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WebLogic 12c & WebLogic Mgmt Pack

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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, and timing of any features or functionality described for Oracle's products remains at the sole discretion of Oracle.

Questions for audience

- How many of you manage WebLogic?
 - What versions are you running? What JDK and version supports it?
 - How many domains? Number of Managed Servers in domains?
 - Are you using OHS as a proxy/LBR? Versions? Any mod_plsql or APEX?
 - Are you using clustering? Nodemanager?
 - What tools do you manage/monitor with?
- How many of you develop apps for WebLogic?
 - Which IDE, frameworks, and Lifecycle Management tools do you use?
 - What kind of apps are you deploying? Servlet, JSP, JSF, EJB, Messaging, Web Services?
- How many of you do anything with Forms & Reports?
- Use of Management & Monitoring Tools?

Agenda

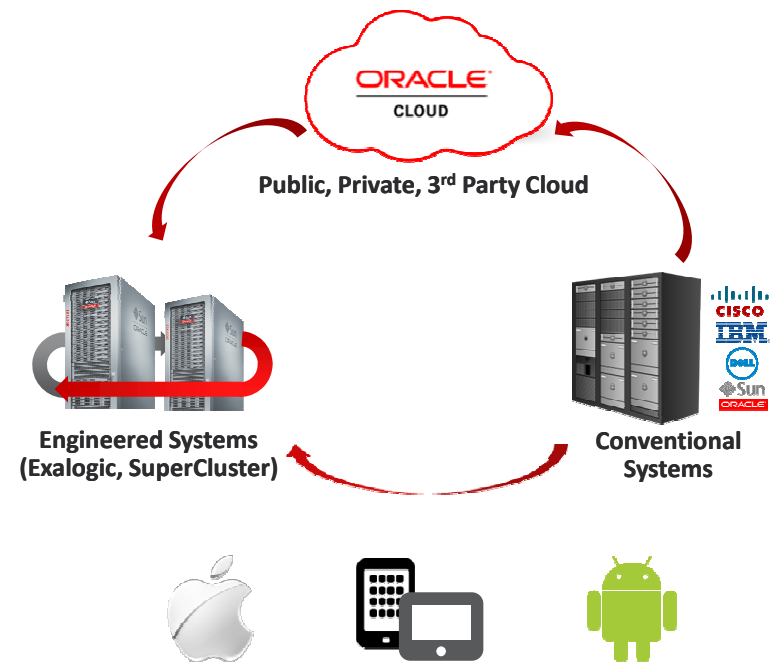
- 1 Fusion Middleware (FMW)
- 2 WebLogic (WLS) – 09/30/2017
- 3 WebLogic Management Pack – 12/31/2017
- 4 Summary

