Upgrade to 12.2 & Moving to the Cloud

Oracle E-Business Suite

Brian Ballamy
Senior Director, HRMS
EBS Development

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Safe Harbor Statement

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Program Agenda

1  EBS & HCM Strategy Overview
2  12.2 Upgrade Planning Considerations
3  Moving to the Cloud
Strategic Investments for Oracle E-Business Suite
Extend Strengths of E-Business Suite Combined with Broader Oracle Portfolio

**FUNCTIONAL INNOVATION**
Rich functional flows for modern business
- Extend with Cloud Apps
- Customer-Driven Enhancements

**MODERN USER EXPERIENCE AND MOBILITY**
Simple and actionable user experience
- Mobile Apps
- Information Discovery
- Latest Oracle UI Look & Feel
- Tablet Optimizations
- More HTML UIs

**OPERATIONAL EFFICIENCY**
Lower cost and effort for optimized operations
- Online Patching
- Migration to Cloud Platform
- Applications Management
- Automated Testing
- Latest Technology Uptake
HCM Functional Advancements

144 Enhancements delivered in last 3 years

Customer Value-Driven Enhancements
Oracle EBS User Experience (UX) and Mobile Strategy

**Modernize User Experience by Enhancing OAF and Product Designs**

Browser apps built with Oracle Application Framework (OAF) enhanced with tablet optimizations in EBS 12.2

**Deliver Smartphone Apps for Targeted Roles and Functions**

Out-of-the-box (OOTB) smartphone apps for iOS and Android for EBS 12.1.3 and 12.2
Oracle E-Business Suite Release Roadmap
Part of Continued Investment on EBS Release Roadmap

12.1  12.1.2  12.1.3  12.1.3+  **12.2**  12.2.3  12.2.4  12.2.5  12.2.6  12.2.7  **12.3**


New Release
Oracle E-Business Suite Support Timelines

Customer Choice to Use 12.1 or 12.2

For more info, see Oracle Lifetime Support Policy: Oracle Applications
Every year – middle of the year, HCM will provide RUP in R12.1 and R12.2

**Release 12.2 HRMS RUP10, Release 12.1 HRMS RUP10 & 12.2.6 Released & Available**

Please refer to Release 12.2 HRMS RUP10 Readme Doc ID: 2233840.1 & Release 12.1 HRMS RUP10 Readme Doc ID: 2233823.1
Program Agenda

1. EBS & HCM Strategy Overview
2. 12.2 Upgrade Planning Considerations
3. Moving to the Cloud
12.2 Upgrade Planning Considerations

1. Build the Business Case for 12.2 Upgrade
2. Understand Factors Driving Time & Resources
3. Understand Online Patching Architecture
4. Plan for Impacts on Business Users
5. Plan for Impacts on Apps DBAs
6. Plan for Impacts on Customization Developers
7. Determine the Target Code Configuration
8. Plan to Provision Upgrade Environments
9. Understand the Upgrade Process
10. Test and Optimize Your Upgrade Process
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Oracle E-Business Suite 12.2 - Highlights

Signature Feature – Online Patching for Business Continuity

- Users remain online while patches are applied
- User downtime is limited to a short cutover period
- The maintenance window in 12.2 is predictable
- Critical business operations and revenue generating activities continue during patching
Latest Oracle Look and Feel Across EBS
See the Difference Across EBS Releases
12.2 Modern User Experience

Consistency with Cloud products

Simpler layout

Tablet-friendly
Build the Business Case for 12.2 Upgrade

Summary

✓ **Online Patching** for continuous business operation
✓ **New functionality** to reduce customizations and improve automation
✓ **More modern user experience** to appeal to users
✓ **Roadmap of continuing, easy-to-adopt updates** on 12.2
✓ **Longer support life** on 12.2
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Key Factors Driving Time and Resources

- **Size of EBS footprint, uptake of new functionality**
  - Number of modules and business flows that will need validation

- **Number and complexity of customizations and integrations**
  - Compliance with new 12.2 development standards, including for vendor-supplied integrations

- **Other IT changes you combine with the EBS upgrade**
  - Moving to new HW/OS, combining multiple instances into a global single instance, etc.

- **Complexity of topology**
  - Multiple middle tier nodes, nodes inside and outside the firewall, RAC, etc.

