Northwestern | myHR

myHR Administration

Query Development

Revised 5/19/2020

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Section 1:
myHR Data Structure

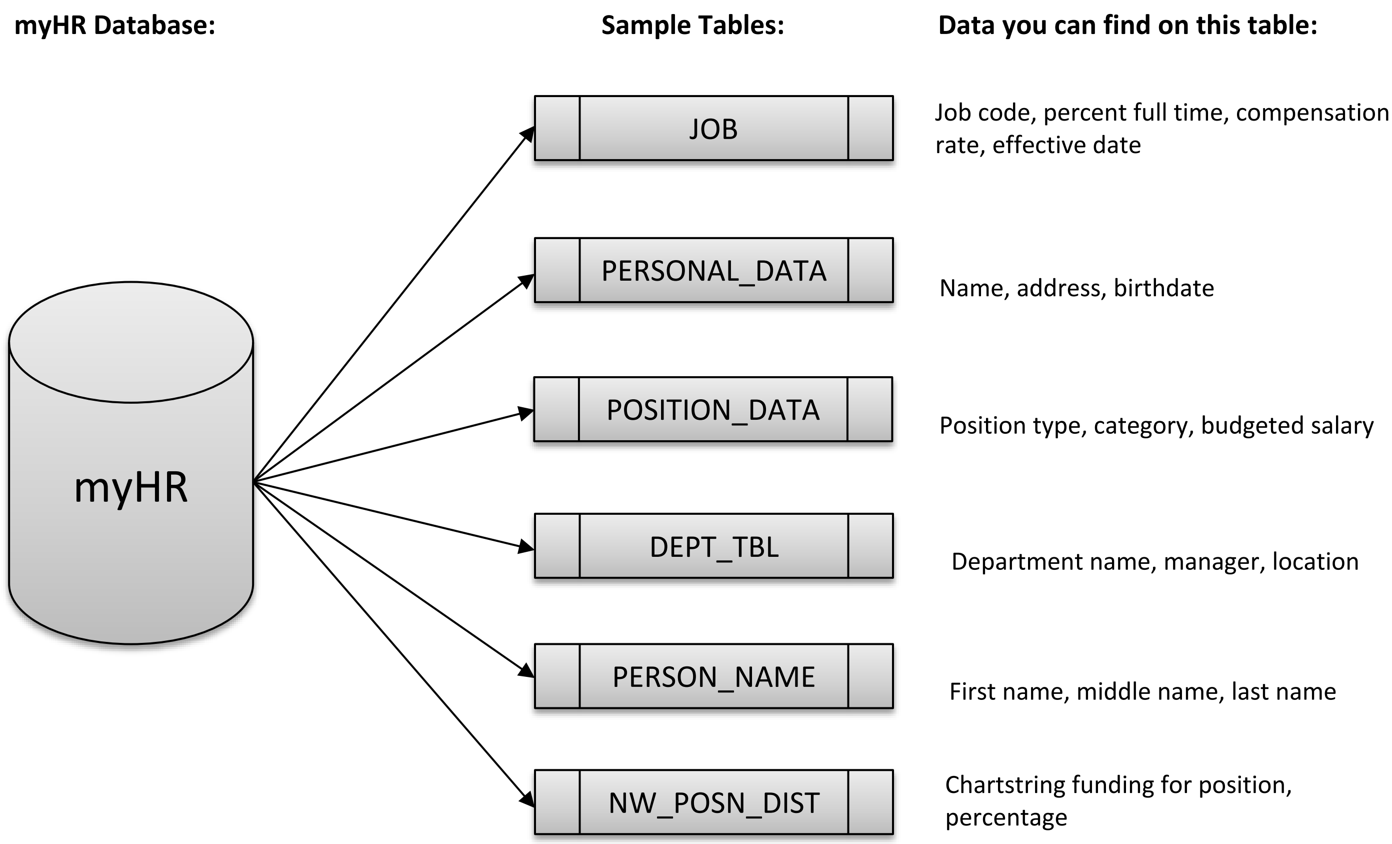
Data Tables

myHR is a large DATABASE that contains a variety of information about your employees, including their appointment data, payroll earnings, and contact information.

The myHR system is composed of smaller TABLES or RECORDS, each containing a very specific type of information.

Table *or* **Record:**	*One building block of the myHR database that contains a specific type of information. Similar to an Excel spreadsheet, a Table may contain many columns of information. When looking to query data, the first step is to determine which Table(s) your information resides on.*

For example, the following tables may be used to locate detailed information about your data in myHR:



Using myHR Admin Pages as a Guide

myHR tables often are equivalent to pages that you can view directly in myHR Administration. When this is true, knowing the information and detail on the myHR page will help you understand myHR data on the query table: if you see it on the page, most likely you can query it from that table.

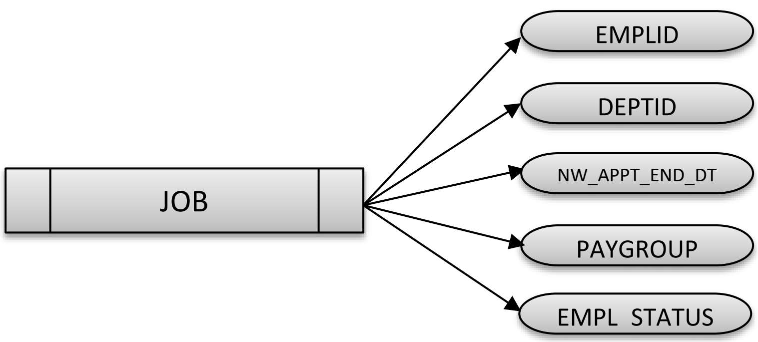
For example, Job Data page corresponds to the JOB table, Position Data page corresponds to POSITION_DATA, and Position Funding page corresponds to NW_POSN_DIST.

DATA FIELDS

Each table contains several FIELDS, or columns in the virtual "spreadsheet" of information.

Field: *One set of data, or column, on a table that contains the information you are looking for (e.g. Name, Start Date, Empl ID, Department, etc.). When querying a table, you must decide which fields to include in your final report. What information do you ultimately want to see?*

Table: **Sample Fields:** **What does that field mean?**



Employee ID number

Department ID number (including last two "node" digits)

Planned end date of the appointment

Pay group: MON for monthly staff, BIR for regular biweekly, MOF for faculty, etc.

Employment status: Active, Leave of Absence, Terminated, etc.

When looking for fields to add into your query, consider:

- The names of most fields will reflect the actual data, but may be abbreviated.
- Some fields will begin with the letters "NW_."
- Many fields are not used; if it doesn't make sense, chances are you do not need to consider it.

FILTERING DATA WITH CRITERIA

By default, queries will return all information to which you have myHR access. Because of the immense amount of data available, it is important to *filter* your results by adding multiple criteria.

Criteria: *Using myHR codes, numbers, dates, and other data to filter your query results, limiting the report to only the specific set of data you want to see. Used to reduce the number of rows in your report.*

Criteria is similar to filtering in Excel: think about which "columns" of data you would like to match to a specific value. The best criteria are usually *codes* or *numbers* in myHR; think about codes that appear on a myHR Admin page or that you see on Position/Appointment Forms or payroll/HR reports.

Adding Criteria to a Query

Almost anything in myHR can be used to add a filter, or criteria, into your query.

- You may combine more than one criterion to get very specific results.
- myHR data "codes" and numbers are the easiest criteria to use.
- Criteria may be used to *include* certain results ("equal to") or *exclude* data ("not equal to").
- Often there may be more than one way to achieve the same results. When there are multiple options, think about which method might cause less strain on the system (e.g. which option would be easier for *you* to figure out).

Causing Problems with Criteria

Although criteria will make your query vastly more useful, **it may also lead to incorrect data**. Consider very carefully how your data will be *included* or *excluded*; think through the criteria first. When adding multiple criteria, add one at a time and test your results for validity before adding the next one.

PLANNING YOUR QUERY

Before beginning to create your query in the system, it is important to know exactly what data you need. What is the purpose of your query? Where are you going to go to find that information? How are you going to filter your results?

1. **DESCRIBE** your query in as much detail as possible. Focus on the goal of the report: what are you ultimately after?
2. Determine which **TABLE(S)** or **RECORD(S)** you need to use to find that information.
3. Select the **FIELDS** that you would like to see as columns in your report.
4. Add **CRITERIA** to limit your results: which groups of results do you want to include or exclude?

SAVING AND RUNNING YOUR QUERY

myHR Reporting Database

All queries MUST be written and run in the myHR Reporting database; queries saved in Production endanger the integrity of the system and all real-time transactions that occur in myHR Admin, Self Service, and eRecruit.

Queries created in the Production database will be deleted regularly and without notice.

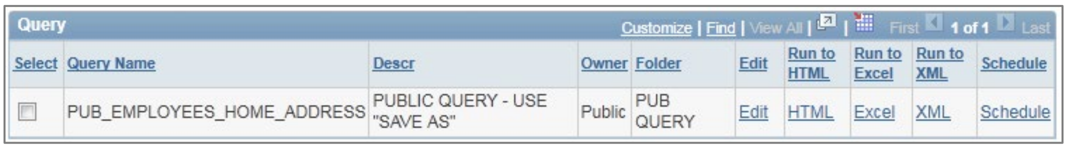
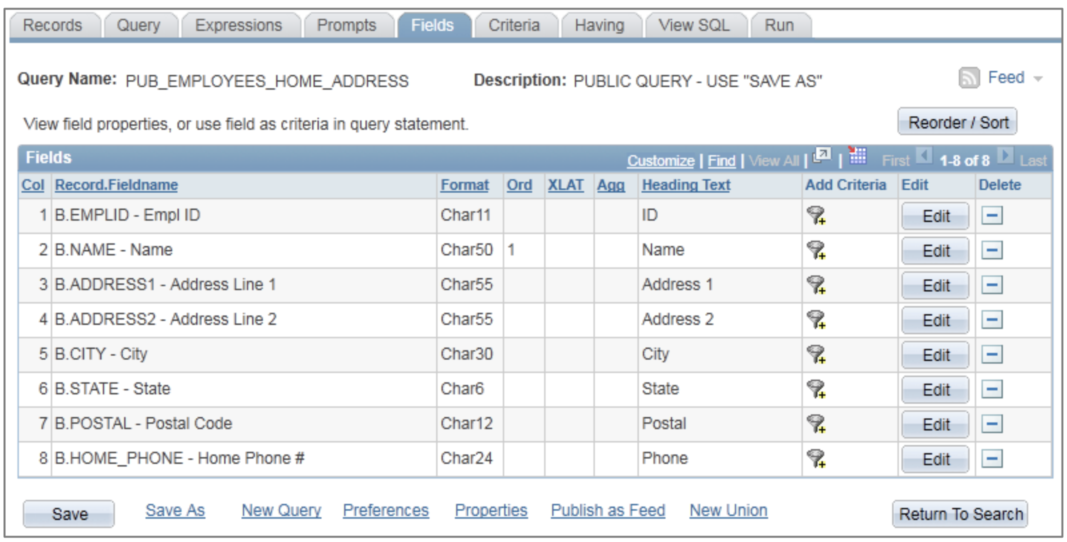
Section 2:
Modifying an Existing Public Query

Resaving a Public Query

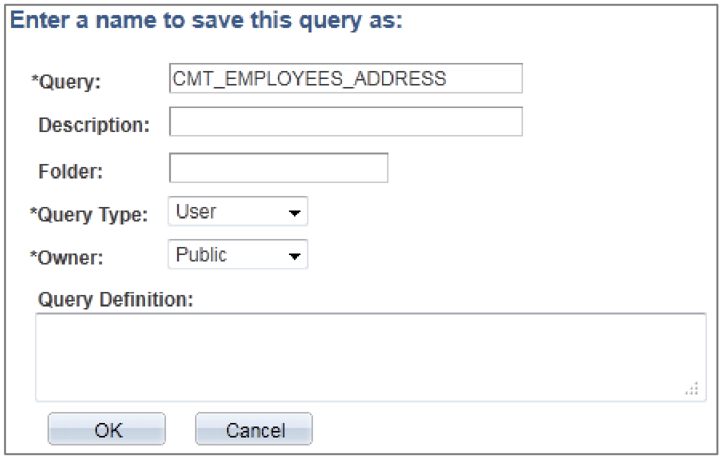
Overview

Prior to modifying any public query for your own use, it is important to first save a copy of the query using your own initials. This ensures that the main public queries are not changed or modified and are available in their original state to all myHR Query users.

Resaving the Query

	Procedure
1.	Search for the query you would like to modify and select the "Edit" link: 
2.	Choose the "Save As" link at the bottom left *before making any changes*: 

3. Enter a new name for the query in the **Query** box, using the myHR naming conventions. Start the query name with your initials and an underscore. Note that spaces are not allowed; use underscores instead:



4. You may also enter a **Description** for the query. If you would like to save it into a customized folder, enter the **Folder** name.

5. Set **Owner** to either "Public" or "Private." If you will be the only one editing and running this version of the query, choose "Private."

   Note: **Query Type** should always be set to "User."

