



COLLABORATE15

TECHNOLOGY AND APPLICATIONS FORUM  
FOR THE ORACLE COMMUNITY



# Powerful PeopleSoft 9.2 Connected Query

**Session ID#: 103300**

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SpearMC Consulting



APRIL 12-16, 2015  
MANDALAY BAY  
RESORT & CASINO

#C15LV

**REMINDER**

Check in on the  
COLLABORATE mobile app

# Administrative Notes

## Please:

- Silence Audible Devices
- Note Fire Exits
- Partake of Refreshments
- Note Quest Staffers (green shirts) and Room Monitors
- Complete Feedback Form
- Ask Questions

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# About SpearMC and Your Presenter

# About SpearMC

Founded in 2004, SpearMC is a technology and professional services firm specializing in

- PeopleSoft Financials and Supply Chain Management
- PeopleSoft Human Capital Management and Payroll
- ERP Architecture and Application Development
- Project and Program Management (PMO)
- Change Management
- ERP Training
- Mobile Technology

# About SpearMC

Regional offices in Chicago, Denver, Oklahoma City, Seattle and San Francisco

- We focus on local market delivery and capability development in line with industry focus areas unique to the regions we serve.
- Our local and well-connected network of top-tier business analysts, technical leads, developers and project managers keep travel cost to a minimum.

# About SpearMC

## Oracle Gold Partner since 2008:

- Gold Level Partner
- PeopleSoft Specialization
- Applications Reseller
- Hardware Reseller





# Services and Competencies.



# Services and Competencies

## Technology and Business Consulting

- Full-service ERP and BI Selection, Implementation and Integration
  - PeopleSoft
  - JD Edwards
  - Oracle EBS
  - Hyperion
  - Dynamics AX
- ERP Training
- IT Transformation and Strategy
- Infrastructure and Architecture
- ERP Application Development
- Capability Assessment

# Services and Competencies

## Program and Project Management

- Project Management Office
- Project Portfolio Management
- Change Management

## Business Transformation

- Operations Improvement (Six Sigma, Lean)
- CIO and CTO Advisory Services
- Strategy for Pricing and Revenue Enhancement

# Methods and Tools.

# Methods and Tools

## Needs Analysis

- IT Strategy and Transformation
- ERP Selection and Integration
- Business Transformation
- Project Management

## Assess Staffing Requirements

- Complement Existing Expertise
- Capability Assessment

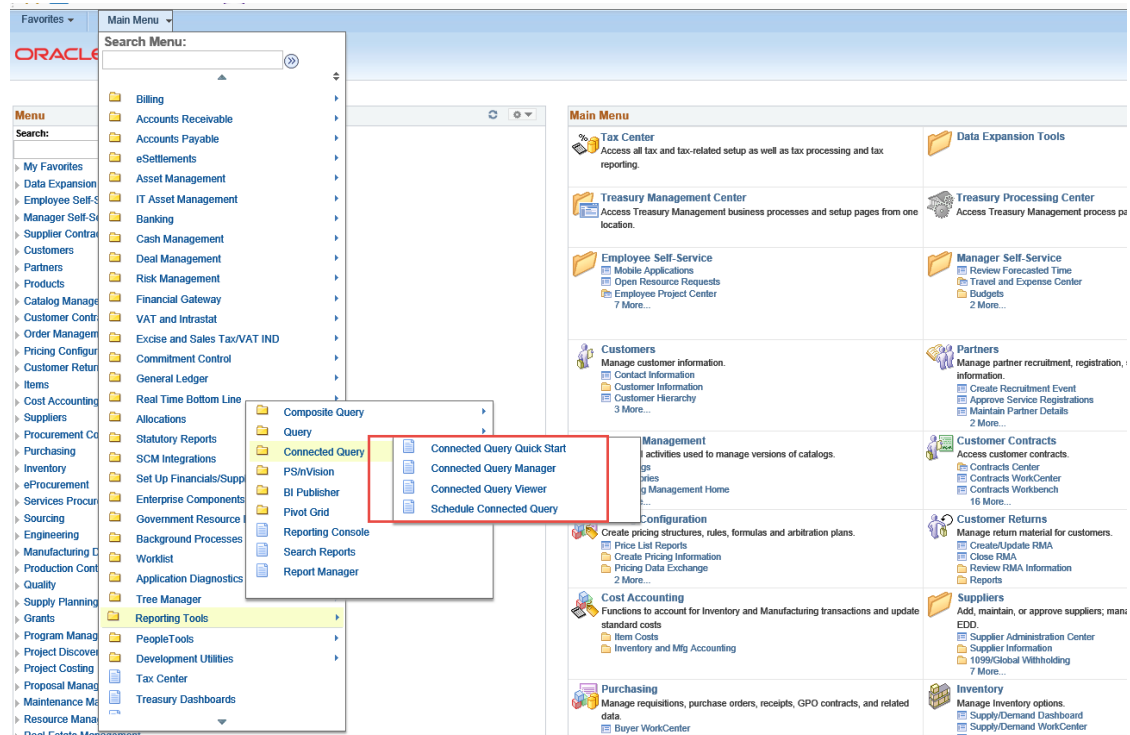
# Methods and Tools

Tools, best practices and proven management techniques include:

- Continuous Improvement
- Six Sigma and Lean
- Agile Project Management Techniques
- Change Management

# What is Connected Query?

- Connected Query is a PeopleSoft Reporting Tool
- Provides additional functionality as an addition to existing PS Query Tool
- Made up of:
  - Connected Query Manager
  - Connected Query Wizard
  - Connected Query Viewer