- **Technical team skills**
  - Readiness to adapt to 12.2 technology changes: Online Patching and WebLogic Server
Different Project Team for the 12.1 to 12.2 Upgrade

11.5.10 to 12.1
Functional team is key

- Financials Specialists
- Tax Specialist
- Business Process Owners

12.1 to 12.2
Technical team is key

- DBAs
- System Administrators
- Customization Developers
12.2 Upgrade Planning Considerations

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Online Patching

Dramatically Reduce Patching Downtime

• Online Patching cycle includes 5 phases
• Application is offline only during the “Cutover” phase
• Online Patching is used to apply all EBS patches in 12.2
Online Patching uses a Dual File System

• **Run file system**
  - Used by online users
  - Stores a complete copy of all Applications and Middle Tier code
  - Logically mapped to either fs1 or fs2

• **Patch file system**
  - Used by patching tools
  - Stores a complete copy of all Applications and Middle Tier code
  - Logically mapped to either fs1 or fs2

• **Non-Editioned file system**
  - Used for data files
    - e.g.: data import/export files, log files, report output files
  - Only stores data files

**fs1** and **fs2** switch **Run** and **Patch** designations during the Cutover phase of an Online Patching cycle.
Online Patching is enabled by 11gR2 Database Editioning

Multiple Copies of Database Code Objects Can Coexist

• Client code connects to an “edition” of database code
  – Run Edition
    • Used by online users
    • Never changed by a patch
  – Patch Edition
    • Used by patching tools
    • Changes do not affect the running application

• Patch Edition becomes the Run Edition at Cutover
12.2 Online Patching Architecture

Run File System
- Oracle HTTP Server (OHS)
- WebLogic Server (WLS)
- Developer 10.1.2

Editions-Enabled Database
- APPL_TOP
- COMMON_TOP
- INST_TOP

Patch File System
- Oracle HTTP Server (OHS)
- WebLogic Server (WLS)
- Developer 10.1.2

Non-Editioned File System
- APPL_TOP_NE
- PATCH_TOP
- LOGS

Synchronization is managed by patching tools

FS1

FS_NE

FS2

Run File System
- Oracle HTTP Server (OHS)
- WebLogic Server (WLS)
- Developer 10.1.2
  - APPL_TOP
  - COMMON_TOP
  - INST_TOP

Non-Editioned File System
- APPL_TOP_NE
- PATCH_TOP
- LOGS
- FS_NE

Editions-Enabled Database
- Synchronization is managed by patching tools

Patch File System
- Oracle HTTP Server (OHS)
- WebLogic Server (WLS)
- Developer 10.1.2
  - APPL_TOP
  - COMMON_TOP
  - INST_TOP

FS1
FS2
Apply: Apply Patches to Patch File System and Patch Edition in DB
**Cutover:** Restart App Tier Services on Switched Patch and Run

- **Run File System**
  - Oracle HTTP Server (OHS)
  - WebLogic Server (WLS)
  - Developer 10.1.2
  - APPL_TOP
  - COMMON_TOP
  - INST_TOP

- **Editions-Enabled Database**

- **Patch File System**
  - Oracle HTTP Server (OHS)
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  - APPL_TOP_NE
  - PATCH_TOP
  - LOGS

- **FS1**

- **FS2**

- **FS_NE**

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Database Editioning and Transactional Data

Online Patching Copies the Code, but not the Transactional Data

- **A single copy of transactional data is stored in your database**
  - Data storage objects such as tables and indexes are “Non-editioned”

- **Editioning Views project the correct logical view of physical tables** to Run and Patch Editions
  - Letting patches update the data model without interfering with the running app

- **Crossedition Triggers propagate data updates** from Run to Patch Edition
  - Replacing traditional data upgrade scripts
Understand Online Patching Architecture

Summary

✓ All EBS patches for Release 12.2 and beyond are Online Patches
✓ Online Patching of code is enabled by the new Dual File System and the Database Editioning feature introduced with 11gR2
✓ Online Patching of transactional tables is enabled by Database Editioning Views and Crossedition Triggers

See Oracle E-Business Suite 12.2: Online Patching FAQ (Doc 1583902.1)
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Plan for Impacts on Business Users

Overview

• New, more modern user experience
• Any new functionality and business process changes you choose to deploy
• Expectations around Online Patching downtime
Online Patching Downtime

Set Appropriate Expectations for Online Patching Downtime

• **Online Patching does not mean zero downtime**
  – There is still a brief Cutover phase during which users are offline

• **DBAs can choose to combine Online Patching Cutover with other maintenance activities that prolong the downtime, e.g.:**
  – Applying custom code
  – Updating system passwords
  – Patching the Database Tier

