Oracle - Implementing Disaster Recovery Using Data Guard on DBCS

Code: D101038GC10  
Length: 2 days  
URL: View Online

The Implementing Disaster Recovery Using Data Guard on DBCS course teaches you how to implement a Hybrid Database Disaster Recovery (DR) site on Oracle Database Cloud using Oracle Cloud Infrastructure Classic.

It's ideal for experienced DBAs who want to learn about Hybrid Cloud DR architecture, setup, disaster recovery strategies, and benefits of using Oracle Cloud to host the DR environment. Lessons are reinforced with hands-on labs and use cases on implementing Hybrid DR using Data Guard on DBCS. Taking this hands-on training will prepare DBAs for Cloud certification exams.

Learn To:

- Explain the need for a disaster recovery plan and the challenges associated with it
- Identify available DR solutions on Oracle Cloud
- Create a Physical Standby Database on Oracle Cloud
- Monitor your Data Guard configuration
- Offload Production workload to Oracle Cloud using Oracle Active Data Guard
- Perform Real Time Application Testing on Oracle Cloud using a Snapshot standby database
- Perform Role transitions on Oracle Cloud

Benefits to You

You will benefit from interactive sessions that cover these areas:

Database Deployment

Expert Oracle University instructors will provide an overview of what the Oracle Cloud offers in terms of services. Learn how to sign in to an Oracle Cloud account and create a database deployment.

Disaster Recovery

Understand the need for a disaster recovery plan and the challenges associated with it. Create a Physical Standby Database on Oracle Cloud and perform Role Transitions.

Oracle Active Data Guard

You’ll learn how to offload production workload to Oracle Cloud using Oracle Active Data Guard.

Oracle Snapshot Standby Database

Perform Real Time Application Testing on Oracle Cloud using a Snapshot standby database.
Suggested Audience

Skills Gained

- Explore Hybrid Cloud DR architecture setup
- Special considerations for setting up a Hybrid DR
- Manage Network Access
- Create a Physical Standby Database on Oracle Cloud
- Perform Data Guard Health Check and Run Time Monitoring
- Offload production workload to Oracle Cloud using Oracle Active Data Guard
- Perform Real Time Application testing on Oracle Cloud using a Snapshot Standby Database
- Learn the Data Protection Modes
- Perform Database Role Transitions on Oracle Cloud
- Understand the need of a Disaster Recovery (DR) plan
- Address Challenges with DR deployment
- Identify available DR solutions on Oracle Cloud
- Benefits of hosting DR on Oracle Cloud

Who Can Benefit

- Cloud Administrator
- Cloud Architect
- Cloud Data Architects
- Cloud Database Administrators
- Cloud System Integrators
- Cloud Technical Consultants
- Database Administrators
- System Administrator

Prerequisites

- Experience in Oracle Database 11g and / or 12c Administration
- Working knowledge of Oracle Database Cloud Service (DBCS)
- Oracle Database Managing Multitenant Architecture

Course Details

Implementing Disaster Recovery Using Data Guard on DBCS

- Why Do You Need a Disaster Recovery Plan?
- Challenges with Disaster Recovery Deployment
- Disaster Recovery to Oracle Cloud: Strategies
- Hybrid: Disaster Recovery to Cloud by Using Backups, Standby Active Standby
- Benefits of Using Oracle Active Data Guard
- Full Stack Disaster Recovery to Cloud by Using Backups Replication
• Hybrid Cloud DR: Overview and Special Considerations
  • Hybrid Cloud Disaster Recovery Architecture: Overview
  • Disaster Recovery to Cloud Using Backups, Standby Active Standby
  • Preparing the Oracle Cloud for DR
  • DBCS: Automated Database Instantiation From Backups
  • Configuring Transparent Data Encryption
  • Creating Standby Redo Logs (SRL)
  • Standby Redo Logs: Architecture
  • Creating Standby Redo Logs

• Target Disaster Recovery Infrastructure
  • DBCS Architecture on OCIC
  • RESTful Web Services
  • Oracle Database Cloud Service: Service-Level Requirements
  • Software Editions: Included Database Options and Management Packs
  • Features and Tooling of DBCS
  • Benefits of Using OCIC for DR
  • Scale Up/Down Compute Shape and Storage in DBCS

• Managing Network Access to Database Cloud Service
  • Oracle Net Services: Overview
  • Security of Data in Transit
  • Cloud Network Configuration: Overview Security Rules
  • Network Encryption and Integrity: Overview
  • On-Premises Network Configuration Network Considerations
  • Creating an SSH Tunnel to DBCS Deployment
  • Public Internet Versus Fast Connect
  • Use Case: Configuring Restricted Access Using Security/IP Whitelist and Blacklist Rules

• Enabling Disaster Recovery on Oracle Database Cloud
  • Enabling DR on Oracle Database Cloud: Overview
  • Prepare the On-Premises Primary Database
  • Set Initialization Parameters
  • Instantiate Data Guard Physical Standby Database

• Data Guard Health Check and Runtime Monitoring
  • Data Guard Health Check: Overview Available Methods
  • Enable Runtime Monitoring
- Identifying Destination Settings
- Evaluate Redo Data
- Data Guard Status Information Monitoring Redo Apply
- How Cloud Control Monitors and Manages Oracle Cloud Services
- How to Get Past the Firewalls That Protect You?
- The Hybrid Cloud Agent: An Elegant Solution

**Offload Production Workload to Oracle Cloud Using Oracle Active Data Guard**

- Oracle Active Data Guard
- High-Level Architecture: Disaster Recovery to Cloud Using Active Standby
- Using Real-Time Query
- Enabling Disabling Real-Time Query
- Configuring Zero Lag Between the Primary and Standby Databases
- Active Data Guard 12c: Far Sync
- Oracle Data Guard 12c: Far Sync Creation
- Benefits of Using Oracle Active Data Guard

**Real-Time Application Testing on Oracle Cloud by Using a Snapshot Standby Database**

- Snapshot Standby Database: Architecture
- Converting a Physical Standby Database to a Snapshot Standby Database
- Converting a Snapshot Standby Database to a Physical Standby Database
- Converting a Physical Standby Database to a Snapshot Standby Database
- Converting a Snapshot Standby Database Back to Physical Standby Database
- Activating a Snapshot Standby Database: Issues and Cautions
- Snapshot Standby Database: Target Restrictions
- Oracle Real Application Testing: Overview Benefits

**Validating Disaster Recovery Readiness and Performing Role Transitions**

- How to Validate Disaster Recovery Readiness?
- Data Protection Modes Comparison of Data Protection Modes
- Using DR Site on Oracle Cloud for Planned Maintenance
- Performing Role Transitions on Cloud DR Site
- Database Role Transition on Oracle Cloud
- Connecting the Application Tier
- Full Stack Failover: Application and Database Tiers
- Using Snapshot Standby for Validating DR Readiness