



OAUG®

# TRAIL TO TEXAS



## Post Upgrade Support in the Release 11/World

Session Leader  
Kevin Dahl, Solution Beacon

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

Release 11/Workshops

NorCal OAUG / San Ramon, CA • NEOAUG / Worcester, MA •  
SROAUG / Los Angeles, CA • CSOAUG / St. Louis, MO •  
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[www.solutionbeacon.com](http://www.solutionbeacon.com)

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# Presenter Introduction

- Kevin Dahl
  - Oracle Apps DBA with over 20 years experience performing more than 100 installations and upgrades
  - Releases 10 through 11i
  - Taught at University of Oklahoma

# Presenter Experiences

- Camping World
- Raytheon
- Texas Instruments
- BioReliance
- Chicago Public Schools
- West Virginia University
- Toshiba
- RL Carriers
- Accor (Motel 6, Red Roof Inns)
- National Institutes of Health
- Kerr-McGee Corporation
- other

# Audience Profile

- Functional
  - Management
  - Analyst
  - End User
- Technical
  - Database Administrator
  - Web Administrator
  - Developer
- Current Application Release
  - Release 10.7, 11.0.x, 11.5.x
- Current Operating Systems
  - UNIX
  - Linux

# Overview

- Release11/ Concepts
  - ◆ What is Release 11/
  - ◆ Architecture
  - ◆ Server Configuration
- Administration and Maintenance
  - ◆ Post-installation
  - ◆ Environment Management
  - ◆ Cloning
  - ◆ AutoConfig
  - ◆ Migrations
  - ◆ Patching

# Release 11 / Concepts



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# 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

# What is Release 11?

- The Biggest and Most Complex Oracle Applications Release Ever!
- Nine CD/DVD bundle releases containing:
  - ◆ major changes to the tools and technology stack
  - ◆ bug fixes
  - ◆ NEW and CHANGED functionality!

# What is Release 11?

- Completely New Architecture, Tools and Technology – True Three-Tier
  - ◆ Internet Computing Architecture (ICA)
  - ◆ Technology Stack – Forms, Java, Apache(html)
  - ◆ Oracle 8*i*/9*i* – CBO, Partitioning
- Multiple Application Server Components
  - ◆ Forms-Based: ERP, Back Office
  - ◆ HTML/JAVA-Based: Self Service, Workflow, “*i*” Products
  - ◆ Business Intelligence: Discoverer 3*i*/4*i*, Reports

# Release 11 / Products

- Increased Modules, Functionality, and Features
  - ◆ Release 10.7 40 products
  - ◆ Release 11.0.x 50 products
  - ◆ :
  - ◆ Release 11.5.5 161 products
  - ◆ Release 11.5.6 175 products
  - ◆ Release 11.5.7 179 products
  - ◆ Release 11.5.8 191 products
  - ◆ Release 11.5.9 197 products
  - ◆ Release 11.5.10 209 products

# Release 11/ Bug Fixes

More stable functionality (technical and applications) continuously appearing with each major patch release

- 11.5.5/6 – ~ 20,000 bug fixes
- 11.5.7 – ~ 40,000 bug fixes
- 11.5.8 – > 60,000 bug fixes
- 11.5.9 – > 100,000 bug fixes
- 11.5.10 – ~ 180,000 bug fixes
  - Initially released on Oracle9i
  - Workflow changed ... again
  - Rapid cloning changed ... again
  - AD enhancements

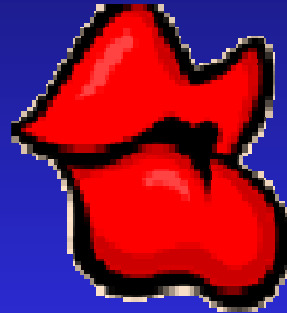
# Release 11/ Objects

“Stub” applications, performance improvements, additional functionality continuously appearing with each major patch release

■ 10.7	—	~ 25,000 objects
■ 11.0	—	~ 30,000 objects
■ 11.5.5/6	—	~ 200,000 objects
■ 11.5.7	—	~ 240,000 objects
■ 11.5.8	—	~ 280,000 objects
■ 11.5.9	—	~ 310,000 objects
■ Fresh* 11.5.9	—	~ 200,000 objects
■ 11.5.10	—	~ 270,000 objects