• **Online Patching cannot be used for Database and OS patching**
  – Users will still experience a downtime when Database and OS patches are applied
Plan for Impacts on Business Users

Summary

✓ Introduce users to new, more modern user experience
✓ Train users on any new functionality and business process changes you decide to implement
✓ Set appropriate expectations around Online Patching downtime
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Plan for Impacts on Apps DBAs

Overview

• New 12.2 patching utility to orchestrate Online Patching cycle
• New 12.2 Technology Stack
• Changes to Applications tier configuration and management
• New Applications tier sizing considerations
• Changes to EBS cloning process
Learn ADOP – New Utility to Orchestrate Online Patching

All the Functionality of ADPATCH, and More

• Steps you through the 5 patching phases
• Controls patching of file system and database
• Lets you apply multiple patches in the same patching cycle
• Allows automated patch execution via input files
• Runs on all nodes in a multi-node configuration

$ adop phase=prepare
$ adop phase=apply patches=1234,5678
$ adop phase=apply patches=4321,8765
  workers=4
$ adop phase=finalize
$ adop phase=cutover
$ adop phase=cleanup

$ adop input_file=April2016.txt

EBS Release 12.0/12.1 Technology Stack

Client

Application

10g

Web Listener

OC4J

JSP

BC4J

UIX

BI Publisher

Forms

Database

10gR2 / 11g

Global Single Data Model

RAC & ASM
EBS Release 12.2 Technology Stack

Client

Application

Database

- Oracle Fusion Middleware 11g
- WebLogic Server
- WebLogic JSP
- BC4J
- UIX
- BI Publisher
- Forms

- Database 11gR2
- Global Single Data Model
- RAC & ASM
- Edition-Based Redefinition
WebLogic Server 11g
Part of the EBS 12.2 Application Tier

• Familiar to some Apps DBAs/Sysadmins
• Will use both WebLogic facilities and EBS Autoconfig for 12.2 configuration
• Don’t assume prior knowledge is sufficient

See Managing Configuration of Oracle HTTP Server and Web Application Services in Oracle E-Business Suite Release 12.2 (Doc 1905593.1)
EBS Release 12.2 Application Tier
Re-evaluate Application Tier Sizing

• WebLogic Server and Dual File System increase sizing requirements
• Review 12.2 sizing doc
    • Database and Application Tier Sizing Guidelines
• Validate sizing through testing with representative data & workloads
• Consult your hardware vendor or SI
Additional DBA Considerations

Practice EBS 12.2 Cloning

• Database Tier cloning process is much the same as in 12.1
• App Tier process uses single-step cloning of Run & Patch file systems (since AD/TXK Delta 7)
• Before cloning, let active Online Patching cycle run through the Cleanup phase

See Cloning Oracle E-Business Release 12.2 with Rapid Clone (Doc 1383621.1)
Training for 12.2 Apps DBAs

• R12.2 Install/Patch/Maintain Oracle E-Business Suite
  – 5-day Oracle University course with choice of:
    • In-Classroom
    • Live Virtual Class
    • EBS Learning Subscription (self-service video training)
  – Information and hands-on labs that an EBS DBA needs to get started with and maintain an R12.2 Oracle E-Business Suite instance using WebLogic Server and Fusion Middleware.

See education.oracle.com
# Application Management Suite for E-Business Suite 12.2

## Operational Efficiency for Better System Management

### Effectively manage EBS 12.2
- Monitor all EBS Tech stack services and components
- Automated Cloning
- Instance administration to add or remove managed services
- **Compare run and patch editions, technical configurations, and patches between instances**
- Performance Management & Diagnosis: RUEI & JVM Diagnostics
- Check industry, regulatory or company compliance standards

### Simplify online patching
- Patch recommendations for EBS applications and technology stack components
- **Simplified process for online patching and patch promotion policies**
- Ensuring integrity of run and patch editions
- Smooth transition to run edition after cutover process

### Streamline customizations
- Discover & Report inventory of customizations
- Validate readiness of customizations for online patching standards
- Ability to package, deploy & promote custom online patches across multiple EBS instances
Plan for Impacts on Apps DBAs

Summary

✓ Learn ADOP, a new 12.2 utility to orchestrate Online Patching
✓ Learn to use WebLogic Server 11g with Autoconfig for 12.2 configuration
✓ Re-evaluate Application tier sizing for WebLogic Server & Dual File System
✓ Practice EBS 12.2 cloning, including single-step cloning of Run & Patch file systems
✓ Consider using Application Management Suite for E-Business Suite for added flexibility and automation
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Plan for Impacts on Customization Developers

