

Human Resources (HR) Query Basics

This course will teach you the concepts and procedures involved in finding public queries, creating private queries, and running queries in PeopleSoft 9.1 Query Manager. Users will learn the basics of Query Manager including, searching predefined HR Queries, managing queries, running queries, and exporting query results.

Course Objectives

By the end of this course, you should be able to perform basic Query Manager functions:

- Access Query Manager
- Navigate Query Manager
- Find Public HR Queries
- Manage Queries
- Modify and Save Public Queries
- Run Queries

Accessing HR Query in PeopleSoft 9.1

HR Query is accessible through the NCSU MyPack Portal via a web browser.

The portal can be accessed the following ways:

- Clicking on the MyPack Portal Link at the top of any [NC State University](#) web page
- Going to <http://mypack.ncsu.edu> URL.

Once you have navigated to the MyPack Portal, Login with your Unity ID and Password.

Portal Login

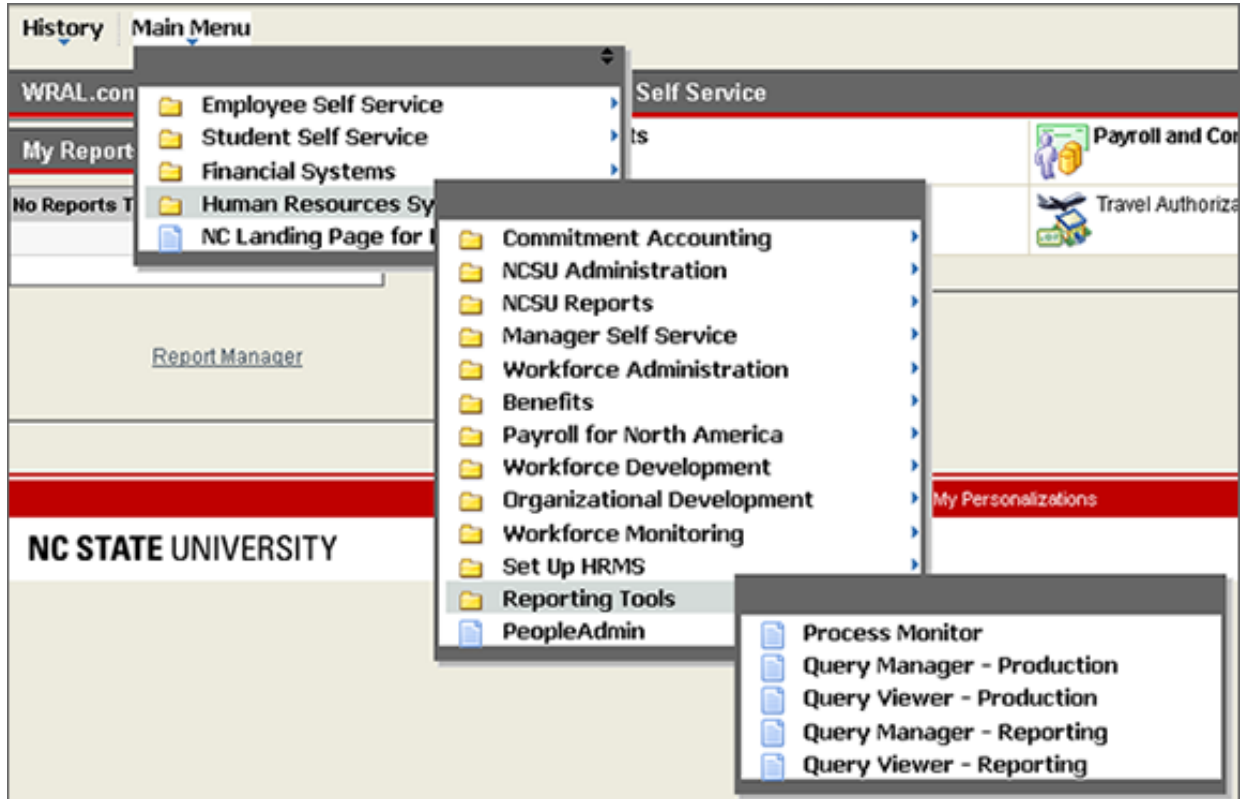
MyPack Portal login involves two steps:

1. Select your Campus Affiliation.
2. Enter your Unity ID and Password

If you experience problems with your Unity ID or Password while logging into MyPack Portal contact the [NC State Help Desk](#) @ 919-515-HELP(4357)

Query Tool Navigation

From the Portal main page click on the Main Menu navigating to Human Resource Systems, Reporting Tools.



The Query folder displays Query Manager, Query Viewer, and Process Monitor. User roles and permissions control access to Production and Reporting systems. Base user options will only display Query Manager and Query Viewer for the Reporting System.

- **Query Manager:** Allows users to create new queries and modify existing ones.
- **Query Viewer:** Provides read-only access to predefined queries. Users can search, run, print, and download query data.



For quicker access to Query Manager select the MyLinks dropdown box to add the page to your MyLinks from within MyPack Portal.

Working with Existing Queries

Use Query Manager to execute, modify, rename, copy, and delete existing queries. Remember, Query Manager actions are based on your security. This means some functionality described here may not be available to you.

Existing Query Search

There are two methods for finding existing queries: Basic Search and Advanced Search. Query Manager opens in Basic Search mode. The default general search uses 'begins with' comparison operator on the Query Name.

Search for a Query

Select Search Method: Advanced or Basic

Select Search By Option

If using Advanced Search, Select Conditional Operator.
Enter Search Data

Basic or Advanced Search Method

Basic Search: Assumes that the criteria entered will be found at the beginning of a data string.

Advanced Search: Select **Advanced Search** to open the search page. Use the Conditional Operators in the drop-down list to define the search.

Using Conditional Operators: In Advanced Search, Conditional Operators compare the search option with the value entered. (See appendix for further explanation)

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

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

Query Name: begins with [input field]

Description: begins with [input field]

Uses Record Name: begins with [input field]

Uses Field Name: [input field]

Access Group Name: [input field]

Folder Name: [input field]

Owner: [input field]

When using the IN or BETWEEN operators, separate values with commas. Do not use spaces between values. Do not use quotes around values. Do not use wildcards. Do not use reserved words. Do not use special characters. Do not use the same value more than once. Do not use the same value for different operators. Do not use the same value for different fields. Do not use the same value for different access groups. Do not use the same value for different folders. Do not use the same value for different owners.

Conditional Operators: begins with, <, <=, =, >, >=

Buttons: Search, Clear

Defining Search by Option

- **Access Group Name:** Provides a list of queries based on user security access to the database information. The search retrieves queries available to the security group selected.
- **Description:** The common name used to describe the query.
- **Folder Name:** The folder where the query is stored. Enter the beginning of the folder name or use wildcards to search for queries in specific folders.
- **Owner:** Queries are saved as either **Public or Private**. Public queries can be executed, opened, modified, or deleted by anyone with proper security access. Private queries can only be executed, opened, modified, or deleted by the individual who created the query.
- **Type:** Search for a query based on its function. The options for query type are Archive, Process, Role, and User. End-users will generally use the User query type.
- **Uses Field Name:** Search for queries using a specific field of data. A specific field name or the beginning of the field name can be entered. To be most specific, enter the exact field name.
- **Uses Record Name:** Search for queries using a specific record. A specific record name or beginning of the name can be entered. To be most specific, enter the exact record name.

Search Criteria

Enter the terms you wish to search on in the Search field. Leaving the field blank will return a maximum of 300 queries, listed 50 per page.

In the HR System, the (%) percent symbol is the most common wildcard character. Wildcards are place holders for data when conducting a search. The wildcard expands your search beyond the 'Begins with' condition.