6. Click .

MODIFYING THE FIELDS OF A QUERY

Overview

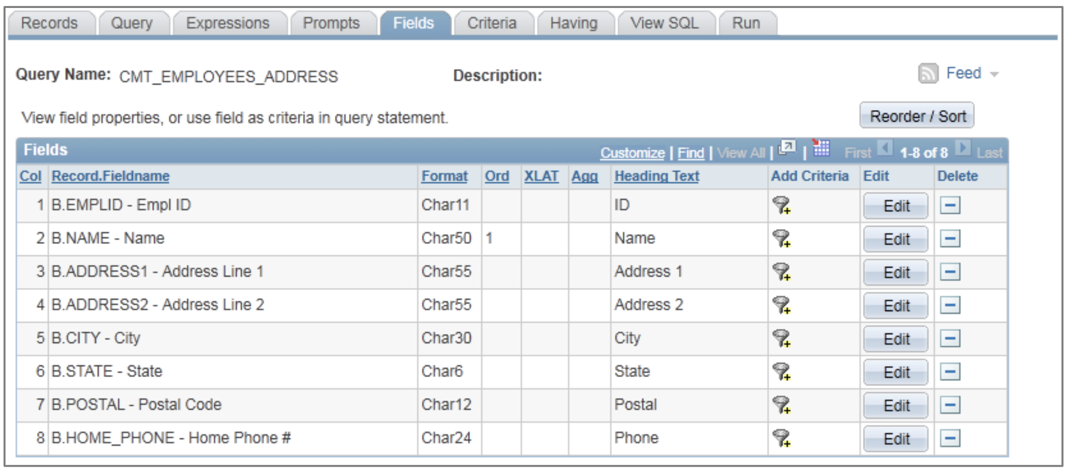
The "Fields" tab shows which fields will be displayed in the final output report. Users have the ability to customize how the fields will appear. Below are examples of changes you may wish to make to the way fields are displayed in your report.

Sorting the Output Results

Results are sorted based on particular fields, and the sort order can be customized to suit your needs. In this example, we will sort employee addresses by city.

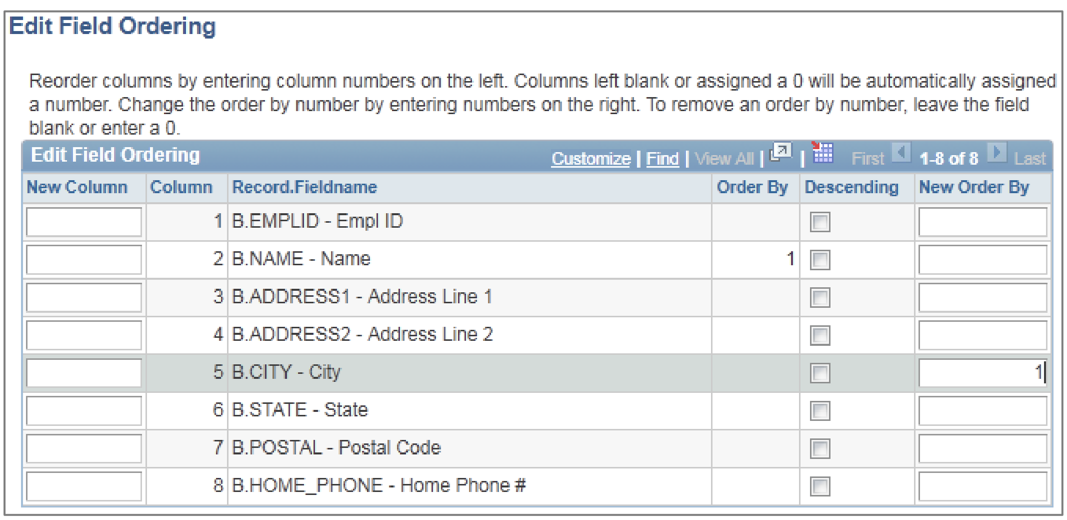
Procedure

1. Make sure you are in the "Fields" tab of the query and click the Reorder / Sort button:



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	1			Name		Edit	
3	B.ADDRESS1 - Address Line 1	Char55				Address 1		Edit	
4	B.ADDRESS2 - Address Line 2	Char55				Address 2		Edit	
5	B.CITY - City	Char30				City		Edit	
6	B.STATE - State	Char6				State		Edit	
7	B.POSTAL - Postal Code	Char12				Postal		Edit	
8	B.HOME_PHONE - Home Phone #	Char24				Phone		Edit	

2. In the CITY row, type "1" into the **New Order By** box. This will ensure the results are ordered by city first.



New Column	Column	Record.Fieldname	Order By	Descending	New Order By
	1	B.EMPLID - Empl ID			
	2	B.NAME - Name	1		
	3	B.ADDRESS1 - Address Line 1			
	4	B.ADDRESS2 - Address Line 2			
	5	B.CITY - City			1
	6	B.STATE - State			
	7	B.POSTAL - Postal Code			
	8	B.HOME_PHONE - Home Phone #			

You can order by additional fields by entering the appropriate numbers in the **New Order By** column. For example, if we want employees sorted primarily by city, but secondarily by name, we would enter "2" for the NAME row.

If you would like to sort in descending (Z-A) order, check the **Descending** box. If not checked, results will be sorted ascending (A-Z).

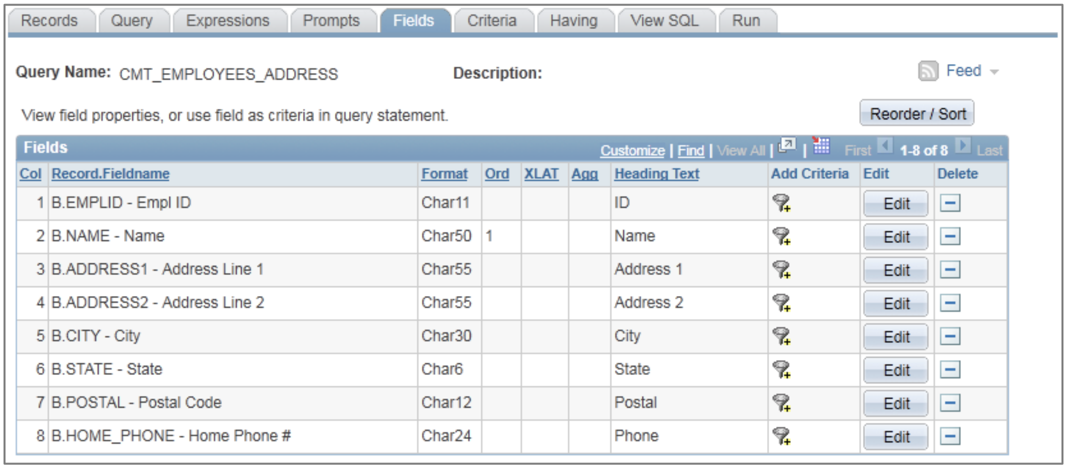
3. Click OK.

Change the Order of Columns

Columns can be easily reordered before the query is run. In this example, we want to move the employee's phone number so that it displays *before* their address.

Procedure

1. Make sure you are in the "Fields" tab of the query and click the Reorder / Sort button:


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

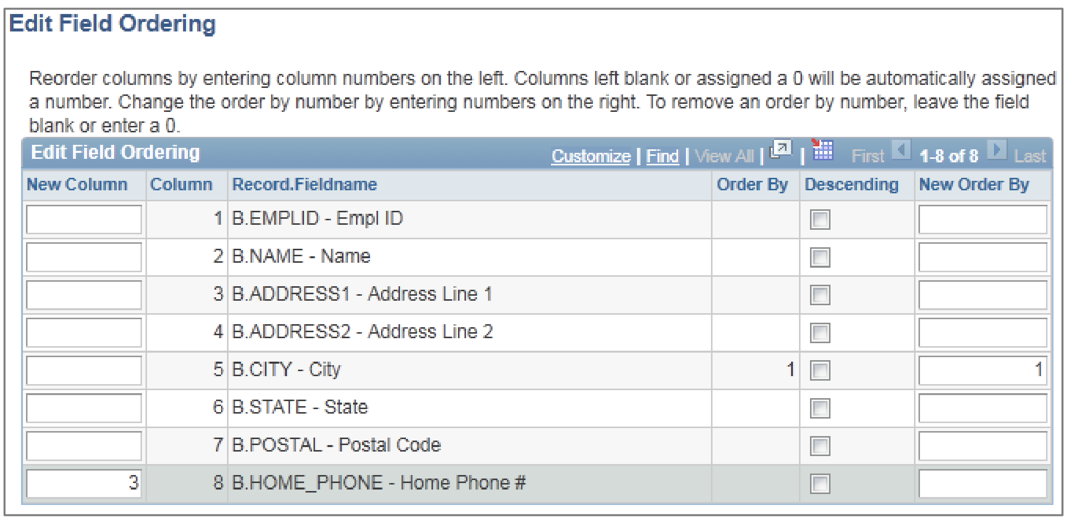
Query Name: CMT_EMPLOYEES_ADDRESS Description: Feed

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

Fields Customize | Find | View All | First 1-8 of 8 Last

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	1			Name		Edit	
3	B.ADDRESS1 - Address Line 1	Char55				Address 1		Edit	
4	B.ADDRESS2 - Address Line 2	Char55				Address 2		Edit	
5	B.CITY - City	Char30				City		Edit	
6	B.STATE - State	Char6				State		Edit	
7	B.POSTAL - Postal Code	Char12				Postal		Edit	
8	B.HOME_PHONE - Home Phone #	Char24				Phone		Edit	

2. In the HOME_PHONE row, type "3" into the **New Column** box. This will move the phone number to position 3, right after NAME. Everything after that will automatically move down; there is no need to enter numbers for each row.


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 1-8 of 8 Last

New Column	Column	Record.Fieldname	Order By	Descending	New Order By
	1	B.EMPLID - Empl ID			
	2	B.NAME - Name			
	3	B.ADDRESS1 - Address Line 1			
	4	B.ADDRESS2 - Address Line 2			
	5	B.CITY - City	1		1
	6	B.STATE - State			
	7	B.POSTAL - Postal Code			
3	8	B.HOME_PHONE - Home Phone #			

You can reorder as many columns as you like at the same time.

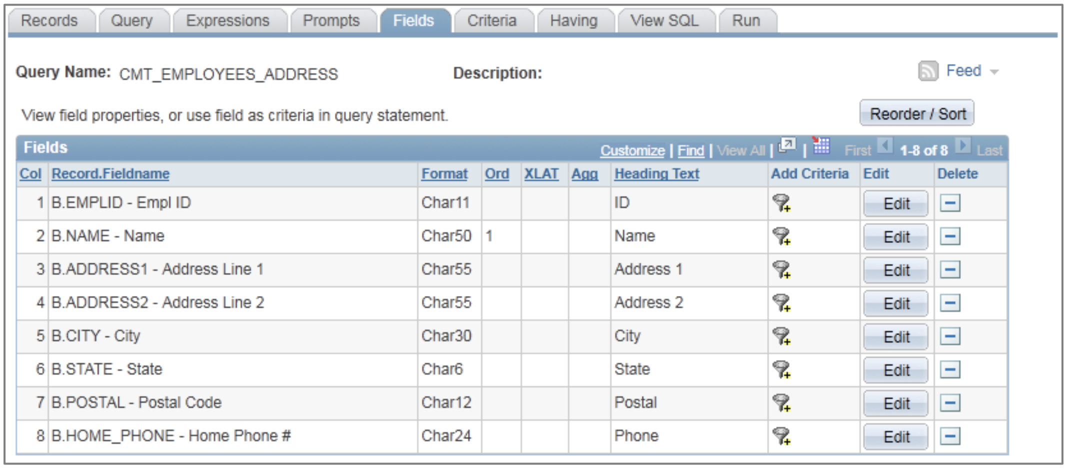
3. Click OK.

Customize Column Heading Text

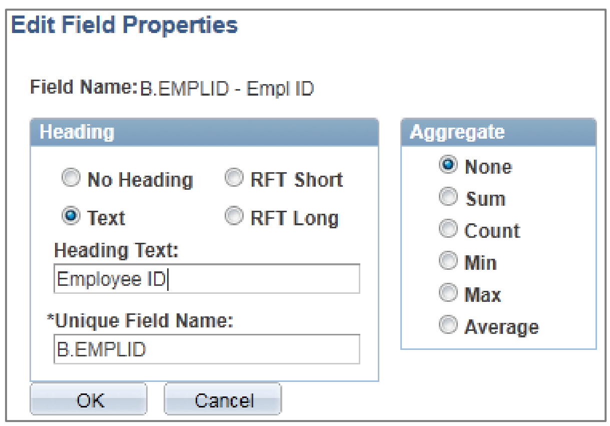
Column headers default to the field name within myHR; however, headers can be modified before running the query. In this example, we will change the Heading Text for EMPLID so that it reads "Employee ID."

Procedure

1. Make sure you are in the "Fields" tab of the query. In the EMPLID row, click the Edit button:



2. In the Heading box, select the radio button for **Text** and type "Employee ID" into the **Heading Text** box.



Do not modify the **Unique Field Name** box, as it could cause errors in your query.

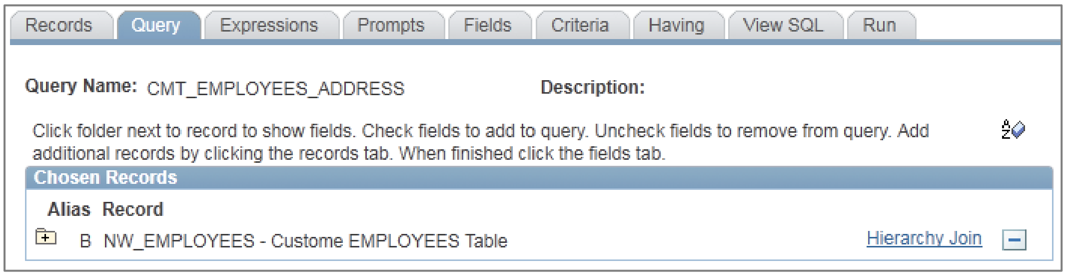
3. Click OK .

Add a Field to the Output Results

You can add additional fields to the output results if you require a piece of data that wasn't included in the original public query. In this instance, we will add the employee's home address country.

