

Upgrade Oracle EBS to Release 12.2

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About Speaker

- Over 20 years of experience with Oracle database, applications, development and administration tools
- Director, OAUG Database SIG Board
- Director, OAUG SysAdmin SIG and Committee Chair, Oracle Tools and Utilities
- Director, NorCal OAUG Board
- Chair, OAUG Upgrade SIG Board
- President, OAUG E-Business Applications Technology SIG Board
- Member, OAUG GEO/SIG Committee
- Oracle EBS Applications Technology CAB Member
- NCOAUG Distinguished Service Award for 2007
- OAUG Member of the Year for 2008
- Oracle ACE since 2008
- Presented at OAUG, NCOAUG, CSOAUG, OVOAUG, SROAUG, NorCal OAUG, Apps World and Open World conferences (100+ sessions)
- Founded VLAD Group, Inc. in March, 2001

Agenda

- Oracle E-Business Suite Support Timelines
- Upgrade to EBS version 12.1 vs. version 12.2
- EBS Release 12.2 Architecture
- Things you can do today to plan for release 12.2 upgrade
- Release 12.2 upgrade paths
- Upgrade EBS release 11.5.10.2 to release 12.2 tasks
 - Planning for the upgrade
 - Preparing for the upgrade
 - Upgrading to 12.2
 - Online patching
 - Post upgrade tasks

E-Business Suite Support Timelines for version 11i

- EBS Sustaining Support started on December 1, 2013
- EBS version 11.5.10.2 will be covered by Exception to Sustaining Support (ESS) until December 31, 2015
- This will provide the following updates during the Sustaining Support:
 - New Fixes for Severity 1 production issues
 - Legislative Updates
 - Payroll regulatory updates for US, Canada, UK and Australia for each country's fiscal years ending in 2014
 - US Form 1099 2013 and 2014 year-end updates
 - Critical Patch Updates (CPU) for security-related issues

E-Business Suite Support Timelines for version 12.0

- Premier Support ended in January 2012
- Extended Support will end in January 2015

E-Business Suite Support Timelines for version 12.1

- Longer EBS 12.1 Premier Support and Extended support timelines
- Premier Support will end on December 31, 2016
- Extended Support will end on December 31, 2019

E-Business Suite Support Timelines for version 12.2

- Premier Support will end in September 2018
- Extended Support will end in September 2021

- For more info about EBS Support Updates please review Metalink Note: 1495337.1
- Additional info regarding EBS Support Policy please review Metalink Note: 149489.1 FAQ

Upgrade to EBS version 12.1 vs. version 12.2

- Oracle E-Business Suite version 12.2 is generally available as of 9/19/2013
- When should you choose release 12.1:
 - Need to move from EBS release below 11.5.10.2 and there is no direct upgrade patch to 12.2
 - Prefer more mature EBS release with stable live production customers
 - Separate Financials-focused (Functional) 12.1 upgrade from Technically-focused 12.2 upgrade
 - Would like to stay on 12.1 for a few years (extended support until Dec. 31, 2019) and evaluate available upgrade options at that time

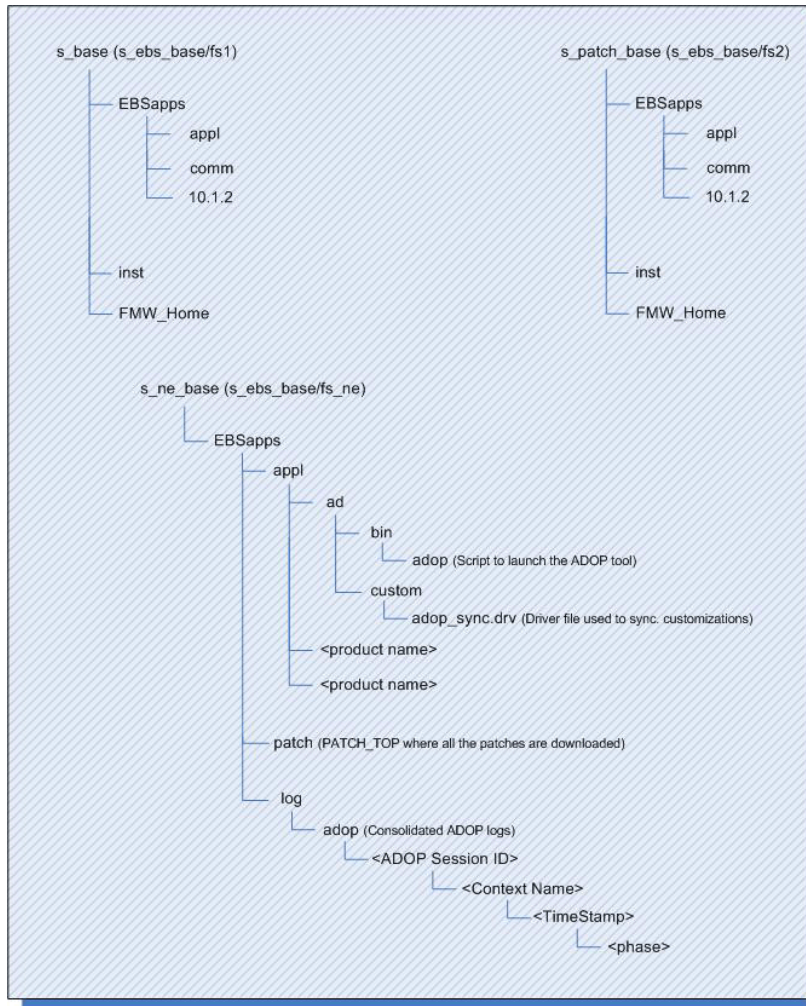
Upgrade to EBS version 12.1 vs. version 12.2