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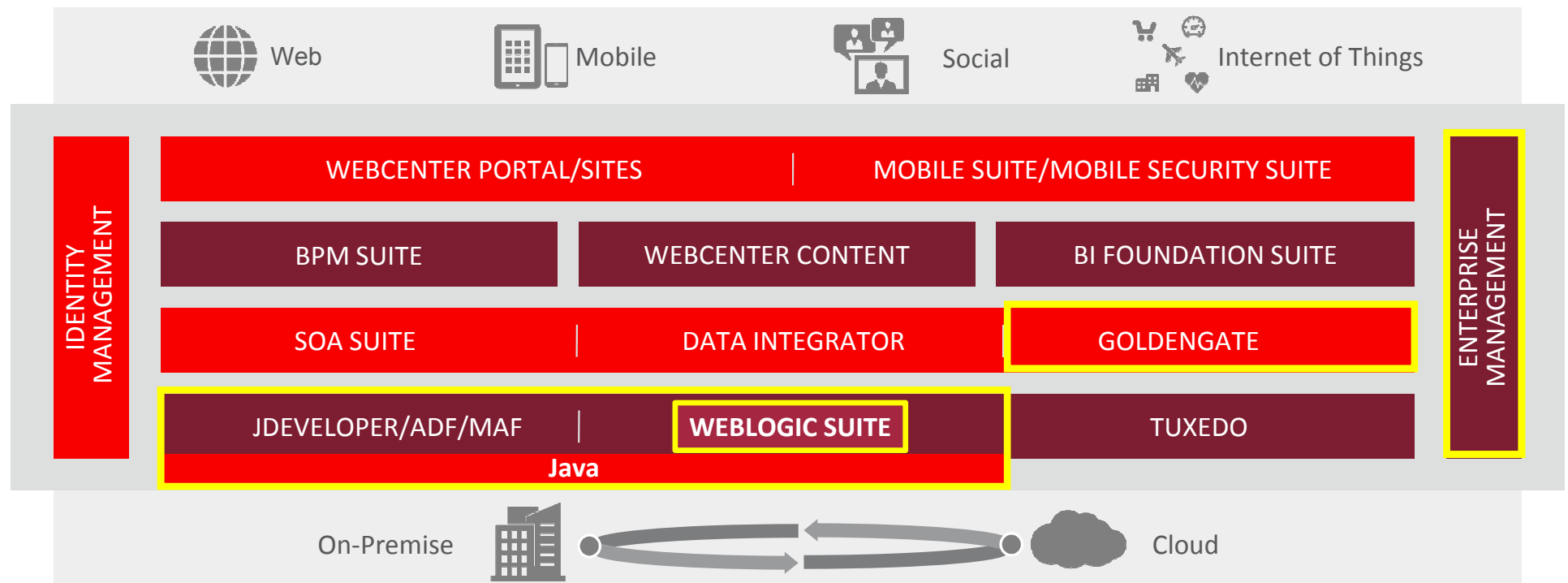
Why Oracle and WebLogic/FMW?

- Secure
- Reliable, Available, Scalable (RAS)
- Portability
 - No Rewrite, possibly Configuration
- Complete, Integrated, Open Standards
- Total Cost of Ownership & Performance
- Successful/Stable



Oracle Fusion Middleware

The Cloud Platform for Digital Business



Fusion Middleware 11g/12c Support Lifecycle

11g – Extended in 2013



12cR1 (12.1.X) – 6 years + 2 years from 12.1.1 GA



12cR2 (12.2.X) - A new major release



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WebLogic Suite Components

- Java-Focused

- FULLY SUPPORTED Oracle JVM (longer)
- WebLogic Server
- Coherence
- JDeveloper & OEPE
- ADF & TopLink
- Mgmt/Monitoring
 - Admin Console
 - WLST
 - JMC/JFR
 - Fusion Middleware Control
 - Coherence Mgmt Pack

- Other

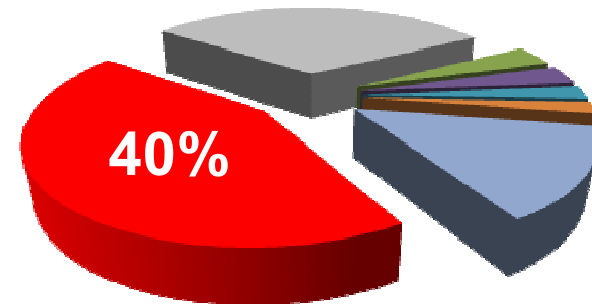
- Oracle HTTP Server (~~mod_plsql~~)
- ~~WebCache~~
- ~~Virtual Assembly Builder~~
- ~~Oracle Single Sign On~~
- Oracle Internet Directory
- Oracle Directory Services Manager
- Forms
- ~~Reports~~
- ~~Discoverer~~

