



WESLEYAN
UNIVERSITY



Student/Faculty Information System

Introduction to PeopleSoft Query

Part II– Query Manager



Student/Faculty Information System

Introduction to PeopleSoft Query

Part II - Query Manager



Part II will present the fundamentals of building queries in PeopleSoft

- The Student/Faculty Information System (SFIS) is one of three PeopleSoft Databases currently in use at Wesleyan.
- The three databases are:
 - SFIS (also called PeopleSoft Campus Solutions)
 - HRMS (Human Resources Management System)
 - WFS (Wesleyan Financial System)
- These instructions are strictly for use with SFIS data, but the basic principles generally apply to any of these PS Databases.

Objectives: In this module you will learn how to:

Lesson 5 : Select, run, and print an existing query

Lesson 6: Create and save a basic custom query

Lesson 7: Join multiple records into one query

Lesson 8: Add Expressions and use Functions

Lesson 9: Adding runtime prompts; Having and View SQL pages

Lesson 10: Basic Query organization

SFIS TEST DATABASE

- Throughout these lessons you will be working in the **SFIS TEST Database**.
- You can always find a link to TEST by clicking in the SFIS Blog on the [SFIS Quick Links](#) page.
- Note that the TEST Database is overwritten periodically, usually about once a month. Consequently, it should only be used for experimentation.
- Note also that TEST is not available from your Portfolio

Lesson 5: Running an Existing Query



In this lesson, you will focus on running an existing query.

You can use an existing query as a starting point before creating custom queries. Learning to run a query is useful if your office has multiple users who will be running queries but not necessarily creating queries.

Understanding Academic Structure

Academic Structure is the foundation of SFIS, and defines the components used within the PeopleSoft system.



Among the elements of Academic Structure with which you should be familiar when working with PS Query are these. Next to each are examples used at Wesleyan.

Academic Structure Term	Wesleyan Example
Academic Institution	WSLYN, Wesleyan
Academic Career	DCST, GLSP, Graduate; Honorary, Undergrad
Academic Program	BA, CAS, CERT, GRNON, MA, PHD, UGNON
Academic Plan	ARST, E&ES-MA, FYST, HIST, MB&B, PSYC, SFAC, TCEX, WMST
Academic Organization	AFAM, ARTS-CAS, CHEM-MA, GRNON, RLAN, WRCT

- The above terms are defined in the [SFIS Blog](#) under DOCUMENTATION > INTRODUCTION > [Glossary – PS Campus Solutions](#)
- Specific terminology related to Query can be found in the SFIS Blog under QUERY > QUERY TOOLS AND REFERENCES > [Glossary](#)



Query Manager – Running a Query



Notes on Searching for a query

- You can always run an existing query through **Query Viewer** if you do not need to look at the criteria, etc.
- **Query Manager** has Search options similar to those found in Query Viewer (the **Search By – begins with** dropdown box and the **Advanced Search** link). You can review those areas in [Lesson 3](#).

STEPS IN OPENING A QUERY IN QUERY MANAGER

Reminder: You will be working in the [SFIS TEST DATABASE](#)

Navigation: *Reporting Tools > Query > Query Manager*

You will see that the **Query Manager** search page is almost identical to the **Query Viewer** search page. There are two additional elements: the **Find an Existing Query** label and the **Create New Query** link.

Query Manager

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

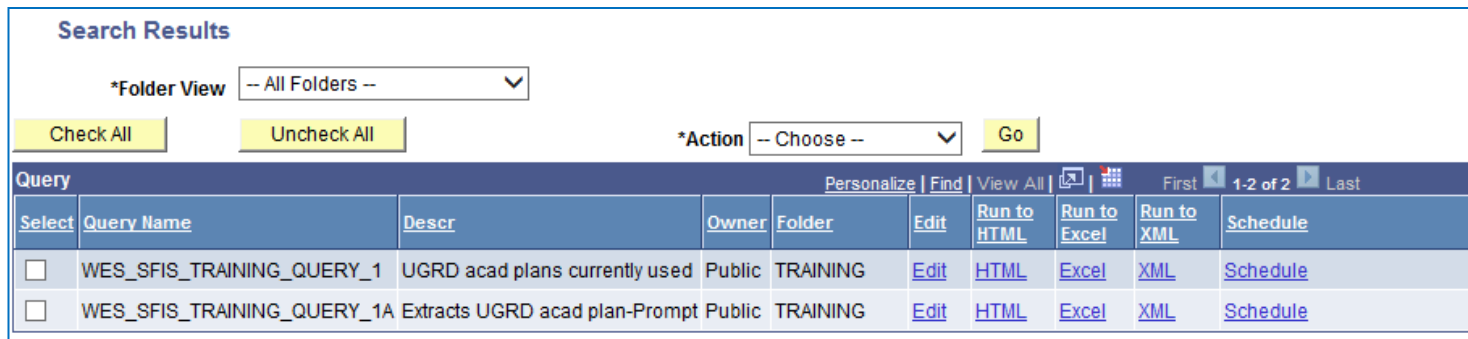
[Find an Existing Query](#) | [Create New Query](#)

*Search By begins with

[Advanced Search](#)

Query Manager – Running a Query

- With Query Manager, since you are able to see the records and fields that comprise existing queries, you can utilize that information in your searches through the **Advanced Search**.
 - As with Query Viewer, if you know the name of the query, type it in the “**begins with**” field and click the **Search** button.
 - If you are uncertain of the name of the query, you can find an existing query by entering the first few letters of the query name.
 - Once you specify a value, click on the **Search** button or hit Enter.
- In this example, search for the query *WES_SFIS_TRAINING_QUERY_1*



Search Results

*Folder View: -- All Folders --

Check All Uncheck All *Action: -- Choose -- Go

Select	Query Name	Descr	Owner	Folder	Edit	Run to HTML	Run to Excel	Run to XML	Schedule
<input type="checkbox"/>	WES_SFIS_TRAINING_QUERY_1	UGRD acad plans currently used	Public	TRAINING	Edit	HTML	Excel	XML	Schedule
<input type="checkbox"/>	WES_SFIS_TRAINING_QUERY_1A	Extracts UGRD acad plan-Prompt	Public	TRAINING	Edit	HTML	Excel	XML	Schedule

The **Search Results** section lists all the queries that match the search criteria.

- If there are Private queries that meet the criteria, they will top the list.
- Since there are two queries that start with *WES_SFIS_TRAINING_QUERY_1*, they are both displayed.

Query Manager – Running a Query



Search Results in Query Manager - main elements:

The screenshot shows the 'Search Results' interface in Query Manager. At the top, there is a search bar with a 'Folder View' dropdown menu set to '-- All Folders --'. Below the search bar are buttons for 'Check All', 'Uncheck All', and an '*Action' dropdown menu set to '-- Choose --', followed by a 'Go' button. The main content is a table with columns: 'Select', 'Query Name', 'Descr', 'Owner', 'Folder', 'Edit', 'Run to HTML', 'Run to Excel', 'Run to XML', and 'Schedule'. The first row of the table is circled in red, showing a query named 'WES_SFIS_TRAINING_QUERY_1' with a description 'UGRD acad plans currently used', owner 'Public', folder 'TRAINING', and various action links.

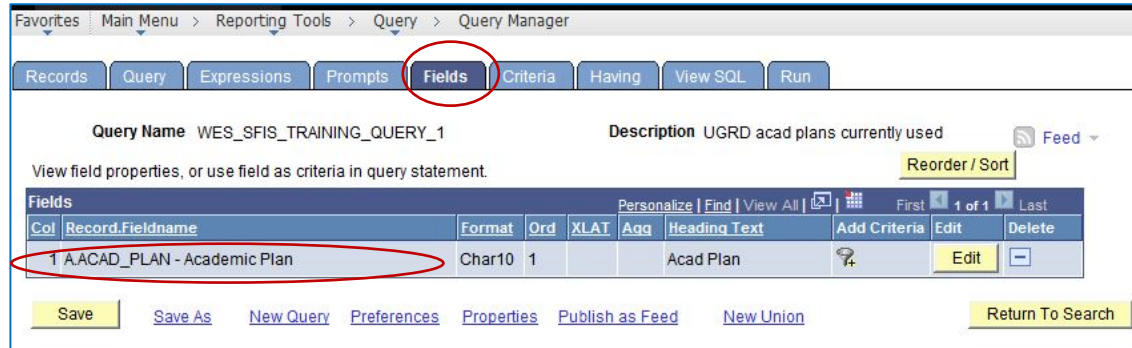
Select	Query Name	Descr	Owner	Folder	Edit	Run to HTML	Run to Excel	Run to XML	Schedule
<input type="checkbox"/>	WES_SFIS_TRAINING_QUERY_1	UGRD acad plans currently used	Public	TRAINING	Edit	HTML	Excel	XML	Schedule
<input type="checkbox"/>	WES_SFIS_TRAINING_QUERY_1A	Extracts UGRD acad plan-Prompt	Public	TRAINING	Edit	HTML	Excel	XML	Schedule

- **Folder View** dropdown : The default is “- All Folders –“ A query may be stored in a folder, but it is not required. Folders can be used to categorize queries. The folder name is entered by the person who created the query when saved.
- **Action dropdown** and **Select checkbox**: These will be covered in the Advanced Query Class.
- **Query related headers. These headers can be clicked on to re-sort the lists if desired.**
 - **Query Name**: Displays all of the queries that meet the criteria you searched on. They are in alphabetical order. The queries are always shown in upper case. Query names do not have spaces in them. Query naming conventions will be discussed later.
 - **Descr**: A brief description of the query.
 - **Owner**: Private or Public.
 - **Folder**: If the query is in a folder, the name would appear here.
 - **Edit**: Click to open the query you want to observe or modify.
 - **Run to HTML**: As with Query Viewer, click to view results. Can run to Excel or CSV file.
 - **Run to Excel**: Click to download the query to an Excel spreadsheet directly from this page.
 - **Schedule**: Click to schedule a time for the query to run.

Query Manager – Running a Query

Choosing and viewing the query

- Click Edit next to Query Name **WES_SFIS_TRAINING_QUERY_1**. The **Fields page** will open as follows:



Overview of elements on the **Fields Page**:

- Col (Column) number:** For multiple columns, each column is numbered here and on the query output.
- Record.Fieldname:** The Alias of “A” plus the Record/Table Name plus the Field/Column Name. If there were additional Records, they would have the aliases of “B,” “C,” “D,” etc.
- Format:** Type and length of field - Numeric, Date, etc. Here it is a Char Field with 10 characters.
- Ord (Order):** With multiple columns, the order in which the **Columns** appear in the output.
- XLAT (translate):** can be utilized to take advantage of translate values in your queries. If a field has an associated translate value, the column will contain one of three values: N, S, or L
- Agg (aggregate):** to utilize aggregate functions in summarizing data, Avg, Count, Max, Min, Sum.
- Heading Text:** Default header for the **Column**. This can be edited.
- Add Criteria:** Apply criteria for this field.
- Edit button:** Make changes to field’s appearance, etc. in the **Edit Field Properties** page.
- Delete:** Delete this field from the query.

Query Manager – Running a Query

Query Manager Page Descriptions

Before running the query, let's take a look at the nine pages that make up Query Manager. The links will take you to the slides that illustrate these pages.



PAGE NAME	USAGE
Records	<ul style="list-style-type: none">Starting on the opening Query Manager page, select the records upon which to base the new query.
Query	<ul style="list-style-type: none">Displays the fields in the records that are part of the query.Add fields to the query content. You can also add more records by performing joins.When you first access this page, if you have selected the record for an effective-dated table, a page informs you that an effective date criteria has been automatically added for this record. Click OK to close the page.
Expressions	<ul style="list-style-type: none">Expressions are calculations that PeopleSoft Query performs as part of a query. Use them when you must calculate a value that PeopleSoft Query does not provide by default.You use expressions to display a field value differently from the way you store the value.
Fields	<ul style="list-style-type: none">View how fields are selected for output; view the properties of each field; and change headings, order-by numbers, and aggregate values.
Prompts	<ul style="list-style-type: none">Adding a prompt lets you further refine a query when you run it.
Criteria	<ul style="list-style-type: none">To selectively retrieve the data that you want, you define selection criteria. Selection criteria refine your query by specifying conditions that the retrieved data must meet.
Having	<ul style="list-style-type: none">SQL does not support the use of aggregate functions in WHERE clauses. Therefore, after you have applied an aggregate function to a field, you cannot use that field in your selection criteria, which corresponds to a SQL WHERE clause. When you want to select rows based on the results of an aggregate function, Query Manager enables you to create HAVING criteria.
View SQL	<ul style="list-style-type: none">View the underlying SQL code that Query Manager generates based on your query definition.You cannot modify SQL on this page.
Run	<ul style="list-style-type: none">View the results of your query prior to saving in order to verify that your query yields the results that you need. Continue to adjust and preview your query as necessary.

Query Manager – Running a Query

Query Manager Output



- The last step is to click the **Run** tab.
- The first few lines of the output of the query **WES_SFIS_TRAINING_QUERY_1** appear as follows:

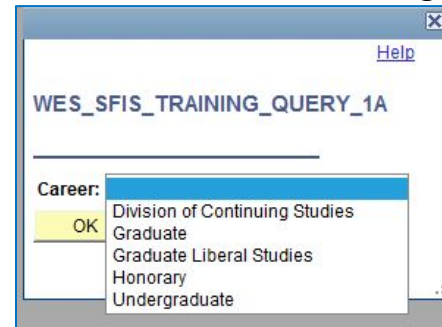
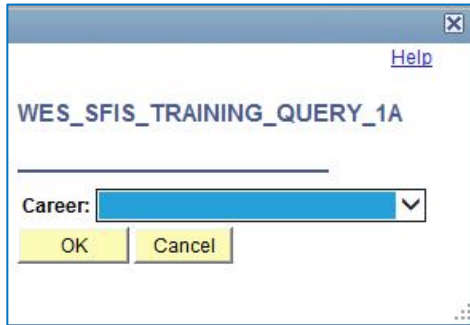
	Acad Plan
1	
2	AFAM
3	AFST
4	AMST
5	ANSO
6	ANTH
7	ARCP
8	ARFS
9	ARHA
10	ARST
11	ART
12	ASST
13	ASTR
14	BCHM
15	BIOL

- Each row has a number in the left-hand column. The Header for the field appears at the top (Acad Plan).
- **View All:** By default, only the first 100 rows of a query appear on the page. To display all of the rows, select View All and use the scrollbar to go through the rest of the list.
- **Rerun Query:** Click to run the query again.
- **Download to Excel:** As with Query Viewer, this option opens the menu for copying to Excel.
- **Download to XML:** You will most likely not be using this option.
- If the number of rows returned is very large, you may receive a message to that effect. In that case, you will need to narrow down your criteria. Another possibility is that the process may “time out” due to a number of reasons having to do with the criteria selected.



