

Safe harbor statement

The following 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, timing, and pricing of any features or functionality described for Oracle's products may change and remains at the sole discretion of Oracle Corporation.



Apps and in the Middle Stuff

Angelo Rosado

Product Management Director

Application Technology

E-Business Suite Development, Oracle



Agenda

- 1 Overview – EM, EBS, AMS
- 2 Oracle E-Business Suite on Oracle Cloud
- 3 Application Management Suite 13c

Agenda

- 1 Overview – EM, EBS, AMS
- 2 Oracle E-Business Suite on Oracle Cloud
- 3 Application Management Suite 13c

Monitoring EBS with Enterprise Manager

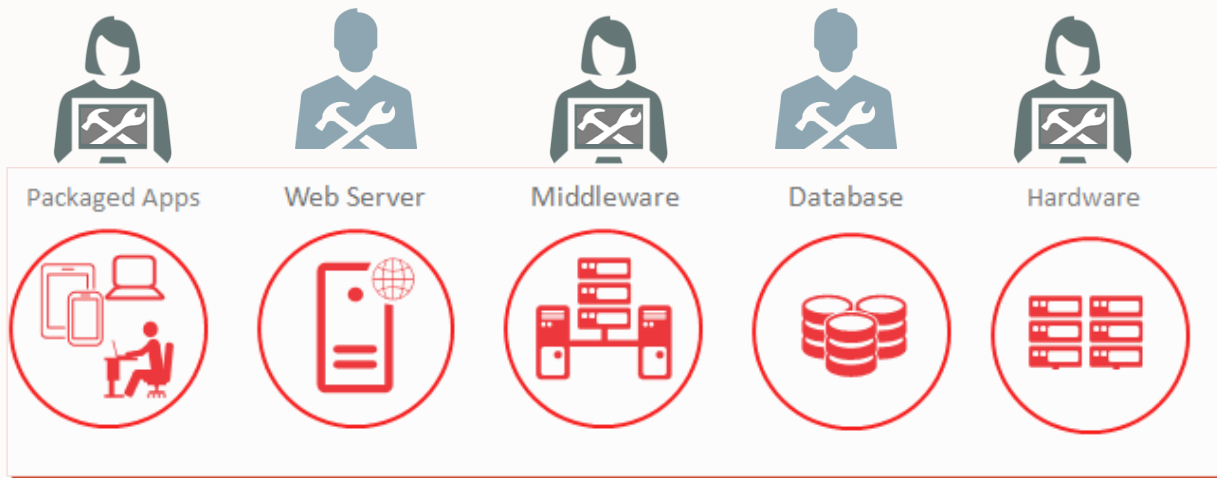
Foundation for monitoring all components of the IT infrastructure

Integrated management of the entire Oracle stack

Automated solution for managing Oracle E-Business Suite across On-premises and Oracle Cloud



Unified Management using Oracle Enterprise Manager 13c



**Comprehensive management
for Oracle E-Business
Suite assets**

**Fleet-wide automation and
visibility across Oracle cloud
and on-premises assets**

**Centralized control of
integrated diagnostic and
lifecycle activities**

New Update! Oracle Enterprise Manager in Oracle Cloud Marketplace

Oracle Enterprise Manager 13.4 with Oracle Database 19c as the OMR, all installed on Oracle Linux 7

[Spring 2020 Update to Oracle Enterprise Manager App on Oracle Cloud Infrastructure and New Multi Node Configurations Now Available](#)



CONTINUOUS INNOVATION ON EBS 12.2 WITH PREMIER SUPPORT THROUGH AT LEAST 2031

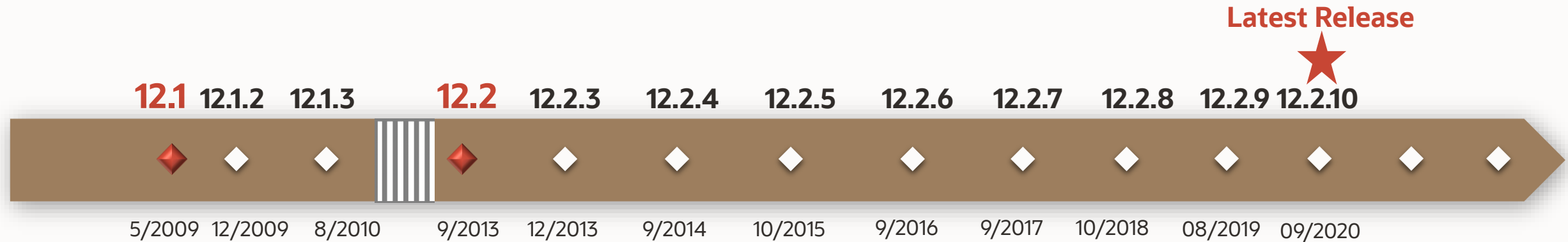
Delivering Ongoing Innovation and
Underlying Technology Stack Updates
without Major Upgrade

[Oracle E-Business Suite \(EBS\) innovations in 2020](#)

[Announcing Continuous Innovation on Oracle E-Business Suite 12.2 \(PDF\)](#)

EBS Roadmap: Continuous Innovation on EBS 12.2

Continued Investment and Support for Years to Come without Major Upgrade



PREMIER SUPPORT THROUGH:

- **Release 12.1:** Dec. 2021
- **Release 12.2:** At least 2031

Application Management Suite for Oracle E-Business Suite

Application Management Pack

- System Management and Monitoring
 - For On-Premises
 - For Oracle Cloud Infrastructure
 - For Oracle Cloud at Customer
- Change Management
 - Customization Management
 - Patch Management
 - Approvals & Cloning

Real User Experience Insight

- Tracing end user transactions through all layers of EBS Technology Stack



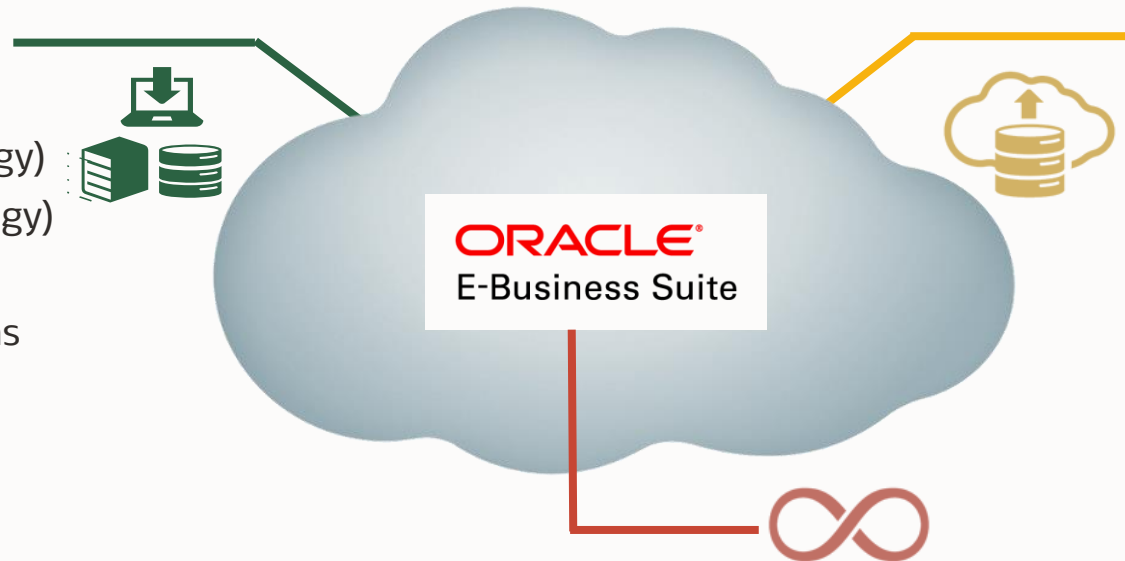
Agenda

- 1 Overview – EM, EBS, AMS
- 2 Oracle E-Business Suite on Oracle Cloud
- 3 Application Management Suite 13c

EBS on Oracle Cloud Infrastructure - Areas of Investment

Provisioning

- One-click (pre-set topology)
- Advanced (flexible topology)
- Scenarios:
 - New implementations
 - Demo environments



Lift and shift fully configured ebs systems

- Lift and shift your on-premises environments to oracle cloud infrastructure, including:
 - EBS configuration
 - Historical data
 - Customizations

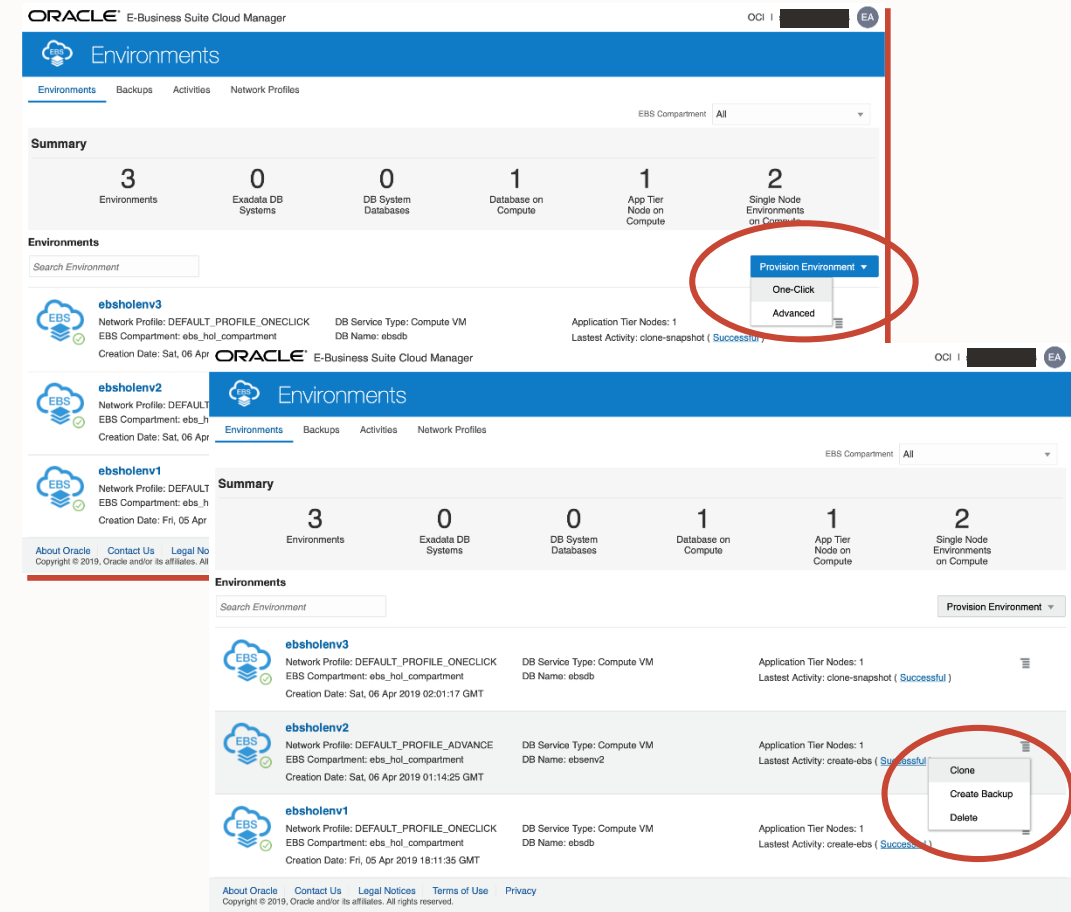
Lifecycle management

- Fast clone, backup and restore
- Environment elasticity (managed server, JVM memory, delete/add nodes)
- Disaster recovery (DR) configuration
- Monitor, patch and manage customizations using application management suite

Oracle E-Business Suite Cloud Manager

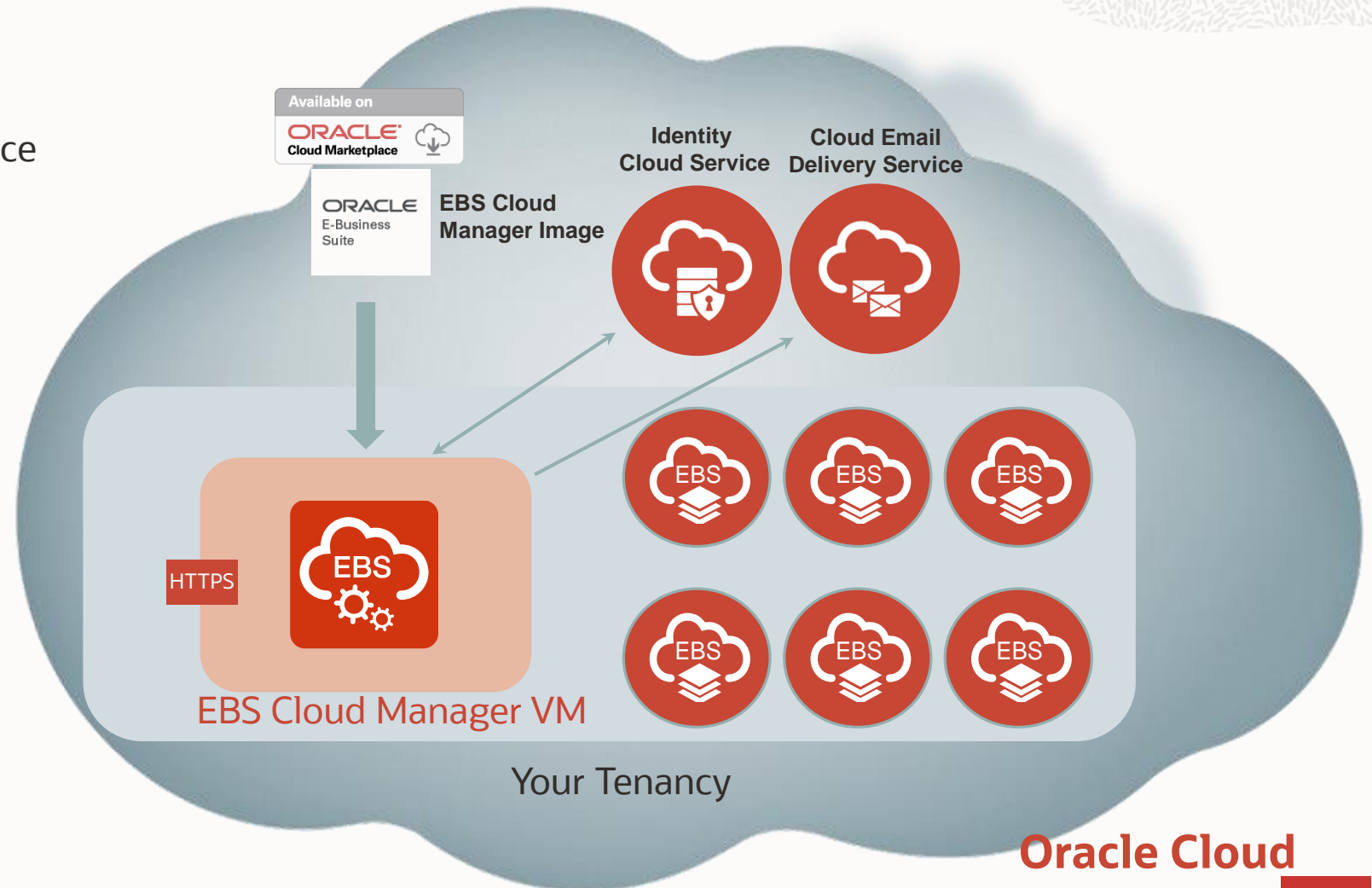
New UI for EBS Provisioning, Lift & Shift, and Lifecycle Management

- Environment deployment
 - One-Click provisioning with pre-populated deployment options
 - Advanced provisioning with user-selected deployment options
 - Lift and Shift to OCI from on-premises backup
- Lifecycle management
 - Clone environment: minutes vs hours
 - Perform backup and restore
 - Delete environment
 - Planned: Elasticity, DR, Refresh



Oracle E-Business Suite Cloud Manager Deployment

- EBS Cloud Manager
Image available in OCI Marketplace
- Authentication
IDCS (Identity Cloud Service)
- Notification
Cloud Email Delivery Service
- Parallel Activities
 - Multiple Users
 - Multiple Request



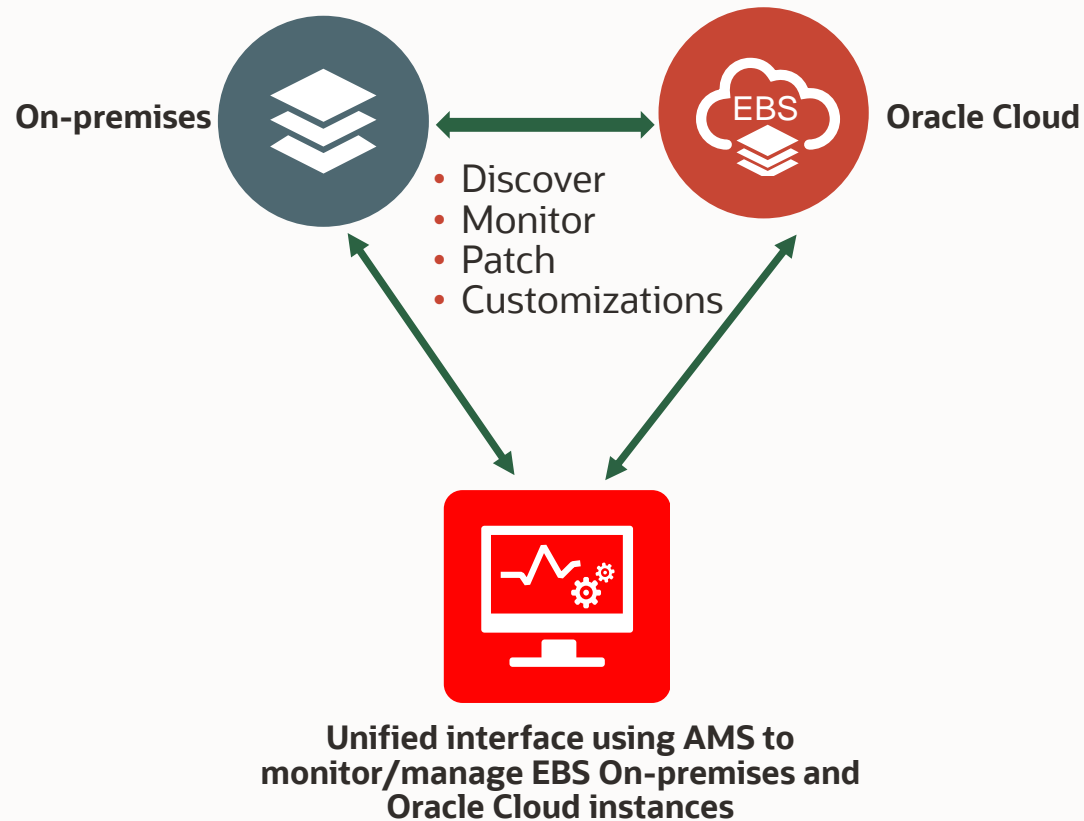
Oracle Cloud

Agenda

- 1 Overview – EM, EBS, AMS
- 2 Oracle E-Business Suite on Oracle Cloud
- 3 **Application Management Suite 13c**

AMS for On-Premises & Cloud Management

Flexible, Reusable, Extensible



Hybrid Cloud Management

- Single pane of glass monitoring and management of cloud and on-premises EBS environments