- **%HR** searches for data containing HR at the end of a string.
- **%HR%** searches for all data containing HR within the string.
- **HR%** searches for data containing HR at the beginning of a string.

Public HR Queries

Human Resources has provided a list of [Public Queries](#) which provides you with various standard reporting data. These queries can also be used as a starting point for you to customize your own private queries.

To search for HR Public Queries:

1. Select Query Name from the Search By drop-down box
2. In the 'begins with' search field, enter HR%.

Query Search Results

Results are returned which meet the search criteria. You can edit, run to HTML, or run to Excel from the 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	Run to XML	Schedule
<input type="checkbox"/>	HR_ACTION_BY_DATE_RANGE	Actions by date range	Public		Edit	HTML	Excel	XML	Schedule
<input type="checkbox"/>	HR_ACTION_REASON_CODE	Action Reason Description	Public		Edit	HTML	Excel	XML	Schedule
<input type="checkbox"/>	HR_ACTIVE_EE_BLR	List of Active empl. distribut	Public		Edit	HTML	Excel	XML	Schedule
<input type="checkbox"/>	HR_ACTIVE_EMPLOYEES_POSITION	Active Employees with a positi	Public		Edit	HTML	Excel	XML	Schedule
<input type="checkbox"/>	HR_ACTIVE_EMPLOYEE_BASIC	List of Active employees	Public		Edit	HTML	Excel	XML	Schedule
<input type="checkbox"/>	HR_ACTIVE_EMPLOYEE_BASIC_DISTR	List of Active empl. distribut	Public	FOR MY DEPTS RUN	Edit	HTML	Excel	XML	Schedule
<input type="checkbox"/>	HR_ACTIVE_EMPLOYEE_BY_OUC	Active employees by OUC prompt	Public		Edit	HTML	Excel	XML	Schedule
<input type="checkbox"/>	HR_ACTIVE_EMPLOYEE_EDUCATION	Active employees education	Public		Edit	HTML	Excel	XML	Schedule
<input type="checkbox"/>	HR_ACTIVE_JOB_CODES	Active Job Codes	Public		Edit	HTML	Excel	XML	Schedule
<input type="checkbox"/>	HR_ACTIVE_RPRTS_TO_SUPRV_ID	HR_ACTIVE_RPRTS_TO_SUPRV_ID	Public		Edit	HTML	Excel	XML	Schedule
<input type="checkbox"/>	HR_ACTIVE_TEMP_EMPLOYEE_BASIC	List of Active Temps	Public	DEBBIE MONTHLY REP	Edit	HTML	Excel	XML	Schedule

- **Select:** Allows you to select multiple queries to perform an action. Check All selects all queries listed. Uncheck All removes selections. Check box is not required to select Edit, HTML, or EXCEL.
- **Query Name:** The name of the query listed.
- **Descr:** Manually entered explanation of the queries actions
- **Owner:** Public or Privately saved queries. Public queries require appropriate security access to be opened, modified, or deleted. You can only modify, execute, open, or delete queries created or owned by you.
- **Folder:** The folder the query is stored. Not required but folders are a good way to store and filter queries for future searches.

Filtering Results

Folder View: Queries stored in folder help to organize and easily filter large result sets for queries.

Queries can be stored in folders when saved and Moved to a Folder from the Search Results. To move a query to a folder, click the Select checkbox and choose Move to Folder under the Action drop-down.

Search Results

*Folder View: **HR**

Check All Uncheck All *Action: Move to Folder Go

Query Customize | Find | View All | First 1-14 of 14 Last

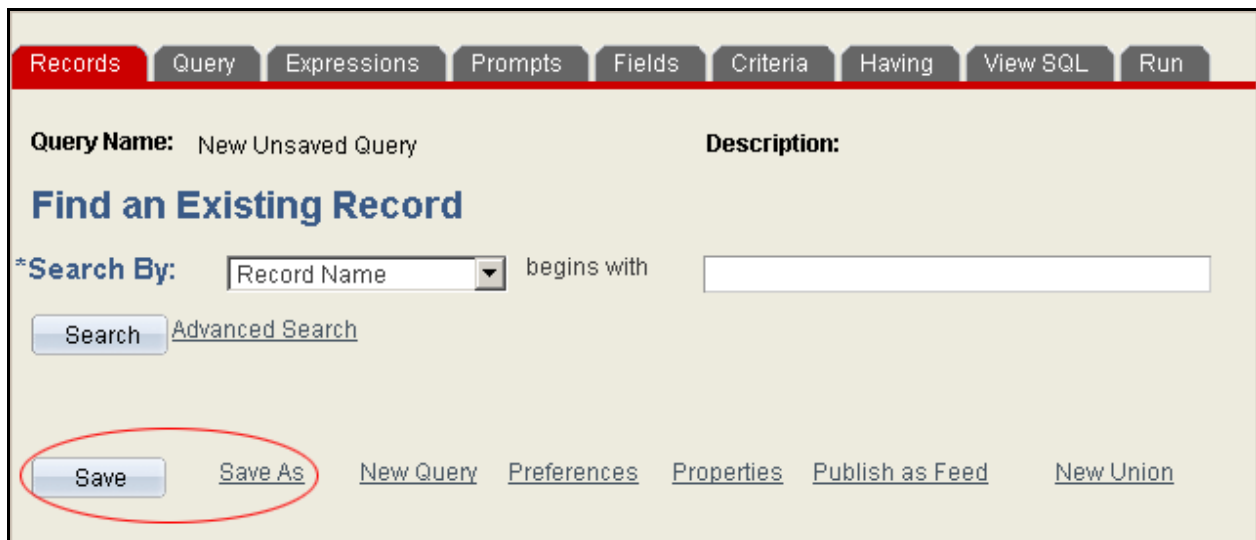
Select	Query Name	Descr	Owner	Folder	Edit	Run to HTML	Run to Excel	Run to XML	Schedule
<input type="checkbox"/>	HRIM_OUC_REORG_RPT_TO	HRIM_OUC_REORG_RPT_TO	Private	HR	Edit	HTML	Excel	XML	Schedule
<input type="checkbox"/>	HR_ACTIVE_EE_BASIC_FORPAYROLL	List of Active employees	Private	HR	Edit	HTML	Excel	XML	Schedule
<input type="checkbox"/>	HR_ACTIVE_EE_BASIC_PAYROLL	List of Active employees	Private	HR	Edit	HTML	Excel	XML	Schedule
<input type="checkbox"/>	HR_ACTIVE_EMPLOYEE_BASIC_TXALL	List of Active employees	Private	HR	Edit	HTML	Excel	XML	Schedule
<input type="checkbox"/>	HR_ACTIVE_EMPLOYEE_EPA_SPA	List of Active employees	Private	HR	Edit	HTML	Excel	XML	Schedule

Saving Queries

Query manager allows you to save queries for you to use again later. In query manager you can save a query as private or public. Private queries are for your express use, no one else has access to the query. If you have the appropriate security you can save a query as public which allows others direct access.

How to Save a Query

1. Select Save or Save As
2. Define or Alter the Query Name
3. Define the Description
4. Define Folder
5. Define Query Type
6. Define the Owner
7. Provide Query Definition



The screenshot shows the Query Manager interface with a navigation bar at the top containing tabs: Records (highlighted in red), Query, Expressions, Prompts, Fields, Criteria, Having, View SQL, and Run. Below the navigation bar, the 'Query Name' is set to 'New Unsaved Query' and the 'Description' field is empty. A section titled 'Find an Existing Record' contains a search form with a dropdown menu set to 'Record Name' and a text input field. Below the search form are buttons for 'Search' and 'Advanced Search'. At the bottom of the interface, a row of buttons includes 'Save' (circled in red), 'Save As', 'New Query', 'Preferences', 'Properties', 'Publish as Feed', and 'New Union'.