Overview

• Evaluating and remediating existing customizations
• New 12.2 development standards
• Reports to help you find and fix development standards violations
• Integration of custom and third-party products
Evaluating Customizations
Discover, Inventory, and Analyze Your Existing Customizations

• Many Systems Integrators have services and tools to inventory CEMLIs
  – Configurations, Extensions, Modifications, Localizations, and Integrations

• Oracle Advanced Customer Services has a CEMLI Catalog Service
  – Inventories CEMLIs by name, type and location

• Oracle Consulting has an EBS CEMLI Analysis Tool and Services
  – Free CEMLI benchmarking and analysis for any EBS customer evaluating an upgrade

• Oracle offers a product that reports on your EBS customizations
  – Application Management Suite for E-Business Suite 12.2
Remediating Customizations
Plan for 12.2 Impacts on Customizations You Decide to Upgrade

• **12.2 data model changes**
  – See EBS Data Model Comparison Report (Doc 1290886.1)

• **New 12.2 UI standards for OA Framework-based pages**
  – See Oracle E-Business Suite Release 12.2 Upgrade Considerations for OA Framework-based Applications (Doc 1927975.1)

• **New 12.2 development standards for Online Patching compatibility**
  – See Developing and Deploying Customizations in Oracle E-Business Suite Release 12.2 (Doc 1577661.1)
New 12.2 Development Standards for Custom Code
Decide Which Standards Compliance Level to Target

**Minimal**
- Required, minimal set of standards must be met for custom code to run correctly on 12.2

**Full**
- Optional, additional standards must be met for custom code to be Online Patchable

- Decision is based on importance of minimizing downtime
- In either case, EBS Patches are always applied online
Custom Code is **Fully Compliant** with 12.2 Standards

Apply Custom Code While Users are Online, Incur Brief Cutover Downtime

<table>
<thead>
<tr>
<th>Prepare</th>
<th>Apply</th>
<th>Finalize</th>
<th>Cutover</th>
<th>Cleanup</th>
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<tbody>
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<td>• Copy the production app code&lt;br&gt;• Create a new Patch Edition in the DB</td>
<td>• Apply EBS patches to the Patch Edition&lt;br&gt;<strong>Apply custom code patches to the Patch Edition</strong></td>
<td>• Compile invalid objects&lt;br&gt;• Wait for a good downtime window</td>
<td>• Restart application on Patch Edition</td>
<td>• Remove obsolete objects</td>
</tr>
</tbody>
</table>

**Users Online**

• Apply to the Patch Edition while users are online
• Patch both EBS and custom code during same Apply phase
• Restart application on Patch Edition after brief Cutover period

**Users Offline**
Custom Code is **Minimally Compliant** with 12.2 Standards

Apply Custom Code During Extended Cutover, Prolonging the Downtime

<table>
<thead>
<tr>
<th>Prepare</th>
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<th>Finalize</th>
<th>Cutover</th>
<th>Extended Cutover</th>
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<td></td>
<td></td>
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</tr>
</tbody>
</table>

- **Apply custom code to the new Run Edition during Extended Cutover**
- Remove obsolete objects

- Prevent automatic restart at end of Cutover
- Apply custom code directly to new Run Edition
- Restart application after Extended Cutover period

Users Online

Users Offline

Users Online
### Oracle-Provided Reports to Check for Standards Compliance

**Identify 12.2 Standards Violations and Recommended Fixes**

<table>
<thead>
<tr>
<th>Report Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Summary Readiness Report</strong></td>
<td>Custom DB schemas you must register with EBS before Online Patching Enablement</td>
</tr>
<tr>
<td><strong>Manual Fix Readiness Report</strong></td>
<td>Custom DB objects you must manually fix before Online Patching Enablement</td>
</tr>
<tr>
<td><strong>Database Standards Checker</strong></td>
<td>DB objects and code that violate 12.2 development standards*</td>
</tr>
<tr>
<td><strong>File System Standards Checker</strong></td>
<td>File system source files that violate 12.2 development standards</td>
</tr>
</tbody>
</table>

* Distinguishes between Minimal versus Full standards compliance

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See Using the Online Patching Readiness Report in Oracle E-Business Suite Release 12.2 (Doc 1531121.1)
Preparing Custom Code: Prior to 12.2 Upgrade Project