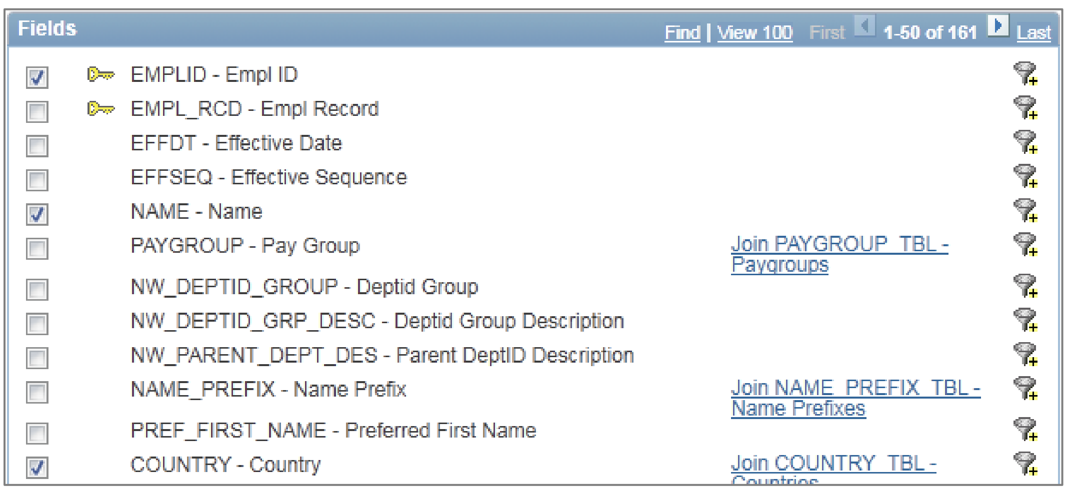
Procedure

1. Click the "Query" tab at the top of the screen. This tab will display all records (tables) that are being used in the query:



2. Click the icon to the left of the table that contains the field you want to add. A list of that table's fields will display, and the ones already being included are marked with a check.

   Locate the COUNTRY field and check it:



   Remember, you may have to use the scroll arrows to see all of the fields available.

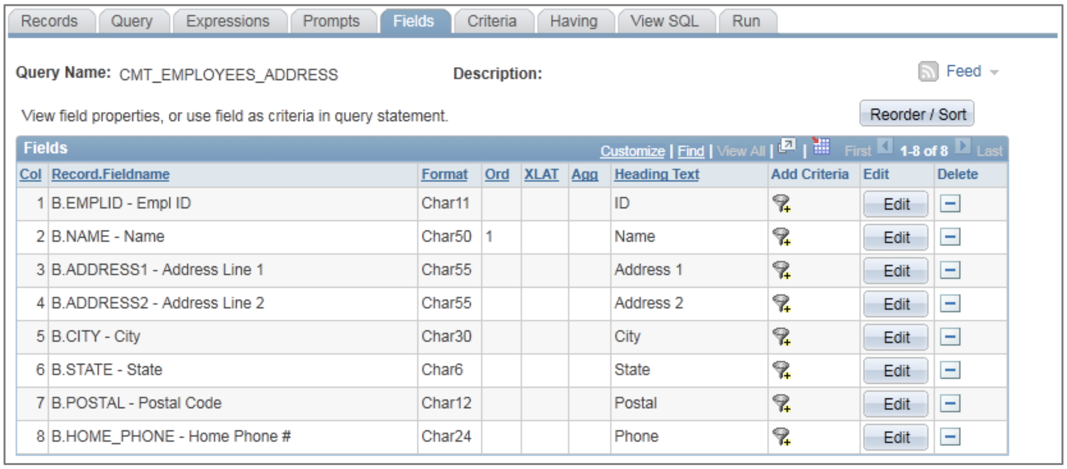
3. As soon as the field is checked, it is automatically added to the output results.

Remove a Field From the Output Results

You can remove any field from the output results if it is not required for your reporting purposes. In this instance, we will remove the employee's phone number.

Procedure

1. Make sure you are in the "Fields" tab of the query.
2. Click the button to the right of the HOME_PHONE row:



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	1			Name		Edit	
3	B.ADDRESS1 - Address Line 1	Char55				Address 1		Edit	
4	B.ADDRESS2 - Address Line 2	Char55				Address 2		Edit	
5	B.CITY - City	Char30				City		Edit	
6	B.STATE - State	Char6				State		Edit	
7	B.POSTAL - Postal Code	Char12				Postal		Edit	
8	B.HOME_PHONE - Home Phone #	Char24				Phone		Edit	

3. The field will be immediately removed from your results and will disappear from the Fields screen.

MODIFYING A CRITERION OF AN EXISTING QUERY

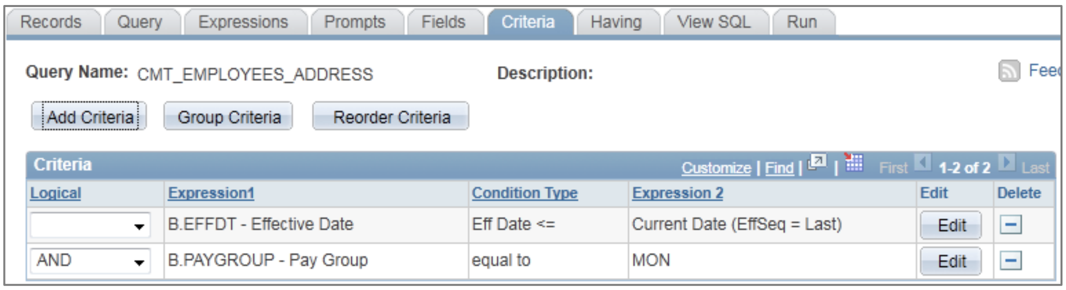
Overview

Criteria set on each query tell myHR which specific information to include or exclude from your report. When entering or modifying a criterion, it is important to know how the data is stored in the system. Your criteria must exactly match the information in myHR for them to work correctly. All myHR fields are case-sensitive, so pay particular attention to how myHR stores the values that you are using for Criteria.

How to Modify a Criterion

Procedure

1. Click on the "Criteria" tab of the query; the current criteria will be displayed for you:



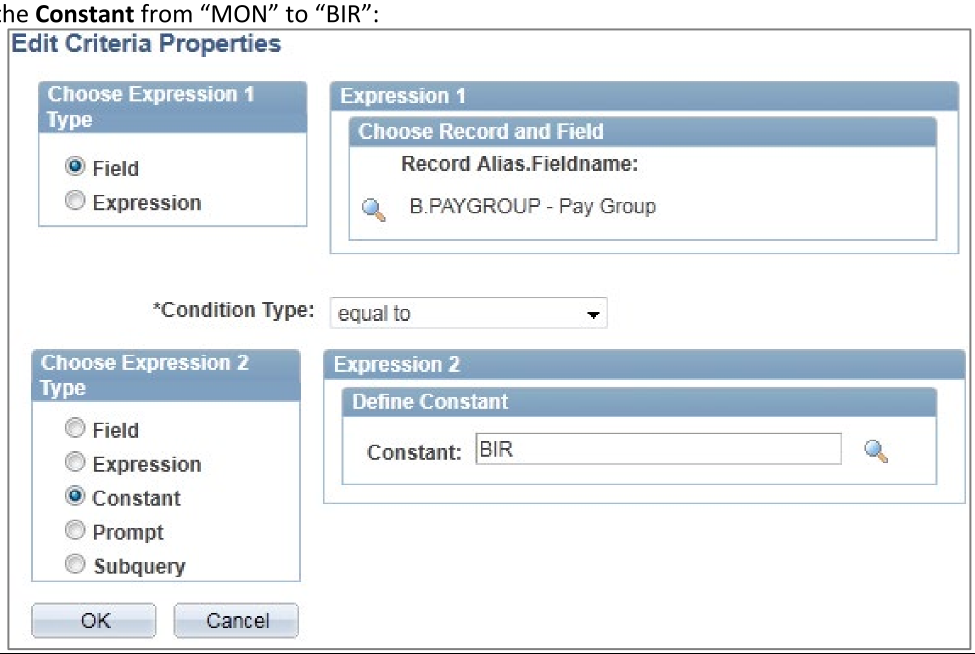
Any criterion involving an "Effective Date" is usually added automatically by myHR and should be left alone. This is placed to ensure that your query receives *current* data, and not *future* or *past* data.

The second criterion above tells myHR to show us only the employees who are paid monthly, i.e. those with a Pay Group equal to "MON."

2. We want to modify the second criterion above to instead show us only the biweekly regular employees, or those employees with a Pay Group of "BIR."

To do so, first click the Edit button next to the second criterion.

3. Change the **Constant** from "MON" to "BIR":



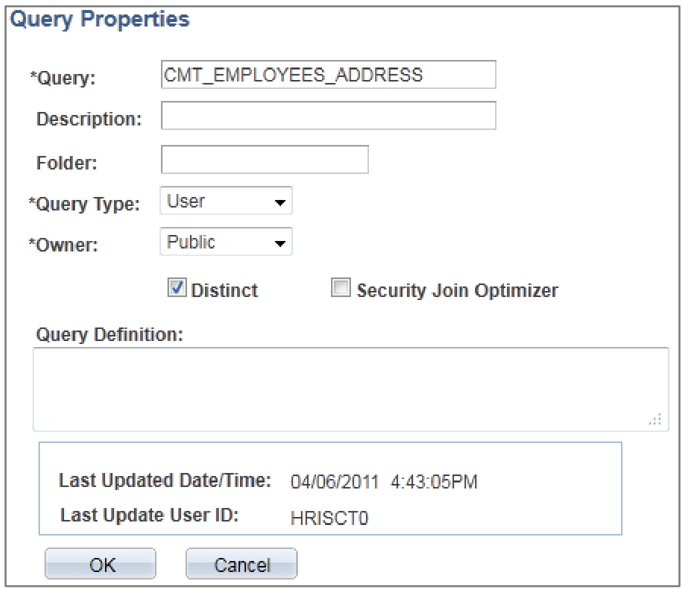
4. Click OK to save the changes.

SAVING AND RUNNING THE MODIFIED QUERY

Overview

Once you make changes to the query, be sure to save it again to retain your modifications. *Be sure that you've already saved the query using your initials first; otherwise you will overwrite the Public query for all other myHR users.*

Saving the Query

Procedure	
1.	Click on the "Properties" link at the bottom of any tab of your query (except the Run tab).
2.	Ensure that the **Query** name begins with your initials and *not* "PUB." You can change the name if you like. You can check the **Distinct** checkbox to remove duplicates from the report output. 
3.	Click  .
4.	Click the "Run" tab to see the results of your updated query.

Section 3:
Maintaining Queries

ADDING A QUERY TO "MY FAVORITES"

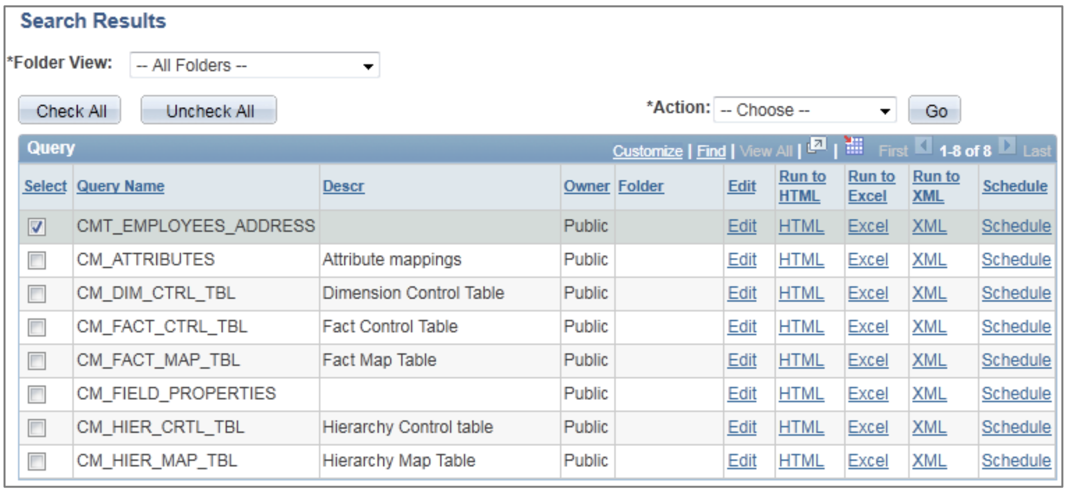
Overview

Public or private queries that are used on a regular basis can be added to a "Favorites" folder. Queries marked as a "Favorite" will always appear at the bottom of the query search screen when you enter Query Manager, allowing quick access without having to use the search function.

How to Add a Favorite

Procedure

1. Search for all or part of the query name you wish to add as a favorite.
2. In the Search Results list, select the checkbox next to the queries you wish to save in the Favorites folder:



Select	Query Name	Descr	Owner	Folder	Edit	Run to HTML	Run to Excel	Run to XML	Schedule
☑	CMT_EMPLOYEES_ADDRESS		Public		Edit	HTML	Excel	XML	Schedule
☐	CM_ATTRIBUTES	Attribute mappings	Public		Edit	HTML	Excel	XML	Schedule
☐	CM_DIM_CTRL_TBL	Dimension Control Table	Public		Edit	HTML	Excel	XML	Schedule
☐	CM_FACT_CTRL_TBL	Fact Control Table	Public		Edit	HTML	Excel	XML	Schedule
☐	CM_FACT_MAP_TBL	Fact Map Table	Public		Edit	HTML	Excel	XML	Schedule
☐	CM_FIELD_PROPERTIES		Public		Edit	HTML	Excel	XML	Schedule
☐	CM_HIER_CRTL_TBL	Hierarchy Control table	Public		Edit	HTML	Excel	XML	Schedule
☐	CM_HIER_MAP_TBL	Hierarchy Map Table	Public		Edit	HTML	Excel	XML	Schedule

3. In the **Action** drop-down box, choose the "Add to Favorites" option.
4. Click Go. The query will now be added to the "My Favorite Queries" box at the bottom of the search page:

Query Name	Descr	Owner	Folder	Edit	Run to HTML	Run to Excel	Run to XML	Schedule	Remove
CMT_EMPLOYEES_ADDRESS		Public		Edit	HTML	Excel	XML	Schedule	−

To remove queries from your favorites box, click the − button. This will not delete your query; it will still be accessible by searching.

