

ORACLE®



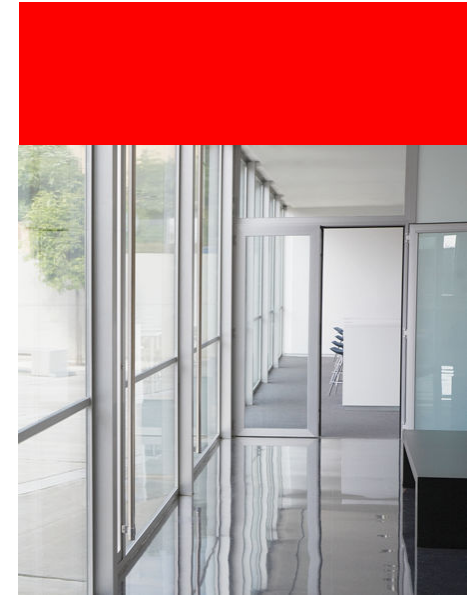
ORACLE®

Best Practices for Patching & Maintaining Oracle E-Business Suite R12

Tony Cavotta, Director Proactive Support Customer Experience
anthony.cavotta@oracle.com

Agenda

- Introduction
 - 411EBS & EBS Stars Bar
- Proactive Support
 - Value & Evolution
 - Demo: MOS: OCM & Health Checks
- Upgrade Assistance
 - Demo: EBS Upgrade Advisors
- Patching Strategy
 - Maintenance Wizard
 - Demo: Oracle Application Manager: Patch Wizard
 - Demo: MOS Patch Search & Reviews
- Resources and More Information
 - Demo: EBS Product Information Center & Communities
 - Other Oracle Services
 - EBS OOW Events



411EBS: MOS Note 411327.1

ORACLE MY ORACLE SUPPORT PowerView is OFF Welcome, Lisa | Contact Us

Dashboard Knowledge Service Requests Patches & Updates Community More... Favorites Search Knowledge Base

Dashboard Last refr

Health Recommendations

Total Issues: 2869

Critical 312

Warning 1365

Informational 1192

Getting Started

- Welcome to My Oracle Support!
- My Oracle Support Training Central
- My Oracle Support Community
- Start using Configuration Management
- My Oracle Support FAQ
- Tips and Tricks using My Oracle Support

[Inventory \(See Report\)](#)

Service Requests

Filters: Technical SRs Only

Create SR Actions **Contact**

Problem Summary	SR Num...	Star	Sev...	Contact	Status
PBEE3R::Status:PBEE3R_Zimbra_Service	3-2126053...	☆	1	Kathy Del...	Work in
'Backup: Multiple failures: adc36osbadm01 ha	3-2126053...	☆	2	AUTOBA...	New
/git/host/sys/msg:auohsclsn15:auohsclsn15 k	3-2123494...	☆	2	Rama Kar...	New
Generic Alert Log Error:PDEV_edevdb6.cos.a	3-2089781...	☆	2	Rama Kar...	New
CPU Utilization (%):adcntpdm01:CPU Utiliza	3-2125984...	☆	3	Rama Kar...	New

Systems

Actions Search System Name

Name	Star	Last Co...	Type	Oracle Home
AMT10_crs_AMT101_aulnx11.au.oracle.com_db	☆	39+ ...	Database Inst...	/u01/oracle/p...
AMT10_crs_AMT101_aulnx11_db	☆	44+ ...	Database Inst...	/u01/oracle/p...
AMT10_crs_AMT102_aulnx12.au.oracle.com_db	☆	44+ ...	Database Inst...	/u01/oracle/p...
AMT10_crs_AMT102_aulnx12_db	☆	39+ ...	Database Inst...	/u01/oracle/p...
AMT10_def_ll_cluster_name_AMT101_aulnx11...	☆	39+ ...	Database Inst...	/u01/oracle/p...