Running a Query with a Prompt

- As discussed in the Query Viewer section, some queries are designed to prompt you for information when you run them. By entering specific data, the results of your query are narrowed down to only the information you entered, instead of returning all the data from the rows in the query.
- For example, if you select “Edit” and run the query **WES_SFIS_TRAINING_QUERY_1A**, the next page will contain the dropdown box on the left. When you click on the arrow, the choices on the right will appear.



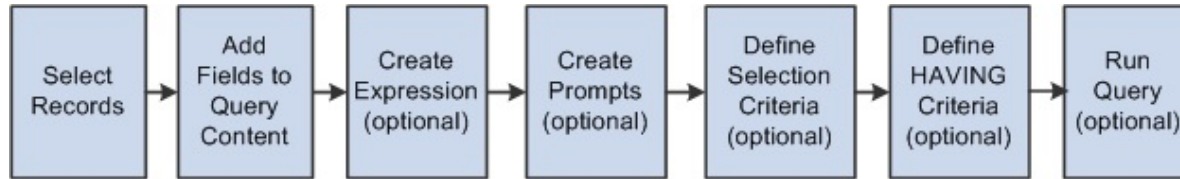
- Your options after running the query are as follows:
 - Rerun the query
 - Download to Excel
 - Download to XML
- Or you can click on one of the other tabs for further editing.

Downloading a Query as an Excel Spreadsheet

- From the Results page, you can download a Query as a Microsoft Excel spreadsheet, in a manner similar to that with Query Viewer.

Lesson 6: Creating a New Query

The following process flow illustrates the PeopleSoft Query business processes:



Before you begin a query, have a good idea of where you want to go.

In this lesson, you will create your first query. Your query will use one record as the basis for its data.



You can use either of these two methods to create a query:

- Click the **Create New Query** link on the Query Manager search page.
- Click the **New Query** link at the bottom of the pages that are within the Query Manager component.

The basic steps involved in creating and running a query are as follows:

1. Determine what table (record) or view you need to extract data from.
2. Select view(s) and/or record(s).
3. Select fields and add to query content.
4. Specify selection criteria.
5. Edit field properties.
6. Format the query output.
7. Remove duplicate rows.
8. Save the query.
9. Run the query.
10. Verify the data.

Creating a New Query

The *first* step in creating a custom query is to select the view(s) and/or record(s) that contain the data you are seeking.

A **table** or **record** is a collection of fields or columns that have something in common (i.e. the Addresses table contains fields for EmplID, Address 1, Address 2, City, State, etc.).

A **view** is a logical representation of data and may consist of **data from multiple tables** depending on how the record was defined. Many views are delivered with PeopleSoft and others are created by ITS Staff.

- *A view makes it easier for the user to utilize the data without having to join the tables.*
- *Additionally, views may already have criteria associated with them.*
- *If an appropriate view of the required tables is not provided and the user requires data from multiple tables, the application user must know in which tables the data he or she requires is stored, and how to join those tables.*
- *Views generally end with the letters VW.*



Selecting a View or Record

- You will use certain tables over and over again and you will know the table names without needing to do research.
- There will be times when you are familiar with the data from using PeopleSoft Pages, but you may not know what records the data exist in behind those pages. Most of the records in the database have an abbreviated name, which will give you some clues as to their contents.
- There will be existing queries used by others in your office that you can use as a starting point.
- For some suggestions on how to choose a record, take a look at the [SFIS Blog, Records Commonly Used Page](#).

Creating a New Query



SAVE your query frequently as you are working on it. If something occurs that kicks you out or if your computer freezes, you will be very glad that you did!



Add a record from the **Records Page**

- Begin defining a new query by selecting the **Create New Query** link from the main page of Query Manager.

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](#)

- When you click on **Create New Query**, the **Records page** will open.

Records Query Expressions Prompts Fields Criteria Having View SQL Run

Query Name: Description:

*Search By begins with

[Advanced Search](#)

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

Creating a New Query



One of the most confusing aspects of working with Query (or any reporting tool) in a very complex database structure, such as PeopleSoft, is knowing what tables and fields you need in order to report correctly. This will be gone into more detail later, but for now, see the information on selecting a record on [Slide 12](#) and the link in the SFIS Blog on [Records Commonly Used](#).



In the **Search By/begins with** field of the **Records Page** you enter the name of the appropriate view or record and click the **Search** button.

- If you are uncertain of the name, you may enter part of the name using the wildcards of % or _.
- You may also perform a partial search by clicking on the **Search By** arrow, and selecting the **Record Name**, **Description**, or **Contains Field Name** in the dropdown.
- In addition, there are more complex searches available if you click on the **Advanced Search** link, which is similar in concept to Advanced Search for queries in Part I – Query Viewer. However, the options available to search for a record are different, as you see here:

Query Name	New Unsaved Query		Description
Record Name	begins with	<input type="text"/>	<input type="text"/>
Description	begins with	<input type="text"/>	<input type="text"/>
Uses Field Name	begins with	<input type="text"/>	<input type="text"/>
Access Group Name	begins with	<input type="text"/>	<input type="text"/>

When using the IN or BETWEEN operators, enter comma separated values without quotes. i.e. JOB,EMPLOYEE,JRNL_LN.

[Basic Search](#)

Creating a New Query

- For this example, type **ACAD_PROG_TBL** (upper or lower case) in the **begins with** box and click **Search**. (This Record contains information relating to the Academic Programs.)

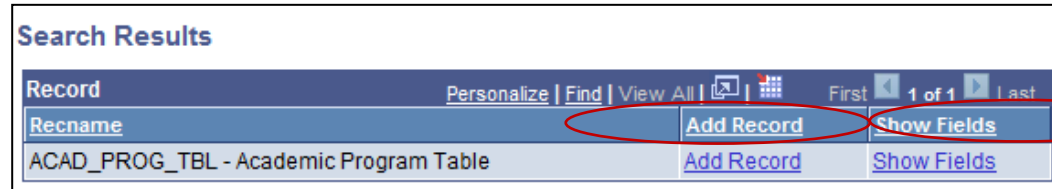


Query Name: New Unsaved Query Description:

*Search By: Record Name (dropdown) begins with: ACAD_PROG_TBL

Search [Advanced Search](#)

- The Search Results section for the **Record page** opens:

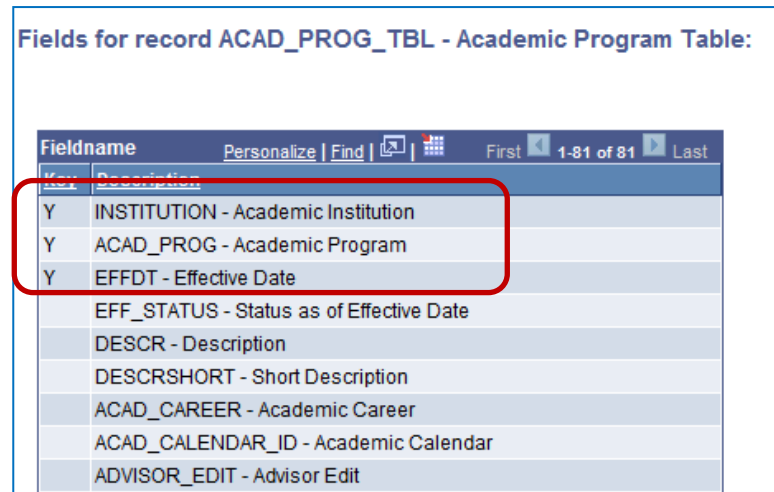


Search Results

Record	Personalize	Find	View All	First	1 of 1	Last
Recname						
ACAD_PROG_TBL - Academic Program Table						

Buttons: Add Record, Show Fields

- In order to view the fields contained in this record, on the row containing the record name, click the **Show Fields** link. The list of fields opens. In this Record, there are 81 fields all together. Displayed here is the beginning of the list.



Fields for record ACAD_PROG_TBL - Academic Program Table:

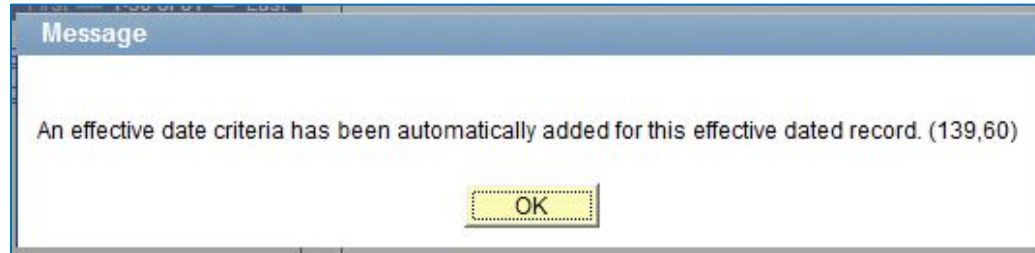
Fieldname	Personalize	Find	View All	First	1-81 of 81	Last
Key Description						
Y INSTITUTION - Academic Institution						
Y ACAD_PROG - Academic Program						
Y EFFDT - Effective Date						
EFF_STATUS - Status as of Effective Date						
DESCR - Description						
DESCRSHORT - Short Description						
ACAD_CAREER - Academic Career						
ACAD_CALENDAR_ID - Academic Calendar						
ADVISOR_EDIT - Advisor Edit						

The first three fields have a “Y” next to them, indicating they are **Key fields**, that is, the **combination of these three fields are what make each row unique.**

Creating a New Query



- Each field name has a short description next to it.
- Once you have looked at the fields, click on the **Return** button at the bottom to go back to the previous page. In order to add this record to your new query, click on the **Add Record** link.
- **Effective Date Field**: Once you click **Add Record**, the following message will pop up because the record you have selected has an **Effective Date** field.



- Click **OK**. The Query tool has automatically started to define criteria for you, as you will see on the **Criteria** page.



Effective Dates

Whenever you use a record that has **effective dating**, you will receive the above message.

What is important to know when you see this message is that the database will automatically give you the very latest dated row for the criteria.

Creating a New Query

Query Page

- Once you click OK, the **Query page** can be viewed for **ACAD_PROG_TBL**.
- In order to hide or show the list of fields associated with the view or record chosen, click the **yellow folder** to the left of the Record's name. By default, 50 of the Record's 81 fields are shown.

Selecting Fields for Output

- The next step in creating a query is selecting the fields for output here on the **Query Page**.
- In addition, you can further define fields on the **Fields Page**.
- A record or view may consist of a sizeable number of fields, which can make it cumbersome for the user, so you should try to include only those that you need to display.

The screenshot displays the 'Query Page' interface. At the top, there are tabs for 'Records', 'Query', 'Expressions', 'Prompts', 'Fields', 'Criteria', 'Having', 'View SQL', and 'Run'. The 'Query' tab is selected. Below the tabs, the 'Query Name' is 'New Unsavd Query' and the 'Description' is empty. A 'Click folder next to record to show fields. Check fields to add to query. Uncheck fields to remove from query. Add additional records by clicking the records tab. When finished click the fields tab.' instruction is present. The 'Chosen Records' section shows a table with one record: 'ACAD_PROG_TBL - Academic Program Table'. The record is highlighted with a yellow folder icon. Below the records, there are 'Check All' and 'Uncheck All' buttons. The 'Fields' section shows a list of fields with checkboxes. The fields listed are: INSTITUTION - Academic Institution, ACAD_PROG - Academic Program, EFFDT - Effective Date, EFF_STATUS - Status as of Effective Date, DESCR - Description, DESCRSHORT - Short Description, ACAD_CAREER - Academic Career, ACAD_CALENDAR_ID - Academic Calendar, ADVISOR_EDIT - Advisor Edit, LEVEL_LOAD_RULE - Academic Level Rule, ACAD_GROUP - Academic Group, and ACAD_PLAN - Academic Plan. Each field has a checkbox and a 'Join' link. The 'Check All' button is highlighted in yellow. A magnifying glass icon is visible in the top right corner of the screenshot.

- To include a field in the query output, click the check box next to the field.
- To include all the fields in your output, click the **Check All** button.
- You must select at least one field in order to run a query.

Creating a New Query

Selecting Fields for Output on the Query Page

The following are the fields and buttons on the **Query page** and their functions:

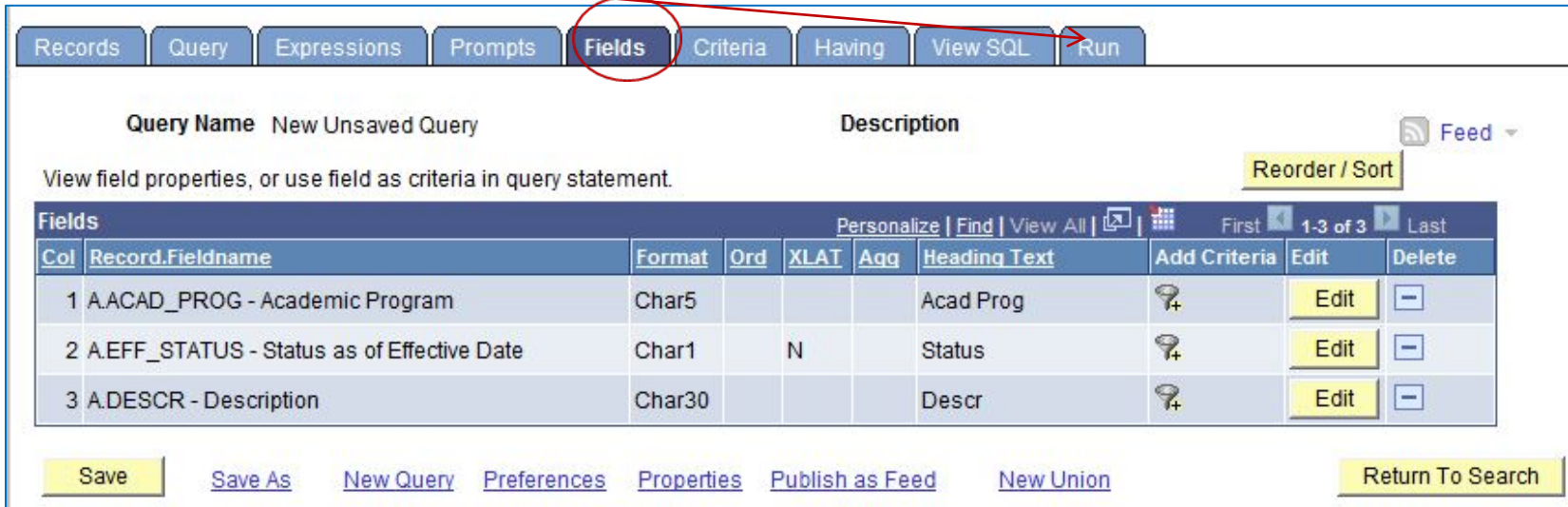
- **AZ** – Sort fields alphabetically
- **Hierarchy Join** – A predefined join. Join parent-child records. Use this page to view a list of child records and select the record to join to the existing record in the query.
- **Delete button** (minus sign) – Delete the displayed record
- **Check All** – Select all of the fields in the record (for output)
- **Uncheck All** – Clear all selected fields (for output)
- **Fields column** – Select fields for output
- **Key** – Key fields in a record/table
- **Join link** – A predefined join. Related record joins can be made.
- **Use as Criteria** (funnel +) – Filter data from the query

- For this example, **select the following fields for output** by putting a check in the **Fields** column checkbox for each field:
 - **ACAD_PROG**
 - **EFF_STATUS**
 - **DESCR**
- Once you have selected the fields, click on the **Fields** tab to open the **Fields page**.