USING CUSTOM FOLDERS FOR QUERIES

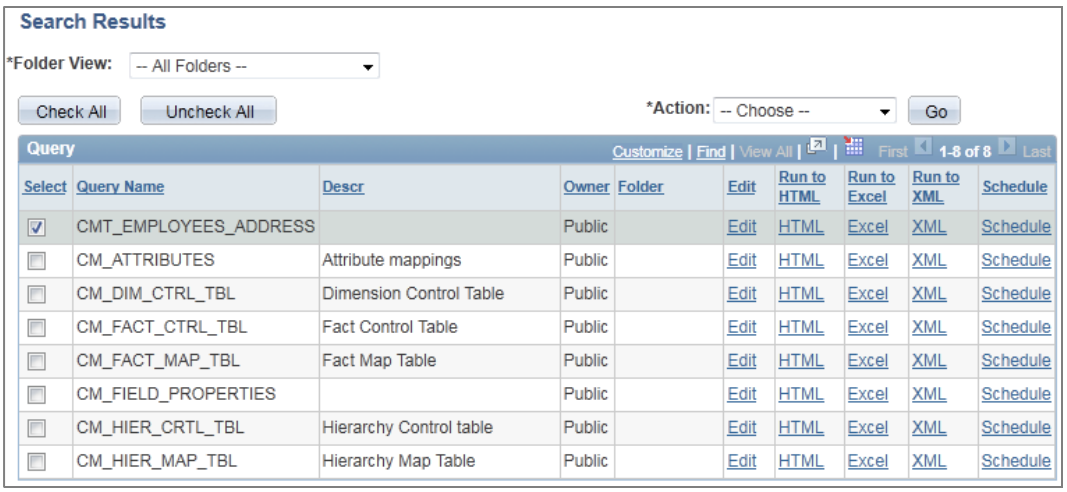
Overview

All users have the ability to create custom folders to organize and sort large numbers of queries.

Creating a Folder and Adding a Query to It

Procedure

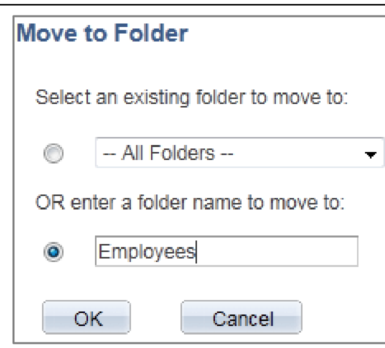
1. Search for all or part of the query name you wish to move to a folder.
2. In the Search Results list, select the checkbox next to the queries you wish to save to a custom folder:



3. In the **Action** drop-down box, choose the "Move to Folder" option.
4. Click Go.
5. If you would like to store the query in a folder you have already created, select the first radio button and choose the existing folder in the **Select an existing folder to move to** box.

   To create a new folder, choose the second radio button and type the name of the folder.

   In this case, we will create a new folder titled "Employees" for this query:



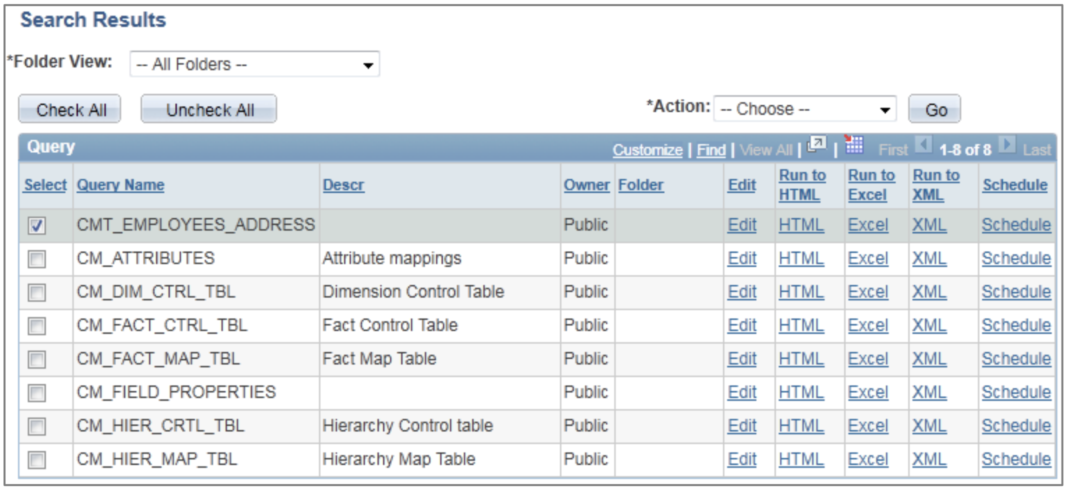
6. Click OK.

Viewing Queries in Custom Folders

Procedure

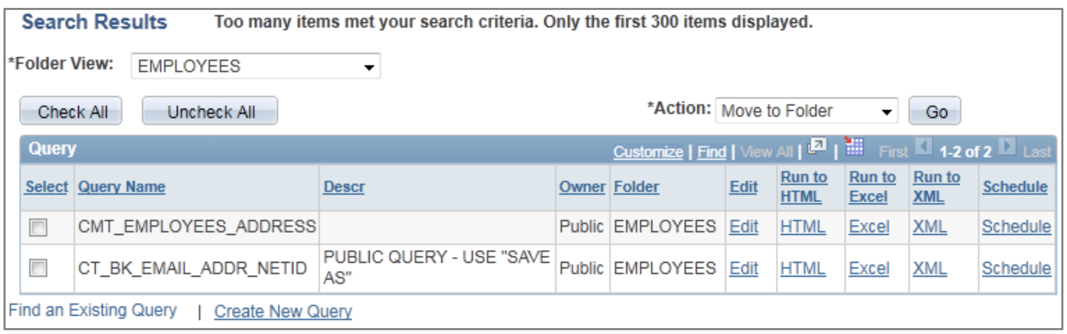
1. Search for all or part of a query name. In order to see the folders list, you must first conduct a search.

2. At the top of the Search Results list, choose the **Folder View** drop-down box and select the folder you'd like to see.


Search Results
*Folder View: -- All Folders --
Check All | Uncheck All
*Action: -- Choose -- Go
Query | Customize | Find | View All | First 1-8 of 8 Last

Select	Query Name	Descr	Owner	Folder	Edit	Run to HTML	Run to Excel	Run to XML	Schedule
☑	CMT_EMPLOYEES_ADDRESS		Public		Edit	HTML	Excel	XML	Schedule
☐	CM_ATTRIBUTES	Attribute mappings	Public		Edit	HTML	Excel	XML	Schedule
☐	CM_DIM_CTRL_TBL	Dimension Control Table	Public		Edit	HTML	Excel	XML	Schedule
☐	CM_FACT_CTRL_TBL	Fact Control Table	Public		Edit	HTML	Excel	XML	Schedule
☐	CM_FACT_MAP_TBL	Fact Map Table	Public		Edit	HTML	Excel	XML	Schedule
☐	CM_FIELD_PROPERTIES		Public		Edit	HTML	Excel	XML	Schedule
☐	CM_HIER_CRTL_TBL	Hierarchy Control table	Public		Edit	HTML	Excel	XML	Schedule
☐	CM_HIER_MAP_TBL	Hierarchy Map Table	Public		Edit	HTML	Excel	XML	Schedule

3. After selecting a folder, the page automatically refreshes and displays a list of queries in that folder:


Search Results Too many items met your search criteria. Only the first 300 items displayed.
*Folder View: EMPLOYEES
Check All | Uncheck All
*Action: Move to Folder Go
Query | Customize | Find | View All | First 1-2 of 2 Last

Select	Query Name	Descr	Owner	Folder	Edit	Run to HTML	Run to Excel	Run to XML	Schedule
☐	CMT_EMPLOYEES_ADDRESS		Public	EMPLOYEES	Edit	HTML	Excel	XML	Schedule
☐	CT_BK_EMAIL_ADDR_NETID	PUBLIC QUERY - USE "SAVE AS"	Public	EMPLOYEES	Edit	HTML	Excel	XML	Schedule

Find an Existing Query | Create New Query

RENAMING QUERIES

Overview

Users can rename their queries at any time; please note that the myHR-provided public queries (query names that begin with "PUB_") should *never* be renamed – always resave them under a different name using the "Resaving a Public Query" procedures described previously.

How to Rename Queries

Procedure

1. Search for the query or queries you would like to modify using the full or partial query name. Select the checkbox next to each query to rename (you may select one or more than one to rename at a time):

Query — Customize | Find | View All | First 1-2 of 2 Last

Select	Query Name	Descr	Owner	Folder	Edit	Run to HTML	Run to Excel	Run to XML	Schedule
☑	CMT_EMPLOYEES_ADDRESS		Public	EMPLOYEES	Edit	HTML	Excel	XML	Schedule
☑	CMT_NK_EMAIL_ADDR_NETID	PUBLIC QUERY - USE "SAVE AS"	Public	EMPLOYEES	Edit	HTML	Excel	XML	Schedule

2. In the **Action** drop-down menu, select "Rename Selected" and click the Go button.

3. For each query you selected, enter the new name in the **New Name** box. Don't forget to use the myHR naming policy by starting each name with your initials and an underscore:

Rename Queries — Customize | Find | First 1-2 of 2 Last

Query Name	Owner	New Name
CMT_EMPLOYEES_ADDRESS	Public	CMT_EMPL_MAILING_LIST
CMT_NK_EMAIL_ADDR_NETID	Public	CMT_EMPL_EMAIL_LIST

4. Click OK.

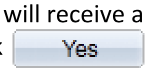
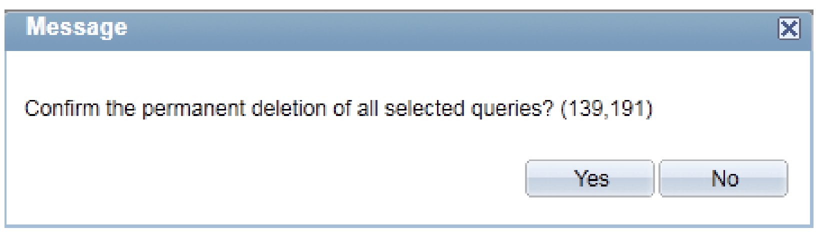
Deleting Queries

Overview

Users can delete unused queries at any time; it is always good practice to clean up your query list on a regular basis to remove the queries you no longer use.

Please remember to never delete any queries that begin with "PUB_" – only delete queries you have created or copied that begin with your own initials.

How to Delete Queries

Procedure	
1.	Search for the query or queries you would like to delete using the full or partial query name. Select the checkbox next to each query to delete (you may select one or more than one at a time): 
2.	In the **Action** drop-down menu, select "Delete Selected" and click the  button.
3.	You will receive a confirmation to delete the selected queries; if you want to delete them, click  . 
4.	Your selected queries will be permanently deleted.

COPYING A PRIVATE QUERY TO ANOTHER USER

Overview

While all Query users can search for and use any query saved as "Public," only the original author can see his or her own "Private" queries. If you wish to share a Private query with another user, you can easily copy the query to that person without needing to set it to Public.

How to Copy a Query to Another User

To copy a query to another Query user, the following conditions must be met:

- The copied query must be Private.
- The person who receives the query must have myHR Query access and must have security access to all records (tables) used in the query.

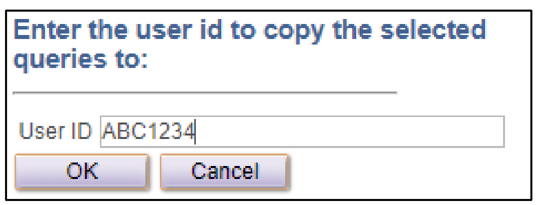
Procedure

1. Search for the query or queries you would like to copy using the full or partial query name. Select the checkbox next to each query to copy (you may select one or more than one). Ensure that the **Owner** field shows that the query is "Private:"

Select	Query Name	Descr	Owner	Folder	Edit	Run to HTML	Run to Excel	Run to XML	Schedule
☑	CMT_EMPL_PHONE_LIST		Private	EMPLOYEES	Edit	HTML	Excel	XML	Schedule
☐	CMT_EMPL_EMAIL_LIST	PUBLIC QUERY - USE "SAVE AS"	Public	EMPLOYEES	Edit	HTML	Excel	XML	Schedule
☐	CMT_EMPL_MAILING_LIST		Public	EMPLOYEES	Edit	HTML	Excel	XML	Schedule

2. In the **Action** drop-down menu, select "Copy to User" and click the Go button.

3. Enter the NetID for the person you wish to copy the query to. Use all caps.



4. Click OK . You will receive confirmation that the query has been copied and a reminder that the new user must have access to all records in the query to be able to see it.

The new user will be able to see the query by searching for the same name; the copied query will be saved as a "Private" query in their User ID. The user can follow the normal procedures to rename or edit that query as necessary.

Note: If the original user saved the query to a custom folder, it will be placed in the same folder for the new user.