# Release 11/ Guiding Principles

***KISS***



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

**Possible vs. Practical**

# Release 11/ Concepts

- All or Nothing: Oracle Applications Software and Database – No sharing of Software/Objects
- Interdependencies of Products: AD, FND, AK, HZ (TCA), OWF, TXK, OAM, SHT, FWK
- Multiple Component Requirements: Database Software (3), Forms, Reports, Java, JDBC, Apache, Self-Service Framework, Workflow
- Hybrid Application: OLTP/Batch/Web Coexist

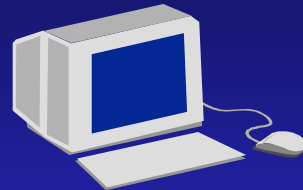
# 11i Terminology

- 11i is 11.5.x or 11i.x
  - 11.5.1 ... 11.5.2 ... ... 11.5.10
- Point Release
  - Applies to all products in all suites
  - CD/DVD Bundle or Maintenance Packs (11.5.6 – MP only)
  - Updates the “point” number  
(11i.8 -> 11i.9 or 11.5.9 -> 11.5.10)

# 10.7 Architecture – Components

Release 10.7

Client  
Tier



Application Technology Stack

Admin  
Server

Concurrent  
Processing Server

Forms  
Server

Applications / Database  
Tier

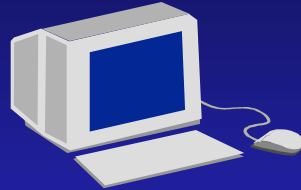


7.3.4.X ORACLE\_HOME

# 11i Architecture – Components

Release 11.5.10 DVD Release

Client  
Tier



JInitiator

Middle  
Tier

Web HTTP Servers

Apache

Discoverer  
Server \*

\*optional

9iAS ORACLE\_HOME  
(1.0.2.2.2)

Application Technology Stack

Admin  
Server

Concurrent  
Processing Server

Forms  
Server

Reports  
Server

8.0.6.3 ORACLE\_HOME

Database  
Tier



9.2.0.5  
Database

9.2.0.5 ORACLE\_HOME  
\*upgrade

# Architecture – 11.5.1/11.5.2

## ■ Client

- ◆ Oracle JInitiator 1.1.7.27

## ■ Middle Tier

- ◆ Webservers (WebDB 2.2 and WebDB 2.5)
- ◆ Jserv 1.1
- ◆ JRE (Java Runtime Environment) 1.1.8
- ◆ Web Listener 2.2
- ◆ Oracle Forms/Reports 6i (6.0.8.8.0)
- ◆ Workflow 2.5

## ■ Database Tier

- ◆ Oracle8i Enterprise Edition 8.1.6
- ◆ Other Oracle Home Software Directories
  - App 8.0.6, WebDB 8.1.6

# Architecture – 11.5.3

## ■ Client

- ◆ Oracle JInitiator 1.1.7.27

## ■ Middle Tier

- ◆ Apache Web Server 1.3.9 (Full – jsp, JServ)
- ◆ Jserv 1.1
- ◆ JRE (Java Runtime Environment) 1.1.8
- ◆ JDK (Java Development Kit) 1.1.8
- ◆ Oracle Forms/Reports 6i (6.0.8.8.0)
- ◆ Workflow 2.5

## ■ Database Tier

- ◆ Oracle8i Enterprise Edition 8.1.6
- ◆ Other Oracle Home Software Directories
  - App 8.0.6, iAS 8.1.6 = 9iAS 1.0.2.1

# Architecture – 11.5.4

## ■ Client

- ◆ Oracle JInitiator 1.1.8.7 on Client

## ■ Middle Tier

- ◆ Apache Web Server 1.3.9 (Full – jsp, JServ)
- ◆ Jserv 1.1
- ◆ JRE (Java Runtime Environment) 1.1.8
- ◆ JDK (Java Development Kit) 1.2.2 (1.3\*)
- ◆ Self Service Framework 5.2.3C
- ◆ Oracle Forms/Reports 6i (6.0.8.12.1-Patch 3)
- ◆ Workflow 2.5

