Oracle@Oracle: How Oracle IT Uses Oracle Enterprise Manager to Manage Mission Critical Business Applications

Patrick Combs  
Director, Oracle IT

Chung Wu  
Director, Product Management
Superior Ownership Experience

- Performance
- Availability
- Agility
- Control

- Costs
- Risks
Oracle Enterprise Manager

Business-Driven Application Management
- Map business metrics to IT events
- Manage IT from business perspective

Integrated Application-to-Disk Coverage
- Eliminate management silos
- Create agile IT for dynamic business

Integrated Systems Management and Support
- Proactively identify and fix problems
- Maximize business productivity
| **Oracle releases Application Management Pack for PeopleSoft** … |
| **Oracle releases Application Management Pack for Siebel** … |
| **Oracle releases Application Management Pack for Oracle E-Business Suite** |
| **Oracle releases Application Management Pack for JD Edwards EnterpriseOne** |
| **Oracle releases Application Change Management Pack for Oracle E-Business Suite** … |
| **Oracle acquires Moniforce** … |
| **Oracle acquires mValent** … |
| **Oracle acquires ActiveReasoning** … |
APPLICATION MANAGEMENT SUITES
Oracle E-Business Suite • Siebel • PeopleSoft • JD Edwards EnterpriseOne
Application Management Suites

- User Experience Management
- System Monitoring and Diagnostics
- Configuration Management
- Lifecycle Automation
Path to Fusion Applications

Enterprise Manager Evolves With Your Oracle Application Environment

Oracle Enterprise Manager 11g

Siebel, EBS, PeopleSoft, JDE E1

OBI-EE

Oracle

ENTERPRISE MANAGER

11g

Fusion Middleware

Fusion Application
Oracle Production IT
Application Management Suite

SIEBEL

E-BUSINESS SUITE

ENTERPRISE MANAGER
Real User Experience Insight
EM Infrastructure @ Oracle

- 8 EM Environments
- Over 150,000 Targets
- Largest Console: 45,824
- OMS/Agent Versions: 10g, 11g
- Disk Subsystems: NFS, SAN
- Load Balancers
- Single Sign-On
- External (DMZ) and Internal
Application Management Suite Benefits

- Eliminating proprietary tools/solutions
- Centralizing on a common toolset and reporting structure
- Standardized processes
- Expanding the use of Oracle Enterprise Manager
- 66% reduction in error resolution time
- Centralized reporting
- Standard monitoring specific to applications
Oracle Production IT

ENTERPRISE MANAGER
Real User Experience Insight
Real User Experience Insight

• Implementation
  – RUEI with the E-Business Suite accelerator collates JSPs, Forms and other network objects
  – Tap Device Network Connection Used – Placed behind load balancer
  – External & Internal Traffic Monitored

• System Details
  – RUEI Version: 6.0.1 with EBS Accelerator
  – DB: 11.1.0.7 (64 bit)
  – OS: Oracle Enterprise Linux 5 (64 bit)

• Benefits
  – Reduced End User errors by region and application
  – Provided comprehensive application overview
Real User Experience Insight Infrastructure
Oracle Production IT
Siebel Pack

- CRM applications for Sales, Marketing and Partners (Alliances & Channels)
- Services over 3 K Users per Instance
- 3.4 TB DB
- RDBMS 11.1.0.7.0 (4 Node RAC)
- Over 30 Midtiers
- Number of end-users: 12 K
- Version of Siebel: 8.0.0.5 (8.0.0.10 – Oct)
- Number of System Administrators and DB/Apps Administrators: 2/3
Siebel Infrastructure
Oracle Production IT

E-BUSINESS SUITE
E-Business Application Management

- Services over 12 K Users per month
- Over 433 K workflow transactions
- 16.1 TB DB
- RDBMS 11.1.0.7.0 (RAC)
- Over 50 Midtiers
- Number of end-users: 70,406
- Version of E-Business Suite: 12.1.1
- Number of System Administrators and DB/Apps Administrators: 3/6
E-Business Application Management Discovery Process

