

PeopleSoft (version 9.1): Introduction to the Query Tool

Introduction

This training material introduces you to some of the basic functions of the PeopleSoft (PS) Query tool as they are used at the University of Delaware (UD). The Query tool is an end-user reporting tool, which allows you to extract precise information using visual representations of your PS database—without writing Structured Query Language (SQL) statements. The Query tool can be used to do the following:

- display data in a grid (using a Preview tab),
- preview query data within Query Manager and Query Viewer, displaying the result set in a grid for review, and
- download query results to an Excel spreadsheet.

Training Objectives

This training material was designed using a desktop computer running Windows XP (operating system) and using the Internet Explorer (version 6.0.2) browser. If you are using a different type of computer, operating system, or browser, some of the screen graphics may appear slightly different than those printed here. However, the function of the screen (page) should remain the same.

After you complete the exercises in this training material, you should be able to do the following:

- Navigate to the Query Manager Search page
- Understand the differences between a private and a public query
- Find and run existing queries
- Create and save new queries
 - identify the two primary tables for reporting
 - identify the criteria that should always be used in queries
- Preview query results
- Set criteria for data selection using
 - criteria components
 - boolean expressions
- Use prompts with a query
- Select data from multiple tables
- Use aggregate functions (defined by PS as “Having” criteria)
- Use the following expressions
 - numerical manipulation
 - substring
 - concatenate (combine fields into one)
 - decode (“if”)
- Run query results to Excel
- Use the Query Viewer

Conventions

The following conventions are used throughout the exercises in this material:

Item	Convention
Text the reader should type	Courier, bold, 10 point font
Keyboard key names	Bold, Uppercase text (e.g., the ENTER key)
Menu titles	Bold, mixed-case letters
Window titles	Bold, mixed-case letters

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Navigating to the Query Manager Search Page

Before you can use the Query tool, you must know how to navigate to the **Query Manager Search** page.

Exercise 1—How to Navigate to the Query Manager Search Page

Note: We recommend you use the Internet Explorer or Firefox. Currently, PS works best with these browsers.

1. Open the Internet Explorer web browser.
2. To access the PS program, type the following URL in the browser's **Address** field:

www.udel.edu/financials or **www/udel.edu/firpt**

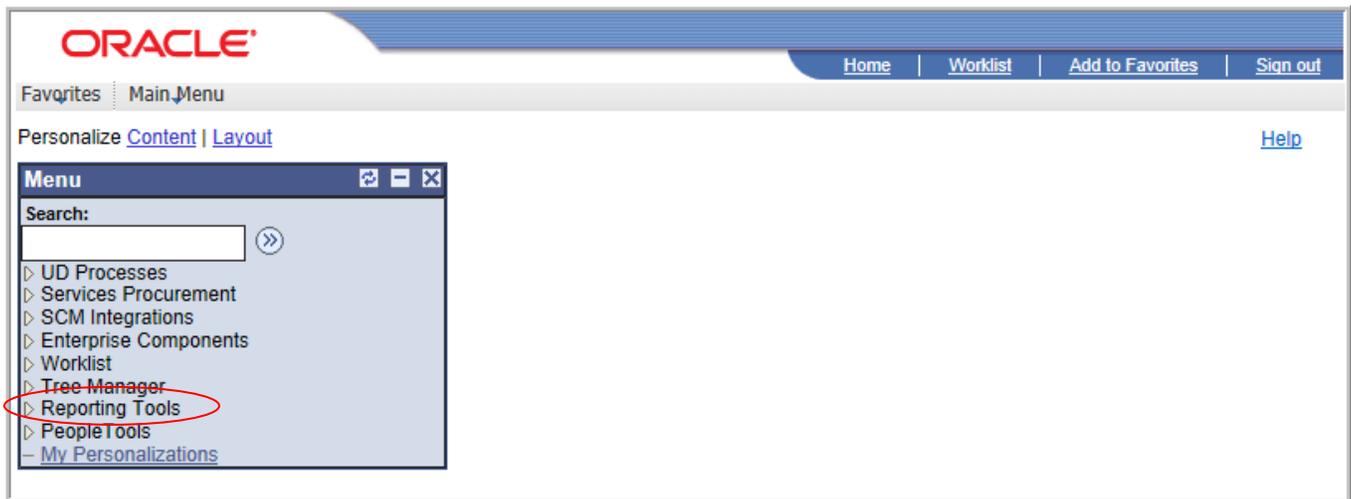
3. Press **ENTER**.

You should see this log-in page:

The screenshot shows the Oracle PeopleSoft Enterprise login page. At the top, the Oracle logo is displayed in red, with 'PEOPLESOFT ENTERPRISE' in black text below it. The main content area is divided into two sections. On the left, there is a login form with two input fields: 'User ID:' containing the text 'ellell' and 'Password:'. Below these fields is a dark grey button labeled 'Sign In'. On the right side, there is a section titled 'Select a Language:' followed by a list of language links in two columns. The first column includes: English, Dansk, Français, Italiano, Nederlands, Polski, Suomi, Čeština, 한국어, ไทย, 繁體中文, and UK English. The second column includes: Español, Deutsch, Français du Canada, Magyar, Norsk, Português, Svenska, 日本語, Русский, 简体中文, and العربية.

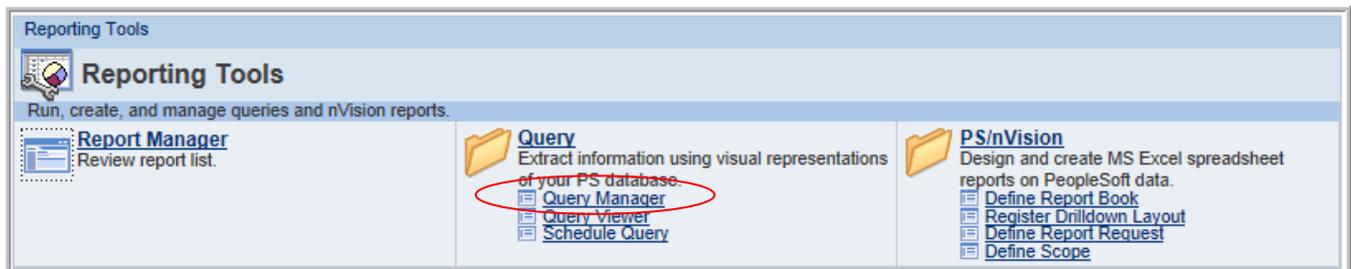
Note: Use your User ID and Password that you normally use to logon to the UD Financial System. It is usually your UDeNet ID and password.

4. Type your **User ID** in the appropriate field.
5. Type your **Password** in the appropriate field.
6. Click **Sign In**. You should see a page similar to the following:



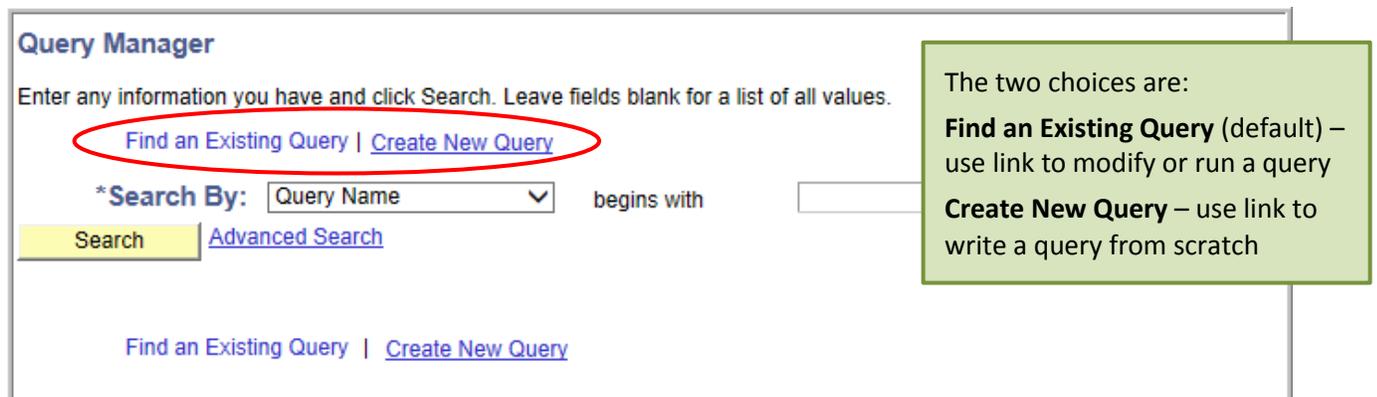
On the left-hand side of the page you will see the **Menu** box, which lists the options you can access.

