Advanced PeopleSoft Query Overview

PeopleSoft Query (Query) is an end-user reporting tool that allows users to extract information from SFS easily and efficiently. Queries can be as simple or as complex as needed; and can be one-time queries or saved queries used repeatedly. This manual walks through the steps of creating a query using the web query tool, and also discusses some advanced query topics that aid in creating powerful queries.

To use Query efficiently, you need a basic understanding of the data (that is, in what record is the data stored) the query will be based upon, and relationships to other records within the database. It is fairly simple to create a query, but it takes time and understanding to create a query and bring back accurate data.

Query has several different ways to do the same task, this manual shows one way. You will likely find different ways to do many items described in this manual. Use the method that works best for you.

Before getting started with Query, remember the following:

- **Use a single mouse click** when working with Query. There is no need to double click on fields or tabs.
- **Do not use the back button** on the browser when navigating through SFS.
- If the system is processing, **there is not a way for you to stop the processing**. Pressing the stop button on the browser or clicking on another tab will likely cause the system to not respond. You will lose any unsaved data.
- PeopleSoft uses the terms “record” and “table” interchangeably. In this manual, the terms will mean the same thing, which is a two-dimensional arrangement of rows and columns that holds data.
- Queries can be either ‘Public’ or ‘Private’. Public queries are available for any user to review, run or alter. Private queries can only be accessed by the owner.
Process Frequency | Used on an ad hoc basis.
--- | ---
Dependencies | Knowledge of SFS records and data.
Assumptions | User has read and understands the PS Query Manager Basic and Intermediate Level business process documents.
Responsible Parties | N/A
Alternate Scenarios | N/A

**Process Detail**

*Navigation: Main Menu > Reporting Tools > Query > Query Manager*

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**I. Using Subqueries**

A subquery is a query where the results are used by another query. The main query uses the subquery’s results as a limit for the results.

Use a subquery to compare a field value to the results of a second query. Suppose, for example, that you want a list of vendors that have withholding. For each Vendor ID in the VENDOR record, you must find out whether their Vendor ID is in the VENDOR_WTHD record. In other words, compare the value in the VENDOR.VENDOR_ID field to the results of a subquery that selects the VENDOR_ID values from the VENDOR_WTHD record.

1. **Create** a query built on the VENDOR record.
2. **Define** any criteria to narrow your results.
3. **On** Criteria, click Add Criteria.
4. When entering criteria, change *Choose Expression 2 Type* to ‘Subquery’
5. Click on the *Define/Edit Subquery* hyperlink.

6. Search for the second record for your subquery (on which you wish to compare values).
7. Click the *Add Record* link to select the record.
8. **Click** the *Select* link on the field to be included in the subquery. A subquery only has one field, and the criteria are either ‘exists in the subquery’ or it ‘does not exist in the subquery’.

9. Note the *Subquery/Union Navigation* hyperlink that is now available. This will allow you to navigate between the two queries.

10. The *Working on Selection* indicator will identify what portion of the query you are modifying.

    In the Top Level of Query, you can now see ‘SUBQUERY’ referenced on **Criteria** for the *Vendor ID*.

11. You can **navigate** the queries by **clicking** the *Subquery/Union Navigation* hyperlink, then **choosing** a query level.
12. To **add** criteria on the subquery, **navigate** to the subquery’s Query tab.

13. Click 📡 for the field you want to add criteria.

14. **Add** criteria as you normally would, using the *Edit Criteria Properties* screen. For this example, we wish to retrieve only vendors with a withholding entity value of ‘IRS’.
15. Click **OK**. Any criteria added for the subquery will only be visible on the subquery's Criteria tab.

16. When **Run**, the query will bring back all the Vendor IDs in the VENDOR_WTHD, who had a Withholding Entity of ‘IRS’ (subquery criteria) and match those Vendor IDs against the VENDOR record, where the Withholding Applicable was ‘Yes’ and the Business Unit was ‘UWPLT’ (top query criteria).

II. Unions

Unions allow you to execute two or more separate queries and consolidate the results into one dataset. **Both queries must have the same number of selected fields, in the same order, with the same data type.**

In this example, we need a query that includes both Purchase Order Header table data and Requisition Order Header table data into one result set. With a union query, you create two separate select statements (one for PO, one for REQ.) The two queries must have the same number of columns, the columns must be in the same order, and the data type for each column must be the same.

1. **Create** a *New Query* or identify a query that you would like to unite with another. For this example, the first query or *Top Level of Query* has been created using the *REQ_HDR* table. The following fields have been selected:
2. Click the **New Union** hyperlink from any tab other than the **Run** tab.

3. PeopleSoft Query automatically switches to the **Records** tab of the Query Manager to start defining the second query (*Union1*).