- When should you choose release 12.2:
 - Wish to invest time and resources in a single project to upgrade directly to 12.2
 - Need high availability provided by a new feature in release 12.2 called “Online Patching”
 - Need to implement new Functional features and enhancements available in release 12.2
- For more information please review White paper on Metalink named “Which Oracle E-Business Suite Release Should You Target: 12.1 or 12.2?”

EBS Release 12.2 Architecture

- On the **database tier**, the technology stack includes:
 - Oracle Database 11g Release 2 (11.2.0.3)
 - EBS utilizes **Edition-Based Redefinition (EBR)** feature to enable EBS online patching
- On the **application tier**, the technology stack includes:
 - Oracle Fusion Middleware 11g PS3 (11.1.1.6.0)
 - Oracle WebLogic Server 11g PS3
 - Oracle WebLogic JSP compiler
 - Oracle FMW 11g Java Required Files (JRF) libraries (except the use of ADF and MDS 11g)
 - Oracle WebLogic Portlet 11g PS3 Container
 - JRockit or JDK 6.0
 - Apache version 2.2
 - Oracle 10g (10.1.2) Applications Server for Oracle EBS Forms based Applications

EBS Release 12.2 File System Implementation



EBS Release 12.2 File System Implementation

- 12.2 Rapid install creates three file systems: fs1, fs2, and fs_ne
- By creating and using these file systems R12.2 allows one (*run file system fs1*) to be part of the running system, while the other (*patch file system fs2*) is either being patched currently or waiting to be patched during the next patching cycle.
- The fs1 and fs2 file systems are sometimes referred to as a **dual file system**, and swap roles at the end of each patching cycle.
- The third file system is called: Non-Edited File System(fs_ne) which is used to store data that is needed across all file systems.

Things you can do today to plan for release 12.2 upgrade

- Upgrade your EBS database to release 11g R2
- 11g R2 is required to run with EBS release 12.2 (11.2.0.3 or 11.2.0.4)
- Confirm certification for your platform
- To upgrade to 11g R2 database 11i customers should follow Metalink Note: [Interoperability Notes - Oracle E-Business Suite Release 11i with Oracle Database 11g Release 2 \(11.2.0\)](#), Doc ID: 881505.1
- To upgrade to 11g R2 database 12.0 and 12.1 customers should follow Metalink Note: [Interoperability Notes - Oracle E-Business Suite Release 12 with Oracle Database 11g Release 2 \(11.2.0\)](#), Doc ID: 1058763.1

Things you can do today to plan for release 12.2 upgrade

- Convert tablespaces to OATM
- Archive and purge EBS 11i data
 - As your EBS data grows it is important to manage database size and growth.
 - Database size contributes to the length of R12.2 upgrade process; less data to upgrade to R12.2 the faster the upgrade process.

