XML Publisher and PeopleSoft Integration
The Nuts and Bolts

HEUG Webinar
Thursday, November 18
Noon – 1:00 pm EST
First, The Nuts

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Arizona State University

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Arizona State University
Agenda

- Introduction
  - Purposes, architecture and tools
  - Case Study
  - 4 Easy Steps

- Building Forms
  - RTF Templates
  - Demo

- Integration with PeopleSoft
  - Report definition
  - Security Roles
- Report Generation
- Form and Letter Generation
- Also known as BI Publisher
- Foundation in XML and Java
- Acronym of XMLP
Why Use It?

- Don’t need a techie to layout report
- Flexible
- A launching step into Fusion
- Relatively quick to implement
Practical Uses

- Transcripts
- Admission Letters
- Time and Labor Approval Report
- Letters of Recommendation
- Pass/Fail Form
- Tuition Waiver Notice
- Financial Aid Notification (FAN)
• Describes data

• Similar to HTML, but extensible

• All elements must have a start <...> and end </...tag>

• Internet Explorer will validate XML document
<?xml version="1.0" encoding="ISO-8859-1" ?>

- <breakfast_menu>
  - <food>
    <name>Belgian Waffles</name>
    <price>$5.95</price>
    <description>two of our famous Belgian Waffles with plenty of real maple syrup</description>
    <calories>650</calories>
  </food>
  - <food>
    <name>Strawberry Belgian Waffles</name>
    <price>$7.95</price>
    <description>light Belgian waffles covered with strawberries and whipped cream</description>
    <calories>900</calories>
  </food>
  - <food>
    <name>Berry-Berry Belgian Waffles</name>
    <price>$8.95</price>
    <description>light Belgian waffles covered with an assortment of fresh berries and whipped cream</description>
    <calories>900</calories>
  </food>
</breakfast_menu>
- **PeopleSoft Query**
  - PeopleSoft creates schema
  - No parent/child relationships

- **XML File**
  - More flexible approach
  - Allows for parent/child relationships
  - XML can be created with SQR, SOA, PS/Query or custom program

**Data Extraction**
Templates

◦ RTF Templates
  • Rich Text Format
  • Template builder plug-in for Microsoft Word
  • Empowers business analysts/power users

◦ PDF Templates
  • Layout pre-defined and fixed
  • Useful for invoices, purchase orders and government forms
  • Requires Acrobat 5.0 or above
Report Output

- HTML
  - Email generation
  - Report output to display on web

- PDF
  - Transcripts
  - Official letters
  - Forms

- RTF
  - Rich Text Format output

- XLS
  - Report output for Excel
Case Study
Sample XML File

- <rankResponse>
  - <ns1:rankResponse xmlns:ns1="http://xmlns.oasis.asu.edu/LOR/types">
    <ns1:emplId>1201522040</ns1:emplId>
    <ns1:appId>588551</ns1:appId>
    <ns1:asuLorId>2</ns1:asuLorId>
    <ns1:questionNumber>04</ns1:questionNumber>
    <ns1:questionText>Oral Communication Skills</ns1:questionText>
    <ns1:questionRank>0</ns1:questionRank>
    <ns1:unableToRank>N</ns1:unableToRank>
    <ns1:lastUpdateId>ASU_LORAPP</ns1:lastUpdateId>
    <ns1:lastUpdateDateTime>2008-09-25T16:23:13.000-07:00</ns1:lastUpdateDateTime>
  </ns1:rankResponse>

- <ns1:rankResponse xmlns:ns1="http://xmlns.oasis.asu.edu/LOR/types">
  <ns1:emplId>1201522040</ns1:emplId>
  <ns1:appId>588551</ns1:appId>
  <ns1:asuLorId>2</ns1:asuLorId>
  <ns1:questionNumber>06</ns1:questionNumber>
  <ns1:questionText>Ethical Standards & Integrity</ns1:questionText>
  <ns1:questionRank>0</ns1:questionRank>
  <ns1:unableToRank>N</ns1:unableToRank>
  <ns1:lastUpdateId>ASU_LORAPP</ns1:lastUpdateId>
  <ns1:lastUpdateDateTime>2008-09-25T16:23:13.000-07:00</ns1:lastUpdateDateTime>
</ns1:rankResponse>