WebLogic Server

Similarities to Oracle DB

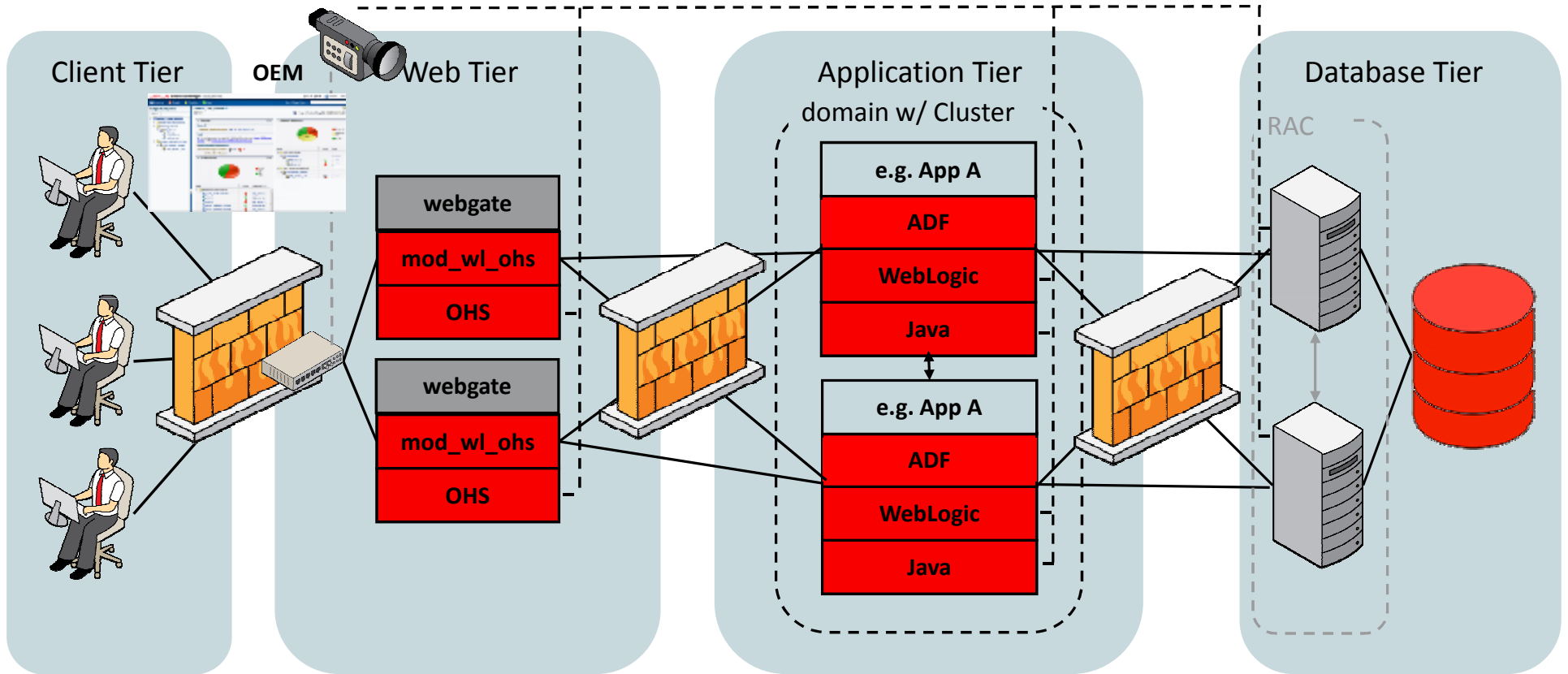
- Best RASP – *Enterprise App Server*
- Integrated, yet Open
- Lowest Total Cost of Ownership
 - License & Support
 - FREE if installed/deployed by Transcom by 09/30/2017
 - Automation & Productivity
- Easy to Use
 - Admin Console/FMWC
 - WLST

Gartner 2013 Worldwide Application Server Market Share report shows



Source: Gartner, Market Share: All Software Markets, Worldwide – March 2013 – Based on total software revenue