Things you can do today to plan for release 12.2 upgrade

- Evaluate impact of R12.2 on customizations and extensions
- Catalog all customizations deployed in production
- Make sure custom code complies with new Release 12.2 coding standards
- Run both the Online Patching Readiness Report and Global Standards Compliance Checker to help ensure that your code is compliant
- Determine which customizations/extensions you can retire
 - Can the same functionality be delivered by standard R12.2 features?
- Analyze scope and cost (time and resources) of customizations/extensions rework during an early phases of the upgrade project

Things you can do today to plan for release 12.2 upgrade

- If using Oracle Single Sign-On switch to Oracle Access Manager
- Oracle E-Business Suite Release 12.2 is certified only with Oracle Access Manager 11g and higher.
- If you are running Oracle Single Sign-On, you should migrate to Oracle Access Manager before upgrading to Release 12.2.
- If using Oracle Portal migrate to Oracle WebCenter Portal before upgrading to EBS 12.2.
 - Oracle Portal is deprecated in Oracle E-Business Suite Release 12.2.

Things you can do today to plan for release 12.2 upgrade

- Evaluate existing hardware and complete capacity planning for R12.2 ahead of time, as upgrade to R12.2 may require an additional hardware
- If determined an additional/new hardware is needed, budget and procure it in advance
 - Please keep in mind 12.2 foot print requires additional disk space and additional memory (review “Installation Guide: Using Rapid Install Release 12.2 (12.2.0) Part No. E22950-14” for details)
- Evaluate OS options; now is the time to make architecture, platform, storage, backup changes

Release 12.2 upgrade paths

- There is a direct upgrade patch from EBS release 11.5.10.2 to EBS release 12.2.
 - Customers on EBS release 11.5.10.2 must apply minimum baseline patch requirements for Extended Support as per Metalink Note: 883202.1 before upgrading to EBS release 12.2
- There is no direct upgrade path to EBS release 12.2 from earlier EBS 11i releases.
 - Customers must first upgrade to 11.5.10.2 and apply baseline patch requirements for Extended Support before they can upgrade to 12.2.

Release 12.2 upgrade paths

- There is a direct upgrade path from EBS release 12.0.4 and 12.0.6 to EBS release 12.2
- Customers on earlier releases of EBS 12.0 will need to upgrade to EBS 12.0.4 or 12.0.6 level before starting EBS release 12.2 upgrade
- There is a direct upgrade path from EBS 12.1 (12.1.1, 12.1.2 and 12.1.3) to EBS release 12.2

Planning for the upgrade

- Review R12.2 functionality and features for “in use” and future planned modules
- Develop detailed upgrade project plan
 - Clearly define project timeline and milestones
- Identify tools to manage issues and environment changes
- Identify resources (inside and outside of your organization)
 - Don't wait until the last minute to engage consultants!
 - Partner only with experienced outside resources!
- Identify project sponsor (C or VP level executive) and assure they are involved throughout the project
- Catalog testing scripts
- Review training processes and procedures
 - Evaluate Oracle UPK (User Productivity Kit) as an option to train end users

Upgrade EBS release 11.5.10.2 to release 12.2 tasks

- Preparing for the upgrade
 - Follow Oracle E-Business Suite Upgrade Guide Release 11i to 12.2 Part No. E48834-04
 - Tasks in the manual outlined as “required” or “conditional” or “recommended”
 - Database and System Administration Tasks
 - Apply 11i.AD.I.7
 - Run TUMS utility and review TUMS report
 - Convert to Multiple Organizations architecture (**required**)
 - Review sizes of old and new tablespaces (**required**)
 - Run AD preparation scripts (**conditional**)
 - Migrate Existing Objects to New Tablespace Model (**recommended**)
 - Applications Technology Tasks
 - Product Specific Functional Tasks

Upgrade EBS release 11.5.10.2 to release 12.2 tasks

- Preparing for the upgrade
 - Gather schema statistics **(required)**
 - Install JRE on the database tier **(conditional)**
 - Reset init.ora parameters **(required)**
 - Run Rapid Install **(required)**
 - Synchronize values of APPLPTMP with UTL_FILE_DIR for PL/SQL based Concurrent Requests **(required)**
 - Perform a system backup
 - Migrate or Upgrade Your Database to Oracle 11g Release 2 **(required)**

Upgrade EBS release 11.5.10.2 to release 12.2 tasks

- Upgrading to 12.2
 - **Perform the Upgrade**
 - Disable AOL Audit Trail (**conditional**)
 - Shut down application tier listeners and concurrent managers (**required**)
 - Migrate database to at least Oracle11g Release 2 (**required**)
 - Update init.ora with upgrade parameters (**required**)
 - Disable custom triggers, constraints, and indexes (**conditional**)
 - Drop MRC schema (**conditional**)
 - Back up the database (**recommended**)
 - Ensure that Maintenance Mode is enabled (**required**)

