It Pays to be Connected:
The Power of Connected Query

· Session #3003
· July 22, 2015
Your Presenter

- Darlene Hopkins
  - Business Intelligence Analyst at UT Arlington
  - Working primarily with Student Financials and its accounting
Who are YOU?
Agenda/Contents

- Environment
- Introduction
- Design
- Tools
- Presentation
- Questions
Environment
UT Arlington

• Total enrollment of all students in on-campus and online programs - 41,779

• Students come from every state and 111 countries, making it fifth among national universities for undergraduate diversity (US News & World Report)

• More than 180 degree programs in 10 schools and colleges
UT Arlington & Oracle

- Campus Solutions 9.0
- Enterprise Portal 9.1
- PeopleTools 8.5.3
- Running on IBM AIX with Oracle Database
UT Arlington & Reporting/BI

- Focused on operational reports immediately after implementation - is everything working as expected?
- Increasing emphasis on metrics and analytics
- Increasing variety in the combinations of data that are explored
- Increasing demand for data in very short time frames
- Existing systems sometimes limited our ability to provide what was needed
Introduction
Introduction - Why?
• Simplify the writing of reports
• Supply data to other systems using an XML interface
• Provide a data source for a BI Publisher report
• Facilitate left outer joins
• Ability for functional users to understand and control the data source
• Multiple representations of the same data
Introduction - Why

- Simplify the writing of reports
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Introduction - Security
• PTPT2700 - full edit access
• PTPT2800 - view only
Introduction - Glossary
• Connected Query
  • a hierarchical object built with existing PeopleSoft queries
  • enables you to create a single XML file based on a set of queries with parent/child relationships
  • introduced in PeopleTools 8.5
• **Parent Query**
  - the top level query in a Connected Query
  - any query in a Connected Query that has one or more child queries
• **Child Query**
  • a query that has a single parent query
  • may also be a parent query
  • may have sibling queries
• Sibling Query
  • a query shares a parent query with another child query
  • a query that is at the same level of the hierarchy
Query 1
 Query 2
  Query 3
   Query 4
 Query 5
 Query 6
 Query 7
 Query 8
 Query 9
 Query 10
• **Public Connected Query**
  • can be used by all users
  • may not contain any private queries
• Private Connected Query
  • can only be used by its creator
  • may include public and private queries
Mapping Query Fields

- establishes the filtering relationship between values of corresponding fields in the child and parent queries
Audience Participation
Design
Query 1
Field
Field
Field
Field
Field
Field
Field
Field
Field

Query 2
Field
Field
Field
Field
Field
Field
Field
Field
Field
Design
Audience Participation
Tools
Tools - PSQuery
• Main Menu
  • Reporting Tools
    • Query
    • Query Manager
Tools - Quick Start
• Main Menu
  • Reporting Tools
    • Connected Query
      • Connected Query
Quick Start
Connected Query Quick Start

Create a simple parent-child Query relationship between two Queries

Step 1 of 5

Enter Connected Query Name and Descriptive Information

*Connected Query:  
Public

Description:

Comments:
Connected Query Quick Start

Create a simple parent-child Query relationship between two Queries

Enter Connected Query Name and Descriptive Information

Connected Query: UTA_SF_DEMO_QUERY

Description: Demo Connected Query

Comments: This is a Connected Query that has been developed to show the Connected Query Quick Start
## Connected Query Quick Start

Create a simple parent-child Query relationship between two Queries

### Step 2 of 5

#### Select a Parent Query

**Connected Query Definition**

- **Connected Query:** UTA_SF_DEMO_QUERY
  - **Public:**✓
- **Description:** Demo Connected Query
- **Comments:** This is a Connected Query that has been developed to show the Connected Query Quick Start

**Parent Query:**

[View Query]
**Look Up Query**

*Search by: Query Name begins with UTA_SF_D*

- [Lookup] [Cancel] [Advanced Lookup]

**Search Results**

<table>
<thead>
<tr>
<th>Query Name</th>
<th>Description</th>
<th>Owner</th>
</tr>
</thead>
<tbody>
<tr>
<td>UTA_SF_DAILY_ACCOUNT_BALANCES</td>
<td>Daily balances by account</td>
<td>Public</td>
</tr>
<tr>
<td>UTA_SF_DAILY_COMM_SUMMARY</td>
<td>SF Comm Summary Pivot Query</td>
<td>Public</td>
</tr>
<tr>
<td>UTA_SF_DAILY_STUDENT_BALANCES</td>
<td>Daily balances by student</td>
<td>Public</td>
</tr>
<tr>
<td>UTA_SF_DAILY_UNAPL_PMT_BALANCE</td>
<td>Daily pmt balances by student</td>
<td>Public</td>
</tr>
<tr>
<td>UTA_SF_DECEASED_WACCTBAL</td>
<td>Deceased with AcctBalance</td>
<td>Public</td>
</tr>
<tr>
<td>UTA_SF_DEFERRED_REVENUE</td>
<td>deferred revenue</td>
<td>Public</td>
</tr>
<tr>
<td>UTA_SF_DELINQUENT_EMPLOYEES</td>
<td>List of delinquent employees</td>
<td>Public</td>
</tr>
</tbody>
</table>
Connected Query Quick Start