Select Save or Save As

Enter a name to save this query as:

***Query:**

Description:

Folder:

***Query Type:**

***Owner:**

Query Definition

Saving a Query

Selecting **Save** or **Save As** opens the Save Page. After clicking OK you commit the changes to the query.

Query Name

Change the query name to something specific to you or your Division/Department. The Query field does not accept spaces so use underscores instead.

Description

Give a short description of what the query does.

Folder

Use the folder as a way to organize your queries. This is an optional field.

Owner

Requiring appropriate security permissions you can save your query as Public or Private. If the Owner drop-down is grayed out then you do not have permission to save the query as anything but private. Saving as a public query allows you to save queries for others to access. Saving as a private query only allows you to view.

Activity 1

Let's take this opportunity to practice finding an existing query:

1. Navigate to the **Query Manager**.
2. Using the % wildcard option **Search** for queries which contain CLASS.
3. Find the Query HR_Class_Query.
4. Click on the Edit Link.
5. Click **SAVE AS**
 - a. Change the Query Name to XXX_CLASS_QUERY (replace XXX with your initials)
 - b. Add a folder name
 - c. Make sure the owner is private
 - d. Click OK

NOTES

Working With Records

Most of the queries you use in HR Query will already be provided to you as HR Public Queries. Sometimes those queries may not have a field you need. To customize the query you may need to add a record, also known as a table, to add the field to your query.

In the HR System there are two types of records (tables), de-normalized and base. Access to these records is based on your security profile. Most users will not have access to base tables but if you do it's important to know how to identify them.

Base tables require security access to view. These tables contain the data entered into the HR System over time. Most of the time you will not need base tables to complete your query tasks.

De-normalized tables or denorm for short are views of multiple base tables brought together for ease of use. They are identified by the prefix **NC** and contain a large number of fields. They provide a four year snap-shot of the data entered into the HR System. This is important if you want to list data over a date range. Anything with a date greater than years will not show in your query.

Find an Existing Record

*Search By: Record Name begins with NC_%

Search Advanced Search

Search Results

Record	Join Record	Show Fields
NC_ABS_HIST_VW - EE Absence	Join Record	Show Fields
NC_ACT_OVR_TBL - Account Override and Default	Join Record	Show Fields
NC_ALL_EMPLOYEE - Leave Eligible Employees	Join Record	Show Fields
NC_ASSGN_EMP_VW - Assignment Employee View	Join Record	Show Fields
NC_ASSIGNMENT	Join Record	Show Fields

Search By: To find a table you use the search field as you would to search for a query. Searching by record name is your best bet in finding the table you need.

Show Fields

Select Show Fields to preview the fields within the Record.

Join Record

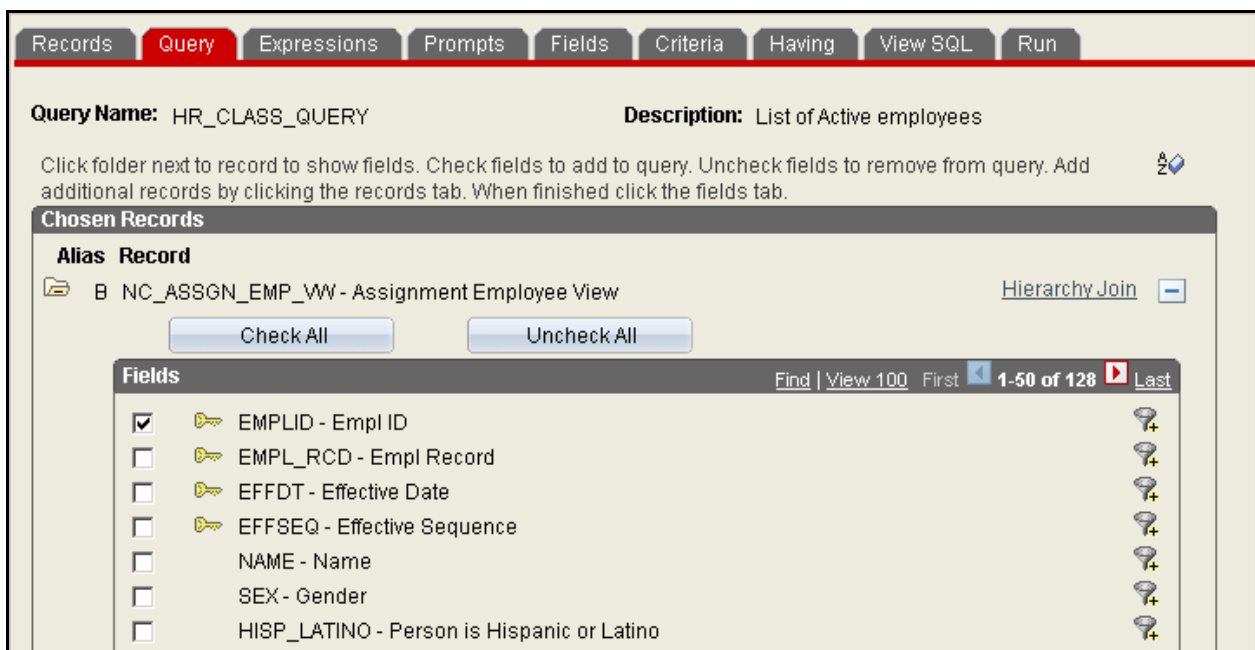
Select Join Record to add additional records to the query.

For a great resource for fields and records use the [Public Query Documentation](#) on the HRIM website. It contains a list of Public Queries, what they do, and what tables are used.

** Before customizing Public HR Queries please be sure to save and rename the query. **

Working with Fields

Fields are added to a query through the Query Page. Specific information regarding field properties, display order, and sort order is defined on the Fields Page.



Display the fields by clicking the folder under Chosen Records. Select the field by clicking in the checkbox next to the field.

Along the Gray Fields bar you can navigate through all of the fields within the Table.

Find: Click it to search by field name to quickly locate a field.

View 100: By default fields are grouped by 50, Click this link to list 100 fields at a time.

Arrows: Scroll the Fields from first to last by clicking the arrows.

Add Field

To add a field, select the checkbox next to the field name. Clicking the Check All button will select all fields. Selected fields display on the Fields Page.

Column Display Order

The HR System uses a default display order to fields appearing in the query results. Column order is displayed as listed on the *Fields* page. Use the Reorder / Sort button on the Fields page to renumber the column order.