Typical Custom WebLogic Application

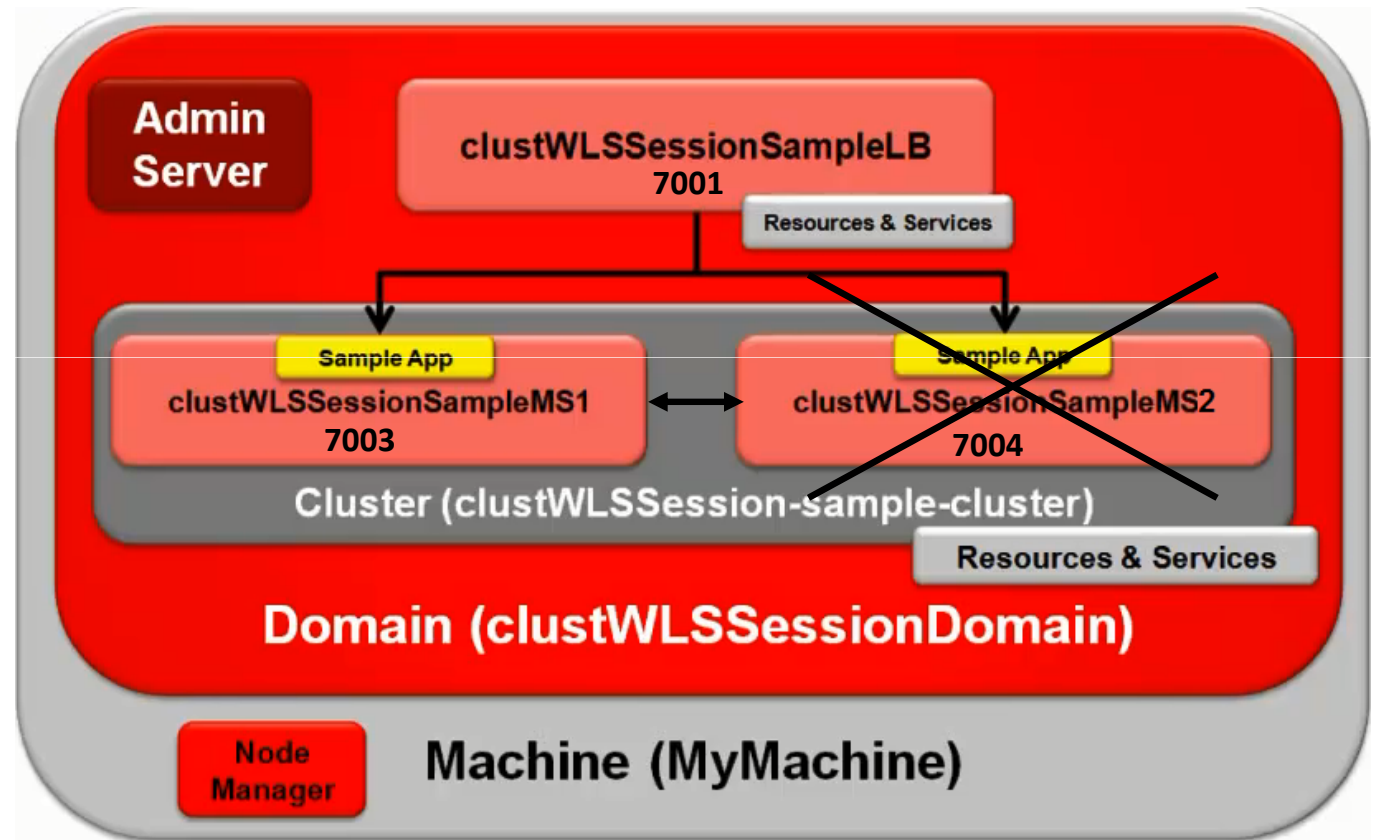


WebLogic Features

- *Clustering*
- Dynamic Clustering
- Whole Server Migration
- Service Migration
- Work Managers
- OverLoad Management
- Coherence EE
- Active GridLink for RAC
- *Admin Port*
- *No Licensing Issues*
- *Meets FMW & WL Option Pre-req Reqmts (e.g. SOA)*
- *JMC & JFR*
- *Diagnostics Framework*
- *Side-by-Side Deployment*
- Order of Deployment
- *Deployment Plans*
- TopLink & ADF
- Java EE 7 APIs
- WebSockets
- *FastSwap*
- JMS
- Advanced Web Services
- WLST Recording
- Managed Server Cloning

