

Course 287: Oracle Database 10g Data Guard

Course Description...

This In this course, students learn how to use Oracle Data Guard to help protect their Oracle Database against planned and unplanned downtimes. Data Guard architecture is examined.

Hands-on Lab exercises give students practice using many of the features.

Learning Objectives...

- Prepare the primary database for a Data Guard Configuration
- Monitor a Standby configuration
- Create a Physical Standby database
- Create a Logical Standby database
- Perform Failover and Switchover Operations

Who should attend...

Database Administrators and support staff tasked with providing a High Available (HA) Oracle Database environment

Prerequisites...

Significant administration experience with Oracle Databases

See next page for a detailed course outline...



Course Outline

Introduction and Overview
Course Objectives

Unit 1: Oracle Data Guard Overview

- Unplanned Downtime
- Architecture
- Data Guard Configurations
- Data Guard Services and Brokers
- Protection Modes
- Summary of Data Guard Benefits

Unit 2: Preparing to Use Data Guard

- Database Features Usage Tracking
- Automatic Enterprise Manager Configuration
- Simplified Initialization Parameters and Install
- Standby Database Types
- User Interfaces for Administering Data Guard Configurations
- Data Guard Operational Prerequisites
- Standby Database Directory Structure Considerations
- Online Redo Logs, Archived Redo Logs, and Standby Redo Logs

Unit 3: Creating a Physical Standby Database

- Preparing the Primary Database for Standby Database Creation
- Creating a Physical Standby Database
- Further Preparations
- Using SQL commands to create a physical standby database
- Creating a Physical Standby Database with Recovery Manager

Unit 4: Protection Modes and Log Transport Services

- Data Protection Modes
- Changing the Data Protection Mode
- Configuring and modifying the Log Transport Mode

Unit 5: Creating a Logical Standby Database

- Preparing for Logical Standby Database Creation
- Creating a Logical Standby Database
- Further Preparations

Unit 6: Log Apply Services

- Log Apply Services Overview
- Log Apply Services Configuration Options
- Applying Redo Data to Physical Standby Databases
- Applying Redo Data to Logical Standby Databases
- Tuning the Log Apply Rate for a Physical Standby Database

Unit 7: Managing Roles: Switchover and Failover

- Introduction to Role Transitions
- Role Transitions Involving Physical Standby Databases
- Role Transitions Involving Logical Standby Databases
- Flashback Database after Failover

Unit 8: Managing Physical Standby Databases

- Starting Up and Shutting Down a Physical Standby Database



- Using a Standby Database That Is Open for Read-Only Access
- Managing Primary Database Events That Affect the Standby Database
- Using RMAN to Back Up and Restore Files on a Physical Standby Database
- Recovering Through the OPEN RESETLOGS Statement
- Monitoring the Primary and Standby Databases

Unit 9: Managing Logical Standby Databases

- Configuring and Managing a Logical Standby Database
- Upgrading the Oracle Database Software Version
- Recovering Through the OPEN RESETLOGS Statement
- Tuning Logical Standby Databases

Unit 10: Data Guard and Real Application Clusters

- Configuring Standby Databases in a Real Application Clusters Environment
- Configuration Considerations in a Real Application Clusters Environment
- Troubleshooting

Unit 11: Other Considerations for Oracle Data Guard

- Back up the primary database with a physical standby database
- Back up a logical standby database
- Flashback Database features in a Data Guard configuration
- Encrypt redo information
- Cascaded redo log destinations

Unit 12: Course Summary

- Plan of Action

Please contact your ROI representative to discuss course tailoring!!!