Section 4:
Creating New Queries

ADDING A RECORD (TABLE)

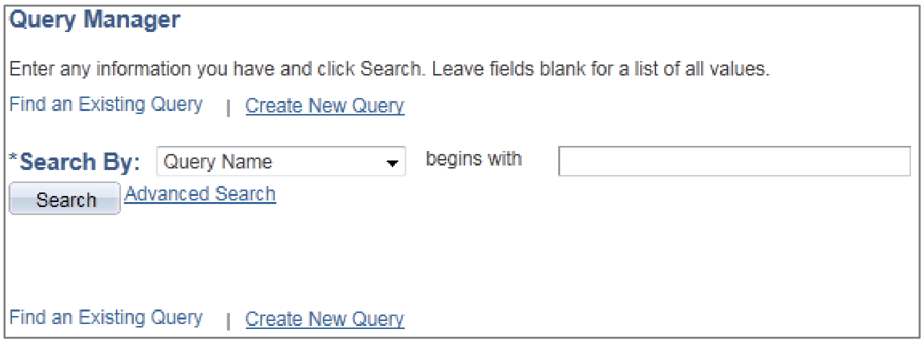
How to Add a Record

The first step in creating a new query is to determine which records in myHR contain the information you need and add them to your query.

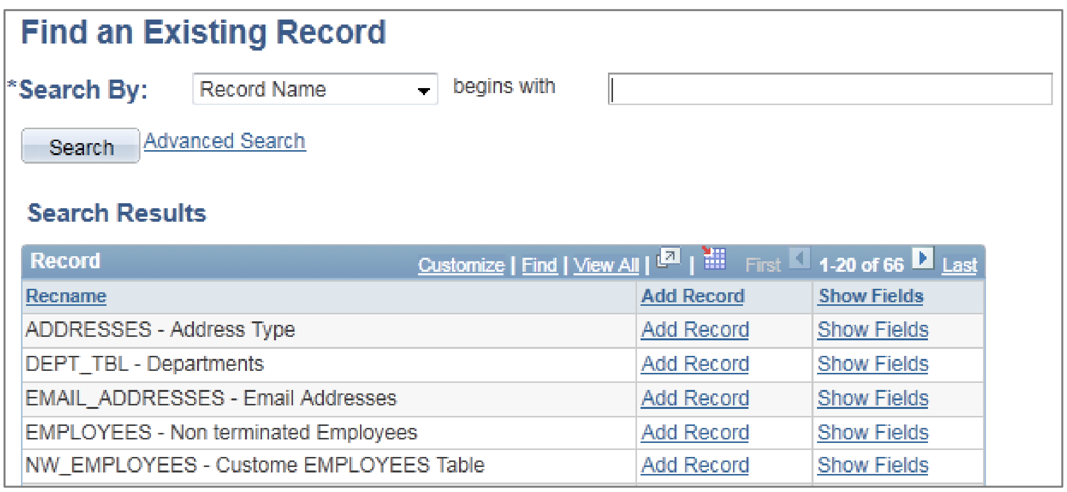
For this example, we will assume that you need to create a list of monthly-paid staff in your department. The list should include each employee's name, Empl ID, position type, pay group, position number, and the standard number of work hours.

Procedure

1. Click the "Create a New Query" link on the query search page:



2. The new query will open the "Records" tab.
To see all records you have access to use, leave the search box blank and click Search. Don't forget to use the scroll arrows to see all tables in the list:



3. Determine which record contains the information you need. In this case, we need only active employees, so we will use the table NW_EMPLOYEES.

Note: NW_EMPLOYEES is a common table used when looking for active employee information. It does not include terminated employees.

4. Click the "Show Field" link next to NW_EMPLOYEES to see which fields are available in that record:

Fieldname	Customize | Find | First 1-161 of 161 Last
Key	Description
Y	EMPLID - Empl ID
Y	EMPL_RCD - Empl Record
	EFFDT - Effective Date
	EFFSEQ - Effective Sequence
	NAME - Name
	PAYGROUP - Pay Group

A full list will pop up, and we can see that NW_EMPLOYEES includes everything we need: NAME, EMPLID, PAYGROUP, POSITION_NBR (Position Number), NW_POSN_TYPE (Position Type), and STD_HOURS (Standard Hours). Note the full list is not shown above for space reasons.

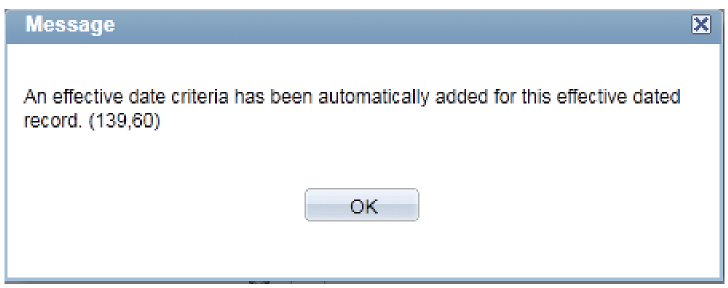
4. Click Return at the bottom of the list to exit the field view and return to the query.

Note: It is important to always use the navigation buttons within myHR, and <u>*not*</u> *your browser's Back and Forward buttons.*

5. Click the "Add Record" link next to NW_EMPLOYEES to add the record to your query.

Note: If you know the record you need to use, you can search for the record by name. If you're unsure which record contains the information you're looking for, change the ***Search By*** *drop-down box to "Contains Field Name" and search by field.*

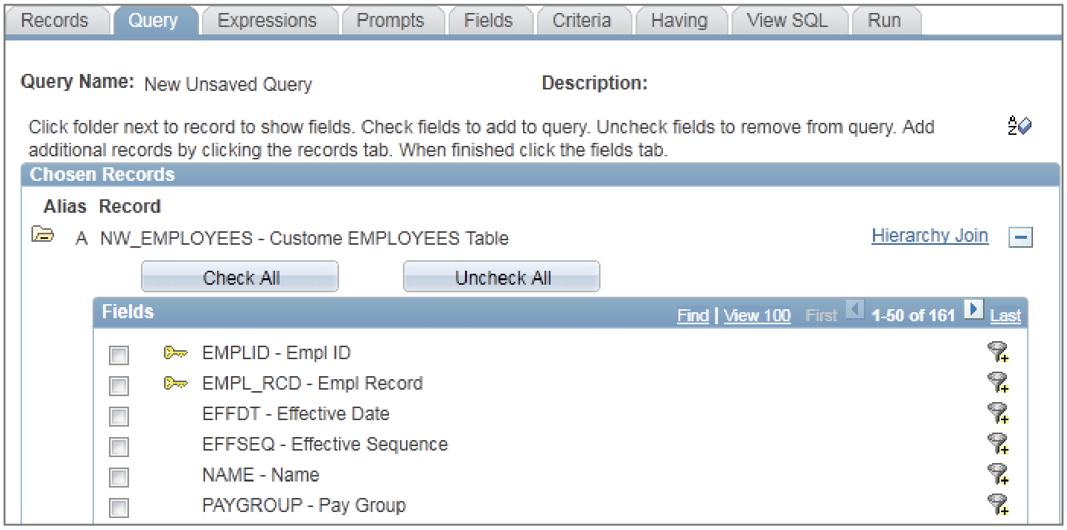
6. The following notice concerning an Effective Date Criteria will be displayed:



Many tables in myHR are Effective Dated, which maintains historical and future information. When you add one of these tables to your query, myHR will automatically add an entry to the Criteria tab that will ensure you are receiving the most current (but not future) information.

Click OK to acknowledge the message.

7. After clicking OK, the record will be added to your query and the "Query" tab will automatically open, allowing you to see the fields of the table you just added:



SELECTING FIELDS

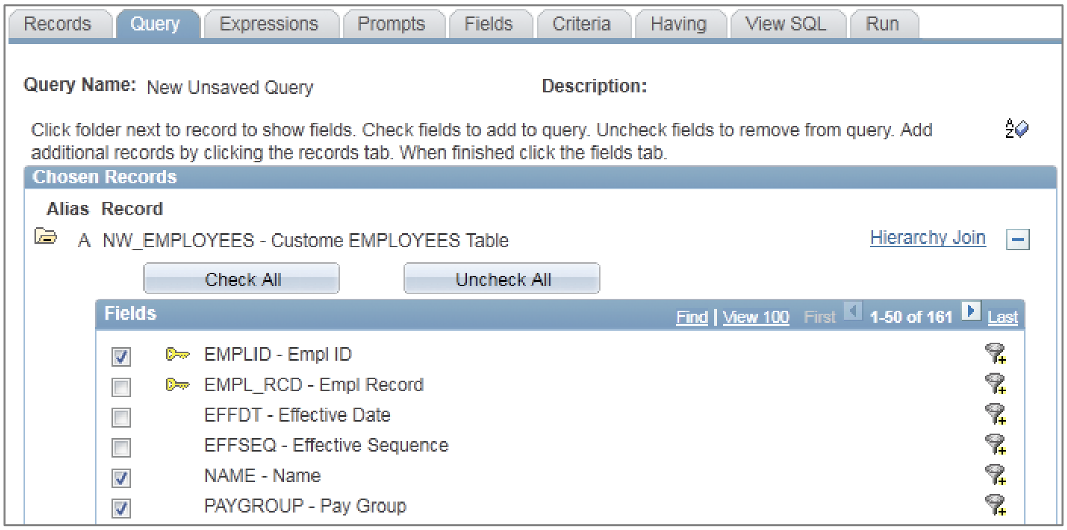
How to Select Fields

After adding one or more records to your query, you must next select the fields that you would like to display in the results. Every field is a separate piece of information contained in the record. In our running example, Name, Empl ID, Position Type, Pay Group, Position Number, and Standard Hours are all examples of fields.

Procedure

1. Ensure you are in the "Query" tab of the query editor.

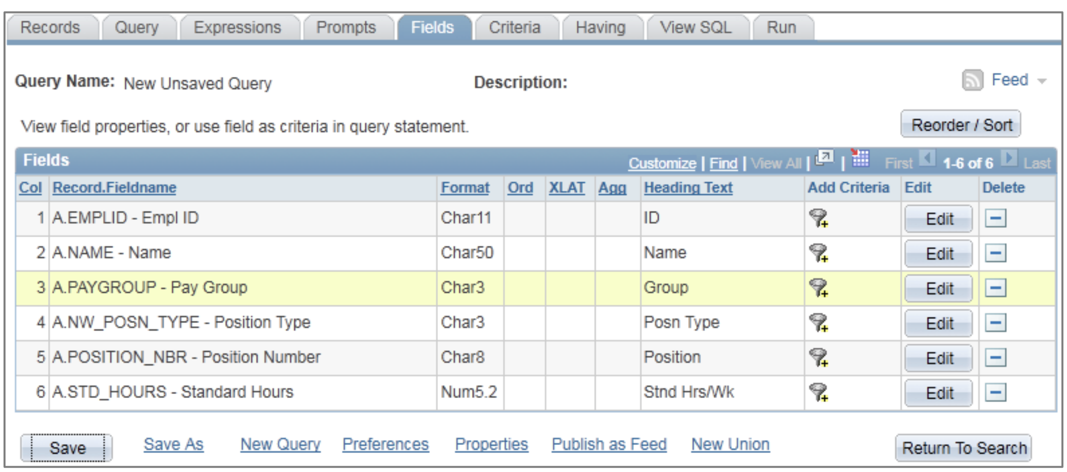
2. Select the checkbox to the left of the field name for any field you wish to add to your report:



Note: Don't forget to use the scroll buttons to access all fields.

Tip: If you are having trouble finding a field to select, use the button at the top right to sort fields alphabetically by name. You can use "Find" to search the list of field names, the items matching your search will go to the top of the list.

3. After selecting the fields to add, click to the "Fields" tab to see what has been added to your report:



4. You may adjust the display order, sort order, and heading text of the fields to match the needs of your report. For more information, see the section *Modifying the Fields of an Existing Query.*

ESTABLISHING CRITERIA

Overview

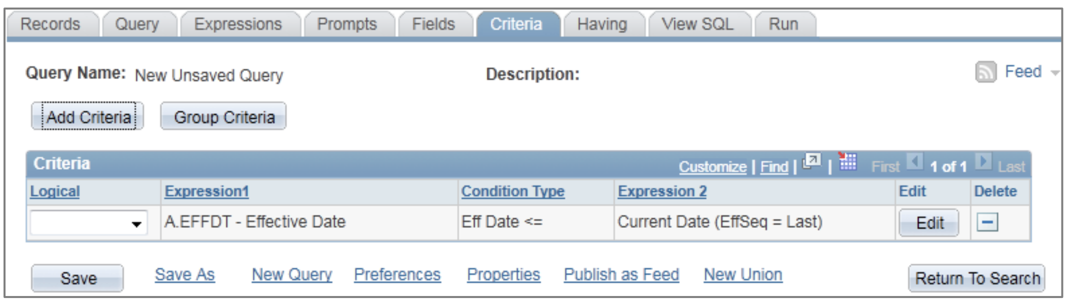
Criteria can be set on your query to filter the data retrieved from the myHR database. Criteria help to extract specific information by excluding or including particular sets of data. Criteria are used to select which rows appear in your result set.