4. Define the query the same way other queries are defined.
However, the first query in the union—the Top Level of Query—has a special status. PeopleSoft Query determines the ordering of the rows and columns based on what you specify for the Top Level of Query. It also uses the column headings defined for the Top Level of Query in the results.

5. **Add** the selected record to the second query (Union 1). For this example, the `PO_HDR` table is added.

6. **Add** the similar fields as in the Top Level of Query.

7. The two queries have the same number of fields, in the same order, and of the same data type.
8. When you're working on a union, each individual selection looks like an independent query. To navigate between the main query, subqueries, and unions, use the Subquery/Union Navigation hyperlink.

9. Criteria to narrow results must be placed in both queries.
10. When you have set up your query, **run** the query, and the results will be the combination of the two statements entered.

11. You can [View SQL](#) to see the union of the two separate queries.
12. If you need to delete the union, you can **click** the *Delete Union* hyperlink at the bottom of the screen in *Union 1* only. This will return your query to a single query, leaving only the *Top Level of Query*.
III. Using Wildcard Characters to Find Information

PeopleSoft applications support three wildcard characters to help you search for data in character fields. You can use these wildcard characters to find the exact information that you need.

NOTE: Wildcard characters only work with the ‘begins with’ and ‘contains’ operators.

The supported standard wildcard characters are:

<table>
<thead>
<tr>
<th>Wildcard</th>
<th>Search Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>% (percent symbol)</td>
<td>Match one or more characters.</td>
</tr>
<tr>
<td>_ (underscore)</td>
<td>Match any single character.</td>
</tr>
<tr>
<td>\ (backslash)</td>
<td>Escape character; do not treat the next character as a wildcard.</td>
</tr>
</tbody>
</table>

- % matches any string of zero or more characters. For example, C% matches any string starting with C, including C alone.
- _ matches any single character. Such as, _ones matches any five-character string ending with ones, such as Jones or Cones.
- To use one of the wild-card characters as a literal character, meaning to include a % in your string, precede the % character with a \, as \%.

The following will demonstrate an example, if you wanted to find the SFS Centrally maintained queries, you could search for ‘SFS%’ in the begins with search box for Search By ‘Query Name’. However, the system returns a list of all queries that begin with SFS which includes queries that are NOT maintained centrally, as you can see below:
Understanding that the centrally maintained query inventory list uses a naming convention of ‘SFS_module two letter designation_query name’ then you could reduce the list to those that are centrally maintained by using ALL three wildcard options.
1. **Search by ‘Query Name’ begins with ‘SFS\___\_’**.
2. You can also find these special queries by changing the **Search by** to ‘Folder Name’ **begins with** ‘SFS%Inventory’.

![Query Manager](image)

**IV. Internet Explorer Settings for Query Download to Excel**

Depending on the settings on your computer, when you run a query to Excel, it may or may not open in the Internet Explorer browser window. If Excel does open in the browser window, Excel functionality is not available. This setting is defined in Internet Explorer.

To adjust the settings:

1. **Open** an Internet Explorer Window.
2. **Choose** “Tools” from the menu in the upper right hand corner.
3. **Click** Internet Options.
4. In the Internet Options screen, **click** Security.
5. **Click** Custom level...

![Internet Options window with Security tab highlighted]

6. **Scroll** down to the “Downloads” heading.
7. Under “Automatic prompting for file downloads”, **choose** the “Enable” radio button.
8. Click [Yes]

9. Click [OK]
10. Click 

11. Click 

12. Excel will now open in a new window when opened.

### Revision History

<table>
<thead>
<tr>
<th>Author</th>
<th>Version</th>
<th>Date</th>
<th>Description of Change</th>
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<tbody>
<tr>
<td>Andrea Vredberg</td>
<td>1.0</td>
<td>06/24/2013</td>
<td>Initial Draft from 8.9 version</td>
</tr>
<tr>
<td>Stacy VanWormer</td>
<td>2.0</td>
<td>07/31/2013</td>
<td>Revision</td>
</tr>
<tr>
<td>Susan Kincanon</td>
<td>2.1</td>
<td>08/15/2013</td>
<td>Edit, format and ready for publication</td>
</tr>
<tr>
<td>Stacy VanWormer</td>
<td>2.2</td>
<td>09/05/2013</td>
<td>Revision</td>
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<tr>
<td>Susan Kincanon</td>
<td>3.0</td>
<td>09/05/2013</td>
<td>Updated with Wildcards and IE sections, finalized</td>
</tr>
<tr>
<td>Scott Larson</td>
<td>3.0</td>
<td>09/13/2013</td>
<td>Reviewed and approved to publish</td>
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<tr>
<td>Susan Kincanon</td>
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