Oracle Forms to Oracle Application Express
A Migration Roadmap

Instructor: Dan McGhan
Today’s Agenda

➢ Oracle Forms
  • Status Today
  • Why Migrate?
➢ Other Options
  • .NET, PHP, and Java
  • Apex
➢ Apex Migration
  • Generate XML Files
  • Create Conversion Project
  • Review/Edit Forms Metadata
  • Generate Apex Application
  • Manually Update Application
Oracle Forms Today

- Mature and Robust
  - Introduced mid 80’s
  - Many major releases
  - A lot of “Out of the box” functionality
  - Extendable with Java (PJC’s)

- Easy to use
  - Declarative
  - Leverages full Oracle database capabilities and existing SQL & PL/SQL skills

- Supported

- Development Continues
So Why Migrate?

- Modern “look and feel”
- HTML based solution
- Support (Both Development and Client)
.NET, PHP, and Java

- Object Oriented Languages
  - Could require retraining
  - Not as declarative (productivity)
- Different data types
- Database features
- No built in Forms conversion utility
Targets the Rapid Application Development Community
## Side by Side

<table>
<thead>
<tr>
<th>Feature</th>
<th>Forms</th>
<th>Apex</th>
</tr>
</thead>
<tbody>
<tr>
<td>4GL Declarative</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>4GL Languages</td>
<td>SQL and PL/SQL</td>
<td>SQL and PL/SQL</td>
</tr>
<tr>
<td>User Interface</td>
<td>Java</td>
<td>HTML</td>
</tr>
<tr>
<td>Page Layout</td>
<td>Windows and Canvases</td>
<td>Pages and Regions</td>
</tr>
<tr>
<td>Client-side Field Control</td>
<td>Form triggers</td>
<td>JavaScript and Ajax</td>
</tr>
<tr>
<td>Web Service Support</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Charting</td>
<td>BI Beans</td>
<td>Flash Charts</td>
</tr>
<tr>
<td>Locking</td>
<td>Pessimistic, Optimistic, Custom</td>
<td>Optimistic, Custom</td>
</tr>
<tr>
<td>Database Connections</td>
<td>Synchronous</td>
<td>Asynchronous</td>
</tr>
<tr>
<td>Concurrent User Support</td>
<td>Database connectivity maintains by user session</td>
<td>Database connectivity only maintained for the processing of requests</td>
</tr>
<tr>
<td>Architecture</td>
<td>3 Tier</td>
<td>2 Tier</td>
</tr>
</tbody>
</table>
Apex Migration Overview

**Step 1**
Identify Oracle Forms Components to be converted

**Step 2**
Automatically generate Default Application

**Step 3**
Manually refine and enhance Application Logic and UI

Oracle Application Express Forms Converter

Oracle Forms Application

Import Oracle Forms and Reports Definition Files into Conversion Repository

Oracle Application Express Application

Deploy Application

Forms Conversion Project Management: Track automatic and manual conversion tasks
Load Oracle Forms Source

- Run Forms2XML Utility
- Create APEX Project
- Upload Source Files

Forms2XML Utility:
- Available with Forms 9i & 10g
- May convert Forms 4.x & 6i
  - If conversion fails will need to manually upgrade first
Step 1: Identify Components to be Generated

- **Browse Components**
- **Blocks**
  - Select / Deselect
  - Enhance SQL Query
- **Items**
  - Select / Deselect
  - Review Prompts

- **Annotate**
  - Triggers, Program Units, Alerts, etc.
    - Is it Applicable?
    - Document post-generation requirements
Step 2: Automatically Generate Components

- **Blocks**
  - Form
  - Master / Detail
  - Tabular Form

- **Items**
  - Date Pickers
  - HTML Editors
  - Checkboxes
  - Radio Groups
  - Select Lists
  - Pop-up List of Values

- **List of Values**

- **Reports**
Step 3: Manual Post-Generation Tasks

- **Application Logic**
  - Triggers
  - Program Units
  - PL/SQL Libraries
  - Validations
  - Processes
  - Computations

- **User Interface**
  - Windows
  - Canvasses
  - Object Libraries
  - Corporate Theme
  - Add Pages / Regions / Items
  - JavaScript / AJAX

- **Annotate**
  - Update Completion
  - Increases % complete

<table>
<thead>
<tr>
<th>Completion Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Components: 194</td>
</tr>
<tr>
<td>Completed: 155</td>
</tr>
<tr>
<td>Percent Complete: 81.58%</td>
</tr>
</tbody>
</table>
Track Conversion Progress

- Deploy Oracle APEX Application
- Create Validations, Processes and Computations
- Incorporate JavaScript / AJAX
- Create Additional Pages / Regions / Items
- Develop Corporate Theme
- Generate Application
- Identify Components to be Generated
- Load Oracle Forms Source

% Complete: 0% 20% 40% 60% 80% 100%
Thank You

Questions?

Dan McGhan
DanMcghan@SkillBuilders.com
401.783.6172 or 888.803.5607

www.SkillBuilders.com