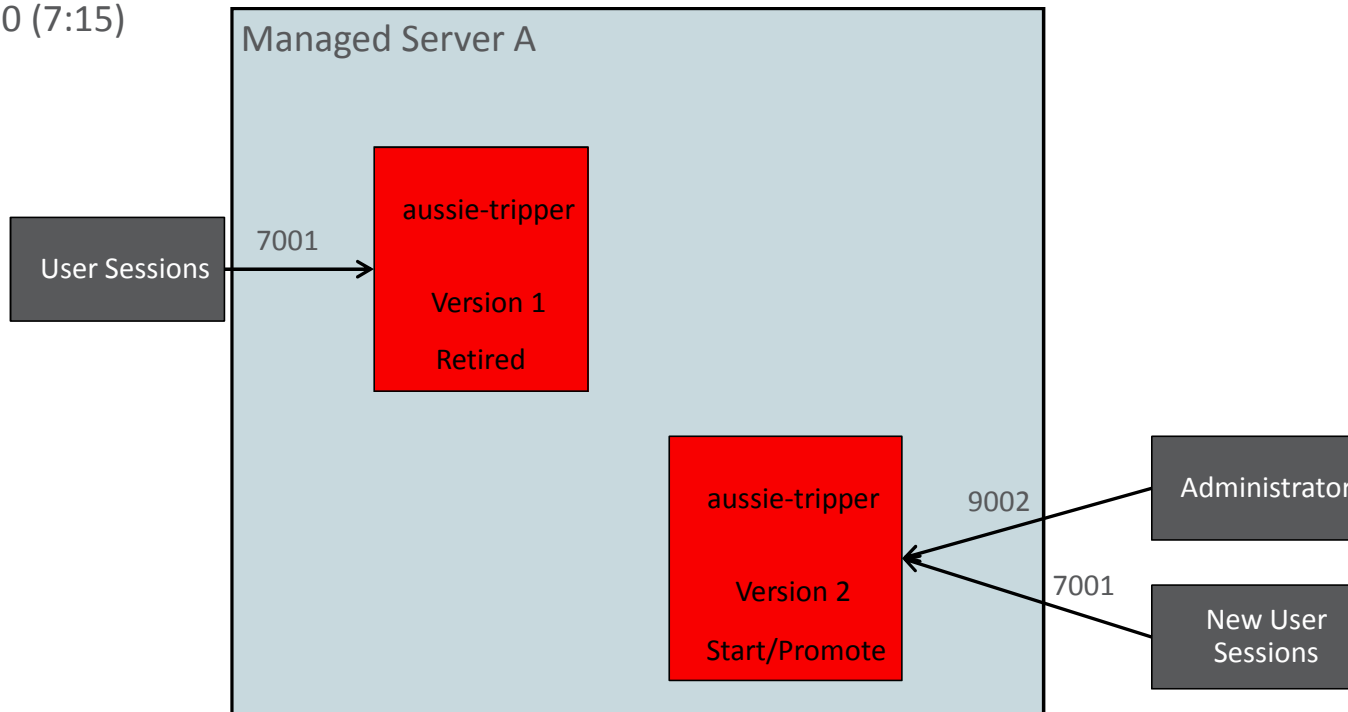
Clustering

- [Demo](#) – 8:15 (3:45)



