

## **Oracle Data Guard Course Content:35-40hours**

### Course Outline

#### **Introduction to Oracle Data Guard**

- Causes of Data Loss
- Oracle Data Guard Architecture
- Data Protection Modes

#### **Creating a Physical Standby Database by Using SQL and RMAN Commands**

- Preparing the Primary Database
- Creating a Physical Standby Database

#### **Overview of the Data Guard Broker**

- Oracle Data Guard Broker Features
- Oracle Data Guard Broker Configurations

#### **Using DGMGRL to Create a Data Guard Broker Configuration**

- Creating the Broker Configuration
- Adding the Standby Database to the Configuration

#### **Creating a Physical Standby Database by Using Enterprise Manager Grid Control**

- Using the Add Standby Database Wizard
- Verifying a Configuration
- Viewing the Data Guard Configuration Status

#### **Monitoring a Data Guard Broker Configuration**

- Monitoring the Data Guard Configuration
- Verifying the Configuration
- Using Enterprise Manager Data Guard Metrics
- Viewing Log File Details

#### **Managing Data Protection Modes**

- Determining Which Data Protection Mode to Use
- Setting Up Standby Redo Logs

- Setting the Data Protection Mode

### **Optimizing a Data Guard Configuration**

- Monitoring Configuration Performance
- Optimizing Network Configuration
- Implementing Cascaded Destinations

### **Using Flashback Database in a Data Guard Configuration**

- Using Flashback Database and Real-time Apply
- Using Flashback Database Instead of Apply Delay
- Recovering Data from the Standby Database From a Past Point-in-time

### **Performing Role Transitions**

- Understanding Roles in an Oracle Data Guard Configuration
- Performing a Switchover to a Physical Standby Database
- Performing a Failover to a Physical Standby Database
- Re-enabling a Disabled Database After a Role Transition

### **Enabling Fast-Start Failover**

- Configuring Fast-Start Failover
- Viewing Fast-Start Failover Information
- Performing Role Changes
- Reinstating the Database

### **Implementing Client Failover Procedures**

- Configuring Your Database to Automate Failover for OCI Clients
- Configuring Your Database to Automate Failover for JDBC Clients
- Troubleshooting Client Failover

### **Creating and Managing a Snapshot Standby Database**

- Converting a Physical Standby Database into a Snapshot Standby Database
- Using a Snapshot Standby Database
- Monitoring a Snapshot Standby Database

### **Using Oracle Active Data Guard**

- Opening a Physical Standby Database in Read-only Mode
- Enabling Block Change Tracking on a Physical Standby Database for Fast Incremental Backups

### **Creating a Logical Standby Database**

- Preparing to Create a Logical Standby Database
- Creating a Logical Standby using SQL/RMAN Commands
- Creating a Logical Standby using Grid Control

- Managing SQL Apply Filtering
- Performing Rolling Upgrades

#### **Managing the Data Guard Configuration**

- Viewing Data Guard Diagnostic Information
- Troubleshooting

#### **Backup and Recovery Considerations in an Oracle Data Guard Configuration**

- Using RMAN to Back Up and Restore Files in a Data Guard Configuration
- Offloading Backups to a Physical Standby Database
- Recovering a Corrupted Datafile on the Primary Database
- Backing Up a Logical Standby Database

#### **Upgrading Databases in a Data Guard Configuration**

- Using SQL Apply to Upgrade the Oracle Database
- Using a Physical Standby for Rolling Upgrades
- Upgrading an Oracle Data Guard Release 10.n Configuration to Release 11.1