Create a simple parent-child Query relationship between two Queries

Select a Parent Query

Connected Query Definition

- Connected Query: UTA_SF_DEMOQUERY
- Description: Demo Connected Query
- Comments: This is a Connected Query that has been developed to show the Connected Query Quick Start
- Parent Query: UTA_SF_DEMO_PARENT

Step 2 of 5
**Connected Query Quick Start**

Create a simple parent-child Query relationship between two Queries

**Connected Query Definition**

**Connected Query:** UTA_SF_DEMO_QUERY  
**Description:** Demo Connected Query  
**Comments:** This is a Connected Query that has been developed to show the Connected Query Quick Start

**Connected Query Structure**

- UTA_SF_DEMO_PARENT
  - no child Query defined yet

**Child Query:**
Connected Query Quick Start

Create a simple parent-child Query relationship between two Queries

Connected Query Definition

Connected Query: UTA_SF_DEMO_QUERY  √ Public

Description: Demo Connected Query

Comments: This is a Connected Query that has been developed to show the Connected Query Quick Start

Connected Query Structure

- UTA_SF_DEMO_PARENT
- UTA_SF_DEMO_CHILD

Child Query: UTA_SF_DEMO_CHILD  View Query
### Connected Query Quick Start

Select fields from each Query then click 'Map Fields' button to map.

Map Child Query fields to Parent Query fields for Filtering.

#### Connected Query Definition

- **Connected Query:** UTA_SF_DEMO_QUERY
- **Public:** 
- **Description:** Demo Connected Query
- **Comments:** This is a Connected Query that has been developed to show the Connected Query Quick Start

#### Connected Query Structure

- **UTA_SF_DEMO_PARENT**
- **UTA_SF_DEMO_CHILD**

Select fields from each Query then click 'Map Fields' button to map.

#### Parent Query - UTA_SF_DEMO_PARENT

#### Child Query - UTA_SF_DEMO_CHILD

<table>
<thead>
<tr>
<th>Select</th>
<th>Key</th>
<th>Select a Child Query Field</th>
<th>Format</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A.EMPLID - Empl ID</td>
<td></td>
<td>CHAR 11</td>
</tr>
<tr>
<td></td>
<td>A.ACAD_CAREER - Academic Career</td>
<td></td>
<td>CHAR 4</td>
</tr>
<tr>
<td></td>
<td>A.STRM - Term</td>
<td></td>
<td>CHAR 4</td>
</tr>
<tr>
<td></td>
<td>A.CLASS_NBR - Class Nbr</td>
<td></td>
<td>NUMBER 5</td>
</tr>
<tr>
<td></td>
<td>A.SESSION_CODE - Session</td>
<td></td>
<td>CHAR 3</td>
</tr>
<tr>
<td></td>
<td>A.STDNT_ENRL_STATUS - Student Enrollment Status</td>
<td></td>
<td>CHAR 2</td>
</tr>
<tr>
<td></td>
<td>A.ENRL_STATUS_REASON - Enrollment Status Reason</td>
<td></td>
<td>CHAR 4</td>
</tr>
<tr>
<td></td>
<td>A.UNT_BILLING - Billing Units</td>
<td></td>
<td>NUMBER 6</td>
</tr>
</tbody>
</table>
Select fields from each Query then click 'Map Fields' button to map.

**Parent Query - UTA_SF_DEMO_PARENT**

**Child Query - UTA_SF_DEMO_CHILD**

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### Child Query - UTA_SF_DEMO_CHILD

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<thead>
<tr>
<th>Select</th>
<th>Key</th>
<th>Select a Child Query Field</th>
<th>Format</th>
<th>&quot;Select a Parent Query Field&quot;</th>
</tr>
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<tr>
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Preview XML
Max Rows Fetched for Query: 6
Tools - Quick Start

Preview XML  Max Rows Fetched for Query: 6
Connected Query Manager

Connected Query: UTA_SF_DEMO_QUERY
Owner ID: 

Public: 

Description:
Demo Connected Query

Comments:
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Parent Query Selection
Parent Query: UTA_SF_DEMO_PARENT

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</tr>
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Preview XML
Max Rows Fetched for Query: 6
Save
Tools - Manager
- Main Menu
  - Reporting Tools
    - Connected Query
      - Connected Query Manager
### Look Up Query

*Search by:* Query Name begins with **UTA_SF_D**

[Lookup] [Cancel] [Advanced Lookup]