- Install agents on all E-Business hosts (DB/Midtier)
- Execute AutoConfig to ensure all context files are clean
- Permissions Changes on Middleware
- Permissions Changes on JVM Tech Stack
- Execute Discovery of E-Business Application
- Review Standard Metrics
- Create Notification Rules
# E-Business Application Management Implementation Review

<table>
<thead>
<tr>
<th>Task</th>
<th>Overview</th>
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</thead>
<tbody>
<tr>
<td><strong>Standard Metrics</strong></td>
<td>Concurrent Requests, Forms Sessions, Web User, Workflow Errors, Unsent Workflow Notifications</td>
</tr>
<tr>
<td><strong>User Defined Metrics (UDMs)</strong></td>
<td>Host – Data Guard (MRP) Database - Datafile Recovery</td>
</tr>
<tr>
<td><strong>Metrics Threshold Trends</strong></td>
<td>Review required metrics for 30 day period and set accordingly</td>
</tr>
<tr>
<td><strong>Corrective Action</strong></td>
<td>Restart Process in the event of failure, Clear Log Directories</td>
</tr>
<tr>
<td><strong>Security Policies</strong></td>
<td>Permissions Changes, Password Change, Open Ports</td>
</tr>
<tr>
<td><strong>Monitoring Templates</strong></td>
<td>Host, Database, Middleware, JVMs, E-Biz</td>
</tr>
</tbody>
</table>
E-Business Application Management

- Leveraging Groups
  - Manage Many as One
  - Notification Rules
- Configuration Management
- Dashboards
E-Business Application Management

Systems group Dashboard

- Infrastructure Overview
- Target Health
- Alert Acknowledgement

Target Status

Alert Status
E-Business Application Management
Systems Group Chart

- Holistic Environment View
- Resource Usage Compare
- Highlight Hot Spots
E-Business Application Management Information Publishing (Reporting)

- Standard & Custom Dashboards
- Private or Public
- Application Availability Dashboard
- Infrastructure Services Dashboard
- Database Capacity
- Session Overview
# E-Business Application Management

**Application Services Dashboard**

- Application Status
- Module Usage
- Infrastructure Performance
- Service Level Status

## PDIT Business Application Services Dashboard

<table>
<thead>
<tr>
<th>Service</th>
<th>Status</th>
<th>Performance</th>
<th>Usage and Business Indicators</th>
<th>Components</th>
<th>Service Level</th>
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<tbody>
<tr>
<td></td>
<td></td>
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<td></td>
<td>Last 24 Hours</td>
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<td>Last 24 Hours</td>
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*Oracle*
E-Business Application Management
Infrastructure Services Dashboard

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<th>Service</th>
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<th>Usage and Business Indicators</th>
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<th>Service Level</th>
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<td></td>
<td></td>
<td>Last 7 Days: 100.00%</td>
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<td>Last 31 Days: 99.75%</td>
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<td>gsiap-Self Service Applications Service</td>
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<td>Last 24 Hours: 100.00%</td>
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<td>Last 7 Days: 99.98%</td>
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<td></td>
<td></td>
<td>Last 31 Days: 99.96%</td>
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<tr>
<td>gsiap-Workflow Service</td>
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<td>Last 24 Hours: 100.00%</td>
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<td>Last 7 Days: 99.69%</td>
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<tr>
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<td></td>
<td></td>
<td>Last 31 Days: 98.66%</td>
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</tbody>
</table>
E-Business Application Management
Database Capacity

Database Capacity Summary (GSIAAP)
Cluster Database: gsiaap.us.oracle.com
Time Period: This Year PDT

This report displays the monthly cumulative allocated space usage for all tables in the database. In addition, the detailed monthly allocated space usage of each tablespace is displayed for the selected time frame. Historic trend is based on available data for selected time frame. Space usage data is only available for databases managed by agent of version 10.2 and above.
Earliest Collection Time: Jan 1, 2010 12:00:00 AM
Latest Collection Time: Jul 19, 2010 12:00:00 AM