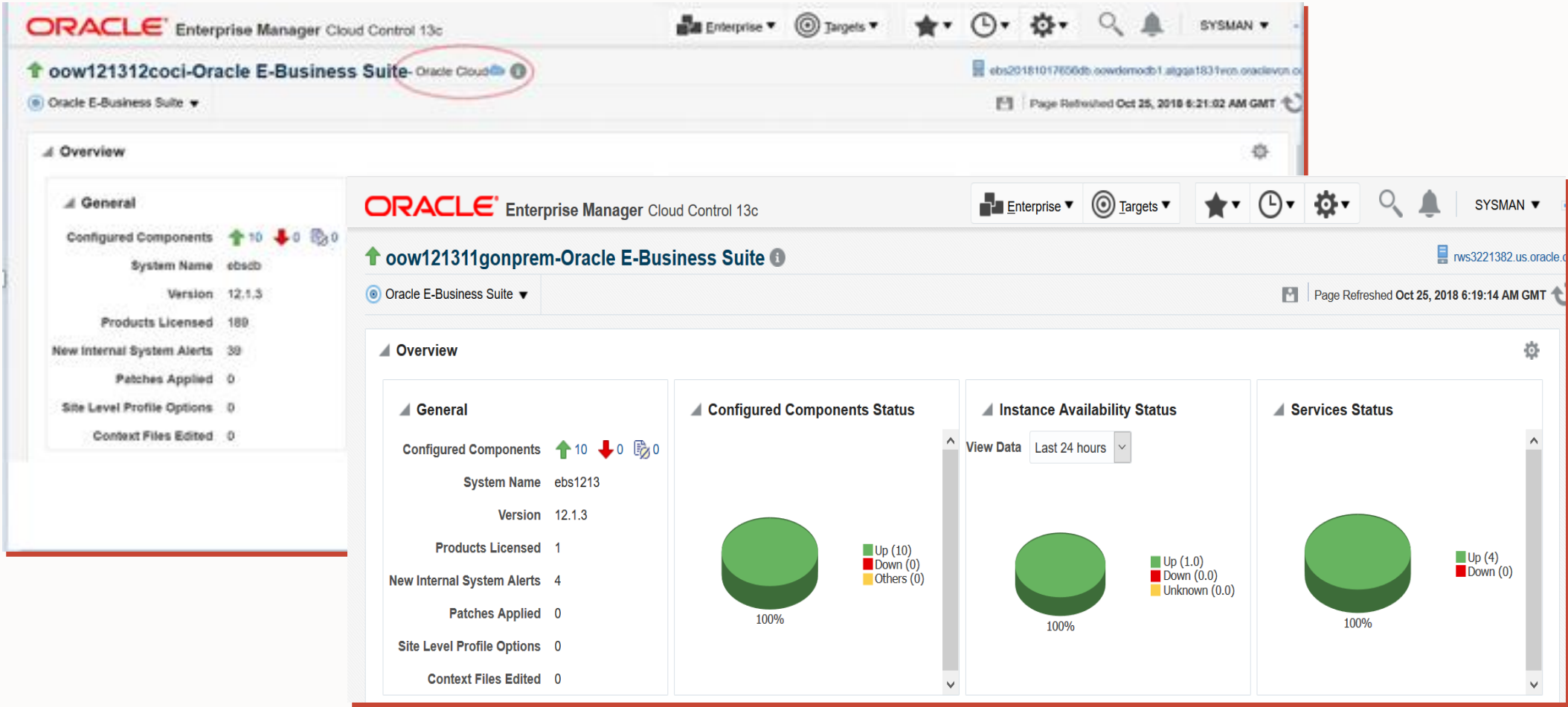
Change Management

- Migrate patches and customizations seamlessly between cloud and on-premises

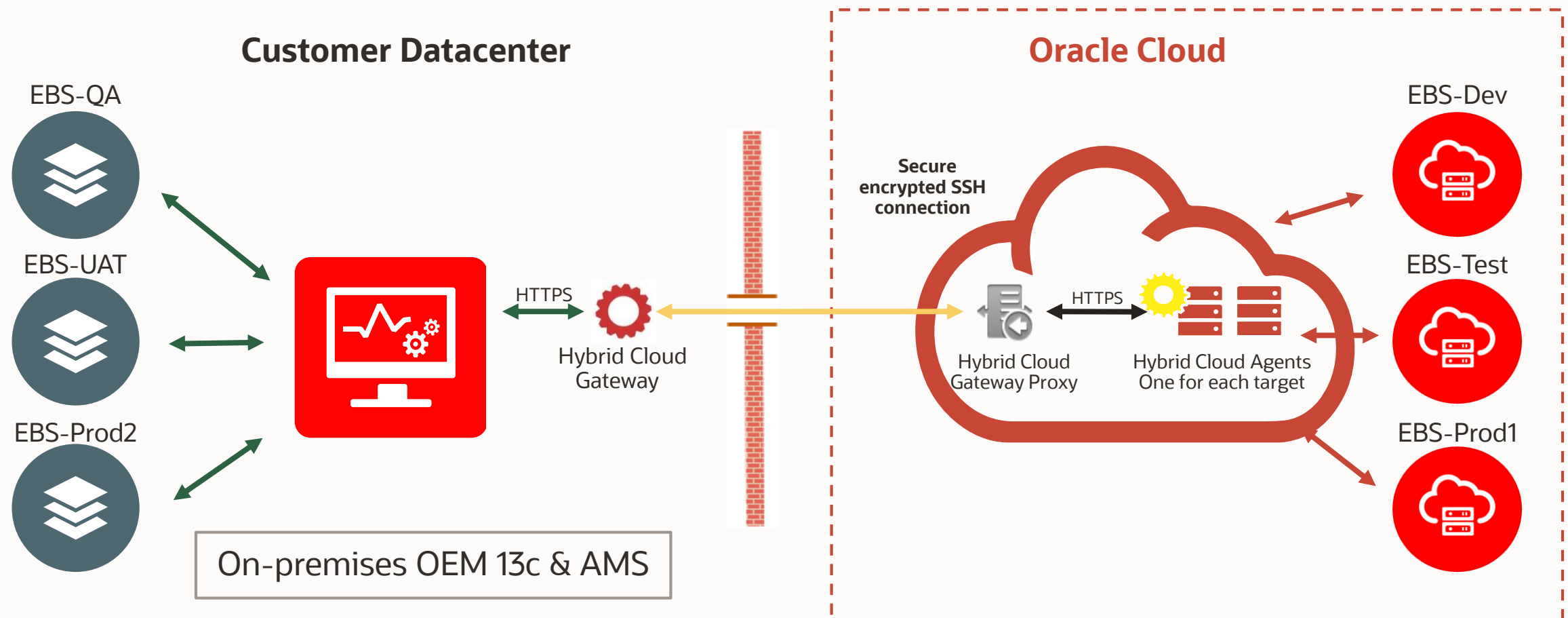
Automation of key processes using EMCLI

- Improve user experience
- Eliminate / reduce manual steps by 90%
 - Reusable deployment procedures and properties files
- Flexibility to extend / customize the standard EM deployment procedures

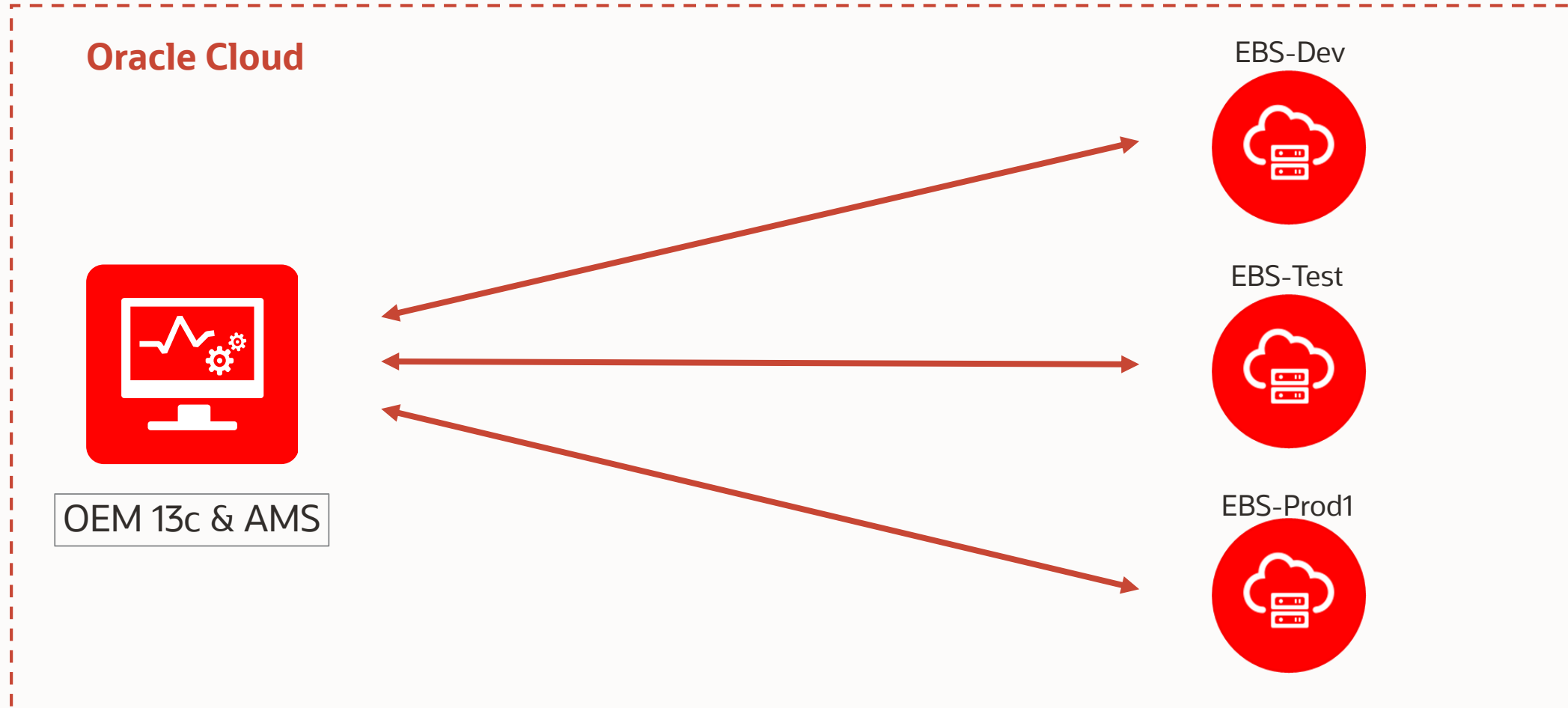
AMS for On-Premises & Cloud Management



Deploying AMS for Hybrid Cloud Management



Deploying AMS On OCI to Manage EBS on OCI



Hybrid Cloud Management

Automation using EMCLI

System Management

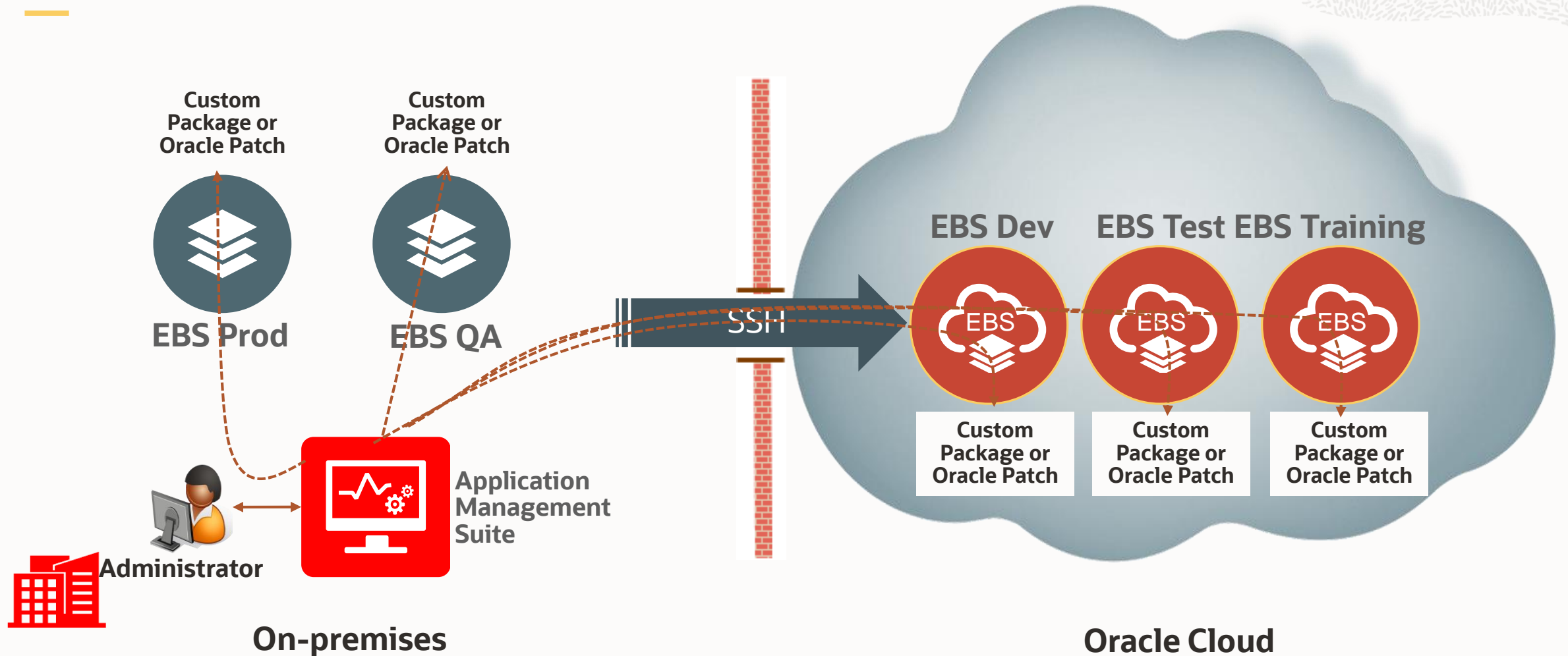
- Discover and Monitor Cloud EBS environments
- Auto deployment of Hybrid Cloud Agent during EBS discovery
- Start and End Blackouts
- Start and Stop Services

Change Management

- Creating Custom Packages
- Deploying EBS & Custom patches
- Patch multiple environments using a single procedure
- View and apply recommended patches for EBS Applications and Database

Hybrid Cloud Management

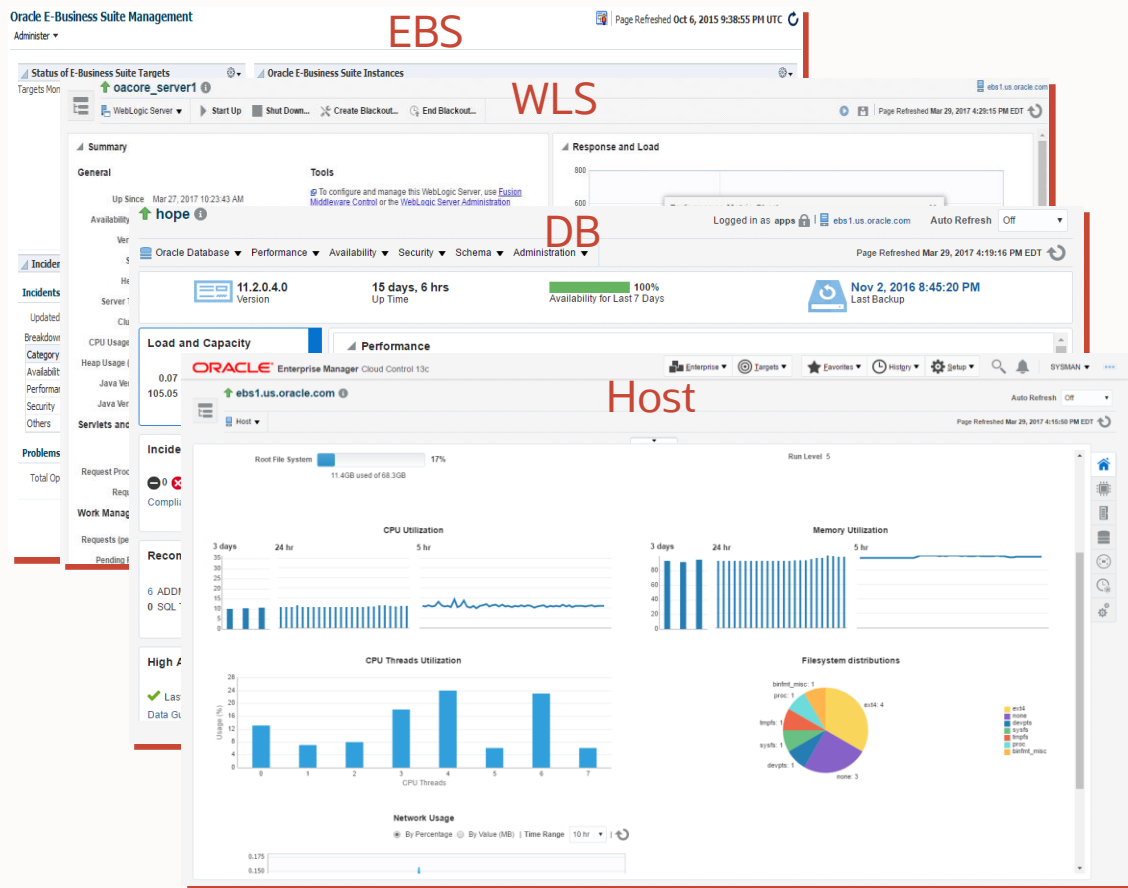
Migrate Custom Package or Apply Oracle Patch



Application Management Suite 13c

System Management Features

System Management Dashboards



- Discovery Wizard / EMCLI support
- Monitor and manage all EBS Services & Tech Stack Components
- EBS Specific Monitoring Templates & Metrics
- Extending EBS Target Model
- Supports Privilege Propagation on EBS Targets
- Configurable Automated Service Tests
- EBS Seeded Compliance Standards
- Stop & Start EBS Services
- Support for Gold Agent



Monitoring: Metric and Collection Settings

UNIT19774-Oracle E-Business Suite ⓘ
Oracle E-Business Suite ▼

unit19774.oradeads.com

▽ Applications by Running Requests					Every 1 Day	
Application Name						
Number of Running Requests	>	<input type="text"/>	<input type="text"/>	None		
▽ Concurrent Requests by Status					Every 15 Minutes	
Concurrent Requests Inactive (No Manager)	>	<input type="text"/>	<input type="text"/>	None		
Concurrent Requests Inactive (On Hold)	>	<input type="text"/>	<input type="text"/>	None		
Concurrent Requests Pending (Normal)	>	<input type="text"/>	<input type="text"/>	None		
Concurrent Requests Pending (Standby)	>	<input type="text"/>	<input type="text"/>	None		
Concurrent Requests Running	>	<input type="text"/>	<input type="text"/>	None		
Concurrent Requests Scheduled	>	<input type="text"/>	<input type="text"/>	None		
▽ Configuration Changes (Last 24 hours)					Every 1 Hour	
Context Files Edited	>	<input type="text"/>	<input type="text"/>	None		
Invalid Database Objects	>	<input type="text"/>	<input type="text"/>	None		
Last Update Date						
Patches Applied						
Site Level Profile Options Changed	>	<input type="text"/>	<input type="text" value="1"/>	None		
▽ Forms Database Sessions per Application					Every 15 Minutes	
Application Name						
Number of Forms Database Sessions per Application	>	<input type="text"/>	<input type="text"/>	None		
▽ Hourly Completed Requests					Every 60 Minutes	
Concurrent Requests Completed Successfully	>	<input type="text"/>	<input type="text"/>	None		
Concurrent Requests Completed With Error	>	<input type="text"/>	<input type="text"/>	None		

- Metrics based incidents & notifications
- Set EBS metrics collection schedules to meet business goals
- Set warning and critical thresholds based on instance type (e.g. Production, QA, Dev)
- Add corrective actions
- Metric Reference Manual

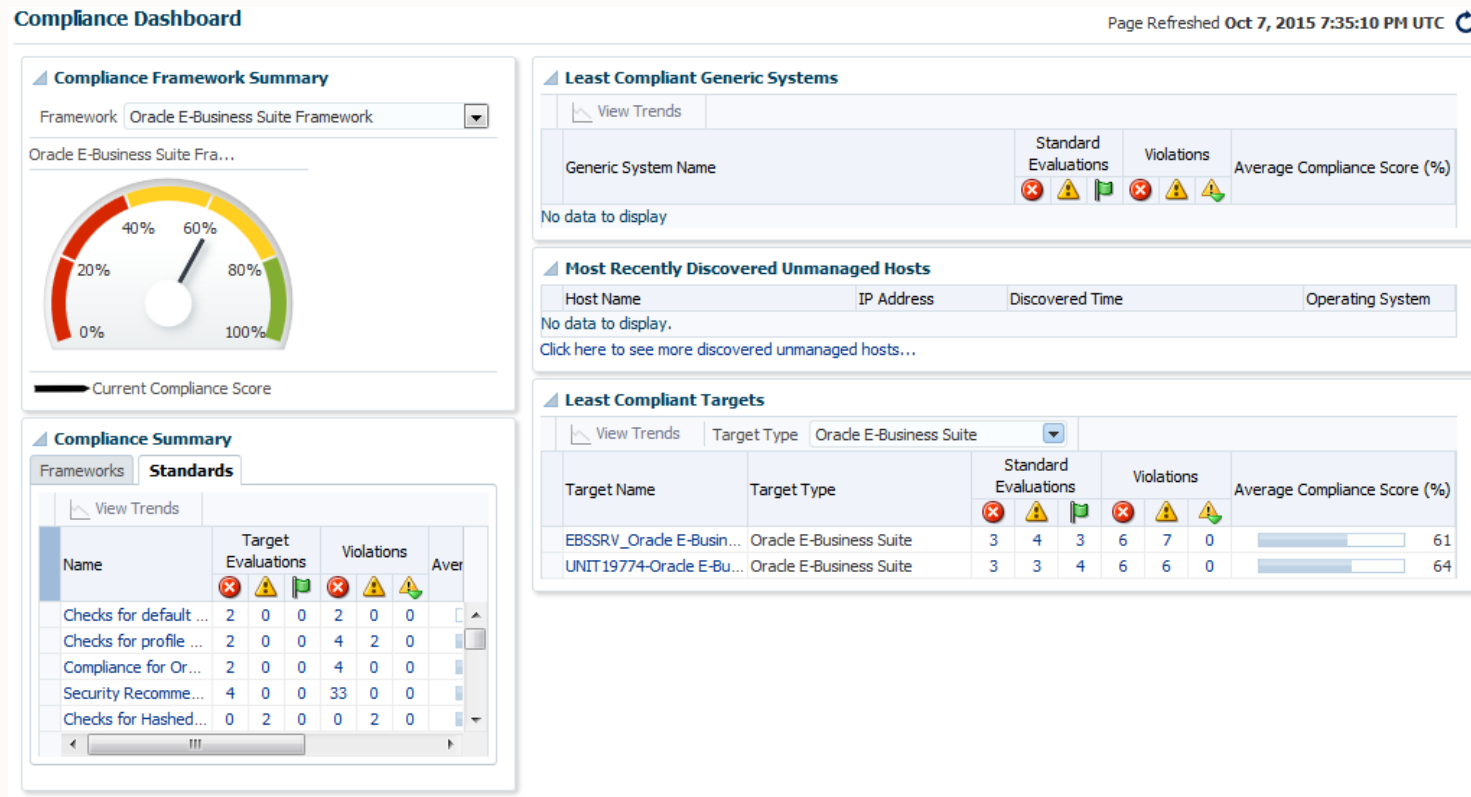
Concurrent Processing Dashboard



- Monitor Current Activity & Usage
- Number of Executions & Failed Executions
- Average Running Time Minutes
- Total Running Time Minutes
- Watch list for:
 - Concurrent Programs
 - Concurrent Managers
- Incidents & Notifications

