COLLABORATE 12

TECHNOLOGY AND APPLICATIONS FORUM
FOR THE ORACLE COMMUNITY

What You Need to Know About E-Business Suite Release 12.2

John Stouffer

Independent Consultant

john.stouffer@gmail.com

www.justadba.com

John Stouffer

- Connection Point 12.1 Board

- OAUG Board Member 2010

- Oracle ACE

- Oracle Databases Version 5+

- Oracle Applications Release 8+

- Specialist in Assessments, Upgrades and Client Advocacy

- Audience - Techical/Functional, DB, EBS Release

Presentation Objectives

Describe key points from:

- MOS Doc. ID: 1302189.1: *Oracle E-Business Suite Releases 12.1 and 12.2 Release Content Documents*
- Oracle E-Business Suite Directions: Deployment and System Administration - *excellent presentation/webcast*
- *Oracle E-Business Suite Directions: Slashing Downtimes with Online Patching* - Kevin Hudson, Senior Director
- *Minimizing Oracle E-Business Suite Maintenance Downtimes* - Ivo Dujmovic, Director & Kevin Hudson, Senior Director
- Glimpses of E-Business Suite 12.2: WebLogic Server and Online Patching, Steven Chan
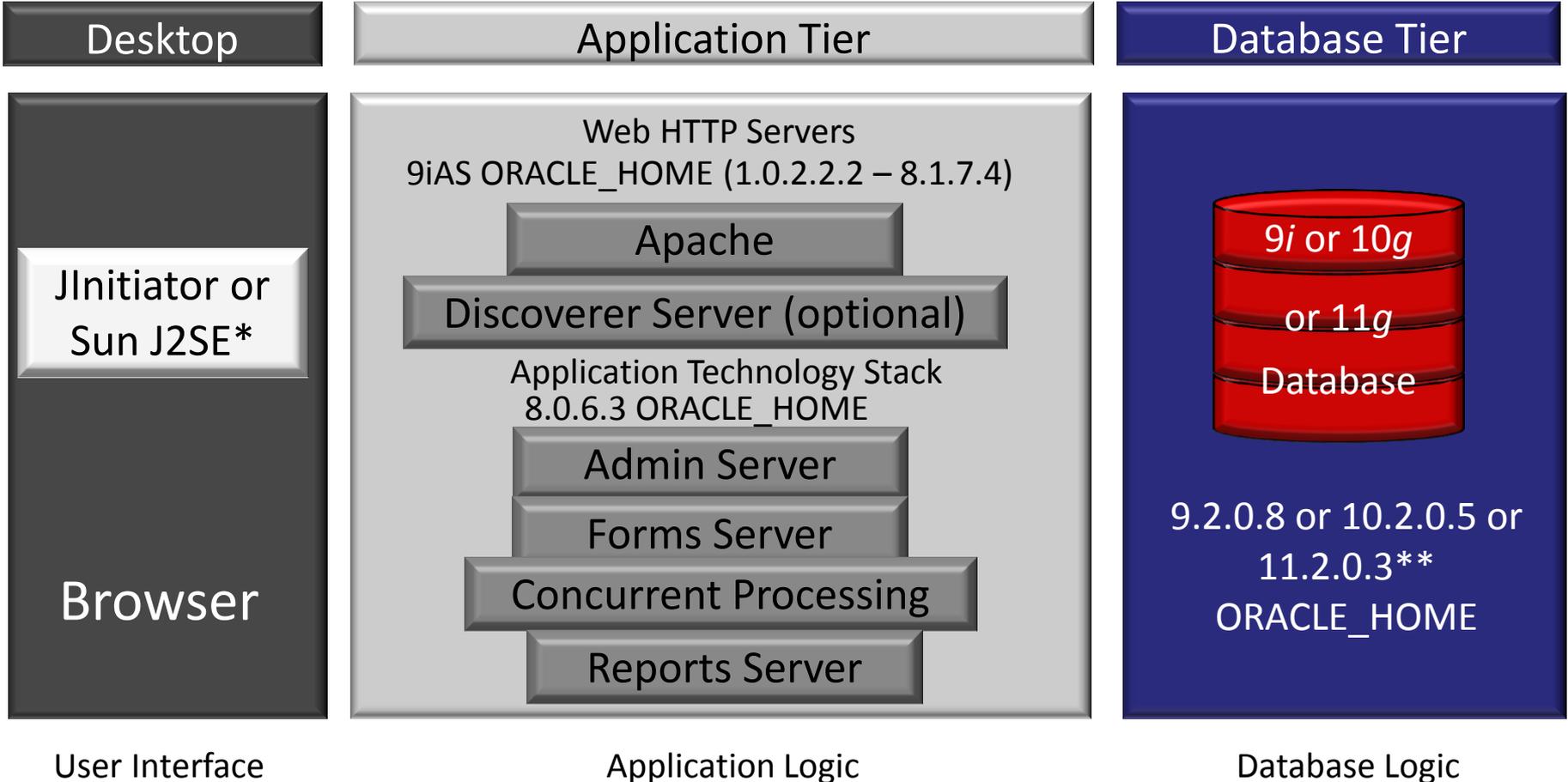
The Most Important Things You Need to Know About Release 12.2