The screenshot shows the 'Query' page interface. The 'Query' tab is selected in the top navigation bar. Below the navigation bar, the 'Fields' tab is also selected. The main area displays a table of fields for the 'ACAD_PROG_TBL - Academic Program Table'. The fields listed are: INSTITUTION - Academic Institution, ACAD_PROG - Academic Program, EFFDT - Effective Date, EFF_STATUS - Status as of Effective Date, DESCR - Description, and DESCRSHORT - Short Description. The checkboxes for ACAD_PROG, EFF_STATUS, and DESCR are checked. A red box highlights these three checked fields. The 'Check All' and 'Uncheck All' buttons are visible above the fields table. The 'Fields' table also includes a 'Find' button, a 'View All' button, and a 'Last' button. The 'Description' column contains links to join related tables, such as 'Join INSTITUTION_TBL - Institution Table'.

Creating a New Query

Fields Page: The three fields you selected for output appear here. Click the **Run** tab to view the output.



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

Query Name New Unsaved Query Description

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	AACAD_PROG - Academic Program	Char5				Acad Prog		Edit	-
2	AEFF_STATUS - Status as of Effective Date	Char1		N		Status		Edit	-
3	ADESCR - Description	Char30				Descr		Edit	-

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

Query Output – Initial Format:

- As you will see in the next slide, the three fields/columns appear in the output in the same order displayed here.
- The rows are sorted by entries in the first column, **ACAD_PROG**.
- The **EFF_STATUS** field displays as the letter “A” since the **XLAT (Translate)** short code of “N” appears by default.
- The **Heading Text** for each column appears as shown above.

Creating a New Query

Query Output



Formatting Query Output:

You can format the appearance of the query output in several ways, including:

Reorder/Sort Button

- Reorder Columns
- Sort Output

Edit button


- Edit the Field Header
- Change the display of a Translate Value

Expression page

- Using an Expression to change a field's look
- Use an Expression to add a field with a different format

Demonstrations of the first two items are shown below. Expressions will be discussed in [Lesson 8](#).

Initial Query Output



	Acad Prog	Status	Desc
1	BA	A	Bachelor of Arts
2	CAS	A	Certificate of Advanced Study
3	MALS	A	M.A. in Liberal Studies
4	GLNON	A	GLS Non-degree
5	UGNON	A	Non-Degree Undergraduate
6	MA	A	Master of Arts
7	PHD	A	Doctor of Philosophy
8	GRNON	A	Graduate Non-Degree
9	WMAPS	A	Artificial WesMaps Plan
10	MAT	A	Master of Arts in Teaching
11	HONR	A	Honorary
12	CSNON	A	CCST Non-Certificate
13	NODEG	A	Non Degree
14	CERT	A	Cert Curatorial Practice
15	WINS	A	Wesleyan Institute
16	MCERT	A	Major Certification
17	MPHIL	A	M.Phil. in Liberal Arts
18	WINU	A	Wesleyan Institute - Undergrad

To Reorder Columns and/or Sort Output Rows:

- Click on the **Fields** tab to return to the **Fields Page**.
- Click on the **Reorder/Sort** button. The **Edit Field Ordering page** opens.

Creating a New Query

Formatting Query Output – Field Ordering

The **Edit Field Ordering** page displays all the fields in the query. The instructions on how to use this page appear at the top.

Edit Field Ordering

Reorder columns by entering column numbers on the left. Columns left blank or assigned a 0 will be automatically assigned a number. Change the order by number by entering numbers on the right. To remove an order by number, leave the field blank or enter a 0.

New Column	Column	Record.Fieldname	Order By	Descending	New Order By
	1	A.ACAD_PROG - Academic Program		<input type="checkbox"/>	
	2	A.EFF_STATUS - Status as of Effective Date		<input type="checkbox"/>	
	3	A.DESCR - Description		<input type="checkbox"/>	

OK Cancel

- **Reorder Field:** To reorder the fields (columns) in the query results, for example, to make **EFF_STATUS** the third field on the output, enter the number “3” next to **EFF_STATUS** in the **New Column** box.
- **Sort Output:** To sort by a new field, for example, to sort by **DESCR**, add a “1” next to **DESCR** in the **New Order By** box. The default is ascending; to make it descending, check the box with that name.
- Click on the **OK** button when done.
- You’re returned to the **Fields Page**. Click the **Run** tab.

Edit Field Ordering

New Column	Column	Record.Fieldname	Order By	Descending	New Order By
	1	A.ACAD_PROG - Academic Program		<input type="checkbox"/>	
3	2	A.EFF_STATUS - Status as of Effective Date		<input type="checkbox"/>	
	3	A.DESCR - Description		<input type="checkbox"/>	1

OK Cancel

Creating a New Query

Formatting Query Output – Field Ordering

When you clicked on **Run** initially, the output appeared as follows:

	Acad Prog	Status	Descr
1	BA	A	Bachelor of Arts
2	CAS	A	Certificate of Advanced Study
3	MALS	A	M.A. in Liberal Studies
4	GLNON	A	GLS Non-degree
5	UGNON	A	Non-Degree Undergraduate
6	MA	A	Master of Arts
7	PHD	A	Doctor of Philosophy
8	GRNON	A	Graduate Non-Degree
9	WMAPS	A	Artificial WesMaps Plan
10	MAT	A	Master of Arts in Teaching
11	HONR	A	Honorary
12	CSNON		
13	NODEG		
14	CERT		
15	WINS		
16	MCERT		
17	MPHIL		
18	WINU		

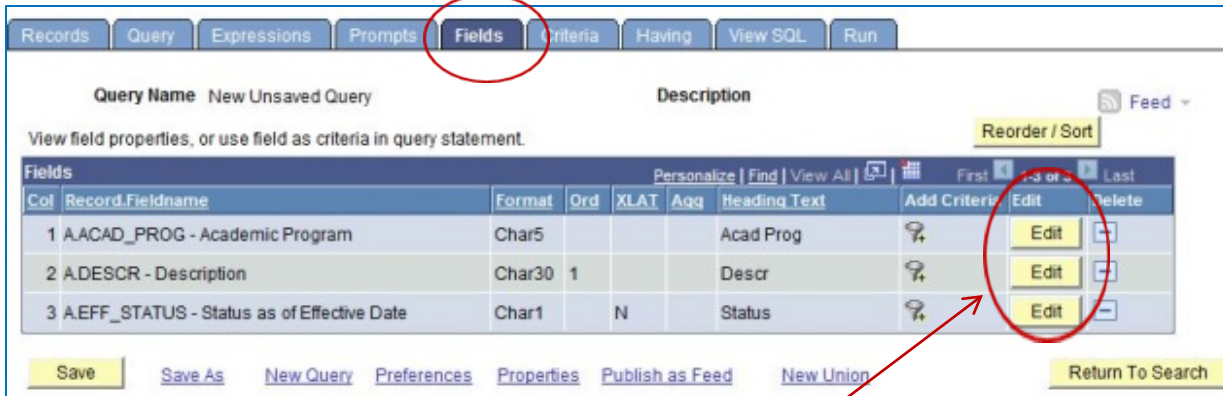
After you have made the changes on the **Edit Field Ordering** page, and clicked on **Run**, the output now looks like this:

	Acad Prog	Descr	Status
1	WMAPS	Artificial WesMaps Plan	A
2	BA	Bachelor of Arts	A
3	CSNON	CCST Non-Certificate	A
4	CERT	Cert Curatorial Practice	A
5	CAS	Certificate of Advanced Study	A
6	PHD	Doctor of Philosophy	A
7	GLNON	GLS Non-degree	A
8	GRNON	Graduate Non-Degree	A
9	HONR	Honorary	A
10	MALS	M.A. in Liberal Studies	A
11	MPHIL	M.Phil. in Liberal Arts	A
12	MCERT	Major Certification	A
13	MA	Master of Arts	A
14	MAT	Master of Arts in Teaching	A
15	NODEG	Non Degree	A
16	UGNON	Non-Degree Undergraduate	A
17	WINS	Wesleyan Institute	A
18	WINU	Wesleyan Institute - Undergrad	A



Creating a New Query

Formatting Query Output – Edit Button



When you return to the **Fields page**, you will see that since the sort order and column order have been modified, those aspects of the fields have changed on the **Fields page**.

Edit Field Header – When you select a field for query output, the system automatically assigns a header to display at the top of the column.

- The short name, or **RTF Short**, is used by default.
- Using the **Edit** button on the **Fields** page, you can use the field properties to change the header.
- In addition to selecting either the delivered **RFT Short** or **RFT Long** description, you can select **Text** and overtype the text in the **Heading Text** box on the **Edit Field Properties** page.

Creating a New Query

Formatting Query Output – Edit Field Header



- To change the **Heading Text** of *Descr* to *Academic Program Description*, while on the **Fields page**, click on the **Edit** button on that row.
- The **Edit Field Properties** page opens.
- The current **Heading Text** displayed is **Descr** which is the **RFT Short** version.
- You can change it to *Academic Program Description* as follows:
 - Click on the **Text** radio button, and then type *Academic Program Description* in the **Heading Text** box (overriding **Descr**).
 - Click OK. When returned to the **Fields Page**, click **Run**.

Edit Field Properties

Field Name: A.DESCR - Description

Heading

No Heading RFT Short

Text RFT Long

Heading Text:
Descr

*Unique Field Name:
A.DESCR

Aggregate

None

Sum

Count

Min

Max

Average

OK Cancel

Field Name: A.DESCR - Description

Heading

No Heading RFT Short

Text RFT Long

Heading Text:
Academic Program Description

*Unique Field Name:
A.DESCR

Aggregate

None

Sum

Count

Min

Max

Average

OK Cancel

- The query output now appears as follows:

	Acad Prog	Academic Program Description	Status
1	WMAPS	Artificial WesMaps Plan	A
2	BA	Bachelor of Arts	A
3	CSNON	CCST Non-Certificate	A
4	CERT	Cert Curatorial Practice	A

Creating a New Query

Formatting Query Output – Translate Value Display



Col	Record	Fieldname	Format	Ord	XLAT	Aliq	Heading Text	Add Criteria	Edit	Delete
1	A.ACAD_PROG - Academic Program		Char5				Acad Prog		Edit	
2	A.DESCR - Description		Char30	1			Descr		Edit	
3	A.EFF_STATUS - Status as of Effective Date		Char1		N		Status		Edit	

- **Translate Value:** You will see that one of the elements described earlier for the **Fields page** appears here next to the field of **EFF_STATUS**, that is, the **XLAT or Translate** column.
- This can be utilized to take advantage of **Translate Values** in your queries.
- If a field has an associated **Translate Value**, the column can contain one of three values:
 - N (Translate code)
 - S (Short name)
 - L (Long name)
- You may leave the default of “N” or may choose “S” or “L” to display a longer form.
- In order to change the value, click on the **Edit** button to the right of the field name.
- The **Edit Field Properties** page opens. On this version of the page is an additional box headed **Translate Value** with the three options of **None, Short** and **Long**.

Creating a New Query

Formatting Query Output – Translate Value Display



Edit Field Properties

Field Name: A.EFF_STATUS - Status as of Effective Date

Heading

No Heading **RFT Short**
 Text RFT Long

Heading Text:

*Unique Field Name:

Aggregate

None
 Sum
 Count
 Min
 Max
 Average

Translate Value

None Short Long

Effective Date for Short/Long

Current Date
 Field
 Expression

[Add Prompt](#) [Add Field](#)

- You can click on the **Short** or **Long** radio button to display a longer form.
- For the **EFF_STATUS** Field, either the **Short** or **Long** forms displays as “**Active.**”
- For this example, click the **Short** button and click **OK.**

- On the **Fields page**, the **EFF_STATUS** row now has an “**S**” for **Short** in the **XLAT** column.

Col	Record.FieldName	Format	Ord	XLAT	Agg	Heading Text	Add Criteria	Edit	Delete
3	A.EFF_STATUS - Status as of Effective Date	Char1		S		Status		<input type="button" value="Edit"/>	<input type="button" value="-"/>

- Click **Run** to see the results. Now “**Active**” is spelled out in the **Status** column:

	Acad Prog	Academic Program Description	Status
1	WMAPS	Artificial WesMaps Plan	Active
2	BA	Bachelor of Arts	Active

Creating a New Query

Discarding or Saving a Query



- You can discard or save an in-process query at any time after you have selected one record and at least one field. The links/buttons to do so are found on the bottom of all pages (except **Run**), along with the other options displayed here.
 - Properties** and **New Union** will be discussed in later lessons.
 - Preferences** should not be altered.
 - You will probably not be using **Publish as Feed**.



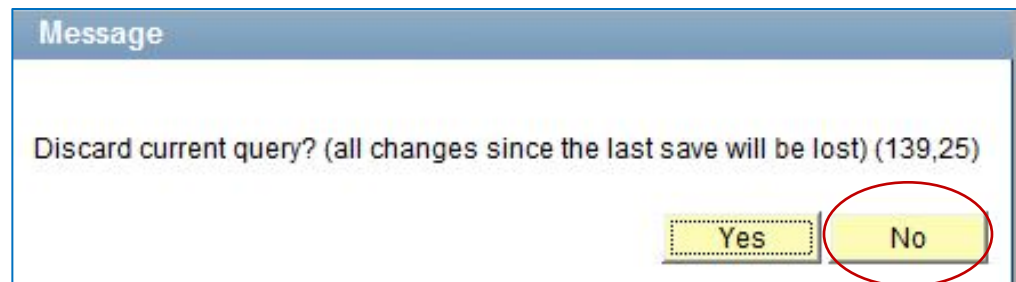
Discarding a Query

The ways to discard a query which has not yet been saved are:

- New Query**
- Return To Search**

If you click on either, this warning message appears.

- For this exercise, click **No**.
- Had you clicked **Yes**, all work you have done would have been erased.



Creating a New Query

Discarding or Saving a Query



There are two ways to save a query

- The yellow **Save** button
- The **Save As** link (also used to save existing queries).

If you click on either, this page appears.

Enter a name to save this query:

*Query:

Description:

Folder:

*Query Type:

*Owner:

Query Definition:

Saving a Query

- There will be more discussion on query naming in Lesson 10. For now, populate the Query and Description fields only as follows. Do not change the Query Type or Owner.
- For this example, make the last two characters of the query name your initials (where you see “xx”).
- Click OK.

Enter a name to save this query:

*Query:

Description:

Folder:

*Query Type:

*Owner:

Query Definition:



Some things to remember about **naming queries**:

- There can be no spaces in a query name. You may use underscores.
- You can type the query name in upper or lower case. When saved, it will display in upper.
- There are naming conventions which you should follow. See [Lesson 10](#).