Targets

Actions Search Target Name

Name	Type	Star	Oracle Home	Host
/podaai/product/IAS	Oracle ...	☆	/podaai/product/IAS	auohsodaa05.or

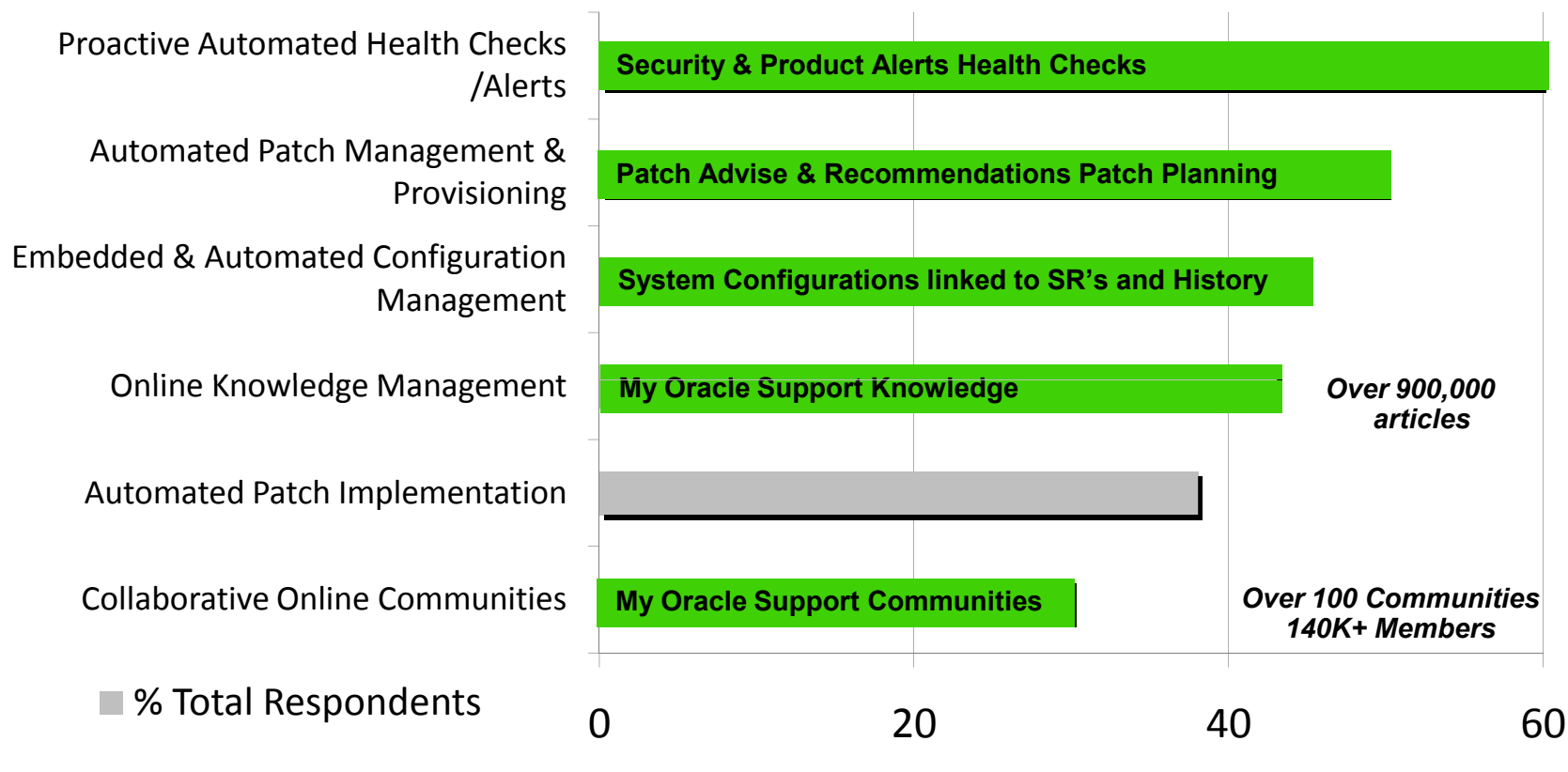


Proactive Support

**SOFTWARE.
HARDWARE.
COMPLETE.**

Perceived Value of Proactive Services

What are the top three proactive service innovations you would find valuable from your support vendor?



Nine out of ten (93%) respondents worldwide agree it is important for IT providers to invest in product and service Innovation.

