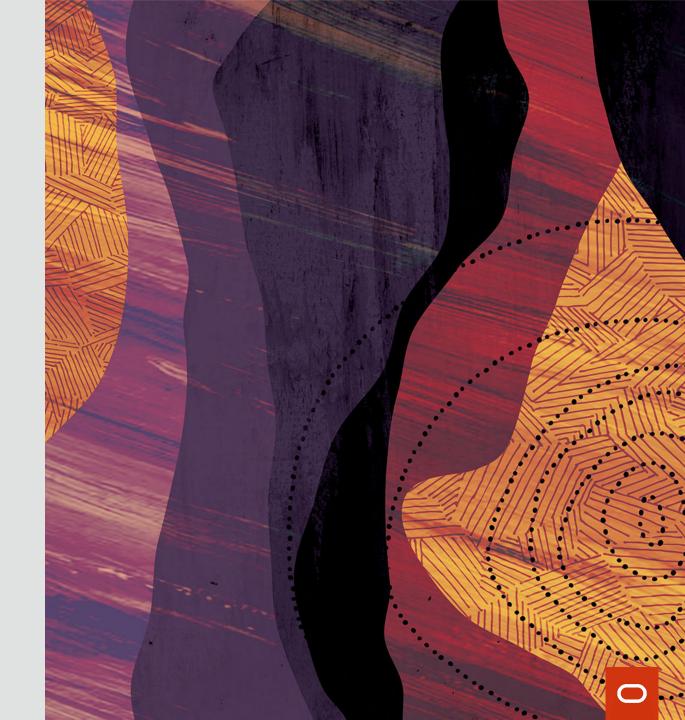
Javier Ruiz

Manager, IT-Infra Svcs- Database Technology Oracle-HANA Services Energy Transfer





Why ExaCC

- All database options available
- Consolidation onto one standard Exadata platform
- Extreme performance for all databases



Why ZDLRA

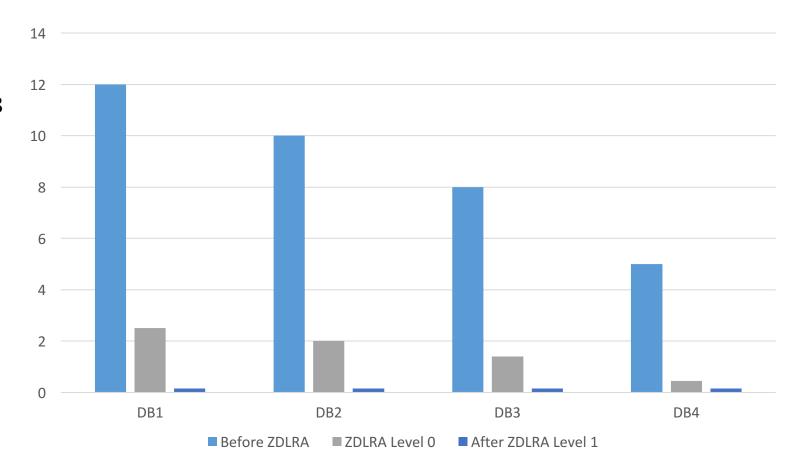
- Significant performance improvement (reduction in time):
 - Backups and restores of databases using the Recovery Appliance.
 - Cloning of new databases from backups on the Recovery Appliance.
- Incremental forever architecture reduced backup window
- Offload backup processing from production servers:
 - Backup compression, merge of incremental, validation, deletion and backup to tape.
- Integrated and automated multi-tiered deployment (Replica and tape)
 - RMAN automatically restores from downstream or tape if backup isn't on the upstream
 - Downstream used to build standby database



Improved Backup Performance

RMAN Backup Times

- Before ZDLRA full compressed backup where taking between 8 to 12 hours with 4 channels
- Backup windows 5pm to 5am
- ZDLRA nightly incremental backups completed between 2 to 3 minutes depending on the amount of block changes.
- Now all backups complete before 11pm

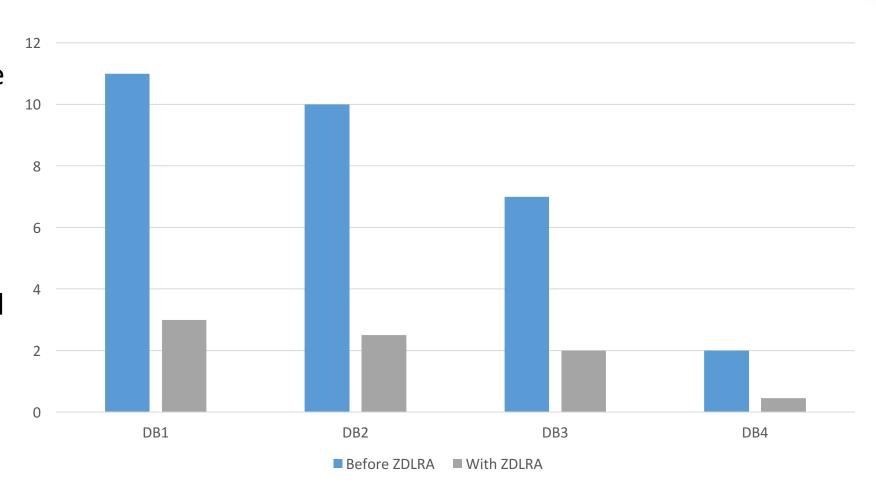




Improved Restore Performance

RMAN Restore Times

- Before ZDLRA restores could take up to 10 hour
- ZDLRA delivers a 75% improvement on restore times.
- This sped up our clones of non-prod databases.





Cross Platform Migration using ZDLRA

- Big endian to little endian
- Use existing ZDLRA backups
- Target database higher version supported
- Minimize downtime using ZDLRA
- Cross Platform Database Migration using ZDLRA (Doc ID 2460552.1)



Benefits with RA Migration

- Export/Import 32+ hours outage
 - RMAN transportable tablespace method without ZDLRA requires 24+ hours
- Other methods require additional license cost
- RA migration from 32+ hours down to 8 hours outage
 - ZDLRA transportable tablespace outage was 3.5 hours
 - Additional time for post-migration database validation
- Automated the migration with Ansible Tower for decrease to 4 hours



Automation Details

Detail about automation

Automate DevOps Using Oracle and Ansible [BUS1488]



In this session learn how to use Oracle Enterprise Manager Cloud Control 13c, Oracle Application Express 18c, Oracle Exadata Cloud at Customer, and Ansible to automate day-to-day DevOps task. Hear how Energy Transfer was able to streamline DevOps operations to meet growing demand for DBA operational tasks. Learn about Oracle Enterprise Manager Cloud Control monitoring, Oracle Application Express Rest API calls for automation, Oracle Exadata Cloud at Customer and Oracle Cloud Infrastructure command line interface, and Ansible Tower. See how to integrate these tools to create an end-to-end automation solution.

SPEAKERS

Javier Ruiz, Oracle DBA Team Technical Lead, Manager, IT-Infra Svcs- Database Technology Oracle-HANA Services

Topic: Optimize Your Environment

Job Role: DBA

Products and Solutions A-Z: Development Tools, Enterprise Manager/Oracle Management Cloud, Cloud at Customer

Session Type: Business Use Case Session