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<td>Public</td>
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</tbody>
</table>
Connected Query Manager

Connected Query: UTA_SF_DEMO
Owner ID: [Input Field]
Public: [Check Box]
Status: Active

Description:
Connected Query Demo

Comments:
Connected Query Demo; doesn’t do anything useful

Parent Query Selection:
Parent Query: UTA_SF_DEMO_PARENT

Connected Query Structure:
- UTA_SF_DEMO_PARENT
- UTA_SF_DEMO_CHILD
Connected Query Manager

Connected Query: UTA_SF_DEMO
Owner ID: [Dropdown]

Status: Active

Description

Parent Query Selection
Parent Query: UTA_SF_DEMO_PARENT
View Query

Connected Query Structure
[TreeView]

Select fields from each Query then click 'Map Fields' button to map.

Parent Query - UTA_SF_DEMO_PARENT
Child Query - UTA_SF_DEMO_CHILD

<table>
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<tr>
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<td>☑</td>
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<td>NUMBER 5</td>
</tr>
<tr>
<td>☑</td>
<td>A.SESSION_CODE - Session</td>
<td>CHAR 3</td>
</tr>
<tr>
<td>☑</td>
<td>A.STDNT_ENRL_STATUS - Student Enrollment Status</td>
<td>CHAR 2</td>
</tr>
<tr>
<td>☑</td>
<td>A.ENRL_STATUS_REASON - Enrollment Status Reason</td>
<td>CHAR 4</td>
</tr>
<tr>
<td>☑</td>
<td>A.UNT_BILLING - Billing Units</td>
<td>NUMBER 6</td>
</tr>
</tbody>
</table>
Select fields from each Query then click 'Map Fields' button to map.

### Parent Query - UTA_SF_DEMO_PARENT

### Child Query - UTA_SF_DEMO_CHILD

<table>
<thead>
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<th>Select Key</th>
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<table>
<thead>
<tr>
<th>Select</th>
<th>Key</th>
<th>Select a Child Query Field</th>
<th>Format</th>
<th>*Select a Parent Query Field</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A.EMPLID - Empl ID</td>
<td>CHAR 11</td>
<td>A.EMPLID</td>
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<td>A.ITEM_TERM</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A.STRM - Term</td>
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<tr>
<td></td>
<td>A.CLASS_NBR - Class Nbr</td>
<td>NUMBER 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A.SESSION_CODE - Session</td>
<td>CHAR 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A.STDNT_ENRL_STATUS - Student</td>
<td>CHAR 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enrollment Status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A.ENRL_STATUS_REASON - Enrollment Status Reason</td>
<td>CHAR 4</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>A.UNT_BILLING - Billing Units</td>
<td>NUMBER 6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
To o ls  -
To o ls  -
Manager

Connected Query Manager

Connected Query: UTA_SF_DEMO

Owner ID:

Public: Yes

Status: Active

Description

Parent Query Selection

Parent Query: UTA_SF_DEMO_PARENT

View Query

Connected Query Structure

<table>
<thead>
<tr>
<th>Connected Query Structure</th>
<th>Field1</th>
<th>Field2</th>
</tr>
</thead>
<tbody>
<tr>
<td>UTA_SF_DEMO_PARENT</td>
<td>A.EMPLID</td>
<td>A.ITEM_TERM</td>
</tr>
<tr>
<td>UTA_SF_DEMO_CHILD</td>
<td>A.EMPLID</td>
<td>A.STRM</td>
</tr>
</tbody>
</table>
This XML file does not appear to have any style information associated with it.

```xml
<ConnectedQuery name="UTA_SF_FEES_OWED_ALL" preview="True">
  <UTA_SF_FEES_OWED_IDS>
    <A.ITEM_TERM>2152</A.ITEM_TERM>
    <A.COMMON_ID>1000000951</A.COMMON_ID>
    <B.NAME>Cambronero, Sergio</B.NAME>
    <A.SESSION_CODE>1</A.SESSION_CODE>
    <EXPR6_6>1006.64</EXPR6_6>
  </UTA_SF_FEES_OWED_IDS>
  <UTA_SF_FEES_OWED>
    <A.ITEM_TERM>2152</A.ITEM_TERM>
    <A.COMMON_ID>1000000951</A.COMMON_ID>
    <A.SESSION_CODE>1</A.SESSION_CODE>
    <A.ITEM_TYPE_CD>Charge</A.ITEM_TYPE_CD>
    <A.ITEM_TYPE>201030025001</A.ITEM_TYPE>
    <B.DESCRIPTION>N-R Out of State DE Non-Cde</B.DESCRIPTION>
    <A.ITEM_AMT>1006.64</A.ITEM_AMT>
  </UTA_SF_FEES_OWED>
  <UTA_SF_FEES_BILLED_UNITS_TRAD>
    <A.EMPLID>1000000951</A.EMPLID>
    <A.STRM>2152</A.STRM>
    <A.SESSION_CODE>1</A.SESSION_CODE>
    <B.DESCRIPTION>No Description</B.DESCRIPTION>
    <A.UNIT_NBR>1006</A.UNIT_NBR>
    <A.UNIT_TYPE>…</A.UNIT_TYPE>
    <A.AMOUNT>1006.64</A.AMOUNT>
  </UTA_SF_FEES_BILLED_UNITS_TRAD>
</ConnectedQuery>
```
<table>
<thead>
<tr>
<th>Property Name</th>
<th>Property Value</th>
<th>Default Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ExecutionLog</td>
<td>False</td>
<td>False</td>
</tr>
<tr>
<td>IgnoreRelFieldOutput</td>
<td>False</td>
<td>False</td>
</tr>
<tr>
<td>IsDebugMode</td>
<td>False</td>
<td>False</td>
</tr>
<tr>
<td>ShowFormattedXML</td>
<td>False</td>
<td>False</td>
</tr>
<tr>
<td>SupportsOrderBy</td>
<td>False</td>
<td>False</td>
</tr>
</tbody>
</table>
### Connected Query Transformation