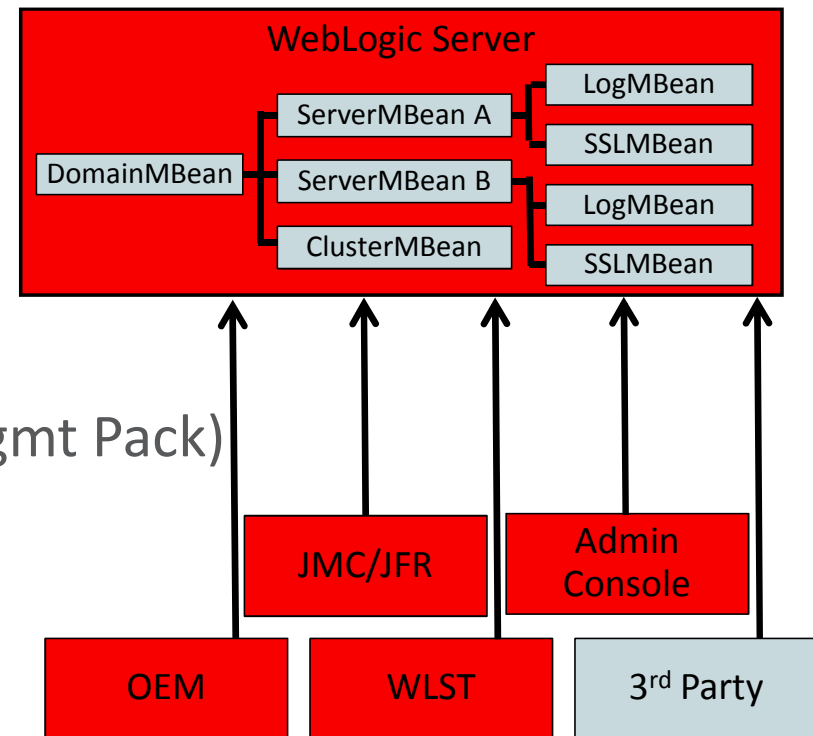
Admin Port & Side-by-side Deployment

- [Demo](#) – 4:10 (7:15)



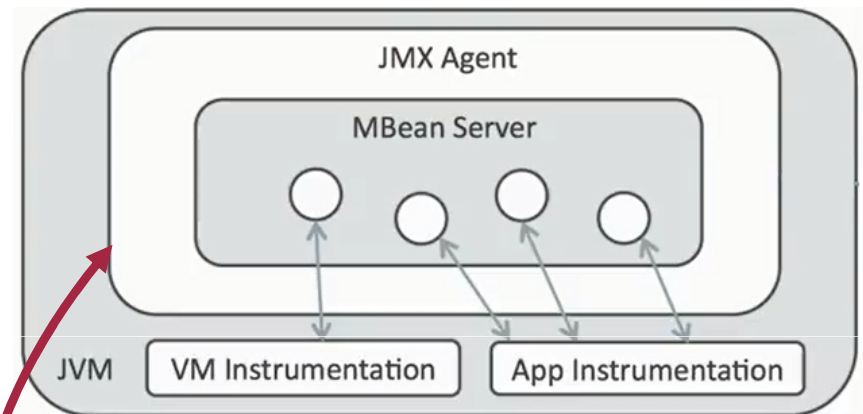
WebLogic Management Tools

- Java Mission Control & Flight Recorder
- WebLogic Admin Console
- WebLogic Scripting Tool (WLST)
- Fusion Middleware Control
- Oracle Enterprise Manager (i.e. WebLogic Mgmt Pack)



Java Management

- Java SE Support
 - 24x7 Support
 - Security & Fixes (Java 7 EoPU is 04/2015)
- Java Mission Control (JMC)
 - Desktop & Server
 - JMX Console – Real Time
 - Java Flight Recorder (JFR) – Over Time
 - -XX:+UnlockCommercialFeatures
 - -XX:+FlightRecorder
 - ~1% Performance Impact



Versions, Certifications, & Timelines

- WebLogic 10.3.6/11.1.1.6-9 (12/2018)
 - Fusion Middleware Forms & Reports 11.1.2.x (12/2016)
 - Java SE 6-7
 - Java EE 5
- WebLogic 12.1.x (12/2017)
 - Java SE 7-8
 - Java EE 6
- WebLogic 12.2.x (10/2020)
 - Java SE 8
 - Java EE 7

“WebLogic” STIG

Crawl, Walk, Run

- Weblogic vs FMW Infrastructure (ADF/JRF/Upper FMW Stack)
- “Oracle WebLogic Server 12c STIG” (FMW Infrastructure 12.1.3)
 - Published 12/2014
 - Based upon Previous SRG
 - WebLogic 12c STIG Compliance Standard available OEM 13.1+
 - Some Check/Fix in Fusion Middleware Control
- “Oracle WebLogic Server 12c Release 2 (12.2.x) STIG” (WebLogic + Add'l)
 - In-Process, Green Light from DISA
 - Admin Port, Node Mgr, PKI, Auditing, “Securing a Production Environment for OWLS”
 - PM & Development Review