7. In the **Menu** box, click **Reporting Tools**.
8. Under **Query** listed under **Reporting Tools**. You should now see the following options in the options:
 - Query Manager** – you can run an existing query, create a new query, or modify an existing query
 - Query Viewer** – you can run an existing query
 - Schedule Query** – setup a query to run on a certain date/time



9. Click **Query Manager** from the options listed under **Query**.

You should see the **Query Manager Search** page, which should look similar to the following:



--End of Exercise--

Understanding Public and Private Queries

Before using the Query tool, you should understand the differences between a *public* query and a *private* query. The following items are a list of the most important differences:

- A *public* query may be used by anyone.
- Only the individual who created it may use a *private* query.
- If you use a public query created by someone else—and make any modifications to it—you must leave the public query in its original form and save the modified version as your query. Use the **Save As** link to do this.



- **Always** save your version of a public query with a unique name. We recommend using the creator's initials as the first three letters of the query name.
- Before creating a public query, review all public queries to confirm that your initials do not duplicate the first three letters of an existing query. If your initials are already being used, select a new, unique combination of letters to use for the first three characters of the query's name.
- If you create a public query, consider making a private copy with a unique name for yourself. Therefore, if someone mistakenly changes a public query you created, you still have a copy of the original query.
- When you search for queries from the **Query Manager Search** page, PS automatically lists all private queries you created—*only you* will see these. Public queries are listed after private queries.
- If you run a public query and do not receive results, you may not have authorization to some of the data used in that query.

Note: The following table of definitions is based on information from the PS PeopleBooks online documentation. This information is included here for reference.

Terms and Buttons Used with the Query Tool

Term or Button	Action
Add Record	Click this link to access the Query page, where you can add fields to the query content or additional records.
Col (column)	Current column number for each field listed.
Query Name	<i>New Unsaved Query</i> appears in this read-only field until you change it on the Properties page. This field appears on all Create New Query pages.
Record.Fieldname	Record alias and name for each field listed.
 Delete button	Click the Delete button to delete the associated record from the query. A confirmation message appears. Click the Yes button to proceed with the deletion. Click the No button to cancel the deletion.
 Use as Criteria button	Click the Use as Criteria button to open the Criteria page, where you can add criteria for the selected field.

Finding All Existing Queries

Exercise 2—How to Find All Existing Queries

1. If necessary, navigate to the **Query Manager Search** page (see instructions in exercise number 1). If you are already working within the **Query** tool, you can simply click **Query Manager** in the **Navigation Bar** at the top of the page. You should see **Find an Existing Query** page:

Query Manager

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

[Find an Existing Query](#) | [Create New Query](#)

***Search By:** begins with

Search
[Advanced Search](#)

[Find an Existing Query](#) | [Create New Query](#)

2. To see **ALL** available queries, leave the **begins with** field empty. Click **Search**.

This will return a list of queries in the **Search Results**:

Query Manager
Enter any information you have and click Search. Leave fields blank for a list of all values.
[Find an Existing Query](#) | [Create New Query](#)

*Search By: begins with
 [Advanced Search](#)

Search Results Too many items met your search criteria. Only the first 300 items are displayed.
 *Folder View:

*Action:

Select	Query Name	Descr	Owner	Folder	Edit	Run to HTML	Run to Excel	Run to XML	Schedule
<input type="checkbox"/>	ATF_TRIAL_BAL_EBL		Private		Edit	HTML	Excel	XML	Schedule
<input type="checkbox"/>	EBL_EE_NAMES	Employee Names and Empl IDs	Private		Edit	HTML	Excel	XML	Schedule
<input type="checkbox"/>	EBL_EZQ_TRANS_ALL_QUERY	Transactions from all ledgers	Private		Edit	HTML	Excel	XML	Schedule
<input type="checkbox"/>	EBL_TRANS_TAGS		Private		Edit	HTML	Excel	XML	Schedule
<input type="checkbox"/>	EZ_TRANS_NONBUDPURPNOPO	Non Budget Trans No PO Purp	Private		Edit	HTML	Excel	XML	Schedule
<input type="checkbox"/>	1743SC_PTD_TRAN_DETAIL_ALL_YRS	All trans for date range-Purp	Public		Edit	HTML	Excel	XML	Schedule
<input type="checkbox"/>	1743SC_TRAN_DETAIL_ALL_MULTI_Y	All trans for date range-Purp	Public		Edit	HTML	Excel	XML	Schedule
<input type="checkbox"/>	1743UD_PTD_TRAN_DETAIL_ALL_YRS	All trans for date range-Purp	Public		Edit	HTML	Excel	XML	Schedule
<input type="checkbox"/>	1743UD_TRAN_DETAIL_ALL_MULTI_Y	All trans for date range-Purp	Public		Edit	HTML	Excel	XML	Schedule
<input type="checkbox"/>	1743_BALANCES	Balances for Funds Like 1	Public		Edit	HTML	Excel	XML	Schedule

Owner column:

- Your **Private** queries (if any) display alphabetically at the top
- Public** queries display next alphabetically

Select column – use checkbox with the **Action** box to Add to Favorites, Delete, Rename, etc.

Descr column – description of the query

Click on any of the column headings to sort the list by the heading. (first click A to Z, second click Z to A).

Note: If too many items are produced from a query search, only the first 300 results are displayed.

—End of Exercise—

Finding and Running an Existing Query

Exercise 3—How to Find and Run an Existing Query

1. If necessary, navigate to the **Query Manager Search** page (see instructions in exercise number 1). If you are already working within the **Query** tool, you can simply click **Query Manager** in the **Navigation Bar** at the top of the page. You should see the following:

Query Manager
Enter any information you have and click Search. Leave fields blank for a list of all values.
[Find an Existing Query](#) | [Create New Query](#)

*Search By: begins with
 [Advanced Search](#)

[Find an Existing Query](#) | [Create New Query](#)

2. The default for this page is **Find an Existing Query**, no need to click the link

Note: Before you create a new query, search for your initials to confirm that they are unique to the database. Type your initials in the **begins with** field and then click **Search**. If you do not receive any results, you can use your initials. If you receive results, you will need to create a unique 3-character beginning for the name of your query.