Value Delivered Through Proactive Services



My Oracle Support Platform



Demo: My Oracle Support Dashboard

ORACLE MY ORACLE SUPPORT PowerView is OFF Welcome, Lisa | Contact Us

Dashboard Knowledge Service Requests Patches & Updates Community More... Favorites Search Knowledge Base

Dashboard


Last refresh

Health Recommendations

Total Issues: 2855

Critical	310
Warning	1360
Informational	1185

Getting Started



- Welcome to My Oracle Support!
- My Oracle Support Training Central
- My Oracle Support Community
- Start using Configuration Management
- My Oracle Support FAQ
- Tips and Tricks using My Oracle Support

Inventory (See Report)

Service Requests

Filters: Technical SRs Only

Create SR Actions Contact

Problem Summary	SR Num...	★	Sev...	Contact	Status
Filesystem Space Available (%):auohsilrn08:F 3-2099245...		★	2	Rama Kar...	New
Flexible Volume /vol/roh_10_arch/ has been c 3-2098894...		★	1	Rama Kar...	New
/git/host/sys/msg:auohscoar01:auohscoar01 3-2095323...		★	2	Rama Kar...	Automat
/git/host/sys/msg:auohsmyfa14:auohsmyfa14 3-2095130...		★	2	Rama Kar...	New
/git/host/sys/msg:auohsvvtt16:auohsvvtt16 3-2100875...		★	2	Rama Kar...	New

Systems

Actions Search System Name

Name	★	Last Coll...	Type	1 ▲	Oracle ..
AMT10_crs_AMT101_aulnx11.au.oracle.co...	★	37+ ...	Database Instance		/u01/ora.
AMT10_crs_AMT101_aulnx11_db	★	42+ ...	Database Instance		/u01/ora.
AMT10_crs_AMT102_aulnx12.au.oracle.co...	★	42+ ...	Database Instance		/u01/ora.
AMT10_crs_AMT102_aulnx12_db	★	37+ ...	Database Instance		/u01/ora.
AMT10_def_ll_cluster_name_AMT101_aulnx...	★	37+ ...	Database Instance		/u01/ora.

Targets

Actions Search Target Name

Name	Type	★	Oracle Home
/podaai/product/IAS	Oracle Home	★	/podaai/product/IAS auohsodi



OCM: Oracle Configuration Manager

What is OCM?

- Tool that **captures configuration data**
- Installation is via a patch for 11i, included with R12
- Upload collected data to Oracle manually or automatically
- Data is **securely stored** in a central repository at Oracle

Benefits

- Included with premier support
- Easily attach accurate and complete configuration data directly to Service Requests
- Allows you to take advantage of Service Request Priority Handling
- Compare system configuration data over time
- Show **proactive advice** via automated Health Checks

Demo: OCM & EBS Health Checks

ORACLE MY ORACLE SUPPORT PowerView is OFF Welcome, Lisa | Contact

Dashboard | Knowledge | Service Requests | Patches & Updates | Community | More... | Favorites | Search Knowledge Base


Dashboard

Health Recommendations

Total Issues: 2735

Critical	299
Warning	1311
Informational	1125

Getting Started



- Welcome to My Oracle Support!
- My Oracle Support Training Central
- My Oracle Support Community
- Start using Configuration Management
- My Oracle Support FAQ
- Tips and Tricks using My Oracle Support

Inventory (See Report)

Service Requests

Filters: Technical SRs Only

Create SR | Actions | Contact

Problem Summary	SR Num...	Sev...	Contact
Any adjustments in Weblogic to better manag	3-2030032...	3	Brenda d...
/git/host/sys/msg:ausodjdsu02:ausodjdsu02 <	3-2030479...	1	React WW
Flexible Volume /vol/rcho2i_16a_data/ is 95%	3-2030332...	2	React WW
Setting web session timeout for ARM/ASA/We	3-2026614...	2	Dave Sev...
Backup: rmohsgewr28/client-db-tgew1i Failc	3-1995956...	2	AUTOBA...

Systems

Actions | Search System Name

Name	Last Co...	Type	Oracle
AMT10_crs_AMT101_aulnx11.au.oracle.com_db	34+ ...	Database Inst...	/u01/ora
AMT10_crs_AMT101_aulnx11_db	39+ ...	Database Inst...	/u01/ora
AMT10_crs_AMT102_aulnx12.au.oracle.com_db	39+ ...	Database Inst...	/u01/ora
AMT10_crs_AMT102_aulnx12_db	34+ ...	Database Inst...	/u01/ora
AMT10_def_ll_cluster_name_AMT101_aulnx11...	34+ ...	Database Inst...	/u01/ora