Run Reports and Apply Fixes Today to Avoid Rework at Upgrade Time

1. Get the reports patch for your current release (11.5.10, 12.0, or 12.1)
2. Run reports on current release
3. Apply recommended fixes in test environments
4. Deploy remediated code in production (optional)

Iterate until compliant

Recommended fixes are backward compatible

See Using the Online Patching Readiness Report in Oracle E-Business Suite Release 12.2 (Doc 1531121.1)
Preparing Custom Code: During 12.2 Upgrade Project

Run Reports During Practice Upgrade Cycles to Confirm Standards Compliance

- Upgrade to 12.2.0
- Run reports on 12.2.0
- Apply recommended fixes to custom DB code and schemas
- Run Online Patching Enablement
- Re-run reports to confirm standards compliance

• Iterate until compliant for DB
• Apply MT fixes at later stage

Automatically fixes many violations

See Using the Online Patching Readiness Report in Oracle E-Business Suite Release 12.2 (Doc 1531121.1)
Plan for Impacts on Customization Developers

Summary

✓ Inventory customizations, decide which ones to upgrade to 12.2
✓ Review new 12.2 development standards for custom code and many integrations
✓ Decide on Minimal vs. Full standards compliance based on importance of minimizing patching downtime
✓ Leverage Oracle-supplied reports today to prepare custom code for 12.2
✓ Evaluate custom and third-party integrations to see if 12.2 changes are needed
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Plan for Required OS Platform

If Currently on 32-bit Windows or Linux, Must Upgrade to 64-bit

• If you didn’t change to 64-bit operating system during your 12.1 project, you **must** do so during your 12.2 project
  – 11.5.10: Windows and Linux are certified for 32-bit only
  – 12.1: Windows and Linux are certified for both 32- and 64-bit
  – **12.2: Windows and Linux are certified for 64-bit only**

See Oracle E-Business Suite Upgrades and Platform Migration (Doc 1377213.1)
Determine the Target Database Code Level
Get to Latest Certified Database Patch Set Prior to EBS Upgrade

• Plan to go live on latest certified database patch set
  – As of OOW 2016, latest patch set is 11.2.0.4 or 12.1.0.2

• Identify missing database patches needed for EBS 12.2
  – Run EBS Technology Codelevel Checker (ETCC): checkDBpatch script (Patch 17537119)

• Apply missing database patches
  – See Oracle E-Business Suite Release 12.2: Consolidated List of Patches and Technology Bug Fixes (Doc 1594274.1) for guidance

See Database Preparation Guidelines for Release 12.2 Upgrade (Doc 1349240.1)
Determine the Target Middle Tier Code Level

Get to Latest Middle Tier Patch Level

• As of **OOV 2016**, 12.2 upgrade installs **Fusion Middleware 11.1.1.9**

• Identify missing middle tier patches needed for 12.2
  – Run EBS Technology Codelevel Checker (ETCC): checkMTpatch script (**Patch 17537119**)

• Apply missing middle tier patches

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**Application Tier**

<table>
<thead>
<tr>
<th>FS1</th>
<th></th>
<th>FS2</th>
<th></th>
</tr>
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<tbody>
<tr>
<td>INST_TOP</td>
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<td></td>
</tr>
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<td></td>
</tr>
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</table>

**Forms 10.1.2**: ✓

**OHS**: ✓

**Oracle Common**: ✓

**WebLogic**: ✓
Determine the Target Apps Code Level

Get to Latest Patching Technology and EBS Code Level

• Apply latest patching technology with AD and TXK RUPs
  – `R12.AD.C.delta.9 / R12.TXK.C.delta.9` has been available since April 2017
  – Expect frequent updates of 12.2 AD and TXK
    • See Applying the Latest AD and TXK Release Update Packs to Oracle E-Business Suite Release 12.2 (Doc 1617461.1)

• Apply latest EBS / HCM RUP
  – `EBS R12.2.5` has been available since Oct 2015
  – `EBS R12.2.6` has been available since Sept 2016
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Plan for Adequate Compute Capacity

Consider CPU and Memory Needed for Online Patching

• Critical business operations continue during Online Patching
• System resources consumed by a patch can be throttled
• If your 12.1 production operation fully utilizes CPU and memory, you may need additional hardware resources
• Plan to do a hardware capacity analysis
  – Discuss with your systems integrator (SI) or hardware vendor

Plan for Required Storage
Consider Disk Space Needed for Online Patching

• **Database**
  – SYSTEM tablespace needs double its current space allocation
    • 25GB increases to 50GB
  – SEED tablespace needs double its current space allocation
    • 5GB increases to 10GB