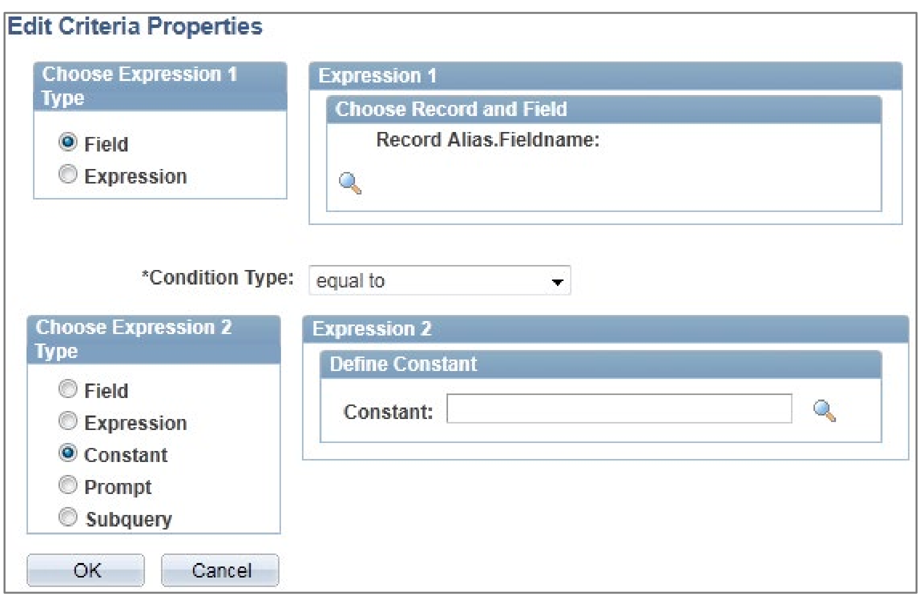
There are three ways to establish criteria:

- **Using the Criteria Tab** is the most time consuming, but fields can be used that may or may not appear in the final report.
- **Using the Fields Tab** is a quick way to add criteria for fields that also appear in your final report.
- **Using the Query Tab** will allow criteria to be set for all available fields in the records you are using.

Establishing Criteria Using the Criteria Tab

<table>
<tr><th colspan="2">Procedure</th></tr>
<tr><td>1.</td><td>Click the "Criteria" tab.</td></tr>
<tr><td>2.</td><td>All criteria currently set on the query (if any) will be shown. In our running example, you will see the automatic Effective Date criterion that was discussed earlier. Never delete this, as it will help ensure only current information is included in your report.


</td></tr>
<tr><td>3.</td><td>Click the Add Criteria button. A blank criteria screen will be displayed:

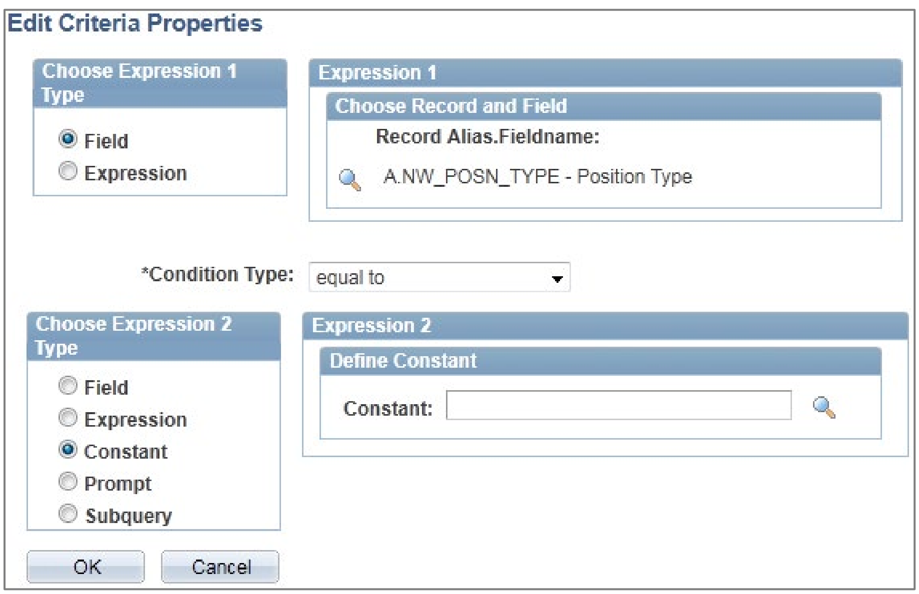

</td></tr>
</table>

4. In this example, we want only staff members included in our report; we must add a criterion to tell myHR that only employees with a Position Type of Staff should be displayed.

In the **Expression 1** box, click the 🔍 button.

5. Notice that the record we added, NW_EMPLOYEES, is assigned the letter "A," and the list of fields now begin with "A." A letter is always assigned to each record added into your query; this is useful to distinguish where fields are coming from when using multiple records at the same time.
Find and select the field NW_POSN_TYPE to add it to your criteria.

6. After selecting the field, you are returned to the Edit Criteria screen; notice the field NW_POSN_TYPE is now in the **Expression 1** box.



7. The **Condition Type** drop-down box should remain at "equal to," since our goal is to find Position Types that *equal* staff.

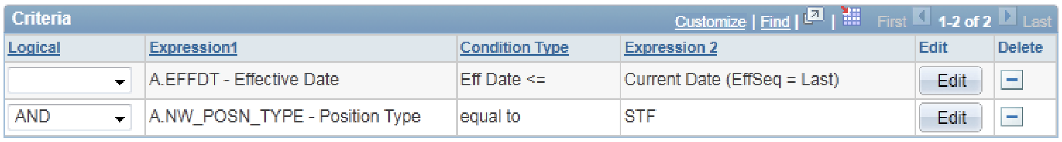
Note: To learn more about the various Condition Type options, see the "Using the Criteria Condition Types" section.

8. In the **Expression 2** box, enter STF for the **Constant**. STF is the value for "Staff" in myHR.

Remember, we must always use the value as stored in myHR for the query to work. In this case, myHR refers to Staff as "STF."

Note: If you are unsure what to enter in the Constant box, clicking on the button may provide options available for use.

9. Click the OK button. Notice the criterion has been added to the list in the Criteria tab:



Criteria — Customize | Find | First 1-2 of 2 Last

Logical	Expression1	Condition Type	Expression 2	Edit	Delete
	A.EFFDT - Effective Date	Eff Date <=	Current Date (EffSeq = Last)	Edit	−
AND	A.NW_POSN_TYPE - Position Type	equal to	STF	Edit	−

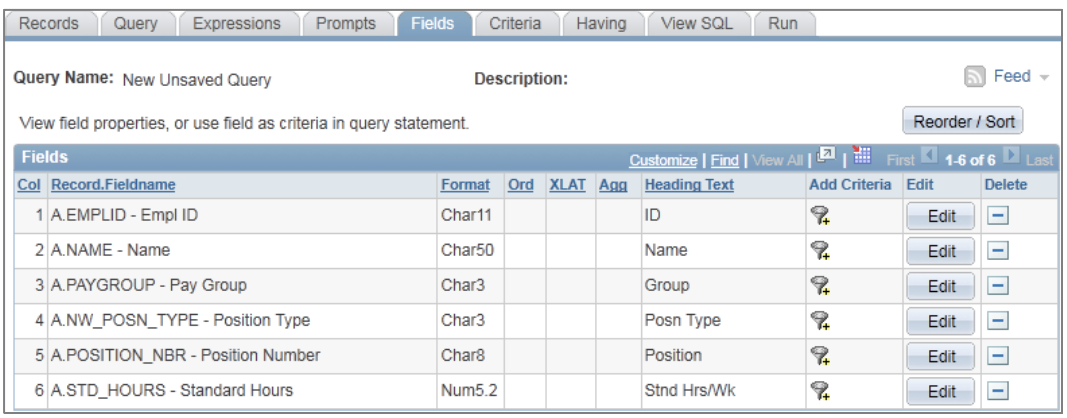
Establishing Criteria using the Fields Tab

Procedure

1. Click the "Fields" tab.

2. Find the field you want to establish a criterion for and click the button to the right of that field.

In our example, we want to show only monthly paid employees, so we will choose the PAYGROUP field:



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

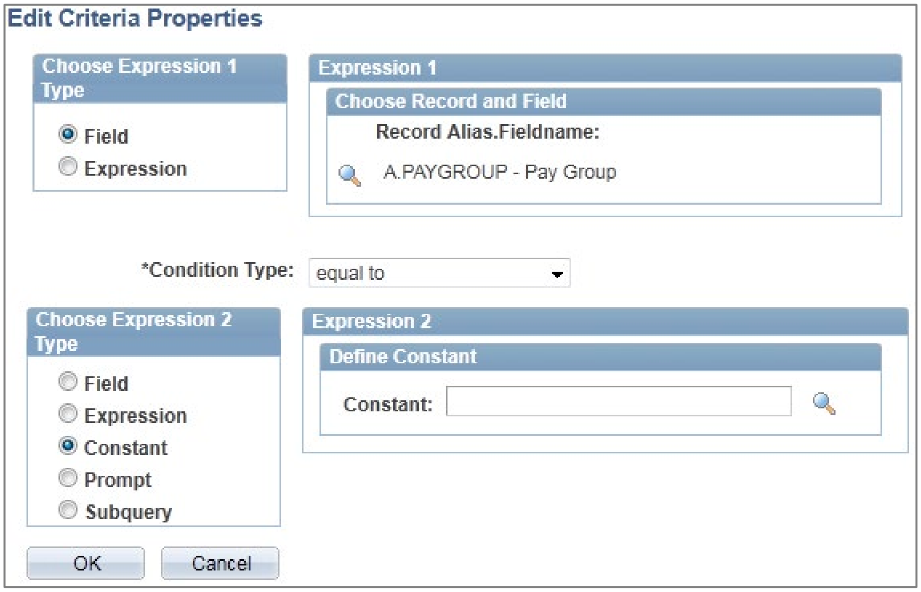
Query Name: New Unsaved Query **Description:** Feed

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

Fields — Customize | Find | View All | First 1-6 of 6 Last

Col	Record.Fieldname	Format	Ord	XLAT	Agg	Heading Text	Add Criteria	Edit	Delete
1	A.EMPLID - Empl ID	Char11				ID		Edit	−
2	A.NAME - Name	Char50				Name		Edit	−
3	A.PAYGROUP - Pay Group	Char3				Group		Edit	−
4	A.NW_POSN_TYPE - Position Type	Char3				Posn Type		Edit	−
5	A.POSITION_NBR - Position Number	Char8				Position		Edit	−
6	A.STD_HOURS - Standard Hours	Num5.2				Stnd Hrs/Wk		Edit	−

Note: To use this feature, the field you select for the criteria must be included in your report results.

3.	We are taken to the Edit Criteria page, but notice how PAYGROUP is now automatically entered in the **Expression 1** box: 
4.	The **Condition Type** drop-down box should remain at "equal to," since our goal is to find Pay Groups that *equal* monthly.
5.	In the **Expression 2** box, enter MON for the **Constant**. MON is the value for "Monthly Paid Staff" in myHR. *Note: If you are unsure what to enter in the Constant box, clicking on the button may provide options available for use.*
6.	Click the OK button to add the criterion.

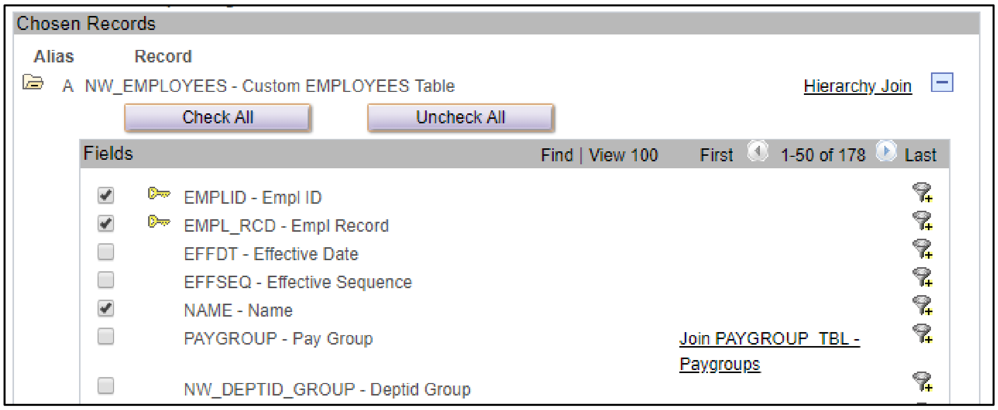
Establishing Criteria Using the Query Tab

Using the Query tab to enter criteria works exactly like using the Fields tab, except in this scenario you can access any fields in the records your query is using, even if they are not selected for output.

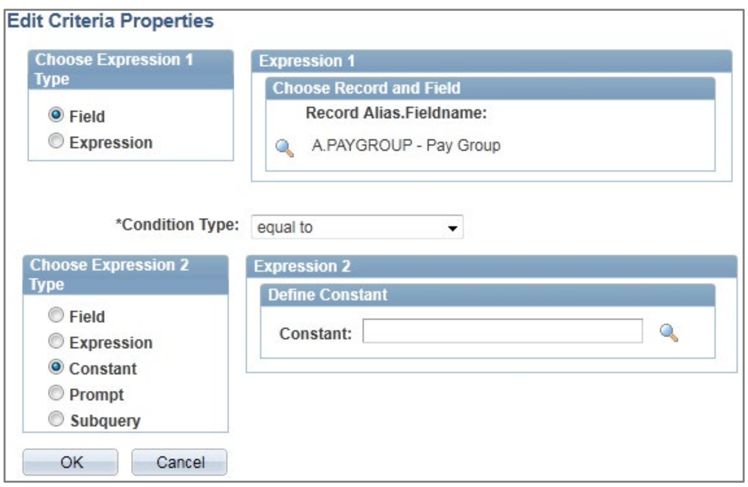
Procedure

1. Click the "Query" tab.
2. Find the field you want to establish a criterion for and click the button to the right of that field.

   For example, if we want to show only monthly paid employees, we will choose the PAYGROUP field:



3. We are taken to the Edit Criteria page, but notice how PAYGROUP is now automatically entered in the **Expression 1** box:



4. The **Condition Type** drop-down box should remain at "equal to," since our goal is to find Pay Groups that *equal* monthly.
5. In the **Expression 2** box, enter MON for the **Constant**. MON is the value for "Monthly Paid Staff" in myHR.