Targets

Actions | Search Target Name

Local intranet

Health Check Catalog – Note 868955.1

ORACLE MY ORACLE SUPPORT PowerView is OFF Welcome, Lisa | Contact Us

Dashboard Knowledge Service Requests Patches & Updates Community More... Favorites Search Knowledge Base

Dashboard Last refr

Health Recommendations


Total Issues: 2868







Critical 312

Warning 1365

Informational 1191

Getting Started



-  Welcome to My Oracle Support!
-  My Oracle Support Training Central
-  My Oracle Support Community
-  Start using Configuration Management
-  My Oracle Support FAQ
-  Tips and Tricks using My Oracle Support

Inventory (See Report)

Service Requests

Filters: Technical SRs Only

Create SR Actions Contact

Problem Summary	SR Num...	★	Sev...	Contact	Statu
/git/host/sys/msg:aupodcost08:aupodcost08	3-2101425...	★	▲ 2	Rama Kar...	Automat
Memory Utilization (%25):P_ftv10411:Memory	3-2023768...	★	▲ 2	Rama Kar...	New
/git/host/sys/msg:aupodcost06:aupodcost06	3-2101544...	★	▲ 2	Rama Kar...	Automat
/git/host/sys/msg:auohsclop80:auohsclop80	k 3-2103438...	★	▲ 2	Rama Kar...	Automat
/git/host/sys/msg:aupodcost07:aupodcost07	3-2101471...	★	▲ 2	Rama Kar...	Automat

Systems

Actions Search System Name

Name	★	Last Co...	Type	1 ▲	Oracle Home
AMT10_crs_AMT101_aulnx11.au.oracle.com_db	★	✗ 38+ ...	Database Inst...		/u01/oracle/p...
AMT10_crs_AMT101_aulnx11_db	★	✗ 43+ ...	Database Inst...		/u01/oracle/p...
AMT10_crs_AMT102_aulnx12.au.oracle.com_db	★	✗ 43+ ...	Database Inst...		/u01/oracle/p...
AMT10_crs_AMT102_aulnx12_db	★	✗ 38+ ...	Database Inst...		/u01/oracle/p...
AMT10_def_ll_cluster_name_AMT101_aulnx11...	★	✗ 38+ ...	Database Inst...		/u01/oracle/p...

Targets

Actions Search Target Name

Name	Type	★	Oracle Home	Host
/podaai/product/IAS	Oracle ...	★	/podaai/product/IAS	auohsodaa05.or

12



OD: Oracle Diagnostics

What are Oracle Diagnostics?

- Set of SQL tests that gather configuration and application data

Benefits

- Included in your EBS application suite
- Executed via a **simple user interface** so even functional users can run without intervention from a DBA
- Ability to upload output directly to the SR from the application
- Over **400 diagnostics available** ranging from setup to period close
- Many diagnostics display **proactive resolution steps** within the output to resolve identified issues