- <ns1:rankResponse xmlns:ns1="http://xmlns.oasis.asu.edu/LOR/types">
  <ns1:emplId>1201522040</ns1:emplId>
  <ns1:appId>588551</ns1:appId>
  <ns1:asuLorId>2</ns1:asuLorId>
  <ns1:questionNumber>09</ns1:questionNumber>
  <ns1:questionText>Leadership Skills</ns1:questionText>
  <ns1:questionRank>51</ns1:questionRank>
  <ns1:unableToRank>N</ns1:unableToRank>
  <ns1:lastUpdateId>ASU_LORAPP</ns1:lastUpdateId>
  <ns1:lastUpdateDateTime>2008-09-25T16:23:13.000-07:00</ns1:lastUpdateDateTime>
</ns1:rankResponse>
This applicant has waived her/his right to review this recommendation.

**Recommendation**

Project supervisor
1 years 0 months

**How would you rate the applicant relative to others with respect to the following?**

Please rank the applicant's writing ability  
Excellent (Top 10%)

Please rank the applicant's presentation skills  
Outstanding (Top 5%)

Please rank the applicant's reasoning and analysis skills  
Outstanding (Top 5%)

Please rank the applicant's mathematics and statistics skills  
Outstanding (Top 5%)

Please rank the applicant's overall intellectual ability  
Outstanding (Top 5%)

**Question 01: Knowledge of Applicant: How do you know the applicant? How long have you known the applicant?**

I first met Chris in a course that I was teaching in solid state devices, ELEN3106, about four years ago. He consistently performed well and, while not the absolute top student, had a solid understanding of the material and ultimately received an A- (I am told that I am a rather strict grader).
This applicant has waived her/his right to review this recommendation. end if
This applicant has not waived her/his right to review this recommendation. end if

Recommendation
What is your relationship to the applicant?

How long have you known the applicant?

How would you rate the applicant relative to others with respect to the following?

questionText:

questionNumber

questionResponse

Overall Recommendation

end if
XML Publisher in 4 Easy Steps!

- Step 1: Generate XML Data
- Step 2: Design Template
- Step 3: Set-up PeopleSoft
- Step 4: Run it!
Step 1: Generate XML Data
Step 2: Design Template
Building an RTF Template

Design Helper

Plug-in for Microsoft Word (requires 2000 or later)
Facilitates the insertion of application data tags into RTF templates.
<table>
<thead>
<tr>
<th>Description</th>
<th>Syntax</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form Field</td>
<td><code>&lt;?field_name?&gt;</code></td>
<td><code>&lt;?last_name?&gt;</code></td>
</tr>
<tr>
<td></td>
<td><code>&lt;?endforeach?&gt;</code></td>
<td><code>&lt;?endforeach?&gt;</code></td>
</tr>
<tr>
<td>Conditional</td>
<td><code>&lt;?if:condition?&gt;</code></td>
<td><code>&lt;?if:recDeclined=&quot;N&quot;?&gt;</code></td>
</tr>
<tr>
<td></td>
<td><code>&lt;?end if?&gt;</code></td>
<td><code>&lt;?end if?&gt;</code></td>
</tr>
<tr>
<td>Description</td>
<td>Syntax</td>
<td>Example</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Extended SQL</td>
<td><code>&lt;?xdofx:expression?&gt;</code></td>
<td><code>&lt;?xdofx:substr(middle_name,1,1)?&gt;</code></td>
</tr>
<tr>
<td></td>
<td></td>
<td><code>&lt;?xdofx:sysdate()&gt;</code></td>
</tr>
<tr>
<td>Sort Rows</td>
<td><code>&lt;?sort:field_name?&gt;</code></td>
<td><code>&lt;?sort:last_name?&gt;</code></td>
</tr>
<tr>
<td>Format Number</td>
<td><code>&lt;?format-number:field_name;mask?&gt;</code></td>
<td><code>&lt;?format-number:salary;'L999G999 D99'?&gt;</code></td>
</tr>
</tbody>
</table>