Query Name: HR_CLASS_QUERY Description: List of Active employees

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.EMPLID - Empl ID	Char11				ID		Edit	-
2	B.EMPL_RCD - Empl Record	Num3.0				Empl Record		Edit	-
3	B.EFFDT - Effective Date	Date				Eff Date		Edit	-
4	B.EFFSEQ - Effective Sequence	Num3.0				Sequence		Edit	-
5	B.NAME - Name	Char50				Name		Edit	-
6	B.SEX - Gender	Char1	N			Sex		Edit	-
7	B.HISP_LATINO - Person is Hispanic or Latino	Char1				Hisp or Latin		Edit	-
8	B.NC_EG1_DESCR - Ethnic Group 1 Description	Char30				Ethnic Group 1		Edit	-
9	B.NC_EG2_DESCR - Ethnic Group 2 Description	Char30				Descr		Edit	-
10	B.NC_EG3_DESCR - Ethnic Group 3 Description	Char30				Descr		Edit	-
11	B.NC_EG4_DESCR - Ethnic Group 4 Description	Char30				Descr		Edit	-
12	B.NC_EG5_DESCR - Ethnic Group 5 Description	Char30				Descr		Edit	-
13	B.NC_EG6_DESCR - Ethnic Group 6 Description	Char30				Descr		Edit	-

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
2	1	B.EMPLID - Empl ID		<input type="checkbox"/>	
1	2	B.NAME - Name		<input type="checkbox"/>	
4	3	B.JOBCODE - Job Code		<input type="checkbox"/>	
3	4	B.NC_JOBCODE_DESCR - Description		<input type="checkbox"/>	
5	5	B.POSITION_NBR - Position Number		<input type="checkbox"/>	
6	6	B.EMPL_STATUS - Payroll Status		<input type="checkbox"/>	
7	7	B.DEPTID - Department		<input type="checkbox"/>	
8	8	B.DESCR - Department		<input type="checkbox"/>	

OK Cancel

To reorder your fields enter the field number under New Column. Once completed, the fields will be displayed on the Fields page and your query results in the order defined.

Changing Sort Order

A sort order is not defined for a query, results are displayed in the order the data was retrieved from the database. You change the data sort order by selecting the Reorder / Sort button.

Query Name: HR_CLASS_QUERY Description: List of Active employees

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.EMPLID	- Empl ID	Char11				ID		Edit	
2	B.EMPL_RCD	- Empl Record	Num3.0				Empl Record		Edit	
3	B.EFFDT	- Effective Date	Date				Eff Date		Edit	
4	B.EFFSEQ	- Effective Sequence	Num3.0				Sequence		Edit	
5	B.NAME	- Name	Char50				Name		Edit	
6	B.SEX	- Gender	Char1		N		Sex		Edit	
7	B.HISP_LATINO	- Person is Hispanic or Latino	Char1				Hisp or Latin		Edit	
8	B.NC_EG1_DESCR	- Ethnic Group 1 Description	Char30				Ethnic Group 1		Edit	
9	B.NC_EG2_DESCR	- Ethnic Group 2 Description	Char30				Descr		Edit	
10	B.NC_EG3_DESCR	- Ethnic Group 3 Description	Char30				Descr		Edit	
11	B.NC_EG4_DESCR	- Ethnic Group 4 Description	Char30				Descr		Edit	
12	B.NC_EG5_DESCR	- Ethnic Group 5 Description	Char30				Descr		Edit	
13	B.NC_EG6_DESCR	- Ethnic Group 6 Description	Char30				Descr		Edit	

- ✓ Use the Reorder/Sort button to access the Edit Field Ordering page.
- ✓ Enter the number for sort order in the New Order By field.
- ✓ To sort the field data in descending order, select the Order By Descending checkbox.

Edit Field Ordering

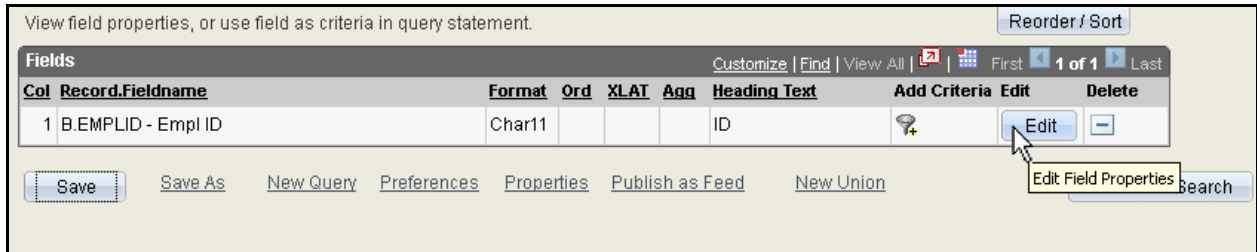
Reorder columns by entering column numbers on the left. Columns left blank or assigned a 0 will be automatically assigned a number. Change the order by number by entering numbers on the right. To remove an order by number, leave the field blank or enter a 0.

New Column	Column	Record.Fieldname	Order By	Descending	New Order By
	1	B.EMPLID - Empl ID		<input type="checkbox"/>	3
	2	B.NAME - Name		<input type="checkbox"/>	
	3	B.JOBCODE - Job Code		<input type="checkbox"/>	2
	4	B.NC_JOBCODE_DESCR - Description		<input type="checkbox"/>	
	5	B.POSITION_NBR - Position Number		<input type="checkbox"/>	
	6	B.EMPL_STATUS - Payroll Status		<input type="checkbox"/>	
	7	B.DEPTID - Department		<input type="checkbox"/>	1
	8	B.DESCR - Department		<input type="checkbox"/>	

OK Cancel


Changing Column Headings

Column headings for query results use the RFT short name defined for the field in the HR system. Since customize the column heading in your query use the Edit Field Properties Page.



Headings can be customized by selecting one of the following:

- **No Heading:** Column heading will be blank
- **RFT Short:** Short description for the column defined by the system
- **RFT Long:** Long description for the column defined by the system
- **Text:** User customized heading.

 You must select the Text radio button and change the Heading Text field. Otherwise, the selected heading type will be displayed.

Edit Field Properties

Field Name: B.EMPLID - Empl ID

Heading

No Heading RFT Short

Text RFT Long

Heading Text:
ID

*Unique Field Name:
B.EMPLID

Aggregate

None

Sum

Count

Min

Max

Average

OK Cancel

Aggregate

You can aggregate your results by selecting one of the functions under Aggregate in the Edit Field Properties. By selecting Count, instead of returning the rows in the query results the query will return a count of the rows returned by the query.

TRANSLATE VALUES

A translate value is a value used at the database to tie a code with a description. You can tell a field is defined as a translate value when the XLAT column contains a value. As an example, the EMPLOYEE_CLASS field is a translate value.

Query Name: CLASS_ACTIVE_EMPLOYEE Description: List of Active employees 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.EMPLID - Empl ID	Char11				ID		Edit	-
2	B.NAME - Name	Char50				Name		Edit	-
3	B.EMAILID - Email ID	Char70				Email ID		Edit	-
4	B.ADDRESS1 - Address Line 1	Char55				Address 1		Edit	-
5	B.ADDRESS2 - Address Line 2	Char55				Address 2		Edit	-
6	B.CITY - City	Char30				City		Edit	-
7	B.STATE - State	Char6				State		Edit	-
8	B.POSTAL - Postal Code	Char12				Postal		Edit	-
9	B.EMPL_CLASS - Employee Classification	Char3		N		Empl Class		Edit	-

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

Each class is assigned a 3-letter code, the code is meaningless without the description. By clicking the edit button on the Fields page you can change the field properties to Short or Long Translate Value.

Edit Field Properties

Field Name: B.EMPL_CLASS - Employee Classification


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](#)

DELETE FIELDS

On the Fields Page you can delete fields from a query. Select the delete icon  for the field to be removed. Deleting a field does not remove it from any Expressions, Prompts, or Criteria defined for the query.

Col	Record.FieldName	Format	Ord	XLAT	Agg	Heading Text	Add Criteria	Edit	Delete
1	B.EMPLID - Empl ID	Char11				ID		Edit	
2	B.NAME - Name	Char50				Name		Edit	
3	B.EMAILID - Email ID	Char70				Email ID		Edit	
4	B.ADDRESS1 - Address Line 1	Char55				Address 1		Edit	
5	B.ADDRESS2 - Address Line 2	Char55				Address 2		Edit	
6	B.CITY - City	Char30				City		Edit	
7	B.STATE - State	Char6				State		Edit	
8	B.POSTAL - Postal Code	Char12				Postal		Edit	
9	B.EMPL_CLASS - Employee Classification	Char3		N		Empl Class		Edit	

NOTES:

ACTIVITY 2: WORKING WITH FIELDS

Search for the public query CLASS_ACT2. Modify the query to list the contact information for Active Employees.