• **File System**
  – Two file systems need double the space of one file system 😊

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9. **Understand the Upgrade Process**
10. Test and Optimize Your Upgrade Process
Understand the Upgrade Process

Overview

• You perform the 12.2 upgrade during downtime
• The upgrade includes additional steps to enable Online Patching
• You get Online Patching as a result of doing the 12.2 upgrade
Understand the Upgrade Process

Key Takeaways

✓ Critically important to follow latest, documented upgrade instructions:
  – Oracle E-Business Suite Upgrade Guide, Release 12.0 and 12.1 to 12.2

✓ Seek Oracle Support’s help when obstacles are met (don’t improvise)
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4. Plan for Impacts on Business Users
5. Plan for Impacts on Apps DBAs
6. Plan for Impacts on Customization Developers
7. Determine the Target Code Configuration
8. Plan to Provision Upgrade Environments
9. Understand the Upgrade Process
10. Test and Optimize Your Upgrade Process
Test and Optimize Your Upgrade Process

Overview

• As for any upgrade to a major new release level ...
  – Plan to do full functional testing
  – Plan to do load and volume testing
  – Include customizations and integrations in your test plans

• Plan to test the Online Patching cycle on the upgraded system

• Plan to minimize upgrade downtime
Oracle Applications Testing Suite (OATS)

Operational Efficiency through Test Automation

**Oracle Functional Testing Suite for Oracle Applications**
- Functional and Regression Testing
- Web and Oracle Application Testing Accelerators
- Oracle Flow Builder

**Oracle Load Testing Suite for Oracle Applications**
- Load and Performance Style Testing
- Web and Oracle Application Testing Accelerators
- Smart Integration with EM Diagnostics

**Oracle Test Manager**
- Test Planning, Requirements and Test Cases
- Defects Tracking
- Reporting
Plan to Test Online Patching Cycle on Upgraded System

Test Online Patch Cycle During Practice Upgrades

• **Test Online Patches on a system that matches your production topology**

• **Especially critical for complex topologies, such as those involving:**
  – Multiple nodes
  – Nodes inside and outside the firewall (DMZ)
  – RAC

Plan to Test Online Patching Cycle on Upgraded System

Where and Where Not to Test Online Patches

• **Must apply and validate every Online Patch on a test system**
  – Consider performing tests with users online during patch application

• **Patch Edition is not a test environment**
  – Designed solely for reducing patching downtime
  – Usable only when an Online Patching cycle is in progress
  – Cannot be accessed by end users

Plan to Minimize Upgrade Downtime

Required Downtime Will Depend on Factors Unique to Your Circumstances

• **Mix of modules & functionality and associated data volumes**
  – Scripts and jobs that change the data model can run long, especially if data volumes are high

• **Hardware resources**
  – How much CPU, memory, and IO are available?

• **Other IT changes you make during the EBS upgrade downtime**
  – Are you upgrading the database, switching platforms, moving data centers?

• **Number and complexity of customizations and integrations**
  – Additional time is needed to deploy and test customizations and integrations

• **Amount of upgrade practice and optimization**
  – Are you optimizing performance with each practice upgrade?
Key Takeaways for 12.2 Upgrade Planning

✓ All EBS patches for 12.2 and beyond are Online Patches
✓ Business users will experience a new, more modern UI and any new functionality you choose to implement
✓ DBAs will use ADOP to orchestrate Online Patching, and both WebLogic Server and EBS AutoConfig to make configuration changes
✓ Developers can apply new 12.2 standards to custom code TODAY, leveraging Oracle-provided compliance reports
✓ IT team can provision additional environments on Oracle Cloud to support the 12.2 project
Program Agenda

1. EBS & HCM Strategy Overview
2. 12.2 Upgrade Planning Considerations
3. Moving to the Cloud
1. Oracle Cloud Strategy – Overview
2. Why Oracle E-Business Suite on the Oracle Cloud?
3. Solution Overview
4. Your Journey to the Cloud
5. Resources and Getting Started
Oracle Cloud: Simple View

Oracle Cloud

Oracle Cloud Applications

SaaS
- ERP/EPM
- Supply Chain
- Marketing
- Sales
- Service
- HCM

Oracle Cloud Platform

IaaS
- Compute
- Storage
- Network
- Container
- Ravello
- Cloud@Customer

PaaS
- Data Management
- Application Development
- Enterprise Integration
- Data Integration
- Business Analytics
- Content & Experience
- Identity & Security
- IT Management
1. Oracle Cloud Strategy – Overview
2. Why Oracle E-Business Suite on the Oracle Cloud?
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5. Resources and Getting Started
Deploy your EBS Workloads Where you Need Them