Monthly Cumulative Tablespace Allocated Space Usage

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<th>Calendar Month</th>
<th>Size (GB)</th>
<th>Used (GB)</th>
<th>Free (GB)</th>
<th>Used (%)</th>
<th>Size (GB)</th>
<th>Used (GB)</th>
<th>Free (GB)</th>
<th>Used (%)</th>
<th>Size (GB)</th>
<th>Used (GB)</th>
<th>Free (GB)</th>
<th>Used (%)</th>
<th>Size (GB)</th>
<th>Used (GB)</th>
<th>Free (GB)</th>
<th>Used (%)</th>
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<td>5,335.33</td>
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<td>64.66</td>
<td>16,225.76</td>
<td>10,902.52</td>
<td>5,324.25</td>
<td>67.21</td>
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<tr>
<td>Jun 1, 2010</td>
<td>16,742.77</td>
<td>10,550.97</td>
<td>6,191.80</td>
<td>63.02</td>
<td>16,778.91</td>
<td>10,873.14</td>
<td>6,442.94</td>
<td>64.85</td>
<td>16,721.95</td>
<td>10,287.01</td>
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<td>10,550.97</td>
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<td>6,640.70</td>
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<td>6,554.66</td>
<td>59.07</td>
<td>16,540.84</td>
<td>9,900.14</td>
<td>6,640.70</td>
<td>59.85</td>
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<td>6,241.90</td>
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<td>16,445.66</td>
<td>10,506.34</td>
<td>6,572.95</td>
<td>64.1</td>
<td>16,351.88</td>
<td>9,665.87</td>
<td>5,885.43</td>
<td>58.77</td>
<td>16,403.51</td>
<td>10,161.61</td>
<td>6,241.90</td>
<td>61.96</td>
</tr>
<tr>
<td>Mar 1, 2010</td>
<td>16,125.52</td>
<td>10,295.88</td>
<td>5,829.65</td>
<td>63.86</td>
<td>16,361.88</td>
<td>10,405.29</td>
<td>6,062.79</td>
<td>64.92</td>
<td>15,999.23</td>
<td>10,132.52</td>
<td>5,621.94</td>
<td>62.92</td>
<td>16,125.52</td>
<td>10,295.88</td>
<td>5,829.65</td>
<td>63.86</td>
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<tr>
<td>Feb 1, 2010</td>
<td>15,931.36</td>
<td>9,887.11</td>
<td>6,044.25</td>
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<td>Jan 1, 2010</td>
<td>15,886</td>
<td>9,819.78</td>
<td>6,066.22</td>
<td>61.81</td>
<td>15,918.51</td>
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<td>15,886</td>
<td>9,819.78</td>
<td>6,066.22</td>
<td>61.81</td>
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</tbody>
</table>
E-Business Application Management Session Breakdown Report

Cluster Database gsiap.us.oracle.com

This report identifies the number of connections to database by session type to illustrate the distribution across the different types of session.

Reported Instances

<table>
<thead>
<tr>
<th>Database Targets</th>
<th>Reported Date/Times</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Date/Time / Parameter</td>
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<tr>
<td></td>
<td>2009/08/26 07:30:25 Start Date</td>
</tr>
<tr>
<td></td>
<td>2010/08/26 07:30:25 End Date</td>
</tr>
</tbody>
</table>

Session Breakdown for All Instances

- Active Par
- Proc
- Background
- CM Active
- CM NON
- Active
- DB Link
- Disco
- EMS
- Forms Logons
- Forms Sessions
- HTTP
- Job Queue
- Non Classified
- Perl
- Thin JDBC
- Tools

Date and Time: 2010/08/26 07:30:25 AM PDT
E-Business Application Management Performance – Java Virtual Machine (JVMs)

- Standard Metrics
- Real-time Data
- Alert Summary
- Memory Pools
- Garbage Collection
E-Business Application Management
Performance - Java Virtual Machine (JVMs)
E-Business Application Management