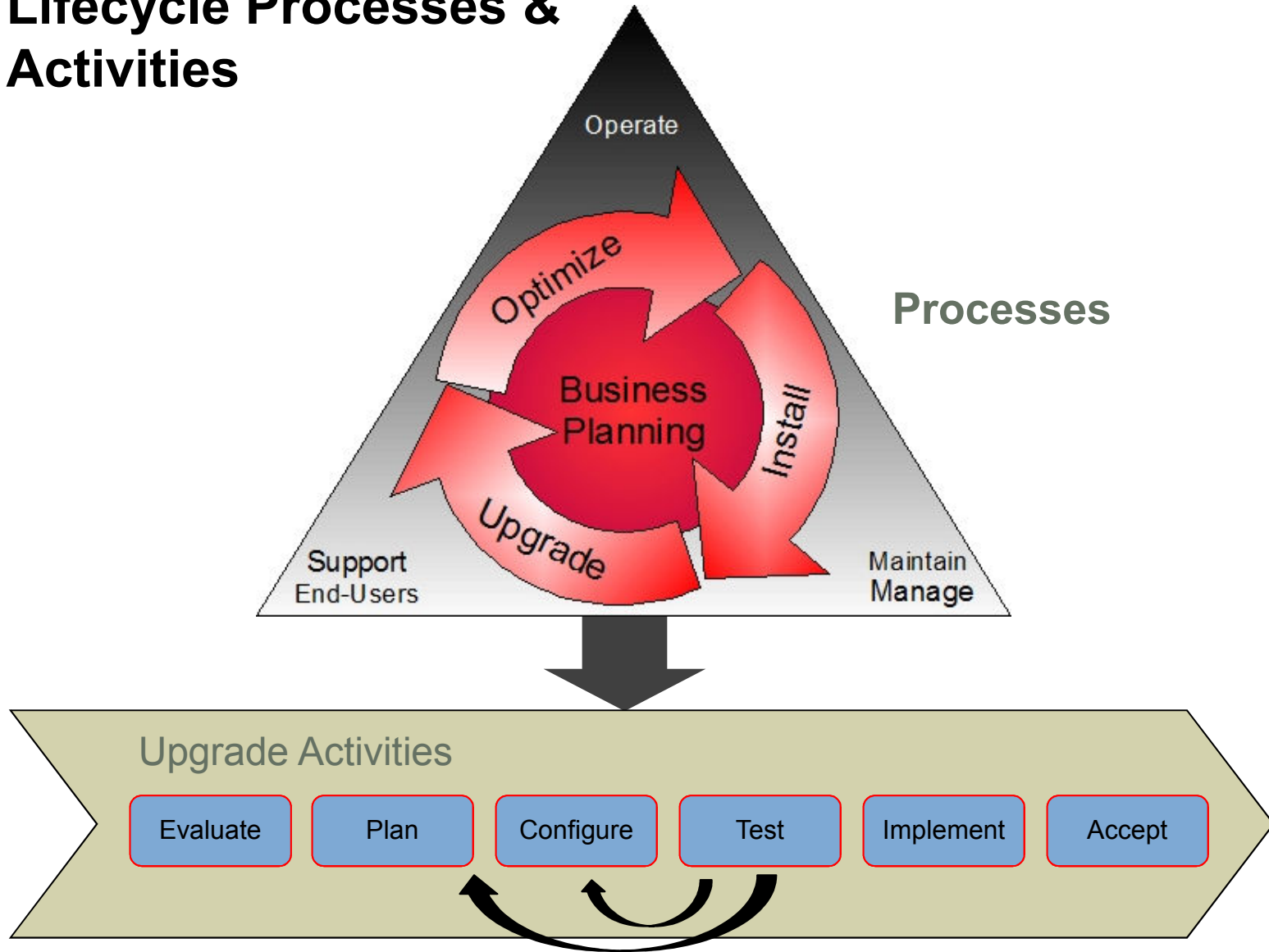
<< EBS Proactive Customer Advisory Board >>



Upgrade Assistance

**SOFTWARE.
HARDWARE.
COMPLETE.**

Lifecycle Processes & Activities





Upgrade Advisors

What are Upgrade Advisors?

- **Collection of dynamic documents** that are intended to guide you through an upgrade lifecycle **step by step**
- Specific to a particular upgrade path of a product or suite between specific versions
- Created by incorporating **best practices** and information we collected over conducting numerous upgrades

Benefits

- Regularly updated information presented in multimedia formats
- **Organized** in a way that you can take maximum advantage through your lifecycle
- Supported via Collaborative Support through a focused community

Demo: EBS Upgrade Advisor

ORACLE MY ORACLE SUPPORT PowerView is OFF Welcome, Lisa | Contact Us

Dashboard | Knowledge | Service Requests | Patches & Updates | Community | More... | Favorites | Search Knowledge Base

Dashboard Last r

Health Recommendations

Total Issues: 2869

Critical	312
Warning	1365
Informational	1192


Service Requests

Filters: Technical SRs Only

Create SR | Actions | Contact

Problem Summary	SR Num...	★	Sev...	Contact	Status
Backup: ausodsmrt01/client-db-dsmrt3 Error	3-2107386...	★	2	AUTOBA...	New
Backup: aurodlvsc06/client-db-tlvsc6 Unkno	3-2107158...	★	2	AUTOBA...	New
Backup: auohscgeo59/client-db-tcge60 Error	3-2107445...	★	2	AUTOBA...	New
Backup: auhodtest05/client-db-thuat7_essbas	3-2107257...	★	2	AUTOBA...	New
Backup: auhodtest01/client-db-thypw7 Back	3-2107118...	★	2	AUTOBA...	New