#### User Defined Transformation

<table>
<thead>
<tr>
<th>Name</th>
<th>File Type</th>
<th>Edit XSLT</th>
<th>Preview</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEES_OWED_CSV_FORMATTED</td>
<td>CSV</td>
<td>Edit XSLT</td>
<td>Preview</td>
</tr>
<tr>
<td>FEES_OWED_CSV_UNFORMATTED</td>
<td>CSV</td>
<td>Edit XSLT</td>
<td>Preview</td>
</tr>
<tr>
<td>PLAIN_COLUMNS</td>
<td>CSV</td>
<td>Edit XSLT</td>
<td>Preview</td>
</tr>
</tbody>
</table>

**Buttons:**
- Add XSLT
- OK
- Cancel
<table>
<thead>
<tr>
<th>File Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>001</td>
</tr>
<tr>
<td>A01</td>
</tr>
<tr>
<td>ABA</td>
</tr>
<tr>
<td>AET</td>
</tr>
<tr>
<td>APC</td>
</tr>
<tr>
<td>CSS</td>
</tr>
<tr>
<td>CSV</td>
</tr>
<tr>
<td>D01</td>
</tr>
<tr>
<td>DAT</td>
</tr>
<tr>
<td>DTD</td>
</tr>
<tr>
<td>DTL</td>
</tr>
<tr>
<td>ERR</td>
</tr>
<tr>
<td>GIF</td>
</tr>
<tr>
<td>GIR</td>
</tr>
<tr>
<td>HTM</td>
</tr>
<tr>
<td>HTML</td>
</tr>
<tr>
<td>IDX</td>
</tr>
<tr>
<td>JCD</td>
</tr>
<tr>
<td>JS</td>
</tr>
<tr>
<td>LIS</td>
</tr>
<tr>
<td>LOG</td>
</tr>
<tr>
<td>MDL</td>
</tr>
<tr>
<td>MT9</td>
</tr>
<tr>
<td>TRC</td>
</tr>
<tr>
<td>TRN</td>
</tr>
<tr>
<td>NXT</td>
</tr>
<tr>
<td>OUT</td>
</tr>
<tr>
<td>PS</td>
</tr>
<tr>
<td>SQL</td>
</tr>
<tr>
<td>STDOUT</td>
</tr>
<tr>
<td>SYS</td>
</tr>
<tr>
<td>TMP</td>
</tr>
<tr>
<td>TXT</td>
</tr>
<tr>
<td>XLSM</td>
</tr>
<tr>
<td>XSLX</td>
</tr>
<tr>
<td>XSD</td>
</tr>
<tr>
<td>ZIP</td>
</tr>
</tbody>
</table>

**Tools - Manager**
### Connected Query Transformation

#### User Defined Transformation

<table>
<thead>
<tr>
<th>Name</th>
<th>File Type</th>
<th>Edit XSLT</th>
<th>Preview</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEES_Owed_CSV_FORMATTED</td>
<td>CSV</td>
<td>Edit XSLT</td>
<td>Preview</td>
</tr>
<tr>
<td>FEES_Owed_CSV_UNFORMATTED</td>
<td>CSV</td>
<td>Edit XSLT</td>
<td>Preview</td>
</tr>
<tr>
<td>PLAIN_COLUMNS</td>
<td>CSV</td>
<td>Edit XSLT</td>
<td></td>
</tr>
</tbody>
</table>

**Tools - Manager**
Tools - Viewer
• Main Menu
  • Reporting Tools
    • Connected Query
    • Connected Query Viewer
Connected Query Viewer

