EMACS Version 9.0: Transition Training

Private Query
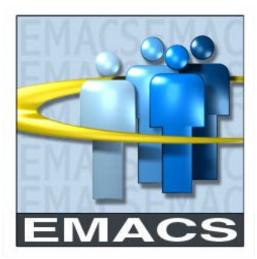
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Using Query Manager

The steps used to create a query in EMACS version 9.0 are very similar to creating a query in the previous version of EMACS, version 8.3

Before you can create a new query, modify an existing query, or run a query, you must navigate to the main page of Query Manager, as shown below.

Navigate to query manager:

1. Main Menu > Reporting Tools > Query > Query Manager

As you drill down through the different levels to get to Query Manager, the Menu and navigation path remains visible on the left side of the page. If you wish, you can collapse the Menu by clicking the small minus sign on the menu bar. A small 'expand' icon will remain in its place. The path refers to the navigation steps you've selected for each specific menu group, menu, menu item and component.

The **Find an Existing Query** search page is displayed. From this page, you can either create a new query or find an existing query.

Public Queries can only be run, not deleted or modified. You can, however, take a public query, modify it, and then save it as a private query. You can run, modify and delete your Private queries.

Creating a new Query

To create your query, you will define the relevant parts of your query within Query Manager. Query Manager provides a page that corresponds to each part of your query provided by tabs

- Records – select tables

- Query – select fields

- Fields – view fields

- Criteria – define and view criteria

- Properties – refine output

To begin defining a new query, you would select **Create New Query** from the main page of Query Manager. Because the first step in creating a new query is to select the record upon which the new query will be based, Query Manager takes you directly to the Records page so you can select the base record.

We will use the JOB – EE History record to build and modify our queries.

To select a record for the query:

1. Click the **Create New Query** hyperlink to jump to the **Find an Existing Record** search page.

   a. You can find an existing record (table) by entering the record name or partial name in the blank **Search By** field then clicking the **Search** button.

   b. If you leave the field blank and click the **Search** button, a list of up to 300 records will be displayed.

   c. By default, only the first 20 records appear on the page. To see more of the list, use the navigation buttons and links located on the header bar.

2. Leaving the Search by: Record Name field at its default value, enter a partial name of **JOB** in the blank field, and click the **Search** button.

For each page displayed, Field Descriptions have been given as reference material.

'Find an Existing Record' Field Descriptions

Query Name	This field is read-only. The default "New Unsaved Query" is displayed until query is saved. This field is displayed on all the Create New Query pages.
Description	This field will be blank until query is saved.
Record	The name and description of the records to which you have access are listed.
View All	Click **View All** link to view all the records found. You may have to scroll through many records to locate your desired record.
▶	Use arrow to move to the next 20 records
Last	Click **Last** link to move to the very bottom of the list.
"Add Record" link	Click the **Add Record** link to select the record. You'll be dropped into the Query page where you can add fields to the query or add additional records.
Show Fields	Click Show Fields to open a view of fields for the record. Click the yellow Return button to go back to the list of records.

3. Click on **Add Record** on the JOB – EE History row to select the record.

4. The following message appears as a reminder. Effective Dating will be covered in a later section. Click **OK**.

You are automatically dropped into the Query view - Query Tab - to begin selecting fields.

'Query Tab' Field Descriptions

📂 📁	Click the **Folder** to hide or show the list of fields associated with the record.
Alias Record	The system-defined name and description assigned to the chosen record(s) is displayed.
Hierarchy Join	Click the Hierarchy Join link to join a child table to its parent table
Related Record Join	Click the Related Record Join link to join two records based on a shared field. • For example, in the next screenshot the JOB record is related to the JOB CODE record by the JOB CODE field

Query Field Descriptions (cont)

Check All Fields	Click the **Check All Fields** button to select all fields in the record.
Uncheck All Fields	Click the **Uncheck All Fields** button to uncheck all fields in the record.
Fields	Select the box located to the left of each field that you wish to add to your query. Click again to de-select. 🗝Indicates key fields. Using key fields in criteria will help your query run more efficiently.
🔻⁺	Click the **Use as Criteria** link to add a row of criteria for the selected field. You are taken to the Criteria page where you can complete the criteria for the selected field.
➖	Click the **Delete** button to delete the associated record from the query. A confirmation message will appear. Click the **Yes** button to proceed with the deletion. Click the **No** button to cancel the deletion.

After the record has been selected, the next step is to select the individual fields from the record that you want in your query results.

> To select fields for the query:

1. Click the **checkbox** next to each field you want to include in the query output. Click on: EMPLID, EMPL_RCD, DEPTID, JOBCODE and EMPL_STATUS.