Creating a New Query

Discarding or Saving a Query

Newly named query

- Once you click OK, you are returned to the **Fields page** where you'll now see the new name and description displayed.

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

Query Name WES_ACAD_PROG_TBL_XX **Description** Sample List Academic Programs 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.ACAD_PROG - Academic Program	Char5				Acad Prog		Edit	
2	A.DESCR - Description	Char30	1			Academic Program Description		Edit	
3	A.EFF_STATUS - Status as of Effective Date	Char1		S		Status		Edit	

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

Lesson 7: Mastering Record Joins and Selection Criteria

In this lesson, you will create a query which uses data from more than one record, as well as using selection criteria to extract the data of interest.

Record Joins – First, you will create a query that will extract data related to addresses.

To complete this exercise, you should be familiar with the basics of creating a query.



1. **Select the first record (PERS_DATA_SA_VW) from the **Records page**.** (Note that this is a **View**.)
 - a) From the PeopleSoft menu select **Query Manager**.
 - b) To begin defining a new query, select the **Create New Query** link. Type the record name **PERS_DATA_SA_VW** in the “**begins with**” box. Click **Search** or Enter.
 - c) Select the **PERS_DATA_SA_VW - Common Person Information** record/table by clicking **Add Record** to the right of **PERS_DATA_SA_VW - Common Person Information**.
2. **Select the appropriate fields in the first record**
 - a) The fields for the record appear on the **Query page**. Add the following fields to the query output by putting a checkmark to the left of each:
 - **EMPLID** (the **key field** for this table)
 - **NAME**

- In this query, you also want to know which students have a home address in a given state. The fields with this information are not in this table.
- You will need to join a related table that contains (1) the **State** field, (2) the **Address Type** field, and also contains (3) one of the **key fields** from this table.
- Then you can perform a simple join to combine these into one query.



NOTE: *You will be adding to this query throughout Lesson 7 through 9.*

Record Joins



3. Select the second record (ADDRESSES).
- a) Navigate to the **Records page**.
 - b) The results of your previous search are still displayed.
 - c) Type **ADDRESSES** in the “**begins with**” box.
 - d) Click **Search** or Enter.

The screenshot shows the PeopleSoft Query Manager interface. At the top, there are tabs for Records, Query, Expressions, Prompts, Fields, Criteria, Having, View SQL, and Run. Below the tabs, the 'Query Name' is 'New Unsaved Query' and the 'Description' is empty. The search criteria are set to '*Search By' 'Record Name' 'begins with' 'ADDRESSES'. There is a 'Search' button and a link to 'Advanced Search'. Below the search criteria, the 'Search Results' section shows a table with two records:

Record	Personalize	Find	View All	First	1-2 of 2	Last
Recname						
ADDRESSES - Address Type						
ADDRESSES_SA - Address Type						

Each record has a 'Join Record' link and a 'Show Fields' link. The 'Join Record' link for the first record is circled in red. At the bottom of the interface, there are buttons for 'Save', 'Save As', 'New Query', 'Preferences', 'Properties', 'Publish as Feed', and 'New Union'.

- e) There are two records that begin with “**ADDRESSES.**” You want the first one.
- f) Note that instead of **Add Record**, the column to the right reads **Join Record**.
- g) Once you click on **Join Record**, you will see the **Join Type** page where you will decide how to join this record to the first record.

Creating Any Record Joins

- Using Query Manager, you can create a join between two records (*any record join*) by selecting your initial base record, defining its output fields and associated criteria, and then returning to the Records page to select the second record.
- When you return to the Records page, you see the link **Join Record** rather than **Add Record** to the right of all listed record names.
- If you have the Enable Auto Join preference selected in the Query Preferences page – which you do – PeopleSoft Query automatically attempts to join the new record to the existing record by looking for matching columns on the two records.



4. The **Join Type** page has two options.

- a) The default is the first option of “Join to filter and get additional fields (Standard Join).”
- b) The second option (Left outer join) will be covered in the advanced class.
- c) Select the default join type for the **Join Record** displayed, i.e. **PERSON_DATA_SA_VW**, by clicking on that link under **Join Record**. There could be multiple records, in which case you could select one, some, or all of them.

5. The next page to open is **Auto Join Criteria**.

All queries default to **Auto Join**, which does *some* of the work for you and lets you verify or manipulate the criteria to be added before accepting it. This feature looks for common keys among the joining records and creates a criteria row for each common key combination. You must evaluate these predefined combinations to have a successful query.

- a) Click on the **Add Criteria** button to accept the proposed criteria.

Select join type and then record to join with ADDRESSES - Address Type.

Join Type
<input checked="" type="radio"/> Join to filter and get additional fields (Standard Join)
<input type="radio"/> Join to get additional fields only (Left outer join)

Join Record
A = PERS_DATA_SA_VW - Common Person Information

Cancel

Auto Join Criteria

Query has detected the join conditions shown below.
Use the checkboxes to unselect the criteria that you do not want to add to the query and click add criteria when done. The criteria added can always be modified later using the criteria tab.

<input checked="" type="checkbox"/>	A.EMPLID - Empl ID = B.EMPLID - Empl ID
-------------------------------------	---

Add Criteria Cancel

Record Joins



6. Viewing the Query Page with joined records

- a) Since the **Addresses** record has an Effective Dated row, the message “An effective date criteria has been automatically added for this effective dated record. (139,60)” will appear. Click **OK**. The **Query page** opens.
- b) The top of the page shows the **PERS_DATA_SA_VW** record with its fields hidden. Also note that it has an alias of **A** which will be identify the record throughout the query.
- c) The **ADDRESSES** record displays with all of its fields listed. It has an alias of **B** which will be the record’s identifier throughout all pages of the query.

d) To view the fields for the first record, click on the yellow folder with the plus (+) sign.

e) To hide them in the second record, click on the yellow folder with the minus (-) sign.

f) Note that the **ADDRESSES** record has **three key fields**.

The screenshot shows a query editor interface with tabs for Records, Query, Expressions, Prompts, Fields, Criteria, Having, View SQL, and Run. The main area displays a query named "New Unsaved Query" with a description: "Click folder next to record to show fields. Check fields to add to query. Uncheck fields to remove from query. Add additional records by clicking the records tab. When finished click the fields tab." Below this is a "Chosen Records" section with two records: "A PERS_DATA_SA_VW - Common Person Information" and "B ADDRESSES - Address Type". Both records have a "Hierarchy Join" button. Below the records are "Check All" and "Uncheck All" buttons. The "Fields" section shows a list of fields with checkboxes and a "Find | View All" button. The fields listed are: EMPLID - Empl ID, ADDRESS_TYPE - Address Type, EFFDT - Effective Date, EFF_STATUS - Status as of Effective Date, COUNTRY - Country, ADDRESS1 - Address Line 1, ADDRESS2 - Address Line 2, and ADDRESS3 - Address Line 3. A red box highlights the first three fields (EMPLID, ADDRESS_TYPE, and EFFDT), and a red arrow points from the text in step f) to this box.

Understanding the Criteria Page

Often, you do not want to retrieve every row of data from the record(s) you are accessing. By defining criteria in the **Criteria page**, you specify what conditions you want the query to have.



Note: You do not have to select a field to show up as output to have that field as criteria.

Observe the **Criteria Page**



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

Query Name New Unsaved Query Description Feed

Add Criteria Group Criteria Reorder Criteria

Logical	Expression1	Condition Type	Expression 2	Edit	Delete
<input type="checkbox"/>	A.EMPLID - Empl ID	equal to	B.EMPLID - Empl ID	Edit	-
AND	B.EFFDT - Effective Date	Eff Date <=	Current Date	Edit	-

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

- The first row displays the join you created associating the two records.
 - Notice that there is a one-to-one relationship with the **EMPLID** (“**equal to**”), that is, for every **EMPLID** in the first record (**A**) there one **EMPLID** in the second record (**B**).
- The second row shows that the **Effective Date** criterion has been automatically added for the second record (**ADDRESSES**). It is less than or equal to the **Current Date** (today’s date).
- You have created a query that works as it should! However, you would not yet run the query since it could potentially return tens of thousands of records.
- The next section discusses how to select criteria.

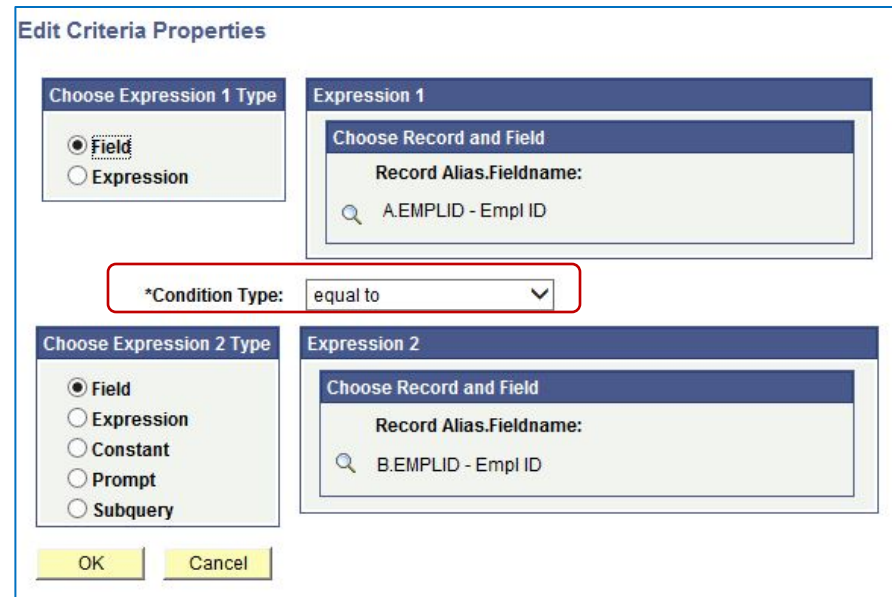
Choosing Selection Criteria



- There are three different ways to **view** the **Edit Criteria Properties** page:
 - On the **Criteria page**, click on the **Edit** button next to the field name.
 - On the **Query page**, click on the **Funnel** to the right of the field name.
 - On the **Fields page**, click on the **Funnel** to the right of the field name.
- Whichever method you use, the same page opens, the **Edit Criteria Properties** page.

View the **Edit Criteria Properties** page

- Select one of the above methods to open the page for the **EMPLID** field.
- The **Expression 1 Type** – the left side of the equation - can only be a **Field** or an **Expression**.
- The **Condition Type** field operator is “**equal to.**” The **Condition Type** determines which **Expression 2 Type** is set for the right side of the equation.
- The **Condition Type** determines how Query Manager compares the values of the first (left-hand) expression to the second (right-hand) expression.
- There are a number of **Condition Type operators** that will be described later.



Edit Criteria Properties

Choose Expression 1 Type

Field
 Expression

Expression 1

Choose Record and Field

Record Alias.Fieldname:
A.EMPLID - Empl ID

***Condition Type:** equal to

Choose Expression 2 Type

Field
 Expression
 Constant
 Prompt
 Subquery

Expression 2

Choose Record and Field

Record Alias.Fieldname:
B.EMPLID - Empl ID

OK Cancel

Choosing Selection Criteria

Adding Fields to the Criteria

To add a criterion, in addition to accessing the **Edit Criteria Properties** page from the **Criteria** page, you can also access it as follows:

- Click the Use as Criteria button (filter icon/funnel) on the **Query page**
- Click the Add Criteria button (filter icon) on the **Fields page** (if the field has been selected for output)
- Click the Add Criteria button on the **Expressions page**

1. Adding two fields for output

- Navigate to the **Query page**. Add **ADDRESS_TYPE - Address Type** from record **B** as a Field for output.
- Add **STATE - State** from record **B** as a Field for output.

2. Moving STATE field to first position in the output

- On the **Fields page**, make **STATE** appear as the first field using Column order by clicking the **Reorder/Sort button** and typing a “1” under **New Column** next to **B.STATE**.
- Click OK.

The screenshot shows the 'Query Fields' page for a 'New Unsaved Query'. The 'Fields' list includes:

- EMPLID - Empl ID
- ADDRESS_TYPE - Address Type
- EFFDT - Effective Date
- EFF_STATUS - Status as of Effective Date
- COUNTRY - Country
- ADDRESS1 - Address Line 1
- ADDRESS2 - Address Line 2
- ADDRESS3 - Address Line 3
- ADDRESS4 - Address Line 4
- CITY - City
- NUM1 - Number 1
- NUM2 - Number 2
- HOUSE_TYPE - House Type
- ADDR_FIELD1 - Address Field 1
- ADDR_FIELD2 - Address Field 2
- ADDR_FIELD3 - Address Field 3
- COUNTRY - County
- STATE - State

Red circles highlight the 'ADDRESS_TYPE - Address Type' and 'STATE - State' rows, and the 'Fields' tab in the top navigation bar.

The 'Edit Field Ordering' dialog box shows a table for reordering columns:

New Column	Column	Record.Fieldname	Order By	Descending	New Order By
	1	A.EMPLID - Empl ID		<input type="checkbox"/>	
	2	A.NAME - Name		<input type="checkbox"/>	
	3	B.ADDRESS_TYPE - Address Type		<input type="checkbox"/>	
1	4	B.STATE - State		<input type="checkbox"/>	

Red circles highlight the 'Edit Field Ordering' title bar and the row for 'B.STATE - State'.

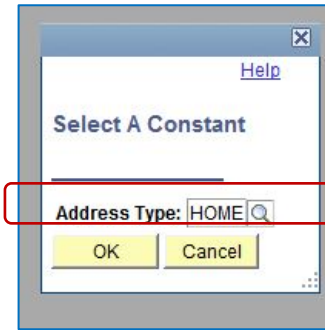
Choosing Selection Criteria

Adding Fields to the Criteria



3. Adding New Criteria to two fields

- **STATE:** On the **Fields page**, select the criteria funnel icon for **STATE** from record **B**
- On the **Edit Criteria Properties page**
 - **STATE** is automatically selected as **Expression 1**.
 - Leave the **Condition Type** as **equal to**.
 - Click on the magnifier (lookup icon) next to the **Constant** box under **Expression 2 - Define Constant**. You are prompted for the **Country** and the **State**.
 - In the **Country** box select or type **USA**, and in the **State** box select or type **FL** (for Florida). Click OK.
 - Click OK.



- **ADDRESS_TYPE:** Return to the **Fields page**; select the criteria funnel icon for **B.ADDRESS_TYPE**.
- On the **Edit Criteria Properties page**
 - **ADDRESS_TYPE** is automatically selected as **Expression 1**.
 - Leave the **Condition Type** as **equal to**.
 - Click on the magnifier next to the **Constant** box under **Expression 2 - Define Constant**.
 - Select or type **HOME**.
 - Click OK twice.

Choosing Selection Criteria

Adding Fields to the Criteria



4. Running the Query

- Click on the **Run** tab. Over 10,000 rows should be returned. This large result will cause the process to move slowly. Below is partial output showing *all* individuals in the database who have the **State** of **Florida** as their **Home** Address Type (with identifying fields blocked out).