Getting Started



- Welcome to My Oracle Support!
- My Oracle Support Training Central
- My Oracle Support Community
- Start using Configuration Management
- My Oracle Support FAQ
- Tips and Tricks using My Oracle Support

[Inventory \(See Report\)](#)

Systems

Actions | Search System Name

Name	★	Last Coll...	Type	1 ▲	Oracle ..
AMT10_crs_AMT101_aulnx11.au.oracle.co...	★	38+ ...	Database Instance		/u01/ora.
AMT10_crs_AMT101_aulnx11_db	★	43+ ...	Database Instance		/u01/ora.
AMT10_crs_AMT102_aulnx12.au.oracle.co...	★	43+ ...	Database Instance		/u01/ora.
AMT10_crs_AMT102_aulnx12_db	★	38+ ...	Database Instance		/u01/ora.
AMT10_def_ll_cluster_name_AMT101_aulnx...	★	38+ ...	Database Instance		/u01/ora.

Targets

Actions | Search Target Name

Name	Type	★	Oracle Home



EBS Upgrade Advisor Community

Communities:

Join the [Upgrade Advisor Community](#) to take advantage of an extensive resource network including Oracle's Upgrade Subject Matter Experts (SMEs) to get answers to your questions, share best practices with others and give us your suggestions to improve the Upgrade Advisors.

For all other types of "technical questions" related to your products, please keep on using the existing product specific communities !

- [All EBS Communities](#)
- [Upgrade Community](#)
- [OTN Install/Upgrade Discussion Forum](#)



Patching Strategy

**SOFTWARE.
HARDWARE.
COMPLETE.**

R12 Patching Strategy

Key Patching Knowledge Documents in MOS:

- **New!** Video: EBS R12 Patching Best Practices & Overview
- **New!** EBS R12 Patching Best Practices & Overview [Video] (Doc ID 1207498.1)

EBS R12 Patching Best Practices & Overview [Video]

Modified 18-SEP-2010

This video will provide an overview of Oracle E-Business R12 Patching Best Practices Documentation and tooling.

Topics Covered:

- EBS R12 Patching
 - Documentation
 - Codeline Review
 - Patching Types
- Highlights of:
 - Oracle Application Patch Wizard
 - AD Utility
 - Maintenance Wizard
 - Oracle Configuration Manager
 - Oracle Diagnostics
 - Distributed AD
 - Staged Application System
 - Shared APPL_TOP

9



Video - [EBS R12 Patching Best Practices & Overview \(27:46\)](#)

5 Patching Procedures

ORACLE



R12 Upgrade Tool – Maintenance Wizard

What is Maintenance Wizard?

- Tool with **step by step assistance** to guide you through an EBS R12 upgrade

Benefits

- **Reduces upgrade tasks** by checking your application environment and identifying the steps needed for your specific upgrade
- Identifies which **critical patches** your system requires
- Automatically executes many of the identified tasks
- Includes **Project Management** features
 - Records task times, assigns tasks
 - Run reports that show progress, timing statistics and responsibility assignments



Oracle Application Manager Patch Wizard

What is Patch Wizard?

- Included utility that helps **simplify patching** process

Benefits

- Pulls a current list of **critical and recommended** patches from MOS
- Can be scheduled to run at set intervals
- Compares that list to your current patches
- Shows patch application status for your instance
- **Conduct Impact Analysis** for any EBS patch, then mass download and merge the patches you select

Demo: Patch Wizard

The screenshot displays the Oracle E-Business Suite home page. At the top, the Oracle logo and 'E-Business Suite' are visible on the left, and navigation links for 'Diagnostics', 'Logout', 'Preferences', and 'Help' are on the right. Below this, the user is logged in as 'SYSADMIN'. The main content area is titled 'Oracle Applications Home Page' and features a 'Navigator' section on the left and a 'Favorites' section on the right. The Navigator section contains a list of application folders and a 'Personalize' button. The Favorites section contains a 'Personalize' button and a message indicating that no favorites have been selected.