- To find a specific query, type the first few letters of the name of the query in the **Search For** field. This field is not case-sensitive. For this exercise, in the **Search For** field, type the letters: **EBL**
- Click **Search**. You should see the following Search Results:

Query Manager

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

[Find an Existing Query](#) | [Create New Query](#)

*Search By: begins with

[Advanced Search](#)

Search Results

*Folder View:

*Action:

Query	Customize	Find	View All	First	1-30 of 36	Last			
Select	Query Name	Descr	Owner	Folder	Edit	Run to HTML	Run to Excel	Run to XML	Schedule
<input type="checkbox"/>	EBL_EE_NAMES	Employee Names and Empl IDs	Private		Edit	HTML	Excel	XML	Schedule
<input type="checkbox"/>	EBL_EZQ_TRANS_ALL_QUERY	Transactions from all ledgers	Private		Edit	HTML	Excel	XML	Schedule
<input type="checkbox"/>	EBL_TRANS_TAGS		Private		Edit	HTML	Excel	XML	Schedule
<input type="checkbox"/>	EBL_AAA_TRAINING	Query Training	Public		Edit	HTML	Excel	XML	Schedule
<input type="checkbox"/>	EBL_ACCOUNTS_ACTIVE		Public		Edit	HTML	Excel	XML	Schedule
<input type="checkbox"/>	EBL_ACCOUNTS_ACTIVE_EXP_REV		Public		Edit	HTML	Excel	XML	Schedule
<input type="checkbox"/>	EBL_ACCTPURPCONVERSION	enter dept acronym or deptID	Public		Edit	HTML	Excel	XML	Schedule
<input type="checkbox"/>	EBL_COA_ROW_BY_PURPOSE	find approver,viewer,rpt distr	Public		Edit	HTML	Excel	XML	Schedule
<input type="checkbox"/>	EBL_COA_ROW_BY_PURP_MULT	find approver,viewer,rpt distr	Public		Edit	HTML	Excel	XML	Schedule
<input type="checkbox"/>	EBL_EE_NAMES_IDS	Employee Names and Empl IDs	Public		Edit	HTML	Excel	XML	Schedule

- To view a query, click **Edit** on the row of the query you want to view.
- For this exercise, click **EBL_AAA_TRAINING**. You should see the following:

Records **Query** **Expressions** **Prompts** **Fields** **Criteria** **Having** **View SQL** **Run**

Query Name: EBL_AAA_TRAINING Description: Query Training

View field properties, or use field as criteria in query statement.

Col	Record.FieldName	Format	Ord	XLAT	Agg	Heading Text	Add Criteria	Edit	Delete
1	A.CHARTFIELD1 - Purpose	Char10				Purpose		<input type="button" value="Edit"/>	<input type="button" value="-"/>
2	A.EFF_STATUS - Status as of Effective Date	Char1		N		Status		<input type="button" value="Edit"/>	<input type="button" value="-"/>
3	A.DESCR - Description	Char30				Descr		<input type="button" value="Edit"/>	<input type="button" value="-"/>

[Save As](#) [New Query](#) [Preferences](#) [Properties](#) [Publish as Feed](#) [New Union](#)

Across the top of the page, you will see a row of tabs, each with a label (e.g., **Records**, **Query**, **Fields**, etc.). These pages contain additional information about the query you are viewing.

Below the tabs, you will see the name of the query in the **Query Name** field and the description of the query in the **Description** field.

Note: In the **Format** column (the second column), you will see each field described as **Char**, **Num**, or **SNm**. **Char** designates a character; **Num** or **SNm** designate a number. When you work with a query, take note of these designations because they are useful when you work with expressions such as numerical manipulation, substrings, concatenate, and decode.

Records Query Expressions Prompts **Fields** Criteria Having View SQL **Run**

Query Name: EBL_AAA_TRAINING Description: Query Training Feed

View field properties, or use field as criteria in query statement. Reorder / Sort

Col	Record	Fieldname	Format	Ord	XLAT	Agg	Heading Text	Add Criteria	Edit	Delete
1	A	CHARTFIELD1 - Purpose	Char10				Purpose		Edit	-
2	A	EFF_STATUS - Status as of Effective Date	Char1		N		Status		Edit	-
3	A	DESCR - Description	Char30				Descr		Edit	-

Save Save As New Query Preferences Properties Publish as Feed New Union Return To Search

7. To run the query, click the **Run** tab

8. When the processing is complete, your results should look like this:

Records Query Expressions Prompts Fields Criteria Having View SQL **Run**

View All | Rerun Query | Download to Excel | Download to XML First 1-100 of 1105 Last

	Purpose	Status	Descr
1	MAST100000	A	Cost Share Purpose
2	MAST110000	A	CEO DEANS OFC ADMIN
3	MAST112111	A	CEO LEWES HONORS DAY
4	MAST112112	A	CEO GRADUATE SUPPORT
5	MAST112113	A	SMS LEWES INSTRUCTION SUPP
6	MAST112114	A	EARTH OCEAN & ENVIRONMNT INSTR
7	MAST112115	A	SMS SUPPORT
8	MAST112116	A	CEO IT OPERATIONS
9	MAST112117	I	(D) LEWES IT
10	MAST112118	A	PHYSICAL OCEAN INSTRUCTION
11	MAST112119	A	LEWES MARINE BIO SCI INSTR

Good habit:
Check the # of rows returned. This helps you evaluate the validity of your results.

--End of Exercise--

Creating a New Query

Note: PS terminology for “table” is “record.”

The basic steps to create a new query are the following:

- select the record on which to base the query
- add fields to the query content
- specify selection criteria
- format the query output
- run the query
- save the query

Exercise 4—How to Create a New Query

1. If necessary, navigate to the **Query Manager** (see instructions in exercise number 1). If you are already working within **Query**, click **Query Manager** in the **Navigation Bar** at the top of the page.
2. Click the **Create New Query** link:

Query Manager

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

[Find an Existing Query](#) | [Create New Query](#)

***Search By:** begins with

[Advanced Search](#)

3. The **Find an Existing Record** search page will appear:

Records | **Query** | **Expressions** | **Prompts** | **Fields** | **Criteria** | **Having** | **View SQL** | **Run**

Query Name: New Unsaved Query Description:

Find an Existing Record

***Search By:** begins with

This page is the first in a series of pages that you use to define a query within **Query Manager**. You can access each of the pages by clicking the tab at the top of the page.

- ❖ **First, we'll look at one of the most frequently used records (tables) to start to get familiar with the data in UD Financials.**

4. In the **Search by** field (this field *is not case-sensitive*), type **UOD**
5. Click **Search** button. You should see a page similar to the following:

Records | **Query** | **Expressions** | **Prompts** | **Fields** | **Criteria** | **Having** | **View SQL** | **Run**

Query Name: New Unsaved Query Description:

Find an Existing Record

***Search By:** begins with

[Advanced Search](#)

Search Results

Record		
UOD_ACCOUNT_PRE - UoD Account Convert Table prev	Add Record	Show Fields
UOD_ACCOUNT_TBL	Add Record	Show Fields
UOD_ACCT_VW	Add Record	Show Fields
UOD_AWD_ATRB_VW - Award Parent Record	Add Record	Show Fields
UOD_AWD_BUD_VW - Grants Award Budget data	Add Record	Show Fields
UOD_BALANCES	Add Record	Show Fields

Query security determines the number of records (tables) you have available to you in Query Manager.

These are the custom UD tables, some of the most useful to you will be:

UOD_BALANCES – Purpose balances

UOD_TRANS_DTL – Purpose transaction details

UOD_TRN_NOTE_VW – Transaction tag details (click the **Last** link to find it)

Note: Sometimes the record you want to use will be located near the bottom of the list, click one of the links labeled **View All** or **Last** or use the arrow buttons in the blue **Record** header. The links look similar to the following:



6. Click the **Show Fields** link to see fields in **UOD_BALANCES**.

Record		
Record	Customize Find View All [grid icon] [arrow icon] First [left arrow] 1-20 of 83 [right arrow] Last	
Rename	Add Record	Show Fields
UOD_ACCOUNT_PRE - UoD Account Convert Table prev	Add Record	Show Fields
UOD_ACCOUNT_TBL	Add Record	Show Fields
UOD_ACCT_VW	Add Record	Show Fields
UOD_AWD_ATRB_VW - Award Parent Record	Add Record	Show Fields
UOD_AWD_BUD_VW - Grants Award Budget data	Add Record	Show Fields
UOD_BALANCES	Add Record	Show Fields
UOD_BALANCES2	Add Record	Show Fields
UOD_BENEFITS_VW	Add Record	Show Fields
UOD_BLDG_HIS	Add Record	Show Fields
UOD_BUDCAT_ACCT	Add Record	Show Fields

