Making the Most of PeopleSoft Query

Brent Mohl
Applications Technology
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Session Agenda

• What this session is about
• PS Query – Recent Improvements
• More than just a query tool
• Connected Query – what’s new
  – Tips and techniques
• Questions
What this Session is About

Making the most of

v.s.

Tips and techniques
Session Agenda

- What this session is about
- PS Query – Recent Improvements
- More than just a query tool
- Connected Query – what’s new
  - Tips and techniques
- Questions
PS Query – Recent Improvements
8.48 – 8.51

- 8.48
  - PS Query results can serve as a data source for PeopleSoft XML Publisher.
Reminder: As of June 1, 2011, Oracle will discontinue distribution of Business Objects Enterprise and Crystal Reports with PeopleTools. Existing customers may use the license previously received from Oracle. PeopleSoft reports will continue to be delivered using Oracle XML Publisher, which is included free-of-charge.

<table>
<thead>
<tr>
<th>If you already own a PeopleSoft application and want to keep using Crystal Reports…</th>
<th>If you are a new customer and want to use Crystal Reports…</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The license you have already received is still valid.</td>
<td>• Oracle will continue to certify new Business Objects products with future PeopleTools releases.</td>
</tr>
<tr>
<td>• Oracle will continue to certify new versions of Business Objects products with future PeopleTools releases. You will need to purchase these future releases from SAP/Business Objects if you wish to use them.</td>
<td>• You will need to purchase a license for these products directly from SAP/Business Objects.</td>
</tr>
</tbody>
</table>

Details:

- All customers who have received a licensed copy of Business Objects products from Oracle with PeopleTools will be able to continue using the product according to the provided license terms.
- Oracle plans to continue to certify future versions of Business Objects products with future PeopleTools releases. Customers who wish to use future versions of Business Objects products with PeopleSoft will need to obtain appropriate license and support directly from SAP/Business Objects.
- Oracle will continue to package Oracle XML Publisher with PeopleTools. All customers will have the option to use this product at no charge. All of the critical reports included with PeopleSoft applications will be converted to XML Publisher format and included with future PeopleSoft releases.
PS Query – Recent Improvements

8.48 – 8.51

• 8.49
  – PS Query supports **dirty reads**. Performance increases as queries do not lock on other INSERT and UPDATE operations.

• 8.50
  – add **in-tree criteria** prompts to your queries, and define tree option in Expression 2 type.
  – add **email as an output type** for scheduled query (any Application Engine program) results. With this option, you can schedule queries to run and have the results emailed directly to recipients (not just a link to the Report Manager).
PS Query – Recent Improvements

8.48 – 8.51

8.50

• Drilling URL
  • Using Query Manager, you can define drilling URLs that are associated with this query; and all these settings are saved into database with prompt, criteria, and other metadata for this query. When you execute this query through Query Manager or Query Viewer, the query results page shows results as links, which you can click to access other browsers. Depending on how drilling URLs are defined, the new browser is either a PIA page, or another query result page, or even an external link.

• Download to XML
  • Query results are downloaded to the browser as web browser format and there are options enabling you to open, save, or cancel the downloaded file. If you click Open, the XML formatted query result is downloaded to the browser. The Download to XML link is also available on the Query Manager - Run page. In the Schedule Query component, two new formats, XML and XMLP, produce webbrowser XML and XMLP format results.
8.50

• Security Join Optimizer
  • In the Query Properties page, the new Security Join Optimizer option enables you to define whether a query, that contains multiple joins to the same query security record, should be optimized.
PS Query – Recent Improvements

**8.48 – 8.51**

8.50

- **Reporting Console**
  - introduced - provides a single interface for a user to manage and schedule reports. From the Reporting Console users can run a report, schedule a report, organize reports and share reports.

- **Connected Query**
  - provides the ability to create a single XML file based on a set of queries with parent-child relationships. A Connected Query is a hierarchical object built with existing PeopleSoft Queries.

- **CQ ↠ XMLP Sub reports**
  - Connected Query can be used as a data source for XML Publisher reports that require sub reports.
PS Query – Recent Improvements

8.48 – 8.51

8.51

- The effective date operator is available in the Connected Query Manager page as a part of the field mapping process.
- From the Connected Query Manager page, report developers can click the Properties button to access the Connected Query Properties page.
- From the Select a Query page, users can click the Select Field button to display the Select Query Columns section, where they can:
  - Select query result columns to form field name and value pairs.
  - Define order of the appended value pair in the URL.
- Beginning with release 8.51, PeopleTools supports attachment drilling URLs for SES (Secure Enterprise Search). If you use SES and belong to the HTTP File View role, you can view the attachment URL file. Otherwise, a message appears that says you are not authorized for viewing attachments from database using HTTP.
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More than just a query tool

- Reporting Console
- Email attachments
- Drilling URLs
- Feeds
- Pagelets
- Web services
- Related Content
- Connected Query
More Than Just A Reporting Tool

Reporting Console

- Since console
  - Retrieve – Run – Schedule reports
More Than Just A Reporting Tool

*Reporting Console*

- Since console
  - Retrieve – Run – Schedule reports
More Than Just A Reporting Tool