- It hasn't been released yet

- It will include significant changes to the Application Server architecture

- It will use RDBMS Version 11gR2 or higher because it will use the 11gR2 Edition Based Redefinition Feature – no more 10g or 11gR1

- Patching and Cloning will change significantly

The Application and Database Tier Architectures Will Change

- Release 12.2 will replace Apache and Oracle Containers for Java (OC4J) 10g with Oracle HTTP Server and WebLogic Server 11g

- The Release 12.2 Database Tier will run RDBMS 11*g*R2 (or 11*g*R3 when available and certified) to support Online Patching

Current Release 11*i* Architecture Components

Desktop	Application Tier	Database Tier
	Web HTTP Servers 9iAS ORACLE_HOME (1.0.2.2.2 – 8.1.7.4)	

JInitiator or Sun J2SE*

Apache

Discoverer Server (optional)

Application Technology Stack
8.0.6.3 ORACLE_HOME

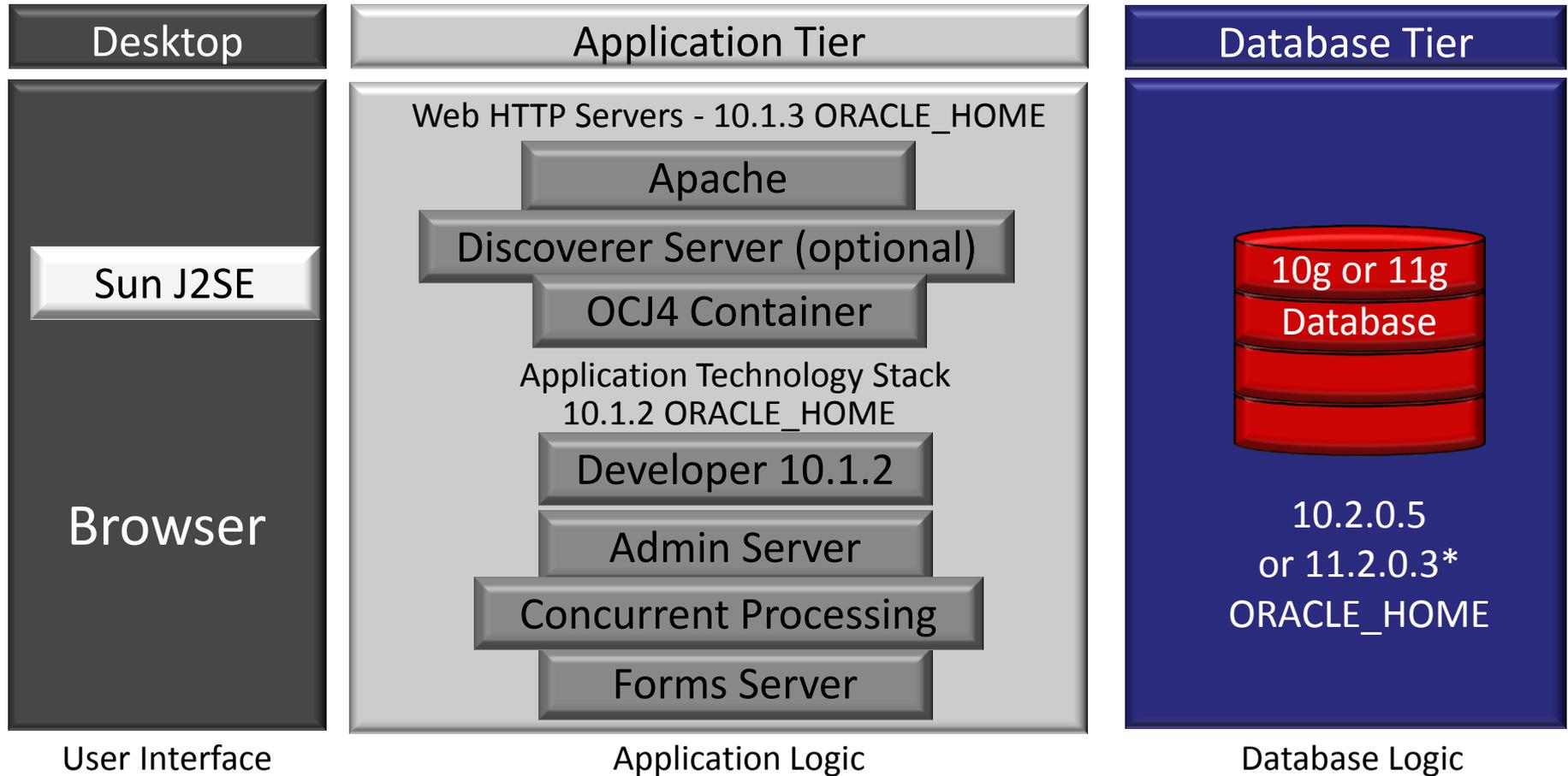Admin Server
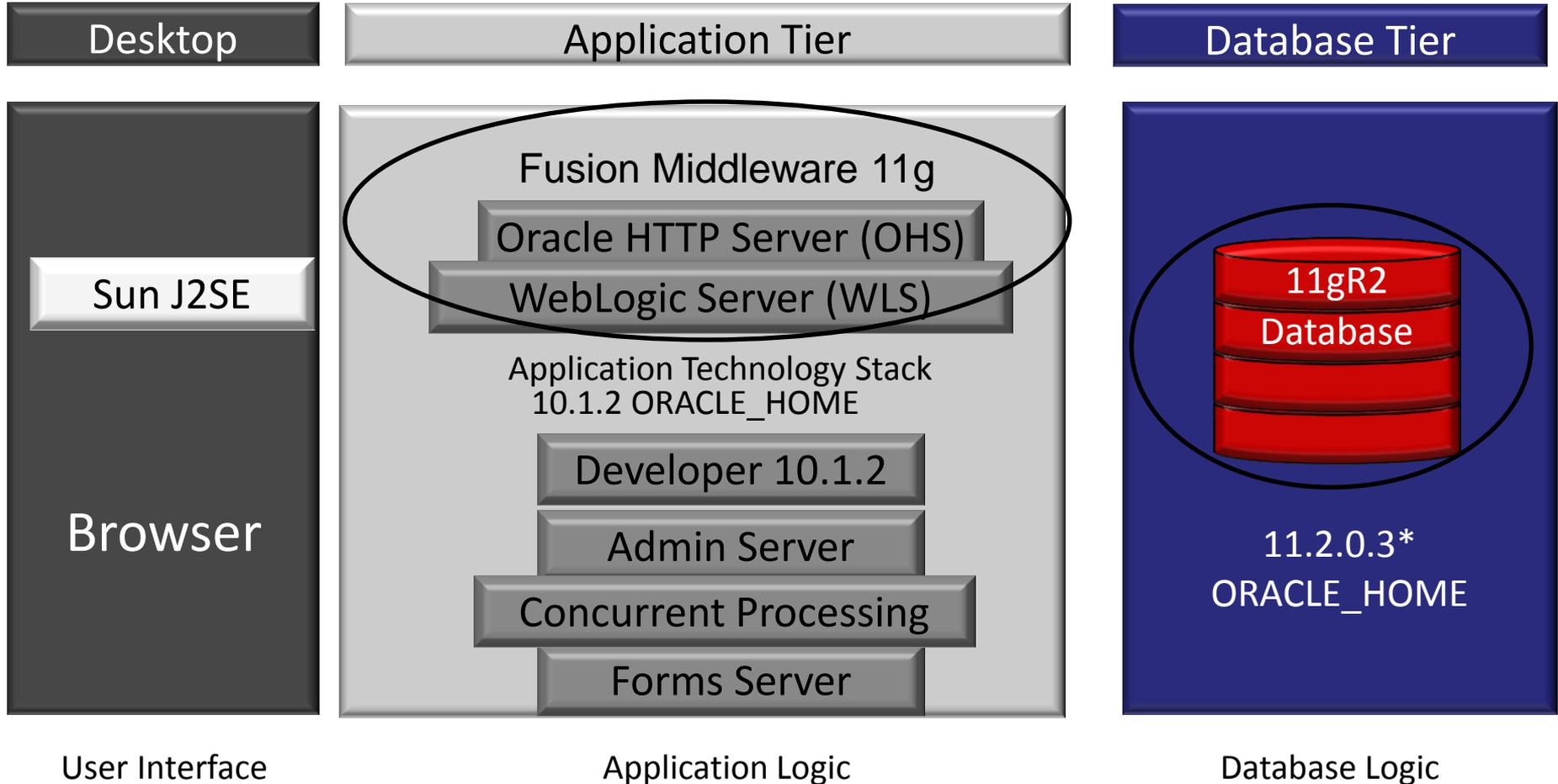
Forms Server

