



OAUG®

# TRAIL TO TEXAS



## Introduction to Oracle Applications Release 11i... Part 2: *Administration & Maintenance*

Session Leader

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*TRAIL to TEXAS<sup>sm</sup>*

Release 11i/Workshops

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# Introduction

- Welcome and Introduction
- Session Overview
  - ◆ The focus of this presentation is to share “Real-World” experience as well as tips and techniques to install, upgrade and tune the complex Oracle Application environment delivered with Release 11/

# Administration and Maintenance

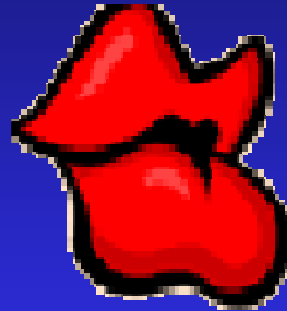


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# Release 11/ Guiding Principles

***KISS***



**Keep it Simple and Supportable<sup>sm</sup>**

**Possible vs. Practical**

# Release 11/ Basics to Remember

- Release 11/ is not a static release
- Release 11/ installs everything regardless of licensing
- Release 11/ contains constantly evolving technology
- Release 11/ point upgrades introduce significant changes to functionality and technology
- Release 11/ has significant interdependencies of Critical Products: AD, FND, AK, HZ (TCA), OWF, TXK, ADX, SHT, ATG, AU, FWK, OAM

# Housekeeping

- Apply Minimum Patches
  - ◆ Latest AD Consolidated (AD.I) – starting with 11.5.7 AD mini-packs and AD consolidated are the same
  - ◆ Password Utility – patch required
  - ◆ Clone Utility – patch required pre-11.5.7
  - ◆ Workflow
  - ◆ Oracle Application Manager
  - ◆ Technology Validation
  - ◆ ADI Security / WebADI
- Backup AD/FND bin directories
- Modify processes, rbs, temp, redos, init.ora
- Resize the Database
- Pinning – installed module packages/sequences
- Run ADADMIN Steps
- Cold Backup to Disk/Tape

# AutoConfig

AutoConfig is a configuration tool that automates the configuration of an Oracle Applications system.

- The information required for configuring an Applications system is collected into a repository, called the *Applications Context*; there is one Applications Context for the application tier, and a separate one for the database tier
- When AutoConfig runs, it uses information from the Applications Context file to generate all configuration files and update database profiles
- MetaLink Note 165195.1
- AutoConfig FAQ 218089.1

# Cloning

- Definition of Cloning: the process of reproducing an entire environment, including the Oracle software (\$ORACLE\_HOME) and Application software (\$APPL\_TOP) directory structures.
- Whitepapers: MetaLink Note 135792.1
- Limitations
  - ◆ Architecture
  - ◆ Technology Stack
  - ◆ AutoConfig (11.5.7 +)

# Cloning Methods

- Manually
  - ◆ Dozens of Configuration Files
  - ◆ Numerous Site Profile Values
  - ◆ Not Supported
- Oracle's adclone.pl Utility (pre-11.5.7)
- Oracle's AutoConfig Utility (11.5.7)
- Oracle's Rapid Clone Utility (11.5.8+)
- No sharing of software

# Cloning Checklist – Pre-11.5.7

- Clone Patches
- PERL Path
- High-Level Tasks
  - ◆ Target Installation
  - ◆ adclone.pl Pre-Clone
  - ◆ Copy Directories (HTML/JAVA)
  - ◆ Copy Database
  - ◆ adclone.pl Post-Clone
  - ◆ Post-Clone Tasks
  - ◆ FND\_PRODUCT\_GROUPS Update

# AdClone

- Adclone.pl MetaLink Note 135792.1
  - ◆ Patch 2115451 + Pre-requisite
  - ◆ Supported
  - ◆ Limitations – Identical Configuration, Database and Technology Patches Not Cloned

# Migrations – Point Releases

- Basic Definition and Configuration
  - ◆ Technology
  - ◆ Applications
- Migration Strategies
  - ◆ Technology
  - ◆ Maintenance Pack

# Patching



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# Patching Strategy ... Prior to 11i

- Patch to “almost” current – Don’t be bleeding edge at go-live
- Patch to fix specific issues – If it ain’t broke, don’t fix it!
- Patching was mostly a technical issue
- Patches were typically specific – fixed either a bug *or* added new functionality ... not both

# Patch Definitions

- CD Bundle (50+ CDs)
  - ◆ Entire Applications Release
- Maintenance Pack (AU – 11.5.9)
  - ◆ Entire Code Set Release for All Application Modules
  - ◆ No Technology Patches Included
  - ◆ Lots of Pre/Post Tasks, VERY Long-Running
  - ◆ Will break ... period
  - ◆ Consolidated Update Patch – 11.5.9 (185 patches)
- Family Pack (PRC\_PFI)
  - ◆ All Product Modules Mini-packs for the Specific Family
  - ◆ Lots of Pre/Post Tasks, VERY Long-Running
  - ◆ Will likely break
- Product Mini-Pack (GL.H)
  - ◆ Entire Release for Specific Application Modules
- One-Off Bug Patch (High Priority)
  - ◆ Fixes Specific Issue, No Regression Testing

# AutoPatch Review

## ■ AutoPatch Checklist

- ◆ Research on Patch # – MetaLink, OAUG Archives
- ◆ Readme.txt, README.html
- ◆ Shutdown Application Processes
- ◆ Pre-Requisite Patches/Tasks, Post-Patch Tasks
- ◆ Traditional C(ode), D(atabase), G(enerate) drivers
- ◆ New U (nified) Drivers
  - ◆ options=nodatabaseportion,nogenerateportion = "C" driver
  - ◆ options=nocopyportion,nogenerateportion = "D" driver
  - ◆ options=nocopyportion,nodatabaseportion = "G" driver
- ◆ Migration to Other Environments – Tools
- ◆ Manual (AD.H Enhancements)

# AutoPatch Driver Definitions

**Copy driver (c driver):** Named c<patchnumber>.drv, and contains commands to change Oracle Applications files. The commands include directives to copy/update files, libraries, and/or Java, and commands for generating JAR files and/or C executables.