After you have selected the fields for output, you need to define the criteria. Criteria tells Query Manager what data to select based on defined values. To build the criteria, select a field and then define what the field's value should be. Query will pull all data that match the criteria.

As with other Query functions, there are two ways to enter criteria. You may enter criteria from either the Query page or the Criteria page. Entering criteria from the Query page is much faster than using the

Criteria page so it is demonstrated below. Using the Criteria page will be explained in the Advanced Function section.

> Note: EMACS is case-sensitive. Some entered data will convert to all caps, however, when defining criteria in Query, your *constant values* need to be entered in ALL CAPS. For example, in our sample query using the JOB table, the employee status we want should retrieve only Active employees. The entered criteria, your constant value, should be entered equal to '**A**' not '**a**'.

> To enter and edit selection criteria from Query page:

1. On the JOBCODE row, click on the funnel 🔽 to select this field.

You are linked automatically to 'Edit Criteria Properties' to further define the criteria.

'Edit Criteria Properties' Field Descriptions

Choose Expression 1 Type	**Field.** The value you want to base the selection criterion on. To compare the values from fields in two records, you need to join the record components.
	Expression. Advance functions that will not be covered.
Expression 1	A field component on which you want to base the selection criterion.
*Condition Type	Select the condition type from the drop-down list.
Choose Expression 2 Type	**Field.** Another field's value, usually a field in another record component. To compare the values from fields in two records, you need to join the record components.

'Edit Criteria Properties' Field Descriptions (cont)

Choose Expression 2 Type	• **Expression.** An expression you enter which Query evaluates before comparing the result to the value in the selected field. Query evaluates the expression once for each row it tests. • **Constant.** A single fixed value. • **Prompt.** A prompt value.
Expression 2	Based on the expression 2 type you selected, this box is where you specify the Field name, Expression, Constant value or Prompt for which query will look.
Define Constant	If you selected 'Constant' as your 'Expression 2 Type', this is the value query will look for.

2. Leaving all fields at their default values, in the Expression 2 box, in the **Constant** field, enter the job code 01025. Click **OK**. You will be returned to the Query page to finish selecting criteria.

   a. If you did not know the job code, you could click on the magnifying glass in the Expression 2 box and Query would bring up a list of valid job codes from which to choose. From the list, scroll to find the job code, then click on the Select Constant link.

   b. If the list has too many possible values, query will return the message 'No matching values were found.".

3. Repeating steps 1 and 2, add as criteria, the following fields and values:

   a. EMPL_STATUS equal to A (A translates to Active). Remember to use capital 'A'.

   b. SHIFT equal to 1.

4. Click on the Criteria page to view completed criteria.

Notice that the first field selected as criteria is EFFDT – Effective Date. Since the record JOB is an effective-dated record, Query assumes you want the most current date so this criteria is already selected. Certain tables in EMACS carry with them effective dates which tell EMACS when certain actions or events take effect.

This Effective Date field gives a historical perspective allowing you to see how the data has changed over time.   When using effective dated tables, you usually want the most *current effective* row of data—that is, the row whose EFFDT value is closest to today's date without being in the future. You may not want to view the history rows which may no longer accurate nor do you want to see future-dated rows. However, you do have the ability to see these rows by changing the criteria for the effective date. This will not be covered in this document.

Since we do not really care about shift, we'll delete the criteria row of shift.

5. To delete a criteria row, click on the minus sign (Delete column) on the Shift row.

View after Shift row deleted.

Records	Query	Expressions	Prompts	Fields	Criteria	Having	View SQL	Run

Query Name: New Unsaved Query   **Description:**

[Add Criteria]   [Group Criteria]   [Reorder Criteria]

Criteria   Customize | Find | 🔠   First ◄ 1-3 of 3 ► Last

Logical		Expression1	Condition Type	Expression 2	Edit	Delete
	▼	A.EFFDT - Effective Date	Eff Date <=	Current Date (EffSeq = Last)	Edit	−
AND	▼	A.JOBCODE - Job Code	equal to	01025	Edit	−
AND	▼	A.EMPL_STATUS - Payroll Status	equal to	A	Edit	−

[Save]   Save As   New Query   Preferences   Properties   New Union   [Return to Search]

To edit field properties:

With edit properties, you have the ability to change field length, change headings, change sort order, sum amounts, etc. Before we run the query, we want the output to be sorted by employee id.