	State	ID	Name	Addr Type
1	FL			HOME
2	FL			HOME
3	FL			HOME
4	FL			HOME
5	FL			HOME
6	FL			HOME
7	FL			HOME
8	FL			HOME
9	FL			HOME
10	FL			HOME
11	FL			HOME
12	FL			HOME
13	FL			HOME
14	FL			HOME
15	FL			HOME
16	FL			HOME
17	FL			HOME
18	FL			HOME
19	FL			HOME

5. Saving the Query

- Save the query by clicking on **Save** or **Save As** at the bottom of any page (except the Run page).
- Use the name "**WES_TRAINING_STATE_xxx**" where "xxx" equals your initials. (***The example in these lessons ends in "ZZZ."***)
- In the **Description** box, type **Person Home State**.
- Leave it as a **Private** Query.
- Click OK.

Choosing Selection Criteria

Elements of a Sample **Edit Criteria Properties** Page



- This chart displays attributes of the components of the following page when the **Condition Type** is “equal to.”
- With a different **Condition Type**, the **Expression 2 Type** may change.
- See variations in the following examples.

Edit Criteria Properties

Choose Expression 1 Type

Field

Expression

Expression 1

Choose Record and Field

Record Alias.Fieldname:

*Condition Type:

Choose Expression 2 Type

Field

Expression

Constant

Prompt

Subquery

Expression 2

Choose Record and Field

Record Alias.Fieldname:

OK

Cancel

Choose Expression 1 Type	<p>Determines whether the first part of the selection criteria is based on a Field or an Expression.</p> <p><i>Field</i> – Another field’s value that you want to base the selection criterion on, usually a field in another record.</p> <p><i>Expression</i> – An expression which Query uses to evaluate before comparing the result to the value in the selected field.</p>
Expression 1	Contains the value of the first part of the selection criteria.
Condition Type	Determines how Query Manager compares the first expression value to the second expression value. It contains a dropdown list of operators.
Choose Expression 2 Type	<p>Determines whether the second part of the selection criteria is based on a field, an expression, a constant, a prompt, a subquery, and so on.</p> <p><i>Field</i> – Another field’s value that you want to base the selection criterion on, usually a field in another record.</p> <p><i>Expression</i> – An expression Query uses to evaluate before comparing the result to the value in the selected field.</p> <p><i>Constant</i> – A single, fixed value. Note: A list of Constants is available only for fields that have Translate Values or an assigned prompt table.</p> <p><i>Prompt</i> – A prompt value (see Lesson 6)</p> <p><i>Subquery</i> - The value in the selected field is compared to data returned by a subquery (covered in the Advanced Class).</p>
Expression 2	Contains the value of the second part of the selection criteria.

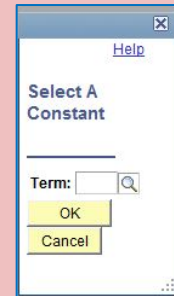
Choosing Selection Criteria

Basic Criteria Steps



Note: Not all value types are available for all **Condition Types**. For example, when you select the **exists** operator, Subquery is the only available value type. After you select an operator, PeopleSoft Query displays only the value types that are available for that operator.

Set up Criteria – basic overview with a Field equaling a Constant:

1. These are the means to get to the **Edit Criteria Properties** page to set up a **new** criterion :
 - a) On the **Criteria page**, click on the yellow **Add Criteria** button, then select the field name.
 - b) On the **Query page**, click on the **Funnel** to the right of the field name.
 - c) On the **Fields page** - if the field or expression appears there - click on the **Funnel** to the right of the field name. (Remember, the criteria does not have to be in the query output.)
 - d) On the **Expressions page**
2. When on the **Edit Criteria Properties** page, click on the magnifier under **Expression 1 – Record Alias.FieldName**. A list of all fields in all available tables appears. Select one.
3. Leave the default **Condition Type** of “equal to.”
4. Select the **Constant** for comparison
 - a) You can type the **Constant**
 - b) In many cases, you can choose it from a dropdown by clicking on the magnifier next to **Constant**. A menu similar to the following opens:
 - c) Click OK until back to the **Criteria page**, and then click **Run**.

Choosing Selection Criteria

Basic Criteria Steps



Below is the entire list of **Condition Types** that are available to the user on the **Edit Criteria Properties** page:

- between
- does not exist
- equal to
- exists
- greater than
- in list
- in tree
- is not null
- is null
- less than
- like
- not between
- not equal to
- not greater than
- not in list
- not in tree
- not less than
- not like

- **On the following slides are demonstrations of setting some of the more commonly used Condition Types/Operators.**
- **Not displayed are these :**
 - **exists** - This operator is different from the others in that it does not compare a record field to the comparison value. The comparison value is a subquery. If the subquery returns any data, PeopleSoft Query returns the corresponding row.
 - **does not exist**
 - **in tree** - The value in the selected record field appears as a node in a tree created with PeopleSoft Tree Manager. The comparison value for this operator is a tree or branch of a tree that you want PeopleSoft Query to search.
 - **not in tree**

Choosing Selection Criteria

Commonly Used Condition Types/Operators

Between

- Selects fields having a value that is between two specified values. This is an **inclusive** range where the upper and lower values are included in the search.
- This example displays some of the fields related to academic terms.
- The user chooses the field of **A.STRM** for **Expression 1**.
- Once the user selects “**between**,” the display in the **Choose Expression 2 Type** box changes to offer a number of options.
- In this example, the user can type in two **Constants (1 and 2)** to narrow down the criteria for the field **STRM – Term**.
- This is also an example of where, if available, a list of choices would show for selection, one list for each **Constant**.
- Nothing needs to be changed under **Choose Expression 2 Type** since both pieces of data are **Constants**.
- However, notice that there are a number variations available involving ranges of **Constants, Fields** and **Expressions**.
- When the query is run, in the output, the data for the span between the relevant Terms of **1129** and **1131** are displayed.
- **Note:** There is also a “**not between**” option.

Edit Criteria Properties

Choose Expression 1 Type

Field

Expression

Expression 1

Choose Record and Field

Record Alias.Fieldname:

A.STRM - Term

*Condition Type: between

Choose Expression 2 Type

Const - Const

Const - Field

Const - Expr

Field - Const

Field - Field

Field - Expr

Expr - Const

Expr - Field

Expr - Expr

Expression 2

Define Constant

Constant:

Define Constant 2

Constant 2:

OK Cancel

	Career	Term	Descr	Short Desc
1	DCST	1129	Fall 2012	Fall 12
2	UGRD	1129	Fall 2012	Fall 12
3	HONR	1129	Fall 2012	Fall 12
4	GRAD	1129	Fall 2012	Fall 12
5	GLSP	1129	Fall 2012	Fall 12
6	DCST	1131	Spring 2013	Spring 13
7	GLSP	1131	Spring 2013	Spring 13
8	UGRD	1131	Spring 2013	Spring 13
9	HONR	1131	Spring 2013	Spring 13
10	GRAD	1131	Spring 2013	Spring 13

Choosing Selection Criteria

Commonly Used Condition Types/Operators

Equal To

- The value in the selected record field exactly matches the comparison value.
- The user chooses the field of **A.STRM** for **Expression 1**.
- No change is made to the **Condition Type** so there is no change to the options under **Choose Expression 2 Type**.
- The user can either type in the **Constant** of **1141** or select it from the dropdown.
- After the query is run, in the output, the relevant rows – one for each Career – appear for each instance of the Term of **1141**.

The screenshot shows the 'Edit Criteria Properties' dialog box. It is divided into several sections: 'Choose Expression 1 Type' with 'Field' selected; 'Expression 1' with 'Record Alias.Fieldname:' set to 'A.STRM - Term'; '*Condition Type:' set to 'equal to'; 'Choose Expression 2 Type' with 'Constant' selected; and 'Expression 2' with 'Define Constant' and 'Constant:' set to '1141'. 'OK' and 'Cancel' buttons are at the bottom.

	Career	Term	Descr	Short Desc
1	GLSP	1141	Spring 2014	Spring 14
2	DCST	1141	Spring 2014	Spring 14
3	UGRD	1141	Spring 2014	Spring 14
4	GRAD	1141	Spring 2014	Spring 14



Query Manager also offers a *not* option that reverses the effect of each condition type. For example, *not equal to* returns all rows that *equal to* would not return.

Choosing Selection Criteria

Commonly Used Condition Types/Operators

Greater Than

- The value in the record field is greater than the comparison value.
- The user chooses the field of **A.STRM** for **Expression 1**.
- The **Condition Type** is changed to “**greater than**.”
- Notice that there is no change to the options under **Choose Expression 2 Type**.
- The user can either type in the **Constant** of **1149** or select it from the dropdown.
- The user Runs the query.
- The output displays all rows where the value is larger than **1149**. This is a partial display.
- **Note:** There is also a “*not greater than*” option.

	Career	Term	Descr	Short Desc
1	UGRD	1156	Summer 2015	Summer 15
2	GLSP	1151	Spring 2015	Spring 15
3	GLSP	1156	Summer 2015	Summer 15
4	GLSP	1159	Fall 2015	Fall 15
5	GLSP	1169	Fall 2016	Fall 16
6	GLSP	1191	Spring 2019	Spring 19
7	GLSP	1199	Fall 2019	Fall 19
8	GLSP	1201	Spring 2020	Spring 20
9	GLSP	1206	Summer 2020	Summer 20
10	UGRD	1151	Spring 2015	Spring 15
11	GLSP	1171	Spring 2017	Spring 17
12	GLSP	1176	Summer 2017	Summer 17
13	GRAD	1151	Spring 2015	Spring 15
14	GRAD	1156	Summer 2015	Summer 15
15	GRAD	1159	Fall 2015	Fall 15
16	GRAD	1161	Spring 2016	Spring 16
17	GRAD	1169	Fall 2016	Fall 16
18	GRAD	1171	Spring 2017	Spring 17
19	GRAD	1166	Summer 2016	Summer 16
20	UGRD	1158	Pre-Matric 2015	PreMtrc 15
21	UGRD	1169	Fall 2016	Fall 16
22	UGRD	1166	Summer 2016	Summer 16
23	UGRD	1169	Pre-Matric 2016	PreMtrc 16

Choosing Selection Criteria

Commonly Used Condition Types/Operators

In List

- Finds fields having a value that matches any one of the values in a list of values. With this option, you are prompted to create a list with an **Edit List** dialog box.
- The user chooses the field of **A.DESCR** for **Expression 1**.
- Once the user selects “**in list**” as the **Condition Type**, the display in the **Choose Expression 2 Type** box changes to offer two options: **In List** and **Subquery**.
- The user clicks on the magnifier under **Expression 2 – Edit List – List Members**.
- The **Edit List** dialog box opens. The user types in **Fall 2013** next to Value and clicks the yellow Add Value button. The user does the same for **Fall 2012** and **Fall 2011**.
- After clicking Add Value for the last choice, **Fall 2011**, the user clicks OK. (Note: Be sure that you have clicked **Add Value** for the last Value before you click the OK button.)

[continued on next slide]

Edit Criteria Properties

Choose Expression 1 Type

Field
 Expression

Expression 1

Choose Record and Field

Record Alias.Fieldname:
A.DESCR - Description

*Condition Type: In list

Choose Expression 2 Type

In List
 Subquery

Expression 2

Edit List

List Members:

OK Cancel

Edit List

List Members

<input type="checkbox"/>	Fall 2013
<input type="checkbox"/>	Fall 2012

Value: Fall 2011

Add Value

Delete Checked Values

OK Cancel

Edit List

List Members

<input type="checkbox"/>	Fall 2013
<input type="checkbox"/>	Fall 2012
<input type="checkbox"/>	Fall 2011

Value:

Add Value

Delete Checked Values

OK Cancel

Choosing Selection Criteria

Commonly Used Condition Types/Operators

In List (continued)

- Once the user clicks OK after having entered the desired **List Members**, the **Edit Criteria Properties** page opens.
- The **List Members** are now displayed under **Expression 2 – Edit List**. Each is surrounded by single quotes. They are separated by commas.
- If edits need to be made, the user can click the magnifier again and make adjustments.
- When ready, the user clicks OK and then **Run** to view the output.
- Displayed are only the Terms whose **Descr** is equal to **Fall 2011**, **Fall 2012** and **Fall 2013**.
- **Note:** There is also a *“not in list”* option.

The screenshot shows the 'Edit Criteria Properties' dialog box. It has two main sections for expressions. The first section, 'Expression 1', has 'Field' selected and shows 'A.DESCR - Description' in the search field. The second section, 'Expression 2', has 'In List' selected. Below it, the '*Condition Type:' is set to 'in list'. The 'Edit List' sub-section shows 'List Members: (Fall 2013;Fall 2012;Fall 2011)' with a magnifier icon. At the bottom are 'OK' and 'Cancel' buttons.

	Career	Term	Descr	Short Desc
1	DCST	1119	Fall 2011	Fall 11
2	GLSP	1119	Fall 2011	Fall 11
3	GRAD	1119	Fall 2011	Fall 11
4	HONR	1119	Fall 2011	Fall 11
5	UGRD	1119	Fall 2011	Fall 11
6	DCST	1129	Fall 2012	Fall 12
7	GLSP	1129	Fall 2012	Fall 12
8	GRAD	1129	Fall 2012	Fall 12
9	HONR	1129	Fall 2012	Fall 12
10	UGRD	1129	Fall 2012	Fall 12
11	DCST	1139	Fall 2013	Fall 13
12	GLSP	1139	Fall 2013	Fall 13
13	GRAD	1139	Fall 2013	Fall 13
14	UGRD	1139	Fall 2013	Fall 13

Choosing Selection Criteria

Commonly Used Condition Types/Operators

Is Null

- The selected record field does not have a value in it.
- You do not specify a comparison value for this operator.
- Key fields, required fields, character fields, and numeric fields do not allow null values.
- In general, **Is Null** is applicable to date fields and long field text fields only.
- Note: Null fields are not the same as zeros or blanks. They have no data, whereas zeros and blanks are considered data.
- Required fields cannot be null.
- If you are creating a query to find where a field was not entered and **is null** does not return the desired results, try creating an **equal to** criteria statement with blank or zero (0) in the **Constant**.
- **Note:** There is also a “*is not null*” option.

The screenshot shows the 'Edit Criteria Properties' dialog box. It has two main sections: 'Choose Expression 1 Type' and 'Expression 1'. In the first section, 'Field' is selected with a radio button. The second section, 'Expression 1', contains a sub-section 'Choose Record and Field' with 'Record Alias.Fieldname:' and a search box containing 'A.TERM_BEGIN_DT - Term Begin D'. Below these sections is a dropdown menu for '*Condition Type:' which is currently set to 'is null'. At the bottom are 'OK' and 'Cancel' buttons.

- This is an example how the Condition Type of **is null** appears.
- Once the user selects **is null**, **Choose Expression 2 Type** is no longer applicable.
- There is no output since all of the rows related to this field were populated, i.e., were not null.