Oracle HTTP Server

1 of 2

- Apache-based (2.2 – 2.4) Web Server (Static Content & Dynamic Apps)
- Modules
 - Webgate – OAM
 - mod_ossll – SSL
 - TLS 1.2 (11.1.1.9 – 12.2.1)
 - FIPS-140 (12.1.2 – 12.2.1)
 - mod_wl_ohs - Proxy/LBR for WebLogic
 - mod_plsql - Custom & APEX Apps (deprecated in 12.1.3)
 - mod_rewrite

Oracle HTTP Server

2 of 2

- Management
 - .conf file configuration
 - Error & Access Logs
 - opmn (11.1.x)
 - WebLogic Management Framework (12.x)
 - Standalone Domain
 - WLST w/ NodeManager
- STIG 12.1.3
- Execution Context ID (ECID)

OHS STIG

Crawl, Walk, Run

- Stand-alone vs Collocated Domain
- Linux/Unix
- “Oracle HTTP Server 12.1.3 STIG”
 - Published 12/2015
 - Based upon Current SRG
 - STIG Compliance Standard available OEM 13.x??? (Initially just CAT 1)
- “Oracle HTTP Server 12c Release 2 (12.2.x) STIG”
 - Not Yet Submitted

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Oracle Enterprise Manager

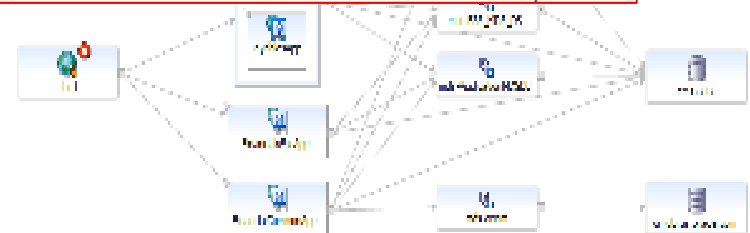
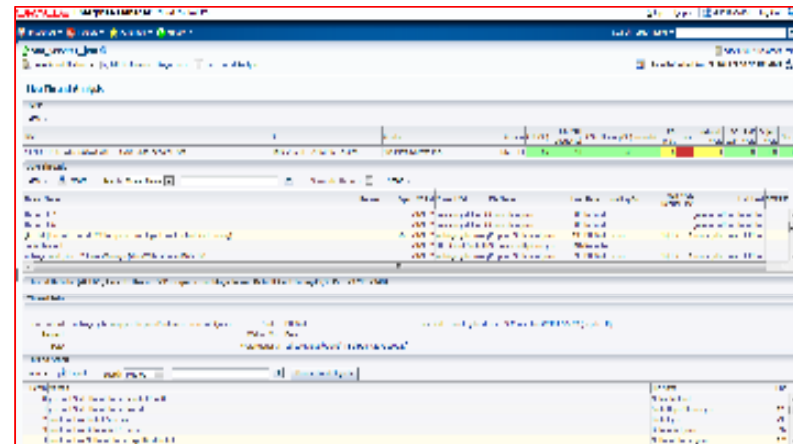
- Better Service/End-user Productivity
- Reduced Costs/Increased IT Productivity
- Reduced Risk

“What we see in circumstances where **clients are applying traditional methodologies** to resolve problems is that they typically **burn through about \$200,000** per incident.”

