Oracle Data Guard 12cR2: New Features in Action!

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About ME

• #include <std/disclaimer.h>
• Senior Principal Trainer – Oracle University
• 35 years Unix Experience
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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
QUESTIONS & ANSWERS
And Finally

Thank you for your kind attention!

Remember:

Learn Oracle from Oracle!