Upgrade EBS release 11.5.10.2 to release 12.2 tasks

- Upgrading to 12.2
 - **Perform the Upgrade**
 - Apply AD 12.2 upgrade driver **(required)**
 - Apply all Consolidated Upgrade Patches (CUPs) **(required)**
 - Run the American English upgrade patch driver **(required)**
 - Disable Maintenance Mode **(required)**
 - Reset init.ora parameters **(required)**
 - Back up Oracle Applications **(recommended)**
 - Review Security Practices **(recommended)**

Upgrade EBS release 11.5.10.2 to release 12.2 tasks

- Upgrading to 12.2
 - **Finish the Upgrade**
 - Configure Release 12.2 E-Business Suite instance **(required)**
 - Configure applications client software for forms applet **(required)**
 - Upgrade considerations for Add-on Localization products **(conditional)**
 - Reapply customizations **(conditional)**
 - Integrate custom objects and schemas **(conditional)**
 - Re-enable custom triggers, constraints, and indexes **(conditional)**

Upgrade EBS release 11.5.10.2 to release 12.2 tasks

- Online patching

- In Release 12.2 **ALL** patching operations are carried out while the applications are in use and users are online.
- Patching is performed using the new **adop** (AD Online Patching) utility.
- A short period of downtime is still required.
- Enabling Online Patching
 - Online patching has to be enabled after the upgrade has finished in order to apply any R12.2 patches (including 12.2.2 or 12.2.3 RUP)
 - Complete 12 steps outlined in Section 4 of Upgrade Guide

Upgrade EBS release 11.5.10.2 to release 12.2 tasks

- **Post upgrade tasks**
 - Apply latest AD and TXK for Release 12.2
 - Mandatory Steps for Custom Schema Upgrade for 11i/12.0/12.1
 - Reset ORACLE schema passwords (**recommended**)
 - Verify completion of Compile Security concurrent program (**required**)
 - Verify completion of concurrent programs (**recommended**)
 - Drop Obsoleted Product Schema (**optional**)
 - Drop dangling synonyms (**optional**)
 - Install online help (**recommended**)

Upgrade EBS release 11.5.10.2 to release 12.2 tasks

- **Post upgrade tasks**
 - Apply latest product patches (**required**)
 - Installing NLS upgrade patch driver and NLS Online Help (**conditional**)
 - Update and verify custom responsibilities (**conditional**)
 - Migrate custom development to new technologies (**recommended**)
 - Migrate the CUSTOM library (**conditional**)
 - Copy and re-customize modified scripts or reports (**conditional**)
 - Copy existing custom start scripts (**conditional**)
 - Review user responsibility assignments (**recommended**)

EBS release 12.2.3 RUP

- EBS release 12.2.3 is Release Update Pack (RUP) is available as patch 17020683
- This is 3.2 Gb patch for Linux x86 customers
- It can be applied by EBS 12.2 customers
- EBS 12.2.3 is an online patch and may be applied while EBS 12.2 is running
- For more information please review Metalink Document 1586214.1

Documents:

- EBS 12.2 Product Information Center (Metalink Note: 1581299.1)
- Oracle E-Business Suite 12.2 Technical Planning Guide (Metalink Note: 1585857.1)
- E-Business Suite 12.2 Release Content Document (Metalink Note: 1302189.1)
- EBS 12.2 Documentation Library (On Oracle Technology Network)
- Installation Guide: Using Rapid Install Release 12.2 (12.2.0) Part No. E22950-14
- Oracle E-Business Suite Upgrade Guide Release 12.0 and 12.1 to 12.2 Part No. E48839-04
- Oracle E-Business Suite Upgrade Guide Release 11i to 12.2 Part No. E48834-04

Documents:

- Oracle E-Business Suite Release Notes, Release 12.2 (Metalink Note: 1320300.1)
- Oracle E-Business Suite Installation and Upgrade Notes Release 12.2 for Linux x86-64 (Metalink Note: 1330701.1)
- Oracle E-Business Suite Release 12.2: Consolidated List of Patches and Technology Bug Fixes (Metalink Note: 1594274.1)
- Oracle E-Business Suite RUP, AD, TXK RUP Information, Release 12.2 (Metalink Note: 1583092.1)

Questions



Thank you

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