MARC RIX, CEO, Bridgescape

Middleware Management

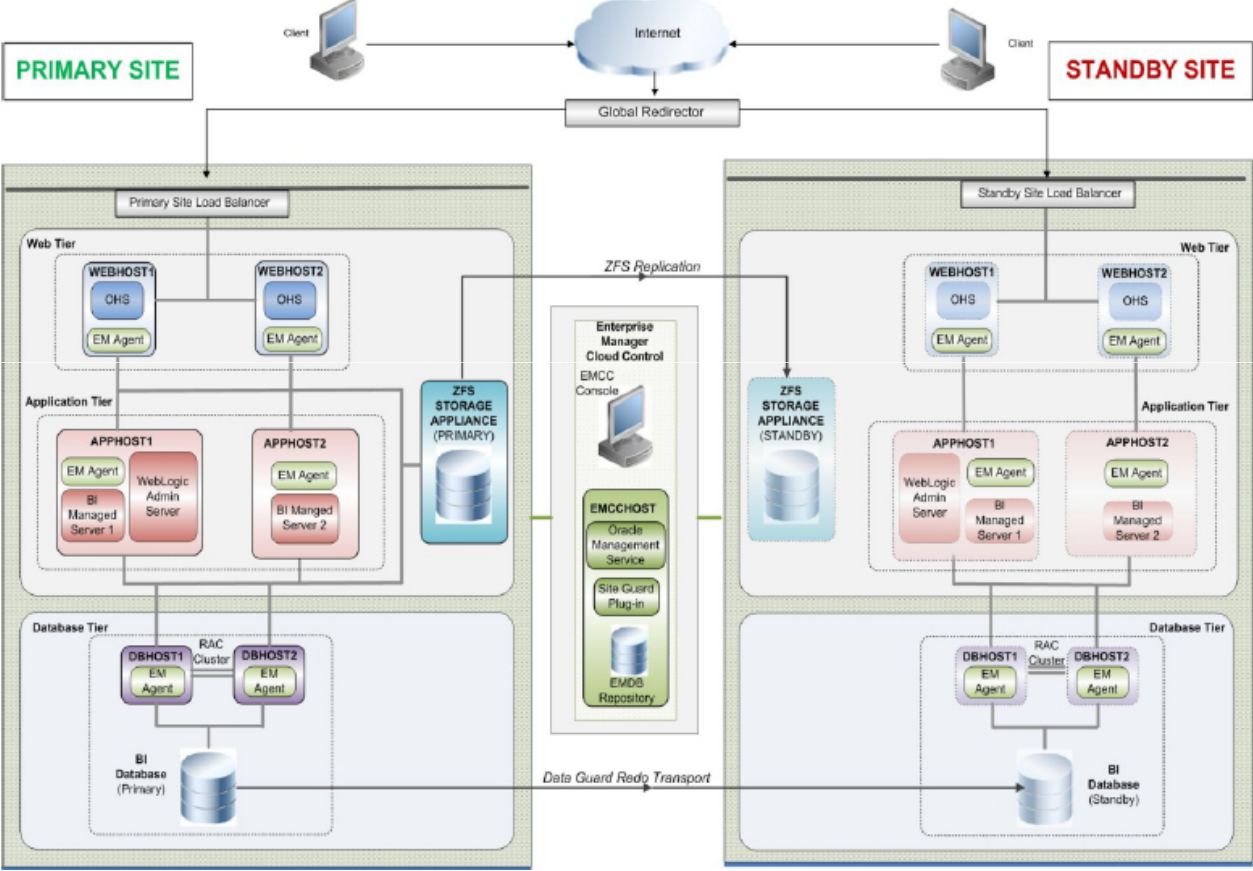
- Single, consistent UI
- Included targets
 - Multiple WebLogic domains w/ JVM
 - Oracle HTTP Server (OHS)
- Status & performance monitoring
- JVM & cross-tier diagnostics
- Provisioning & patch automation
- Config mgmt & STIG compliance
- Service level management



Site Guard

- End-to-End Disaster Recovery Automation
 - Fusion Middleware (Storage Replication) & Database (Data Guard)
 - Switchover (Planned)
 - Failover (Unplanned)
 - Extensible to integrate w/ 3rd party components
- Reduced Risk
 - Reduce possibility of Human Errors
 - Increased confidence (Testing)
- Better availability
 - Minimize MTTR

DR Blueprint with Site Guard



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Fusion Middleware & OEM

Important Documents

- [Fusion Middleware Certification Matrices](#)
- Lifetime Support Policy
 - [Fusion Middleware](#)
 - [Oracle Enterprise Manager](#)
- [Securing a Production Environment for Oracle WebLogic Server](#)
- STIGs
 - [WebLogic \(FMW Infrastructure\) 12.1.3](#)
 - [OHS 12.1.3](#)
- [Middleware Management Video](#)

Fusion Middleware

A way forward...

- Consolidate, build foundation on WebLogic Suite
- Exploit middleware management solutions
- Prepare for cloud, mobile, and Internet of Things



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