Reporting Console
More Than Just A Reporting Tool

Reporting Console

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Details</th>
<th>Action</th>
<th>Status</th>
<th>Run Date/Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>My Reports</td>
<td>Folder</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My Process Requests</td>
<td>Folder</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>007 FSQUERY : Scheduled Query...</td>
<td>Process Instance</td>
<td>View</td>
<td></td>
<td>Success</td>
<td>10/19/2009 5:29:59PM PDT</td>
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<tr>
<td>987 PSQUERY : Scheduled Query...</td>
<td>Process Instance</td>
<td>View</td>
<td></td>
<td>Success</td>
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</tr>
<tr>
<td>986 TREEMAIN : Tree Maintenance...</td>
<td>Process Instance</td>
<td>View</td>
<td></td>
<td>Success</td>
<td>10/14/2009 10:50:34AM PDT</td>
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<tr>
<td>985 PSQUERY : Scheduled Query...</td>
<td>Process Instance</td>
<td>View</td>
<td></td>
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<tr>
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<td>Process Instance</td>
<td>View</td>
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<td>10/13/2009 6:16:36PM PDT</td>
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<tr>
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</tr>
<tr>
<td>My Favorites</td>
<td>Folder</td>
<td></td>
<td></td>
<td></td>
<td>Add</td>
</tr>
</tbody>
</table>
More Than Just A Reporting Tool

Reporting Console
More Than Just A Reporting Tool

Reporting Console
More Than Just A Reporting Tool

*Email Attachment*

- Results emailed directly to recipients
More Than Just A Reporting Tool

*Email Attachment*

- Results emailed directly to recipients
More Than Just A Reporting Tool

*Drilling URLs*

- Query Results are actionable.
- Also works with Excel output type.
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*Publish A Query as a Feed*

---

<table>
<thead>
<tr>
<th>Col</th>
<th>Record.Fieldname</th>
<th>Format</th>
<th>Ord</th>
<th>XLAT</th>
<th>Agg</th>
<th>Heading Text</th>
<th>Add Criteria</th>
<th>Edit</th>
<th>Delete</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A.MESSAGE_SET_NBR - Message Set Number</td>
<td>Num5.0</td>
<td></td>
<td></td>
<td></td>
<td>Set</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>A.MESSAGE_NBR - Message Number</td>
<td>Num5.0</td>
<td></td>
<td></td>
<td></td>
<td>Msg</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>A.MSG_SEVERITY - Message Severity</td>
<td>Char1</td>
<td></td>
<td>N</td>
<td></td>
<td>Severity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>A.MESSAGE_TEXT - Message Text</td>
<td>Char100</td>
<td></td>
<td></td>
<td></td>
<td>Message</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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More Than Just A Reporting Tool

Publish A Query as a Feed

PSQuery Data Type

Advanced Feed Options
Specify the advanced options of this feed.

Feed Title: MESSAGES_FOR_MSGSET

Query Prompts

Parameter ID | Description          | Value
-------------|----------------------|------
MESSAGE_SET_NBR | Message Set Number | 0    

Advanced Query Feed Options

Max Number of Entries: 0 (Enter 0 for unlimited number of entries.)

Entry Occurrence
- All Rows in One Feed Entry
- One Row Per Feed Entry

Feed Publishing Type
- Scheduled
- Real Time

Publish Language
- Current Language Only
- All Available Languages

*Query Feed Security

Query Security

Query Fields

Feed Entry Content Mapping

Feed Entry Element | Entry Template
----- | -------
Entry Content Url | http://vram.bbu-pcfps/pse/EMPLOYEDE/ERP/q? %ROW%HTML% %ROW%TEXT% %DATE_TIME%
Entry Full Content | %ROW%HTML% %ROW%TEXT% %DATE_TIME%
Entry ID | %GUID%
Entry Title | %ROW%TEXT% %DATE_TIME%
Entry Updated | %ROW%TEXT% %DATE_TIME%

OK  Cancel
More Than Just A Reporting Tool

Feed Examples

Subscribe to content of interest...

Pagelet with all your feeds

...or an entire workspace
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*Pagelets*

- Pagelets can be built and published for the application homepage.
- Pagelets can also be used to appear on transaction pages
- Pagelet Wizard
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*Query Access Services (QAS)*

- Manage PS/Query remotely.
More Than Just A Reporting Tool

Query Access Services (QAS)

• Example: CRM

Build an Audience from a Remote Query against Student system.
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Connected Query, Query and XML Publisher

• Consider Connected Query instead of:
  – Application Engine
  – SQR
  – Query with multiple outer joins and union
  – Crystal Reports when multiple sub reports are needed
Connected Query, Query and XML Publisher

XML Publisher

Query

Formatting

Expressions

Data Retrieval
Connected Query, Query and XML Publisher

- Connected Query
  - Sub Reports
  - Multiple Outer Joins
  - Hierarchical Data
- Query
  - Unions
  - Outer Joins
- Connected Query and Query overlap features:
  - Unions
  - Outer Joins
  - Prompts
  - Standard Joins
  - Criteria

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Connected Query New Features