You should see the following:

Fields for record UOD_BALANCES:

Fieldname	
Key	Description
Y	BUSINESS_UNIT - Business Unit
Y	ACCOUNT - Account
Y	DEPTID - Department
Y	FUND_CODE - Fund Code
Y	PROGRAM_CODE - Program Code
Y	BUDGET_REF - Budget Reference
Y	CHARTFIELD1 - Purpose
	UOD_PROJ_TO_DT_BUD - Project to Date Budget
	UOD_PROJ_TO_DT_ACT - Project to Date Actuals
	UOD_PROJ_TO_DT_BAL - Project to Date Balances
	ACCOUNT_TYPE - Account Type

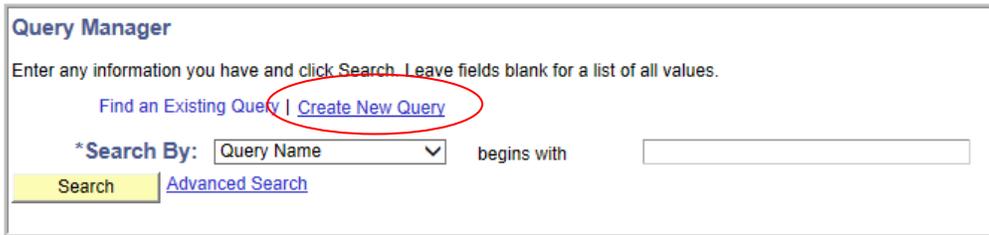
[Return](#)

A list of the 49 fields in the record will be displayed. Think of the fields in the record as columns in a table. The key fields display at the top. You can sort the fields alphabetically by clicking the Description link in the heading.

7. Click the **Return** button to go back to the list of records (tables).

❖ Next, we'll create a new query with a standard PS record (table).

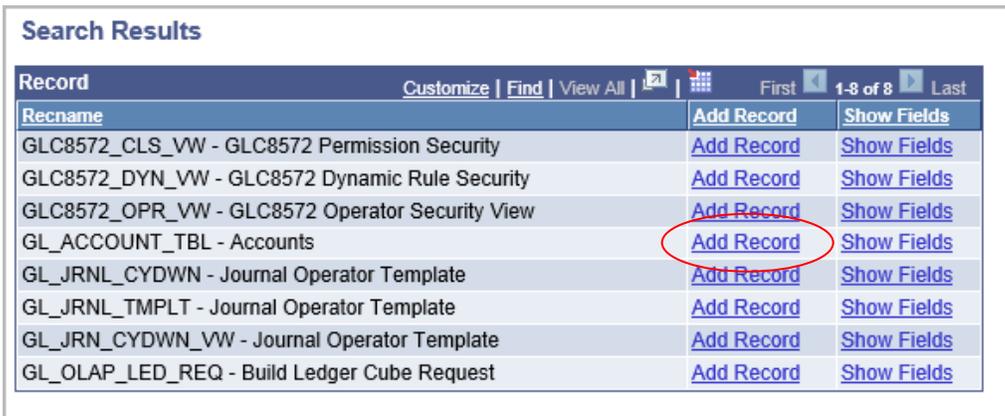
8. Click **Query Manager** in the Navigation Bar at the top of the page.
9. Click the **Create New Query** link:



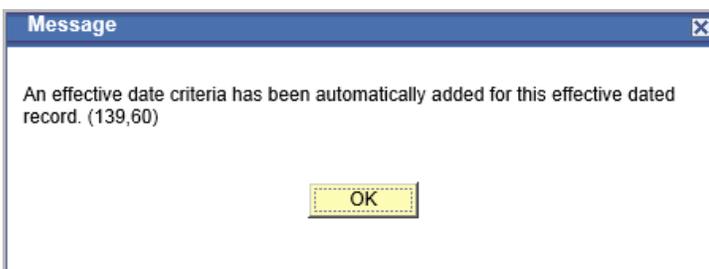
10. The **Find an Existing Record** search page will appear. In the **Search by** field, type **GL**



11. You should see a page similar to the following. Click the **Add Record** link for **GL_ACCOUNT_TBL**.



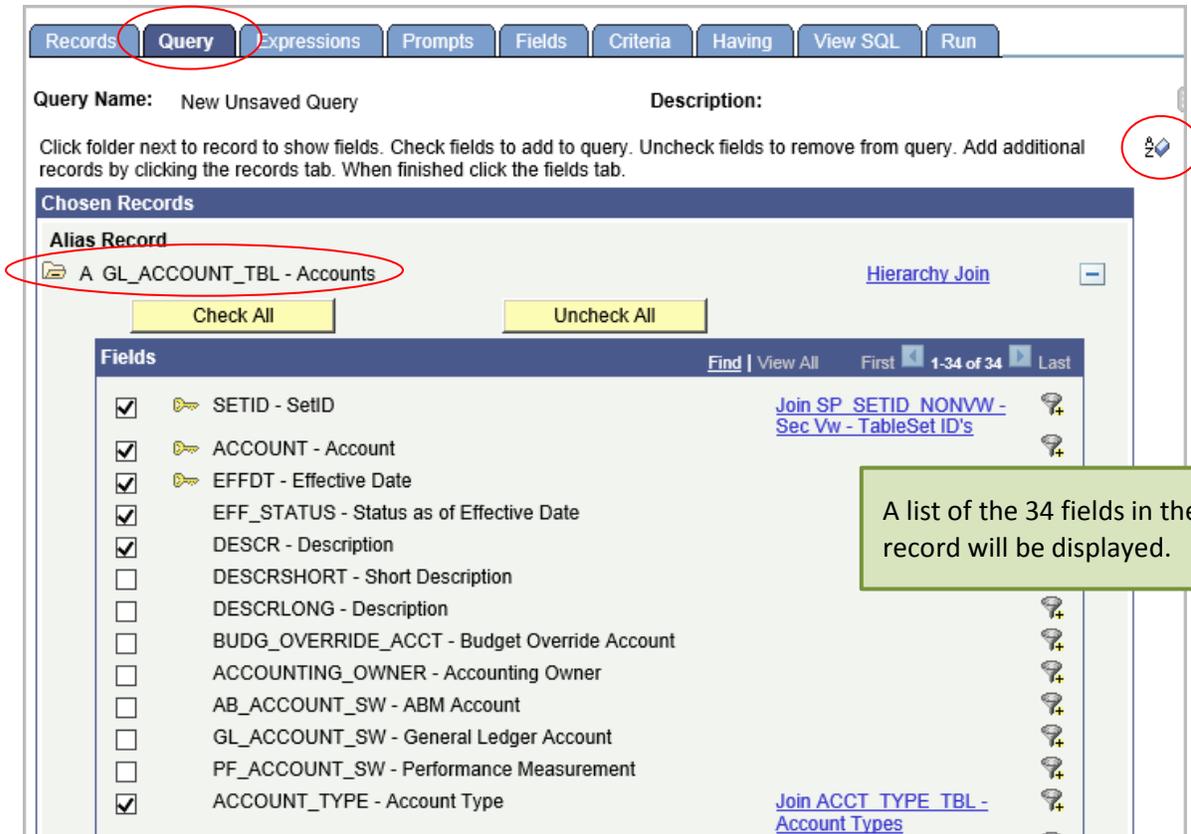
12. Click **OK** when this message box appears. It will automatically create a criteria because this record is effective dated.



Effective Date:
 Tables with values that are subject to change over time have Effective Dates so that an accurate history can be maintained.

For example the **GL Dept** table is effective dated so that department name changes can be stored historically.

You should now be viewing the **Query** tab, which should look similar to the following:



Note: PS names the first record you select as “A”.

If you use more than one record in a query, PS will name the second record “B”, etc.