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

Search by: Connected Query Name begins with

[Search] [Advanced Search]
### Connected Query Viewer

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

**Search by:** Connected Query Name begins with UTA_SF_W

---

**Search Results:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Owner</th>
<th>Status</th>
<th>Preview XML</th>
<th>Run To Window</th>
<th>Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>UTA_SF_WAIVERS</td>
<td>Waivers for range of terms</td>
<td>Public</td>
<td>Active</td>
<td>Preview XML</td>
<td>Run To Window</td>
<td>Schedule</td>
</tr>
<tr>
<td>UTA_SF_WAIVERS_AP</td>
<td>Waivers for AP students</td>
<td>Public</td>
<td>Active</td>
<td>Preview XML</td>
<td>Run To Window</td>
<td>Schedule</td>
</tr>
<tr>
<td>UTA_SF_WAIVERS_BAC</td>
<td>Waivers for BAC students</td>
<td>Public</td>
<td>Active</td>
<td>Preview XML</td>
<td>Run To Window</td>
<td>Schedule</td>
</tr>
<tr>
<td>UTA_SF_WAIVERS_OTHER_DYN</td>
<td>Waivers for students</td>
<td>Public</td>
<td>Active</td>
<td>Preview XML</td>
<td>Run To Window</td>
<td>Schedule</td>
</tr>
<tr>
<td>UTA_SF_WVRS_OFFSET_CHGS</td>
<td>Waivers and Offsetting Charges</td>
<td>Public</td>
<td>Active</td>
<td>Preview XML</td>
<td>Run To Window</td>
<td>Schedule</td>
</tr>
</tbody>
</table>
Queued

This window will show your report when it has completed.

<table>
<thead>
<tr>
<th>Process Name</th>
<th>PSCONQRS</th>
<th>PSCONQRS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process Instance</td>
<td>6742756</td>
<td></td>
</tr>
<tr>
<td>Process Type</td>
<td></td>
<td>Application Engine</td>
</tr>
</tbody>
</table>
Connected Query Scheduler

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

Find an Existing Value  Add a New Value

Search Criteria

Run Control ID: begins with ALLIANCE_DEMO
Connected Query: UTA_SF_WAIVERS

Case Sensitive
Limit the number of results to (up to 300): 300

Search  Clear  Basic Search  Save Search Criteria
### Schedule Connected Query

**Run Control ID:**
- ALLIANCE_DEMO
- Report Manager
- Process Monitor

**Connected Query Definition**
- **Connected Query:** UTA_SF_WAIVERS
- **Description:** Waivers for range of terms

### Report Parameters

**Query Parameters**

<table>
<thead>
<tr>
<th>Query Name</th>
<th>Prompt Name</th>
<th>Prompt Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>UTA_SF_WAIVER_PARENT</td>
<td>ITEM_TERM</td>
<td>2148</td>
</tr>
<tr>
<td>UTA_SF_WAIVER_PARENT</td>
<td>ITEM_TERM</td>
<td>2148</td>
</tr>
<tr>
<td>UTA_SF_BILLED_UNITS_TERM_RANGE</td>
<td>STRM</td>
<td>2148</td>
</tr>
<tr>
<td>UTA_SF_BILLED_UNITS_TERM_RANGE</td>
<td>STRM</td>
<td>2148</td>
</tr>
<tr>
<td>UTA_SF_CAREER_RES_TERM_RANGE</td>
<td>STRM</td>
<td>2148</td>
</tr>
<tr>
<td>UTA_SF_CAREER_RES_TERM_RANGE</td>
<td>STRM</td>
<td>2148</td>
</tr>
</tbody>
</table>
## Process Scheduler Request

**User ID:** 1000290398  
**Run Control ID:** ALLIANCE_DEMO

<table>
<thead>
<tr>
<th>Server Name</th>
<th>Run Date</th>
<th>Recurrence</th>
<th>Run Time</th>
<th>Time Zone</th>
<th>Reset to Current Date/Time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>01/29/2015</td>
<td></td>
<td>12:15:48PM</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Process List

<table>
<thead>
<tr>
<th>Select</th>
<th>Description</th>
<th>Process Name</th>
<th>Process Type</th>
<th>*Type</th>
<th>*Format</th>
<th>Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓</td>
<td>PSCONQRS</td>
<td>PSCONQRS</td>
<td>Application Engine</td>
<td>Web</td>
<td>XML</td>
<td></td>
</tr>
</tbody>
</table>

[OK] [Cancel]
**Process Scheduler Request**

**User ID:** 1000290398  
**Run Control ID:** ALLIANCE_DEMO

<table>
<thead>
<tr>
<th>Server Name</th>
<th>Run Date</th>
<th>Recurrence</th>
<th>Run Time</th>
<th>Time Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSUNIX</td>
<td>01/29/2015</td>
<td></td>
<td>12:15:48PM</td>
<td></td>
</tr>
</tbody>
</table>