1. Click on the Fields Tab.

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]

Fields   Customize | Find | View All | 🔠   First ◄ 1-5 of 5 ► Last

Col	Record.Fieldname	Format	Ord	XLAT	Agg	Heading Text	Add Criteria	Edit	Delete
1	A.EMPLID - EmplID	Char11				ID	🔍	Edit	−
2	A.EMPL_RCD - Empl Rcd Nbr	Num3.0				Empl Rcd#	🔍	Edit	−
3	A.DEPTID - Department	Char10				DeptID	🔍	Edit	−
4	A.JOBCODE - Job Code	Char6				Job Code	🔍	Edit	−
5	A.EMPL_STATUS - Payroll Status	Char1		N		Pay Status	🔍	Edit	−

[Save]   Save As   New Query   Preferences   Properties   New Union   [Return to Search]

'Fields Tab' Field Descriptions

Reorder / Sort	Click the Reorder/Sort button to change the order in which columns appear or to specify a sort order.
Col (Column)	Displays the column order for each field listed.
Record.Fieldname	Displays the name for each field listed.
Format	Displays the field type and length for each field listed.
Ord	Shows one or more fields selected to sort your query output. • If the field is the first sort field, a 1 appears, and the system will sort rows based on this field first. The second sort field selected will be numbered 2, and so on. • You can also specify a descending sort order. The letter **D** will appear if selected.
XLAT	Specifies which translate value you want to display in the query results: **N**one, **S**hort, or **L**ong.
Agg	Displays the aggregate function for each field listed.
Heading Text	Shows the heading assigned to display at the top of the column for the query output for each field listed.
🔽 (funnel)	Click the **funnel** to add a row of criteria for the selected field. You are taken to the Criteria page where you can complete the criteria. You can also add additional criteria.
Edit	Click the **Edit** button to format the query output. For example: change column headings, use aggregate functions, display translate table values in place of codes,etc.
−	Click on the **Minus** button to delete the associated field from the query.

2. To sort the output by employee ID and then by Department ID, click the **Reorder/Sort** button.

3. In Edit Field Ordering, in the 'New Order By' box, enter 1 and 2 on the EMPID and DEPTID rows.

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.

Edit Field Ordering			Customize	Find	View All	🔲 First ◄ 1-5 of 5 ► Last		
New Column	Column	Record.Fieldname	Order By	Descending	New Order By
	1	A.EMPLID - EmplID		☐	1
	2	A.EMPL_RCD - Empl Rcd Nbr		☐	
	3	A.DEPTID - Department		☐	2
	4	A.JOBCODE - Job Code		☐	
	5	A.EMPL_STATUS - Payroll Status		☐	

OK   Cancel

'Edit Field Ordering' Field Descriptions

New Column	Query Manager adds the columns in the order you select the fields. To change the order, enter the new column number here. When you close the Edit Field Ordering window by clicking OK, the columns are reordered.
Column	Indicates the order of the columns before you opened the Edit Field Ordering window.
Record.Fieldname	Displays the names of the fields you have selected.
Order By	Indicates the sort order of the field(s) by which data will be sorted. When you first open the Edit Field Ordering window, this field will be blank.
Descending	Check the box to sort data output in descending order. Leave blank to sort in ascending order.
Order By Number	To sort data output, enter the column number for the field you wish to sort by.

4. Click **OK**.

Notice the 1 and 2 in the Ord column.

5. To change Heading Text and Translate Value, click on the **Edit** button on the EMPL_STATUS row. The Edit Field Properties window will open.

Edit Field Properties

Field Name: A.EMPL_STATUS - Payroll Status

Heading	Aggregate	Translate Value
○ No Heading ⊙ RFT Short	⊙ None	⊙ None ○ Short ○ Long
○ Text ○ RFT Long	○ Sum	**Effective Date for Short/Long**
Heading Text:	○ Count	⊙ Current Date
Pay Status	○ Min	
*Unique Field Name:	○ Max	○ Field
A.EMPL_STATUS	○ Average	○ Expression
		Add Prompt Add Field

OK   Cancel

6. In the **Heading** section, choose heading type **Text** and type in "**Employee Status**" in the Heading Text box. In the **Translate Value** section, choose a **Long** translate value.

Edit Field Properties

Field Name: A.EMPL_STATUS - Payroll Status

Heading	Aggregate	Translate Value
○ No Heading ○ RFT Short	⊙ None	○ None ○ Short ⊙ Long
⊙ Text ○ RFT Long	○ Sum	**Effective Date for Short/Long**
Heading Text:	○ Count	⊙ Current Date
Employee Status	○ Min	
*Unique Field Name:	○ Max	○ Field
A.EMPL_STATUS	○ Average	○ Expression
		Add Prompt Add Field