   Note: If you are unsure what to enter in the Constant box, clicking on the button may provide options available for use.
6. Click the OK button to add the criterion.

REORDERING CRITERIA

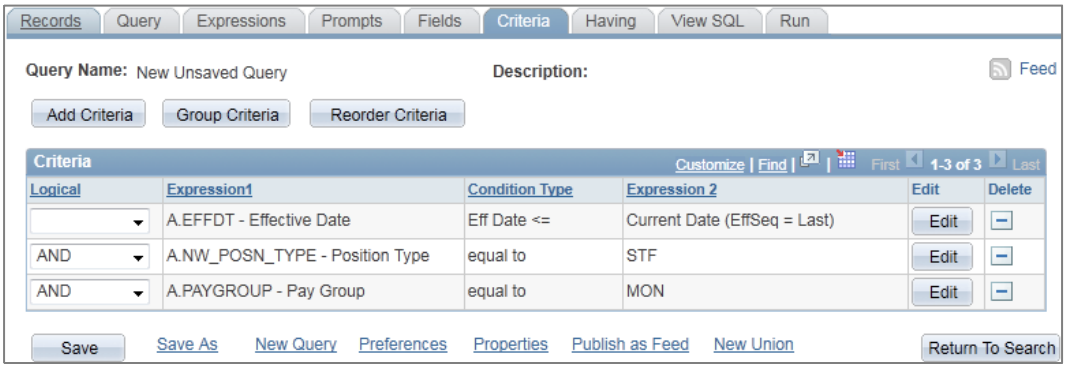
Overview

Criteria can be reordered to assist with complex filtering and data retrieval. For most myHR queries it will not be necessary to reorder criteria; however, it may be useful for more sophisticated queries that involved many records and numerous criteria.

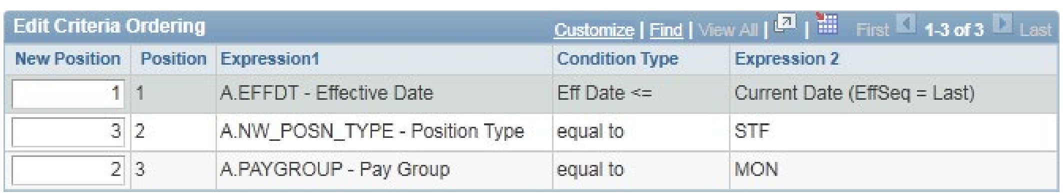
How to Reorder Criteria

Procedure

1. Click the "Criteria" tab.
2. Click the Reorder Criteria button:



3. In the **New Position** column, renumber the criteria in the order they should be processed when the query is run:



4. Click the OK button.

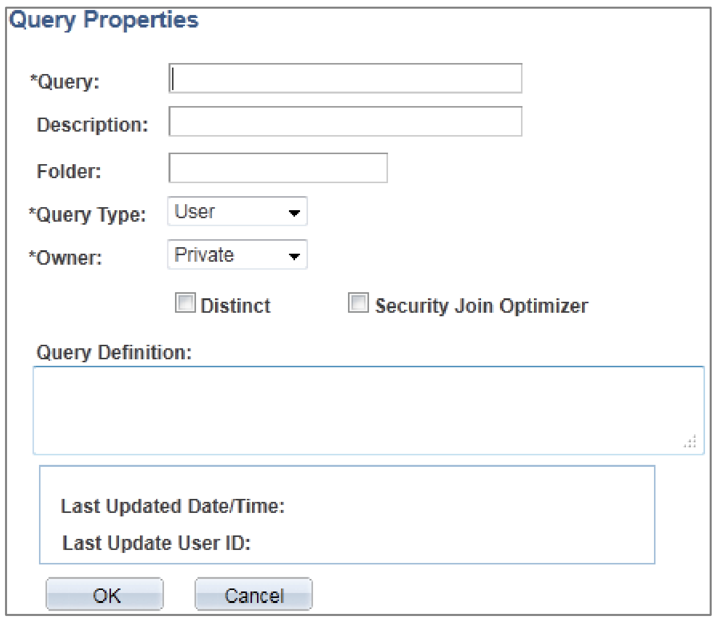
SAVING AND RUNNING YOUR QUERY

Overview

After finalizing your records, fields, and criteria, your query can be saved for access or modification at a later date.

Saving Your Query

	Procedure
1.	At the bottom of any tab, click the "Properties" link.
2.	The Query Properties screen will be displayed:



3.	Enter the query's name in the **Query** box; be sure to use the myHR naming conventions of YourInitials_Description.
4.	Enter information into the **Description** box. This information will display when you search for queries.
5.	If you want to save the query into a custom folder, enter that name in the **Folder** box. If the folder does not exist, it will be created when you save the query.
6.	Using the **Owner** drop-down, choose whether you want to set your query as "Public" or "Private." Only you can see and edit Private queries. All users can see and edit Public queries.
7.	Check the **Distinct** checkbox if you want to remove duplicates from your output list.
8.	Click OK to save the query Properties. You will return to the query editing screen.
9.	Click Save in the bottom left to save your query.

Section 5:
Building Complex Queries

Working with Multiple Records (Joins)

Overview

Many times the information you are looking for will not be contained within one record; in those instances, multiple records will need to be joined together to produce the information you need.

There are three different Join options available in myHR, each with its own advantages and disadvantages:

- Any Record Join
- Record Hierarchy Join
- Related Join

In most instances, the Any Record Join will be used to address the needs of a specific query; however, all three joins are described in further detail in this section.

Join Terminology

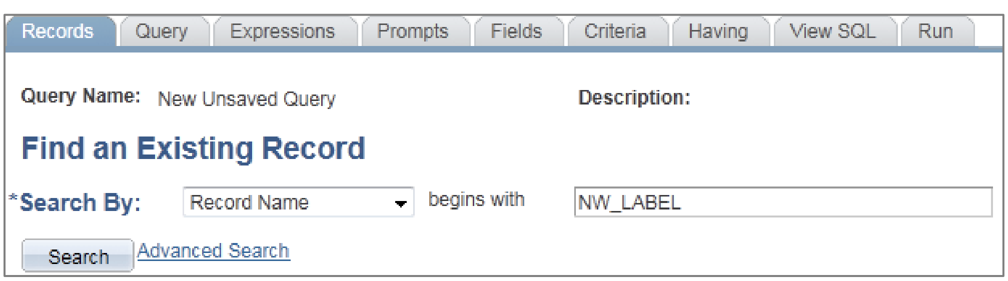
The following terms are used in this section to explain the function and creation of joins:

- **Join:** a join retrieves data from more than one table, presenting the data as if it came from one source.
- **Key Field:** a Key Field uniquely identifies a row of data and is identified by a key icon in myHR. A key field is also used to join one record to another when both records share the same field.

Any Record Join

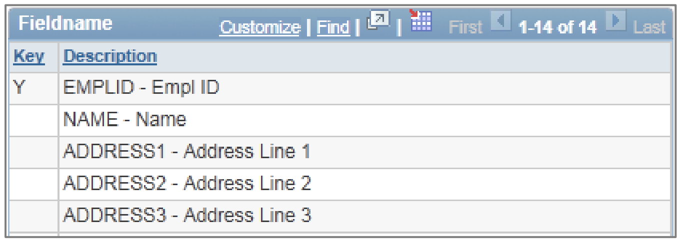
The **Any Record Join** means that results are retrieved only when there is a match between key fields. A user must manually join the tables together to achieve an Any Record Join.

In this example, you would like to include the employees' University Mailing Location into the query we created previously (for monthly paid staff employees). That query uses the NW_EMPLOYEES record, but the University Mailing Address is *not* on NW_EMPLOYEES. We must join an additional record to add the address into our results.

	Procedure
1.	Since we are editing an existing query, we will first find and open the one created in the previous section.
2.	To add a record to this query, click on the "Records" tab.
3.	Search for the record "NW_LABEL:"  *Note: The record NW_LABEL is a table that contains the University mailing address for all employees. In most instances, it is an on-campus office address; however, some employees may use their home address or an off-campus office for official mail.*

4. Click Search . The NW_LABEL table will be displayed in the Search Results area:

5. Remember, to join records together, there must be at least one Key Field in common between them. Check the Key Fields of NW_LABEL by clicking the "Show Fields" link:



All key fields have a "Y" listed in the **Key** column. We see that for NW_LABEL, EMPLID is a Key Field. We know EMPLID is also on the NW_EMPLOYEES table; since it is on both, we can join these tables together.

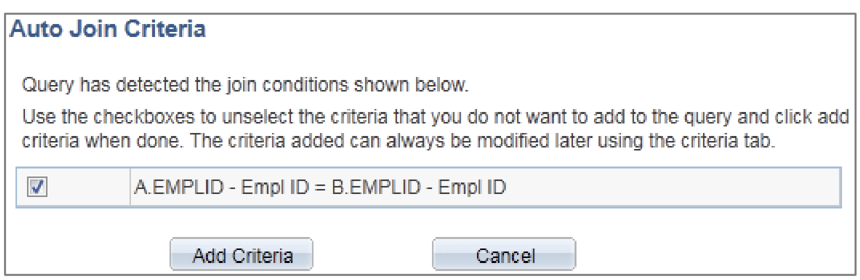
Click Return to return to the Records tab of your query.

6. Click the "Join Record" link next to the NW_LABEL table. The join page will show two boxes:

7. **Join Type** defaults to "Standard Join." Leave this choice as is. Please note that Left Outer Joins are covered in the "myHR Advanced Query Manual" document, not in this manual.

In the **Join Record** box, you will see a list of all records currently used in your query; click the record to use for this join. In our example, there is only one option, so we will click the A = NW_EMPLOYEES record.

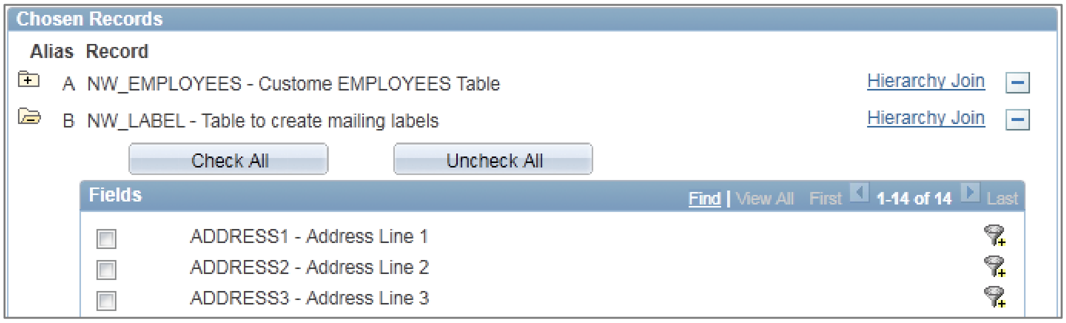
You will see the **Auto Join Criteria** page:



8. myHR will detect any Key Fields that are common between the two tables. Click the Add Criteria button to complete the join.

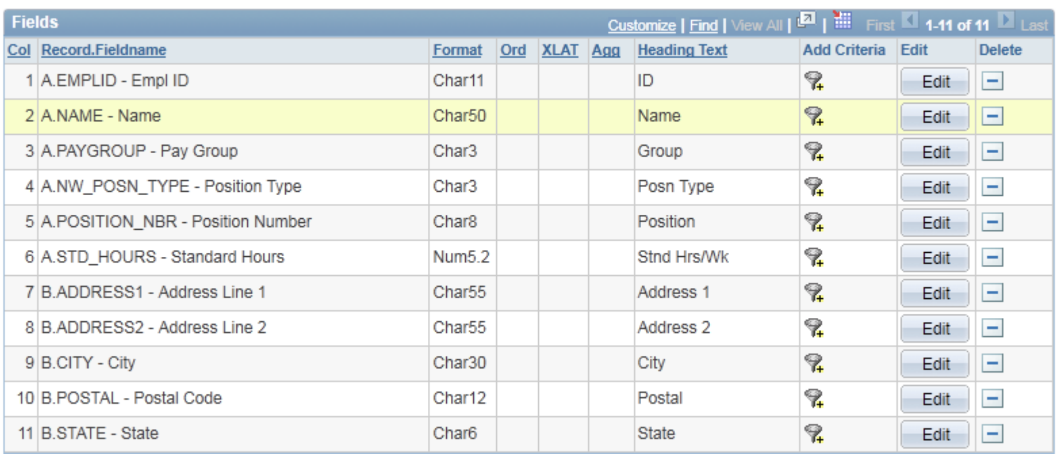
Note: If no common Key Fields are found, you will receive a message stating, "No join conditions found between the records." Proceeding with a join in this instance may result in inaccurate query results. If you need to join these two tables, you will need to manually add the join condition using Criteria.

9. You will be taken to the Query tab, where you can see that NW_LABEL has been added to your query, and was assigned the letter "B" for reference:



The fields for NW_LABEL will be listed directly underneath the table name. Go through the list of fields and select those that you would like to add in to the display of your query results.

10. Click the Fields tab. You will now see a list of all fields that will be shown in your results; the fields that begin with "A" will come from NW_EMPLOYEES, and the fields beginning with "B" will come from NW_LABEL:



Fields — Customize | Find | View All | First 1-11 of 11 Last

Col	Record.Fieldname	Format	Ord	XLAT	Agg	Heading Text	Add Criteria	Edit	Delete
1	A.EMPLID - Empl ID	Char11				ID		Edit	
2	A.NAME - Name	Char50				Name		Edit	
3	A.PAYGROUP - Pay Group	Char3				Group		Edit	
4	A.NW_POSN_TYPE - Position Type	Char3				Posn Type		Edit	
5	A.POSITION_NBR - Position Number	Char8				Position		Edit	
6	A.STD_HOURS - Standard Hours	Num5.2				Stnd Hrs/Wk		Edit	
7	B.ADDRESS1 - Address Line 1	Char55				Address 1		Edit	
8	B.ADDRESS2 - Address Line 2	Char55				Address 2		Edit	
9	B.CITY - City	Char30				City		Edit	
10	B.POSTAL - Postal Code	Char12				Postal		Edit	
11	B.STATE - State	Char6				State		Edit	

Related Record Join

The **Related Record Join** allows users to automatically join two related records from within the Query tab.