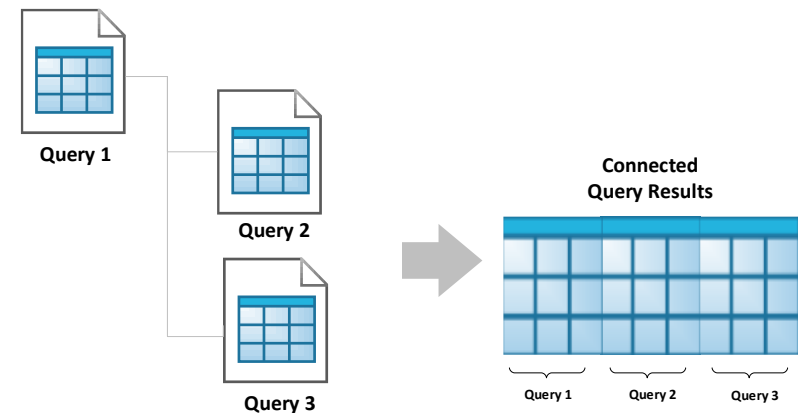




# What is Connected Query

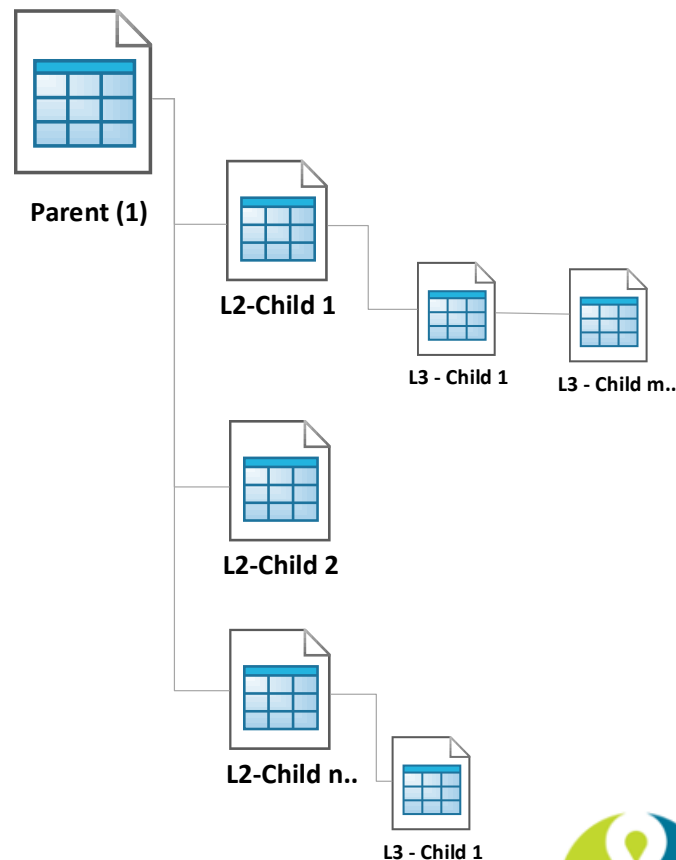
# What is Connected Query?

- A connected Query is a reporting tool that uses other Queries as its data sets (records)
  - Aka.....A Query made from multiple Queries
- When a CQ is run, it generates a single XML File
  - The XML file can be used by XML Report Writing tools such as BI Publisher or Crystal
- A connected query is a hierarchical object
  - Has parent-child relationships.



# What is Connected Query?

- A parent query can nest multiple levels of child queries and any child query can have multiple sibling queries within a hierarchy.
  - No limits exist for levels, but typical use involves a single parent-child relationship or a few levels of nesting.



# What is Connected Query?

## ■ Example

### Vendor Purchase Orders

Vendor ID
Vendor Name
Sum of PO \$
Count of POs

### Vendor UnPaid Invoices

Vendor ID
Sum Unpaid Inv \$
Unpaid Inv Count

### Vendor Paid Invoices

Vendor ID
Sum Paid Inv \$
Count of Paid Inv.



Vendor ID	Vendor Name	PO \$	PO Count	Unpaid Inv \$	Unpaid Inv Count	Paid Inv \$	Paid Inv Count
12345	SpearMC	\$125,000	4	\$50,0000	10	\$25,0000	6

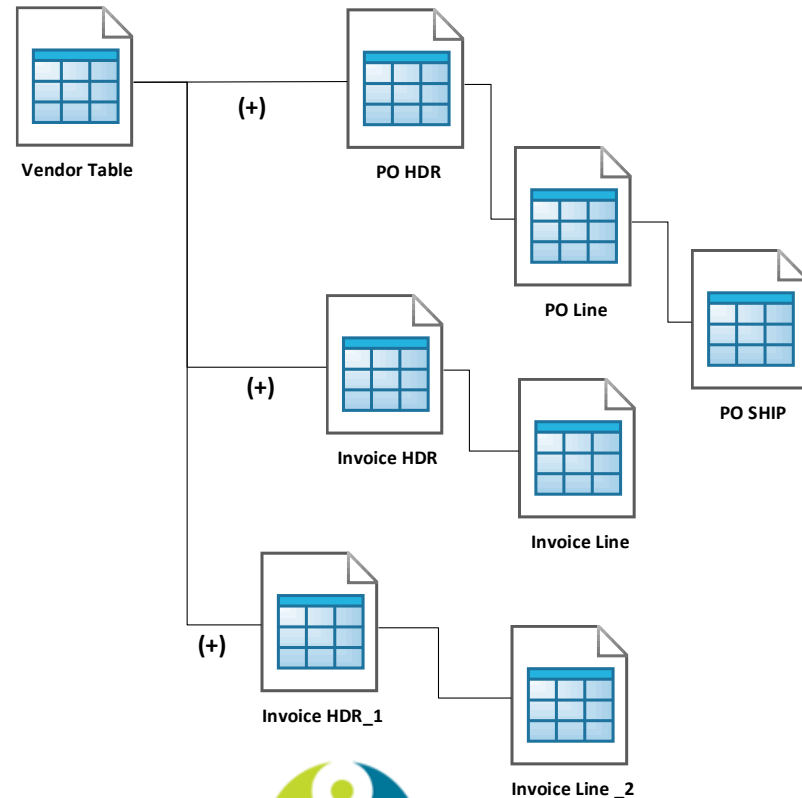
# What is Connected Query?