OK   Cancel

Edit Field Properties Field Descriptions

Field	The name of the field for which you are editing properties.
Heading	*Choose column heading from the following:* • **No Heading.** The column does not have a heading. • **Text.** The column heading is the text you've entered in the text box. • **RFT Short.** The column heading is the short name from the record definition. • **RFT Long.** The column heading is the long name from the record definition.
Heading Text	Text displayed at the top of the column.
***Unique Field Name**	Used for translations. There is no need to change this field.
Aggregate	*To aggregate values, select the aggregate function value for this field:* • **None.** No aggregate functions used. • **Sum.** Adds the values from each row and displays the total. • **Count.** Counts the number of rows. • **Min.** Checks the value from each row and returns the lowest one. • **Max.** Checks the value from each row and returns the highest one. • **Average.** Adds the values from each row and divides the result by the number of rows.
Translate Value	*To select a translate value, choose from the following:* • **None.** Result will be a one character value, (i.e. 'L' for 'Leave Status') • **Short.** Result will be a short name ('Leave' instead of 'L') • **Long.** Result will be a long name ('Leave with Pay' instead of 'L')

Other editing can be done from here, such as summing an amounts field, changing the system-defined heading to one of your own, or changing the translate value of a field.

7. Click **OK.**

Notice the XLAT value has changed from N (none) to L (long) and the Heading Text now reads "Employee Status" rather than "Pay Status".

Saving a Query

You can save a query at any time after you have selected one record and at least one field. **You do not have to save a query before you run it**, but to avoid losing your work, it is best so save your query periodically as you build it. If you modify an existing query, you may wish to save the new query under a different query name so you won't lose your changes.

To save a query:

1. Click on the **Save As** link.

2. Enter the ***Query Name** of Active_Emps. Enter **Description** as Active Employee.

Note. An asterisk before a field name indicates that it is a required field and must be completed. Query name is required, however, description is not.

Enter a name to save this query as:

*Query:	Active_Emps
Description:	Active Employee
Folder:	
*Query Type:	User
*Owner:	Private

Query Definition:

[OK]   [Cancel]

"Save Query As' Field Descriptions

*Query Name	Enter the name of the query
Description	Description of the query. Limited to 30 characters.
Folder:	Enter the name of the folder in which you would like the query to reside. To create a new folder, enter the name of the new folder.
*Query Type	This field is read-only.
*Owner	Choices are usually Private or Public. You will only have the capability of building private queries.
Query Definition	Free text that can be used to further describe your query.

3. Click **OK.** You are once again returned to the Records page.

Notice that the Query Name is now ACTIVE_EMPS whereas before it was New Unsaved Query.

Using **Save As** creates an instance of the query that you created or if you modified an existing query, it creates another instance.   **Save** simply saves over the current query.

Run a Query

To run a query:

1. Click the **Run** tab at the top right of the page.

    The query results will be displayed.

Download the Query as an Excel Spreadsheet or CSV file

Once your query has been run, you can of download your results to an Excel spreadsheet or a CSV file.

To download to Excel

1. Click the hyperlink <u>Download to Excel</u> (see page 14) to open the file in your browser in Excel. The following message appears. Click on **Open**.

When you download to Excel, a new Excel window will open in your browser.

Working in Excel through the browser allows only minimal Excel functions to be performed like basic formatting and sorting.

If the Excel application is on your PC and you need more advanced Excel functions, you can save you query results in an Excel format and retrieve the document through Excel. To save as an Excel file:

1. Using the browser menu, click on **File** then **Save As**.

2. At the save as box, navigate to the location and folder in which you want to save your file.

3. In the 'Save as type' box, click the drop down arrow and select **Microsoft Excel Workbook**.

4. At File name: enter **Active Employees** and hit **Save.**

You may now open up Excel and retrieve the worksheet.

To download to CSV test file

If your individual PC has Excel and your CSV default is set to Excel, you can download to CSV text file which will open the Excel application and all functions and formatting will be available.

1. Return from **Run** to another page of Query and Click the **Return to Search** button.

2. On the Find an Existing Query page, type in 'Active' and Click **Search**.

3. Find your query ACTIVE_EMPS and on the same row click on the **HTML** link under Run to HTML. A new window will open with your results and two Download options will be available: Excel Spreadsheet and CSV Text File.
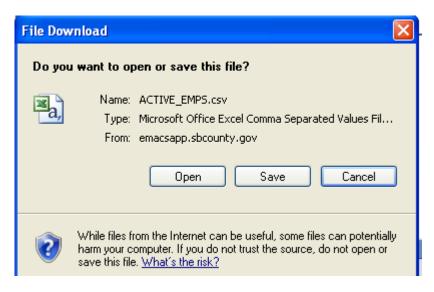

Query Manager

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: [Query Name ▼]   begins with   [ACTIVE]

[Search]   Advanced Search

Search Results

*Folder View: [-- All Folders -- ▼]