Components				
Name	Type	Status	Incidents	Host
demo121-Internal Concurrent Manager	Internal Concurrent Manager	Up	0 0	us.oracle.com
demo121_Conflict Resolution Manager	Oracle E-Business Suite Conflict Resolution Manager	Up	0 0	us.oracle.com
demo121_Service Manager_RWS32707134	Oracle E-Business Suite Service Manager	Up	0 0	us.oracle.com
demo121_Internal Monitor_RWS32707134	Oracle E-Business Suite Internal Monitor	Up	0 0	us.oracle.com
demo121_Output Post Processor	Oracle E-Business Suite Output Post Processor	Up	0 0	us.oracle.com

Compliance Dashboard



- Integration with EM Compliance Framework
- Out-of-box Security Compliance Standards for EBS
- Checks for mandatory database configuration parameters for EBS (init.ora)
- View violations & trends
- Real-time observations

Out-of-the-box Oracle E-Business Suite Compliance Standards

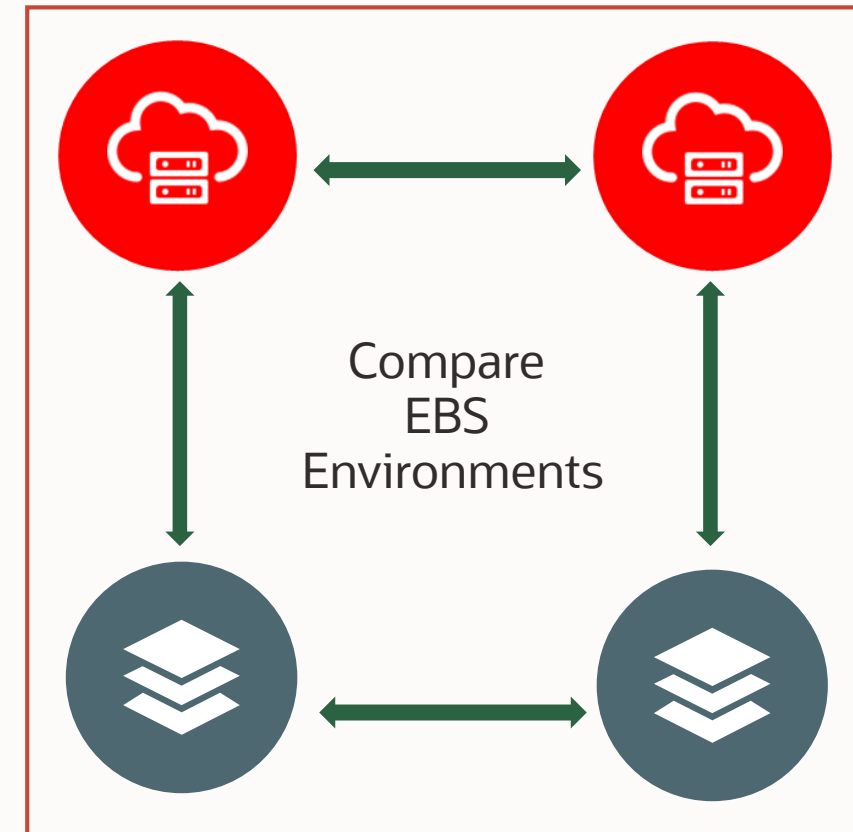
Compliance Standard	Rules mapped to the standard	Severity
Profile Settings	Check if all critical profiles are set correctly.	Critical
Profile Settings	Check if other profiles are set correctly.	Warning
Profile Settings	Check if no profile is missing.	Critical
Change Default Passwords	Checks if any database user with a default password exists.	Critical
Change Default Passwords	Checks if any application user with a default password exists.	Critical
Secure APPLSYSPUB	Checks if there is any unwanted privilege in the APPLSYSPUB account.	Warning
Use Secure Flag on DBC File	Checks if server security is on.	Warning
Migrate to Password Hash	Checks if the setting for hashed passwords are on.	Warning

Configuration Management

Compare Oracle E-Business Suite Technology Stack



- Applications system
- Workflow
- Concurrent Processing
- Patch information
- Custom objects
- Apps context
- Database context
- Database
- Hosts



Configuration Management

Compare Oracle E-Business Suite Technology Stack

Comparison Results: test 3 Page Refreshed Sep 12, 2016 12:53:59 PM EDT

Comparison & Drift Management > test 3 > hope_Oracle E-Business Suite

Show Only Differences

Configuration Properties for Oracle E-Business Suite View ☐ Side By Side ☒ List

View

Configuration Item	Identifier	Property Name	Reference Target	Compared Target	Reference Value	Compared Value
EBS_PROFILE_OPTION...	APPLICATION_SHORT_NAME:A...	SQL_VALIDATION	hope_Oracle E-Business...	PURPLE-Oracle E-Busin...	SQL="SELECT LOOKUP...	SQL="SELECT LOOKUP...
EBS_PROFILE_OPTION...	APPLICATION_SHORT_NAME:B...	PROFILE_OPTION_VALUE	hope_Oracle E-Business...	PURPLE-Oracle E-Busin...	http://ebs1.us.oracle.com...	http://bama1.us.oracle.cc
EBS_PROFILE_OPTION...	APPLICATION_SHORT_NAME:C...		hope_Oracle E-Business...	PURPLE-Oracle E-Busin...	Present	Not Present
EBS_PROFILE_OPTION...	APPLICATION_SHORT_NAME:C...	DESCRIPTION	hope_Oracle E-Business...	PURPLE-Oracle E-Busin...	Bank Account Security A...	
EBS_PROFILE_OPTION...	APPLICATION_SHORT_NAME:C...	LEVEL_ID	hope_Oracle E-Business...	PURPLE-Oracle E-Busin...	10001	
EBS_PROFILE_OPTION...	APPLICATION_SHORT_NAME:C...	PROFILE_OPTION_ID	hope_Oracle E-Business...	PURPLE-Oracle E-Busin...	3232	
EBS_PROFILE_OPTION...	APPLICATION_SHORT_NAME:C...	PROFILE_OPTION_VALUE	hope_Oracle E-Business...	PURPLE-Oracle E-Busin...	INTERNAL	
EBS_PROFILE_OPTION...	APPLICATION_SHORT_NAME:C...	SQL_VALIDATION	hope_Oracle E-Business...	PURPLE-Oracle E-Busin...	SQL="SELECT meaning ...	
EBS_PROFILE_OPTION...	APPLICATION_SHORT_NAME:C...	USER_PROFILE_OPTIO...	hope_Oracle E-Business...	PURPLE-Oracle E-Busin...	CE: Bank Account Securi...	
EBS_PROFILE_OPTION...	APPLICATION_SHORT_NAME:C...		hope_Oracle E-Business...	PURPLE-Oracle E-Busin...	Not Present	Present
EBS_PROFILE_OPTION...	APPLICATION_SHORT_NAME:C...	DESCRIPTION	hope_Oracle E-Business...	PURPLE-Oracle E-Busin...		
EBS_PROFILE_OPTION...	APPLICATION_SHORT_NAME:C...	LEVEL_ID	hope_Oracle E-Business...	PURPLE-Oracle E-Busin...		
EBS_PROFILE_OPTION...	APPLICATION_SHORT_NAME:C...	PROFILE_OPTION_ID	hope_Oracle E-Business...	PURPLE-Oracle E-Busin...		
EBS_PROFILE_OPTION...	APPLICATION_SHORT_NAME:C...	PROFILE_OPTION_VALUE	hope_Oracle E-Business...	PURPLE-Oracle E-Busin...		
EBS_PROFILE_OPTION...	APPLICATION_SHORT_NAME:C...	SQL_VALIDATION	hope_Oracle E-Business...	PURPLE-Oracle E-Busin...		SQL="SELECT lookup_o

- Application Configuration Console integrated into EM
- Configuration Comparison Templates
 - Control how and what is compared
 - Ability to ignore certain differences
- Ad-hoc or schedule comparisons
- Automatic detection & notification
- 12.2 Run/Patch edition comparisons
- Periodic Snapshot comparisons

Application Management Suite 13c

—
Change Management Features

Change Management Features



- Change Management Approval
- Customization Management
- Patch Management
- Smart Clone

Change Approval Framework

Oracle E-Business Suite Management

Update Request: both approvers test_drop8 Thu Mar 12 09:03:58 UTC 2015

* Indicates required field

Module Patch Manager
Requester Name REQUEST_PM
Justification test drop 8

Action

* Comments

Targets

Target Name

UNIT19774-Oracle E-Business Suite

Notification E-mail(s)

E-mail Address

angelo.rosado@oracle.com

Related History

Name	Action	Comments	Updated By	Updated Date
both approvers test_drop8 Thu Mar 12 09:03:58 UTC 2015	Submitted for Approval	test drop 8	REQUEST_PM	Mar 12, 2015 9:15:18 AM UTC

- Approvals for Customizations & Patches
- Role based privileges
- Reporting and auditing capabilities
- Provides notifications on pending approval requests and status of changes to specific users or user groups

Customization Management

Oracle E-Business Suite Management

Oracle E-Business Suite Management > Customization Manager
Customization Manager

Page Refreshed Oct 13, 2015 1:32:13 PM PDT

Packages

Search Name Advanced Search

Procedure Patch Oracle E-Business Suite Online

Deploy

Update Metadata

Report

Create Like

Create

Upload

Select	Name	ID	Release	Product	Type	Status	Owner	Last Updated	Update	Delete
<input checked="" type="radio"/>	TestPack1	100000000013	R.12	oam	AOL	Succeeded	SYSMAN	May 31, 2015 5:29:18 AM PDT		
<input type="radio"/>	Copy of TestPack1	100000000021	R.12	xxco	AOL	Failed	SYSMAN	May 29, 2015 3:06:03 AM PDT		
<input type="radio"/>	pack5	100000000009	R.12	xxco	AOL	Released	SYSMAN	May 27, 2015 11:25:37 PM PDT		
<input type="radio"/>	pack3	100000000005	11i	xxco	AOL	Succeeded	SYSMAN	May 7, 2015 3:05:46 AM PDT		
<input type="radio"/>	pack2	100000000004	R.12	xxco	AOL	Succeeded	SYSMAN	May 7, 2015 12:01:16 AM PDT		
<input type="radio"/>	pack1	100000000002	R.12	xxco	AOL	Succeeded	SYSMAN	May 6, 2015 4:57:18 AM PDT		

Related Links

[File Source Mapping](#)
[E-Business Suite Mapping](#)
[Package Report](#)

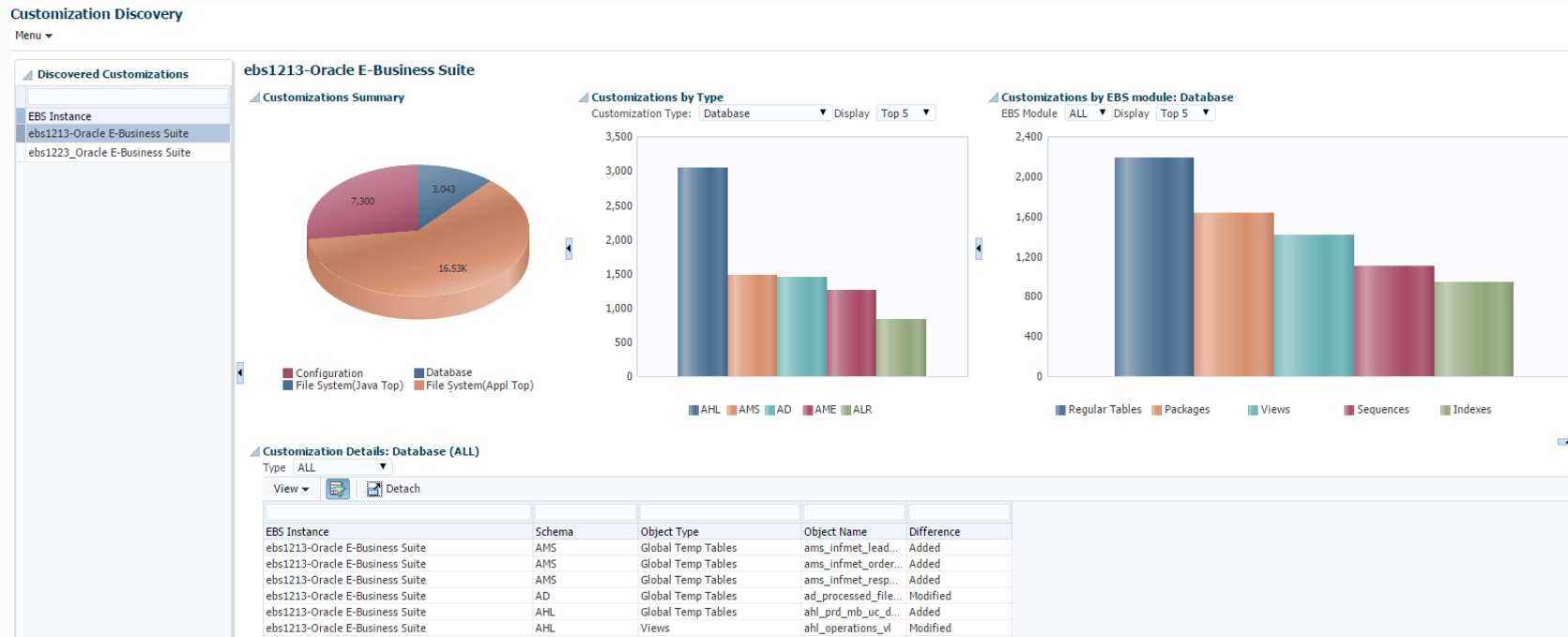
[Custom Applications](#)
[Custom Application Requests](#)
[File Metadata Repository](#)

[Custom Standards](#)
[Customization Discovery](#)
[Customization Discovery Requests](#)

- Ability to package, deploy and promote customizations across EBS instances
- Over 175 customization file types supported
- Interface with external Source Code Version Control systems
- Validation of the custom objects using:
 - Oracle Defined Standards
 - Optionally, User Defined Standard
- Validates and reports readiness of customizations for Online Patching
- Discovery & reporting of inventory of EBS customizations

Customization Discovery & Reporting

Application & Database Objects



- Custom Files (APPL_TOP & JAVA_TOP)
- Custom Configurations (Custom Menus, Functions, Grants, Profiles, etc.)
- Database Objects (Regular Tables, Partitioned Tables, Views, Indexes, etc.)

Patch Management

Patch Oracle E-Business Suite

Deployment Details Patch Details Options Review

Patch Oracle E-Business Suite: Review

Save Back Step 4 of 4 Next Submit Cancel

Deployment Details

Patch Deployment Name ADOP Run#3
Target System Name tst1225_Oracle E-Business Suite
Deployment Procedure Patch Oracle E-Business Suite Online
Description
Justification Go
Requestor SYSMAN
Notification Email(s)

Patch Application Deployment Procedure

Start Option Start Immediately
Indefinite Grace Period ☒

Prepare

Pause After Prepare ☐

Apply

Pause After Apply ☐
Hotpatch ☐
Actualize All Objects ☐
Disable checkfile feature ☐

Finalize

Finalize Mode Quick
Pause After Finalize ☐

Cutover Deployment Procedure

Cutover Choice Start Immediately
Indefinite Cutover Grace Period ☒

Cutover

Restart Middle Tier ☒
Pause After Cutover ☐
Error out if EBS has abandon node(s) ☒

Cleanup

Cleanup Mode Quick

FS Clone

Run Full File System Synchronization ☐

Notifications

Action Required ☒
Problems ☒
Succeeded ☐
Running ☐
Suspended ☐

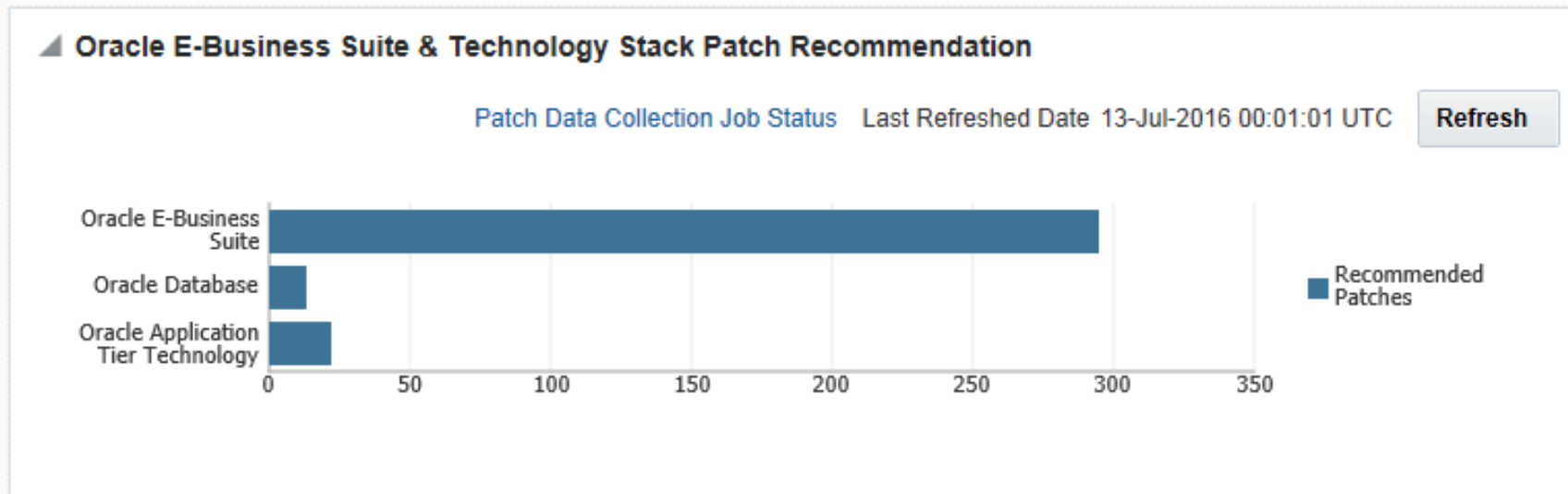
Selected Patches

Merge Patches ☒

Patch Number	Platform	Language	Description	Readme	Created By	Replaced By	Patch Name	Product	Release	Files
17766337	Linux x86	American English	R.12.AD.C.delta.4	bd		18283295 19197270		Oracle Application...	Applications R.12 (...)	p17766337_R12.AD.C...
17893964	Generic Platform	American English	R.12.TXK.C.DELTA.4	bd		18288881 19330775		Oracle Application...	Applications R.12.2	p17893964_R12.TXK.C...
19270816	Generic Platform	American English	10FF:12.2.2+16...	bd				Oracle Application...	Applications R.12.2	p19270816_R12.OAM.C...