13. For this exercise, you will select the following fields. Click the checkmark box in front of each of the following seven fields:

- **SETID – SetID**
- **ACCOUNT - Account**
- **EFFDT – Effective Date**
- **EFF_STATUS – Status as of Effective Date**
- **DESC - Description**
- **ACCOUNT_TYPE – Account Type**

Helpful Hint: The A-Z button () located in the upper right-hand corner sorts the fields in alphabetical order. It is a toggle button—if you click it once the fields are alphabetized; if you click it a second time, the fields return to their original order.

Note: On the right-hand side of the page you will see information about “joins” (underlined blue text). We will discuss this topic in a later exercise. Query Security determines which table joins you will see.

14. Click the **Fields** tab.

You should see following page, which lists the fields you selected in the previous step.

Records Query Expressions Prompts **Fields** Criteria Having View SQL Run

Query Name: New Unsaved Query Description: Feed

View field properties, or use field as criteria in query statement. Reorder / Sort

Col	Record.Fieldname	Format	Ord	XLAT	Agg	Heading Text	Add Criteria	Edit	Delete
1	A.SETID - SetID	Char5				SetID		Edit	
2	A.ACCOUNT - Account	Char10				Account		Edit	
3	A.EFFDT - Effective Date	Date				Eff Date		Edit	
4	A.EFF_STATUS - Status as of Effective Date	Char1		N		Status		Edit	
5	A.DESCR - Description	Char30				Descr		Edit	
6	A.ACCOUNT_TYPE - Account Type	Char1				Type		Edit	

Save Save As New Query Preferences Properties Publish as Feed New Union Return To Search

15. Save the query with the **Save As** link.
(NEVER use the **Save** button, it is too easy to overwrite a Public query).

You should see a page that looks similar to the following:

Enter a name to save this query as:

*Query:

Description:

Folder:

*Query Type:

*Owner:

Query Definition:

Note: Keep in mind the following naming conventions when you create a name for a new query:

- Before you save the query, confirm that someone else doesn't have the same initials you do.
- If your initials are not already in use, name your query using the first three initials of your name.

16. Enter the following:

Query - type the name of the query: **xxx_class** (where **xxx** represents your initials).

For example, if your name is Shannon Michelle North, you would type **smn_class**.

Description - type: **query class exercise 1**

Query Type - confirm that **User** is selected.

Owner - confirm that **Private** is selected.

17. Your completed **Save As** page will look similar to this:

Enter a name to save this query as:

*Query:

Description:

Folder:

*Query Type:

*Owner:

Query Definition:

18. Click **OK**.

19. Click the **Run** tab.

You should see a page similar to the following:

Records	Query	Expressions	Prompts	Fields	Criteria	Having	View SQL	Run
View All Rerun Query Download to Excel Download to XML								First <input type="text" value="1-100 of 1970"/> Last
1	SetID	Account	Eff Date	Status	Descr	Type		
1	UOD01	140130	01/01/1951	A	ELECTRONICS SHOP EXPENSE	E		
2	UOD01	140140	01/01/1951	A	STUDENT CENTER EXPENSE	E		
3	UOD01	140150	01/01/1951	A	PHYSICS SHOP EXPENSE	E		
4	UOD01	140160	01/01/1951	A	UPS SHIPMENTS-CENT REC/DEL-ONL	E		
5	UOD01	140170	01/01/1951	A	ELECTRICAL ENGNRNG SHOP EXPENS	E		
6	UOD01	140180	01/01/1951	A	SAFETY OFFICE-RADIOACTIVE MATE	E		
7	UOD01	140190	01/01/1951	A	ANIMAL MAINTENANCE EXPENSE	E		
8	UOD01	140200	01/01/1951	A	COPY MACHINE SUPPLIES	E		
9	UOD01	140210	01/01/1951	A	MATERIALS & METALLURGY EXPENSE	E		
10	UOD01	140220	01/01/1951	A	BIOLOGICAL SERVICES STOCKROOM	E		
11	UOD01	140230	01/01/1951	A	RSCH OFC SMALL BALANCE ACCT CL	E		
12	UOD01	140240	01/01/1951	A	WELLNESS BENEFIT	E		
13	UOD01	140250	01/01/1951	A	NON-CENTRAL COMPUTER CHARGES	E		
14	UOD01	140260	01/01/1951	A	NON-CENTRAL COMPUTER CHARGES	E		
15	UOD01	140270	01/01/1951	A	LEWES STOCKROOM	E		

You should see six columns and a number of rows of data. Note the number of rows you receive, which is indicated above the right-most column on the page. In this example page, 1970 rows are returned.

You cannot sort the results on the Run tab, go to the Fields tab and use the **Reorder / Sort** button.

Pages Used to Create a Query

The pages listed in the following table are those used to create a new query.

Note: The following table is based on information from the PS PeopleBooks online documentation. This information is included here for reference.

Page Name	Definition Name	Navigation	Usage
Query	QRY_QUERY	Reporting Tools, Query, Query Manager Click the Create New Query link on the Query Manager search page. Click the Search button. Click the Add Record link to select a record for the query.	Select a record for the query criteria.
Fields	QRY_FIELDS	Reporting Tools, Query, Query Manager, Fields Select each field that you want to use in the query, and then click the Add Criteria icon, or click the Check All button to select all the fields associated with the record as criteria.	Select the fields to be used as criteria for the query.
Criteria	QRY_CRITERIA	Reporting Tools, Query, Query Manager, Criteria	View and edit selection criteria for your query statement.
Edit Criteria Properties	QRY_CRITERIA_SEC	Reporting Tools, Query, Query Manager, Criteria Click the Add Criteria button on the Criteria page or click the Use As Criteria link on the Fields page.	Edit selection criteria properties for your query statement.

--End of Exercise--

Adding New Criteria to a Field in a Query

You can view data for a specific department by adding criteria to a field in a query. The next exercise explains how to add new criteria to the **A.DEPTID - Department** field and shows you how to add the criteria that every query needs.

In addition to adding criteria to filter the information you want to see, there is a criteria that you should add to your query to enhance performance.

Exercise 5—How to Add New Criteria to a Query

1. Click the **Fields** tab.

You should see a page similar to the following:

The screenshot shows the Query Tool interface with the 'Fields' tab selected. The 'Fields' tab is circled in red. The interface displays a table of fields with columns for Col, Record, Fieldname, Format, Ord, XLAT, Agg, Heading Text, Add Criteria, Edit, and Delete. The 'Add Criteria' icon (a lightbulb with a plus sign) is circled in red for the 'A.ACCOUNT_TYPE - Account Type' field.

2. On the **A.ACCOUNT_TYPE – Account Type** field, click the **Add Criteria** icon 

3. You will see the **Edit Criteria Properties** page:

The 5 Account Types are:
 Expense (E)
 Revenue (R)
 Asset (A)
 Liability (L)
 Net Assets (Q)

4. In the **Define Constant** box, type: **E** (not case sensitive)

Note: Because you chose to add criteria to the **A.ACCOUNT_TYPE** field, that field is automatically placed in the **Choose Record and Field** box. To select a different field, click the magnifying glass icon in this box.

5. Click **OK**. You will return to the **Fields** page.

6. Click the **Criteria** tab to view the criteria you've added.

(**A.EFFDT – Effective Date** criteria was added automatically when you chose this record.)

Logical	Expression1	Condition Type	Expression 2	Edit	Delete
	A.EFFDT - Effective Date	Eff Date <=	Current Date	Edit	-
AND	A.ACCOUNT_TYPE - Account Type	equal to	E	Edit	-

7. Click the **Run** tab.

	SetID	Account	Eff Date	Status	Descr	Type
1	UOD01	120200	01/01/1951	A	PROFESSIONAL STAFF FULL-TIME	E
2	UOD01	120201	11/11/2004	I	(D)DO NOT USE, USE 120200	E
3	UOD01	120299	01/01/1951	A	COMPENSATED ABSENCES	E
4	UOD01	120300	01/01/1951	A	PROFESSIONAL STAFF PART-TIME	E
5	UOD01	120400	01/01/1951	A	SUPPLEMENTAL PAY - PROFESSIONA	E

Note that you now have fewer rows and all of your rows have Type = E. This sample has 676 rows.