[Check All]   [Uncheck All]   *Action: [-- Choose -- ▼]   [Go]

Query							
Select	Query Name	Descr	Owner	Folder	Edit	Run to HTML	Run to Excel
☐	ACTIVE_EMPS	Active Employee	Private		Edit	HTML	Excel

Customize | Find | View All | ▦   First ◄ 1 of 1 ► Last

Find an Existing Query | Create New Query

4.   Click on **CSV Text File.**

ACTIVE_EMPS- Active Employee

Download results in : Excel SpreadSheet CSV Text File (3 kb)

View All   First ◄ 1-25 of 25 ► Last

	ID	Empl Rcd#	DeptID	Job Code	Employee Status
1	10747	0	44010	01025	Active
2	A5892	0	86600	01025	Active
3	B4255	0	92441	01025	Active
4	C0831	0	62411	01025	Active

5. The following message will appear. Click on **Open**.

5. A new Excel window will open.

If you click on <u>CSV Text File</u> and Excel does not open, your default CSV needs to be changed to point to Excel. Your internal computer operations section should be able to make the change.

Note that from the query search page you may also run your query to **Run to HTML** which opens a new window with the query results. From this page, which resembles the 8.3 version of query, you can download to Excel or CSV Text File. From the search page you can also click on the link **Run to Excel** and Excel will open through the browser window.

Print a Query

To print query results:

1. If you are in Query Manager and used the Run tab to get your results, you'll need to **Download to Excel** first.

2. Once your results are in the browser, click on the **Printer** icon or navigate to File > Print in your browser menu.

NOTE: If you are in the Run tab of query and do **File > Print**, only a partial page of your results will print.

Exit Query Manager

1. To exit, click on **Home** at the top of the page.

Update an Existing Query

There may be times when you'd like to update a query to reflect new conditions or copy an existing query and modify for other uses. You can open a query, examine it to see if it's suitable, modify as needed then use the **Save As** function to save it with a new name.

To update an existing query:

1. If you have exited query manager, navigate from **Main Menu** > **Reporting Tools** > **Query** > **Query Manager**

   If you are still in query manager, you may hit the **Return to Search** button that appears in lower right hand corner of most of the pages. You will be taken to the Find an Existing Query page.

2. Enter ACT in the blank select box and click **Search.**

From this page, you may run existing private or public queries. You may also delete private queries by selecting the appropriate Action from the drop down menu.

3. Locate and click on the ACTIVE_EMPS **Edit** link.

You are dropped into the Fields page to begin modifying. We will modify the criteria for the job code to retrieve several, specific job codes.

4. Go to Criteria Page by clicking on **Criteria.**

5. Click the **Edit** button on the JOBCODE row.

6. In the Edit Criteria Properties, in the ***Condition** box, hit the down arrow. Scroll to find **In List,** highlight to select.

Edit Criteria Properties

Choose Expression 1 Type	Expression 1
⊙ Field	**Choose Record and Field**
○ Expression	Record Alias.Fieldname:
	🔍 A.JOBCODE - Job Code

*Condition Type: | in list ▼ |

Choose Expression 2 Type	Expression 2
⊙ In List	**Edit List**
○ Subquery	List Members: 🔍

OK   Cancel

7. In the Edit List in Expression 2 box, click on the magnifying glass to begin listing job codes. When the following window opens, click **Search**.

Edit List

No values have been added yet.
Value: [   ]   Add Value   Search

Add Prompt

OK   Cancel

8. This window opens. Click the **magnifying glass** icon next to SetID.

SetID: [   ] 🔍
Job Code: [   ] 🔍
OK   Cancel

9. Click **Look Up** button when the following window opens. Select **COMMN** from the list.

10. Repeat step 9 for search for Job Code.

11. At the following window, click Look Up.

12. A list of Job Codes Appears. Select **01025**.

13. Click **OK.**

14. Repeat the steps outlined above and add job code 01059.

Edit List

List Members	Customize	Find	🎹	First ◄ 1-2 of 2 ► Last
☐ 01025
☐ 01059

Value: [   ] [Add Value]   [Search]   [Delete Checked Values]

Add Prompt

[OK]   [Cancel]

Notice the previous entered job code 01025 appears in the List Members box. If you needed to delete this job code, click on the check box and click the **Delete Checked Values** box.