## ■ Database Tier

- ◆ Oracle8i Enterprise Edition 8.1.7.1
- ◆ Other Oracle Home Software Directories

# Architecture – 11.5.5/11.5.6

## ■ Client

- ◆ Oracle JInitiator 1.1.8.13 on Client

## ■ Middle Tier

- ◆ Apache Web Server 1.3.9 (Full – jsp, JServ)
- ◆ JRE (Java Runtime Environment) 1.1.8
- ◆ JDK (Java Development Kit) 1.3
- ◆ Self Service Framework 5.2.3C
- ◆ Oracle Forms/Reports 6i (6.0.8.14.2 – P5)
- ◆ Workflow 2.5

## ■ Database Tier

- ◆ Oracle8i Enterprise Edition 8.1.7.1
- ◆ Other Oracle Home Software Directories  
– App 8.0.6.3, iAS 8.1.6 = 9iAS 1.0.2.1

# Architecture – 11.5.7

## ■ Client

- ◆ Oracle JInitiator 1.1.8.13 on Client

## ■ Middle Tier

- ◆ Apache Web Server 1.3.19 (Full – jsp, JServ)
- ◆ JRE (Java Runtime Environment) 1.1.8
- ◆ JDK (Java Development Kit) 1.3.1\_02
- ◆ Self Service Framework 5.6E
- ◆ Oracle Forms/Reports 6i (6.0.8.18 – Patch 9)
- ◆ Workflow 2.6

## ■ Database Tier

- ◆ Oracle8i/Enterprise Edition 8.1.7.3
- ◆ Other Oracle Home Software Directories – App 8.0.6.3, iAS 8.1.7 = 9iAS 1.0.2.2.2 (Release 1)
- ◆ Oracle Portal 3.0.9.8.1

# Architecture – 11.5.8

## ■ Client

- ◆ Oracle JInitiator 1.1.8.16 on Client

## ■ Middle Tier

- ◆ Apache Web Server 1.3.19 (Full – jsp, JServ)
- ◆ JRE (Java Runtime Environment) 1.1.8
- ◆ JDK (Java Development Kit) 1.3.1\_02
- ◆ Self Service Framework 5.6E
- ◆ Oracle Forms/Reports 6i (6.0.8.18 – Patch 9)
- ◆ Workflow 2.6

## ■ Database Tier

- ◆ Oracle8i/Enterprise Edition 8.1.7.4
- ◆ Other Oracle Home Software Directories – App 8.0.6.3, iAS 8.1.7 = 9iAS 1.0.2.2.2 (Release 1)
- ◆ Oracle Portal 3.0.9.8.1

# Architecture – 11.5.9

## ■ Client

- ◆ Oracle JInitiator 1.1.8.16 on Client

## ■ Middle Tier

- ◆ Apache Web Server 1.3.19 (Full – jsp, JServ)
- ◆ JRE (Java Runtime Environment) 1.1.8
- ◆ JDK (Java Development Kit) 1.3.1\_02
- ◆ Self Service Framework 5.7H
- ◆ Oracle Forms/Reports 6*i* (6.0.8.21 – Patch 12)
- ◆ Workflow 2.6.2+

## ■ Database Tier

- ◆ Oracle9*i* Enterprise Edition 9.2.0.3
- ◆ Other Oracle Home Software Directories – App 8.0.6.3, *iAS* 8.1.7 = 9*iAS* 1.0.2.2.2 (Release 1)
- ◆ Oracle Portal 3.0.9.8.4

- ◆ Discoverer 4*i* (4.1.46)

# Architecture – 11.5.10

## ■ Client

- ◆ Oracle JInitiator 1.3.1.18. on Client

## ■ Middle Tier

- ◆ Apache Web Server 1.3.19 (Full – jsp, JServ)
- ◆ JRE (Java Runtime Environment) 1.4.2\_04-b05
- ◆ JDK (Java Development Kit) 1.4.2
- ◆ Self Service Framework 5.10
- ◆ Oracle Forms/Reports 6*i* (6.0.8.24 – Patch 15)
- ◆ Workflow 2.6.3 (OWF.H)