- Simplified online patching:
 - Patch deployment procedure
 - Cutover deployment procedure
 - FS clone
 - Advanced search filtering
 - Set number of workers
 - "No Cutover" is the new default option
 - Set Internal Concurrent Manager duration before shutting down
- Check patch prerequisites
- Patch options, merge, scheduling
- Status Notifications
- View logs online
- View & search applied patches

Patch Recommendations Summary



- Complete inventory of unapplied recommended E-Business Suite patches including, Database, Forms and Reports, WebLogic Server, FMW Web tier, and FMW Common.
- Code level recommendations for EBS products and product families
- EBS recommendations integrated with Patch Management
- EBS Database and WebLogic recommendations integrated with EM Patch Plan

Patch Recommendations

Sample Screen Shots

EBS Applications

ORACLE Enterprise Manager Cloud Control 13c

Oracle E-Business Suite & Technology Stack Patch Recommendation

Oracle E-Business Suite Management > ebs1228_Oracle E-Business Suite > Oracle E-Business Suite & Technology Stack Patch Recommendation

E-Business Suite Application Tier Technology Database

Patches Recommended for Oracle E-Business Suite

Patch Information Bundle Creation Date 12-Jul-2016 10:11:36 UTC Unapplied Patches 295

Last Refreshed Date 13-Jul-2016 00:01:01 UTC Applied Patch Data Collection Date 14-Jul-2016 12:40:47 UTC Refresh

Search Patch Number

View Patch Deployment Procedure Patch Oracle E-Business Suite Online Apply Patches Export Detach

Product Short Name	Product Name	Patch Count	Patch Number	Readme	Description
ad	Oracle Applicat...	3			
ado	Oracle Applicat...	1			
ap	Oracle Payables	1			
22590844 R12 AP C			22590844		New Patch to handle missed dependency registration in Patch 21415235
ben	Oracle Advanc...	1			
20056665 R12 BEN C			20056665		ICD FUNCTION IN SSHR FAILS

Database

ORACLE Enterprise Manager Cloud Control 13c

Oracle E-Business Suite & Technology Stack Patch Recommendation

Oracle E-Business Suite Management > ebs1228_Oracle E-Business Suite > Oracle E-Business Suite & Technology Stack Patch Recommendation

E-Business Suite Application Tier Technology Database

Patches Recommended for Oracle Database

Patch Recommendation Information Creation Date 31-May-2016 14:52:47 UTC Last Refreshed Date 13-Jul-2016 00:01:01 UTC

Distinct Unapplied Patches 13

View Create EM Patch Plan Add To Existing EM Patch Plan Schedule EM Patch Plan Refresh Export Detach

Patch Number	Patch Version	Footnote	Description
rws3270719.us.oracle.com			
ebs1226			
13417321	11.2.0.4.0		DST 18 : HALF-YEARLY DST PATCHES, MAY 2012
20489666	11.2.0.4.0		MERGE REQUEST ON TOP OF 11.2.0.4.0 FOR BUGS 17912217 20294666
20523280	11.2.0.4.0		N-APPLY BUNDLE PATCH II FOR RDBMS 11.2.0.4.0 WITH EBS RELEASE 12.2
20678391	11.2.0.4.0		MERGE REQUEST ON TOP OF 11.2.0.4.0 FOR BUGS 16992075 17901041
21289665	11.2.0.4.0		EXPORT IS SLOW WAITING FOR STREAMS AQ: ENQUEUE BLOCKED ON LOW MEMORY
21321429	11.2.0.4.0		STALE STATS ON SUMDELTA CAUSING PERFORMANCE ISSUE
21864513	11.2.0.4.0		EBS12.2 : ORA 6544 (PHF_FAST_VALIDATE:KOLDIN DEP NUM DIFFERS) W/ UTLRP

Apps Tier Technology

ORACLE Enterprise Manager Cloud Control 13c

Oracle E-Business Suite & Technology Stack Patch Recommendation

Oracle E-Business Suite Management > ebs1228_Oracle E-Business Suite > Oracle E-Business Suite & Technology Stack Patch Recommendation

E-Business Suite Application Tier Technology Database

Forms & Reports Oracle WebLogic Server WebTier Oracle FMW Common

Patches Recommended for Oracle Forms and Reports 10.1.2.3 Home

Patch Recommendation Information Creation Date 24-May-2016 14:14:29 UTC Last Refreshed Date 13-Jul-2016 00:01:01 UTC

Distinct Unapplied Patches 2 Online Patching Cycle Status Not Started Start Online Patching Cycle

View Refresh Export Detach

Patch Number	Patch Version	Footnote	Description
rws327071...			
run			
89...	10.1.2.3.0		APPS1012: ALIGNMENT INCORRECT WHEN USING VIETNAMESE COMBINING CHARACTERS
22...	10.1.2.3.2		MERGE REQUEST ON TOP OF 10.1.2.3.2 PSU FOR BUGS 22283356 21024122 22351071
patch			
89...	10.1.2.3.0		APPS1012: ALIGNMENT INCORRECT WHEN USING VIETNAMESE COMBINING CHARACTERS
22...	10.1.2.3.2		MERGE REQUEST ON TOP OF 10.1.2.3.2 PSU FOR BUGS 22283356 21024122 22351071

WLS patches

ORACLE Enterprise Manager Cloud Control 13c

Oracle E-Business Suite & Technology Stack Patch Recommendation

Oracle E-Business Suite Management > ebs1228_Oracle E-Business Suite > Oracle E-Business Suite & Technology Stack Patch Recommendation

E-Business Suite Application Tier Technology Database

Forms & Reports Oracle WebLogic Server WebTier Oracle FMW Common

Patches Recommended for Oracle Weblogic Server

Patch Recommendation Information Creation Date 24-May-2016 14:33:22 UTC Last Refreshed Date 13-Jul-2016 00:01:01 UTC

Distinct Unapplied Patches 6 Online Patching Cycle Status Not Started Start Online Patching Cycle

View Create EM Patch Plan Add To Existing EM Patch Plan Schedule EM Patch Plan Refresh Export Detach

Patch Number	Patch Version	Footnote	Description
rws327071...			
run			
13...	10.3.6		SU Patch [YVDZ]: 12C DEMO CERTS NOT GENERATED
13...	10.3.6.0.12		SU Patch [L34G]: 10.3.6.0.12 Overlay: STATEMENT CACHE SETUP IMPROVEMENTS USING WEBLOGIC CONSOLE
17...	10.3.6		SU Patch [XECU]: P57 PATCH SET WITH JDK 7 - NATIVE LIBRARY STACKDUMP.DLL IS MISSING
20...	10.3.6		SU Patch [EJUV]: WLS PATCH SET UPDATE 10.3.6.0.12
22...	10.3.6.0.12		SU Patch [GKSN]: 10.3.6.0.12 Overlay: MERGE REQUEST ON TOP OF WLS PSU 10.3.6.0.12 FOR BUGS 13337000 21562338
22...	10.3.6		SU Patch [DISE]: UPDATE JAVAMAIL API LIBRARY VERSION TO 1.5.4 WITHIN WLS 10.3.6



Deploying DB & WLS patches using EM patch plans

ORACLE Enterprise Manager Cloud Control 13c

Enterprise ▼Targets ▼Favorites ▼History ▼Setup ▼

Search 🔍

SYSMAN ▼

Page Refreshed Jun 24, 2016 10:29:30 AM PDT ↻

Oracle E-Business Suite & Technology Stack Patch Recommendation

Oracle E-Business Suite Management > cln7_Oracle E-Business Suite > Oracle E-Business Suite & Technology Stack Patch Recommendation

E-Business SuiteApplication Tier TechnologyDatabase

Patches Recommended for Oracle Database

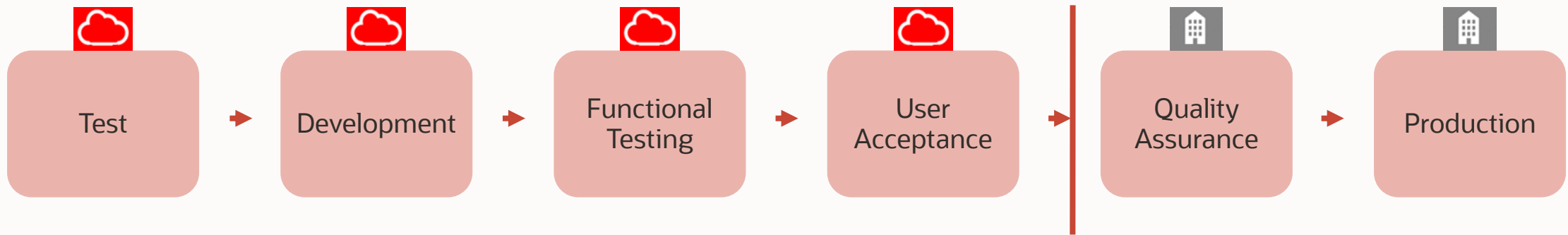
Patch Recommendation Information Creation Date 31-May-2016 14:52:47 UTCLast Refreshed Date 24-Jun-2016 00:01:19 UTC

Distinct Unapplied Patches 20

View ▼Create EM Patch PlanAdd To Existing EM Patch PlanSchedule EM Patch PlanRefreshExportDetach

















Patch Number	Patch Version	Footnote	Description
▲ rws322143...			
▲ cln7			
18...	12.1.0.2.0		DBMS_PARALLEL_EXECUTE PERFORMANCE DELAY AFTER UPGRADE TO 11.2.0.4
19...	12.1.0.2.0		INTERMITTENT WRONG RESULTS WHEN USING PLSQL RESULT CACHE FUNCTION
20...	12.1.0.2.0		ORA-39126, ORA-1427 ON EXPDP
20...	12.1.0.2.0		ORA-8103 ON QUERIES AGAINST BLOCK TYP=58, NO DDLS
20...	12.1.0.2.0		MERGE REQUEST ON TOP OF 12.1.0.2.0 FOR BUGS 18607546 19791273
20...	12.1.0.2.0		ADD 4 NEW DEFAULT DB USERS FOR EBS TO SYS.DEFAULT_PWD\$
21...	12.1.0.2.0		ORA-00600-[QSMKZSI_SETUP_IVQBC:1] ERROR WITH ALTER MATERIALIZED VIEW

Patch Promotion Policies



- Promote Oracle Patches & Custom Packages from pre-production to production instance
- Approvals required for each target prior to patch application
- View all the patches applied/not-applied for each target in a single UI
- Bundle patches while promoting patches to each target
- Only Super Administrators can define patch promotion policy
- Only Super Administrators can bypass patch promotion policy for emergency patching

Patch Promotion Policies: Patches Applied or Not?

Patch Promotions						
View ▾	Policy	policy1 ▾	 Promote	 Search	 Detach	  
Patch	Language	Readme	Deployment Details	atqa2130-Oracle E-Business Suite	sc1226_Oracle E-Business Suite	amp1225_Oracle E-Business Suite
20600201	American English			✓	✗	✗
16316030	American English			✓	✓	✗
14644892	American English			✓	✓	✗
100000000004	American English			✓	✓	✓
100000000002	American English			✓	✓	✓

- Ability to define a promotion policy that allows users to apply patches in a sequence to the pre-production instances prior to applying the patches to production instance.

Automated Cloning & Scalability

Oracle E-Business Suite Management Page Refreshed Oct 13, 2015 8:56:29 PM UTC

Smart Clone for R12, 12.2.x

Source Instance Target Database Target Application Stage Directories Credentials Schedule Review

Cancel Back Step 2 of 7 Next

Target Database Details

☐ Database is already cloned and discovered
☒ Let Smart Clone procedure do database cloning

Database Clone Type: Use Custom Commands

* Database Type: ☐ Single ☒ Real Application Cluster

* Apps User

* Apps Password

Target Database Node(s)

* Oracle Global Name

* Database Service

Delete... Add

Full Host	Virtual Hostname	Database Sid	Database Port	Listener Name	Oracle Home	TNS Admin Directory
No data to display.						

Enable SCAN Configuration

List of Scripts for Database Cloning

Delete... Add

Script along with the arguments	Input Parameters each in new line	Host(s)
No data to display.		

- Automated Cloning:
 - On-premises only
 - Facilitates EBS database & Apps tier cloning using single procedure
 - Single-Node, Multi-Node
 - Shared File System, RAC support
 - Customize pre & post cloning steps
 - Schedule cloning during off hours
 - Save interview templates for reuse
 - Supports dual file system configurations
- Scale in / Scale out managed servers & application tier nodes

Application Management Suite: Key capabilities summary

Lifecycle Management for Oracle Cloud and On-premises

Monitoring & Management

- Hybrid Cloud Management
- Monitoring
 - Based on metric thresholds
 - Concurrent Processing, Users, Performance
- Configuration Management and Comparisons
- Enforce Compliance Standards
- Instance Administration
- Real User Experience Insight
- JVMD integration (EBS 12.2)

Change Management

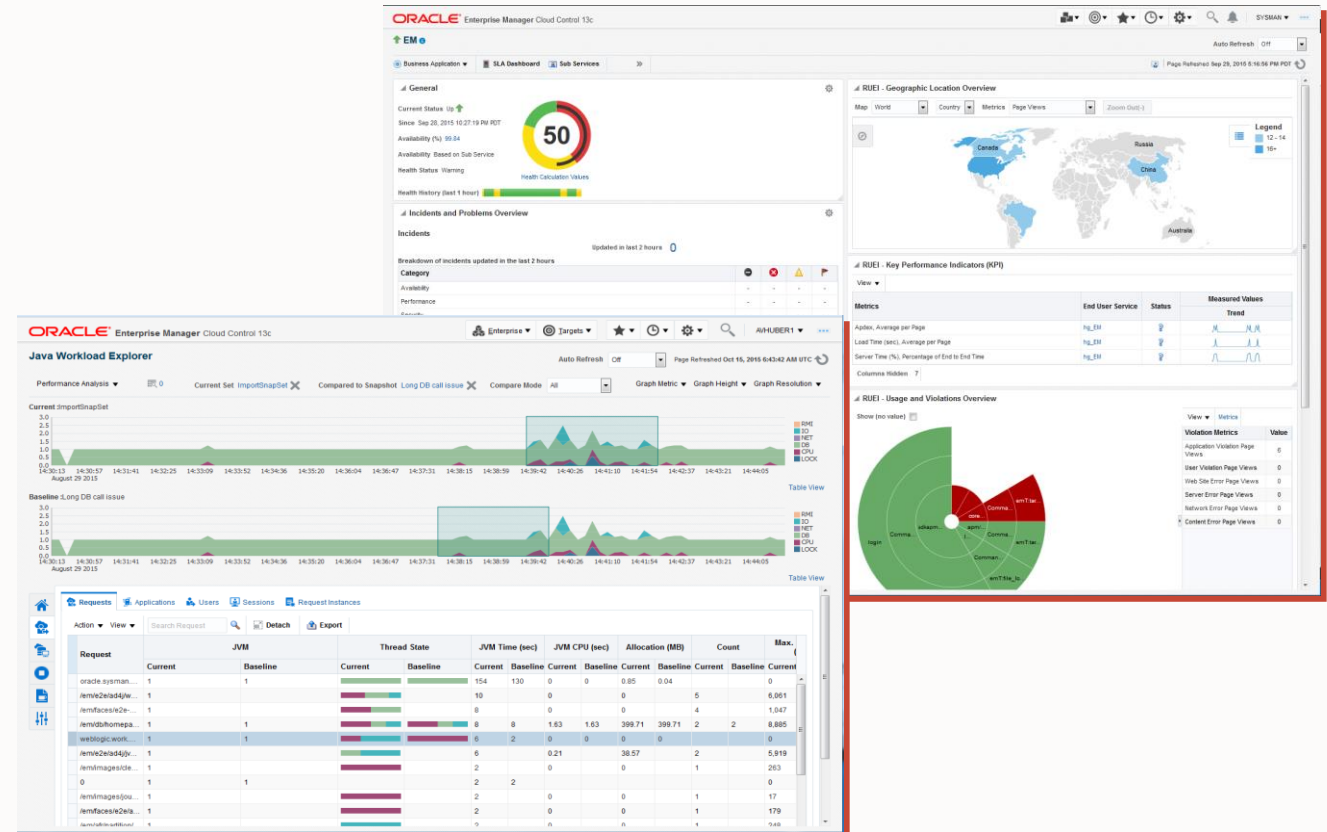
- Customization Management
 - Discover and view all EBS customizations
 - Validate, Package and Migrate customizations
- Patch Management
 - Automated 12.1.3 & 12.2 patching process
 - EBS and Tech Stack patch recommendations
 - Patch Promotion Policies for migration
- Cloning (On-premises)
 - UI to facilitate DB and Apps tier cloning
 - Scale out: Add managed application servers

Application Management Suite 13c

—
Real User Experience Insight

Real User Experience Insight for E-Business Suite

- End User Management
 - Real User monitoring: full, all sessions capture and alerting capabilities
 - Synthetic monitoring and SLA management
- Geo-location Reporting
- Integration with JVM Diagnostics
 - Thread and code-line level Java Diagnostics
 - Drilldown to DB diagnostics



Leveraging Enterprise Manager 13c

Packaged Apps

- Application Management Suite for EBS
- Application Management Suite for PSFT
- Application Management Suite for JDE
- Application Management Suite for (Siebel, or Fusion)

Middleware & Identity Management

- WebLogic Server Management Pack EE
- SOA Management Pack EE
- Management Pack Plus for Identity Management

Database Management

- Oracle Diagnostics Pack
- Oracle Tuning Pack
- Database Lifecycle Management Pack
- Data Masking Pack

Cloud Management

- Oracle Cloud Management Pack for Oracle Database
- Oracle Cloud Management Pack for Oracle Fusion Middleware
- Oracle Cloud Management Pack for Testing

Application Management Suite 13c

Benefits

Benefits of Application Management Suite

Benefits

Enablers

Reduce Complexity

- Automation of Hybrid Cloud Management processes
- Seamless management of on-premises and Oracle cloud EBS environments

Increase Efficiency

- Automation of routine monitoring tasks
- Enforce Standardization & Compliance across the Enterprise

Lower Costs

- Efficient resource utilization
- Automation of Cloning, Scaling, Patching, and Customizations

Reduce Risks

- Proactively manage high availability of applications
- Manage & Diagnose End-to-End technology stack Performance

Learn More

Additional Resources

Getting Started - AMS

- Application Management Suite Getting Started MOS Note (Doc ID [2676355.1](#))

AMS Collateral

- [DataSheet](#)
- [Enterprise Manager Portal](#)

Documentation

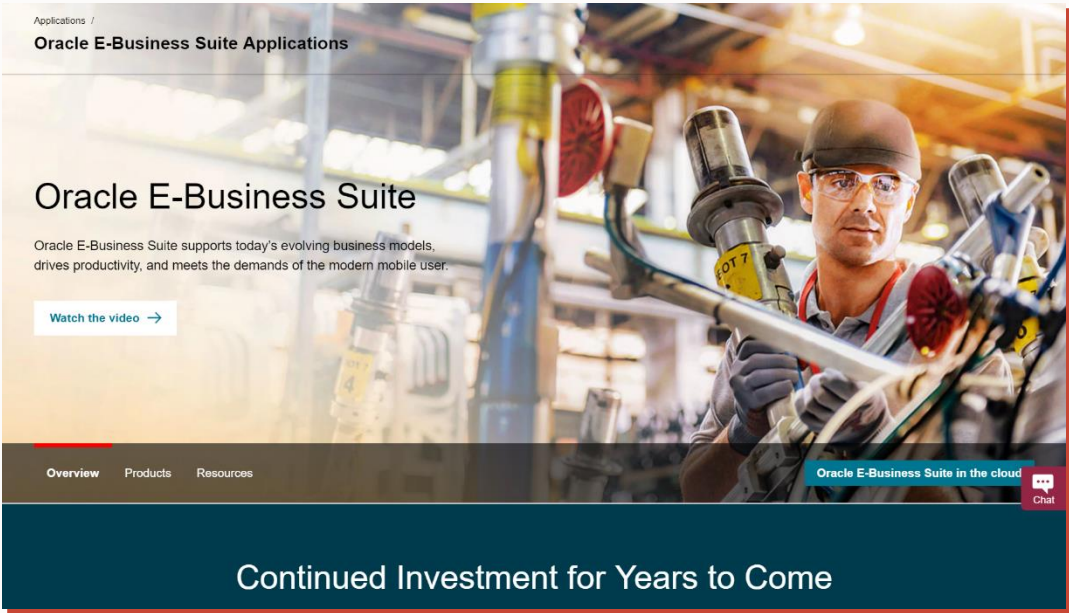
- [Oracle Application Management Pack for Oracle E-Business Suite Guide Release 13.4.1.0.0](#)
- [Oracle Application Management Pack for Oracle E-Business Suite Metric Reference Manual](#)

Support Resources

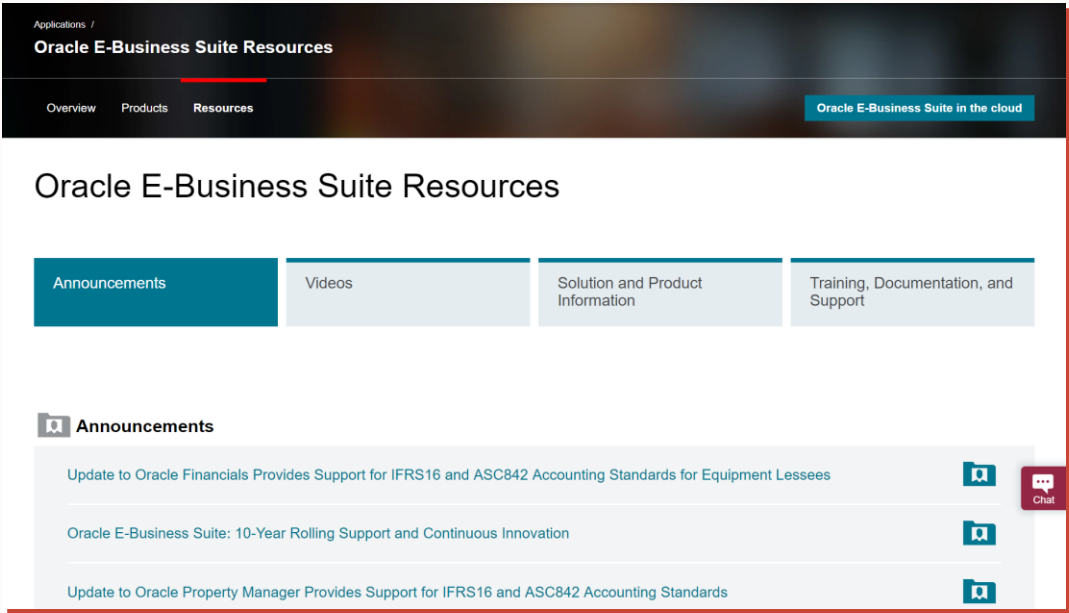
- Support Policy Quick Reference (Doc ID [1603898.1](#))
- [Oracle E-Business Suite Technology Blog](#)
- [Oracle E-Business Suite and Oracle Cloud Blog](#)