15. Click **OK**.

Edit Criteria Properties

Choose Expression 1 Type
- ⦿ Field
- ○ Expression

Expression 1
Choose Record and Field
Record Alias.Fieldname:
🔍 A.JOBCODE - Job Code

*Condition Type: [in list   ▼]

Choose Expression 2 Type
- ⦿ In List
- ○ Subquery

Expression 2
Edit List
List Members: ('01025','01059')   🔍

[OK]   [Cancel]

16. Click **OK** in the Edit Criteria Properties box.

17. Save query by hitting the **Save** button. Run the query.

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

View All | Rerun Query | Download to Excel   First ◄ 1-27 of 27 ► Last

	ID	Empl Rcd#	DeptID	Job Code	Employee Status
1	10747	0	44010	01025	Active
2	A0127	0	11000	01059	Active

In the previously modified query, we used the **In List** Condition Type in Criteria. We listed specific job codes to retrieve. One other useful criteria condition is the **wildcard %.**

If we edit the JOBCODE criteria by changing *Condition Type to 'like' and the Constant in Expression 2 to '03%', query will retrieve all rows where the job code begins with 03XXX.

Edit Criteria Properties

Choose Expression 1 Type	Expression 1
⦿ Field	**Choose Record and Field**
○ Expression	Record Alias.Fieldname:
	🔍 A.JOBCODE - Job Code

*Condition Type: like ▾

Choose Expression 2 Type	Expression 2
⦿ Constant	**Define Constant**
○ Prompt	Constant: 03% 🔍

[OK]   [Cancel]

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

View All | Rerun Query | Download to Excel   First ◀ 1-100 of 3311 ▶ Last

	ID	Empl Rcd#	DeptID	Job Code	Employee Status
1	10015	0	45136	03317	Active
2	10031	0	91821	03560	Active
3	10033	0	44230	03537	Active
4	10079	0	52360	03316	Active
5	10086	0	52395	03316	Active

Run an Existing Query

Run an existing query:

1. Navigate to **Main Menu > Reporting Tools > Query > Query Manager.**

   Or if you are still in query manager, click on the **Return to Search** key.

2. Enter SB_DEPT in the blank select box and click **Search.**

3. Locate **SB_DEPTID** and click on **HTML** or **Excel** to obtain a list of department ID'S and descriptions.

Delete a Query

To delete a query:

1. **Navigate to Main Menu > Reporting Tools > Query > Query Manager.**

    Or if you are still in query manager, click on the **Return to Search** key.

2. Leaving the 'begins with' field blank, click **Search**.

3. From the list, select Query Name **ACTIVE_EMPS** by clicking its check box at the left. Select '**Delete Selected'** from the **Action** drop down menu and click Go

4. You will be prompted to confirm deletion.

Confirm the permanent deletion of all selected queries? (139,191)

| Yes | No |

5. Click **Yes** to delete but for this sample, click **No.** You'll be returned to the Find an Existing Query page.

Advanced Query Functions

Advanced functions include:
- Add a prompt
- Table joins
- Distinct function
- Building expressions
- Unions using SQL
- Sub-queries

Building expressions, unions using SQL and sub-queries are beyond the scope of this class and will not be covered. We will do the advance functions of adding a prompt and doing a table join but not the distinct function. It is documented, however, for reference.

Prompts

Adding a prompt allows you to further refine a query when you run it. For example, retrieving employee information on different employees. Instead of hardcoding an employee id in the criteria and changing it each time you run the query, you could add a prompt so each time the query is run, you can enter a different employee id.

Use our existing Active_Emps query, we will be adding a prompt for the Job Code so we can run the query for different job codes.

1. If you are still in Active_Emps, do nothing. If you are not, retrieve the query ACTIVE_EMPS.
   Click on the Return to Search button.
   Enter ACTIVE_EMPS as the search criteria.
   Click SEARCH button.
   Click on ACTIVE_EMPS query.
   The Fields page is automatically displayed. We will be entering the prompt as criteria.

2. Click on the **Criteria** page.

Records	Query	Expressions	Prompts	Fields	Criteria	Having	View SQL	Run

Query Name: ACTIVE_EMPS   **Description:** Active Employee

[Add Criteria]   [Group Criteria]   [Reorder Criteria]

Criteria   Customize | Find | First ◄ 1-3 of 3 ► Last

Logical	Expression1	Condition Type	Expression 2	Edit	Delete
▼	A.EFFDT - Effective Date	Eff Date <=	Current Date (EffSeq = Last)	Edit	─
AND ▼	A.JOBCODE - Job Code	like	03%	Edit	─
AND ▼	A.EMPL_STATUS - Payroll Status	equal to	A	Edit	─

💾 Save   Save As   New Query   Preferences   Properties   New Union   🔍 Return to Search

3. Click the **Edit** button on the **JOBCODE** row

4. In the Edit Criteria Properties box, select Condition Type "equal to" and under Choose Expression 2 Type, click on the **Prompt** radio button.