Concurrent Processing

Reports Server

Browser

9i or 10*g*

or 11*g*

Database

9.2.0.8 or 10.2.0.5 or
11.2.0.3**
ORACLE_HOME

User Interface   Application Logic   Database Logic

Current Release 12.1 Architecture Components

Desktop

Sun J2SE

Browser

User Interface

Application Tier

Web HTTP Servers - 10.1.3 ORACLE_HOME

Apache

Discoverer Server (optional)

OCJ4 Container

Application Technology Stack
10.1.2 ORACLE_HOME

Developer 10.1.2

Admin Server

Concurrent Processing

Forms Server

Application Logic

Database Tier

10g or 11g
Database

10.2.0.5
or 11.2.0.3*
ORACLE_HOME

Database Logic

Future Release 12.2 Architecture Components

Desktop

Application Tier

Database Tier

Fusion Middleware 11g

Oracle HTTP Server (OHS)

WebLogic Server (WLS)

Sun J2SE

Application Technology Stack
10.1.2 ORACLE_HOME

Developer 10.1.2

Admin Server

Browser

Concurrent Processing

Forms Server

11gR2
Database

11.2.0.3*
ORACLE_HOME

User Interface

Application Logic

Database Logic

Planned Changes for R12.2

- WebLogic Server (WLS)

- Native Technology Stack Install

- Database RMAN Restore

- Dual File System – Online Patching

- Cloning Improvements

- Optional 11g Home for Upgrades

Planned Changes for R12.2

- **WebLogic Server (WLS)**

- Native Technology Stack Install

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What is WebLogic?

- A tool acquired by Oracle when they purchased BEA in 1998
- E-Business Suite Release 12.2 will replace the 10.1.3 Oracle Home with the Oracle HTTP Server (OHS) and WebLogic Server (WLS). The old web tier, Apache and OC4J, will be replaced by WebLogic.
- The Application Technology Stack's 10.1.2 Oracle Home will stay the same.
- This will be a major technology change and learning challenge for Applications DBAs – even those with years of experience managing and maintaining the E-Business Suite

WebLogic Benefits

- End users experience "always on" applications and services
- Comprehensive, low-overhead application monitoring and deep diagnostics
- Integration with Oracle RAC for highest levels of application availability
- Rapid development of applications without lost time due to system restarts
- Comprehensive tooling simplifies customization development and speeds new application delivery

See **Oracle E-Business Suite Directions: Deployment and System Administration -** Max Arderius, Manager & Ivo Dujmovic, Director

Do I Need to be a Guru to Support WebLogic?