ORACLE E-Business Suite

Diagnostics Logout Preferences Help

Logged In As **SYSADMIN**

Oracle Applications Home Page

Navigator

[Personalize](#)

- [Ak Html Forms](#)
- [Alert Manager, Vision Enterprises](#)
- [Application Developer](#)
- [Application Developer Common Modules](#)
- [Application Diagnostics](#)
- [Auditing Manager](#)
- [Balanced Scorecard Manager](#)
- [Balanced Scorecard Supervisor](#)
- [Business Intelligence System, Vision Operations \(USA\)](#)
- [CRM Administrator, Vision Enterprises](#)
- [CRM HTML Administration](#)
- [CRM HTML Developer](#)
- [Customer Support, Vision Enterprises](#)
- [Default Partner User](#)
- [Functional Administrator](#)
- [Functional Developer](#)
- [HRMS Manager, Vision University](#)

System Administrator

- [Define Profile Options](#)

Oracle Applications Manager

- [Workflow](#)
- [License Manager](#)
- [Service Fulfillment Manager](#)
- [Patching and Utilities](#)
- [Hosts](#)
- [Purging/Critical Activities](#)
- [System Alerts](#)
- [Logs](#)
- [Applications Usage](#)
- [Business Flows](#)
- [Database Status](#)
- [System Configuration Overview](#)
- [Forms Monitoring](#)
- [Concurrent Managers](#)
- [Concurrent Requests](#)
- [Dashboard](#)
- [OAM Setup](#)

Favorites

[Personalize](#)

You have not selected any favorites. Please use the "Personalize" button to set up your favorites.

Demo: MOS Patch Reviews

ORACLE MY ORACLE SUPPORT PowerView is OFF Welcome, Lisa | Contact Us

Dashboard Knowledge Service Requests Patches & Updates Community More... Favorites Search Knowledge Base

Dashboard Last refreshed 5 ho

Health Recommendations

Total Issues: 2869

Critical	312
Warning	1365
Informational	1192

Getting Started

- Welcome to My Oracle Support!
- My Oracle Support Training Central
- My Oracle Support Community
- Start using Configuration Management
- My Oracle Support FAQ
- Tips and Tricks using My Oracle Support

Inventory (See Report)

Service Requests

Filters: Technical SRs Only

Create SR Actions Contact

Problem Summary	SR Num...	★	Sev...	Contact	Status
PBEE3R::Status:PBEE3R_Zimbra_Service	3-2126053...	★	1	Kathy Del...	Work in
'Backup: Multiple failures: adc36osbadm01 ha	3-2126053...	★	2	AUTOBA...	New
/git/host/sys/msg:auohsclsn15:auohsclsn15 k	3-2123494...	★	2	Rama Kar...	New
Generic Alert Log Error:PDEV_edevdb6.cos.a	3-2089781...	★	2	Rama Kar...	New
CPU Utilization (%):adcntapdfm01:CPU Utiliza	3-2125984...	★	3	Rama Kar...	New

Systems

Actions Search System Name

Name	★	Last Coll...	Type	1 ▲	Oracle ...
AMT10_crs_AMT101_aulnx11.au.oracle.co...	★	39+ ...	Database Instance		/u01/ora.
AMT10_crs_AMT101_aulnx11_db	★	44+ ...	Database Instance		/u01/ora.
AMT10_crs_AMT102_aulnx12.au.oracle.co...	★	44+ ...	Database Instance		/u01/ora.
AMT10_crs_AMT102_aulnx12_db	★	39+ ...	Database Instance		/u01/ora.
AMT10_def_ll_cluster_name_AMT101_aulnx...	★	39+ ...	Database Instance		/u01/ora.

Targets

Actions Search Target Name

Name	Type	★	Oracle Home	H
/podaai/product/iAS	Oracle Home	★	/podaai/product/iAS	auohsoda



Resources & More Information

**SOFTWARE.
HARDWARE.
COMPLETE.**

Demo: EBS PIC & Communities

MY ORACLE SUPPORT PowerView is OFF Welcome, Lisa Contact Us Sign Out

Knowledge | Service Requests | Patches & Updates | Community | More... | Favorites

Search Knowledge Base

Health Recommendations

Total Issues: 2869

Critical 312

Warning 1365

Informational 1192

Getting Started

Welcome to My Oracle Support!