Query Requirements:

1. Select the fields: DEPTID, DESCR-Department, Name, ADDRESS1, ADDRESS2, City, STATE, POSTAL
2. Using the Reorder/Sort button on the Fields page, order the columns: ID, NAME, DEPTID,DESCR, ADDRESS1, ADDRESS2, City, STATE, POSTAL
3. Sort the output by Department ID (OUC), NAME
4. Edit the Column headings: Employee ID, Department ID, Department, Street 1, Street 2, City, State, Postal
5. Save the query
6. Click Run

NOTES:

Working with Criteria

Running a query without criteria returns all the data in a record for the fields you selected. You refine your query by giving instructions on how to filter your data. Types of criteria involve comparing values in two separate fields or filtering data based on a constant value against a field. Data is filtered in the HR System by comparing data in Expression 1 to data in Expression 2 using a Condition Type.


DEFINE CRITERIA

To add or edit criteria you have two options, the **Criteria** page or **Query** page. On the criteria page you can use the Add Criteria button or edit by selecting the Edit button for the appropriate Expression.

Criteria

Logical	Expression1	Condition Type	Expression 2	Edit	Delete
	B.EFFDT - Effective Date	Eff Date <=	Current Date (EffSeq = Last)	Edit	-
AND	B.EMPL_STATUS - Payroll Status	in list	("A";"L";"P";"Q")	Edit	-

Criteria definitions compare two different expressions. Define Expression 1 by Choosing a Field.

To choose the fields select the magnifying glass icon 

DEFINE CRITERIA

- ✓ Expression 1: Define the data to be filtered
- ✓ Select your Condition Type
- ✓ Expression 2: Define the comparison data

Expression 1: Filter Data

Field: If you are filtering a data field from a record use the Field option for Expression 1

Expression: If you have created an expression to be filtered, use the Expression option.

Edit Criteria Properties

Choose Expression 1 Type

Field
 Expression

Expression 1

Choose Record and Field

Record Alias.Fieldname:

B.EFFDT - Effective Date

***Condition Type:** Eff Date <=

Choose Expression 2 Type

Field
 Expression
 Constant
 Current Date

Expression 2

Effective Sequence Options

First
 Last
 All

OK Cancel

Expression 1

Condition Type

Expression 2

Condition Type

Condition Type is the comparison operator between Expression 1 and Expression 2. The Condition Type selected determines the way Expression 1 is filtered by Expression 2.

Between: The value of Expression 1 falls between and includes the two values defined in Expression 2.

Not Between: The value of Expression 1 does not fall between and does not include the two values defined.

Greater Than: The value of Expression 1 is greater than the value of Expression 2.

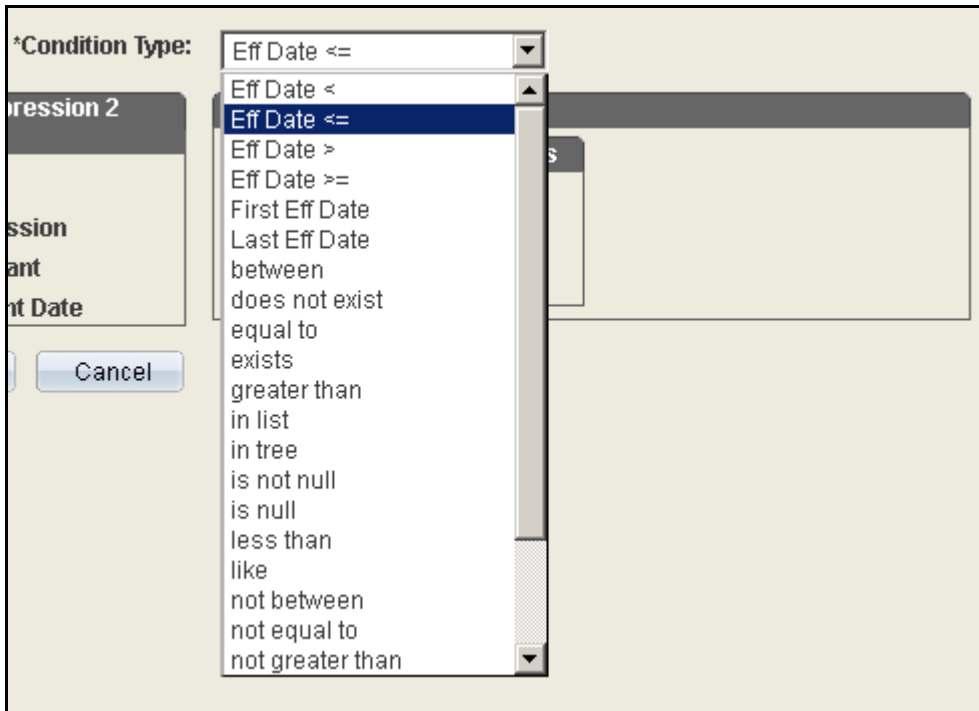
Not Greater Than: The value of Expression 1 is not greater than the value of Expression 2.

In List: The value of Expression 1 is in a list of values defined in Expression 2.

Not In List: The value of Expression 1 is not in a list of values defined in Expression 2.

Is Null: The field selected for Expression 1 does not have a value. Null is different from 0 in that 0 is considered a value. If this condition type is selected, Expression 2 will not be defined. Key fields, required fields, character fields, and numeric fields do not allow null values.

Is Not Null: The field selected for Expression 1 has a value. Null is different from 0 in that 0 is considered a value. If this condition type is selected, Expression 2 will not be defined.

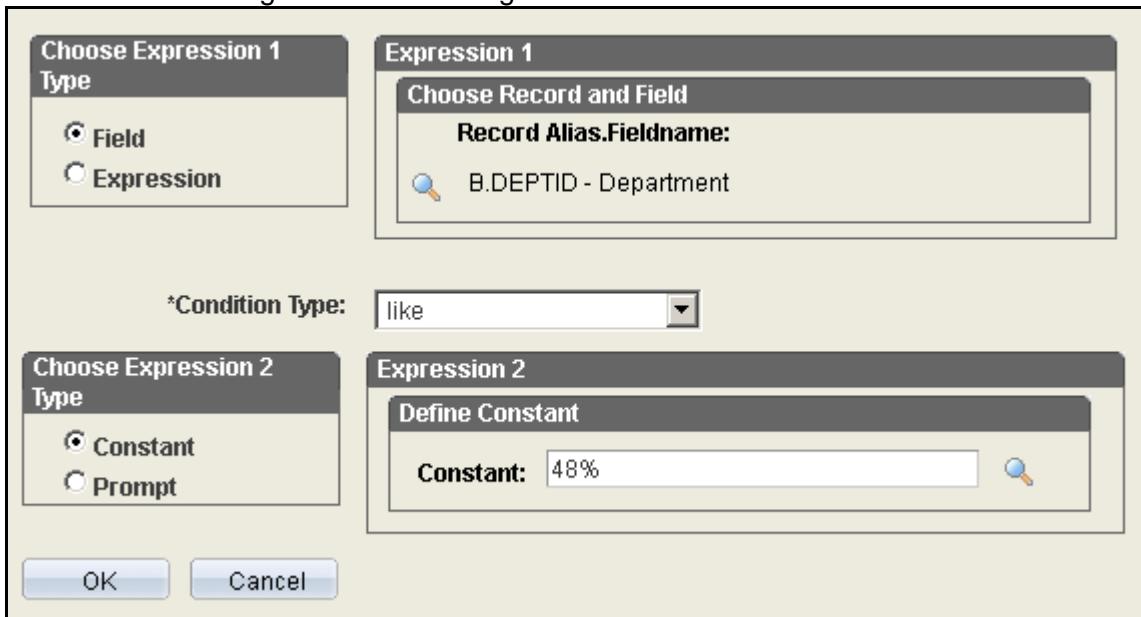


Condition Type Options

Less Than: The value of Expression 1 is less than the value of Expression 2.