**Process List**

<table>
<thead>
<tr>
<th>Select</th>
<th>Description</th>
<th>Process Name</th>
<th>Process Type</th>
<th>Type</th>
<th>Format</th>
<th>Distribution</th>
<th>Transformation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PSCONQRS</td>
<td>PSCONQRS</td>
<td>Application Engine</td>
<td>Web</td>
<td>XFORM</td>
<td>Distribution</td>
<td>WITHOUT_CAREER_COLUMNS</td>
</tr>
</tbody>
</table>

**Options:**

- OK
- Cancel
Tools - Scheduler
- Main Menu
  - Reporting Tools
    - Connected Query
      - Schedule Connected Query
Schedule Connected Query

Run Control ID: ALLIANCE_DEMO_2

Connected Query Definition

*Connected Query: Description:

Save Cancel
## Look Up Query

*Search by:* Query Name begins with **UTA_SF_D**

- **Lookup**
- **Cancel**
- **Advanced Lookup**

### Search Results

<table>
<thead>
<tr>
<th>Query Name</th>
<th>Description</th>
<th>Owner</th>
</tr>
</thead>
<tbody>
<tr>
<td>UTA_SF_DAILY_ACCOUNT_BALANCES</td>
<td>Daily balances by account</td>
<td>Public</td>
</tr>
<tr>
<td>UTA_SF_DAILY_COMM_SUMMARY</td>
<td>SF Comm Summary Pivot Query</td>
<td>Public</td>
</tr>
<tr>
<td>UTA_SF_DAILY_STUDENT_BALANCES</td>
<td>Daily balances by student</td>
<td>Public</td>
</tr>
<tr>
<td>UTA_SF_DAILY_UNAPL_PMT_BALANCE</td>
<td>Daily pmt balances by student</td>
<td>Public</td>
</tr>
<tr>
<td>UTA_SF_DECEASED_WACCTBAL</td>
<td>Deceased with AcctBalance</td>
<td>Public</td>
</tr>
<tr>
<td>UTA_SF_DEFERRED_REVENUE</td>
<td>deferred revenue</td>
<td>Public</td>
</tr>
<tr>
<td>UTA_SF_DELINQUENT_EMPLOYEES</td>
<td>List of delinquent employees</td>
<td>Public</td>
</tr>
</tbody>
</table>
Tools - Scheduler

Schedule Connected Query

Run Control ID: ALLIANCE_DEMO_2  Report Manager  Process Monitor

Connected Query Definition

*Connected Query: UTA_SF_OPEN_REFUNDS_INFO
Description: Open refunds with addtl Info

Save  Cancel
Audience Participation
Presentation
Presentation - XML
<?xml version="1.0" encoding="utf-8"?>
<ConnectedQuery xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" name="UTA_SF_WAIVERS" xsi:noNamespaceSchemaLocation="" >

<UTA_SF_WAIVERS_PARENT>
  <EXPR7_7><![CDATA[3ADAUX]]></EXPR7_7>
  <A.WAIVER_CODE><![CDATA[3ADA1U]]></A.WAIVER_CODE>
  <A.ITEM_TYPE_CD><![CDATA[Waiver]]></A.ITEM_TYPE_CD>
  <A.ITEM_TYPE><![CDATA[751080000102]]></A.ITEM_TYPE>
  <C.DESCR><![CDATA[AP RN-BSN Adopted Waiver]]></C.DESCR>
  <A.COMMON_ID><![CDATA[1000509155]]></A.COMMON_ID>
  <B.NAME><![CDATA[Riggs,Melissa D]]></B.NAME>
  <A.ITEM_AMT>-2827</A.ITEM_AMT>
  <UTA_SF_BILLED_UNITS_TERM_RANGE>
    <A.EMPLID><![CDATA[1000509155]]></A.EMPLID>
    <A.ACAD_CAREER><![CDATA[UGRD]]></A.ACAD_CAREER>
    <A.UNT_BILLING>11</A.UNT_BILLING>
  </UTA_SF_BILLED_UNITS_TERM_RANGE>
  <UTA_SF_CAREER_RES_TERM_RANGE>
    <A.EMPLID><![CDATA[1000509155]]></A.EMPLID>
    <A.ACAD_CAREER><![CDATA[UGRD]]></A.ACAD_CAREER>
    <A.STRM><![CDATA[2148]]></A.STRM>
    <B.RESIDENCY><![CDATA[1]]></B.RESIDENCY>
    <EXPR5_5><![CDATA[Resident]]></EXPR5_5>
  </UTA_SF_CAREER_RES_TERM_RANGE>
  <UTA_SF_WVR_DESCRIPTION>
    <A.WAIVER_CODE><![CDATA[3ADA1U]]></A.WAIVER_CODE>
    <A.DESCR><![CDATA[RN to BSN Adopted Res]]></A.DESCR>
    <A.DESCR254><![CDATA[RN to BSN Adopted Res]]></A.DESCR254>
  </UTA_SF_WVR_DESCRIPTION>
</UTA_SF_WAIVERS_PARENT>
</ConnectedQuery>
<A.WAIVER_CODE>{value}</A.WAIVER_CODE>