- Start using Configuration Management
- My Oracle Support FAQ
- Tips and Tricks using My Oracle Support

Inventory (See Report)

Service Requests

Filters: Technical SRs Only

Create SR | Actions | Contact

Problem Summary	SR Num...	Sev...	Contact	Status	Last Up
'Backup: Multiple failures: auohsoolm10 had	3-2109008...	2	AUTOBA...	New	Today
/git/host/sys/msg:rmpodudrt03:rmpodudrt0	3-2109296...	2	Rama Kar...	Automatic...	Today
/git/host/sys/msg:auohsmyfa14:auohsmyfa1	3-2103208...	2	Rama Kar...	Automatic...	Today
Filesystem Space Available (%):auohshyat02	3-2101636...	1	Rama Kar...	New	Today
what is the patch number for oracle server 11	3-2104629...	2	Gary Li	Close Req...	Today

Systems

Search System Name

Name	Last Coll...	Type	Oracle ...	Organiz
AMT10_crs_AMT101_aulnx11.au.oracle.co...	38+ ...	Database Instance	/u01/oracle...	Oracle S
AMT10_crs_AMT101_aulnx11_db	43+ ...	Database Instance	/u01/oracle...	Oracle S
AMT10_crs_AMT102_aulnx12.au.oracle.co...	43+ ...	Database Instance	/u01/oracle...	Oracle S
AMT10_crs_AMT102_aulnx12_db	38+ ...	Database Instance	/u01/oracle...	Oracle S
AMT10_def_ll_cluster_name_AMT101_aulnx...	38+ ...	Database Instance	/u01/oracle...	Oracle S

Targets

Search Target Name

Name	Type	Oracle Home	Host
/u01/oracle/...	Oracle Home	/u01/oracle/...	...



EBS Tooling Cheat Sheet

Tooling Collection


Oracle Product	Tool	Cost	Install Link	Purpose/Intent
Enterprise Manager (EM)	Applications Management Pack (AMP)	\$	Note: 812315.1	Centralizing and automating key routine/complex tasks such as Cloning and Administration activities
	Change Management Pack (CMP)	\$	Note: 812315.1	Provides a centralized view to monitor and orchestrate changes (such as Oracle E-Business Suite customizations, patches and functional setups) across multiple Oracle EBS systems
Oracle Applications Manager (OAM)	OAM Release Notes 12.1.3 Oracle Diagnostic Framework (ODF)	Info Free	Note: 1095293.1 Note: 342459.1 Overview Note: 167000.1 Install Note: 232116.1 Training Video	Release Notes for OAM Tool to ease the gathering and analyzing of information from your E-Business Suite, specific to an existing issue or setup.
	PatchWizard	Free	Note: 976188.1 Tool Note: 976688.1 FAQ Note: 1085668.1 Training	Free utility that comes installed with EBS products and can be accessed via OAM. This utility compares the patches you have already applied against a list of all recommended (EBS) patches and provides an impact analysis for any EBS patch.”
	R11.5.10 Minimum Baseline	Info	Note: 883202.1 11.5.10 Baseline minimum	11.5.10 Min Baseline & Extended Support Note: 1199724.1
EBS R12-AD	AD Utilitiesadadmin & adctrl	Free	AD Patches Note: 761938.1 R12.1.1	PAA: For patches that have manual steps, the patch readme file instructs you to use Oracle Patch Application Assistant (PAA) to create customized instructions for your system.
Patch Appl Assistanceadmsi.pl	Free	Note: 954251.1 R12.1.2 Note: 1098653.1 R12.1.3	
MyOracleSupport	MOS-Patches & Updates	Free	MyOracleSupport.com	Review & Download Patches
	Maintenance Wizard (MW)PatchAssistMaintenance Pack Assist	Free	Note: 430732.1 Tool /Overview Note: 405263.1 FAQ	Guides you through the upgrade of Oracle Applications technology stack and products from Release 11i versions to Release 12.
	Oracle Configuration Manager (OCM)	Free	Note: 1087336.1 EBS Video Note: 728989.5 Install Note: 868955.1 Health Checks Catalog Note: 369111.5 FAQ	The configuration manager centralizes configuration information based on your Oracle technology stack. Oracle uses secure access to your configuration information to help you achieve problem avoidance, faster problem resolution, better system stability, and easier management of your Oracle systems
	Oracle Communities	Free	Community Link	Interaction with other MyOracleSupport users via many community topics.



Q & A



Thank You !



The preceding is intended to outline our general product direction. It is intended for information purposes only, and may not be incorporated into any contract. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development, release, and timing of any features or functionality described for Oracle's products remains at the sole discretion of Oracle.

ORACLE®