• Properties page
  – Hide mapped fields
  – Non-formatted XML
  – Show Query statistics
  – Debug a single Query

• EFFDT operators

• Processing performance enhancements
Connected Query New Features
Properties Page

Connected Query Manager

Connected Query: QE_EMPL_DEPT_DETAILS
Public
*Status: Active
Properties

Description:
Description: Con Query same as Smoke Test
Comments: Connected Query same as created by smoke test

Parent Query Selection
Parent Query: QE_EMPLOYEE
View Query

Connected Query Structure

<table>
<thead>
<tr>
<th>Connected Query Structure</th>
<th>Field1</th>
</tr>
</thead>
<tbody>
<tr>
<td>QE_EMPLOYEE</td>
<td>A.EMPLID</td>
</tr>
<tr>
<td>QE_PERS_DATA</td>
<td>A.EMPLID</td>
</tr>
<tr>
<td>QE_DEPARTMENT_DATA_A</td>
<td></td>
</tr>
</tbody>
</table>
# Connected Query New Features

## Properties Page

### Connected Query Manager

![Connected Query Properties](image)

## Connected Query Properties

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Property Value</th>
<th>Default Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ExecutionLog</td>
<td>True</td>
<td>False</td>
</tr>
<tr>
<td>IgnoreRelFieldOutput</td>
<td>True</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>
</tbody>
</table>

[OK] [Cancel]
Connected Query New Features

New Properties

- Creates Execution log including statistics (WriteToLog)
- Does not repeat linked fields in child queries, reducing size of XML output
- Saves SQL and bind variables to Execution log
- Turns on/off xml formatting (node indentations)
- Setting to false reduces the size of XML output
### Connected Query New Features

**EFFDT Operators**

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

<table>
<thead>
<tr>
<th>Parent Query - QE_EMPLOYEE</th>
<th>Child Query - QE_DEPARTMENT_DATA_A</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Select</strong></td>
<td><strong>Key</strong></td>
</tr>
<tr>
<td>☐</td>
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<td>☐</td>
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</tbody>
</table>
Connected Query New Features
Performance Enhancements

• What we did:
  – Eliminated dependency on XMLDoc / Write XML data directly to file.
  – Eliminated csv temp file processing

• Results:
  – Less CPU and memory required (based on internal testing)
  – Substantial improvement in performance based on internal testing
Connected Query
Tips and Techniques - Performance

• Query vs. Connected Query
  – Do basic joins in Query
  – Outer and Union joins: either Query or Connected Query
    • Query will run faster
    • Connected Query will be easier to build
    • Connected Query will not have join limitations
Connected Query
Tips and Techniques - Performance

- Limit the number of rows returned in parent queries
  - The higher the parent, the more important this is
  - Use Query criteria and prompts to filter parent results

- Limit the number of fields used
  - The lower in the hierarchy, the more important this is
  - Reuse vs. clone/modify

- Use Connected Query properties to reduce output
  - ShowFormattedXML
  - IgnoreRelFldOutput
Connected Query
Tips and Techniques – Execution Modes

- **Preview Mode**
  - Executes on the Application Server
  - More use for report development before moving to production
  - Limit rows returned if using in production

- **XML Publisher Report Viewer**
  - Will not run a Connected Query-based XMLP report
  - Executes on the application server

- **Scheduled and Run to Window**
  - Execute on the Process Scheduler server
Connected Query
Tips and Techniques – Can I Kill It?

- Yes
- All member queries share the same process ID
- Killing the process will kill the member queries
- Process Scheduler:
  - “Cancel Request”

- Application Server:
  - Kill any member query and it kills the entire CQ process
Connected Query
Tips and Techniques – Use Excel to view XML
Learn More

PeopleSoft Information Development Resources

Hosted & Mobile PeopleBooks - PeopleTools PeopleBooks are available in three formats: Hosted PeopleBooks, PDF’s, and Amazon’s Kindle format. All can be accessed here:

http://www.oracle.com/technetwork/documentation/psftent-090284.html

Doc Home Pages – constantly updated direct links to PeopleBooks, PeopleBook Updates, Release Notes, Installation and Upgrade Guides, and other useful product documentation, all accessible from one My Oracle Support location.

PeopleTools 8.51 Documentation Home Page [ID 1127534.1]
https://support.oracle.com/CSP/main/article?cmd=show&type=NOT&id=1127534.1

Information Portal - locate the documentation, training, and other info needed to help with your implementation process. Customers searching for this information should make this their first online destination.


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PeopleTools Viewlets

• http://download.oracle.com/peopletools/viewlets.html
Learn More

PeopleSoft Information Development Resources

Cumulative Feature Overview (CFO) - Providing concise descriptions of new and enhanced solutions and functionality that have become available starting with the 8.4 release through our latest 8.51 release.

https://support.oracle.com/CSP/main/article?cmd=show&type=NOT&doctype=SYSTEMDOC&id=793143.1

Upgrade Resource Report Tools - helps you find all the documentation, scripts, and files you need for your upgrade project.

https://support.oracle.com/CSP/main/article?cmd=show&type=NOT&doctype=SYSTEMDOC&id=1117047.1

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