## ■ Database Tier

- ◆ Oracle9*i* Enterprise Edition 9.2.0.5
- ◆ Other Oracle Home Software Directories – App 8.0.6.3, *i*AS 8.1.7 = 9*i*AS 1.0.2.2.2 (Release 1)
- ◆ Oracle Portal 3.0.9.8.4
- ◆ Discoverer 4*i* (4.1.48)

# Single Server Configuration

- Single Tier Definition: All Application components installed on a single server
  - ◆ Pros
    - ◆ Ease of Administration – installation and process control
    - ◆ No network traffic
    - ◆ Ease of maintenance – single tier patching
  - ◆ Cons
    - ◆ Scalable only within the single server – must provide for present and future growth needs
    - ◆ All or nothing performance tuning

# Multi-Server Configuration

- Multi-Tier Definition: All Applications components installed on two or more servers (up to 5 separate nodes)
  - ◆ Pros
    - ◆ Separate database server
    - ◆ Load balancing
    - ◆ Specific component level performance tuning
    - ◆ Ability to add additional front-end servers as user load increases
    - ◆ Shared \$APPL\_TOP with 11.5.10

# Multi-Server Configuration

## ■ Multi-Tier Definition, continued

### ◆ Cons

- ◆ Increased network traffic
- ◆ Increased administration – process control and backups
- ◆ Greater architectural complexity
- ◆ Costly consistent production, test and development environments
- ◆ More complicated load balancing – OLTP vs. Batch vs. Web
- ◆ Higher OS license costs

# Server Sizing Configurations

- Disk Space (for fresh install)
  - ◆ 50GB for the software and database
  - ◆ 25GB for the software staging areas
  - ◆ 10-25GB for patches, log/out files, archives, disk backups, temporary files, etc.
  - ◆ RAID for disk drives is necessary
- Typical ERP Server Configuration
  - ◆ Combined Single Server
    - ◆ 4CPU, 4GB RAM (Scalable)
    - ◆ 150GB disk effective (after RAID)

# Server Sizing Recommendations

## ■ Memory

- ◆ Oracle Recommendation – 8MB/user
- ◆ Real World Recommendation
  - ◆ 15MB for every active user
  - ◆ 15MB for concurrent manager processes
  - ◆ 20MB for database background processes
  - ◆ 500MB SGA (pinning packages and sequences)

# Server Sizing Recommendations

## ■ CPU

- ◆ Oracle Recommendation – 70 users/CPU
- ◆ Real World Recommendation
  - ◆ 15 Active Users/CPU (super users)
  - ◆ 50 Logged Users/CPU
  - ◆ 1 CPU Dedicated – Database and Application Processes (DB, Forms, Web, Concurrent Managers)

# 11/ Architecture – Client



- Use a web browser
  - ◆ Netscape
  - ◆ Internet Explorer
- On
  - ◆ Windows
  - ◆ Macintosh
- To display
  - ◆ HTML
  - ◆ Java

# Desktop OS and Sizing – Oracle Minimum

	<b>Windows NT 4.0</b>	<b>Windows 2K</b>	<b>Windows XP</b>
<b>CPU – MHz</b>	Pentium 200+	Pentium 200+	Pentium 200+

“you will realize significant performance improvement with faster (1.4GHz +) processors”

<b>Memory</b>	64MB	64MB	64MB
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“users who are concurrently running Oracle Applications with other desktop applications, will experience better performance with at least 96 MB of RAM”

## Macintosh?

- at least 200MHz PowerPC G3
- Apple Mac OS clients require a minimum of 128 MB

# Desktop Sizing – Real World

## Windows 95/98/2000

<b>CPU</b>	1GHz+
<b>Memory</b>	Minimum 512MB (1024MB better)
<b>Color Palette</b>	Must be able to run a minimum of 256 colors (a Java requirement), but ideally 65,536 (64K) colors
<b>Jinitiator</b>	Latest release that is certified for the Oracle Applications Release
<b>Browser</b>	Either Netscape Navigator 4.73 or higher or Internet Explorer* 5 or higher

**\* Why IE? – Preferred by Oracle – MetaLink**

# Desktop Considerations

- Java applets are particularly CPU intensive since they are run locally on the user's PC - A faster CPU has a more noticeable affect on performance, all other things being equal.
- JInitiator 1.1.8.7 and certain other Oracle tools are incompatible with Pentium 4 Processors (minimum of 1.1.8.10 required)
- Automatic download and installation of the JInitiator requires temporary changes to IE security settings
- Periodic "cleaning" of cache and other temporary files is necessary to reduce browser/memory issues while accessing the Oracle Applications (see Clean Cache in Free Tools section at <http://www.solutionbeacon.com> )

