



Oracle Open World 2015

Oracle Exadata Case Studies: Drive Application Performance, Lower Business Costs

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Business Objective of the Platform Upgrade



- Architect a database platform for new enterprise wide systems - Guidewire's ClaimCenter, PolicyCenter, BillingCenter, Data Hub, and InfoCenter.

- New systems will replace legacy systems - Unisys Mainframe, IBM Mainframe, Lotus Notes, SQL Server,...

- Requirements:
 - High Availability (24x7)
 - High Performance
 - Manage TCO

Why Exadata?



High Availability (24x7)

- Inherent HA Benefits – Hardware Components, Power, RAC
- Active Data Guard

High Performance

- Oracle Marketing said it was fast. (*Real examples to follow*)

Manage TCO

- License Consolidation (*Real examples to follow*)
- Pre-built and Optimized Out-of-the-Box

Overview of the Hardware and Software



Hardware

- 2 X3-2 (1/8th Rack) - OLTP
- 2 X4-2 (1/8th Rack) - DW
- 4 Linux Servers (DG)

Software

- Guidewire ClaimCenter
- Guidewire PolicyCenter
- Guidewire BillingCenter
- Guidewire Data Hub
- Guidewire InfoCenter
- Simpana CommVault
- SAP Data Services

Options

- RAC
- Active Data Guard
- Diagnostic & Tuning
- Advanced Security
- Multitenant

- Consolidated Legacy Oracle OLTP systems onto X3-2
 - 2.5-5x savings in query elapsed times
 - Single batch job performance improvement – 5+ hours to 50 minutes (> 6x)
 - Batch job creates 500+ million record table - joins data from 13 different tables
- Consolidated Legacy Oracle DW systems onto X4-2
 - ClaimCenter data mart – 4x performance gain (16+ hours on AIX P5 versus 4+ hours on X4-2) for nightly load/build of data mart from ClaimCenter Consolidated 4 production warehouses into a single database.
 - Monthly Aggregate Experience build was 22 hours, now 53 seconds. (Yes, ~1,500x!)

Manage TCO (License Consolidation)



Pre-Exadata (1000 NUP & 33 Proc)

- OLTP – 3 AIX (75 NUP & 3 Proc)
 - DW – 2 AIX & 2 Windows (375 NUP)
 - PeopleSoft – 2 Windows (2 Proc)
 - Cognos – 2 AIX (2 Proc)
 - FileNet – 2 Windows (2 Proc)
 - Dynatrace – 1 Windows (50 NUP)
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- BAU ClaimCenter – 7 Linux (250 NUP & 12 Proc)
 - BAU Policy/BillingCenter – 7 Linux (250 NUP & 12 Proc)

Current State (800 NUP & 20 Proc)

- X3-2 OLTP Test (200 NUP)
- X3-2 OLTP Prod (8 Proc)
- X4-2 DW Test (300 NUP)
- X4-2 DW Prod (12 Proc)
- Active Data Guard – 2 Linux (150 NUP)
- Data Guard – 2 Linux (150 NUP)

WILL DECREASE TCO OVER 5 YEARS BY ~ 40%!

Key Takeaways



- Ultimately AMIG's decision to implement Exadata was based on the need:
 - for 24x7 high availability for our Guidewire Suite
 - an overall cost reduction based on consolidation
 - AMIG received much more
- AMIG realized many wins, both from an IT and business perspective, unimagined during the original business case.
- Increased performance was not a factor spelled out in the original business case.
 - AMIG did not want to use a general factor, often un-measurable and un-comparable, on which to base the decision.
 - What was discovered after the implementation was much better than expected.
- Upgrades & Patches –
 - AMIG Pre-Exadata found it hard to dedicate time to perform these tasks, both from an IT and business perspective.
 - Now with Exadata and Oracle Platinum Support we stay with n-2.