Choosing Selection Criteria

Commonly Used Condition Types/Operators

Less Than

- The value in the record field is less than the comparison value.
- The user chooses the field of **A.STRM** for **Expression 1**.
- The **Condition Type** is changed to “less than.”
- Notice that there is no change to the options under **Choose Expression 2 Type**.
- The user can either type in the **Constant** of **1131** or select it from the dropdown.
- The user Runs the query.
- The output displays all rows where the value is less than **1131**. This is a partial display.
- **Note:** There is also a “*not less than*” option.

	Career	Term	Descr	Short Desc
1	UGRD	0909	Fall 1990	Fall 90
2	GLSP	0989	Fall 1998	Fall 98
3	GLSP	0986	Summer 1998	Summer 98
4	GRAD	0989	Fall 1998	Fall 98
5	UGRD	0989	Fall 1998	Fall 98
6	UGRD	0911	Spring 1991	Spring 91
7	UGRD	0991	Spring 1999	Spring 99
8	UGRD	0919	Fall 1991	Fall 91
9	UGRD	0921	Spring 1992	Spring 92
10	UGRD	0929	Fall 1992	Fall 92
11	UGRD	0931	Spring 1993	Spring 93
12	UGRD	0941	Spring 1994	Spring 94
13	UGRD	0949	Fall 1994	Fall 94
14	UGRD	0951	Spring 1995	Spring 95
15	UGRD	0961	Spring 1996	Spring 96
16	UGRD	0969	Fall 1996	Fall 96
17	UGRD	0971	Spring 1997	Spring 97
18	UGRD	0981	Spring 1998	Spring 98
19	UGRD	0999	Fall 1999	Fall 99
20	UGRD	1009	Fall 2000	Fall 00

Choosing Selection Criteria

Commonly Used Condition Types/Operators

Like

- 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 PeopleSoft Query recognizes are % and _.
- The user chooses the field of **A.ACAD_CAREER** for **Expression 1**.
- The **Condition Type** is changed to **“like.”**
- Notice that the **Choose Expression 2 Type** now only lists **Constant** and **Prompt**.
- The user wishes to see all Careers that contain the letter **“G,”** (UGRD, GLSP, GRAD) so uses % on either side of G to find all, regardless of where the letter appears in the word.
- The user Runs the query.
- The output displays all rows where the value contains **“G.”** This is a partial display.
- **Note:** There is also a **“not like”** option.

The screenshot shows the 'Edit Criteria Properties' dialog box. It is divided into several sections. On the left, there are two sections: 'Choose Expression 1 Type' with 'Field' selected, and 'Choose Expression 2 Type' with 'Constant' selected. In the center, there is a dropdown menu for '*Condition Type:' set to 'like'. On the right, there are two sections: 'Expression 1' showing 'Record Alias.Fieldname:' with 'A.ACAD_CAREER - Academic Caree' selected, and 'Expression 2' showing 'Define Constant' with 'Constant:' set to '%G%'. At the bottom, there are 'OK' and 'Cancel' buttons.

	Career	Term	Descr	Short Desc
1	UGRD	0909	Fall 1990	Fall 90
2	GLSP	0989	Fall 1998	Fall 98
3	GLSP	0986	Summer 1998	Summer 98
4	GRAD	0989	Fall 1998	Fall 98
5	UGRD	0989	Fall 1998	Fall 98
6	UGRD	0911	Spring 1991	Spring 91
7	UGRD	0991	Spring 1999	Spring 99
8	UGRD	0919	Fall 1991	Fall 91
9	UGRD	0921	Spring 1992	Spring 92
10	UGRD	0929	Fall 1992	Fall 92
11	UGRD	0931	Spring 1993	Spring 93
12	UGRD	0941	Spring 1994	Spring 94
13	UGRD	0949	Fall 1994	Fall 94
14	UGRD	0951	Spring 1995	Spring 95
15	UGRD	0961	Spring 1996	Spring 96
16	UGRD	0969	Fall 1996	Fall 96
17	UGRD	0971	Spring 1997	Spring 97
18	UGRD	0981	Spring 1998	Spring 98
19	UGRD	0999	Fall 1999	Fall 99

Choosing Selection Criteria



Condition Types	Return Values
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 does not compare a record field to the comparison value. The comparison value is a subquery. If the subquery returns any data, PeopleSoft 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 PeopleSoft Tree Manager. The comparison value for this operator is a tree or branch of a tree that you want PeopleSoft Query to search.
is null	The selected record field does not have a value in it. You do not 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 PeopleSoft 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 ones, such as Jones or Cones.</p> <p>To use one of the wild-card 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 have selected the EFFDT field on an effective-dated table, PeopleSoft Query also offers special effective date operators.

Lesson 8: Adding Expressions and Using Functions

In this lesson, you will refine your query by using expressions in the selection criteria and as a column in the query output



Expressions

- **Expressions are calculations that PeopleSoft Query performs as part of a query.**
 - Use them when you must calculate a value that PeopleSoft Query does not provide by default (for example, to add the values from two fields together or to multiply a field value by a constant). Calculations are rarely stored in a database.
- **You can work with an expression as if it were a field in the query:** select it for output, change its column heading, or choose it as an “order by” column.
 - If you use an expression as a field, the expression is like any other field in a query. When you preview the query, the expression name appears as a column heading in the query. When selected for output, you can change its column heading or sort it. Normally, data that is the result of a calculation is produced when the query is run in real time.



In Query, you can use expressions in two ways:

- **As a column in the query output.**
 - As a column, expressions are used to display a field value differently from the way you store the value, for example, to display the values from several fields as one value.
- **In selection criteria to narrow results.**
 - On the **Edit Criteria Properties page**.

- **The two pages used to define Expressions are:**
 - **Expressions Page**
 - **Editing Expressions Properties Page**
- In the query **WES_TRAINING_STATE_xxx** which uses the records **PERS_DATA_SA_VW** and **ADDRESSES**, in order to change the appearance of the output, it is necessary to introduce one or more additional fields, either by adding a new record (or view) or by adding an expression on the **Expressions page**.
 - In general, it is better to create an Expression than try to determine which would be the correct record (or view) to add to the query.

Adding Expressions and Using Functions



This first example of using an expression will combine three fields into one – the City (CITY), State (STATE) and Zip Code (POSTAL) so the output will be *City, State Zip*

Remember to Test and Save
your query frequently as you
are building it!

- But before starting the expression, let's reduce the output a bit so that it's easier to work with. To do so, change the **STATE** criteria to equal **AK** (Alaska) as follows.
- Navigate to the **Criteria page**, and on the line containing **STATE**, click the yellow edit button.
 - On the **Edit Criteria Properties** page, replace the **Constant** of **FL** with **AK** either by simply typing it in or
 - by clicking the magnifier, then selecting **USA** and **AK**. Click OK twice.
- Click **Run** to verify the output. It should run more quickly and have considerably smaller results, fewer than 300 rows.
- Now let's add two fields to the query output – **CITY** and **POSTAL**.
- Even though you wouldn't necessarily want to have these separate fields in your final output, it's a good idea to see what they look like while you're working on building the query.
- Navigate to the **Query page** and put checkmarks next to the **CITY** and **POSTAL** fields under **B.ADDRESSES**. Click **Run** to see the output.
- There should now be two additional columns labeled **City** and **Postal**.
- You may want to save your query at this time.



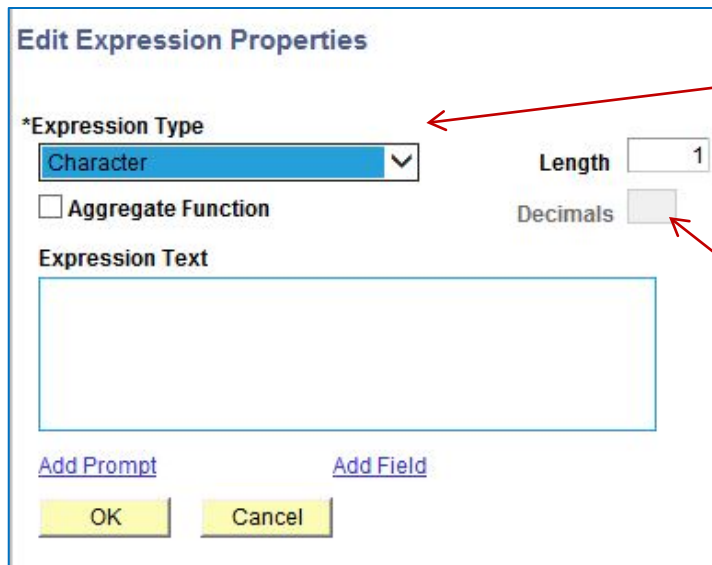
Adding Expressions and Using Functions

Creating an Expression

- Begin the expression by clicking on the **Expressions page** tab



- Click on the **Add Expression** button.
- The **Edit Expression Properties page** opens.



Overview of Expression Type and Length

- The user must choose the type of expression. Will the result be a string (character), a number, a date, or something else?
- The size of the result must also be set.
 - If the result is a string, the length would be the maximum number of characters in the string.
 - If the result is a number, the length is set in digits, including both before and after the decimal point. Then the number of digits after the decimal is set.
- The expression itself is typed in Expression Text .

Adding Expressions and Using Functions

Creating an Expression

View **Edit Expression Properties Page**

Expression Type - used to identify the data type of the value this expression will return. Options are as follows:

- Character
- Long Character
- Number
- Signed Number
- Date
- Time
- DateTime

Length - should contain the maximum length of the string.

- For *Number* and *Signed Number* Expression Types the Length field defines the total length of the number (integer portion + decimals portion). For example, if Length = 10 and Decimals = 3, then this means that the integer portion = 7 (Length - Decimals = Integer).



Decimals – is grayed out unless the **Expression Type** is Number or Signed Number

Aggregate Function - should be toggled on if an expression includes an aggregate function, such as COUNT, SUM, or AVG.

Add Prompt – click to add prompt properties for this expression

Add Field – click to add a field to this expression.

Adding Expressions and Using Functions

Creating an Expression

Create the new expression to combine CITY, STATE and POSTAL into one field so the output appears as - City, State Zip

- **Expression Type** – leave the default of **Character**.
- **Length** - You need to estimate how long the new field should be. This can always be adjusted. For now, set it at **30**.
- Begin the **Expression Text** by selecting the first field as it will appear in the result. Click on the **Add Field** link.
- The **Select a field page** opens displaying the two records in the query.
 - Beneath are the fields associated with the record with the Alias of **A**, that is, **PERS_DATA_SA_VW**.
 - To see the fields associated with the **ADDRESSES** (Alias **B**), click on the Show Fields button next to **ADDRESSES**.

Expression Type: Character

Length: 30

Aggregate Function:

Decimals:

Expression Text:

Add Prompt

Add Field

OK Cancel

Select a field

Select a record to show fields for			
Alias	Record	Record Description	Show Fields
A	PERS_DATA_SA_VW	Common Person Information	Show Fields
B	ADDRESSES	Address Type	Show Fields

Select a field	
A.EMPLID - Empl ID	
A.COUNTRY_NM_FORMAT - Format Using	
A.NAME - Name	
A.NAME_INITIALS - Name Initials	

Adding Expressions and Using Functions

Creating an Expression



Select a record to show fields for			
Alias	Record	Record Description	Show Fields
A	PERS_DATA_SA_VW	Common Person Information	Show Fields
B	ADDRESSES	Address Type	Show Fields

Select a field	
Field Name	Description
B.EMPLID	Empl ID
B.ADDRESS_TYPE	Address Type
B.EFFDT	Effective Date
B.EFF_STATUS	Status as of Effective Date
B.COUNTRY	Country
B.ADDRESS1	Address Line 1
B.ADDRESS2	Address Line 2
B.ADDRESS3	Address Line 3
B.ADDRESS4	Address Line 4
B.CITY	City

*Expression Type
Character Length
 Aggregate Function
Decimals

Expression Text

[Add Prompt](#) [Add Field](#)

- All of the fields in **ADDRESSES** are displayed. Notice that each field name begins with the alias identifier, such as B.EMPLID.
 - If the same field name is in another record, having the alias as part of the field name enables you to ascertain its source.
- Select the first field for the expression by clicking on **B.CITY**.
- **B.CITY** is added to the **Expression Text** box on the **Edit Expression Properties page**.
- Before adding the next two fields, you need to consider – in detail - how the final result will look, including punctuation and spaces.

Adding Expressions and Using Functions

Creating an Expression

- The final output for each row should appear as follows: **City, State Zip**
 - For example:
 - **Fairbanks, AK 99709**
 - **Anchorage, AK 99501**
- In the output, there is a comma after the City, one space between the comma and AK, and one space between AK and the Zip Code.
- To combine two or more text (character) fields, also called strings, you concatenate them by using a double pipe, i.e., two pipes `||` between each field name and between every element in the string, i.e., the comma and space after B.CITY and the space after B.STATE (note that there is one space between each set of pipes).
- In addition, any elements that are not fields (the comma and the spaces), need to be surrounded by SINGLE quotes.
- The following instructions demonstrate how to add the three fields and all of the elements into the **Expression Text** box.

Expression Text Box Components

1. After having added **B.CITY** in the **Expression Type** box
 - Enter one space
 - Type `||', '||`
2. Click the **Add Field** link and select **B.STATE**
3. After having added **B.STATE**
 - Enter one space
 - Type `||''||`
4. Click the **Add Field** link and select **B.POSTAL**
5. The line in the **Expression Text** box should now appear as follows:

B.CITY ||', '|| B.STATE ||''|| B.POSTAL



Expression Text

```
B.CITY ||', '|| B.STATE ||''|| B.POSTAL
```

6. Click OK.

Notes:

- There is a space between each set of pipes, i.e. `||`
- There is a space after B.CITY and B.STATE
- Between the first two quote marks are a comma and one space.
- Between the second two quote marks is one space.
- Between each pipe and quote is a space.

Adding Expressions and Using Functions

Creating an Expression (continued)



- Once you click **OK** to accept the **Expression Text**, you are returned to the **Expressions page**.
- It has five main elements. The last three are used in a manner similar to any field.

- **Expression Text** – displays the text. This is not editable here.
- **Use as Field** – clicked to add the expression as a field to the output
- **Add Criteria**
- **Edit**
- **Delete**

Records Query Expressions Prompts Fields Criteria Having View SQL Run

Query Name WES_TRAINING_STATE_ZZZ Description Person Home State Feed

Add Expression

Expressions List

Expression Text

B.CITY || ',' || B.STATE || '' || B.POSTAL

Personalize | Find Add Criteria Edit Delete

Use as Field Use as Field Edit

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

- Click on the **Use as Field** link.
- The **Fields page** opens and the new field is displayed.
- You'll notice that the **Heading Text** is comprised of the first few characters of the **Expression Text**.