--End of Exercise--

Adding a New Field to a Query

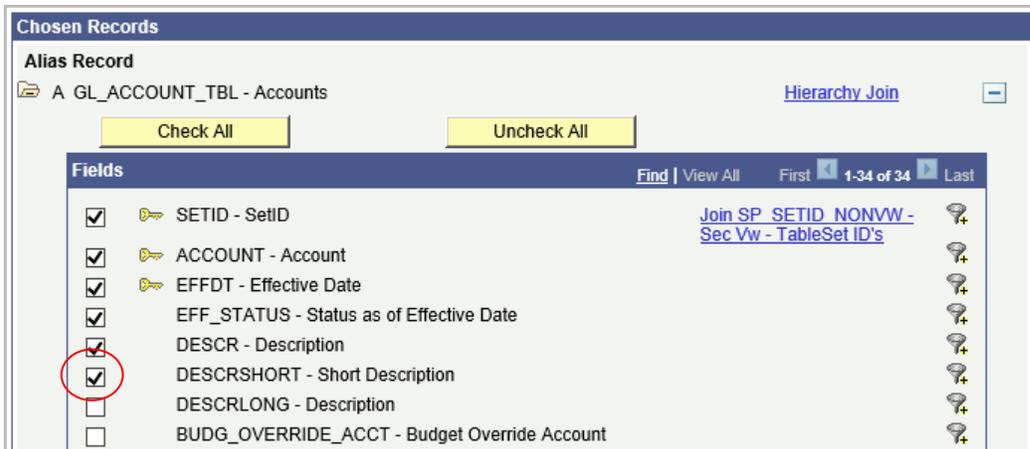
If you decide you want to see more information for each row, you can add a new field to a query. In the next exercise, you will add the **UOD_CHRTFLD1_DESCR – Description** field to the query you’ve created.

Exercise 6—How to Add a New Field to a Query

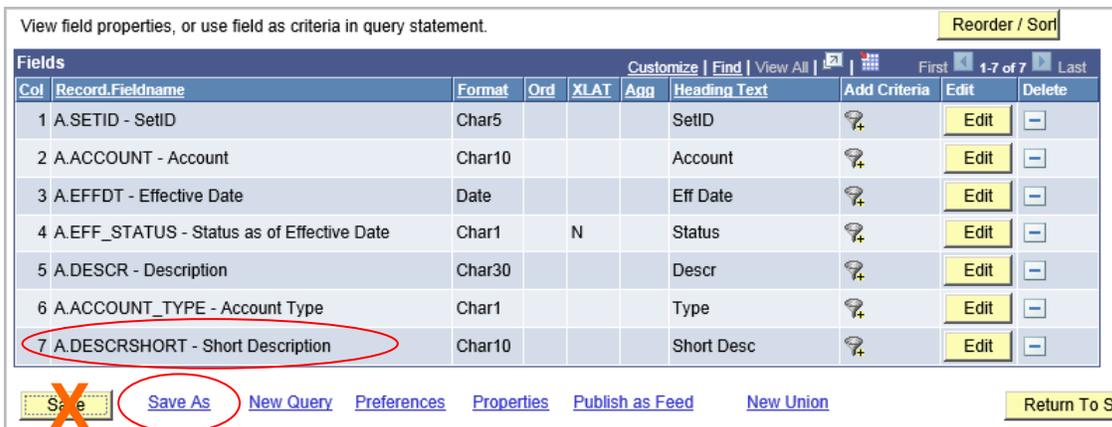
1. Click the **Query** tab to view the available fields.
2. Click the record icon  to show the available fields



3. Click the checkbox in front of the field: **DESCRSHORT - Short Description**



4. Click the **Fields** tab to confirm that the field has been added to the list of fields.



5. Click the **Save As** link.

6. In the **Query** field - type: **xxx_class2** (where **xxx** are your initials)
7. In the **Description** field – type: **query class exercise 6**
8. Click **OK**.

Enter a name to save this query as:

*Query:

Description:

Folder:

*Query Type:

*Owner:

Query Definition:

9. Click the **Run** tab.

Note the new column on the far right for **Short Descr**.

Records	Query	Expressions	Prompts	Fields	Criteria	Having	View SQL	Run
View All Rerun Query Download to Excel Download to XML								First <input type="text" value="1-100 of 676"/> Last
	SetID	Account	Eff Date	Status	Descr	Type	Short Descr	
1	UOD01	120200	01/01/1951	A	PROFESSIONAL STAFF FULL-TIME	E	PROF FT	
2	UOD01	120201	11/11/2004	I	(D)DO NOT USE, USE 120200	E	PROF FT	
3	UOD01	120299	01/01/1951	A	COMPENSATED ABSENCES	E	COMP ABSEN	
4	UOD01	120300	01/01/1951	A	PROFESSIONAL STAFF PART-TIME	E	PROF PT	
5	UOD01	120400	01/01/1951	A	SUPPLEMENTAL PAY - PROFESSIONA	E	SUPPL PR	
6	UOD01	120500	01/01/1951	A	OFF-CAMPUS - PROFESSIONAL	E	OFF-CMP PR	
7	UOD01	120700	01/01/1951	A	DISABILITY PAY PROFESSIONALS	E	DISABILITY	
8	UOD01	120800	05/04/2010	A	POST DOC/FACULTY FELLOW	E	POSTDOC	
9	UOD01	120801	11/12/2004	I	(D)DO NOT USE, USE 120800	E	POST-DOCTO	
10	UOD01	120802	11/12/2004	I	(D)DO NOT USE, USE 120800	E	POST-DOCTO	
11	UOD01	121000	01/01/1951	A	CHAIRPERSONS	E	CHAIRPERSO	
12	UOD01	121010	01/23/2006	I	(D)DO NOT USE, USE 121000	E	DO NOT USE	
13	UOD01	121020	01/23/2006	I	(D)DO NOT USE, USE 121000	E	DO NOT USE	
14	UOD01	121100	01/01/1951	A	FACULTY FULL-TIME (BARGAINING	E	FACULTY FT	
15	UOD01	121101	11/12/2004	I	(D)DO NOT USE, USE 121100	E	FACULTY FT	
16	UOD01	121102	11/12/2004	I	(D)DO NOT USE, USE 121100	E	FACULTY FT	
17	UOD01	121110	01/23/2006	I	(D)DO NOT USE, USE 121100	E	DO NOT USE	
18	UOD01	121120	01/23/2006	I	(D)DO NOT USE, USE 121100	E	DO NOT USE	
19	UOD01	121200	01/01/1951	A	FACULTY PART-TIME	E	FACULTY PT	
20	UOD01	121300	01/01/1951	A	FACULTY SUMMER SUPPLEMENT	E	FAC SMR	
21	UOD01	121400	01/01/1951	A	SUPPLEMENTAL PAY-FACULTY	E	SUPPL FAC	
22	UOD01	121500	01/01/1951	A	OFF CAMPUS FACULTY	E	OFF CMP FC	
23	UOD01	121600	01/01/1951	A	ACADEMIC CENTER DIRECTORS	E	ACD CT DIR	
24	UOD01	121700	01/01/1951	A	SALARIED STAFF - TEACHING	E	SAL ST TC	
25	UOD01	121800	01/01/1951	A	SUMMER FAC ADMIN/RESEARCH	E	SMR FAC	
26	UOD01	121900	01/01/1951	A	SUMR FAC-NO RETIREMENT	E	SUMR FAC	

--End of Exercise--

Using Other Condition Types

A condition type determines how Query Manager compares the values of the first (left-hand) expression to the second (right-hand) expression. The following table describes the available condition types. **For each of the condition types, Query Manager offers a *not* option that reverses its effect. For example, *not equal to* returns all rows that *equal to* would not return.**

Note: It's always better to use the *not* version of an operator rather than the NOT operator on the entire criterion. When you use NOT, Query can't use SQL indexes to increase the data search. When you use the *not* version of an operator, Query can translate it into a SQL expression, which enables it to use the indexes.