Where to Find EBS News and Information

www.oracle.com/ebs



Strategy ~ Roadmap ~ Path to Cloud ~ Featured Resources



Announcements ~ Videos ~ Product Info ~ Training ~ Doc





ORACLE

Oracle Enterprise Manager Application Management Pack for Siebel

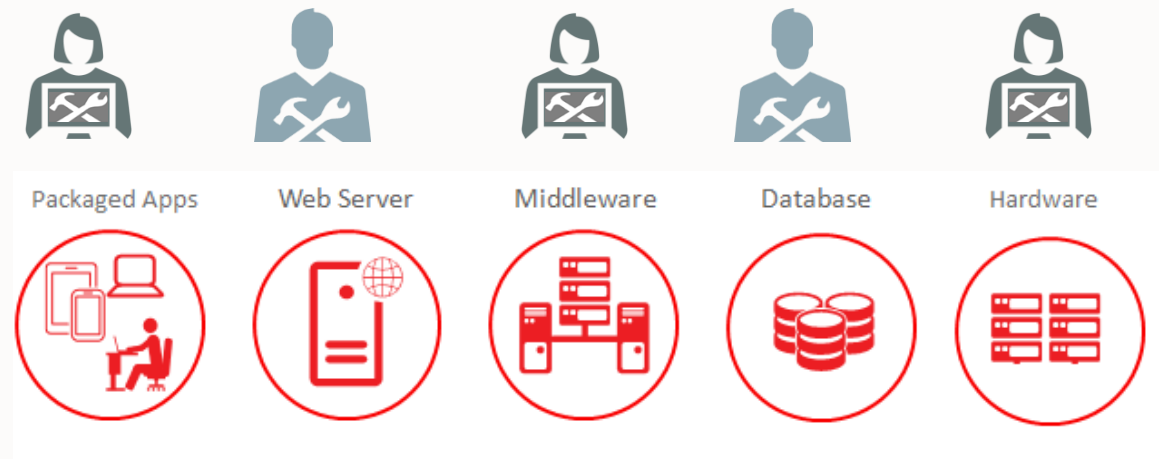
Agnes Zhang

Director, Oracle Product Management



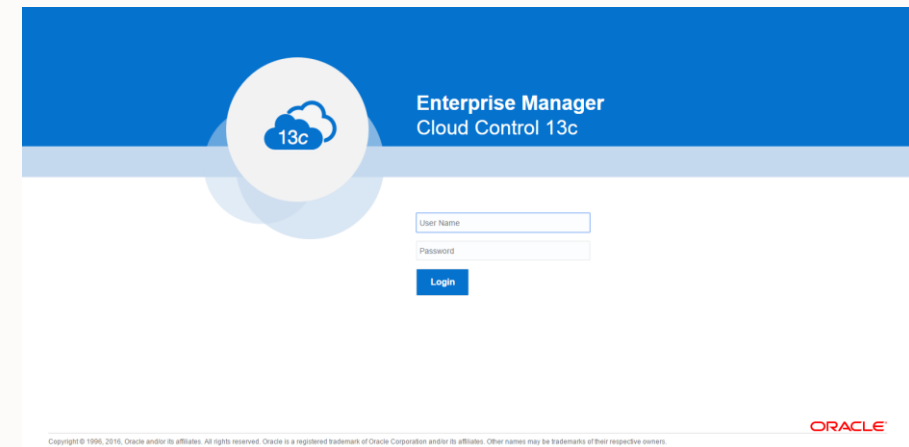
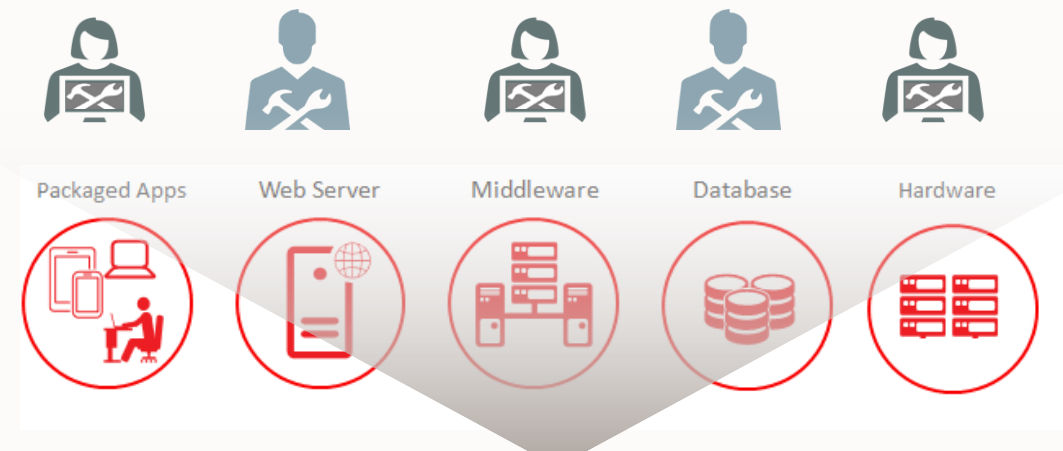
Monitoring Challenges for Siebel Environment

- Highly distributed multi-target environment
- No centralized repository or management point
- Lack of application performance analysis
- Hard to track configuration changes



Application Management Pack for Siebel

- Consists of two products
 - **Siebel Plug-in:** server side monitoring
 - **Real User Experience Insight (RUEI):** client side monitoring
- An integrated solution for managing the entire Siebel Enterprise
- Leverages the capabilities of Oracle Enterprise Manager Cloud Control in configuration, management, application performance management, automation, and service-level management



Application Management Pack for Siebel – Key Functionalities

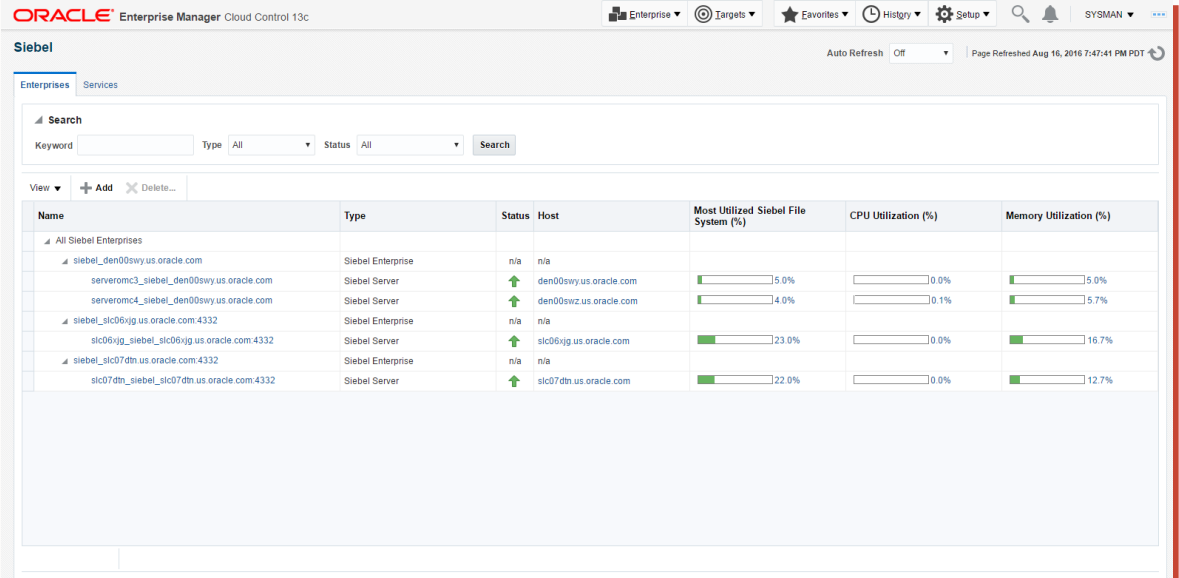
- Centralized console that helps IT administrators manage Siebel multi-target environment. Intuitive user interface to display environment information in an organized way
- Monitor the health and capacity utilization of your Siebel Server environment, the hosts for these servers, and the Server Components deployed within the Siebel Application Servers
- Track configuration changes you have made to Siebel Application Servers and Server Component parameters
- Monitor actual end-user response time as well as response time from synthetic service test transactions
- Diagnose performance and availability problems through performance analysis
- Monitor Event Logs

Siebel Specific Metrics

Siebel Metrics	Examples
Siebel Component Metrics	Average Object Manager Response Time, Average Connect Time for Object Manager Sessions, Average # of Requests Per Object Manager Session, Process ID, etc.
Siebel Component Group Target Metrics	Start Time, Status
Siebel Gateway Target Metrics	Start Time, Response
Siebel Server Target Metrics	File System Usage (%), Average Time for SQL Execute Operations, CPU Usage, Memory Usage, etc.
Siebel Workflow Target Metrics	# of Monitored Process Instances Failed State, Total # of Workflow Policy Instances in Waiting State, etc.

Siebel Enterprise Discovery Process

- Display Siebel Enterprise topology in a single view of EM console
- Siebel Enterprise is displayed in a hierarchical manner:
 - List all Siebel Enterprises
 - List all Siebel Servers under each Enterprise
 - Display key metrics for Siebel Enterprises and Siebel Servers
- Allow system administrators to have a quick overview about Siebel target system health



The screenshot displays the Oracle Enterprise Manager Cloud Control 13c interface for Siebel. The top navigation bar includes 'Enterprise', 'Targets', 'Favorites', 'History', 'Setup', and a search icon. The 'Siebel' section is active, showing 'Enterprises' and 'Services' tabs. A search bar is present with fields for 'Keyword', 'Type', and 'Status'. Below the search bar, a table lists Siebel Enterprises and Servers. The table columns are: Name, Type, Status, Host, Most Utilized Siebel File System (%), CPU Utilization (%), and Memory Utilization (%). The table shows a hierarchical structure where Siebel Enterprises are listed first, followed by their associated Siebel Servers. Each entry includes a status icon (green up arrow for 'Up', green down arrow for 'Down', or 'n/a') and a host name. The 'Most Utilized Siebel File System (%)', 'CPU Utilization (%)', and 'Memory Utilization (%)' columns show progress bars and percentage values.

Name	Type	Status	Host	Most Utilized Siebel File System (%)	CPU Utilization (%)	Memory Utilization (%)
└ All Siebel Enterprises						
└ siebel_den00swy.us.oracle.com	Siebel Enterprise	n/a	n/a			
└ serveromc3_siebel_den00swy.us.oracle.com	Siebel Server	↑	den00swy.us.oracle.com	5.0%	0.0%	5.0%
└ serveromc4_siebel_den00swy.us.oracle.com	Siebel Server	↑	den00swz.us.oracle.com	4.0%	0.1%	5.7%
└ siebel_slc06vjg.us.oracle.com.4332	Siebel Enterprise	n/a	n/a			
└ slc06vjg_siebel_slc06vjg.us.oracle.com.4332	Siebel Server	↑	slc06vjg.us.oracle.com	23.0%	0.0%	16.7%
└ siebel_slc07dtn.us.oracle.com.4332	Siebel Enterprise	n/a	n/a			
└ slc07dtn_siebel_slc07dtn.us.oracle.com.4332	Siebel Server	↑	slc07dtn.us.oracle.com	22.0%	0.0%	12.7%

Siebel Environment Monitoring

Siebel Enterprise Dashboard

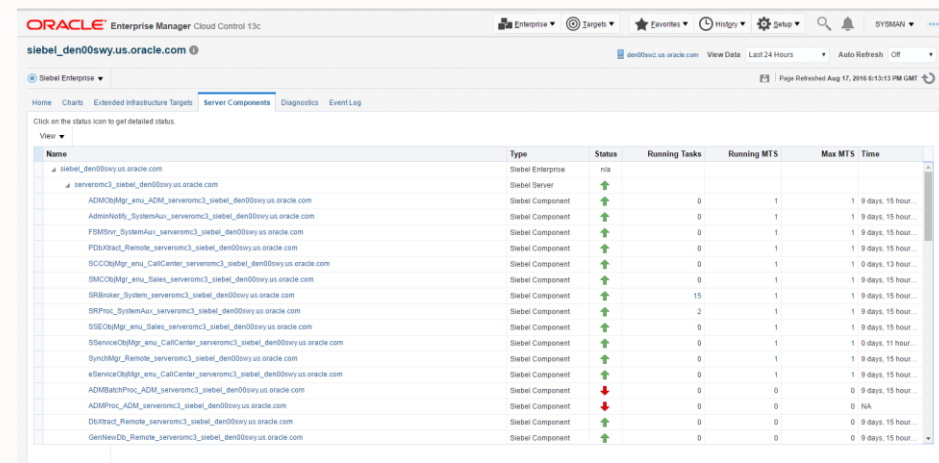
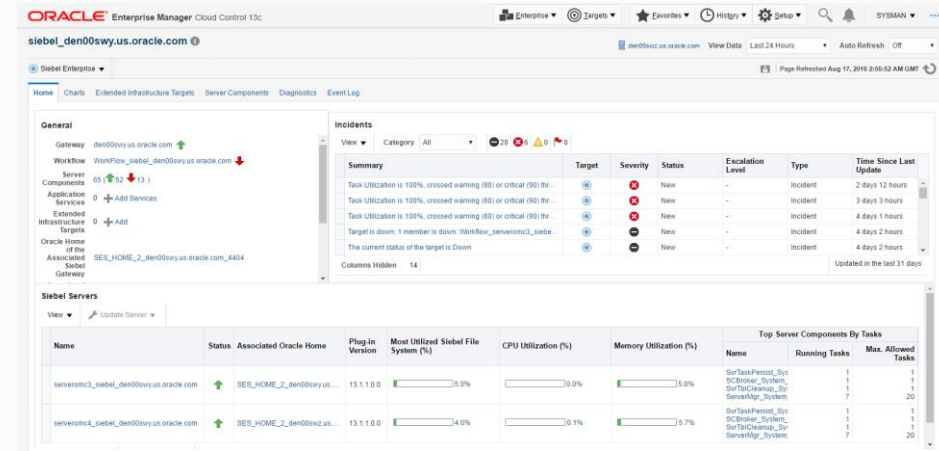
- Enterprise general status
- Incidents tracking
- Siebel Server status

Siebel Server Dashboard

- Siebel Server general status
- Incidents tracking
- Siebel Server Component status

Siebel Server Components Dashboard

- Status, Running Tasks, Running MTS, etc.



Siebel Service Monitoring



- A service is an entity that provides a useful function to its users. It is used to model one or more business functions or applications in an enterprise.
 - E.g. Siebel Call Center, Siebel Services
- Service in EM defines the key measurements (availability, performance, and usage) required for service level management. Once defined, a service can be logically combined with other services to form an aggregate service.
- Applications supported by Siebel Servers can be monitored as services in EM
 - E.g. monitor Siebel Call Center application as a Call Center service

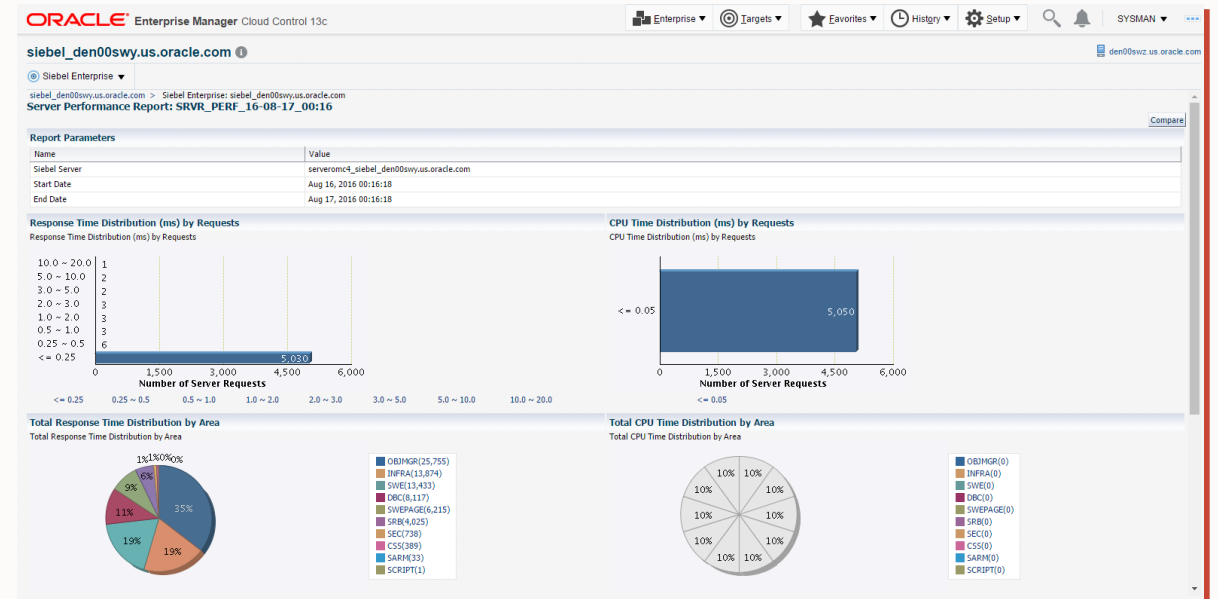
Performance Analysis

Server Performance Report

- Diagnose and identify Siebel Server performance issues, one server at a time
- Providing access to response time, CPU usage, and memory data for selected server components

User Performance Report

- Diagnose and identify user session performance issues for requests that a specific user initiates



ORACLE

Monitor Real End-User & Diagnose in Production using Real User Experience Insight (RUEI) and Enterprise Manager 13.4

Enterprise Manager Middleware Management

Enterprise Manager

Product Management Team

Safe harbor statement



The following 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, timing, and pricing of any features or functionality described for Oracle's products may change and remains at the sole discretion of Oracle Corporation.

End User Application Monitoring & Production Diagnostics

Monitor from business perspectives with application-centric functionalities

- Real User Experience Insight (RUEI)
 - Captures all the end user activity
 - Monitors the performance of applications from the end-user perspectives
 - Proactive alerting and thresholds
 - Now runs on Oracle cloud as RUEI App in Oracle Marketplace
- Java Workload Explorer (JWE)
 - Diagnoses performance problems in Java application in the production environment
 - No need to reproduce in QA environment.
 - Identifies Java problems or Database issues without application downtime
 - RUEI and JWE together provides APM solution in Enterprise Manager (EM)
- EM app for Grafana
 - Quickly create custom EM dashboards in Grafana
 - Integrated with Enterprise Manager schema
 - Out-of-the-box WebLogic dashboards based on the data monitored by EM

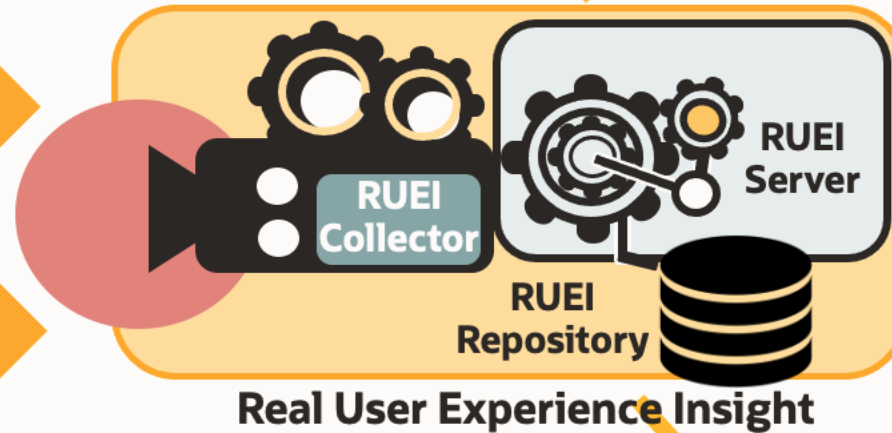
End User Application Monitoring - Real User Experience Insight (RUEI)

RUEI answers your questions for...

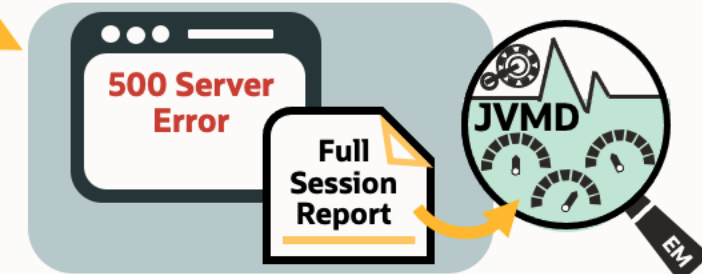
Internal Business Application



Online Shopping Website



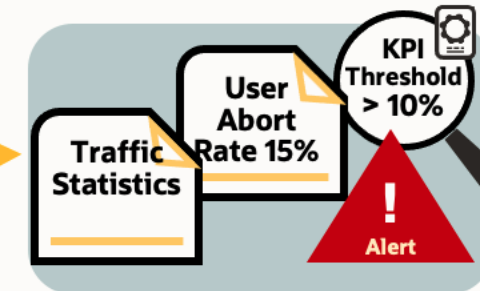
I cannot reproduce.
What was the error
they saw?



?

IT Administrator

How many customers
came to my store, and
what % of them actually
purchased products?



?

Business Application owner



User Session Diagnostics - Full Session Replay

Review complete user sessions

- Complete set of HTTP requests & response, raw and rendered HTML content
- Filter the sessions by Application, User-id, IP address or ECID (Execution Context ID) for a specified timeframe

The screenshot displays the Oracle Enterprise Manager Cloud Control 13c interface for a Full Session Replay. The main table shows activities for the WineCellar application, including BackendUpdates and wineUpdateService.jsp. A detailed view of a specific request is shown on the right, including Request Headers, Response Headers, and Response Content. Annotations highlight the response content in rendered HTML, HTTP Requests headers, and HTTP Response headers and contents.