Concurrent Manager

- Overall Health
- Alert Summary
- Trend Analysis
- Highlight Problem Areas
- Throughput
E-Business Application Management

Concurrent Manager
E-Business Application Management

Workflow

- Configuration overview
- Change Management
- Save Configuration snapshot

**Oracle E-Business Suite Workflow: gisap-Workflow Infrastructure**

**Generic Service Components**

**Custom Workflows**

**View Configuration: Oracle E-Business Suite Workflow**

- Collected From Target: Aug 25, 2010 10:54:25 PM
- Description: Latest Configuration

**Workflow Version**

- Version: 2.6

**Generic Service Components**

<table>
<thead>
<tr>
<th>Select</th>
<th>Component Id</th>
<th>Component Name</th>
<th>Component Type</th>
<th>Component Display Name</th>
<th>Concurrent Queue Name</th>
<th>Concurrent Queue Display Name</th>
<th>Container Type</th>
<th>Container Display Name</th>
<th>Inbound Agent Name</th>
<th>Inbound Agent Display Name</th>
<th>Outbound Agent Name</th>
<th>Outbound Agent Display Name</th>
<th>Max Idle Time</th>
<th>Startup Mode</th>
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<tr>
<td>28.023</td>
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<td>WF_AGENT_LISTENER</td>
<td>Workflow Agent Listener</td>
<td>WFALSNRSVC</td>
<td>Workflow Agent Listener</td>
<td>GSM</td>
<td>Oracle Applications GSM</td>
<td>WF_DEFERRED</td>
<td>WF_DEFERRED</td>
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<td>24.025</td>
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<td>GSM</td>
<td>Oracle Applications GSM</td>
<td>WF JAVA_DEFERRED</td>
<td>Workflow Java Deferred In Queue</td>
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<td>AUTOMA</td>
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</tbody>
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The Oracle Advantage

✓ Business Driven
✓ Complete, Integrated
✓ Application-Specific
✓ Better Performance, Availability, Agility & Control for Applications
✓ Lower Application Management Costs
✓ Provide Path to Future
## Application Management Sessions at OpenWorld

<table>
<thead>
<tr>
<th>Date &amp; Time</th>
<th>Session</th>
<th>Location</th>
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<tbody>
<tr>
<td>Monday 12:30 p.m.</td>
<td>Automate Oracle E-Business Suite Testing With Oracle Application Testing Suite</td>
<td>Moscone W L2, Rm 2020</td>
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<tr>
<td>Monday 2 p.m.</td>
<td>How You Can Optimize Siebel Applications for Today and Prepare for the Future</td>
<td>Moscone W L2, Rm 2001</td>
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<tr>
<td>Monday 5 p.m.</td>
<td>Hands-on Lab: E-Business Suite Monitoring &amp; Cloning</td>
<td>Marriott Marquis, Nob Hill</td>
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<tr>
<td>Tuesday 11 a.m.</td>
<td>Hands-on Lab: E-Business Suite Change Management</td>
<td>Marriott Marquis, Nob Hill</td>
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<td>Tuesday 3:30 p.m.</td>
<td>Latest on Application Change Management for Oracle E-Business Suite</td>
<td>Moscone W L2, Rm 2024</td>
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<td>Wednesday 4:45 p.m.</td>
<td>Hands-on Lab: E-Business Suite Monitoring &amp; Cloning</td>
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<tr>
<td>Thursday 9 a.m.</td>
<td>Reduce TCO with Oracle Application Management Suite for Oracle E-Business Suite</td>
<td>Moscone W L2, Rm 2024</td>
</tr>
<tr>
<td>Thursday 10:30 a.m.</td>
<td>Best Practices for Managing Your PeopleSoft Applications</td>
<td>Marriott Hotel, Golden Gate A</td>
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<tr>
<td>Thursday 12 p.m.</td>
<td>Spot Problems Before Your Users Call: User Experience Monitoring for Oracle Apps</td>
<td>Marriott Hotel, Golden Gate A</td>
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