# Single UNIX Account Owner

**Single User – oraappl, oraSID, or any other single account other than oracle\***

## ■ Pros

- ◆ Ease of access
- ◆ Ease of administration
- ◆ Ease of maintenance – specifically patching

## ■ Cons

- ◆ Less auditability (NT)
- ◆ Less control – more access to entire system

**\*Why not oracle?**

# Multiple UNIX Account Owners

**Multi-User – oraSID (database, database software) and applSID (applications/web software)**

## ■ Pros

- ◆ Separation of duties / responsibilities by account
- ◆ Auditability – increased security, restricted access

# Multiple UNIX Account Owners

## ■ Cons

- ◆ Need root access for installation (NT)
- ◆ Increased complexity of Apps process management
- ◆ Application vs. database maintenance must be closely coordinated and controlled
- ◆ Directory and file permissions may need to be adjusted for dual access / management
- ◆ Increased sharing of database/application files

# Account Recommendation

- Use a single account instead of multiple accounts which typically increases the overall amount of time until an Application issue is resolved.
- For most companies, the distinction between Applications management/maintenance and control is constantly being blurred by business considerations that force support staff to respond quicker to Application issues.
- At a minimum, if multiple accounts are used, the accounts must use the same group (dba).

# Recommendations Summary

- Single Tier
- Single Account
- Single Disk Mountpoint

# Administration and Maintenance



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# Post-Installation Checklist Summary

- Disk/Tape Backup
- Cleanup Installation Files
- Verify Product Licensing – License Manager
- Apply Initial Patches (AD, FND)
- Run ADADMIN Tasks – Create Environment File
- Disk/Tape Backup
- Change Process Log File Destinations
- Run Patchsets (patchsets.sh from FTP Site)
- Apply Technology Stack Patches
- Apply Product Family Packs
- Apply Fully Installed Product Mini-packs
- Run ADADMIN Tasks
- Disk/Tape Backups
- Check for Latest Patchsets (patchsets.sh)  
– shared installs ?
- Update Install/Patch Documentation

# Product Installation Check

- Validate Modules – \$APPL\_TOP/SID.env
- Validate \$APPLFULL/\$APPLSHAR – AD
- \$AD\_TOP/sql/adutconf.sql
- FND\_PRODUCT\_INSTALLATIONS
- Relinking (applprod.txt)
- Patchsets.sh
- [http://machine.domain:Port/OA\\_HTML/US/ICXINDEX.htm](http://machine.domain:Port/OA_HTML/US/ICXINDEX.htm)
- <http://machine.domain:Port> – Portal page
- <http://machine.domain:Port/dev60cgi/f60cgi> – Java Applet

# Environment Verification

- Temporary Files
- init.ora – utl\_file\_dir
- Common Log/Out Files – APPLCSF
- Process Log Files
- Timeout Parameters
  - ◆ FORMS60\_TIMEOUT
  - ◆ ICX (Session, Limit Time, Limit Connect)
  - ◆ Zone.properties
  - ◆ Formservlet.properties

# Environment Management

- Three Specific Oracle Environments for supporting the Release 11/ Applications – Database, Applications, Web
- Manually create profiles for each environment (profile.SID.app, profile.SID.db, profile.SID.web)
- Create a list profiles program to automatically list all available environment profiles upon signon
- Source the appropriate profile for the task(s) to be performed including start, stop, backups and patching

# Environment Profile Management

## Oracle Applications Environment Manager (OAEM)

- Facilitates .profile establishment (DB, Apps, Web)
- No need for multiple UNIX .profile scripts
- Provides start/stop/status – all components
- Download from Free 11/Tools section of Solution Beacon website

# Environment Management

- Oracle Enterprise Manager (OEM)
  - ◆ Multiple Instances
  - ◆ Applications Manager
  - ◆ Management Pack – Applications
- Oracle Applications Manager (OAM)
- AutoConfig (11.5.7/8/9/10 Impact)
- Scripts