Not Less Than: The value of Expression 1 is not less than the value of Expression 2

Like: The value of Expression 1 matches a string pattern defined in Expression 2. Expression 2 must contain a string of data containing wildcard characters.



Not Like: The value of Expression 1 matches a string pattern defined in Expression 2. Expression 2 must contain a string of data containing wildcard characters.

Exists: The value of Expression 1 is contained in a subquery. All records matching are retrieved.

Does Not Exist: The value of Expression 1 is not contained in a subquery. All records not contained in the subquery are retrieved.

Expression 2: Comparison Data

Expression Types for Expression 2 are active depending on the Condition Operator selected.

- **Field:** If the comparison data is contained in a record, use the **Field** option to define Expression 2. Use the Lookup Tool to search for a field used in the query.
- **Expression:** If the data being compared is based on an expression, select the Expression option and build the expression using SQL.

The screenshot shows a dialog box for configuring Expression 2. It is divided into several sections:

- Choose Expression 1 Type:** Contains two radio buttons: Field and Expression.
- Expression 1:** A sub-dialog titled "Choose Record and Field" with a label "Record Alias.Fieldname:" and a text box containing "B.EMPL_RCD - Empl Record".
- *Condition Type:** A dropdown menu currently set to "equal to".
- Choose Expression 2 Type:** Contains five radio buttons: Field, Expression, Constant, Prompt, and Subquery.
- Expression 2:** A sub-dialog titled "Define Constant" with a label "Constant:" and an empty text box.
- Buttons:** "OK" and "Cancel" buttons at the bottom.

- ❖ **Add Prompt:** Select Add Prompt if the expression will be calculated based on data entered by the user.
- ❖ **Add Field:** Select to add a field to the expression.
- **Constant:** Compares Expression 1 to a constant value.
- **Subquery:** Compares Expression 1 to data returned in a subquery.
- **Prompt:** Compares Expression 1 to user-entered data in a prompt.
- **In List:** Compares Expression 1 to a list of values. This option is only available when the Condition Operators In List or Not In List is selected.
- **Current Date:** Compares the date value in Expression 1 to the current system date.
- **Tree Option:** Compares Expression 1 to selected tree nodes. This option is only available when the Condition Operates In Tree or Not In Tree is selected.
- **Effective Sequence:** Used on some effective-dated records.

NOTES:

CLASS ACTIVITY 3





Develop a query from the NC_ASSIGN_EMP_VW record that lists all active SPA, full-time employees with a FTE greater than .75.

1. **Search** for Query CLASS_ACT3, **Save** as XXX_CLASS_ACT3 (replace XXX with your initials)
2. **Order (Sort)** the output by DEPTID, then by JOBCODE
3. Select **Active Employee Criteria**
 - a. On the **Criteria** tab, Select the **Add Criteria** button
 - b. In Expression 1, Choose the Field **EMPL_STATUS** (Payroll Status)
 - c. Select the **In List** condition type from the **Condition Type** drop down box
 - d. Under Expression 2, Add the List Members for Active Employees.
 - e. Click OK
4. Select **SPA Employee Class**
 - a. On the **Criteria** tab, Select the **Add Criteria** button
 - b. In Expression 1, Choose the Field: **EMPL_CLASS**
 - c. Condition Type can remain **equal to** unless you need to look for Police Officers in your Unit (Employee Class SLE)
 - d. In Expression 2, Enter SPA in the Constant field.
 - e. Click OK
5. Add the **FTE** criteria
 - a. On the **Criteria** tab, Select the **Add Criteria** button
 - b. In Expression 1, Choose the Field: **FTE**
 - c. Select the **greater than** condition type from the **Condition Type** drop down box
 - d. Under Expression 2, enter .7499.
 - e. Click OK
6. Save and Run Query

EFFECTIVE DATE CRITERIA

Effective dated records provide a history of that data. When records are added or updated a new Effective Date is assigned to the record.

In Query Manager, if the Effective Date is a Key Field the Effective Date criteria are automatically defined. By default the criteria retrieves the most recent or current record.

Criteria					
		Customize Find   First  1-2 of 2  Last			
Logical	Expression1	Condition Type	Expression 2	Edit	Delete
<input type="text"/>	B.EFFDT - Effective Date	Eff Date <=	Current Date (EffSeq = Last)	<input type="button" value="Edit"/>	<input type="button" value="-"/>
AND	B.EMPL_STATUS - Payroll Status	in list	('A','L','P','Q')	<input type="button" value="Edit"/>	<input type="button" value="-"/>

EFFECTIVE DATE CONDITION TYPES

Specific Condition Operators are used to compare Effective Dates. Below are the Condition Types available when Effective Date is selected in Expression 1

Eff Date <: Retrieves records where the Effective Date is less than the value entered in Expression 2.

Eff Date <=: Retrieves records where the Effective Date is less than or equal to the value entered in Expression 2.

Eff Date >: Retrieves records where the Effective Date is greater than the value entered in Expression 2.

Eff Date >=: Retrieves records where the Effective Date is greater than or equal to the value entered in Expression 2.

First Effective Date: Retrieves the first instance of the record entered.

Last Effective Date: Retrieves the last instance of the record entered.

The screenshot shows a dialog box with the following components:

- Choose Expression 1 Type:** Radio buttons for Field and Expression.
- Expression 1:** A sub-dialog titled "Choose Record and Field" with a search icon and the text "Record Alias.Fieldname: B.EFFDT - Effective Date".
- *Condition Type:** A dropdown menu currently showing "Eff Date <=".
- Choose Expression 2 Type:** Radio buttons for Field, Expression, Constant, and Current Date.
- Expression 2:** A sub-dialog titled "Effective Sequence Options" with radio buttons for First, Last, and All.
- Buttons:** "OK" and "Cancel" buttons at the bottom.

EFFECTIVE DATE COMPARISON

Define Expression 2 using one of the following options:

- **Field:** Compares a date field from a record with the Effective Date in Expression 1. Use this option to retrieve records that were effective on the same date as another record.
- **Expression:** Compares the results of an expression with the Effective Date in Expression 1.
- **Constant:** Compares the Effective Date in Expression 1 against the date entered in Expression 2. Use this option to retrieve data as of a certain date.
- **Current Date:** Compares the Effective Date in Expression 1 against the current system date.

MULTIPLE CRITERIA STATEMENTS

As criteria are added to the query, Query Manager compiles the criteria relationships using standard Logical Operators. The Criteria Page is used to display and edit the criteria logic between statements.

The screenshot shows the 'Criteria' page interface. At the top, there are buttons for 'Add Criteria', 'Group Criteria', and 'Reorder Criteria'. Below these is a table with the following structure:

Logical	Expression1	Condition Type	Expression 2	Edit	Delete
	B.EFFDT - Effective Date	Eff Date <=	Current Date (EffSeq = Last)	Edit	-
AND	B.EMPL_STATUS - Payroll Status	in list	{'A','L','P','Q'}	Edit	-

At the bottom of the interface, there are buttons for 'Save', 'Save As', 'New Query', 'Preferences', 'Properties', 'Publish as Feed', 'New Union', and 'Return To Search'. The table also includes navigation controls like 'Customize', 'Find', 'First', '1-2 of 2', and 'Last'.