Activity Table:

Activity	Time	Timing	Info
WineCellar BackendUpdates UpdateLevel1	6/19/2020 11:59:59 ...	5.8 s	
WineCellar BackendUpdates UpdateLevel1	6/19/2020 12:00:08 ...	7.4 s	
WineCellar BackendUpdates UpdateLevel1	6/19/2020 12:00:18 ...	5.6 s	
WineCellar BackendUpdates UpdateLevel2	6/19/2020 12:00:27 ...	6.6 s	

Full Session Replay Source View:

Request Headers (5)

Name	Value
User-Agent	Wget/1.12 (linux-gnu)
Accept	/*/*
Host	us.oracle.com:7703
Connection	Keep-Alive
X-Forwarded-For	148.87.19.206

Response Headers (6)

Name	Value
Connection	Keep-Alive
Date	Fri, 19 Jun 2020 18:59:59 GMT
Content-Length	342
Content-Type	text/html; charset=ISO-8859-1
X-ORACLE-DMS-ECID	fe288664-847f-42e3-94ce-efc4a40dd184-005e94c0
Set-Cookie	JSESSIONID=J3jN87BPcxSi98168UtzY-zISUAPBVA9OKK9PBGHdtkwvF006Pv1!-824918004; path=/; HttpOnly

Response Content:

```
<html>
<head>
<title>NewGen Wine Cellar app - Update data and reload the cache
<script type="text/javascript">
</script>
</head>
```


User Session Diagnostics– Integration with Java Workload Explorer

Trace JVM transaction from session diagnostic

- Click out to open Java Workload Explorer (JWE)
- Brings the ECID* to open the same session in JWE
- Allows users to perform in-depth diagnosis
 - *ECID (Execution Context ID) is a unique identifier in WebLogic that groups related events in the same request execution flow

ORACLE Enterprise Manager Cloud Control 13c

A_WineCellar

End User Service

Session Diagnostics

View Search In No Search Export as Zip Export as XLS Spurious Hit

Activity	Time	Timing
WineCellar BackendUpdates UpdateLevel1	6/19/2020 11:59:59 ...	5.8 s
http://de.us.oracle.com:7703/wineCellar/wineUpdateService.jsp		5840 ms
WineCellar BackendUpdates UpdateLevel1	6/19/2020 12:00:08 ...	7.4 s
WineCellar BackendUpdates UpdateLevel1	6/19/2020 12:00:18 ...	5.6 s
WineCellar BackendUpdates UpdateLevel2	6/19/2020 12:00:27 ...	6.6 s

User ID NGOperator Client IP 148.87.19.206 6/19/2020 11:59 AM 6/19/2020 12:01 PM

ORACLE Enterprise Manager Cloud Control 13c

Java Workload Explorer

Performance Analysis 21 1

Auto Refresh Off Page Refreshed Jun 19, 2020 12:05:36 PM PDT

1 hour

Graph Metric Graph Height Graph Resolution

All Day 2 hours 1 hour 15 minutes

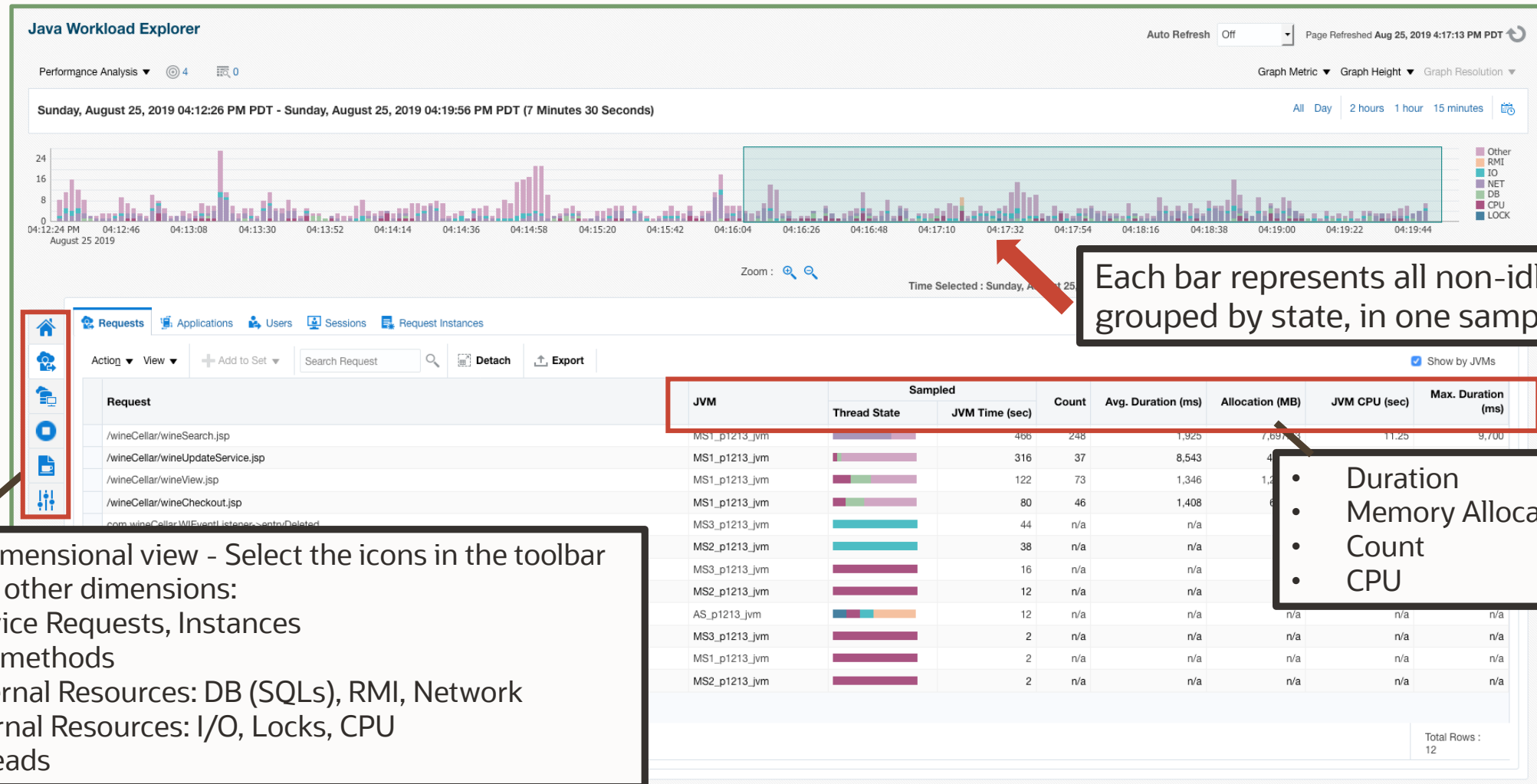
Zoom Time Selected : Friday, June 19, 2020 11:45:01 AM PDT - Friday, June 19, 2020 12:03:01 PM PDT (18 Minutes)

JVM	Thread State	JVM Time (sec)	Diagnostic Findings	Resource (%)	Host CPU (%)	JVM CPU (%)	JVM Heap (%)	GC Overhead (%)
/WC_prod1213_domain/prod1213_domain/MS1_p1213_jvm		6	0	100.0 0.0	51.14	19.93	63.0	2.11

Opens JWE page for the selected ECID for deep-dive analysis

Java Workload Explorer – Visualize JVM stack by Time and resource

- Time and Resource model
 - Time by resource: DB, CPU, GC, File I/O etc.
 - Resource utilization in terms of CPU time and MB allocated

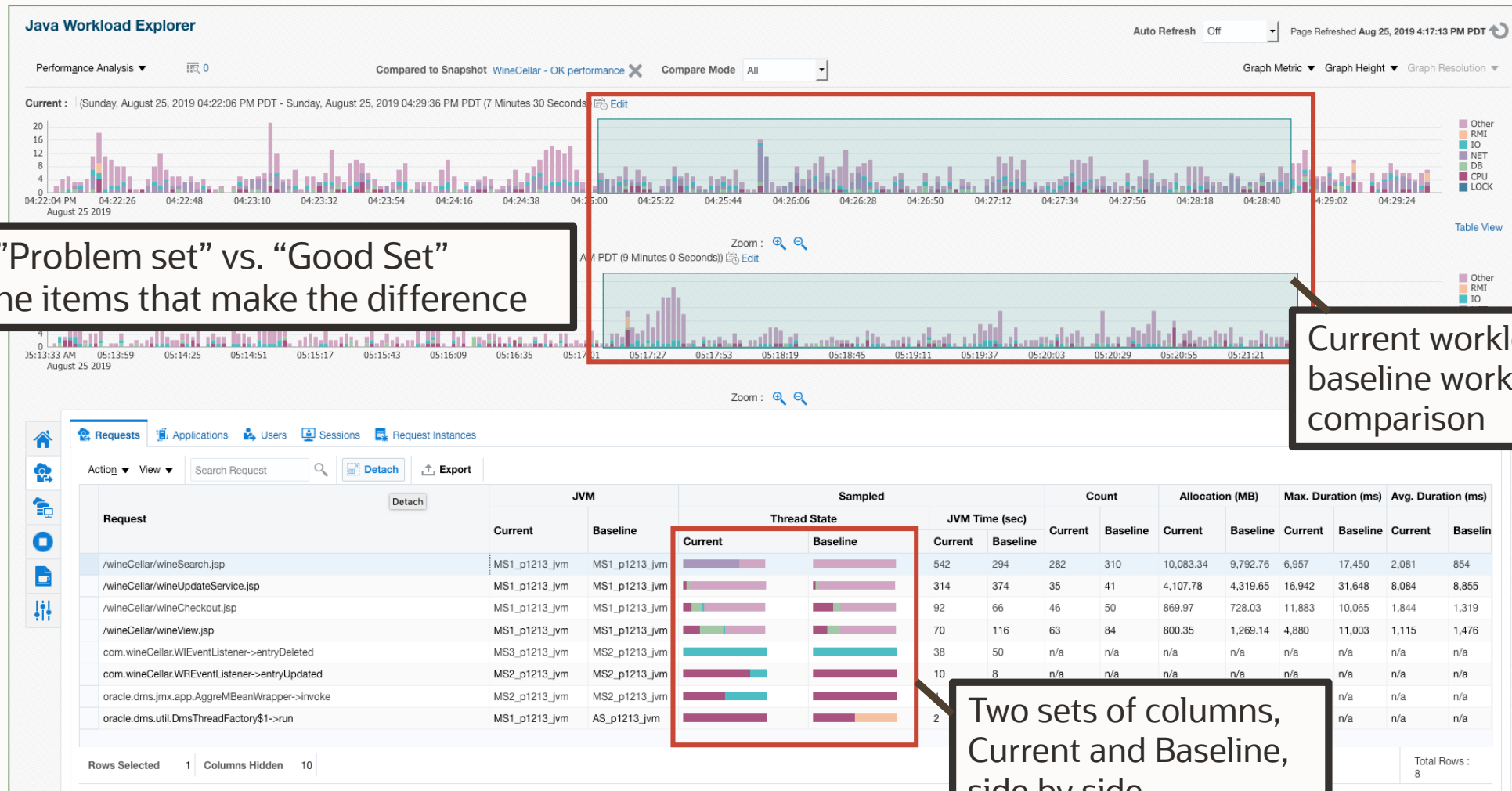


Multi- dimensional view - Select the icons in the toolbar to show other dimensions:

- Service Requests, Instances
- Top methods
- External Resources: DB (SQLs), RMI, Network
- Internal Resources: I/O, Locks, CPU
- Threads

Java Workload Explorer – Compare Data Sets to identify the cause

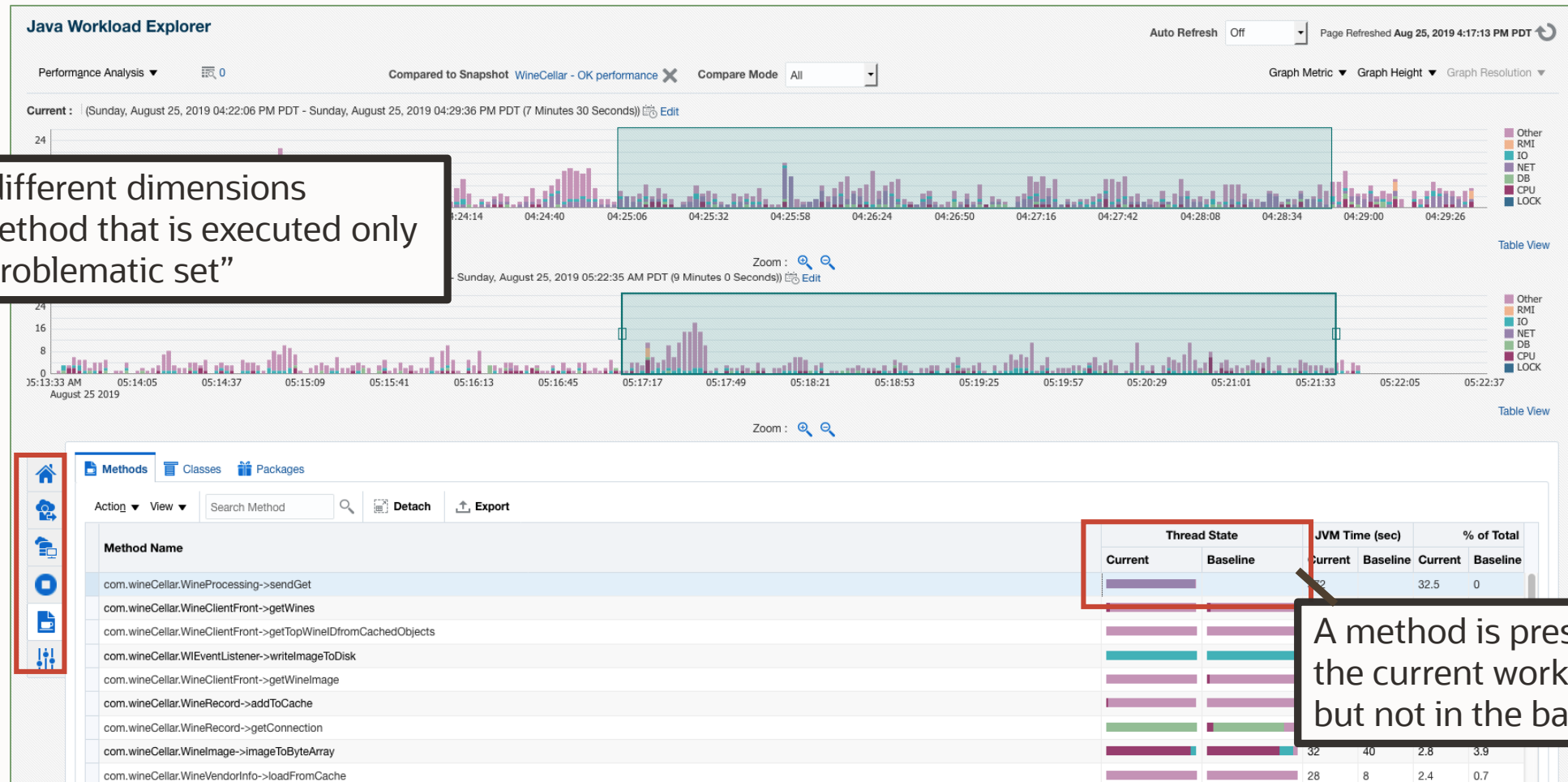
- Compare the problem load with the baseline load
- Identify the differences



Java Workload Explorer – Deep dive analysis from different dimensions

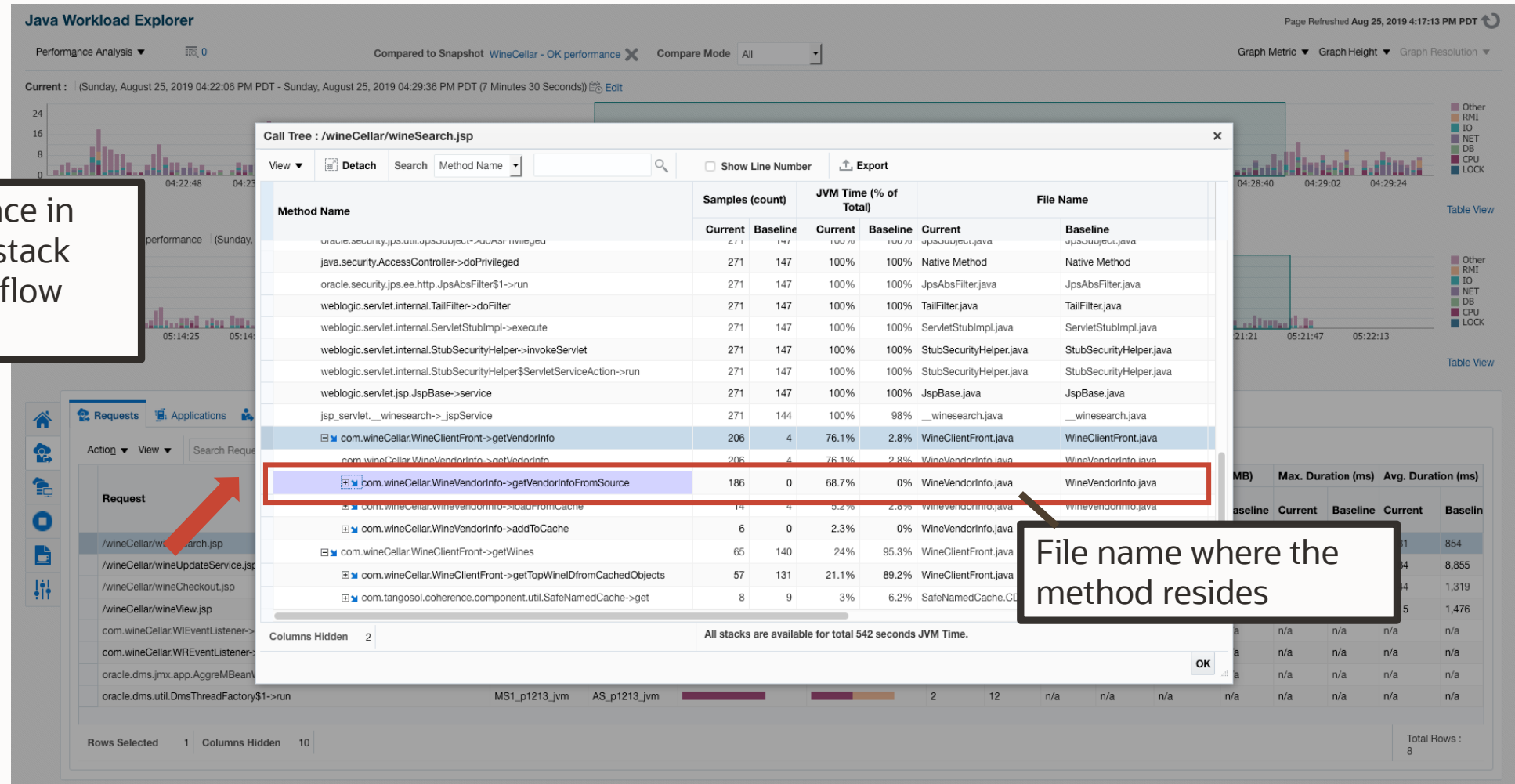
- Compare the problem load with the baseline load
- Identify the differences

- Look at different dimensions
- E.g., A method that is executed only in the “problematic set”



Java Workload Explorer – Drill down the problem to code

- Observe the difference in the aggregated call stack
- The code execution flow changes



Real User Experience Insight is Now Available on Oracle Cloud Marketplace!

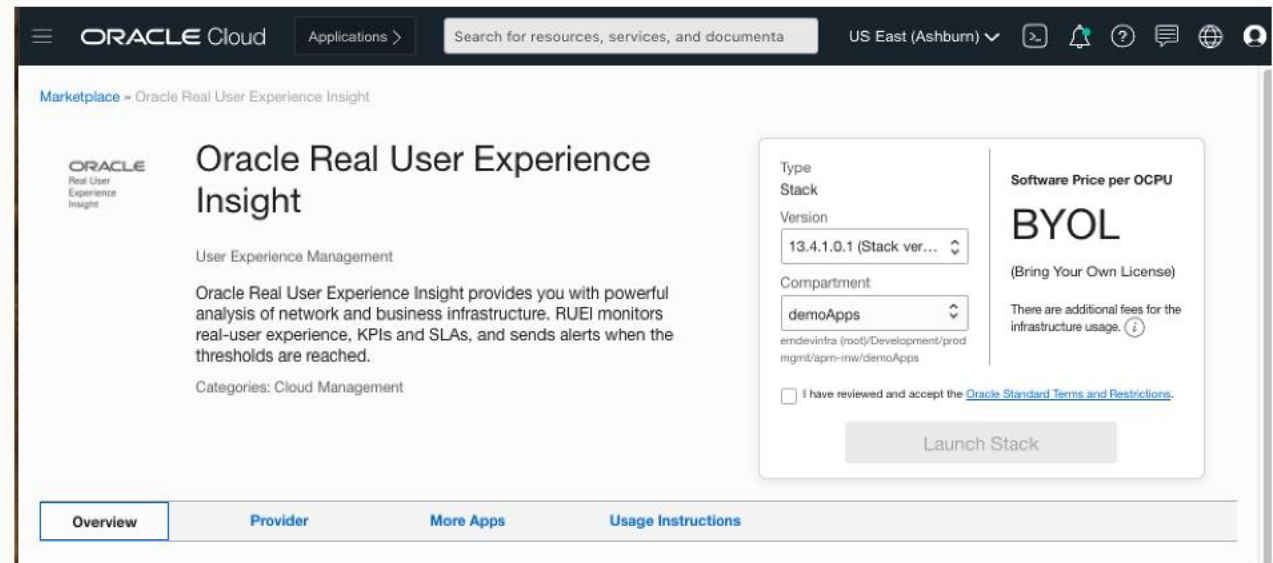
What is RUEI?