Records Query Expressions Prompts Fields Criteria Having View SQL Run

Query Name WES_TRAINING_STATE_ZZZ Description Person Home State 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	B.STATE - State	Char6				State		Edit	
2	A.EMPLID - Empl ID	Char11				ID		Edit	
3	A.NAME - Name	Char50				Name		Edit	
4	B.ADDRESS_TYPE - Address Type	Char4				Addr Type		Edit	
5	B.CITY - City	Char30				City		Edit	
6	B.POSTAL - Postal Code	Char12				Postal		Edit	
7	B.CITY ',' B.STATE '' B.POSTAL	Char40				B.CITY ',' B.STATE '' B.POSTAL		Edit	

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

Adding Expressions and Using Functions

Creating an Expression (continued)



- On the **Fields** page you change the **Heading Text** as you would the Header for any field by clicking on the **Edit** button and replacing the **Heading Text** on the **Edit Field Properties** page. Click OK.
- On the **Fields** page, your new **Heading Text** appears in the row:

7	B.CITY ',' B.STATE '' B.POSTAL	Char40	City State Zip		
---	--	--------	----------------	--	--

- Before running the query, click the **Reorder / Sort** button and reorder by B.POSTAL (**New Order By** column).
- Now **Run** the query.
- As you can see, it has been reordered.
- The first two rows have no Postal Code and the third has an incorrect code. And there are other anomalies as well.
- This is one valuable use for query – a method to see your data all at once and to detect any variances.

	State	ID	Name	Addr Type	City	Postal	City State Zip
1	AK			HOME	Ff		Ff, AK
2	AK			HOME	Juneau		Juneau, AK
3	AK			HOME	Anchorage	09876	Anchorage, AK 09876
4	AK			HOME	Anchorage	98520	Anchorage, AK 98520
5	AK			HOME	Anchorage	99501	Anchorage, AK 99501
6	AK			HOME	Anchorage	99501	Anchorage, AK 99501
7	AK			HOME	Anchorage	99501	Anchorage, AK 99501
8	AK			HOME	Anchorage	99501	Anchorage, AK 99501

Adding Expressions and Using Functions

Creating an Expression (continued)



- You'll see that the new last column contains the City, State and Postal fields combined as laid out in the **Expression Text**.

City State Zip
Ff, AK
Juneau, AK
Anchorage, AK 09876
Anchorage, AK 98520
Anchorage, AK 99501
Anchorage, AK 99501
Anchorage, AK 99501
Anchorage, AK 99501
Anchorage, AK 99501
Anchorage, AK 99501
Anchorage, AK 99501
Anchorage, AK 99501
Anchorage, AK 99501
Anchorage, AK 99501
Anchorage, AK 99501
Anchorage, AK 99501
Anchorage, AK 99501
Anchorage, AK 99501-0000

- You could continue to refine this query by**
 - Reordering and/or resorting
 - Removing the City and Postal fields, but leaving the State field since it is the main criteria and you may want it displayed
 - Adding a prompt for the State to make the query more flexible. (Prompts will be covered later)
 - Changing the Address Type
 - Adding Records that would limit the scope of the individuals contained, e.g. just current students.
- Be sure to save your query** by clicking on any of the tabs (i.e. **not Run**) and clicking on the yellow **Save** button at the bottom.

Adding Expressions and Using Functions

Some Notes on Expressions



- **A few general points about how to refer to fields in expressions**
 - You should reference fields in expressions by using their actual name, not their description.
 - You should precede the name with the alias and a period.
 - An exception is with dates wherein you do NOT use the alias.
- **One type of calculation that can be performed is mathematical.** You can add, subtract, multiply and divide numeric values. The mathematical operators are:
 - **+** (addition)
 - **-** (subtraction)
 - ***** (multiplication)
 - **/** (division)
 - Standard mathematical order of operations (multiplication and division are done before addition and subtraction; computation goes from left to right) is used. Parentheses can be used to group calculations together and force them to be done out of this order
- **There are not operators that perform calculations on two dates. But you can add to or subtract from a date.**
- **Expressions can also use functions**
 - **Functions are special types of command words** (*in the SQL command set*), usually one-word commands, which manipulate data items and return a single value which can be determined by various input parameters.
 - Among the types of functions are:
 - **String**
 - **Numeric**
 - **Date**
 - **Conversion**
 - **Condition**
 - **CASE**
 - In addition to numerous standard functions that can be utilized with Query Expressions, **there are specialized Wesleyan Functions developed by ITS programmers for query users.**
 - There will be one example of a function in this lesson. Functions will be discussed in more detail in the advanced course.



Adding Expressions and Using Functions

Applying a Wesleyan Function in an Expression



- What is a [Wesleyan Function](#)?
- The term “function” as used with PeoplesSoft Query can have a number of descriptions. Among them is the definition of the standard function that can be applied in Expressions.
- To differentiate the use of the term, we refer to those functions designed by the Wesleyan ITS staff as **Wesleyan Functions**. These were created to enable the PeoplesSoft user to exploit the benefit that Expressions can lend to a query. It is pre-written text created specifically for inclusion in Query Expressions for Wesleyan users.
- The Wesleyan Functions commonly have the word “GET” as part of the name (as in WES_GET). However, note that there are some that do not have that designation.

You can reference a listing of the Wesleyan Functions in two ways:

1. [In the SFIS Blog as a PDF File in a chart format](#)
 - This list contains the description, sample output, text, source fields, field type, length and notes for each function.
2. **A menu within PeopleSoft**
 - With PeopleSoft Version 9.0, you can search a list of all functions that contain the word “GET” from within PeopleSoft.
 - *Navigate to **Main Menu > Wesleyan Menu > Campus Community > Database Function List***
 - This is a searchable list that is sorted alphabetically and contains a brief description of each from a technical viewpoint. (If this item does not appear on your PS menu, please send an email to cpike01@wesleyan.edu requesting access.)

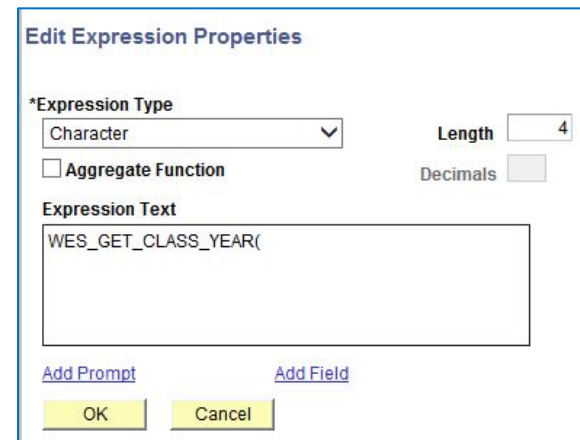
Adding Expressions and Using Functions

Applying a Wesleyan Function in an Expression

Building an Expression with a Wesleyan Function

- In this activity the Wesleyan Function named “WES_GET_CLASS_YEAR” is used as an **Expression** to
 - Determine a student’s Wesleyan Class Year
 - Add a new field consisting of the Class Year and format the header
 - Use the new Class Year field as criteria.
- The WES_GET_CLASS_YEAR function is associated with each student’s EMPLID.
- This activity will use both of the two ways to incorporate **Expressions** into a query:
 - As a field
 - As part of the Where clause, which is created in the **Criteria** tab.
- The query is **WES_TRAINING_STATE_XXX**

- Reopen the query if necessary.
- Open the **Expressions page**.
- Click on the **Add Expression** button to open the **Edit Expression Properties page**.
- Leave the **Expression Type** as Character.
- Change the **Length** to **4**, i.e., a Wesleyan Class Year is four characters long and is a string.
- In the **Expression Text** box type the following , including the opening parenthesis. This is not case sensitive. **WES_GET_CLASS_YEAR(**
- The **Edit Expression Properties page** should now look like this:



The screenshot shows a dialog box titled "Edit Expression Properties". It contains the following fields and controls:

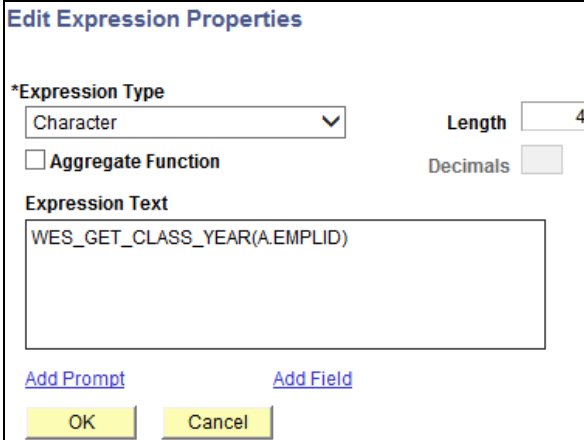
- *Expression Type:** A dropdown menu with "Character" selected.
- Length:** A text input field containing the number "4".
- Aggregate Function:** A checkbox that is currently unchecked.
- Decimals:** A text input field, currently empty.
- Expression Text:** A large text area containing the text "WES_GET_CLASS_YEAR(".
- At the bottom, there are two buttons: "Add Prompt" and "Add Field", both in blue text.
- At the very bottom, there are two buttons: "OK" and "Cancel", both in yellow.

Adding Expressions and Using Functions

Applying a Wesleyan Function in an Expression

Building an Expression with a Wesleyan Function (continued)

- Next, you will need to associate the Expression with a field in one of the Records; the field will be EmplID in Record A (**PERS_DATA_SA_VW**). Click on the **Add Field** link to the lower right. This will open the **Select a field** page which displays all the fields contained in any record in the query. Displayed in the screen shot are the first few fields in the “A” Record, **PERS_DATA_SA_VW**.
- Click on A.EMPLID – EmplID. You will be brought back to the **Edit Expression Properties page** where the text in the Expression Text box will now appear as: **WES_GET_CLASS_YEAR(A.EMPLID**
- Add a closing parenthesis to the expression so that it now reads **WES_GET_CLASS_YEAR(A.EMPLID)**. The page should now appear as follows:



Edit Expression Properties

*Expression Type
Character Length 4

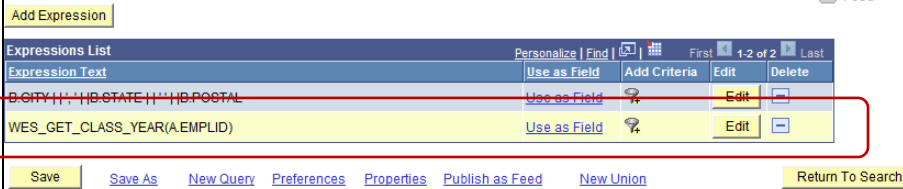
Aggregate Function Decimals

Expression Text
WES_GET_CLASS_YEAR(A.EMPLID)

[Add Prompt](#) [Add Field](#)

OK Cancel

- Click OK.
- The **Expressions page** will open displaying the **Expression Text** as the name of the Expression.



Add Expression

Expressions List	Personalize	Find	First	1-2 of 2	Last
Expression Text	Use as Field	Add Criteria	Edit	Delete	
B. CITY ' ' B. STATE ' ' B. POSTAL	Use as Field		Edit		
WES_GET_CLASS_YEAR(A.EMPLID)	Use as Field		Edit		

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

- Click on **Use as Field**. This will add the Expression as a field to the Query. The **Fields page** opens.

Adding Expressions and Using Functions

Applying a Wesleyan Function in an Expression

Building an Expression with a Wesleyan Function (continued)

- The Expression WES_GET_CLASS_YEAR (A.EMPLID) is now the last field in the Query, and it appears on the **Fields page**.
- Next you will be changing the heading of the new field and use it as criteria.
 - Change the heading text of the new field by clicking on the Edit button to the right. On the **Edit Field Properties page**, replace the text in the Heading Text box - (WES_GET_CLASS_YEAR(A.EMPLID)) - with *Class Year*. Click OK.
 - Now set criteria for Class Year. On the **Fields page**, select the criteria funnel icon on the Class Year row.
- Note on the **Edit Criteria Properties page** that the first element (**Expression 1/Define Expression**) is the new expression .

- In the **Constant** box under **Expression 2/Define Constant** type in **2016** for the Class Year
- Click OK. Save and run the query. (It will run very slowly.)

Edit Criteria Properties

- The resulting output shows all members of the Class of 2016 with a Home address in Alaska.
- This would be a good time to save your query.

	State	ID	Name	Addr Type	City	Postal	City State Zip	Class Year
1	AK			HOME	Anchorage	99508	Anchorage, AK 99508	2016
2	AK			HOME	Fritz Creek	99603	Fritz Creek, AK 99603	2016
3	AK			HOME	Kenai	99611	Kenai, AK 99611	2016



Lesson 9: Adding Runtime Prompts to a Query



- In this lesson, you will see how to add **runtime prompts** to a query so you can reuse the same query for different results or time periods.
- Instead of hard coding the **State** and the **Class Year** in the criteria, for example, you can prompt the user to enter each of those items.
- Among the advantages of using runtime prompts is that the query becomes more flexible, and you do not have to create multiple queries with hard coded constant values.
- One method of working with prompts that increases your flexibility even more is to incorporate a **wild card** into your prompt. A wildcard enables the user to return some or all data for a specified criterion. This will be covered in the Advanced Class.
- The query uses the value that you enter as the comparison value for the criterion that included the prompt.
- If the field for which you are prompting has an associated prompt table (even if it is the Translate table), the **Edit Table** drop-down list box shows its name.

Prompts may be started on the **Prompt** page, but the easiest method is to use the **Criteria** page (since the Expression 1 is derived from the **Criteria** page).

Adding a Runtime Prompt



- In this activity, using the query **WES_TRAINING_STATE_xxx**, you will add a prompt for the **State**, replacing the current criterion of “AK” for Alaska.
- Navigate to the **Criteria** page.
- Click the **Edit** button for the **STATE** row.
- On the **Edit Criteria Properties** page, **Expression 2/Define Constant** currently reads “AK.”
- Under **Choose Expression 2 Type** (over to the left at the bottom), select **Prompt**.
- Once you have done so, under **Expression 2**, the **Define Constant** changes to **Define Prompt**, and there are two choices, **New Prompt** and **Edit Prompt**.

Adding Runtime Prompts to a Query

Adding a Runtime Prompt (continued)

- Click on the **New Prompt** link under **Define Prompt** to open the **Edit Prompt Properties** page.