Joining Criteria

For a field, criteria statements are created individually and then joined to form the overall logic of the criteria. As you add criteria to the Query Manager uses the AND logic operator to join statements. You will notice there is no logic operator on the first statement on the Criteria Page. Here are the Logic Operator options available to use between statements:

- **AND:** Retrieves records where all criteria conditions are met.
- **AND NOT:** Retrieves records meeting the condition of the previous criteria but omits records meeting the next condition.
- **OR:** Retrieves records where any of the conditions are met.
- **OR NOT:** Retrieves any records meeting the conditions of the previous criteria and any records that do not meet the next conditions.

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

Query Name: CLASS_ACT4 Description: List of Active employees Feed

Add Criteria Group Criteria Reorder Criteria

Logical	Expression1	Condition Type	Expression 2	Edit	Delete
	B.EFFDT - Effective Date	Eff Date <=	Current Date (EffSeq = Last)	Edit	-
AND	B.EMPL_STATUS - Payroll Status	in list	('A','L','P')	Edit	-
AND	B.ACTION - Action	equal to	HIR	Edit	-

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

The above criteria statements will evaluate and retrieve data in the following order:

1. To pull the most recently updated records the Table will be searched for an effective date less than or equal to the current date; and
2. The Employee Status is Active, on Leave of Absence, or Leave With Pay (A,L,P); and
3. Action equal to HIR (Hire).

The results for the query above will retrieve records for employees that are active with a Hire action in their current record as of the date run.

ACTIVITY 4: EFFECTIVE DATE CRITERIA

Let's create a query to list all active employees within your department that were hired between two dates. Search for the query CLASS_ACT4, save the query as XXX_CLASS_ACT4 (replace XXX with your initials).

1. From the **Query Tab**, Select the fields: EMPLID, EFFDT, DEPTID, DESCR – Department
2. Select **Active Employee Criteria**
 - a. On the **Criteria** tab, Select the **Add Criteria** link (the funnel icon)
 - b. In Expression 1, Choose the Field **EMPL_STATUS** (Payroll Status)
 - c. Select the **In List** condition type from the **Condition Type** drop down box
 - d. Under Expression 2, Add the List Members for Active Employees.
 - e. Click OK
3. Enter the **Hire Action**
 - a. Under Expression 1 Select the ACTION Field
 - b. Make sure the Condition Type is **equal to**
 - c. Type in the constant **HIR** into Expression 2
4. Enter the **Date Range** criteria
 - a. From the **Criteria** Tab click on the **Edit** button for the **EFFDT** criteria
 - b. Change the **Condition Type** to **between**
 - c. In Expression 2 enter two dates you want to know about. (Don't forget that Denorm tables only go back four years.)

REORDERING CRITERIA

Query Manager adds the criteria relationships and evaluates them in the order they are defined. There are times when you will need to reorder the criteria to apply grouping to the criteria.

- ✓ Select the Reorder Criteria button from the Criteria Page
- ✓ Enter the New Position for the criteria on the Edit Criteria Ordering page
- ✓ Click OK

Logical	Expression1	Condition Type	Expression 2	Edit	Delete
	A.EFFDT - Effective Date	Eff Date <=	Current Date (EffSeq = Last)	Edit	-
AND	A.EMPL_STATUS - Payroll Status	in list	('A','L','P')	Edit	-
AND	A.EMPL_CLASS - Employee Classification	in list	('PDC','CHO','EFX','ES1','ES2','ES3','ENF')	Edit	-
AND	A.CONTRACT_END_DT - Contract End Date	between	:1 AND :2	Edit	-

New Position	Position	Expression1	Condition Type	Expression 2
	1	A.EFFDT - Effective Date	Eff Date <=	Current Date (EffSeq = Last)
4	2	A.EMPL_STATUS - Payroll Status	in list	('A','L','P')
2	3	A.EMPL_CLASS - Employee Classification	in list	('PDC','CHO','EFX','ES1','ES2','ES3','ENF')
3	4	A.CONTRACT_END_DT - Contract End Date	between	:1 AND :2

GROUPING CRITERIA

Criteria statements are evaluated based on the rules of logic for the order of operations. Parentheses are used to group criteria to be evaluated first. AND Statements are evaluated before OR statements.

Order of Operations

1. Grouped statements
2. AND
3. OR

Edit Criteria Grouping

Use the edit boxes to enter parenthesis for each criteria. Use only the '(' and ')' characters.

Logical	Left Paren	Expression1	Condition Type	Expression 2	Right Paren
		A.EFFDT - Effective Date	Eff Date <=	Current Date (EffSeq = Last)	
AND		A.EMPL_STATUS - Payroll Status	in list	('A','L','P','Q')	
AND		A.EMPL_CLASS - Employee Classification	in list	('EFX','ES1','ES2','ENF','ECX')	
AND		A.NC_ANTI_APPT_LN - Contract Length	not in list	('1','2')	
AND	(A.CONTRACT_BEGIN_DT - Contract Begin Date	is null		
OR		A.CONTRACT_END_DT - Contract End Date	is null)

OK Cancel

- ✓ On the Criteria Tab select the Group Criteria button.
- ✓ Enter the Left and Right Parentheses around the statement to be grouped.
- ✓ Click OK

The above criteria will be evaluated in the following order:

1. Records with null CONTRACT_BEGIN_DT or CONTRACT_END_DT ; and
2. Records will be searched for an effective date less than or equal to the Current Date to pull back the most recent record ; and
3. Filter those records for those with Active Employee Status and Employee Class is EPA (EFX, ES1, ES2, ENF, ECX) ; and
4. The Anticipated Appointment Length does not include At-Will or Tenured. (1,2)

DISTINCT CRITERIA

Sometimes data matches more than one criteria in a query, this causes duplicate rows in your data. To prevent duplicates use the distinct check box under properties.

The screenshot shows a 'Criteria' dialog box with a table of criteria and a 'Properties' button circled in red.

Logical	Expression1	Condition Type	Expression 2
	A.EFFDT - Effective Date	Eff Date <=	Current Date (EffSeq = Last)
AND	A.EMPL_STATUS - Payroll Status	in list	('A','L','P','Q')
AND	A.EMPL_CLASS - Employee Classification	in list	('EFX','ES1','ES2','ENF','ECX')
AND	A.NC_ANTI_APPT_LN - Contract Length	not in list	('1','2')
AND	(A.CONTRACT_BEGIN_DT - Contract Begin Date	is null	
OR	A.CONTRACT_END_DT - Contract End Date	is null)

Buttons: Save, Save As, New Query, Preferences, **Properties**, Publish as Feed, New Union

The screenshot shows the 'Query Properties' dialog box with the 'Distinct' checkbox checked and circled in red.