- **On-premises**
  - Traditional Infrastructure
  - **Customer Data Center**
  - **Purchased**
  - **Customer Managed**

- **Cloud@Customer**
  - **Cloud Machines**
  - **Subscription**
  - **Oracle Managed**

- **Public Cloud**
  - **IaaS, PaaS**
  - **Oracle Cloud**
  - **Subscription**
  - **Oracle Managed**
Oracle E-Business Suite on the Oracle Cloud Platform

Benefits - Whitepaper: E-Business Suite on Oracle Cloud

**Support Growth**
- Global expansion
- New market entry
- Mergers & Acquisitions

**Enable Business Agility**
- Easier evaluation of new features
- Faster projects to expand EBS footprint
- Elastic scaling to support changes in workload

**Lower Costs and Risk**
- Infrastructure Modernization & Datacenter Retirement
- Quick and easy procurement for new capacity
- Fewer operational issues
1. Oracle Cloud Strategy – Overview
2. Why Oracle E-Business Suite on the Oracle Cloud?
3. Solution Overview
4. Your Journey to the Cloud
5. Resources and Getting Started
Oracle E-Business Suite on Oracle Cloud

Run EBS on IaaS and PaaS Platform
Oracle E-Business Suite on Oracle Cloud

Benefits

• Elastic Scaling
  – Usage-based pricing
  – Ability to scale to support changes in workload, e.g. peak seasons

• High Availability
  – Fault tolerance in event of failures

• Reduced Cost and Risk
  – Automation reduces chance of error
  – IT resources can focus on higher-value business projects

• Faster Delivery of EBS Projects
  – Upgrade more easily
  – Deploy for new countries, new users, new modules
  – Rapid dev, test and deployment of projects in the Cloud
1. Oracle Cloud Strategy – Overview
2. Why Oracle E-Business Suite on the Oracle Cloud?
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4. Your Journey to the Cloud
5. Resources and Getting Started
Oracle E-Business Suite on Oracle Cloud Platform

Key Use Cases

• Non-Production Environments
  • Dev, Test, Training, UAT etc....

• Backup and Restore

• Disaster Recovery (DR)

• Reporting Database

• Production Environment

• Historical Reporting after Migration
Deployment Choices

Single node on IaaS

- “All-in-One”
- Demo / Sandbox / Training
- Explore new functionality

Multiple nodes on IaaS

- “Scale-out” apps tier
- Dev, Test, Prod
- Full scale deployment

IaaS + Database Cloud Service

- “Scale-out” apps tier and database tier
- Leveraging DBCS for manageability & RAC
- Same components as multiple tiers, but with your data in Oracle Database Cloud Service (DBCS)
Oracle E-Business Suite on the Oracle Cloud Platform

Re-platform EBS to Oracle Cloud Platform

• **Start** with Dev/Test/Training/QA
• Production on Oracle Cloud when ready
• Getting Started with EBS on Oracle Cloud (Doc ID [2066260.1](https://example.com))
• **Whitepaper:** [Oracle E-Business Suite on Oracle Cloud](https://example.com)
Oracle E-Business Suite on Oracle Cloud

Offerings Available Today

• Rapid Provisioning from Marketplace
  • EBS 12.1.3 & 12.2.3+
  • Single-Node Provisioning
  • Automated Multi-Node Provisioning
  • Database in Compute, Database Cloud Service, or Exadata Cloud Service

• Cloning or “Lift and Shift” from On-Premises to Cloud
  • EBS 12.1.3 & 12.2.3+
  • Database in Compute, Database Cloud Service, or Exadata Cloud Service

• Management of EBS in the Cloud
  • Enhanced management through Cloud Admin Tool
  • Hybrid cloud management through Application Management Suite (Enterprise Manager Plug-In)
Rapid Provisioning from Marketplace
Provision EBS Images Directly from Oracle Cloud Marketplace

- EBS Demo Install Image
  - 12.2.5 and 12.2.6
- EBS Fresh Install Image
  - 12.2.5 and 12.2.6
- EBS Development Tools Image
- EBS Provisioning Tools Image
- EBS OS-Only Image
  - Supports “lift and shift” and enhanced provisioning
- EBS Information Discovery v6
  - For 12.1.3 and 12.2.5