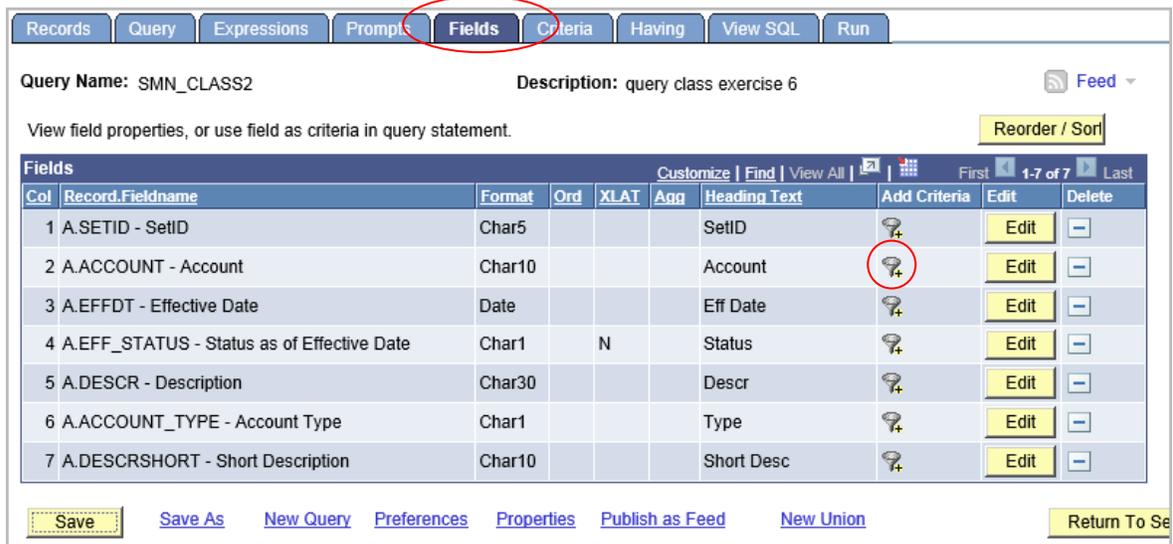
Condition Types	When It Returns a Row
between	The value in the selected record field falls between two comparison values. The range is inclusive.
equal to	The value in the selected record field exactly matches the comparison value.
exists	This operator is different from the others, in that it doesn't compare a record field to the comparison value. The comparison value is a subquery. If the subquery returns any data, PS Query returns the corresponding row.
greater than	The value in the record field is greater than the comparison value.
in list	The value in the selected record field matches one of the comparison values in a list.
in tree	The value in the selected record field appears as a node in a tree created with PS Tree Manager. The comparison value for this operator is a tree or branch of a tree that you want PS Query to search.
is null	The selected record field doesn't have a value in it. You don't specify a comparison value for this operator. Key fields, required fields, character fields, and numeric fields do not allow null values.
less than	The value in the record field is less than the comparison value.
like	<p>The value in the selected field matches a specified string pattern. The comparison value may be a string that contains wildcard characters. The wildcard characters that PS Query recognizes are % and _.</p> <p>% matches any string of zero or more characters. For example, C% matches any string starting with C, including C alone.</p> <p>_ matches any single character. For example, _ones matches any five-character string ending with <i>ones</i>, such as Jones or Cones.</p> <p>PS Query also recognizes any wildcard characters that your database software supports. See your database management system documentation for details. To use one of the wildcard characters as a literal character (for example, to include a % in your string), precede the character with a \ (for example, percent%\%).</p>

Note: If you've selected the EFFDT field on an effective-dated table, PS Query also offers special effective date operators.

Exercise 7—How to Use Other Condition Types

You can specify criteria in many ways. In an earlier exercise, you selected data where the Account Type was equal to a specific value. You may want to see data where a field is between a range of data, or greater than or less than a value, etc. You may also want to use wildcard characters in your criteria. In the following exercise, you will specify a range of values for the account field.

1. Click the **Fields** tab.



Records Query Expressions Prompts **Fields** Criteria Having View SQL Run

Query Name: SMN_CLASS2 Description: query class exercise 6 Feed

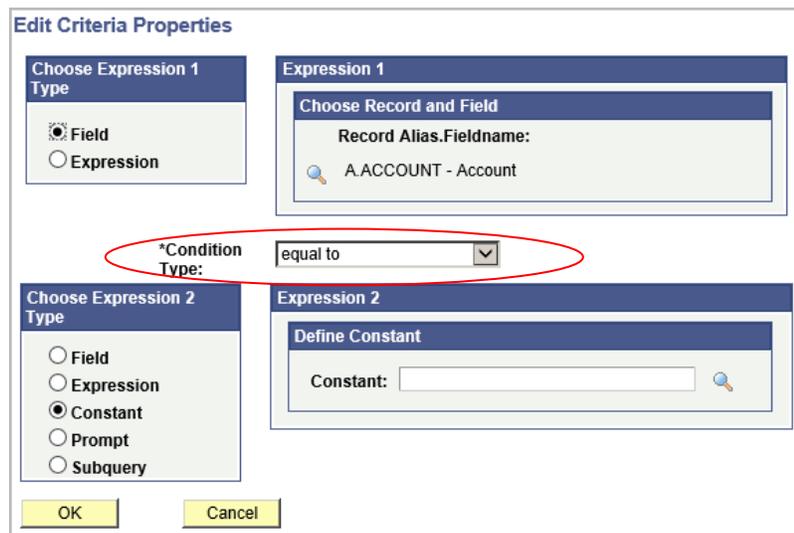
View field properties, or use field as criteria in query statement. Reorder / Sort

Col	Record.FieldName	Format	Ord	XLAT	Agg	Heading Text	Add Criteria	Edit	Delete
1	A.SETID - SetID	Char5				SetID		Edit	-
2	A.ACCOUNT - Account	Char10				Account		Edit	-
3	A.EFFDT - Effective Date	Date				Eff Date		Edit	-
4	A.EFF_STATUS - Status as of Effective Date	Char1		N		Status		Edit	-
5	A.DESCR - Description	Char30				Descr		Edit	-
6	A.ACCOUNT_TYPE - Account Type	Char1				Type		Edit	-
7	A.DESCRSHORT - Short Description	Char10				Short Desc		Edit	-

Save Save As New Query Preferences Properties Publish as Feed New Union Return To Se

2. On the **A.ACCOUNT - Account** field, click the **Add Criteria** icon 

You will see the **Edit Criteria Properties** page:



Edit Criteria Properties

Choose Expression 1 Type

Field
 Expression

Expression 1

Choose Record and Field

Record Alias.FieldName:
A.ACCOUNT - Account

*Condition Type: equal to

Choose Expression 2 Type

Field
 Expression
 Constant
 Prompt
 Subquery

Expression 2

Define Constant

Constant:

OK Cancel

3. In the **Condition Type** field, click the drop-down arrow and select **between**.

4. In the **Expression 2** box, you will see two blank fields.
 - In the top field (**Define Constant**), type: **140000**
 - In the bottom field (**Define Constant 2**), type: **149999**

Your page should now look like this:

5. Click **OK**.
6. Click **Save As** link to save your work. Click **OK**.
7. Click the **Run** tab.

Your results should look like this. Note how many rows you now see.

