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Migrate Your Release 11/ Oracle Applications to Linux

Session Leader
Kevin Dahl, Solution Beacon

Compiled by Sandra Vucinic and Kevin Dahl

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Release 11/Workshops

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Agenda

- Why Linux?
- Release 11i/Architecture – Components
- Linux Platform Migration Utility
- Roadmap to two-step migration
 - ◆ Migrate Oracle Applications to Release 11i using Linux Migration Utility
 - ◆ Migrate database to Linux
- Project requirements
 - ◆ Resources and project timeline

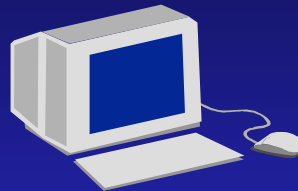
Linux Platform

- Why Linux?
- Fast, low-cost hardware
- Increased availability
- Scalability (add as many applications servers as needed quickly)
- Reduced cost of patching and complexity by using “Shared APPL_TOP”

11i Architecture – Components

Release 11.5.10 DVD Release

Client Tier



JInitiator

Middle Tier

Web HTTP Servers

Apache

Discoverer Server *

Application Technology Stack

Admin Server

Concurrent Processing Server

Forms Server

Reports Server

Database Tier

*optional
9iAS ORACLE_HOME
(1.0.2.2.2)



9.2.0.5
Database

8.0.6.3 ORACLE_HOME

9.2.0.5 ORACLE_HOME
*upgrade

Linux Platform Migration Utility

- Provides a way to quickly move an existing Oracle Applications
- Includes Technology Stack Upgrade to 11.5.10
- Retains exact application patch level therefore no APPL_TOP/Database synchronization is necessary
- Retains many customizations

Roadmap to Two-step Migration

- Migrate Oracle Applications Release 11/
from any platform (UNIX or Windows)
to Linux
 - ◆ Certification for the most common
flavors of Linux:
 - ◆ Red Hat AS/ES version 2.1 and version 3.0
 - ◆ SuSE SLES version 7 and 8
- Migrate database version Oracle8/
Oracle9/
to Linux

Applications 11/Migration Steps

- Apps Tier or Middle tier (appl_top, common_top, Tech Stack (8.0.6 and iAS) reside on UNIX or Windows before migration
- Documentation: MetaLink note 238276.1
- Prerequisites:
 - ◆ Database version 8.1.7.4
 - ◆ If not on AD mini-pack G or later – apply AD.I
 - ◆ Implement AutoConfig
 - ◆ Run “Maintain snapshot information”
 - ◆ Perl version 5.005
 - ◆ JDK version 1.4 (doc 246105.1) if migrating to Red Hat 3.0 else 1.3.1(doc 130091.1)
 - ◆ Verify Linux kernel parms on target system via (document 287453.1)

Applications 11/Migration Steps

■ Migrate Platforms

- ◆ Apply platform Migration Utility Patch 4068109
- ◆ Generate and upload manifest of customer specific files
 - ◆ Run perl \$AD_TOP/bin/adgenpsf.pl
 - ◆ Upload manifest file to Oracle support (<http://updates.oracle.com/PlatformMigration>) use your Metalink username and password
- ◆ Copy Application Tier Directories
 - ◆ \$APPL_TOP, \$OA_HTML, \$OA_JAVA and \$COMMON_TOP/util \$COMMON_TOP/pages directories from your source to your target system

Applications 11/Migration Steps

- ◆ Copy security file for JInitiator (if you wish to preserve source system digital signature)
- ◆ Clone xml context file on target system- refer to port pool help if needed (216664.1)
- ◆ Install 11.5.10 technology Stack on target (Linux) system – note id: 146468.1
- ◆ Apply RHEL3 interop patches 3830807 (note 238276.1 has yet to be updated) and 3170128
- ◆ Execute setup phase on AutoConfig on target

Applications 11/Migration Steps

- ◆ Download and apply the customer-specific update – make sure you run adpatch from patch/bin directory
- ◆ Apply patch 3077161 (if migrating from Windows)
- ◆ Review Technology Stack patches applied to source-and apply to target if necessary
- ◆ Apply Tech Stack interoperability patch 3545927
- ◆ Regenerate file systems objects (messages, forms, reports, graphics and jar files)
- ◆ Run AutoConfig to complete target system configuration

Applications 11/Migration Steps

■ Finishing Tasks

- ◆ Update 3rd party extensions (for example, quantum)
- ◆ Review and update target system applications tier settings and customizations
- ◆ Update printer settings
- ◆ Update Workflow configuration settings

