Planning for Oracle Exadata Migrations & Conversions

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Agenda

Planning for Oracle Exadata Migrations and Conversions: *Don’t Just Forklift to Exadata*

- Customer Case Studies
- Q & A
- About Teleran
General Preparation for Exadata

• **Source Systems. Individual workload profiles**
• **Target Systems. Composite workload behavior**
• **Readiness. Workload’s readiness for Exadata**
Hypothesis:
Application Readiness Matters

- Old, poorly written applications do not ‘fork lift’ well
- Inappropriate user behavior can impact performance
- Right sizing applications, users, and data model will improve performance
Application Readiness Requires Visibility

- Who are the users of the application /system?
- How are they using the application?
- When are they using it?
- What tools are they using?
- What data objects are they using?
- How do they all interact and share the Exadata?
Customer Challenge: Slow Consolidations / Migrations

- Moving 50 databases, marts, ODSs & OLTPs onto Exadata
- Oracle, DB2, & SQL Server (several versions)
- 24 x 7 global operations
- Some applications in poor health

Assess application readiness to find database hints & assess Smart Scan readiness
Customer Challenge: Exadata Slowdown / Fall Down

- Exadata performance slowing over course of the day
- Exadata occasionally crashed
- Identified poorly-coded application
- Database connections left open, resources exhausted

Discover poorly written bad queries impacting Exadata performance
Customer Challenge: Un-Authorized Datamarts

• Identified 7 datamarts (avg. 450 GB, max. 7 TB)
• Resources wasted with tools like MS Access, Toad
• Bogged-down throughput, missed SLAs
• Compliance & security violations

Discovery of unwanted activities in source systems targeted for Exadata can be critical to deployment.
Customer Challenge: Un-Healthy Source Systems

- DB2 EDW, Oracle ODS supporting 1000’s Web users
- Too many DB errors, real-time ETL deadlocks
- DB tuning highly over budget & behind schedule
- New CEO & VP IT

Database “Fork lifting” does not always work…
Customer Challenge: Measuring Exadata Benefits

- Highly-tuned DB2 & Oracle warehouses
- BI: Home-grown, SAP BusinessObjects, OBIEE
- Need to validate Exadata improvements
- Identify & benchmark key queries, indices

Evaluate application readiness to find optimal index plan based upon actual workloads
Key Exadata Readiness Considerations

• Database Hints
• Database Errors
• Inappropriate Queries
• Smart Scan Ready
• Index Lite Ready
Approach for Assessing Readiness

• Database Monitor. Track SQL and metrics of profile
• Data Reduction. Process to cluster similar events
• Readiness Analysis Engine. Produce actionable results
Conclusion/Q&A

• There is no replacement for careful planning
• Exadata is fast, but cannot ‘heal the sick’
• ‘Fork lift’ migrations are not, ‘one size fits all’
• Bad behavior can dramatically affect performance
About Teleran

Visibility, usage analytics & policy management to understand & actively manage data-intensive applications

- Software & services company
- 4th generation software solutions – 8 patents
- Oracle partner 10 years
- Solutions Exastack Certified, installed at Oracle Solutions Centers
## Contact Information

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