- A connected query returns a hierarchical XML data set in which data returned by child queries is filtered by the results of its immediate parent query.
  - All Data from the Parent Query is returned.
  - Results only include data from the child query if there is a related row in its parent query.

```
<?xml version="1.0" encoding="UTF-8"?>
- <ConnectedQuery xsi:noNamespaceSchemaLocation="" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" query_rows_limit="6" preview="True" name="CQ_DEMO_EXP">
  - <CQ_01_VENDOR_SPEND>
    - <A.VENDOR_ID>
      <![CDATA[SCM0000001]]>
    </A.VENDOR_ID>
    - <A.NAME1>
      <![CDATA[BIKE SHOP]]>
    </A.NAME1>
    <MERCHANDISE_AMT>3101462.27</MERCHANDISE_AMT>
  - <CQ_02_VENDOR_PO_COUNT>
    - <A.VENDOR_ID>
      <![CDATA[SCM0000001]]>
    </A.VENDOR_ID>
    - <B.PO_ID>
      <![CDATA[43]]>
    </B.PO_ID>
    </CQ_02_VENDOR_PO_COUNT>
  </CQ_01_VENDOR_SPEND>
- <CQ_01_VENDOR_SPEND>
  - <A.VENDOR_ID>
    <![CDATA[SCM0000002]]>
  </A.VENDOR_ID>
  - <A.NAME1>
    <![CDATA[CAMPER'S WAREHOUSE]]>
  </A.NAME1>
  <MERCHANDISE_AMT>1071999</MERCHANDISE_AMT>
- <CQ_02_VENDOR_PO_COUNT>
  - <A.VENDOR_ID>
    <![CDATA[SCM0000002]]>
  </A.VENDOR_ID>
  - <B.PO_ID>
    <![CDATA[38]]>
  </B.PO_ID>
  </CQ_02_VENDOR_PO_COUNT>
- <CQ_03_VENDOR_INVOICES>
  - <A.VENDOR_ID>
```

# Why It's Cool

- Simplifies process of creating complex Queries by enabling the user to create a few simple Queries and combining the results.
  - Avoid complicated queries with multiple equal, outer joins, and grouping conditions.
- Avoid the need to involve programmers to create an SQR program or create PeopleSoft record Views





# Connected Query Demo

## Supplier Activity Report

# Steps to Build a Connected Query

- Create Your Parent and Child Queries in PeopleSoft Query Manager.
  - In this examples 1 parent and 2 child queries were created.
  - Make sure to save each of them as either all public or all private.
  - Each Query must have one or more fields in common with it's parent query. This field is used to join the parent and child queries

The screenshot shows the Oracle PeopleSoft Query Manager interface for a 'Parent Query'. The 'Query Name' is 'CQ\_01\_VENDOR\_SPEND' and the 'Description' is 'Con Query Parent Vendor Spend'. The 'Fields' table lists three fields: 'A.VENDOR\_ID - Supplier ID', 'A.NAME1 - Supplier Name', and 'D.MERCHANDISE\_AMT - Merchandise Amount'. A red arrow points from the 'Query Manager' link in the top navigation bar to the 'Create Parent Query in Query Manager' button. Another red arrow points from the 'Fields' table to a text box stating: 'Each of these fields will be in the Connected Query Results'.

Col	Record.FieldName	Format	Ord	XLAT	Agg	Heading Text	Add Criteria	Edit	Delete
1	A.VENDOR_ID - Supplier ID	Char10				Supplier		Edit	
2	A.NAME1 - Supplier Name	Char40				Supplier		Edit	
3	D.MERCHANDISE_AMT - Merchandise Amount	SNm25.3			Sum	Sum Merchandise Amt		Edit	

The screenshot shows the Oracle PeopleSoft Query Manager interface for a 'Child Query 1'. The 'Query Name' is 'CQ\_02\_VENDOR\_PO\_COUNT' and the 'Description' is 'Con Query Child Vendor PO Cnt'. The 'Fields' table lists two fields: 'A.VENDOR\_ID - Supplier ID' and 'B.PO\_ID - PO Number'. A red arrow points from the 'Query Manager' link in the top navigation bar to the 'Create in Query Manager' button. Another red arrow points from the 'Fields' table to a text box stating: 'Each of these fields will be in the Connected Query Results'.

Col	Record.FieldName	Format	Ord	XLAT	Agg	Heading Text	Add Criteria	Edit	Delete
1	A.VENDOR_ID - Supplier ID	Char10	1			Supplier		Edit	
2	B.PO_ID - PO Number	Char10			Count	Count PO No.		Edit	

The screenshot shows the Oracle PeopleSoft Query Manager interface for a 'Child Query 2'. The 'Query Name' is 'CQ\_03\_VENDOR\_INVOICES' and the 'Description' is 'Total and Count of Invoices'. The 'Fields' table lists three fields: 'A.VENDOR\_ID - Supplier ID', 'A.PAY\_AMT - Payment Amount', and 'A.VOUCHER\_ID - Voucher ID'. A red arrow points from the 'Query Manager' link in the top navigation bar to the 'Create in Query Manager' button. Another red arrow points from the 'Fields' table to a text box stating: 'Each of these fields will be in the Connected Query Results'.

Col	Record.FieldName	Format	Ord	XLAT	Agg	Heading Text	Add Criteria	Edit	Delete
1	A.VENDOR_ID - Supplier ID	Char10				Supplier		Edit	
2	A.PAY_AMT - Payment Amount	SNm25.3			Sum	Sum Pay Amt		Edit	
3	A.VOUCHER_ID - Voucher ID	Char8			Count	Count Voucher		Edit	

# Steps to Build a Connected Query

- From the Connected Query Manager page, select 'Add New Value'

Connected Query Manager

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 by:  begins with

[Advanced Search](#)

- Enter a Query Name and Description
- Enter if the Connected Query is Public or Private