-or-

<A.WAIVER_CODE />
<table>
<thead>
<tr>
<th>Character Map</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Font:</strong> Times New Roman</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Characters to copy:</th>
<th>Select</th>
<th>Copy</th>
</tr>
</thead>
</table>

U+00C6: Latin Capital Letter Ae

U+0021: Exclamation Mark
<ROOT>
  · <element1></element1>
  · <element2></element2>
  · <eleMent3></eleMent3>
</ROOT>
Audience Participation
Presentation - BI Publisher
Design Helper

Template Designer Client Tools

Plug-in for Microsoft Word (v. 11.1.1.6)

Choose 32/64-bit  Download now

Facilitates the insertion of application data tags into RTF templates.
<table>
<thead>
<tr>
<th>Field</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rs Scc Cg Hdr Vw</td>
<td></td>
</tr>
<tr>
<td></td>
<td>@numrows</td>
</tr>
<tr>
<td></td>
<td>@rowsetname</td>
</tr>
<tr>
<td></td>
<td>@xsi</td>
</tr>
<tr>
<td></td>
<td>@namespaceschemalocation</td>
</tr>
<tr>
<td>Row Scc Cg Hdr Vw</td>
<td></td>
</tr>
<tr>
<td></td>
<td>@rownumber</td>
</tr>
<tr>
<td></td>
<td>Fld Process Instance</td>
</tr>
<tr>
<td></td>
<td>Fld Common Id</td>
</tr>
<tr>
<td></td>
<td>Fld Seq 3c</td>
</tr>
<tr>
<td></td>
<td>Fld Cg Seq</td>
</tr>
<tr>
<td></td>
<td>Fld Scc Letter Cd</td>
</tr>
<tr>
<td></td>
<td>Fld Cg Sort Order</td>
</tr>
<tr>
<td></td>
<td>Fld Tmpldefn Id</td>
</tr>
<tr>
<td></td>
<td>Fld Language Cd</td>
</tr>
</tbody>
</table>

**Example**

**Calculation**

- [ ] On Grouping

- [ ] Force LTR Direction

[Insert] [Close] [Help]
• Main Menu
  • Reporting Tools
    • BI Publisher
    • Data Source
Data Source

Data Source Type: XMLDoc Object
Data Source ID: UTA_SF_INCOMPLETE_DIR_DEP_DS

Data Source Properties
- Description: Incomplete Direct Deposit Data
- Owner ID: PeopleTools
- Registered Date/Time: 05/06/14 10:44:54AM
- Registered By: 1000290398
- Last Update Date/Time: 05/06/14 10:44:55AM
- Updated By: 1000290398

Related Files
- File Type: Sample Data File
  - File: UTA_SF_INCOMPLETE_DIR_DEP_DS.xml
  - Upload File: Upload

- File Type: Schema File
  - File: UTA_SF_INCOMPLETE_DIR_DEP_DS.xsd
  - Upload File: Upload
• Main Menu
  • Reporting Tools
    • BI Publisher
    • Report Definition
### Report Definition

**Report Name:** UTA_SF_DD

**Data Source**

**Data Source Type:** XMLDoc Object

**Data Source ID:** UTA_SF_INCOMPLETE_DIR_DEP_DS

**Data Source Description:**

**Report Properties**

**Report Description:** Incomplete Direct Dep Setup

**Report Status:** Active

**Report Category ID:** ALLUSER

**Owner ID:** PeopleTools

**Template Type:** RT

**Retention Days:**

**Registered Date/Time:** 05/06/2014 10:48:30AM

**Registered By:** 1000290398

**Updated Date/Time:** 05/06/2014 10:48:31AM

**Updated By:** 1000290398

**Download:**

- Data Schema
- Sample Data

**Actions:**

- Add
- Update/Display
- Include History
- Correct History

**Return to Search**

**Previous in List**

**Next in List**
• Main Menu
  • Reporting Tools
    • BI Publisher
      • Query Report
      • Scheduler
Presentation - XSLT
• Extensible Stylesheet Language Transformations
• Converts XML documents into other types of documents
• One option of displaying data from Connected Queries
• Is actually XML itself - different tags, same requirements
• Always at the beginning of the transformation:
  
  ```xml
  <?xml version="1.0" encoding="UTF-8"?>
  <xsl:stylesheet
xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
xmlns:csv="csv:csv" version="2.0">
  <xsl:output method="text" encoding="utf-8"/>
  <xsl:template match="ConnectedQuery">
  ```
• Always at the end of the transformation:
  • </xsl:template>
  • </xsl:stylesheet>
• The data from the Connected Query goes in between
Iterate through a list of nodes:

```xml
<xsl:for-each select="UTA_SF_QUERY">
  [other stuff]
</xsl:for-each>
```
• Insert plain text into the transformation
  