Migrate Database to Linux

- Process applicable to Oracle8*i* or Oracle9*i* Oracle Applications database on any UNIX or Windows platform (source database)
- Export/Import process used for database migration to Linux (target database)
- Target Linux database version Oracle9*i* – steps similar for Oracle8*i*
- Documentation: MetaLink Note 230627.1

Migrate Database to Linux

- High level steps (note 230627.1):
 - ◆ Export source Oracle Applications Release 11i/database (any OS)
 - ◆ Prepare a target Applications Release 11i/database (Linux)
 - ◆ Import target Applications Release 11i/database (Linux)
 - ◆ Update imported Applications 11i/database (Linux)

Migrate Database to Linux

- **Export source Applications Release 11/database (on UNIX or Windows platform)**
 - ◆ Ensure minimum requirements of components are met. The target 9.2.0. The source either 8.1.7 or 9.2.0
 - ◆ Apply AD mini pack F or later to source database
 - ◆ Apply consolidated export/import utility patch 3634436
 - ◆ Apply Materialized Views patch 2447246 (if source is 11.5.7 or lower)
 - ◆ Apply apps database preparation scripts patches 2381851 3992122
 - ◆ Identify GLOBAL_NAME of source database
 - ◆ Create export parameter file (included in 3634436)

Migrate Database to Linux

- **Export source Applications Release 11/database (on UNIX or Windows platform)**
 - ◆ Generate target instance creation script (adcrdb.sql) using \$AD_TOP/patch/115/sql/adclondb.sql script
 - ◆ Record Advanced Queue Settings (use scripts from 3634436) and ConText default tablespace
 - ◆ **Shut down Applications server processes**
 - ◆ Apply RDBMS patch 1879479 (if source is 8.1.7.2)
 - ◆ Apply workaround for AQ privileges and nested tables (if source is 9.2.0.x)
 - ◆ Export source applications database
 - ◆ Restart Oracle Applications processes

Migrate Database to Linux

- **Prepare target Applications Release 11/
database**
 - ◆ Create target Oracle9i/ ORACLE_HOME
 - ◆ Modify sqlnet.ora (windows)
 - ◆ Create target init.ora and ifilecbo.ora files
 - ◆ Create target database instance (ran adcrdb.sql)
 - ◆ Copy database preparation scripts from source to target \$ORACLE_HOME
 - ◆ Set up SYS schema (ran addb920.sql script)

Migrate Database to Linux

- **Prepare target Applications Release 11/
database**
 - ◆ Set up SYSTEM schema (ran adsy920.sql script)
 - ◆ Install JVM (ran adjv920.sql script)
 - ◆ Install ORD, Spatial, interMedia and ConText (ran admisc920.sql script)
 - ◆ Apply Oracle Portal patch (if Portal is installed) 2857908
 - ◆ Update GLOBAL_NAME
 - ◆ **Backup target database instance**

Migrate Database to Linux

- **Import Applications Release 11/ target database on Linux platform**
 - ◆ Create import parameter file
 - ◆ Copy source export dump file
 - ◆ Import target applications database instance
 - ◆ Run import in background or "nohup" mode
 - ◆ **Review import log file**
 - ◆ Convert rollback segments into System Managed Undo tablespace (if source database is version Oracle8/)

Migrate Database to Linux

- **Update imported Applications Release 11/
database on Linux platform**
 - ◆ Apply post-import steps
 - ◆ Copy and update Rapid Install utility files
 - ◆ Grant dictionary privileges to SYSTEM, APPS and MRC
 - ◆ Apply FND patch
 - ◆ Apply CRM Gateway patch (if applicable)
 - ◆ Apply Oracle Contract Core patch (if applicable)
 - ◆ Apply AD patch
 - ◆ Re-create grants and synonyms
 - ◆ Apply post-import Oracle Portal steps (if applicable)
 - ◆ Create ConText objects
 - ◆ Apply patch 3634436 to target node
 - ◆ Run dpost_imp.pl script

Migrate Database to Linux

■ Update imported Applications Release 11/ database on Linux platform

- ◆ Compile APPS schema
- ◆ Compile flexfield data in AOL tables
- ◆ Recreate grants and synonyms for APPS schema
- ◆ MRC steps (if applicable)
- ◆ Compile other invalids
- ◆ Apply workaround for rule based subscribers (conditional)
- ◆ Reset Advanced Queues
- ◆ Start Application server processes for target environment

Project Requirements

- Timeline:
 - ◆ Database migration to Linux
 - ◆ Applications migration to Linux
- Resource requirements:
 - ◆ Database Administrator (full time)
 - ◆ Testing Team (functional and technical resources)

Q&A

Hope you enjoyed this Release 11i session!

Remember:

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Kevin Dahl

kdahl@solutionbeacon.com

www.solutionbeacon.com