Connected Query Manager

\*Connected Query

Owner ID

☐ Public User ID KHARPER \*Status

**Description**

Description

Comments

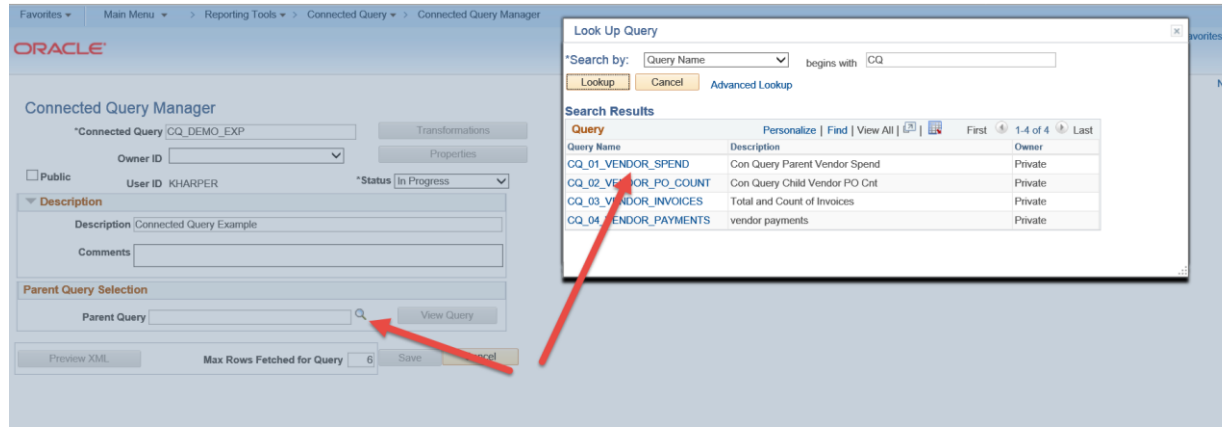
**Parent Query Selection**

Parent Query

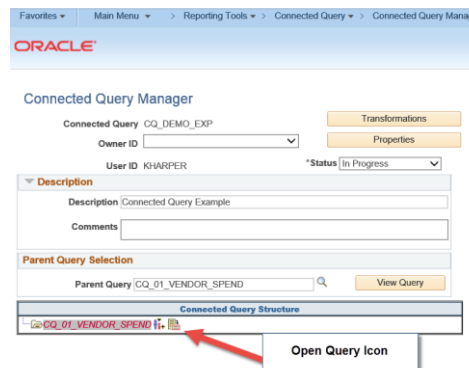
Max Rows Fetched for Query

# Steps to Build a Connected Query

- Click on the lookup icon to choose a parent Query.
  - Note this is the query you created in Query Manager as your 'Parent Query'

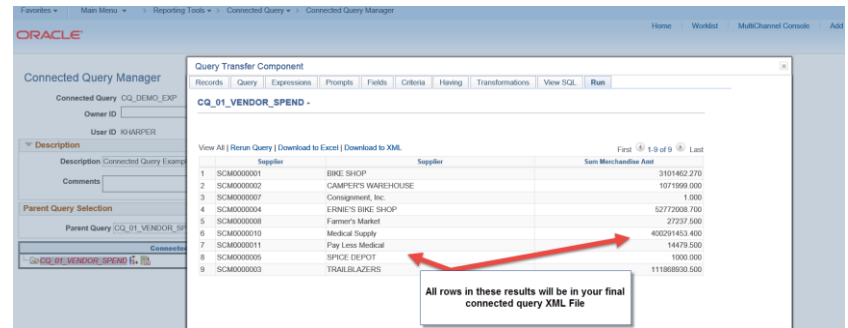
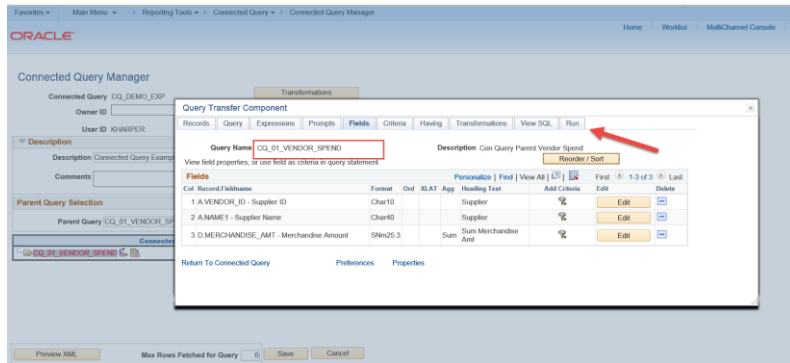


- After you select the parent Query, click on the open Query Icon as shown below

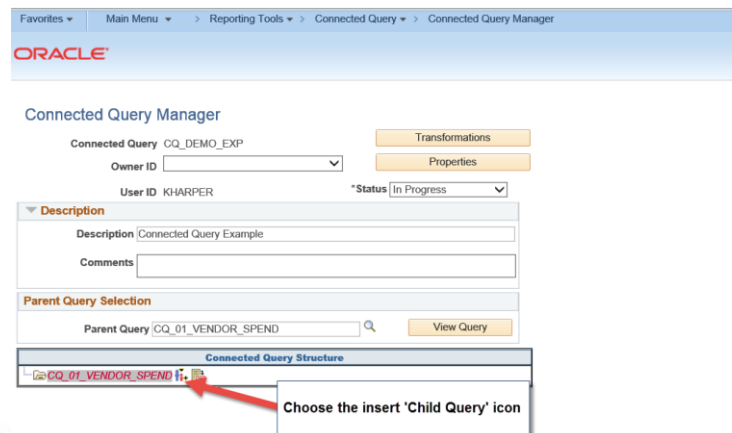


# Steps to Build a Connected Query

- The Parent Query is displayed. Click the run tab to see the values that will be included in your results from the parent query.
  - Note the parent Query cannot be updated from this view.