# 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

# Performance Tuning

- Patched Current
  - ◆ Latest Code and Database Objects
- Intelligent Pinning
  - ◆ \$AD\_TOP/sql/ADXCKPIN.sql
  - ◆ Sequences
- Computed Statistics
  - ◆ Estimated vs. Computed

# Pinning

- Oracle Applications requires space in the ORACLE System Global Area (SGA) for stored packages and functions. If SGA space is fragmented, there may not be enough space to load a package or function. You should pre-allocate space in the SGA shared pool for packages, functions, and sequences by "pinning" them.
- Pinning objects in the shared pool can provide a tremendous increase in database performance, if it is done correctly. Since pinned objects reside in the SQL and PL/PLSQL memory areas, they do not need to be loaded and parsed from the database, which saves considerable time.

# Statistics

- The Concurrent Program Gather Schema Statistics should be run weekly (at a minimum) using ALL, 99 and NOBACKUP values.
- Additionally, a separate statistics gathering process should be run daily on high transactions modules (e.g. AP, PO, OE, ONT, PA) during low processing periods.
- Using any value larger than 50 will force a compute vs. an estimate for statistics; any value  $< 50$  only provides estimated statistics. Computed statistics provide a significant performance improvement for Application modules

# 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+)
- Oracle's AutoConfig Utility revised (11.5.9)
- Oracle's No sharing of software (pre 11.5.9)

# Migrations – Point Releases Defined

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

# Patch Definitions

- CD Bundle (50+ CDs)
  - ◆ Entire Applications Release
- Maintenance Pack (AU – 11.5.10)
  - ◆ Entire Code Set Release for All Application Modules
  - ◆ No Technology Patches Included
  - ◆ Lots of Pre/Post Tasks, VERY Long-Running
  - ◆ Consolidated Update Patch – 11.5.10
- Family Pack (PRC\_PF.I)
  - ◆ All Product Modules Mini-packs for the Specific Family
  - ◆ Lots of Pre/Post Tasks, VERY Long-Running
- 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, AD.I Enhancements)

# AutoPatch Documentation

- 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
- 11.5.9 – *all* product family packs out of date
- 11.5.10 – 3+ months old ... *when released* in November 2004

# Patchsets.sh Comparison Utility

Patchset Comparison Utility Found on Oracle's FTP Site:

[ftp://oracle-ftp.oracle.com/apps/patchsets/PATCHSET\\_COMPARE\\_TOOL/](ftp://oracle-ftp.oracle.com/apps/patchsets/PATCHSET_COMPARE_TOOL/)

- ◆ Updated Nightly By Oracle
- ◆ Can Be used For 10.7, 11.0.x and 11.5.x
- ◆ Displays Currently Available Patchsets
- ◆ Reads the applptch.txt File or the database
- ◆ Produces Reports on Differences
- ◆ Automated FTP Script (see Free Tools section at <http://www.solutionbeacon.com>)

# 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

# Patch Application Methods

- Manual (Interactive)
- Automated (Non-interactive)
- Merge Patch Utility (Automated)
- OAM (Oracle Applications Manager)
- Commercial (RingMaster APM)

# Patch Management/Tracking

- Manual (applptch.txt)
- Manual (spreadsheet)
- Manual (patchsets.sh)
- Database (AD patch – AD.E)
- Commercial (RingMaster APM)

# 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 11.5.10 is currently available, customers at the 11.5.8 (or earlier) level should be planning their upgrade to 11.5.10. 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

# Information Sources

- OAUG Members Only Papers/Presentation Database
- Oracle's MetaLink
- Oracle AppsWorld Presentations
- Multiple List Servers
  - OAUGnet
  - OAUGnet-DBA
- OAUG Upgrade SIG
- [www.solutionbeacon.com](http://www.solutionbeacon.com)

(see OAUG's website at [www.oaug.org](http://www.oaug.org) for more information on list servers and related Oracle information sites)

# Questions & Answers

## Thank you!

***Remember:***

***KISS***



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

Kevin Dahl

[kdahl@solutionbeacon.com](mailto:kdahl@solutionbeacon.com)

[www.solutionbeacon.com](http://www.solutionbeacon.com)