

Oracle Data Guard 12cR2: New Features in Action!

Harald van Breederode
Oracle University
23-NOV-2017

About ME

- `#include <std/disclaimer.h>`
- Senior Principal Trainer – Oracle University
- 35 years Unix Experience
- 20 years Oracle DBA Experience
- Oracle8*i*, 9*i*, 10*g*, 11*g* and 12*c* OCP
- Oracle10*g*, Oracle11*g* and Oracle12*c* OCM
- DBA and O/S Certification Exam developer/Reviewer
- DBA and O/S Curriculum developer/Reviewer
- Blog: prutser.wordpress.com
- Visually Impaired (Legally Blind)



Agenda

- **Introduction**
- **Data Guard Overview**
- **Data Guard 12cR2 Enhancements**
- **Data Guard Broker 12cR2 Enhancements**
- **Demo's**
- **Questions & Answers**

Overview

The goal of this presentation is to demonstrate the Oracle Data Guard 12c Release 2 New Features.

- **Very few slides**
- **Many, many live demos**

What is Data Guard

High Availability and DR Solution

- One or more additional databases at remote locations
- These are called Standby Databases
- They may be local for proof of concept

Data Guard == Standby Database plus extra's

- Data Guard Broker
 - Cloud Control Management Interface
 - CLI Management Interface
- Redo Transport Services
- Role Management Services
 - Switchover
 - Failover

Types of DataGuard Databases

There are four types of DataGuard Databases:

- **Primary Database**
 - The Database that needs protection
 - Transports Redo to its Standby Databases
- **Physical Standby Database**
 - Exact physical copy of primary database
 - May be opened read only
 - Real Time Query permits redo apply whilst open Read Only
 - Synchronized with primary using Redo Apply

Types of DataGuard Databases (continued)

- **Snapshot Standby Database**
 - Physical Standby Database opened temporarily for Read Write
 - Used for Real Application Testing (RAT)
- **Logical Standby Database**
 - Logical copy of primary database
 - Is Read Write open for normal usage
 - Synchronized with primary using SQL Apply
 - Important for Rolling Release Upgrade

Data Guard 12cR2 New Features

- **Multitenant Data Guard Enhancements**
- **Automatic Password File Synchronization**
- **AWR Support for Physical Standby Databases**
- **DBMS_DBCOMP PL/SQL Package**
- **STANDBY_DB_PRESERVE_STATES Parameter**

Data Guard Broker 12cR2 New Features

- **New Broker Properties**
- **Fast Start Failover Enhancements**
- **New Broker Commands**

Q U E S T I O N S
&
A N S W E R S

And Finally

Thank you for your kind attention!

Remember:

Learn Oracle from Oracle!