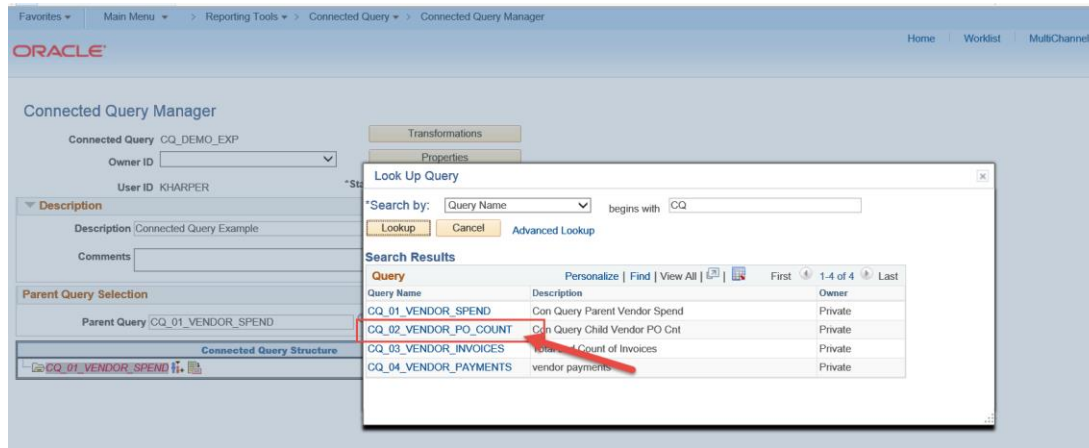


- Choose the 'Insert Child Query' icon

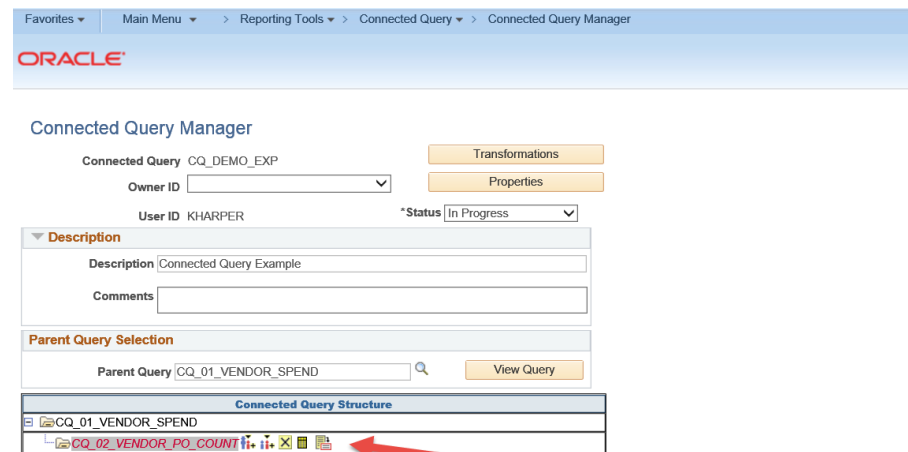


# Steps to Build a Connected Query

- Choose a Query to be inserted as a child to the parent.
  - This query was previously created using Query manager



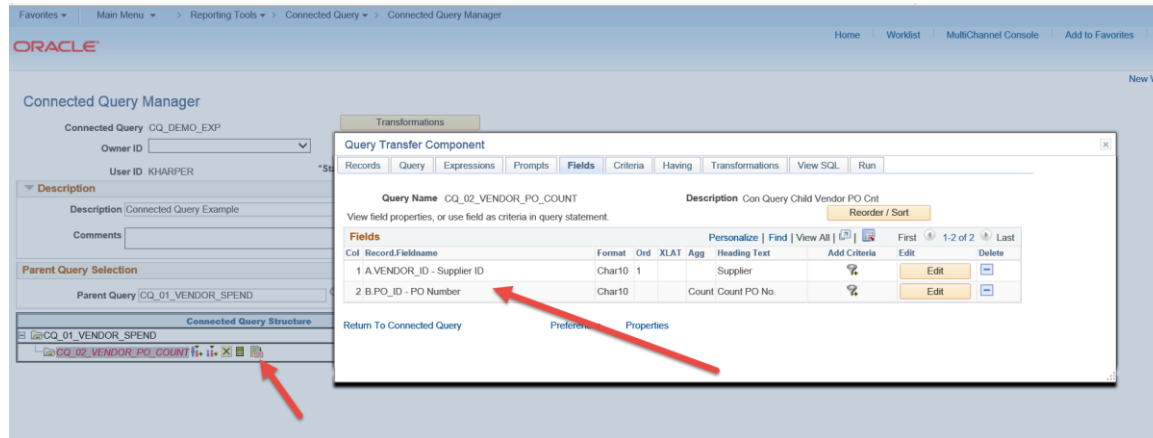
- The Child Query is now shown below the parent Query



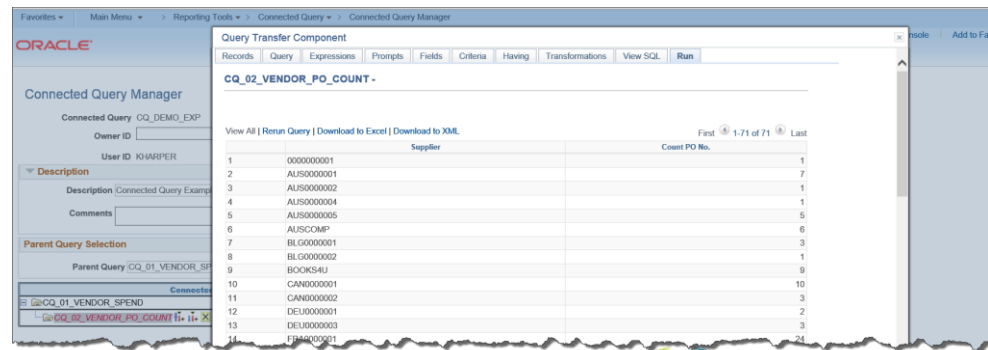


# Steps to Build a Connected Query

- Select the 'Open Query' icon next to the child query.
- The fields displayed will be included in the connected query results.

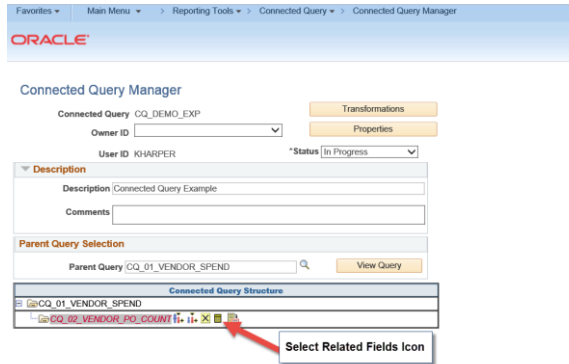


- Note: Only rows in the child query that match the Vendor ID field in the parent Query will be shown.

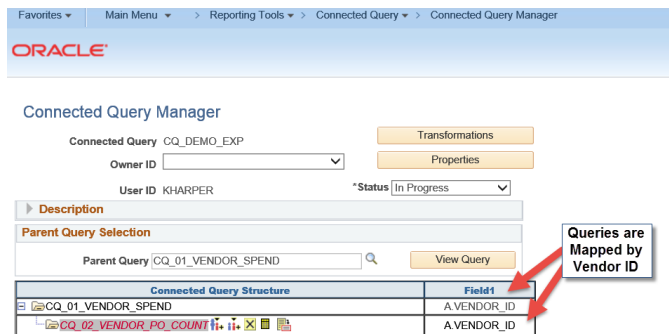
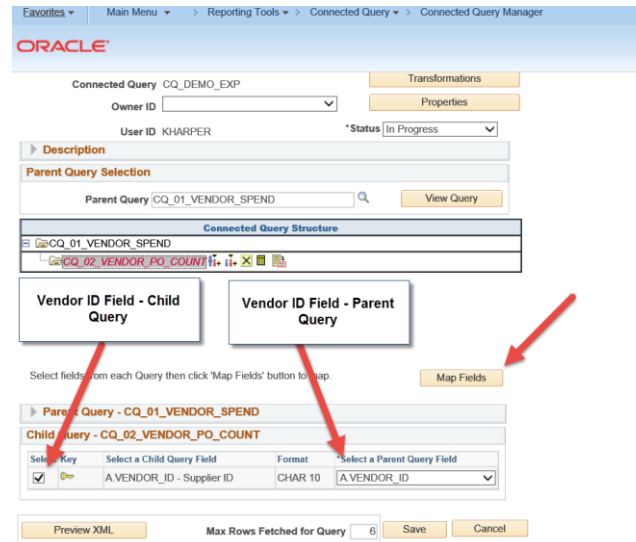


