Oracle ACMP Implementation at WMS Gaming
About WMS Gaming

- Manufacturer of video and mechanical reel-spinning gaming machines and video lottery terminals.
- Market cap of $1.12B.
- Annual revenue of $783M.
- Based out of Waukegan, IL with worldwide operations.
Oracle E-Business Suite Footprint

- 12 Oracle E-Business Suite Instances. (Prod, Test, Patch, Dev)

- Oracle Products implemented:
  - Financials, Manufacturing, Supply Chain Planning, HRMS.

- Oracle Transactions:
  - AR Invoices: 29,000 per Quarter.
  - Inventory Transactions: 950,579 per Quarter.
  - Orders: 9874 per Quarter.
Why we needed a Change Management product

- Highly customized Oracle E-Business environment to cater to a unique business.

- Errors in code migration. The old process involved:
  - Making code packs in Windows/LINUX folders.
  - Writing scripts to compile code.
  - Writing documentation.

- Difficulty in tracking historical changes especially during multiple project executions.

- Difficulty in reporting changes for an IT Audit.
WMS ACMP Implementation Timelines

- Sandbox Install of ACMP 3.1 & EM 10g in October 2010. (Effort: 2.5 person months)

- Sandbox Install of ACMP 4.0 & EM 11g in May 2011. (Effort: 4.5 person months)

- Install on 11i Dev, 11i Test and 2 R12 Instances and sanity tests completed Aug 2011. (Effort: 2.5 person months)
Key differentiators from competition

Leverages existing EBS skills:

- Uses existing OEM infrastructure. Can be managed by an Oracle Apps DBA.

- Uses the same custom patching mechanism as Oracle’s patches. Updates the same audit tables.

- Debugging code migration failures is debugging adpatch utility and concurrent program logs, an Apps DBA’s familiar territory.
Key differentiators from competition

Comprehensive custom object coverage:

- Can compile Oracle E-Business custom components like OAF, Workflows, Forms and all Oracle DB Objects without any configuration.

- Custom Patches do not need to contain dependant objects in the correct order. (Manages dependencies)

- Enforces code quality through Oracle Standard Checker.

- Migrates Oracle Setups.
Key differentiators from competition

Approval Framework:

- Simple change control framework that can address a variety of control mechanisms as opposed to complex configurations.
- Models separation of duties in an IT team.
- Can set up different access levels for different servers for an individual user.
WMS Use Cases

- Currently using ACMP for code and setup migration to Test instances.
- We have a Change control design in place enabling Developers to build patches, IT security to approve them and DBAs to apply them.
- Will be using ACMP in WMS’s Business Transformation project.
  – Data conversions from 11i to R12.
  – Custom objects from Dev to CRP.
## WMS Migration Process

### WMS Oracle Code Migration Process with Oracle ACMP

<table>
<thead>
<tr>
<th>DEV to TEST</th>
<th>Developer</th>
<th>Dev Manager</th>
<th>DBA</th>
<th>Code is in TEST</th>
</tr>
</thead>
</table>
| Development complete | Roles:  
- Customization Manager User  
- TEST - Full access  
Actions:  
- Makes a patch.  
- Requests for approval for the patch release. | Roles:  
- Customization Manager Approver  
Privileges:  
- TEST - View access  
Actions:  
- Approves the release of the patch. | Roles:  
- Patch Manager User  
Privileges:  
- TEST - Full access  
Actions:  
- Applies the released patch. | |

<table>
<thead>
<tr>
<th>TEST to PROD</th>
<th>DBA</th>
<th>Security Manager</th>
<th>DBA</th>
<th>Code is in PROD</th>
</tr>
</thead>
</table>
| Change approved by business | Roles:  
- Patch Manager User  
Privileges:  
- PROD - View access  
Actions:  
- Approves the patch for PROD. | Roles:  
- Patch Manager User  
Privileges:  
- PROD - View access  
Actions:  
- Approves the patch for PROD. | Roles:  
- After approval, runs the patch on PROD. | |

- **Code is in TEST**: Indicates the final stage of the migration process.
- **Development complete**:标志着开发阶段的完成，表明代码已准备好进入测试阶段。
- **Change approved by business**: Indicates that the change has been approved by the business, which is a critical step before proceeding to the PROD stage.
- **Security Manager**: Plays a crucial role in approving and managing changes before they are applied to PROD.
- **DBA**: Responsible for final approvals and running the patch on PROD.
## Template of access levels for different user groups

<table>
<thead>
<tr>
<th>User Type</th>
<th>ACMP Role</th>
<th>TEST EBS Access</th>
<th>PROD EBS Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developer</td>
<td>CM_USER_ROLE</td>
<td>FULL</td>
<td>NONE</td>
</tr>
<tr>
<td>Dev Manager</td>
<td>CM_APPROVER_ROLE</td>
<td>VIEW</td>
<td>NONE</td>
</tr>
<tr>
<td>DBA</td>
<td>CM_USER_ROLE</td>
<td>FULL</td>
<td>FULL</td>
</tr>
<tr>
<td></td>
<td>PM_USER_ROLE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security</td>
<td>PM_APPROVER_ROLE</td>
<td>NONE</td>
<td>VIEW</td>
</tr>
</tbody>
</table>
Most useful ACMP Features

- Pack Diagnostics to find errors in ACMP setup.
- Excel File Manifest upload to make custom patches.
- Excel extraction of setups and offline modification capability.
- Filtering criteria for setup migration through SQL.
- Setup migration to multiple targets in one project execution.