http://download.oracle.com/docs/cd/E05317_01/psft/acrobat/e05078-01.pdf

More Advanced Options
Step 3: Set-up PeopleSoft
Main Menu → Reporting Tools → XML Publisher → Data Source

- Required for your report definition
- Provides data feed and sample file

Data Source Type
- PS Query
- Connected Query (new to PeopleTools 8.5)
- XML File
**Data Source**

- **Data Source Type:** XML File
- **Data Source ID:** ASU_GAARP_LOR
- **Description:** Letter of Recommendation
- **Active:**
- **Object Owner ID:** Admissions - US
- **Registered Date/Time:** 10/09/08 7:03:11AM
- **Registered By:** ryosowit
- **Last Update Date/Time:** 10/09/08 7:04:17AM
- **Updated By:** ryosowit

**Related Files**

<table>
<thead>
<tr>
<th>File Type</th>
<th>File</th>
<th>Upload File</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Data File</td>
<td>LOR_758.xml</td>
<td>Upload</td>
</tr>
<tr>
<td>Schema File</td>
<td></td>
<td>Upload</td>
</tr>
</tbody>
</table>

**Buttons:**
- Return to Search
- Previous in List
- Next in List
- Add
- Update/Display
- Save
Main Menu → Reporting Tools → XML Publisher → Report Definition
Sample Report Definition
Report Definition – Template

Report Name: ASUGAARP_LOR

Template ID: ASUGAARP_LOR_1

Description: Letter of Recommendation

*Language Code: English

*Status: Active

Template Files:

Effective Date: 09/25/2009

Template File: LoR.rtf

Upload | Preview | Use Alt. XML

Return to Search | Previous in List | Next in List | Add | Update/Display | Include History | Correct History

Save
# Report Definition - Output

**Report Name:** ASUGAARP_LOR

## General

### Runtime Output Format Options

<table>
<thead>
<tr>
<th>Format Type</th>
<th>Enabled</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTML</td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td>PDF</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>RTF</td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td>XLS</td>
<td>✔️</td>
<td></td>
</tr>
</tbody>
</table>

### Output Location

- **Location:** Any
- **File Name:**

**Buttons:**
- Return to Search
- Previous in List
- Next in List
- Add
- Update/Display
- Include History
- Correct History
- Save
Step 4: Run It!
Query Report Viewer

Enter any information you have and click Search. Leave fields blank for a list of all values.

*Search by: Report Name begins with

Search Advanced Search

Search Results Show Template Prompts

<table>
<thead>
<tr>
<th>Report Name</th>
<th>Description</th>
<th>Data Source ID</th>
<th>Format</th>
<th>Burst</th>
<th>View Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASUSAAD_TEST</td>
<td>Sample Admissions Letter</td>
<td>ASUSAAD_TEST_EMAIL_ADMIT</td>
<td>PDF</td>
<td>N</td>
<td>View Report</td>
</tr>
</tbody>
</table>

Query Report Viewer
• Process Scheduler Request, with a process type of XML Publisher

• Custom process using PeopleCode

• Expose as a web service and call from external app
XMLP Security

- XMLP Power User – PTPT2500
  - Report Definition
  - Download Design Helper
  - Query Report Viewer/Scheduler

- XMLP Report Developer – PTPT2600
  - Access to all XMLP functions

- For row level security, use Report Definition ID
Advanced Options

- Bursting
- Sub-templates
- eText RTF templates
- Connected Query
- One report definition, multiple templates
- SendMailJPkg
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Questions?