# Steps to Build a Connected Query

- Select the 'Related Fields' Icon

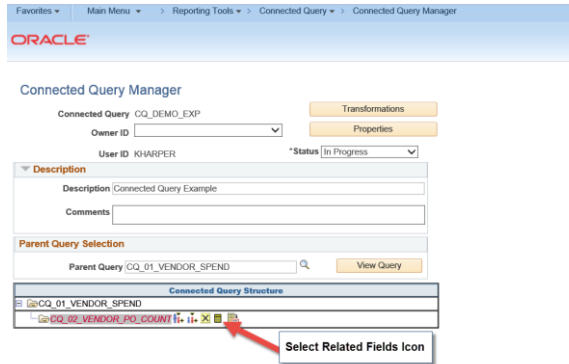


- Choose the field(s) from the Parent and Child Query which link the two Queries together.
- Click the Map Fields Button

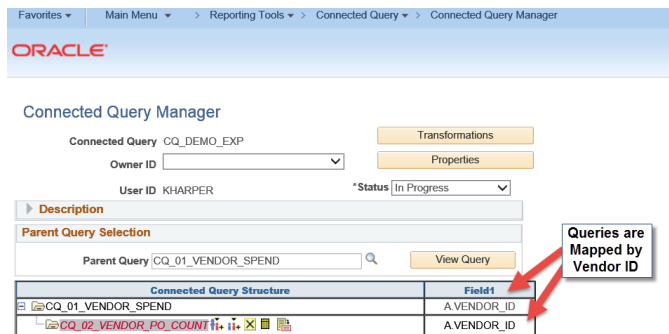
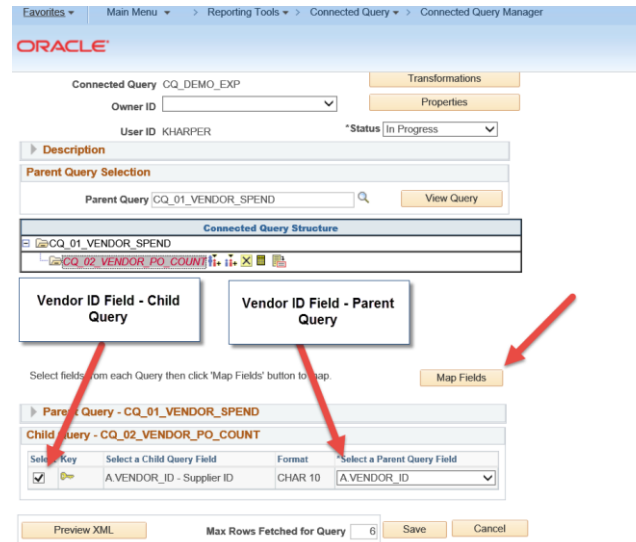


# Steps to Build a Connected Query

- Select the 'Related Fields' Icon

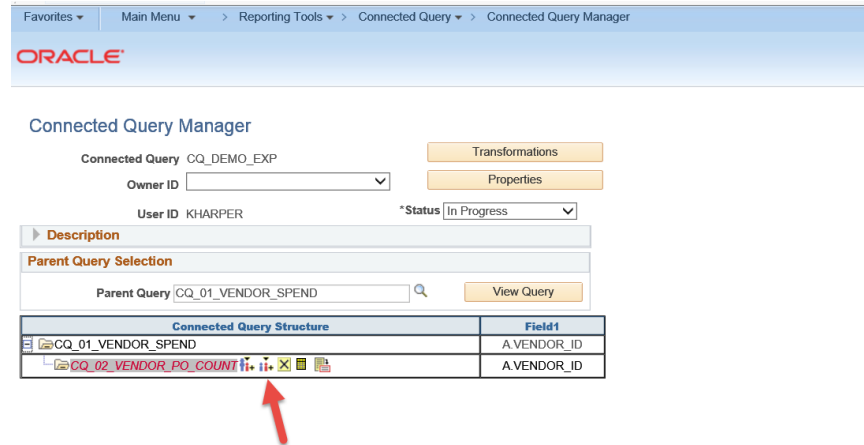


- Choose the field(s) from the Parent and Child Query which link the two Queries together.
- Click the Map Fields Button