The Expression 2 box now opens an additional Define Prompt Box.

5. Click the **New Prompt** link. The Edit Prompt Properties box opens.

Field Descriptions

Field	
Field	Click the 🔍 button to select a prompt field. After you select a prompt field, it shows the name of the field. Query looks to the record definition for information about this field and fills out the rest of the dialog box based on its properties.
*Type	Select a field type from the drop-down list.

*Format	Select a format for the prompt field from the drop-down list.
*Heading Type	Select the **Heading Type** from the drop-down list.
Heading Text	Displays the label for the text box where the user will enter the comparison value. To change the text, select **Text** from the Heading Type list box, then type the new label in the Heading Text box.
*Unique Prompt Name	A default value generated by Query Manager for globalization. This value can only be set by a base language user to uniquely identify a query prompt parameter.
Length	Specify the length of the prompt field.
Decimals	Specify the number of decimals to be used with the prompt field.
*Edit Type	Defines the type of field edit for the specified field. In general, we recommend that you use the same Edit Type that is used in its record definition so that it is consistent throughout PeopleTools.
Prompt Table	If the Edit Type is **Prompt Table**, the value in the list box specifies the prompt table to use. Only values in the prompt table can be entered. If the **No Edit Table** is selected, query will accept all values entered all of which may not be valid.

6. In dropdown arrow in the *Edit Type box. Select **No Table Edit**. Click **Ok**.

When selecting the Edit type of **Prompt Table**, query sometimes may not find a value even though it is valid. When the No Table Edit is selected, you must be careful that you do input a valid job code, otherwise you may get blank results due to an invalid job code and not due to no employees currently occupying that job code.

6. In the Edit Properties box, click **OK** again.

Notice Expression 2 has changed to :1.

7. **Save As** ACTIVE_EMPS_PROMPT.

8. Run the query.

9.   Enter job code 06060 and click OK button.

Job Code: 06060 [🔍]

[OK]   [Cancel]

10.   You may Rerun Query to enter new values in the Job Code box.

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

Job Code = 06060

View All | Rerun Query | Download to Excel   First ◄ 1-5 of 5 ► Last

	ID	Empl Rcd#	DeptID	Job Code	Employee Status
1	C8489	0	34320	06060	Active
2	D6291	0	34320	06060	Active
3	D8449	0	34320	06060	Active
4	H0797	0	34320	06060	Active
5	H3506	0	34320	06060	Active

Joining Records

Query Manager allows you to retrieve data from more than one table in a single query. A **join** connects two or more table together by common values.   For example, within the Job View table, a join can occur with the Department table since the Dept ID exists in both tables, or join with the Job code table since the Job code field exists in both tables.

We will only perform a **related record join**. Using the existing ACTIVE_EMPS query, we will join the Department table to get the description of each department.

Creating a Related Record Join

1.   Retrieve the existing query ACTIVE_EMPS.

2.   Move to the Query page. Click on the join related record link **Join DEPT_TBL_Departments**.

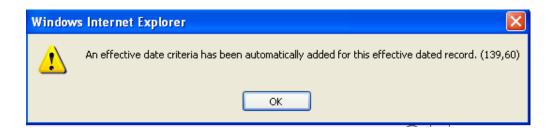| Records | Query | Expressions | Prompts | Fields | Criteria | Having | View SQL | Run |

Query Name: ACTIVE_EMPS   **Description:** Active Employee

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.

Chosen Records

Alias Record

A JOB - EE Job History   Hierarchy Join

[Check All Fields]   [Uncheck All Fields]

Fields   Find | View 100   First ◀ 1-50 of 179 ▶ Last

☑ 🗝 EMPLID - EmplID   Join PERS_SRCH_GBL -
                                           Search - All Pers w/ an ERN

☑ 🗝 EMPL_RCD - Empl Rcd Nbr

☐ 🗝 EFFDT - Effective Date

☐ 🗝 EFFSEQ - Effective Sequence

☐   PER_ORG - Organizational Relationship

☑   DEPTID - Department   Join DEPT_TBL -
                                           Departments

☑   JOBCODE - Job Code   Join JOBCODE_TBL Job
                                           Codes

3. Click **OK** to select the Standard Join type.

Select join type

Join Type

◉ Join to filter and get additional fields (Standard Join)

◯ Join to get additional fields only (Left outer join)

[OK] [Cancel]

4.   Click **OK** to select the Standard Join type.

Windows Internet Explorer

⚠ An effective date criteria has been automatically added for this effective dated record. (139,60)

[OK]

5.   At the 'effective date' message, click **OK.**

6.   Query will open the DEPT_TBL fields. From the new table, click on the **DESCR-Description** field.

Records	Query	Expressions	Prompts	Fields	Criteria	Having	View SQL	Run

Query Name: ACTIVE_EMPS   **Description:** Active Employee

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.