- You'll follow the My Oracle Support upgrade documentation (when it is released) to upgrade to Release 12.2, and that will install WebLogic

- You may want to take training to learn how to configure WebLogic to take advantage of more advanced features – you may need a WebLogic Administrator

- There are experts in the field – WebLogic is widely used in the industry

Planned Changes for R12.2

- WebLogic Server (WLS)

- **Native Technology Stack Install**

- Database RMAN Restore

- Dual File System – Online Patching

- Cloning Improvements

- Optional 11g Home for Upgrades

Native Technology Stack Install

- Rapid Install is integrated better with the Oracle Universal Installer and AutoConfig

- Installing the technology stack using silent-mode calls should be faster

- Oracle will use the best tool for installation and configuration tasks, which improves Rapid Install by changing what is going on "under the hood"

Planned Changes for R12.2

- WebLogic Server (WLS)

- Native Technology Stack Install

- **Database RMAN Restore**

- Dual File System – Online Patching

- Cloning Improvements

- Optional 11g Home for Upgrades

Database RMAN Restore

- Easily integrates with Grid Infrastructure for RAC and Automatic Storage Management (ASM) and different storage methods (OCFSW, NFS, etc.)

Planned Changes for R12.2

- WebLogic Server (WLS)

- Native Technology Stack Install

- Database RMAN Restore

- **Dual File System – Online Patching**

- Cloning Improvements

- Optional 11g Home for Upgrades

What Are the Planned Online Patching Features?

Online Patching Allows Users to Use EBS While Patching

- Reduces downtime to minutes instead of hours or days
- Downtime windows will be very predictable
- Patches are applied while the Production Application remains online
- Allows an application to efficiently store multiple editions of its Application Definition in the same database
- Provides an isolation mechanism (The Edition) that allows pre-upgrade and post-upgrade schemas to co-exist
- Client code chooses the particular "Edition" that it wants to connect to

See **Oracle E-Business Suite Directions: Deployment and System Administration -** Max Arderius, Manager & Ivo Dujmovic, Director

What Are the Planned Online Patching Features?

Users continue to use the Applications while your DBA:

- Creates a Patch Edition
- Patches it
- If there are changes to the Run Edition, synchronizes those with the Patch Edition
- When patching is done, sets the Patch Edition as the new Run Edition and restarts the apps servers so users point to it.

See **Business Value of Upgrading from E-Business Suite 11i to 12.1-** Nadia Bendjedou

What Are the Planned Online Patching Features?

Online Patching
What were we missing for a complete solution?

- EBS uses both the file system and the database to store the code and data that make up the application
  - File system
    - Staged APPL_TOP provided the basis for the design
    - Enhanced in 12.2 to a "Dual File System"
    - Two identical file systems are installed with 12.2
  - Database (This was the missing piece)
    - Edition Based Redefinition (EBR) a revolutionary new feature of the 11g R2 database provides this missing piece
    - Commissioned by the Applications Division

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See **Oracle E-Business Suite Directions: Slashing Downtimes with Online Patching –** Kevin Hudson**,** Senior Director**,** Max Arderius, Manager & Ivo Dujmovic, Director

What Are the Planned Online Patching Features?