**Database driver (d driver):** Named d<patchnumber>.drv, and contains commands to change Oracle Applications database objects, such as PL/SQL and table definitions, or to update or migrate data.

**Generate driver (g driver):** Named g<patchnumber>.drv, and contains commands to generate forms, reports, and/or graphics files. In a multi-node system, run it on all application tier \$APPL\_TOPs, **unless** the \$APPL\_TOP only implements the admin server.

**Unified driver (u driver):** Named u<patchnumber>.drv, it is a consolidated driver containing all copy, database, and generate actions. Apply this driver to all \$APPL\_TOPs on all application tier servers. AutoPatch knows which command should be run on each type of application tier. The unified driver requires only a single execution of AutoPatch.

# AutoPatch Documentation

## ... the parts that aren't "auto"

- Standards – Patch Naming, Driver Log Files, Patch Status, Issue Tracking Spreadsheet
- Process – Discovery, Evaluation and Examination, Pre/Post Patch Tasks, Testing, Migration Approval, Freeze Patch Levels (Install – Int. Testing vs. Upgrade – Latest)
- Installation – Rapid Install, AD Consolidated, FND Mini-Pack
- Ongoing Maintenance – Frequency, Business Requirements/Impact

*11.5.8 – all product family packs out of date*

*11.5.9 – 18+ months old; all family packs out of date*

*11.5.10 – terminal release; 10g certification pending*

# OAM Patch Advisor

- OAM.G Mini-Pack
- MetaLink Document 226826.1
- Uses InfoBundle11i.zip

# InfoBundle11i.zip

- Updated Nightly by Oracle
- Updates Patch Snapshot Repository
- Recommended Patch List
- Includes Patch Prerequisites
- MetaLink Document 233039.1

# Oracle Patch Documentation

- Maintenance Procedures – June 2003 (B10641-01)
- Maintenance Utilities – June 2003 (B10640-01)

# Security Patches

- Applications Codeset \$APPL\_TOP
- Web Tier \$ORACLE\_HOME
- Application Tier \$ORACLE\_HOME
- Database Tier \$ORACLE\_HOME
- Oracle's Quarterly Patch Update
  - ◆ Sometimes Significant
  - ◆ Plan for it as part of Release Mgmt

# Patch Tips

- Pre-Patched/Staged \$APPL\_TOP
- Shared \$APPL\_TOP
- Distributed AD Patching

# Patch MetaLink FAQs

**Q: How often should customers apply mini-packs, family packs, and maintenance packs?**

At a **minimum**, apply maintenance packs to stay within two maintenance releases. For example, since 11.5.9 is currently available, customers at the 11.5.7 (or earlier) level should be planning their upgrade to 11.5.9. Use mini-packs and family packs if you have an immediate need for the latest patch level for a product or product family and cannot wait to apply the corresponding maintenance pack.

# Patch MetaLink FAQs

**Q: How can I find the latest available mini-pack, family pack, or maintenance pack?**

A: On OracleMetaLink, click the *Patches* button on the left-hand side. Choose the *Quick Links to the Latest Patchsets, Mini Packs, and Maintenance Packs* link to get either:

**Q: Where can I find a list of AutoPatch features and the AD mini-packs that introduced them?**

A: The Oracle Applications DBA 11i+ Features Matrix (OracleMetaLink ID: 210326.1) contains a list of major AD features in Release 11i and identifies which AD mini-pack introduced each feature.

# Patch MetaLink FAQs

**Q: What is the AD Features matrix printed on the AutoPatch screen and logfiles?**

**A:** AD Feature Versions is a framework created to handle mismatches between the AD code on the file system and the AD objects in the database. Both the version of the feature on the file system and the version of the feature in the database are tracked separately. When the two versions do not match, the feature is disabled, and when the two versions match, the feature is (normally) enabled.

# Patch FAQs

**Q: Can I run multiple AutoPatch sessions at the same time?**

**A:** You cannot currently run multiple sessions simultaneously; however, patches can be merged and can be applied in a single patching session; a new AD feature called AD Concurrent Sessions is currently being tested

# Patch FAQs

**Q: How can I determine the effects a patch will have on my system?**

**A:** You can submit a specific patch analysis request through the Patch Advisor to determine the impact of a patch on your system. Patch Advisor Impact Analysis provides reports on:

The total number of files in the patch

The number of files the patch will install

The products that will have updated files

The files that will be introduced by the patch

The files on the target system that will be changed by the patch

The files with dependencies on patched files

# Q&A

*Hope you enjoyed this Release 11i session!*

*Remember:*

***KISS***



**Keep It Simple and Supportable<sup>SM</sup>**

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