- Enterprise Manager family product
- Passive monitoring tool
- Captures all the end user activity
- Monitors the performance of applications from the end-user perspectives
- Proactive alerting and thresholds
- Diagnose performance problems from EM console
- Wide experience with enterprise customers for many years

RUEI App on Oracle Cloud Marketplace

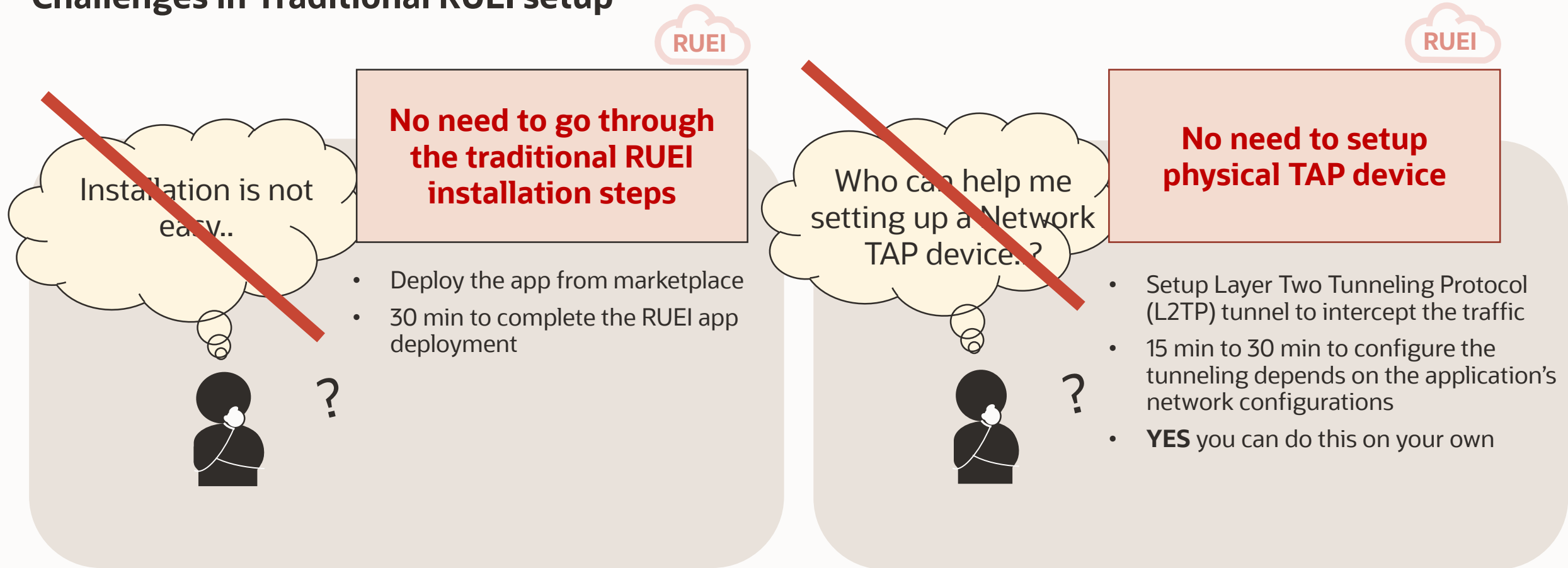


- Now available on Oracle Cloud Marketplace
- Pre-configured stack contains RUEI server and repository, deployed on a single Linux host
- Monitors real-user experience of cloud applications
- Drastically simplified installation and network setup process



Real User Experience Insight is Now Available on Oracle Cloud Marketplace!

Challenges in Traditional RUEI setup

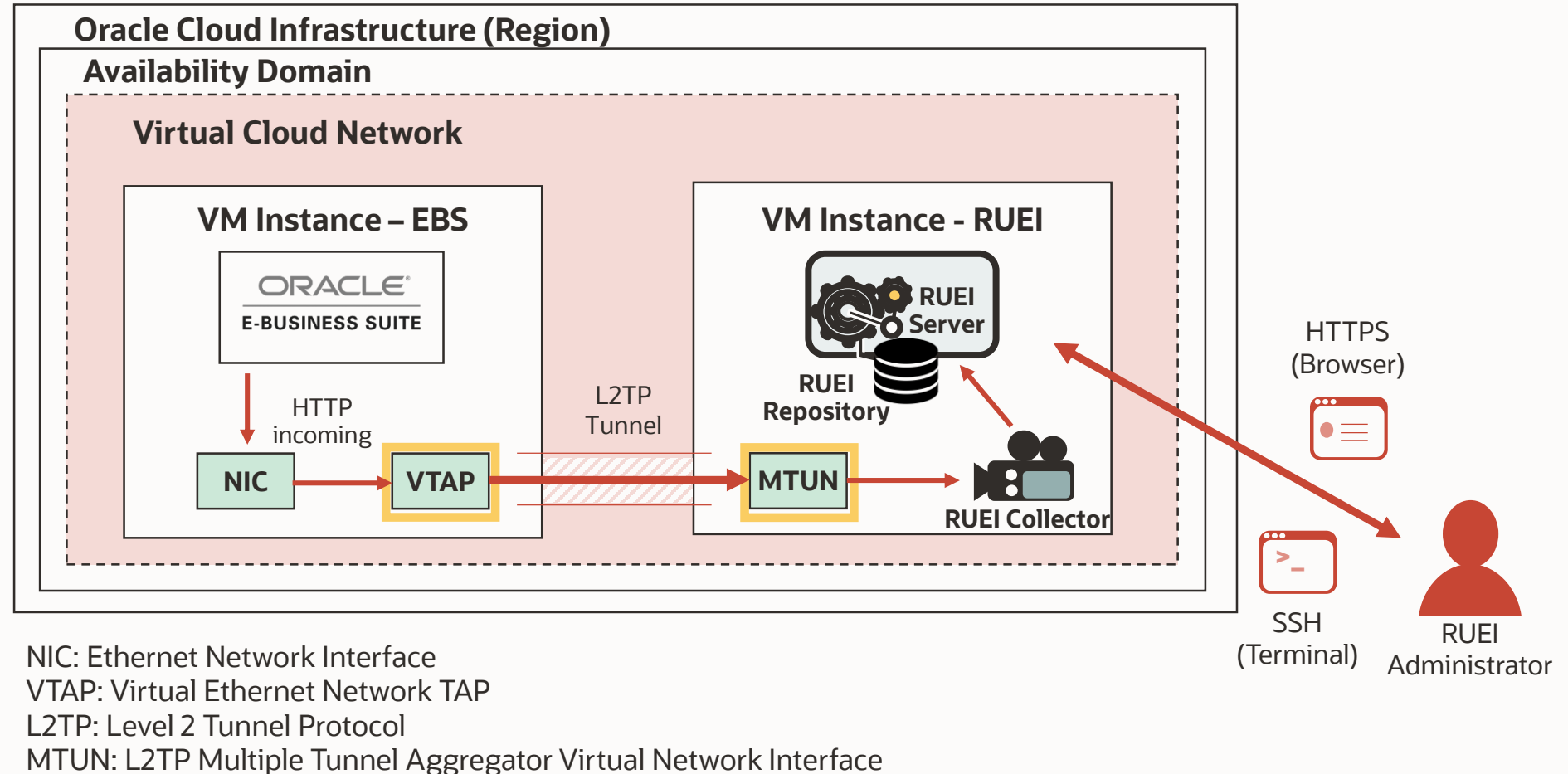


With RUEI app, installation and network configurations are drastically simplified

Monitor real-user experience of cloud applications

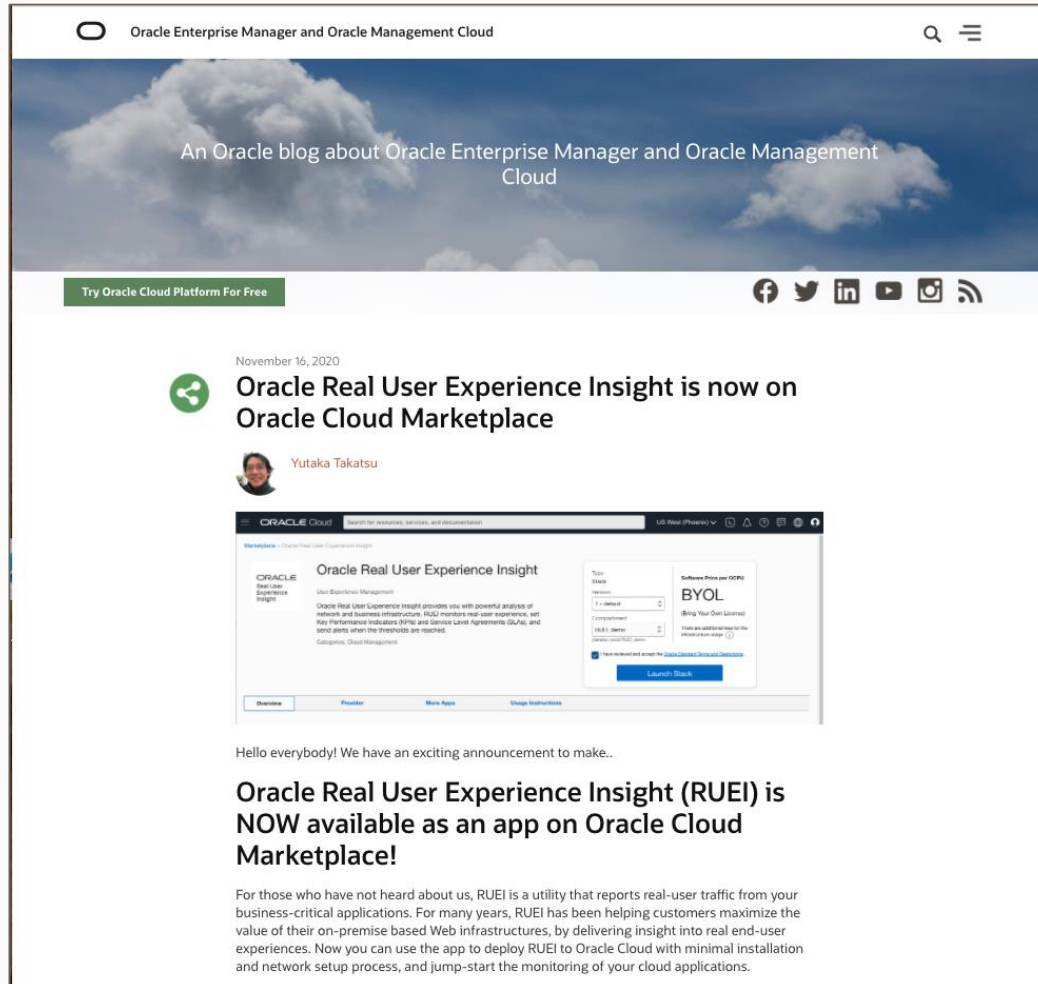
Sample deployment RUEI and EBS deployed on Oracle Cloud in the same VCN

- Setup Virtual Ethernet Network TAP and Layer Two Tunneling Protocol (L2TP) tunnel
- Traffic flows from the EBS instance, to RUEI instance
- Application can be in the same or different VCN, Domain or Region



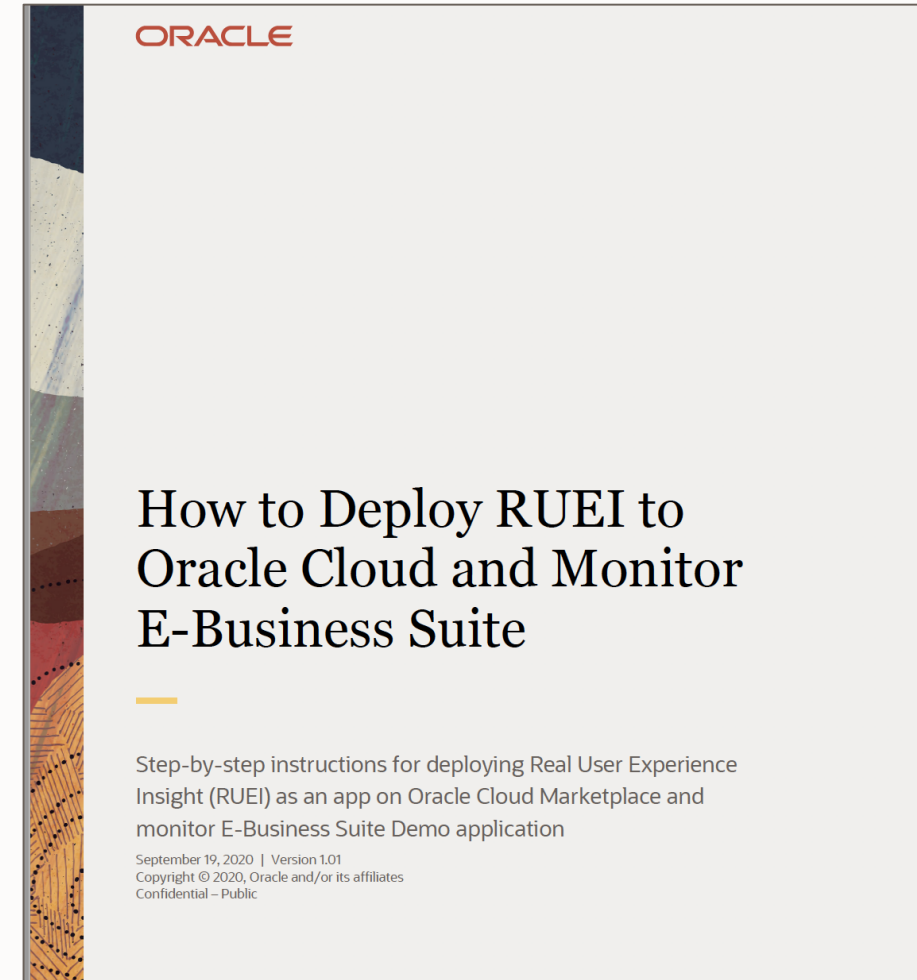
Additional Information

- **BLOG:** Oracle Real User Experience Insight is now on Oracle Cloud Marketplace



<https://blogs.oracle.com/oem/>

- **White Paper:** How to Deploy RUEI to Oracle Cloud and Monitor E-Business Suite



<https://www.oracle.com/a/otn/docs/enterprise-manager/deploy-ruei-to-oracle-cloud-and-monitor-ebs.pdf>



Support for Oracle Fusion Middleware 12.2.1.4



- Certification history

- EM 13.2 with FMW plugin 13.2.2
 - ✓ Support for FMW 12.2.1.1 & 12.2.1.2

- EM 13.3 with FMW plugin 13.3.1
 - ✓ Support for FMW 12.2.1.3

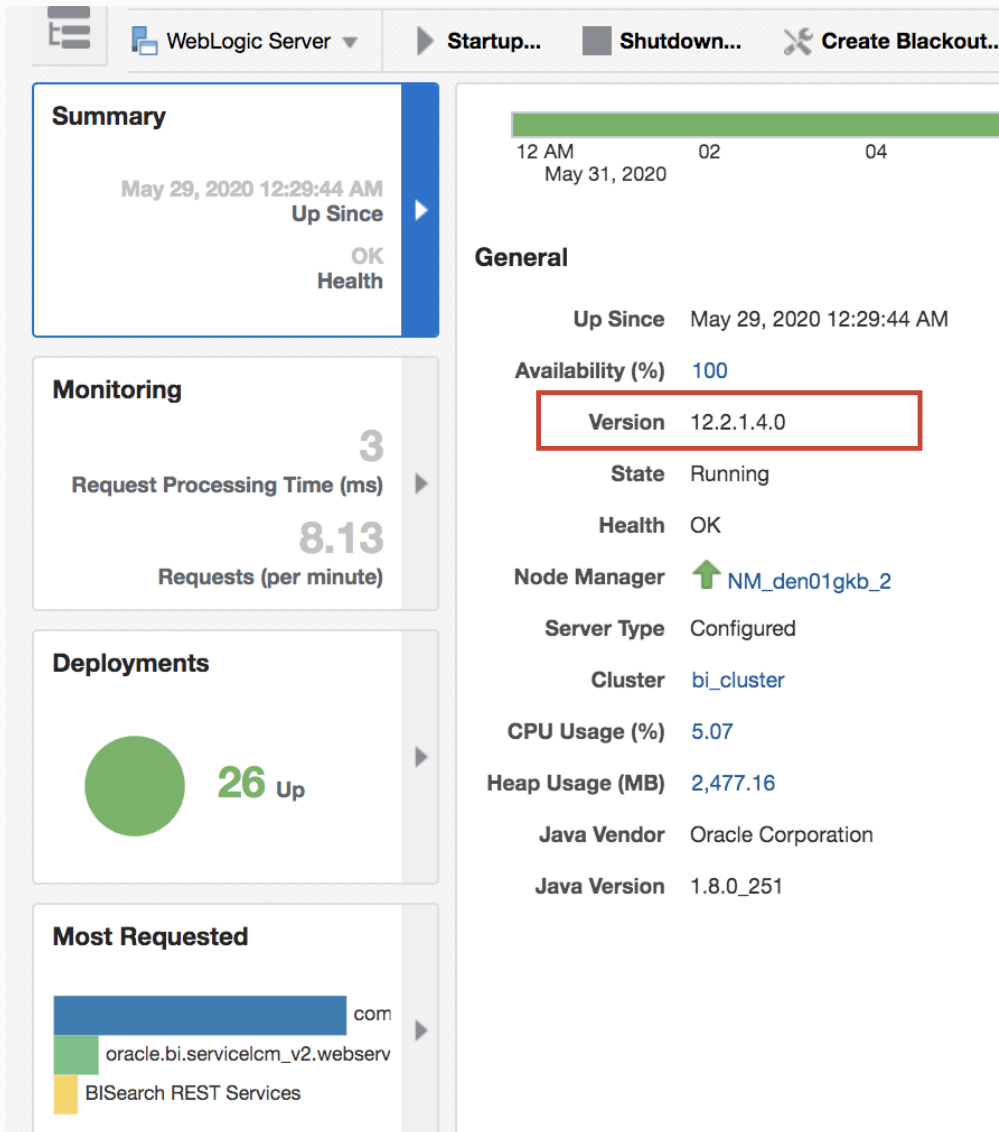
- EM 13.4 with FMW plugin 13.4.1
 - ✓ Support for FMW 12.2.1.4



Continues to future versions of FMW...

Support for Oracle Fusion Middleware 12.2.1.4

NEW in
13.4



- Discover, monitor and manage FMW 12.2.1.4
 - Certified capabilities include..
 - View summary of status & health at target home pages
 - Monitor targets, resources and logs
 - Targets include: domains, clusters, servers, apps, Node managers
 - Utilize predefined performance and availability metrics
 - Real time and historical monitoring
 - Diagnose problems with JVMD
 - Start, stop or restart targets
 - Provision, apply patch, manage configuration and compliance

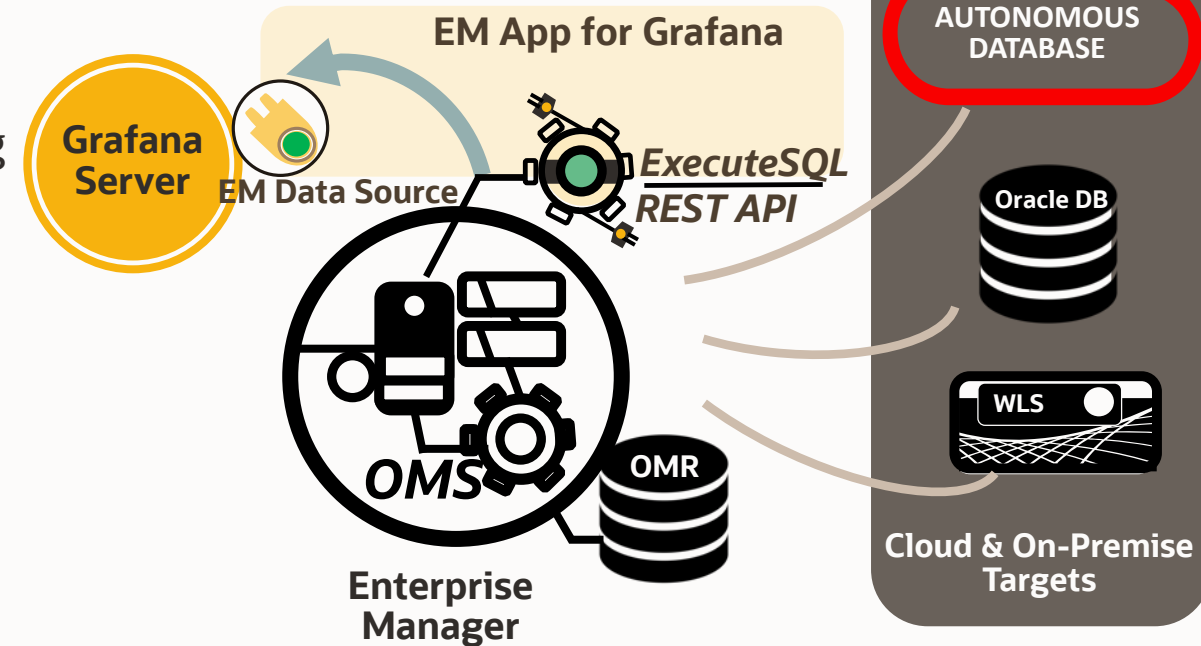
FMW 12.2.1.4 products certified by EM 13.4

Oracle Access Manager	Oracle Reports
Oracle Business Intelligence EE	Oracle Service Bus
Oracle Coherence	Oracle SOA Suite
Oracle Directory Integration Platform	Oracle Traffic Director
Oracle Forms	Oracle WebCenter Content
Oracle HTTP Server	Oracle WebCenter Portal
Oracle Identity Governance	Oracle WebLogic Server
Oracle Internet Directory	

