oracle Cloud (Demo)**

- What is Oracle Cloud
- How Oracle DB runs on Oracle Cloud

### **Oracle Autonomous Database (demo)**

- What is the mean of Oracle Autonomoud DB?
- Handson of Autonomous DB

### **Oracle Database Security and Auditing**

- What is DB security
- How DB Security Breaches?
- Protect data by encryption
- Auditing of DB
- Transparent Data Encryption