Query Properties

*Query:

Description:

Folder: R2W MONTHLY

*Query Type: User

*Owner: Public

Distinct Security Join Optimizer

Query Definition:

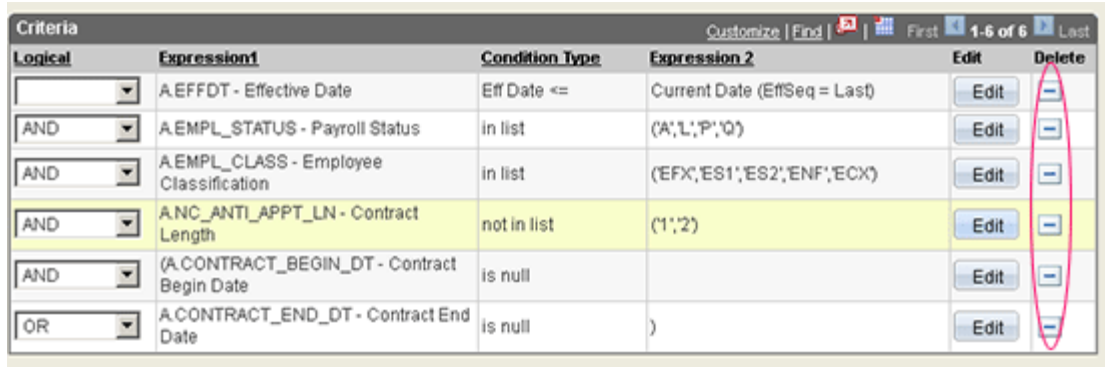
Last Updated Date/Time: 10/17/2012 4:12:38PM

Last Update User ID: RANAYLOR

Buttons: OK, Cancel

DELETING CRITERIA

From the Criteria Tab select the Delete icon for the criteria statement you want to remove. Deleting the criteria does not remove any fields or records from the query.



Logical	Expression1	Condition Type	Expression 2	Edit	Delete
	A.EFFDT - Effective Date	Eff Date <=	Current Date (EffSeq = Last)	Edit	-
AND	A.EMPL_STATUS - Payroll Status	in list	(A,L,P,Q)	Edit	-
AND	A.EMPL_CLASS - Employee Classification	in list	(EFX,ES1,ES2,ENF,ECX)	Edit	-
AND	A.NC_ANTI_APPT_LN - Contract Length	not in list	(1,2)	Edit	-
AND	(A.CONTRACT_BEGIN_DT - Contract Begin Date	is null		Edit	-
OR	A.CONTRACT_END_DT - Contract End Date	is null)	Edit	-

Running Your Queries

Within Query Manager there are two ways to run your queries; from the main Query Search page you can run your queries to HTML, Excel, and XML.

While creating/editing your query you can click the Run tab to preview your results. Satisfied with the preview you can download the results to Excel or XML.



Run Tab Results Download

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"/>	CLASS_ACTIVE_EMPLOYEE_BASIC	List of Active employees	Private	CLASS	Edit	HTML	Excel	XML	Schedule
<input type="checkbox"/>	CLASS_ACT3	List of Active employees	Public	CLASS	Edit	HTML	Excel	XML	Schedule
<input type="checkbox"/>	CLASS_ACT4	List of Active employees	Public	CLASS	Edit	HTML	Excel	XML	Schedule
<input type="checkbox"/>	CLASS_ACTIVE_EMPLOYEE	List of Active employees	Public	CLASS	Edit	HTML	Excel	XML	Schedule

Find an Existing Query | Create New Query

Query Search Results Download

USING PROMPTS

Prompts are used to narrow query results. They allow you to enter query variables before a query will run. After the variables are entered you are able to view results. Date prompts have specific formats such Century and offer a calendar to enter the date into the prompt. Table prompts offer a lookup table to enter criteria.

CREATING PROMPTS

To create a prompt, access the Prompt page and click on **Add Prompt** button.

Query Name: CLASS_ACT4 Description: List of Active employees

Add Prompt

Prompt	Edit	Delete
:1 = EMPL_CLASS - Select Employee Class	Edit	-

Save Save As New Query Preferences Properties Publish as Feed New Union

In **Edit Prompt Properties**, you can select the **Type**, **Format**, and Customize the **Heading Text**.

Edit Prompt Properties

Field Name:

***Type:**

***Format:**

Length:

Decimals:

***Edit Type:**

***Heading Type:**

Heading Text:

***Unique Prompt Name:**

Prompt Table:

The final step is attaching the prompt to the criteria you want to enter when you run the query.

- ✓ Add/Edit the Criteria you want to attach the prompts
- ✓ Set the appropriate Condition Type
- ✓ Change the Expression 2 Type to Expression (For 2 prompt date fields use Expr-Expr)
- ✓ Use the Add Prompt link

Edit Criteria Properties

Choose Expression 1 Type

Field
 Expression

Expression 1

Choose Record and Field

Record Alias.FieldName:

***Condition Type:**

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 Expression

Expression:

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

Define Expression 2

Expression 2:

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

Add Criteria Group Criteria

Criteria					
				Customize	Find
				First	1 of 1 Last
Logical	Expression1	Condition Type	Expression 2	Edit	Delete
	B.EFFDT - Effective Date	between	:1 AND :2	Edit	-



When creating date prompts remember that the De-normalized tables go back four years of the current system date. If you need to run your query further back than four years you will need to run your query from a Base table.

Employee Class Codes (As of 10/01/2012)

Look Up

Search Results



View 100 First 1-17 of 17 Last

Employee Classification	Description	Short Description
CHO	CVM House Officers	CVM Hse Of
CSX	County Operational Supp	COSS
ECX	EPA County Extension	EPA County
EFX	EPA Faculty	EPA Facilty
ENF	EPA Non-Faculty	EPA NonFac
ES1	EPA SAAO Tier 1	SAAO Tier1
ES2	EPA SAAO Tier 2	SAAO Tier2
GRD	Graduate Assistants	GRD
PDC	Post Doc	Post Doc
SLE	Law Enforcement Officers	LEORS
SPA	SPA Employee	SPA
STW	Student Workers	Students
TME	Temp - Exempt from FLSA (TME)	Temp Exemp
TMS	Temp- Subject to FLSA	Temp Subj
UFC	Unpaid Faculty	Unpaid Fac
UNF	Unpaid Non-Faculty	Unpaid non
ZNP	Access Only - No Pay	Access onl

Employee Class Codes (Prior to 10/01/2012)

Empl Classification	Description
1	SPA Employee
2	EPA Employee
3	County EPA Employee
4	Post Doc Employee (4)
5	Law Enforcement
6	Graduate Assistant (6)
7	Grad Fellowship
8	County Operation Support Stf
H	Housing - Resident
N	No Pay Employee
S	Temporary Employee
Z	No Pay Employee (Z)

Employee Status

Values			
Customize Find View All   First 1-12 of 12 Last			
Field Value	Translate Long Name	Translate Short Name	Select Constant
A	Active	Active	Select Constant
D	Deceased	Deceased	Select Constant
L	Leave of Absence	Leave	Select Constant
P	Leave With Pay	Leave W/Py	Select Constant
Q	Retired With Pay	Ret w/Pay	Select Constant
R	Retired	Retired	Select Constant
S	Suspended	Suspended	Select Constant
T	Terminated	Terminated	Select Constant
U	Terminated With Pay	Term w/Pay	Select Constant
V	Terminated Pension Pay Out	Term w/Pen	Select Constant
W	Short Work Break	Work Break	Select Constant
X	Retired-Pension Administration	Ret - PAdm	Select Constant

Conditional Operators

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

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

Query Name:
Description:
Uses Record Name:
Uses Field Name:
Access Group Name:
Folder Name:
Owner:

When using the IN or BETWEEN operator, separate values without quotes. i.e. JOB,EMPLOYEE,

<	Results are less than the criteria entered.
<=	Results are less than or equal to the criteria entered.
=	Results are exactly equal to the criteria entered.
>	Results are greater than the criteria entered.
>=	Results are greater than or equal to the criteria entered.
Begins with	Results begin with the criteria entered.
Between	Results fall within and include the range entered. Separate range with commas.
Contains	Results contain some form of the criteria entered. Entering beg would return Beginning, Beg., etc.
In	Results presented have one or more of the criteria entered. Separate criteria with commas. Entering Ledger and Bank would produce results containing either ledger or bank.
Not =	Results do not include the criteria entered. Entering Ledger will prevent Ledger from returning.