Oracle Cloud Marketplace

Compute Cloud

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Rapid Provisioning from Marketplace Images

**Application Tier and Database on a Single Node**

1. Generate ssh key pair
2. Create Security IP List (recommended)
3. Log on to My Services: Compute
4. Launch Create Instance wizard
   1. Select EBS image in Marketplace
   2. Assign the public ssh key
   3. Create and assign an ip
   4. Create and assign a security list
5. Enable SSH access
6. Change default passwords
7. Configure HTTP access
8. Conditional post-install steps

On-Premises
Enhanced Provisioning with EBS Cloud Admin Tool

Provision new EBS environments from binaries stored in EBS Cloud Public Container
- Application Tier created on Compute
- Database Tier created on
  - Compute, DBCS or Exadata CS
- RAC support available in DBCS and Exadata CS
- Backups Available
  - E-Business Suite 12.2.6
    - Database 11.2.0.4
    - Database 12.1.0.2
  - E-Business Suite 12.1.3
    - Database 11.2.0.4
    - Database 12.1.0.2
- Load Balancer automatically configured
EBS Cloning from On-Premises to Oracle Cloud

Copy your EBS Environment to Oracle Cloud

EBS Dev | EBS Test 1 | EBS Production
---|---|---
EBS Instances

On-premises

SSH

Cloud EBS Instances

EBS Test 2 | EBS Test 3 | EBS Test 4
Oracle Cloud
Clone or Lift and Shift from On-Premises to Oracle Cloud

Step 1: Backup EBS to Oracle Cloud Storage Service or Stage Server

- Application Tier
  - File based backup, File Transfer Manager (FTM) API

- Database Tier
  - Oracle Database Backup Service (ODBCS)
Clone or Lift and Shift from On-Premises to Oracle Cloud

Step 2: Create EBS Environment from Backup

- Application Tier
  - Compute Only

- Database Tier Options
  - Compute (non-RAC)
  - DBCS (non-RAC or RAC)
  - Exadata CS (RAC only)
Practical Paths to Oracle Cloud for EBS Customers

Any Combination of these Paths

Re-platform your EBS on Cloud

Shift EBS to Oracle Cloud Platform:
- Start with DEV/TEST
- Add or migrate your DR on Cloud
- Shift your PROD to Cloud when ready
- Place your “Reporting” Env. on Cloud

Extend with Additive SaaS Apps

Add Value to your EBS Investment:
- Adopt OOTB integrations with IMCM CS, FAH Reporting, Revenue Mgmt
- Adopt easily integrated edge Apps such as PBCS, OTM/GTM & new IoT and Big Data Apps
- Extend with CX Cloud

Migrate to SaaS Apps

Migrate to SaaS Apps in Phases:
- Migrate to SaaS at pillar level
- Start with SaaS at region/subsidiary level
- Migrate simplest ERP/SCM instances such as a sales office
- Avoid splitting instance such as SCM from ERP
1. Oracle Cloud Offerings – Overview
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Where do I begin?
Clone Instances to the Oracle Cloud

Getting Started with Oracle E-Business Suite on Oracle Cloud (Doc ID 2066260.1)

This document describes the various scenarios for deploying Oracle E-Business Suite on Oracle Cloud, and answers some common questions. If you are completely new to using Oracle Cloud, refer to Getting Started with Oracle Cloud.

The most current version of this document can be obtained in My Oracle Support Knowledge Document 2066260.1.

You should periodically check this document on My Oracle Support for updates, which are made as required. There is a change log at the end of the document.

Section 1: Overview
Section 2: Prerequisites
Section 3: Provisioning Oracle E-Business Suite
Section 4: Cloning Oracle E-Business Suite from On-Premises
Section 5: Configuring Integrations
Section 6: Managing and Monitoring Oracle E-Business Suite Installations
Section 7: Deploying Development Tools
Section 8: Deploying Oracle E-Business Suite Information Discovery
Section 9: Frequently Asked Questions
Section 10: Glossary
Section 11: References

MOS Note 2066260.1
Where to Find More Information on EBS

• EBS Documentation and Training
  – EBS 12.2 Information Center on MOS
  – EBS Release Content Documents
  – EBS Transfer of Info (TOI) Online Training
  – EBS Documentation Web Library

• EBS Learning Subscription via OU
  – education.oracle.com/subscriptions/ebs
## Thursday 8\(^{th}\) June

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## Friday 9\(^{th}\) June

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Integrated Cloud
Applications & Platform Services