Edit Criteria Properties

Choose Expression 1 Type

Field
 Expression

Expression 1

Choose Record and Field

Record Alias.Fieldname:
B.STATE - State

*Condition Type: equal to

Choose Expression 2 Type

Field
 Expression
 Constant
 Prompt
 Subquery

Expression 2

Define Prompt

Prompt: [New Prompt](#) [Edit Prompt](#)

OK Cancel

Edit Prompt Properties

Field Name: STATE

*Type: Character

*Format: Upper

Length: 6

Decimals:

*Edit Type: Prompt Table

*Heading Type: RFT Short

Heading Text: State

*Unique Prompt Name: BIND1

Prompt Table: STATE_TBL

OK Cancel

This table explains the Heading Type and Edit Type fields

Field	Options
Heading Type	<i>RFT Long: The long name from the field definition</i> <i>RFT Short: The short name from the field definition.</i> <i>Text: Any label that you enter.</i>
Edit Type	<i>Prompt Table: You search and select only values that exist in a prompt table.</i> <i>Translate Table: You select from a list of values specific to this field that exist in the Translate table.</i> <i>Yes/No Table: You select or clear checkboxes.</i> <i>No Table Edit: You enter any value. No validation exists on this edit type.</i>

Adding Runtime Prompts to a Query

Adding a Runtime Prompt (continued)

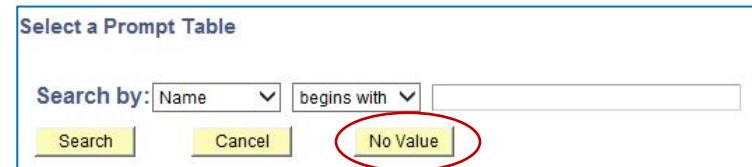
- **Prompt Table Edit Type**
 - If you select a **Prompt Table Edit Type**, the correct record *should* appear by default.
 - However, you should verify that the **Prompt Table** field displays the record that stores the values that you want users to see.
 - In this example, it happens that the table listed under **Prompt Table** (to the right) – which is **STATE_TBL** – does not render a list that the user can utilize.
 - This example points out one problem with the prompt system. It tries to guess at what you are doing and occasionally gets it wrong.
 - If you try to run a prompt based on the **STATE_TBL** table, you receive the message “No matching values were found.”
 - The optimal way to handle this will be discussed in the Advanced Class.
 - For now, make the changes as shown here.

Edit Prompt Properties Page – Prompt Table Edit Type



*Edit Type: Prompt Table
Prompt Table: STATE_TBL

- Change the **Edit Type** to **No Table Edit**.
- Click on the magnifier next to **STATE_TBL** under **Prompt Table**.
 - The **Select a Prompt Table** page opens.

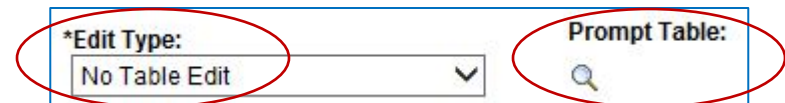


Select a Prompt Table

Search by: Name begins with

Search Cancel No Value

- Click the **No Value** button.
- The **Edit Type** and **Prompt Table** fields now appear as follows:



*Edit Type: No Table Edit
Prompt Table:

- Since there is no longer a Prompt Table, when the prompt is activated, the user will be required to type in the two-character State code.
- Click OK twice.

Adding Runtime Prompts to a Query



- **Adding a Runtime Prompt** (continued)
 - **View the elements of the Prompt page.**
 - Navigate to the **Prompt page**. PeopleSoft lists all prompts in numerical order with a preface of “:# =” followed by the field name. In this case, it is **:1 = STATE – State**
 - Notice you can create, edit or delete a prompt on this page. *(Note: If you do find it necessary to delete a prompt, be sure it’s deleted both on the Criteria page and the Prompt page.)*

- **Run the query.** When prompted, type any two-character State abbreviation and observe the results. This partial example is for Massachusetts (MA). (It will run slowly.)

	State	ID	Name	Addr Type	City	Postal	City State Zip	Class Year
1	MA			HOME	Amherst	01002	Amherst, MA 01002	2016
2	MA			HOME	Amherst	01002	Amherst, MA 01002	2016
3	MA			HOME	Amherst	01002	Amherst, MA 01002	2016
4	MA			HOME	Amherst	01002	Amherst, MA 01002	2016
5	MA			HOME	Chicopee	01020	Chicopee, MA 01020	2016
6	MA			HOME	Gilbertville	01031	Gilbertville, MA 01031	2016
7	MA			HOME	Northampton	01060	Northampton, MA 01060	2016
8	MA			HOME	Northampton	01060	Northampton, MA 01060	2016
9	MA			HOME	Northampton	01060	Northampton, MA 01060	2016
10	MA			HOME	Northampton	01060	Northampton, MA 01060	2016
11	MA			HOME	Florence	01062	Florence, MA 01062	2016

- **Save your query.**

Adding Runtime Prompts to a Query

Using Prompts with Expressions

- As mentioned earlier, you can work with an expression as if it were a field in the query. That includes using it as a prompt.
- This next exercise will use the existing Expression for Class Year as a prompt - **WES_GET_CLASS_YEAR(A.EMPLID)**
- The process for creating a prompt for an expression which is being used as a field is similar to that for any field.
- Navigate to the **Criteria page**.
- Click the **Edit** button for the **WES_GET_CLASS_YEAR(A.EMPLID)** row.
- On the **Edit Criteria Properties page**, for **Choose Expression 2 Type**, select **Prompt**. The **Define Prompt** dialog box displays under **Expression 2**.
- Select **New Prompt**.
- The **Edit Prompt Properties page** opens.
- Since this is not referencing an actual field, the **Heading Text** box is blank. Under **Heading Text**, type (without quotes) **"Insert Class Year"** (This is the text that will appear in the prompt)
- Click OK twice.
- View the **Prompt page**.
- The new prompt has been added to the **Prompt** page as **:2 = Insert Class Year**. **Save your query**.
- Run the query. Now both prompts appear in the prompt menu.

Edit Prompt Properties

Field Name:

*Heading Type: Text

*Type: Character

*Format: Upper

Length: 11

Decimals: 0

*Edit Type: No Table Edit

*Unique Prompt Name: BIND2

Heading Text:

Prompt Table:

OK Cancel

Heading Text:

Prompt	Edit	Delete
:1 = STATE - State	Edit	[-]
:2 = Insert Class Year	Edit	[-]

WES_TRAINING_STATE_ZZZ

State:

Insert Class Year:

OK Cancel



Brief Overview of the Having and View SQL Pages

(These pages will be looked at in more detail in the Advanced Class)

Having Page

- Instead of returning many rows of data, you may only be interested in a count of rows or a sum of a numeric field. You can produce these results using Query.
- You can use the aggregate function to group data and perform calculations on a field that is within the group. For instance, instead of viewing all rows of data, you want to view only a count of rows; or you may want to have an average or sum by a given category.
- When you associate a field with an aggregate, you cannot use that field in selection criteria. Structured Query Language (SQL) supports the use of aggregate functions in the WHERE clauses, but PeopleSoft applications don't. Because the Criteria page corresponds to a SQL statement's WHERE clause, PeopleSoft Query provides the Having page.
- This page enables you to add criteria on the aggregate instead of on the field generating the aggregate. The Having page criteria appear in a SQL statement's HAVING clause. If you experience problems with a query that is associated with aggregates, keep in mind that aggregate functions are not supported in the WHERE clause. The Criteria page creates the WHERE clause. Remember that you can use fields to join tables
- When you click the Add Criteria icon from the Fields or Query pages for an aggregate field, new criteria is added to the Having page instead of the Criteria page. Add selection criteria using the Having page in the same way that you add selection criteria using the Criteria page.
- Keep in mind that PeopleSoft Query compares the result of applying the aggregate function to the comparison value.

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

Query Name WES_TRAINING_STATE_ZZZ Description Person Home State Feed

Add Having Criteria No having criteria have been added yet.

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

Brief Overview of the Having and View SQL Pages

View SQL Page

- You do not need to utilize the **View SQL Page**, but it is useful to have some familiarity with what it contains.
- SQL (Structured Query Language) is a standardized query language for requesting information from a database, i.e., it is the language used to actually pass the queries you create to the database.
- The **View SQL page** enables you to view the underlying SQL code that Query Manager generates based on your query definition.
- You cannot edit the text on this page, but you can copy and paste it to another application.
- The three main parts of the SQL statement are:
 - SELECT – the fields or columns to be used
 - FROM – the records containing the data
 - WHERE – the criteria for filtering the data
- The last row in the SQL code indicates that the output is ordered by the sixth column (POSTAL).



Query Name	WES_TRAINING_STATE_ZZZ	Description	Person Home State
Query SQL			
SELECT B.STATE, A.EMPLID, A.NAME, B.ADDRESS_TYPE, B.CITY, B.POSTAL, B.CITY ', ' B.STATE ' ' B.POSTAL, WES_GET_CLASS_YEAR(A.EMPLID)			
FROM PS_PERS_DATA_SA_VW A, PS_ADDRESSES B			
WHERE (A.EMPLID = B.EMPLID			
AND B.EFFDT =			
(SELECT MAX(B_ED.EFFDT) FROM PS_ADDRESSES B_ED			
WHERE B.EMPLID = B_ED.EMPLID			
AND B.ADDRESS_TYPE = B_ED.ADDRESS_TYPE			
AND B_ED.EFFDT <= SYSDATE)			
AND B.STATE = :1			
AND B.ADDRESS_TYPE = 'HOME'			
AND WES_GET_CLASS_YEAR(A.EMPLID) = :2)			
ORDER BY 6			

Lesson 10: Basic Query Organization



(Organizational matters related to Query that are not discussed here will be part of the advanced course.)

Folders

- Query Manager enables you to organize your queries in Folders. This aids in looking for a particular query by limiting the search. You can use an existing folder or create a new one when Saving. There are no subfolders in Query

Public Queries

- Most queries you create will be private queries which are queries only accessible by the user who created them. Sometimes, however, you will create a query for other users to execute.
- The Public option enables other users to access the query if they have access to public queries.
- A Public query is accessible when:
 - You have been granted access to the public query; and
 - You have access to all records used by the public query.

Query Names

- No two public queries can have the same name.
- No private query can have the same name as a public query.
- Two queries can only have the same name if they are in two different users' private storage.

IMPORTANT NOTES REGARDING USING PUBLIC QUERY



Do not delete a query that you have not created.

**Do not modify a query that you have not created.
Do a SAVE AS with a new name.**

Using Public Queries

- Depending on the operator's security level, a user may utilize an existing public query as a starting point to create a similar query for his/her needs
- **If a user wishes to make changes to the query, it is imperative that the user does a "save as" under a new name immediately - before making any modifications.**
- The modified query must have a different name and may be saved as either public or private, depending on the use of the query and security level.

Naming Private Queries

- While you can name private queries however you wish, it makes sense to adapt some of the naming conventions shown at the end of the lesson.
- You may want to add PVT or your initials to the end for ease of searching.
- Also, remember you can create your own folders to store your private queries.

Basic Query Organization



Creating a Public Query

- In this lesson, you will save the **WES_TRAINING_STATE_xxx** query - which you had originally saved as a Private query - into a Public query.
- Open the query if it is not already open.
- Click on the **Save As** link on the bottom of any page in the Query tool (except **Run**).
- Enter a name for the new query – **WES_TRAINING_STATE_xxx_PUBLIC**
- In the **Folder** box, type **TRAINING**
- For **Owner**, select **Public**
- Leave **Query Type** as is.
- For **Owner**, select **Public**
- Note: If you wish, you can type a longer explanation in the **Query Definition** box; however, it will only appear on this page.
- Click OK.
- Now, when you run a search for the query **WES_TRAINING_STATE_xxx**, you will see a list similar to the following:

Enter a name to save this query as:

*Query:

Description:

Folder:

*Query Type:

*Owner:

Query Definition:

OK

Enter a name to save this query as:

*Query:

Description:

Folder:

*Query Type:

*Owner:

Query Definition:

OK Cancel

Query					Personalize F
Select	Query Name	Descr	Owner	Folder	
<input type="checkbox"/>	WES_TRAINING_STATE_ZZZ	Person Home State	Private		
<input type="checkbox"/>	WES_TRAINING_STATE_ZZZ_PUBLIC	Person Home State	Public	TRAINING	



Basic Query Organization

1. Naming a Public Query – First portion of name

- The naming convention for queries at Wesleyan is to start the name with three (or rarely four) letters and an underscore to assist users in locating queries.
- Each section of the name should have an underscore; there can be no spaces or hyphens in a query name.
- The first character of the query is always a **W**, which identifies it as a Wesleyan query (rather than a PeopleSoft delivered query).
- **The first few letters generally represent an office or department**, but there are the following exceptions.
- In addition to being used to identify an office, the first few letters may be used as follows:
 - **WSI** - Service Indicators (maintained by SFIS for designated offices)
 - **WES** - Used for queries common to more than one office. It may be derived from older query naming convention that had the department designation as a second element, for example, WES_WDN...

Query Office Codes

The following is a list of functional office codes. The majority of the codes listed are currently being employed. Example: WRG_ ...

- **WAD** - Admission
- **WAA** - Academic Affairs
- **WBO** - Box Office
- **WCP** - Center for Community Partnerships
- **WCS** - Continuing Studies
- **WDN** - Dean's Office
- **WFA** - Financial Aid
- **WGL** - GLSP
- **WGR** - Graduate Student Services
- **WHR** - Human Resources
- **WIR** - Institutional Research
- **WIS** - International Student Services
- **WIT** - ITS Computer Store
- **WLB** - Library
- **WOIS** - Office of International Studies
- **WPRES** - President's Office
- **WPS** - Public Safety
- **WRG** - Registrar's Office
- **WRL** - Residential Life
- **WSF** - Student Accounts
- **WSA** - Wes Student Assembly
- **WSS** - Wes Station

Basic Query Organization

2. Naming a Public Query – Second portion

- *May be used to specify an area within an office*
- *Or it may be used to designate the purpose of the query or the type of output.*
Example: WRG_RPT_ ...

CHK - Queries that are run to check data that has been entered

LBL - Queries that are run for labels

LST - Queries run for internal use

LTR - Queries that are run for letters

RPT - Queries that are run for external reporting or to other offices

If it is determined that third or fourth level categories would be beneficial, appropriate values should be implemented within the functional office area.

3. Naming a Public Query – Third portion

- *The third level can help to identify the type of information or constituent you are reporting on. Following are some suggestions. Example: WRG_RPT_ST_ ...*

AP - Applicants

CL - Classroom

CR - Course

FA - Faculty

OR - Organizations

PA - Parents

PR - Prospects

ST – Students

4. Naming a Public Query – Fourth portion

- *The fourth level may be used to indicate the process/functionality. Example: WRG_RPT_ST_ENL_ ...*

BIO – Biographical information

COM – Communication information

EVL – Evaluation

TST – Test (in-progress query)

Remember that the entire query name can only be up to 30 characters.

Review of Part II - Introduction to PeopleSoft Query

Building on **Part I – Introduction to , PeopleSoft Query (Basic Query Concepts and Query Viewer)**, these instructions presented a preliminary look at working with PS Query Manager.

- They demonstrated the basic steps and some of the more complex aspects of creating a new query.
- Additionally, expressions and Wesleyan Functions were incorporated into the instruction, as well as the essentials of working with prompts.
- There was a brief overview of two pages to be further covered in the advanced course.
- Finally, the topic of query organization, including public queries and Wesleyan naming conventions was explored.

Some things to remember:

- Before you begin a query, have a good idea of where you want to go.
- When searching for an existing query or preparing to create a new one, you will use certain records and views over and over. You should become familiar with the queries already created by others in your office which you will then be able to copy and edit.
- As you build your query, run it each time you add a new element to be sure the results are making sense. You should do so after adding new queries and fields, altering criteria, creating a prompt, or creating an expression.
- Use the suggested naming conventions for your office.
- If you file queries in a folder, they will be easier to locate.
- **SAVE your query often as you are building it!**

[End of Part II]