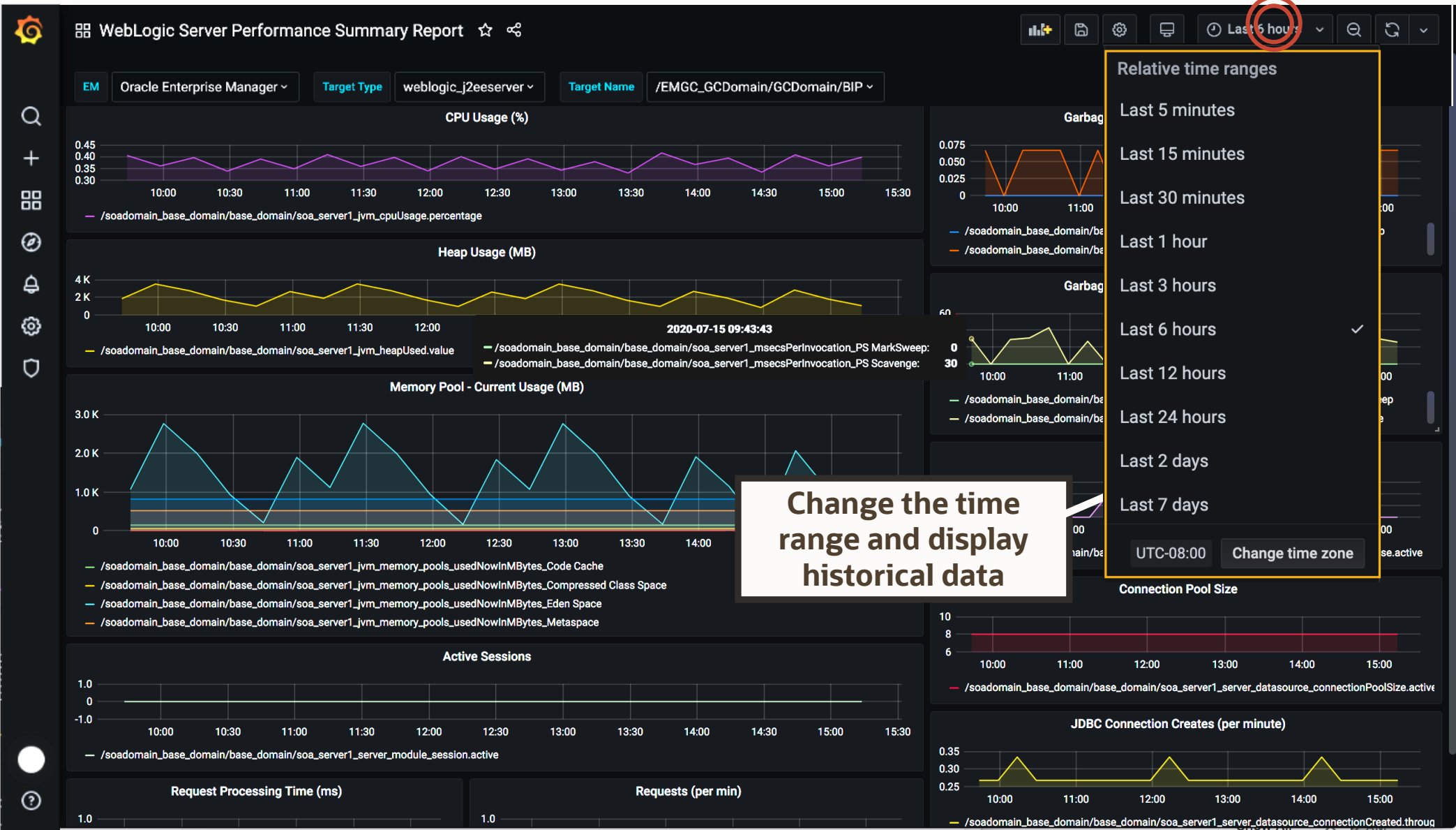


Enterprise Manager App for Grafana

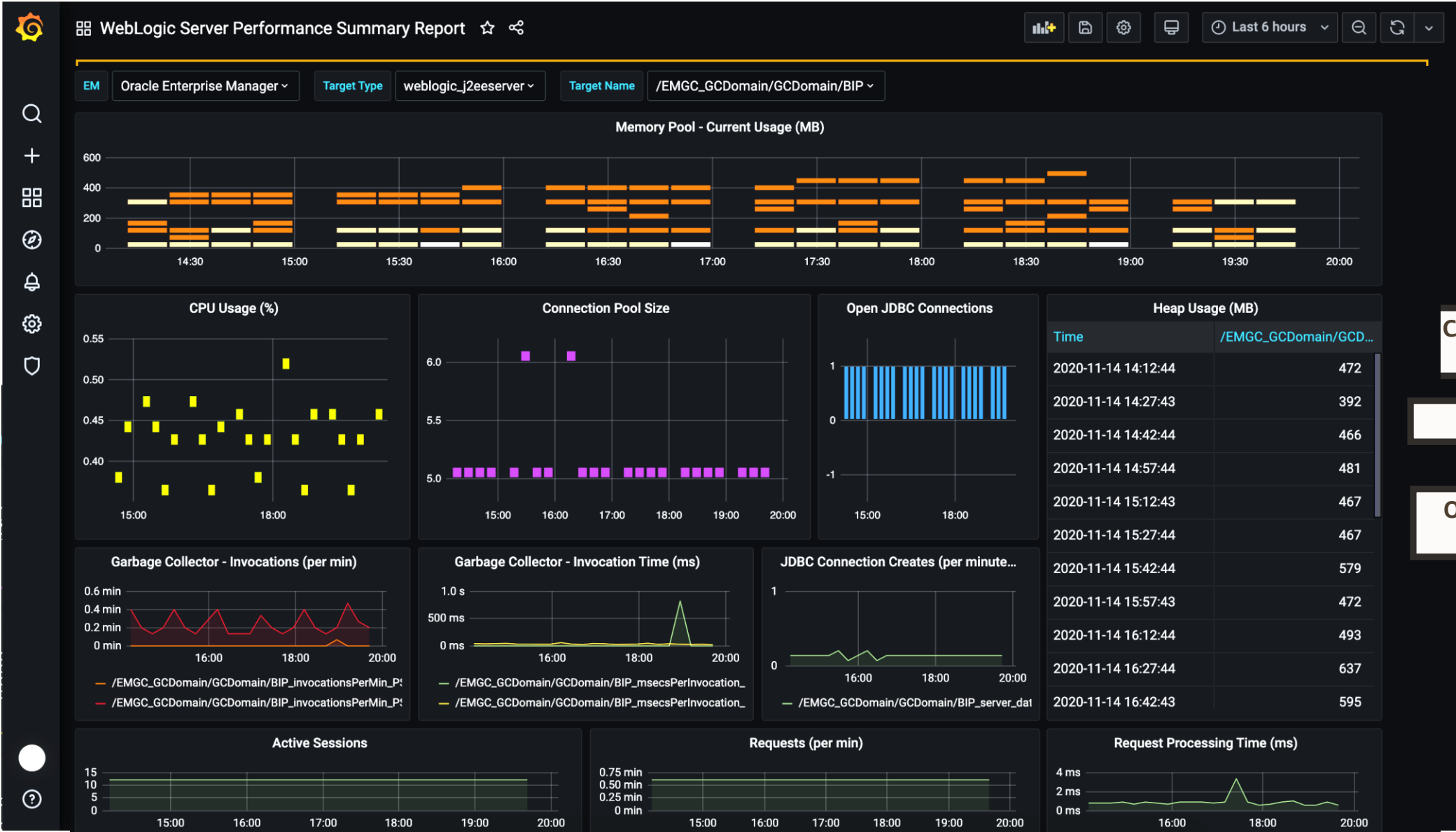
- Oracle Enterprise Manager App for Grafana (EM 13.4 RU3)
- Quickly create custom EM dashboards
 - Out-of-the-box integration with EM schema (query by target, metric group, metric name)
 - Execute SQL via REST API: standards-based access
 - Sample EM dashboards included to get you started
- Federate multiple EMs into a single view
 - Easily pull data from multiple EM instances by reusing useful dashboards against new EMs
 - Combine EM and third-party data sources
- Out-of-the-box DB and MW dashboards
 - **Middleware dashboards Coming Soon!**
 - WebLogic Performance Summary
 - JVM Performance Report



Enterprise Manager App for Grafana– WebLogic Performance Summary



Enterprise Manager App for Grafana- WebLogic Performance Summary



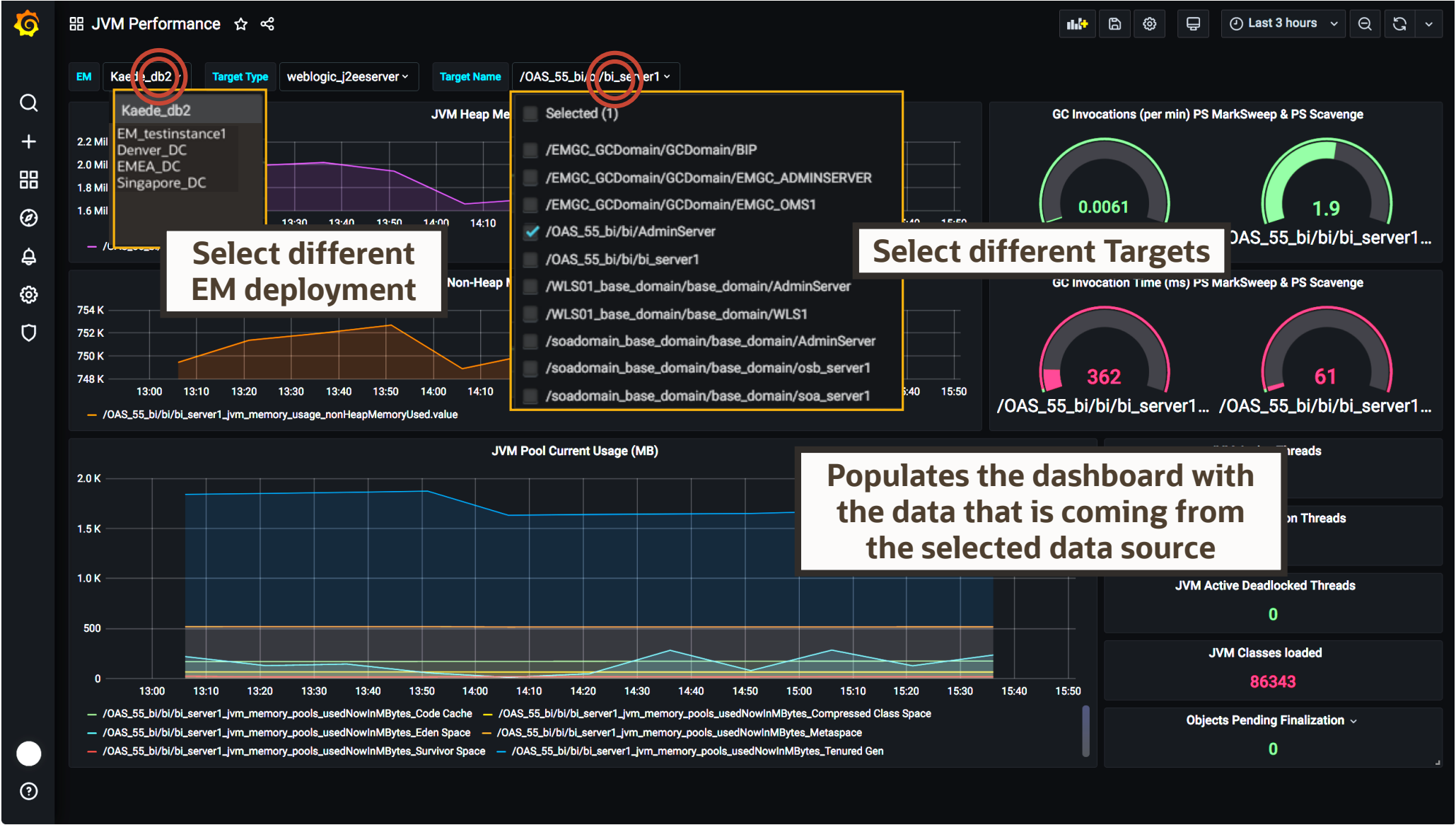
Change the dashboard layout

Add a new chart

Or remove the existing chart

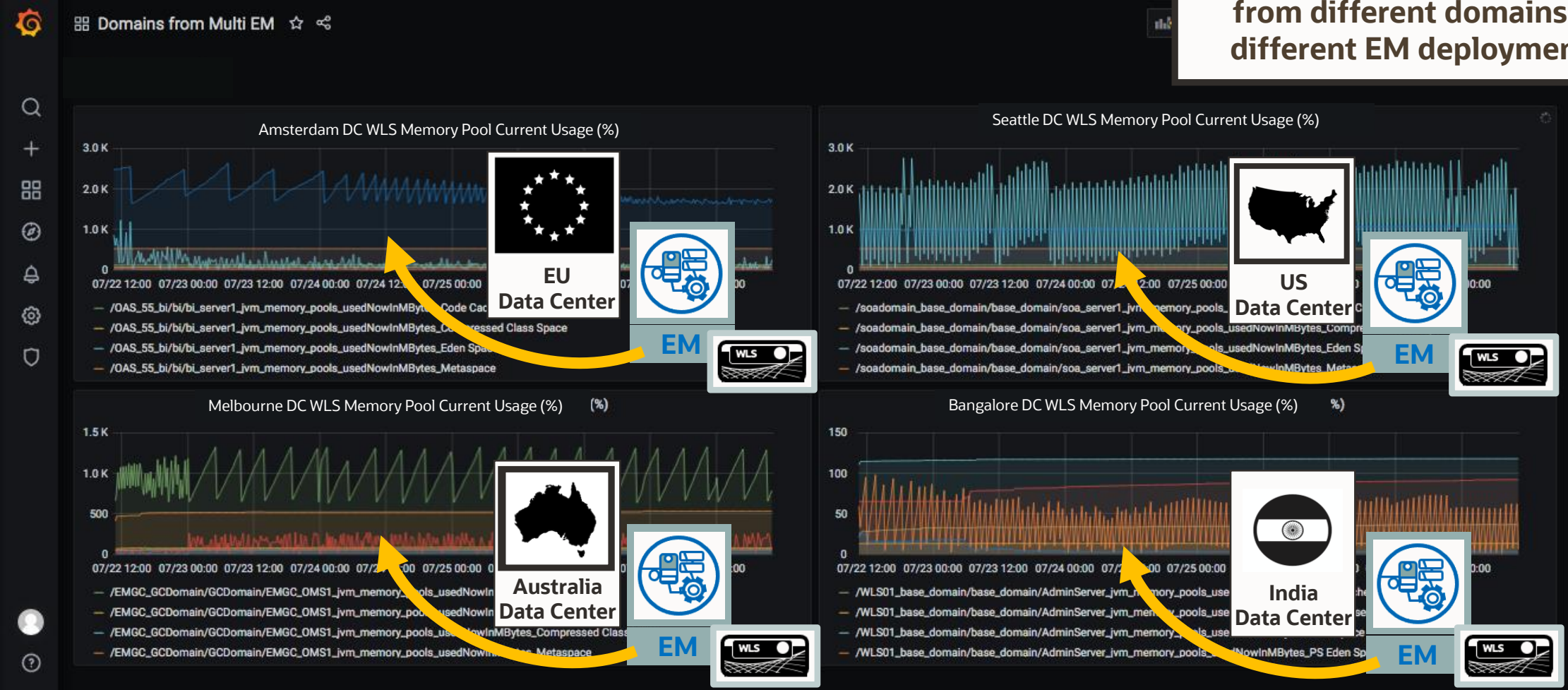


Enterprise Manager App for Grafana- JVM Performance Dashboard



Enterprise Manager App for Grafana– Multi-Domains / EM instances

Each panel shows WLS metrics from different domains in different EM deployments



Enterprise Manager App for Grafana

Two types of Queries

- Use Built-in Time Series Queries
 - No need to write a SQL query
 - Build the query from the UI using pre-defined EM fields (Target Type, Target, Metrics)
- Build your own Time Series queries
 - Write your own SQL query
 - Pull data from EM repository based on your own query

Query Type	Non-time series
Series	Custom(Repository)
Query	<pre>SELECT target_type, availability_status, count(*) FROM MGMT\$AVAILABILITY_CURRENT WHERE lower(availability_status) like '%target down%' group by target_type, availability_status order by count(*) desc;</pre>

EM	Kaede_db2	Fill	Fit	Exact	Last 6 hours
Target Type	weblogic_j2eeserver				
Target Name	/OAS_55_bi/bi/AdminServer				

JVM Heap Memory Usage (KB)

900 K
800 K
700 K
600 K

05:00 06:00 07:00 08:00 09:00 10:00

— /OAS_55_bi/bi/AdminServer_jvm_memory_usage_heapMemoryUsed.value

Query	1	Transform	0	Alert	0
Series	Raw				
Target Type	\$oem_gf_target_type				
Target	\$oem_gf_target_name				
Metric Group	JVM Memory Usage				
Metrics	JVM M				
Offset					
Alias By	\$oem_gf_metricgroup...				

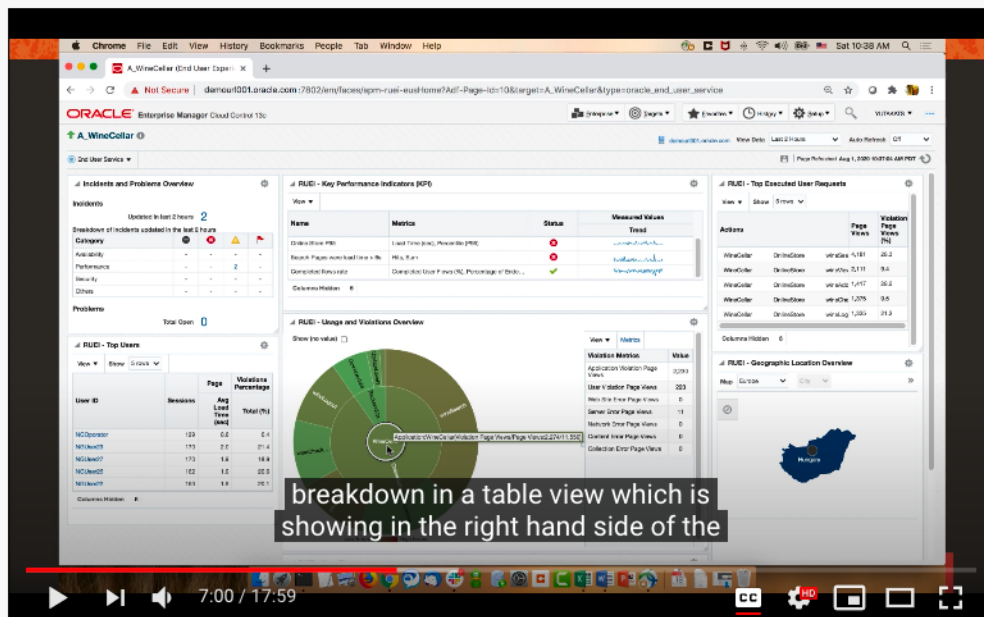
JVM Memory - Heap Memory Usage (KB)

JVM Memory - Non-Heap Memory Usage (KB)

JVM Memory - Objects Pending Finalization

More Information on YouTube

Oracle Real User Experience Insight (RUEI) Demo



Oracle Real User Experience Insight (RUEI) Demo

316 views • Aug 18, 2020

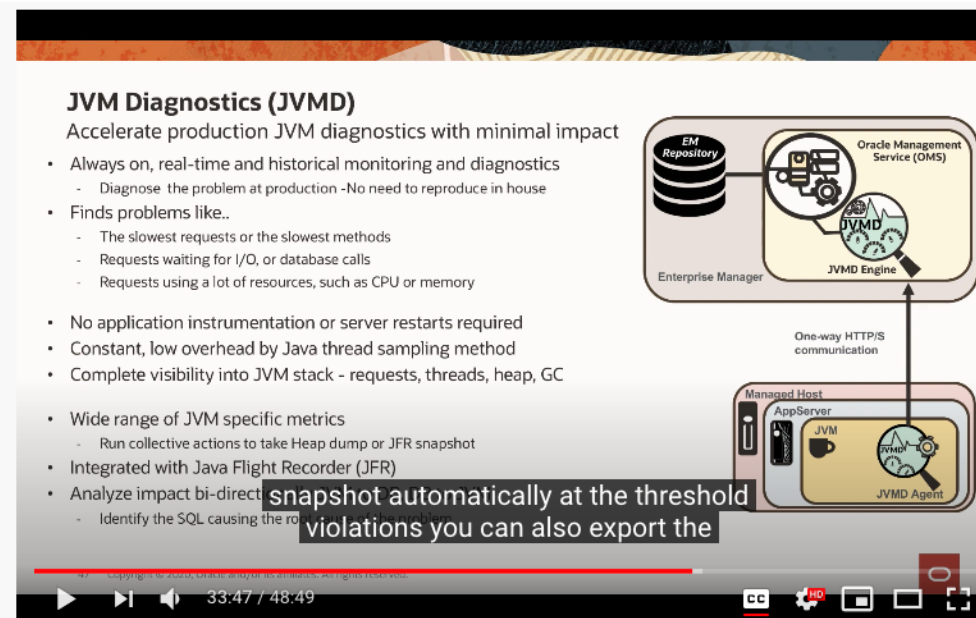
4 0 SHARE SAVE



Oracle Learning
105K subscribers

2 min Intro + 15 min product demo (2:20). Covered topics are RUEI dashboard, full session replay view, integration with Java Workload Explorer, KPI, incident management, user flows and end user session diagnostics.

Managing Oracle WebLogic Server with Oracle Enterprise Manager



Managing Oracle WebLogic Server with Oracle Enterprise Manager

447 views • Aug 4, 2020

10 1 SHARE SAVE



Oracle Learning
105K subscribers

Covered topics are WebLogic discovery (3:02), middleware summary pages (4:49), Grafana dashboards (7:56), monitoring features (11:28), Real User Experience Insight (RUEI) (19:07), JVM Diagnostics (JVMD) (30:08), WebLogic configuration and compliance management (38:00), also patching and provisioning (44:25).

Thank you