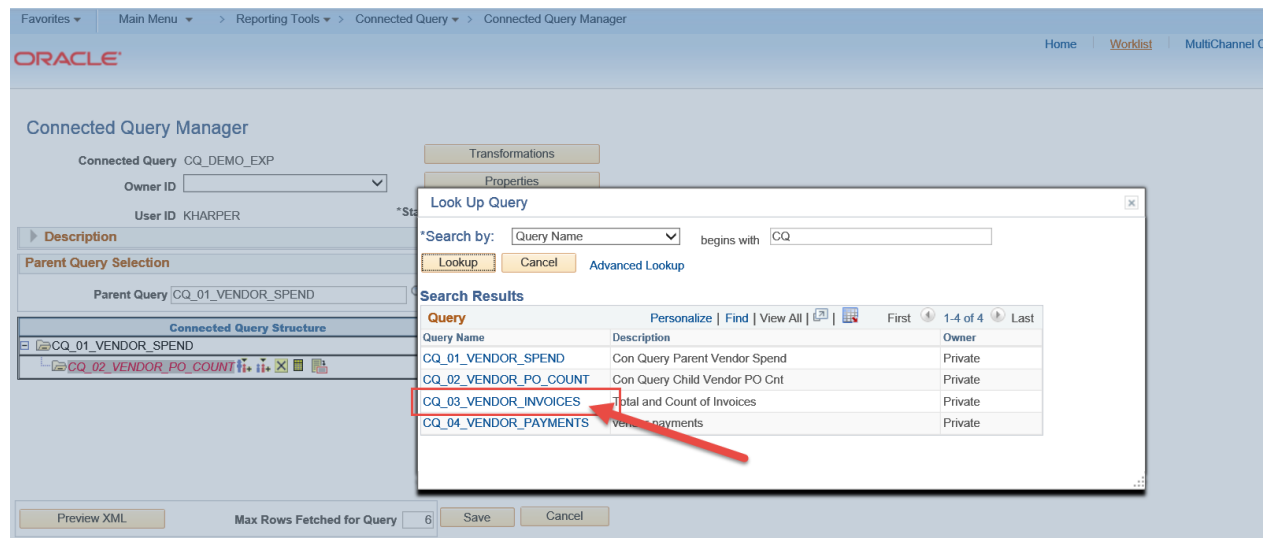


# Steps to Build a Connected Query

- Click the 'Insert Sibling' Icon



- Choose a query to be inserted as the 2<sup>nd</sup> Child Query.



# Steps to Build a Connected Query

- As with the prior child, select the 'Related fields' icon by the newly added query.

Connected Query Manager

Connected Query: CQ\_DEMO\_EXP  
Owner ID: [dropdown]  
User ID: KHARPER  
\*Status: In Progress

Buttons: Transformations, Properties

Description

Parent Query Selection  
Parent Query: CQ\_01\_VENDOR\_SPEND [dropdown] View Query

Connected Query Structure

Query	Fields
CQ_01_VENDOR_SPEND	
CQ_02_VENDOR_PO_COUNT	
CQ_03_VENDOR_INVOICES	

Buttons: Preview XML, Max Rows Fetched for Query: 6, Save, Cancel

- Choose the fields to map from the parent and child queries.
- Click the 'Map Fields' button

Connected Query Manager

Connected Query: CQ\_DEMO\_EXP  
Owner ID: [dropdown]  
User ID: KHARPER  
\*Status: In Progress

Buttons: Transformations, Properties

Description

Parent Query Selection  
Parent Query: CQ\_01\_VENDOR\_SPEND [dropdown] View Query

Connected Query Structure

Query	Fields
CQ_01_VENDOR_SPEND	
CQ_02_VENDOR_PO_COUNT	
CQ_03_VENDOR_INVOICES	

Buttons: Preview XML, Max Rows Fetched for Query: 6, Save, Cancel

Map Fields

Select the child and parent fields to Map

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

Select Key	Select a Child Query Field	Format	*Select a Parent Query Field
<input checked="" type="checkbox"/>	A.VENDOR_ID - Supplier ID	CHAR 10	A.VENDOR_ID

Buttons: Preview XML, Max Rows Fetched for Query: 6, Save, Cancel

# Steps to Build a Connected Query

- The Parent and Child Fields are shown as matched by 'Vendor ID'
- Click on the Preview XML Button. The Data results will be shown in XML Hierarchical format.

Connected Query Manager

Connected Query: CQ\_DEMO\_EXP

Owner ID: [dropdown]

User ID: KHARPER

\*Status: In Progress

Transformations

Properties

Description

Parent Query Selection

Parent Query: CQ\_01\_VENDOR\_SPEND

View Query

Field1	Field2
CQ_01_VENDOR_SPEND	A.VENDOR_ID
CQ_02_VENDOR_PO_COUNT	A.VENDOR_ID
CQ_03_VENDOR_INVOICES	A.VENDOR_ID

```
<?xml version="1.0" encoding="UTF-8"?>
- <ConnectedQuery xsi:noNamespaceSchemaLocation="" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" query_rows_limit="6" preview="True" name="CQ_DEMO_EXP">
-   <CQ_01_VENDOR_SPEND>
-     <A.VENDOR_ID>
-       <![CDATA[SCM0000001]]>
-     </A.VENDOR_ID>
-     <A.NAME1>
-       <![CDATA[BIKE SHOP]]>
-     </A.NAME1>
-     <MERCHANDISE_AMT>3101462.27</MERCHANDISE_AMT>
-   </CQ_01_VENDOR_SPEND>
-   <CQ_02_VENDOR_PO_COUNT>
-     <A.VENDOR_ID>
-       <![CDATA[SCM0000001]]>
-     </A.VENDOR_ID>
-     <B.PO_ID>
-       <![CDATA[43]]>
-     </B.PO_ID>
-   </CQ_02_VENDOR_PO_COUNT>
- </CQ_01_VENDOR_SPEND>
- <CQ_01_VENDOR_SPEND>
-   <A.VENDOR_ID>
-     <![CDATA[SCM0000002]]>
-   </A.VENDOR_ID>
-   <A.NAME1>
-     <![CDATA[CAMPER'S WAREHOUSE]]>
-   </A.NAME1>
-   <MERCHANDISE_AMT>1071999</MERCHANDISE_AMT>
-   <CQ_02_VENDOR_PO_COUNT>
-     <A.VENDOR_ID>
-       <![CDATA[SCM0000002]]>
-     </A.VENDOR_ID>
-     <B.PO_ID>
-       <![CDATA[38]]>
-     </B.PO_ID>
-   </CQ_02_VENDOR_PO_COUNT>
-   <CQ_03_VENDOR_INVOICES>
-     <A.VENDOR_ID>
```



# Steps to Build a Connected Query

- Change the Query Status to 'Active' so that the Query is available in the Connected Query Viewer
- Save the Query

Favorites ▾ Main Menu ▾ > Reporting Tools ▾ > Connected Query ▾ > Connected Query Manager

ORACLE

Connected Query Manager

Connected Query CQ\_DEMO\_EXP Transformations

Owner ID ▾ Properties

User ID KHARPER \*Status Active ▾

Description

Parent Query Selection

Parent Query CQ\_01\_VENDOR\_SPEND View Query

Connected Query Structure	Field1
CQ_01_VENDOR_SPEND	A.VENDOR_ID
CQ_02_VENDOR_PO_COUNT	
CQ_03_VENDOR_INVOICES	A.VENDOR_ID

Favorites ▾ Main Menu ▾ > Reporting Tools ▾ > Connected Query ▾ > Connected Query Manager

ORACLE

Connected Query Manager

Connected Query CQ\_DEMO\_EXP Transformations

Owner ID ▾ Properties

User ID KHARPER \*Status In Progress ▾

Description

Parent Query Selection

Parent Query CQ\_01\_VENDOR\_SPEND View Query

Connected Query Structure	Field1
CQ_01_VENDOR_SPEND	A.VENDOR_ID
CQ_02_VENDOR_PO_COUNT	
CQ_03_VENDOR_INVOICES	A.VENDOR_ID

Preview XML Max Rows Fetched for Query 6 Save Cancel

# Steps to Build a Connected Query

- From the Connected Query viewer menu option, choose the 'Run to Window' URL.