	SetID	Account	Eff Date	Status	Descr	Type	Short Desc
1	UOD01	140000	12/07/2012	A	BUDGETING ONLY-SUPPLIES & EXP	E	BUDG ONLY
2	UOD01	140100	01/01/1951	A	ATHLETIC SUPPLIES	E	ATHL SUP
3	UOD01	140101	11/12/2004	I	(D)DO NOT USE, USE 140100	E	ATHL SUP
4	UOD01	140102	01/01/1951	A	ATHLETIC APPAREL	E	APPAREL
5	UOD01	140110	01/01/1951	A	CHEMISTRY STOREROOM EXPENSE	E	CHEM STRM
6	UOD01	140120	01/01/1951	A	CHEMISTRY-GLASS BLOWING EXPENS	E	CHEM GLS
7	UOD01	140130	01/01/1951	A	ELECTRONICS SHOP EXPENSE	E	ELECTR SHP
8	UOD01	140140	01/01/1951	A	STUDENT CENTER EXPENSE	E	STDT CTR E
9	UOD01	140150	01/01/1951	A	PHYSICS SHOP EXPENSE	E	PHYSICS SH
10	UOD01	140160	01/01/1951	A	UPS SHIPMENTS-CENT REC/DEL-ONL	E	UPS SHIPME
11	UOD01	140170	01/01/1951	A	ELECTRICAL ENGRNRG SHOP EXPENS	E	EEG SHOP
12	UOD01	140180	01/01/1951	A	SAFETY OFFICE-RADIOACTIVE MATE	E	RADIO WAST
13	UOD01	140190	01/01/1951	A	ANIMAL MAINTENANCE EXPENSE	E	AN MAINT
14	UOD01	140200	01/01/1951	A	COPY MACHINE SUPPLIES	E	COPY MACHI
15	UOD01	140210	01/01/1951	A	MATERIALS & METALLURGY EXPENSE	E	MAT MET E

--End of Exercise--

Using Wildcards

You could have requested the information in the above exercise in another way. For example, you could have asked for all accounts that start with the characters 14. There are two ways to do this:

- The **percent sign (%)** is a wildcard that represents any number of characters. So, "14%" represents any character string beginning with "14" and followed by zero or other characters.
- The **underscore character (_)** is a wildcard that represents one character. So, "14____" (four underscores) represents "14XXXX" where "X" is any character.

Exercise 8—How to Use a Wildcard

1. To remove the added criteria (currently set to **between**), click the **Criteria** tab. You should see a page similar to the following:

Logical	Expression1	Condition Type	Expression 2	Edit	Delete
	A.EFFDT - Effective Date	Eff Date <=	Current Date	Edit	-
AND	A.ACCOUNT_TYPE - Account Type	equal to	E	Edit	-
AND	A.ACCOUNT - Account	between	140000 AND 149999	Edit	-

2. On the **A.ACCOUNT - Account** field, click the **Edit** button .

In the **Edit Criteria Properties** page:

3. **Condition Type** - click the drop-down arrow and select **like**.
4. In the **Expression 2 - Define Constant** field, type: **14%**

Your page should look this:

Edit Criteria Properties

Choose Expression 1 Type
 Field
 Expression

Expression 1
 Choose Record and Field
 Record Alias.Fieldname:
 A.ACCOUNT - Account

*Condition Type: like

Choose Expression 2 Type
 Constant
 Prompt

Expression 2
 Define Constant
 Constant: 14%

OK Cancel

5. Click **OK**.

6. Click the **Run** tab.

Your results should look similar to this:

	SetID	Account	Eff Date	Status	Descr	Type	Short Desc
1	UOD01	140000	12/07/2012	A	BUDGETING ONLY-SUPPLIES & EXP	E	BUDG ONLY
2	UOD01	140100	01/01/1951	A	ATHLETIC SUPPLIES	E	ATHL SUP
3	UOD01	140101	11/12/2004	I	(D)DO NOT USE, USE 140100	E	ATHL SUP
4	UOD01	140102	01/01/1951	A	ATHLETIC APPAREL	E	APPAREL
5	UOD01	140110	01/01/1951	A	CHEMISTRY STOREROOM EXPENSE	E	CHEM STRM
6	UOD01	140120	01/01/1951	A	CHEMISTRY-GLASS BLOWING EXPENS	E	CHEM GLS
7	UOD01	140130	01/01/1951	A	ELECTRONICS SHOP EXPENSE	E	ELECTR SHP
8	UOD01	140140	01/01/1951	A	STUDENT CENTER EXPENSE	E	STDT CTR E
9	UOD01	140150	01/01/1951	A	PHYSICS SHOP EXPENSE	E	PHYSICS SH
10	UOD01	140160	01/01/1951	A	UPS SHIPMENTS-CENT REC/DEL-ONL	E	UPS SHIPME

7. Click the **Fields** tab.

8. Click the **Save As** link.

Query Name: SMN_CLASS2 Description: query class exercise 6

View field properties, or use field as criteria in query statement.

Col	Record.Fieldname	Format	Ord	XLAT	Agg	Heading Text	Add Criteria	Edit	Delete
1	A.SETID - SetID	Char5				SetID		Edit	
2	A.ACCOUNT - Account	Char10				Account		Edit	
3	A.EFFDT - Effective Date	Date				Eff Date		Edit	
4	A.EFF_STATUS - Status as of Effective Date	Char1		N		Status		Edit	
5	A.DESCR - Description	Char30				Descr		Edit	
6	A.ACCOUNT_TYPE - Account Type	Char1				Type		Edit	
7	A.DESCRSHORT - Short Description	Char10				Short Desc		Edit	

Buttons: Save, **Save As**, New Query, Preferences, Properties, Publish as Feed, New Union, Return To S...

9. In the **Query** field, type: **xxx_class_criteria** (where **xxx** represent your initials).

10. In the **Description** field, type: **query class criteria**

11. Click **OK**.

Enter a name to save this query as:

*Query:

Description:

Folder:

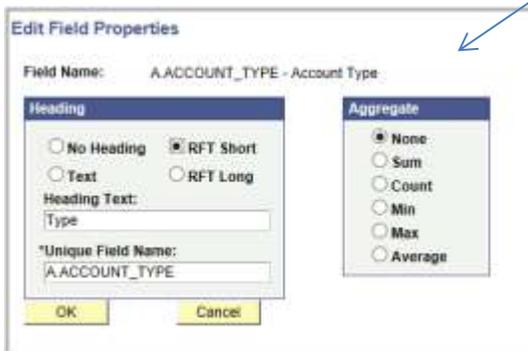
*Query Type:

*Owner:

Query Definition:

Additional Information: Comparison between functionality of **Edit buttons** on Fields and Criteria tabs

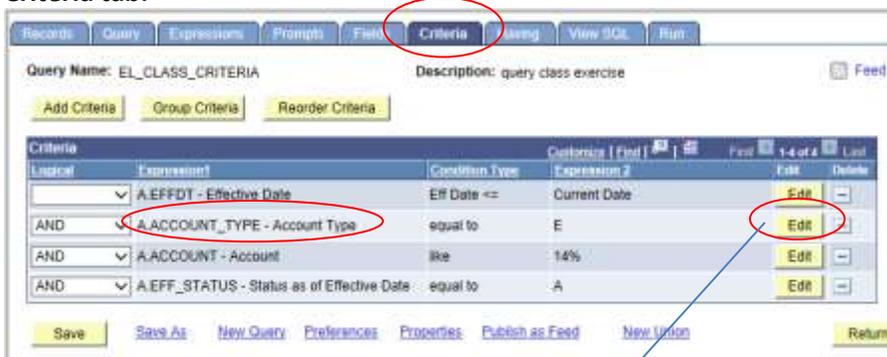
Fields tab:



The **Edit button** in the Fields tab allows you to change the *properties* of field.

- **Aggregate** is only used with fields whose format is a number. **None** is used for all other formats.
- **Heading** is used to change column heading in your Run results.

Criteria tab:



The **Edit button** in the Criteria tab allows you to change the *criteria properties* of field.

--End of Exercise--