Online Patching Architecture Changes

New 12.2 patching tool

- ADOP replaces ADPATCH as the 12.2 patching tool
  - ADOP (**AD O**nline **P**atching)
  - Supports both Interactive and silent modes
- ADOP orchestrates the patching cycle, steps the user through each of the patching phases
  - Prepare
  - Apply
  - Finalize
  - Cutover
  - Cleanup

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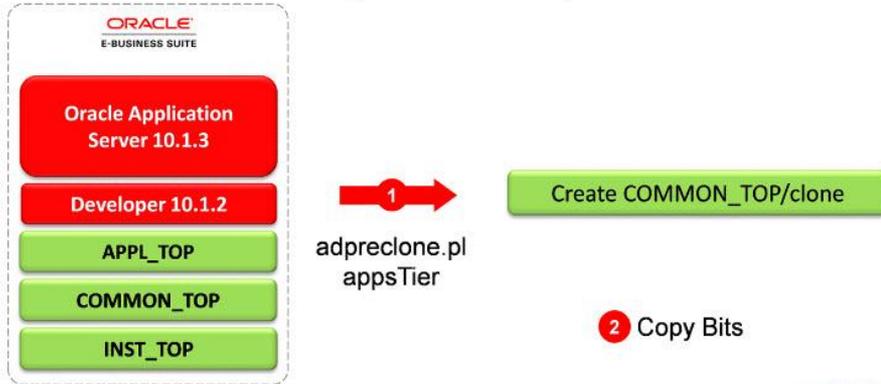# What Are the Planned Cloning Features?

- Database Tier cloning stays the same
- Cloning procedure and commands remain the same as in previous versions (adpreclone, adcfgclone, etc.), but have changed to deal with cloning the WebLogic server.
- Leverages native Fusion Middleware tools to clone WebLogic Server & OHS Homes
- Fusion Middleware included in Apps Stage
- No longer needed to copy the FMW Home Files
- If you've scripted your cloning procedures, you'll need to review and update those procedures

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What Are the Planned Cloning Features?

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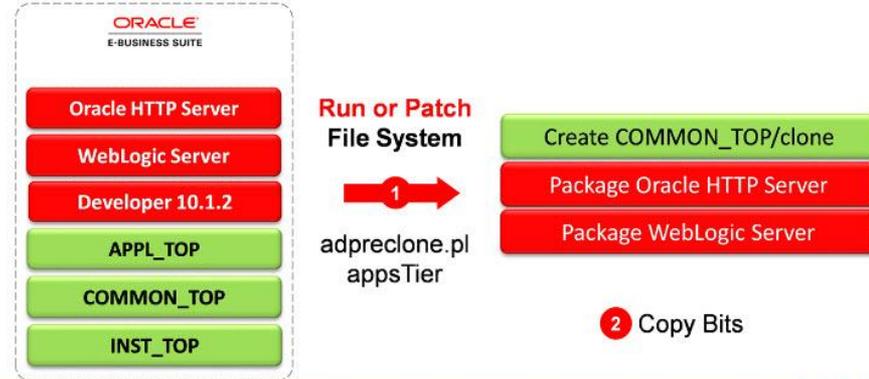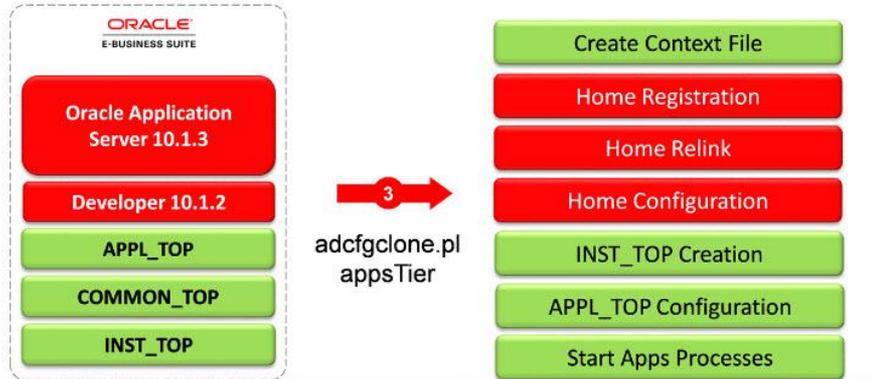# What Are the Planned Cloning Features?