Connected Query Viewer

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

Search by:  begins with

Preview - Max Rows for Query:

Search Results:

Connected Query				Personalize	Find	View All	First	1 of 1	Last
Name	Description	Owner	Status	Preview XML	Run To Window	Schedule	Definitional References		
CQ_DEMO_EXP	Connected Query Example	Private	Active	<a href="#">Preview XML</a>	<a href="#">Run To Window</a>	<a href="#">Schedule</a>	<a href="#">Lookup References</a>		

- Click on the Details URL to retrieve the XML Results from the Connected Query

File Edit View Favorites Tools Help

Process List | Server List

View Process Request For

User ID  Type  Last  Days

Server  Instance

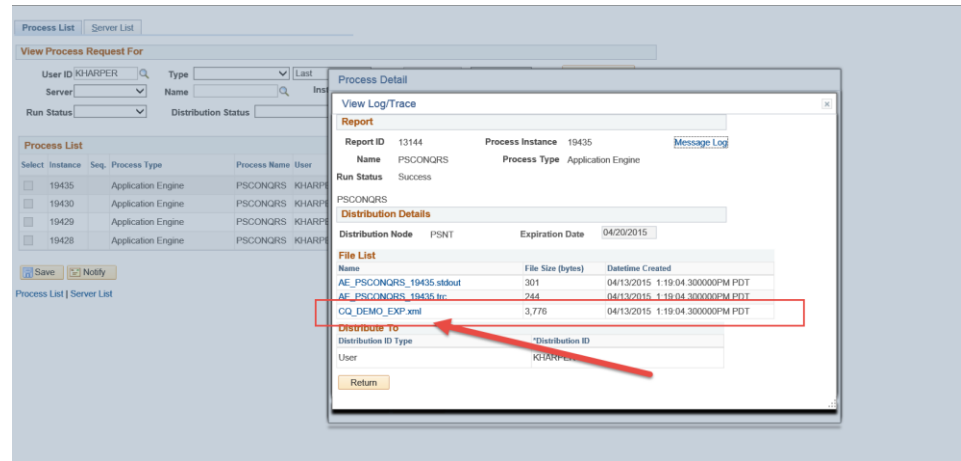
Run Status  ☒ Save On Refresh

Process List				Personalize	Find	View All	First	1-4 of 4	Last
Select	Instance	Seq.	Process Type	Process Name	User	Run Date/Time	Run Status	Distribution Status	Details
<input type="checkbox"/>	19435		Application Engine	PSCONQRS	KHARPER	04/13/2015 1:18:20PM PDT	Success	Posted	<a href="#">Details</a>
<input type="checkbox"/>	19430		Application Engine	PSCONQRS	KHARPER	04/12/2015 4:58:27PM PDT	Success	Posted	<a href="#">Details</a>
<input type="checkbox"/>	19429		Application Engine	PSCONQRS	KHARPER	04/12/2015 2:19:41PM PDT	Success	Posted	<a href="#">Details</a>
<input type="checkbox"/>	19428		Application Engine	PSCONQRS	KHARPER	04/12/2015 2:16:52PM PDT	Success	Posted	<a href="#">Details</a>

Process List | Server List

# Steps to Build a Connected Query

- The XML File can be saved and opened by any XML viewer such as Word or Excel to validate the results



- XML – Connected Query Results Opened in Excel

Book4 - Excel

	A	B	C	D	E	F	G	H	I	J	K	L	M
	name	preview	query_rows_limit	A.VENDOR_ID	A.NAME1	MERCHANDISE_AMT	A.VENDOR_ID2	B.PO_ID	A.VENDOR_ID3	A.PAY_AMT	A.VOUCHER_ID		
1	CQ_DEMO	True		6	SCM0000001	BIKE SHOP	3101462.27	SCM0000001	43				
2	CQ_DEMO	True		6	SCM0000002	CAMPER'S WAREHOUSE	1071999	SCM0000002	38	SCM0000002	1250	2	
3	CQ_DEMO	True		6	SCM0000007	Consignment, Inc.	1	SCM0000007	1				
4	CQ_DEMO	True		6	SCM0000004	ERNIE'S BIKE SHOP	52772008.7	SCM0000004	68	SCM0000004	52634683	5	
5	CQ_DEMO	True		6	SCM0000008	Farmer's Market	27237.5	SCM0000008	4	SCM0000008	16947.5	2	
6	CQ_DEMO	True		6	SCM0000010	Medical Supply	400291453.4	SCM0000010	8	SCM0000010	692600	4	
7													
8													
9													
10													

# Connected Query Terms

## Parent Query

A parent query in a connected query is a query that has one or many child queries. The top level query in a connected query is the parent query.

## Child Query

A child query in a connected query is a query that has a single parent query. A child query can also serve as a parent query if it has one or more child queries in the Connected Query definition. A child query can have one or more sibling queries.

## Sibling Query

A sibling query in a connected query is a child query that shares a parent with another child query.

## Public Connected Query

Public connected query is a query that can be used by all users.

Note: Public connected queries cannot include any private query.

## Get in touch



Keith Harper

SCM-MFG Practice Director

[keith.harper@spearmc.com](mailto:keith.harper@spearmc.com)

866-SPEARMC x806

[www.SpearMC.com](http://www.SpearMC.com)



# Please complete the session evaluation

We appreciate your feedback and insight

Session ID#: 103300



20TH ANNIVERSARY



COLLABORATE. INNOVATE. CELEBRATE.

***Quest is the home for PeopleSoft  
and JD Edwards Users***

## **Visit Seth & Dana at the Quest International Users Group Booth #337**

- Let us show you how to leverage the Quest community to maximize your ERP investment
- Receive your personalized Quest Activation Plan & learn how to make the most of your membership
- Plus, find out how you can join us in celebrating our 20<sup>th</sup> year of success – you might just win a special Quest-themed bottle of Kentucky bourbon!