  • `<xsl:text>ABCDE</xsl:text>`
Insert a value from the XML tree into the transformation:

```
<xsl:value-of select="***
" />
```

Reference a node or element: `A.ACCOUNT`

Format the value of a node: `format-number(A.AMT,’$#.00’)`

Perform simple arithmetic: `B.BALANCE - C.FEES/EXP5`
<?xml version="1.0" encoding="UTF-8"?>
<xsl:stylesheet xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
    xmlns:csv="csv:csv" version="2.0">
  <xsl:output method="text" encoding="utf-8"/>
  <xsl:template match="ConnectedQuery">
    <xsl:text>"UTA ID","Account Balance"</xsl:text>
    <xsl:text>&#10;</xsl:text>
    <xsl:for-each select="UTA_SF_STDNTS_WITH_BALANCE">
      <xsl:text>""</xsl:text>
      <xsl:value-of select="A.EMPLID"/>
      <xsl:text>","</xsl:text>
      <xsl:value-of select="A.ACCOUNT_BALANCE"/>
      <xsl:text>&#10;</xsl:text>
    </xsl:for-each>
  </xsl:template>
</xsl:stylesheet>
Test for a condition without a choice

<xsl:if test="" *** "></xsl:if>

*** presence of node or element: UTA_SF_EXT_ORG_NAME

*** presence of node with specific value: UTA_SF_ALL_ADDRESSES[A.TYPE='HOME']

*** position in list: position() != last()

*** specific value: string(../UNITS/A.CAREER) = 'GRAD'
<xsl:for-each select="UTA_SF_HONORS_STDNTS_W_CHGS">
  
  <xsl:if test="position() != last()">
    <xsl:text>"</xsl:text>
    <xsl:value-of select="../A.COMMON_ID"/>
    <xsl:text>"</xsl:text>
  </xsl:if>

  <xsl:text>,"</xsl:text>
</xsl:for-each>
• Conditionally display a section

  • `<xsl:choose>`
  •   `<xsl:when test="***">`
  •     {other elements here}
  •   `</xsl:when>`
  •   `<xsl:otherwise>`
  •     {other elements here}
  •   `</xsl:otherwise>`
  • `</xsl:choose>`

• *** Options for the test are like `xsl:if`
<xsl:for-each select="UTA_SF_COLLECTION_IDS">
  <xsl:text>
  <xsl:value-of select="A.EMPLID"/>
  <xsl:text>
  <xsl:choose>
    <xsl:when test="UTA_SF_ALL_ADDRESSES[A.ADDRESS_TYPE='HOME']">
      <xsl:for-each select="UTA_SF_ALL_ADDRESSES[A.ADDRESS_TYPE='HOME']">
        <xsl:text>
        <xsl:value-of select="EXPR12_12"/>
        </xsl:for-each>
      </xsl:when>
      <xsl:otherwise>
        <xsl:text>
        <xsl:text>" "
        </xsl:otherwise>
    </xsl:choose>
</xsl:for-each>
</xsl:text>
</xsl:for-each>

<xsl:text>&#10;</xsl:text>
Variables

- `<xsl:variable name="VarName" select="***">`

- reference as `$VarName`

- *** Options for the select are like `xsl:value-of`
Functions

• position()
• last()
• format-number(value, format)
• string(value)
Functions

- position()
- last()
- format-number(value, format)
- string(value)
• Functions
  • position()
  • last()
  • format-number(value, format)
  • string(value)
Functions

- position()
- last()
- format-number(value, format)
- string(value)
XML Editors

- http://www.oxygenxml.com
- http://sourceforge.net/projects/xml-copy-editor/
- http://xmplifyapp.com
Connected Query

- concept_UnderstandingConnectedQuery-257ec1.html
BI Publisher

- XML Publisher for PeopleSoft Enterprise - https://docs.oracle.com/cd/E15743_01/psft/acrobat/pt850txml
• Oracle BI Publisher 11g: A Practical Guide to Enterprise Reporting
XML

- http://www.w3.org/TR/REC-xml/
XML

- XML Pocket Reference (O’Reilly)
- Beginning XML by Joe Fawcett
XSLT

- http://www.w3schools.com/xsl/xsl_w3celementref.asp
XSLT

- XSLT Programmer's Reference 2nd Edition (Wrox)
- XSLT 1.0 Pocket Reference (O’Reilly)
- XSLT Cookbook: Solutions and Examples for XML and XSLT Developers, 2nd Edition (O’Reilly)
Questions?
Contacts

• Darlene Hopkins
  • Business Intelligence Analyst
  • Business Services Analytics
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