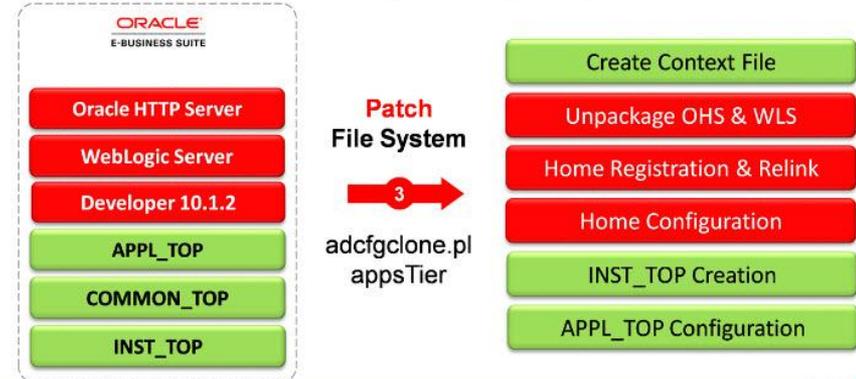See **Oracle E-Business Suite Directions: Deployment and System Administration -** Max Arderius, Manager & Ivo Dujmovic, Director

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- **Use Existing 11g Oracle Home for Upgrades**

Use Existing 11g Oracle Home for Upgrades

- Removes a significant irritant to upgrading EBS – wish it were available for R12.1!

- With 12.1: If you've upgraded your RDBMS to a point release (say 11.2.0.3) higher than what is included on the EBS media (11.1.0.7), you install the older Oracle Home and then point to your higher version.

- With 12.2: Click on the "Use Existing Oracle Home" box during the install, and it will use your higher version.

- Advantage: Saves time and is less confusing

R12.2 New Terminology

AD Online Patching (ADOP) – note that it has a new name, but we don't know yet how different it will look

Edition-Based Redefinition (EBR)

WebLogic

Should I Wait for Release 12.2?

Steven Chan says:

When it comes to ERP software, a bird in the hand is worth two in the bush. It's always best to make your plans around releases that are currently available.

Upgrade to R12.1.3

Concerns About Release 12.2

- Online patching will increase disk requirements
- No way to "not use" online patching – adpatch is replaced by AD Online Patching (ADOP), so if you don't need a big gun, you still have to use the big gun
- Will there be issues with nuances of Edition-Based Redefinition with customer customizations?
- WebLogic is a new tool that technical staff will need to learn
- R12.2 – another upgrade that must be planned and tested
- Will there be a Release 12.1.4 for customers who aren't ready to upgrade to 12.2?

Also at Collaborate

Minimizing Oracle E-Business Suite Maintenance Downtimes – Elke Phelps and Kevin Hudson, Oracle

This session starts with an architecture review of Oracle E-Business Suite fundamentals and then moves to a practical view of the different tools and approaches for downtimes. Topics include patching shortcuts, merging patches, distributing worker processes across multiple servers, running ADPatch in no-interactive mode, staged APPL_TOPs, shared file systems, deferring system-wide database tasks, avoiding resource bottlenecks etc... **This session also describes the online patching capabilities coming in Release 12.2**

Objective 1: Get an architecture review of Oracle E-Business Suite fundamentals
Objective 2: Learn about the different tools and approaches for minimizing the maintenance downtime
Objective 3: Get a glimpse on the upcoming online patching capabilities coming in Release 12.2

Links

- http://blogs.oracle.com/chan – Steven Chan, Director of Applications Technology Integration for Oracle – wonderful articles explaining the nuances of the Applications - THE ORACLE APPLICATIONS BLOG
- www.oaug.org – Oracle Applications User Group
- http://thedbalife.blogspot.com/ - James Morrow's blog
- http://oracleebizviews.blogspot.com/ - Barbara Matthews' blog
- www.integrigy.com – Independent analysis of quarterly CPU/PSU
- www.OnCallDBA.com – E-Business Suite books, Health Checks and Assessments and concurrent manager expertise
- www.RedRiverSolutions.com – Release 11*i* and Release 12 Upgrade Health Checks and Oracle E-Business Suite consulting

- www.justadba.com – that's me!

Questions and Answers

John Stouffer

john.w.stouffer@gmail.com

www.justadba.com

Thank You!