

# Rapid Migrations in Release 11i

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Release 11i Workshops  
OAUG Connection Point 2005  
June 13-16, 2005  
[www.solutionbeacon.com](http://www.solutionbeacon.com)

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# Introduction

- Welcome and Introduction
- Audience Profile
  - ◆ Non-Oracle Applications (PeopleSoft, SAP, Lawson, Siebel, Pending Decision)
  - ◆ Current Platform and O/S
  - ◆ Database Version
  - ◆ Applications Release
  - ◆ Application User Interface
  - ◆ Multi-Language/Currency
  - ◆ Multi-Org Enabled
  - ◆ Installation, Re-implementation or Upgrade Plans and Timelines

# Release 11 / Concepts

# 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 components
- Release 11/ point upgrades introduce significant changes to functionality and technology
- Release 11/ has significant interdependencies of Critical Pseudo Products: ADX, FWK, OAM, OWF, TXK, UMX

# 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)
  - ◆ Oracle8*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 / Concepts

- All or Nothing: Oracle Applications Software and Database – No sharing of Software/Objects
- Multiple Component Requirements: Database Software (3), Forms, Reports, Java, JDBC, Apache, Self-Service (OA) Framework, Workflow
- Hybrid Application: OLTP/Batch/Web Coexist and Each is Separate Database Distribution

# 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 ... 10g certification imminent
  - Workflow changed ... again
  - Rapid cloning changed ... again
  - AD enhancements
  - New Java framework – OAF

# 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

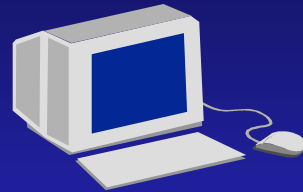
# 11/ Terminology

- 11/ is 11.5.x or 11./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  
(11./8 -> 11./9 or 11.5.9 -> 11.5.10)

# 11/Architecture – Components

Release 11.5.10 DVD Release

Client Tier



**JInitiator**

Middle Tier

Web HTTP Servers

**Apache**

**Discoverer Server \***

*\*optional*

9/AS 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 – 11.5.10

## ■ 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
- ◆ Oracle Applications Framework 5.10 (FWK.H)
- ◆ Oracle Forms/Reports 6*i* (6.0.8.24 – Patch 15)
- ◆ Workflow 2.6.3 (OWF.H)

## ■ Database Tier

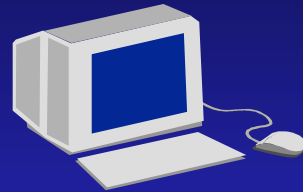
- ◆ Oracle9*i* Enterprise Edition 9.2.0.5
- ◆ Other Oracle Home Software Directories – App 8.0.6.3, *i*AS 8.1.7 = 9*i*AS 1.0.2.2.2 (Release 1)
- ◆ Oracle Portal 3.0.9.8.4

- ◆ Discoverer 4*i* (4.1.48)

# 11/Architecture – Components

Release 11.5.10 DVD Release

Client Tier



**JInitiator**

Middle Tier

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Database Tier



**9.2.0.5 Database**

9.2.0.5 ORACLE\_HOME  
**upgrade!**

# Release 11/ Guiding Principles

***KISS***



**Keep it Simple and Supportable  
Possible vs. Practical**

# Applications Interdependencies

**Consolidated Update Patches and New Family Packs**

**Release 11.5.10 Base Install**

**Application Object Library (FND)**

**Applications DBA (AD)**

**Java Framework (FWK)  
XML Publisher (XDO)  
AutoConfig (TXK)  
Workflow (OWF)  
Security (UMX)**

**RDBMS Oracle9i**

**O/S**

*Layers of  
Increasing  
Impact*

# 11 / Architecture Components

- Operating System Components
  - ◆ Java
  - ◆ UnZip
  - ◆ MKS Toolkit (NT)
  - ◆ XVFB/XVNC – X Server

# 11 / Architecture Components

- Technology/Tool Stack Components
  - ◆ Web Server (Apache)
  - ◆ Jserv
  - ◆ Java Runtime Environment (JRE)
  - ◆ Java Development Kit (JDK)
  - ◆ OJSP
  - ◆ Oracle Applications Framework
  - ◆ Thin Client Framework (TCF)
  - ◆ XML Gateway
  - ◆ Discoverer
  - ◆ Portal
  - ◆ Forms/Reports/Graphics
  - ◆ iAS
  - ◆ 9iAS
  - ◆ Client Libraries (RSF)
  - ◆ Database

# 11 / Architecture Components

- Application Components
  - ◆ CD/DVD Bundles
  - ◆ Maintenance Pack
  - ◆ Product Family Packs
  - ◆ Module Mini-Packs
  - ◆ One-Off Bug Fixes
  - ◆ DBA Utilities (Adpatch, AutoConfig, Rapid Clone, OAM, GSM, Rapid Install)

# 11 / Architecture Components

- Desktop Components
  - ◆ JInitiator/MRJ (Macs)
  - ◆ ADI
  - ◆ Workflow Builder
  - ◆ Discoverer
  - ◆ Developer 6*i*/9*i*

# Patch Definitions

- DVD Bundle – Three Months Behind
  - ◆ Entire Environment
  - ◆ Desktop Components
  - ◆ Documentation
  - ◆ Latest Maintenance Pack Included
- 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
- Family Pack (PRC\_PF J) – Currently 21
  - ◆ All Product Modules Mini-packs for the Specific Family
  - ◆ Lots of Pre/Post Tasks, VERY Long-Running
- Product Mini-Pack (GL K)
  - ◆ Entire Patch Set for Specific Application Modules
  - ◆ Functionality Changes AND Bug Fixes
- One-Off Bug Patch (High Priority)
  - ◆ Fixes Specific Issue
  - ◆ No Regression Testing