Chosen Records

Alias Record

A   JOB - EE Job History   Hierarchy Join   −

B   DEPT_TBL - Departments joined with A.DEPTID - Department   Hierarchy Join   −

Check All Fields	Uncheck All Fields

Fields   Find | View All   First ◄ 1-50 of 56 ► Last

- ☐ SETID - SetID
- ☐ DEPTID - Department
- ☐ EFFDT - Effective Date
- ☐ EFF_STATUS - Status as of Effective Date
- ☑ DESCR - Description
- ☐ DESCRSHORT - Short Description

7. Save query as Active_Emps_By_Dept

8. Run the query

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

View All | Rerun Query | Download to Excel   First ◄ 1-100 of 3311 ► Last

	ID	Empl Rcd#	DeptID	Job Code	Employee Status	Descr
1	10015	0	45136	03317	Active	DA Fontana
2	10031	0	91821	03560	Active	Sup Svcs Env Svc-House Svcs
3	10033	0	44230	03537	Active	Sheriff Scientific Invest
4	10079	0	52360	03316	Active	TAD - Barstow Admin

Properties – Distinct

You can use the Distinct option to eliminate duplicate rows in a query result. Some queries will return the same row more than once because it satisfies the query in more than one case. The Distinct option removes the duplicate rows from the result set. For example, if two returned rows are identical in all selected columns, Query displays only one of the rows.

We will not perform a distinct in this class, however, if you run upon duplicate rows, use the steps below.

To do Distinct to eliminate duplicate rows

1. In the query, click on the **Properties** link at the bottom of most query pages.

2. Click on the **Distinct** box and click **OK.**

3. Save query and run.

Field Descriptions

Query Name	• The default "New Unsaved Query" is displayed until changed on the Properties page. • This field is displayed on all the Create New Query pages.
Description	• This field will be blank. A description can be entered on the Properties page. • This field is displayed on all the Create New Query pages
Folder:	Enter the name of the folder in which you would like the query to reside. To create a new folder, enter the name of the new folder.
Query Type	This field is Read-only.
Owner	Valid value should only be *Private*. *Public* would allow other users to run the query.
Distinct	Use the Distinct option to eliminate duplicate rows in a query result.
Query Definition	Free text area that can be used to further describe your query.
Last Updated Date/Time	The date and time the query definition was last saved.
Last Update User ID	The name of the last user to save the query definition.

Alternate way to enter criteria – From Criteria Page

To enter and edit selection criteria from the Criteria page:

1. After adding a record to your query (JOB_VW is used in this example), click the **Criteria** page to begin adding editing criteria. For EFFDT, use default values.

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

Query Name: New Unsaved Query   Description:

[Add Criteria]   [Group Criteria]

Logical	Expression1	Condition Type	Expression 2	Edit	Delete
▼	A.EFFDT - Effective Date	Eff Date <=	Current Date (EffSeq = Last)	Edit	−

Criteria   Customize | Find | First 1 of 1 Last

Save   Save As   New Query   Preferences   Properties   New Union   Return to Search

Field Descriptions

Add Criteria	Click button to add criteria.
Group Criteria	To select two or more fields to be compared with together. An advance function that will not be covered.
Logical	Any rows after the first row must include either an AND or logical value to specify whether you want the rows to meet this criterion in addition to other criteria you've defined or as an alternative criterion. The first criterion you define doesn't have a value in this column. The default for subsequent criteria is AND.
Expression1	EFFDT is automatically entered due to the record JOB being an effective dated table. This is the field in which you want to base the criteria.
Condition Type	This operator describes the type of evaluation that query will use.
Expression2	This is the value that query compares (using the condition type) to Expression 1. Can be one of up to five types of values, normally constant or prompt will be used. • Field • Expression • Constant • Prompt • Subquery
Edit	Click the **Edit button** to modify the associated criteria.
−	To deleted the current criteria row.

2. Click the **Add Criteria** button to begin adding additional fields.

3. In the Expression 1 box, click on the magnifying glass. This opens up the Select Record and Field window. These are the available fields for selection.

4. Scroll and locate A.JOBCODE field. Click on the link to select. Query drops you back to edit criteria properties.

In Expression 1 box, JOBCODE is selected.

5.   Leave *Condition Type: at equal to and also leave the Choose Expression 2 Type as Constant. In Expression 2 box, click in the Constant field and enter the job code 01025. Click **OK** button.

Notice that JOBCODE is now another row in the Criteria page. You may continue to enter additional criteria repeating steps 2 through 5.