# 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

# MetaLink – 11.5.10 Statement

## ■ From Oracle MetaLink Doc. ID 212005.1 – Rapid Install Technology Stack

- ◆ The Release 11.5.10 Maintenance Pack is designed to be applied to an existing Release 11i installation.
- ◆ Although some of the maintenance pack **prerequisite** steps update some of the Oracle technology stack components, the maintenance pack itself only updates Oracle Applications files and data.
- ◆ It is advisable to keep the Oracle technology stack up-to-date, beyond the mandatory updates dictated in the prerequisite steps, because the technology stack components have different support lifecycles than that of the Applications.
- ◆ The Release 11.5.10 Rapid Install, in contrast, was built with the latest certified technology stack components at the time of its creation.
- ◆ Although the Applications code is the same, customers who start their Release 11i implementation with Release 11.5.10 will receive a more up-to-date technology stack than those customers who upgrade from a prior 11i release and only perform the prerequisite technology stack updates.

# Definitions

## ■ Upgrade

- ◆ Release 8, 9, 10, 11.0.X to 11/
- ◆ Hardware Migration
- ◆ Involved, Complicated Project

## ■ Migration

- ◆ Release 11.5.1, .2, .3, .4, .5, .6, .7, .8, .9, .10
- ◆ Update Technology and Applications Codeset/Objects
- ◆ Regression Testing

# Why Migrate?

- **Stay Current – Applications Codeset and Technology**
  - ◆ **Pros**
    - ◆ **Software/Technology Up to Date**
    - ◆ **Bug/Performance Fixes**
    - ◆ **Support From Oracle**
  - ◆ **Cons**
    - ◆ **Manual/Extensive Research – Multiple Dependencies**
    - ◆ **Significant Business Impact – Regression Testing for All Business Areas**
    - ◆ **Ongoing, Regular Effort**
- **Patch As Needed**
  - ◆ **Pros**
    - ◆ **Stabilize – No Changes, No New Functionality**
    - ◆ **Minimal Business Impact – One-off Bug Fixes Only**
  - ◆ **Cons**
    - ◆ **Oracle Support – Patch Current**
    - ◆ **Software Out of Date – Functionality, Performance Tuning**
    - ◆ **If Problems Encountered – Massive Patch Current Exercise Because of Module Interdependencies**

# Release 11/Rapid Migration Strategy With DVD Bundles

# High Level Migration Approach

- Apply the Latest Maintenance Pack to a Copy of the Existing Environment – All Previous Release Artifacts Retained During Every Subsequent Migration
- Staged/Pre-Patched APPL\_TOP w/Rapid Install –techstack Option
- Fresh Install of Fully Regression Tested “Clean” Technology and Application Codeset

# High Level Migration Checklist

- Perform a Fresh Install of 11.5.10
- Replace Fresh Install Database With Current Database
- Update Codeset – Apply “C” Drivers for any Previous Patches Applied Newer Than Current DVD Release
- Follow Maintenance Pack Instructions for Same Release as DVD Bundle
- Run ADADMIN
- Re-Apply Customizations/Extensions

# High Level Migration Checklist

- Patch Current
- Consolidated Update Patch #1
- Patchsets.sh
- HR Family Pack K
- Diagnostics
- RDA, TUMS-MP, Technology Validation, BDE, ACT Scripts

# Detailed Migration Checklist

- Perform a Fresh Install of 11.5.10
  - ◆ Install JDK
  - ◆ Install UnZip 5.41
  - ◆ Test Installation – Validates Environment
  - ◆ Shutdown All Processes

# Detailed Migration Checklist

- Replace Fresh Install Database With Current Database
  - ◆ Delete Fresh Install Database
  - ◆ Copy Current Database
  - ◆ Recreate Control File
  - ◆ Startup Database and Listener
  - ◆ Update Database Configuration/Profile Information

# Detailed Migration Checklist

- Update Codeset – Apply “C” Drivers for any Previous Patches Applied Newer Than Current DVD Release
  - ◆ Check Existing Database for Patches Released After DVD Bundle
  - ◆ Apply Latest Quarterly Critical Patch Update

# Detailed Migration Checklist

- Follow Maintenance Pack Instructions for Same Release as DVD Bundle – All Tasks Must be Review for Applicability
  - ◆ Section 1 – Pre-Install Tasks
    - ◆ Latest AD Minipack
      - ALL Pre/Post Patch Tasks
    - ◆ Upgrade Database to 9.2.0.6
    - ◆ Configure Database for New Products
  - ◆ Section 2 – Applying the Maintenance Pack
    - ◆ C Driver – NA
    - ◆ D Driver – Apply – “U”
    - ◆ G Driver – NA
  - ◆ Section 3 – Post-Install Tasks
    - ◆ Install Help
    - ◆ Gather Statistics
  - ◆ Section 4 – Product Specific Tasks
    - ◆ HR Global
    - ◆ Discoverer 3*i*/4*i*
  - ◆ Section 5 – Miscellaneous
    - ◆ Family Pack/Module Patch Levels
    - ◆ Technology Component Versions

# Questions & Answers

***Remember:***

***KISS***



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

***Thank You!***

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