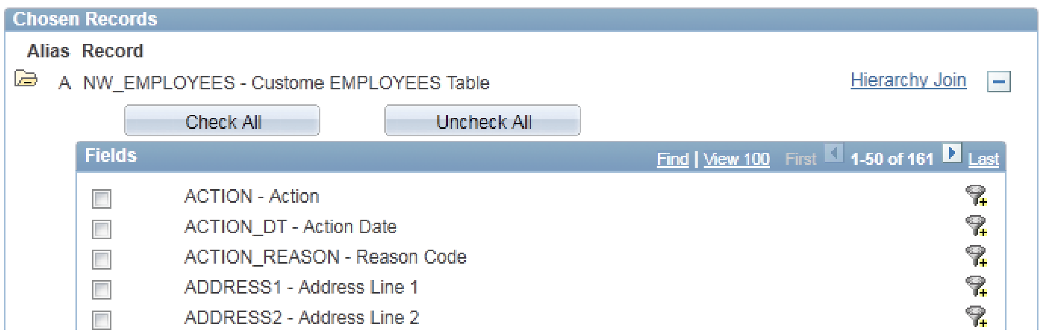
Building upon our example, we now have a query with Employee information and University mailing addresses. Now we would like to add the employee's physical (i.e. office) location as well. We know that the physical location is not on the NW_EMPLOYEE or NW_LABEL records, but NW_EMPLOYEE *does* contain a field called LOCATION (Location Code). While this code means nothing by itself, we can join record LOCATION_TBL to our query.

Procedure

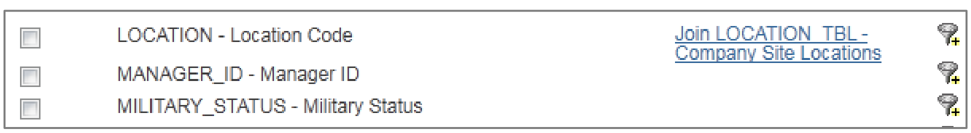
1. Click the Query tab.

2. We need to find the field LOCATION on the record NW_EMPLOYEES. All Related Record Joins take place at the field level.

If not already open, click the NW_EMPLOYEES record so its fields are displayed:



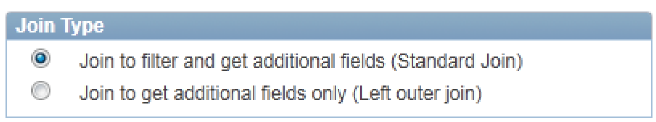
3. Scroll through the fields until you find LOCATION:

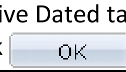


myHR automatically identifies the Related Record Join: it knows that LOCATION_TBL is related to the Location Code, and provides a direct link to create the join. Click the link.

4. Keep the default "Standard Join" selected and click 

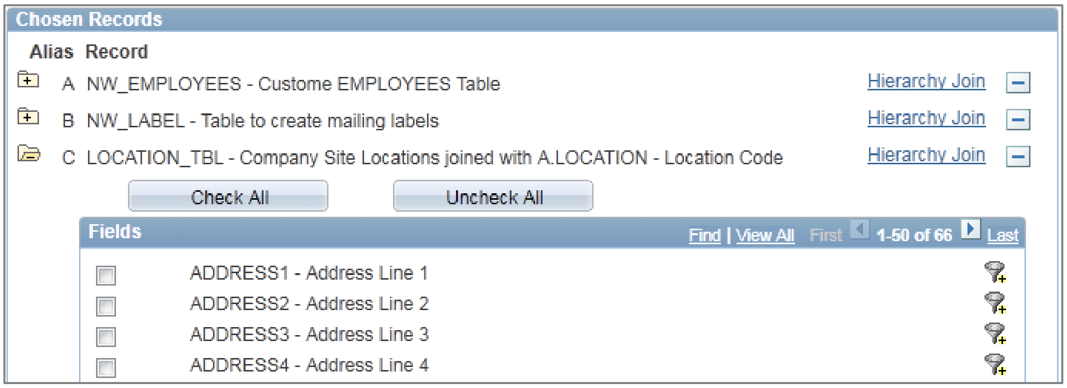
.



5. Because LOCATION_TBL is an Effective Dated table, you will receive the standard notice that an Effective Date criterion has been added. Click 

.

6. LOCATION_TBL is now added to your query and is assigned the letter "C":



Select the checkboxes for any fields you wish to add to your final results.

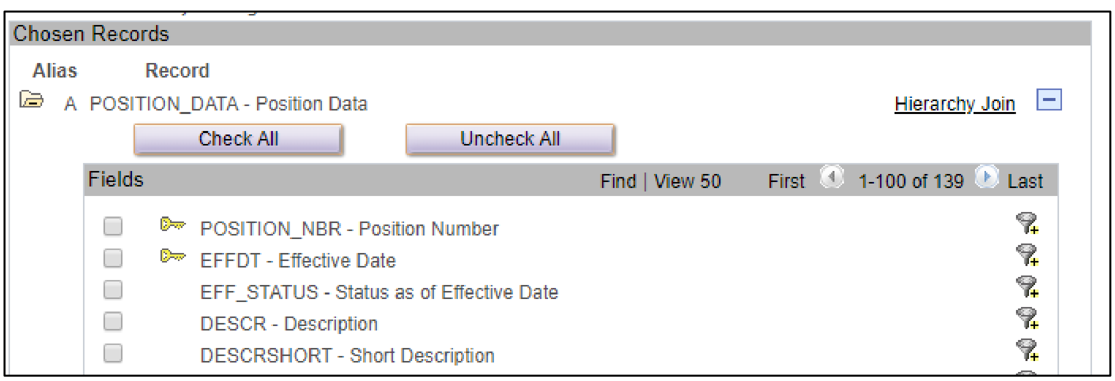
Record Hierarchy Join

The **Record Hierarchy Join** joins a "parent" record to a "child" record. The "child" record uses all of the same Key Fields as the parent, plus at least one more.

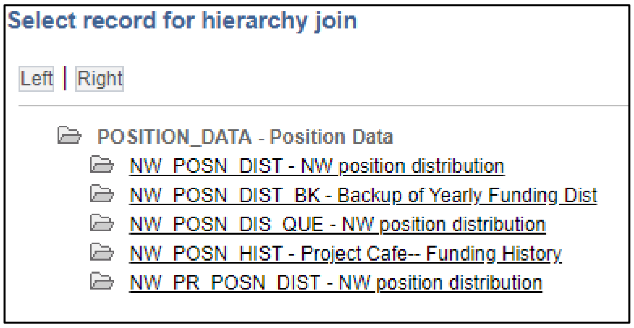
For this example, let's assume we have a basic query that uses the POSITION_DATA table to create a report of position information for your department, such as Position Numbers and Titles. We also want to add position funding (chartstring) information. While we know funding is *not* on the POSITION_DATA table, we are unsure where we can find it. However, it might be safe to assume that position funding is a "child" of POSITION_DATA, so we can attempt a Hierarchy join to locate and join it.

Procedure

1. Click the Query tab. To the left of the table name is a link called Hierarchy Join:

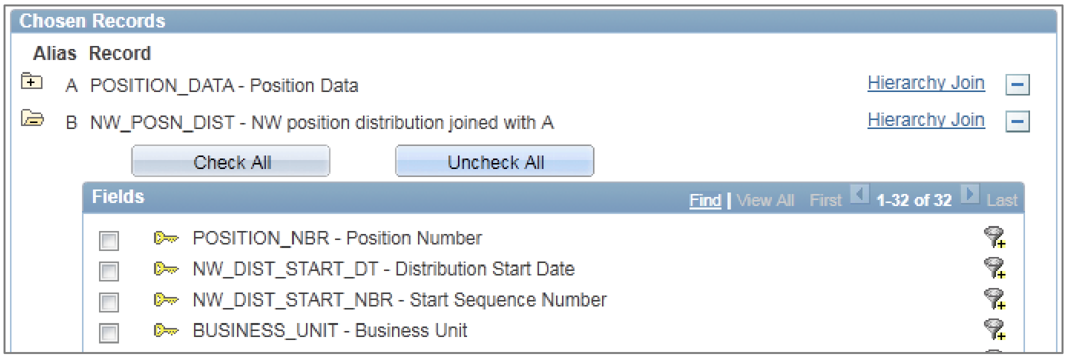


2. Click "Hierarchy Join" to see a list of all tables that have a parent/child relationship with POSITION_DATA:



3. Click on NW_POSN_DIST.

3. Notice NW_POSN_DIST is automatically added to the query:



Go through the fields and check the boxes for those that you would like to add to your query.

USING THE CRITERIA CONDITION TYPES

Overview

Users can further refine their criteria by using a number of different condition types. So far, we have only discussed the most obvious "equal to" condition.

This section will describe how to exclude data using the "not" condition types, and will then explain in detail the use for "Like," "In List," "Is Null," and "Between."

"Not" and Comparative Condition Types

The following conditions are relatively self-explanatory and don't require a great deal of explanation:

Terms	
NOT EQUAL TO	To *exclude* specific data based on the criteria, the **Not Equal To** condition type can be used. For example, if you would like your query to include all employee types *except* temporary employees, you can create a criterion that specifies PAYGROUP is **not equal to** BIT.
GREATER THAN, LESS THAN	The **Greater Than** and **Less Than** conditionals are useful when working with numeric or date criteria. For example, to find employees hired after September 1, 2018, your criterion could look for a HIRE_DT (hire date) **greater than** 09/01/2018. Likewise, employees hired before September 1, 2018 can be found with a criterion where HIRE_DT is **less than** 09/01/2018. *Note that there is no such thing as "Greater/Less Than or equal to."* Keep in mind that if you want to include employees hired ON OR AFTER September 1, 2018, you would have to use **greater than** 08/31/2018.

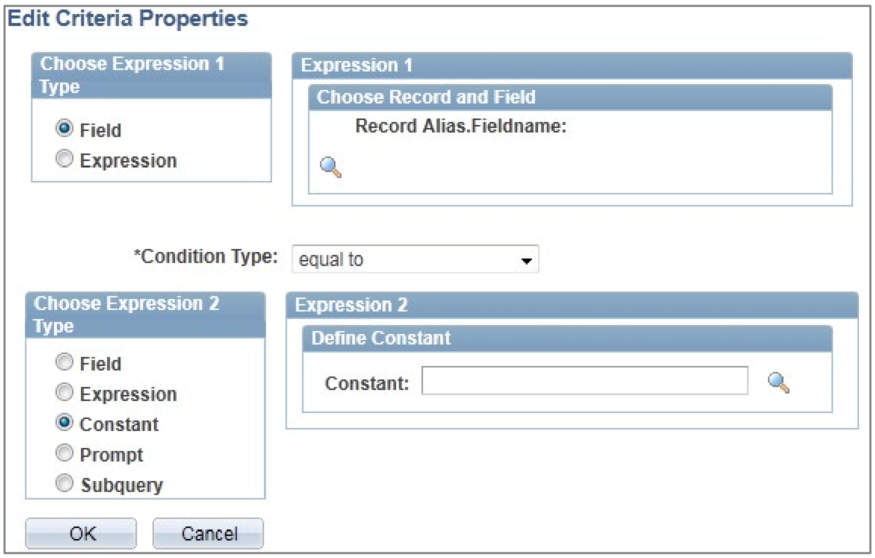
"Like" Condition Type

The **Like** condition retrieves data which matches specified portions of a string. It is similar to using a "wildcard" search in Google or email searches. In myHR, the "wildcard" character is represented by the percent symbol (%).

In this example, we begin with a basic query of NW_EMPLOYEES that includes Job Title, Job Code, Position Type, and Position Number information. We want to add a criterion to pull records for job titles that begin with "Assoc Director:"

Procedure

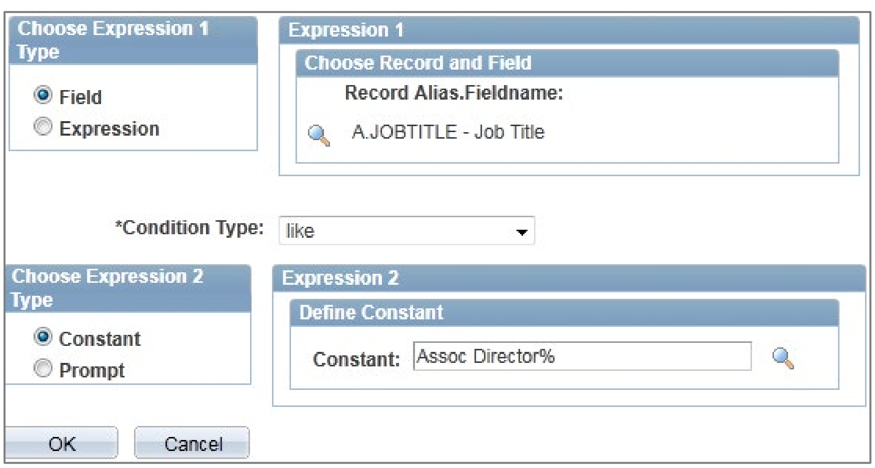
1. In the Criteria tab of your query, click the Add Criteria button to begin a new criterion entry:



2. In the **Expression 1** box, use the button to select the JOBTITLE field.

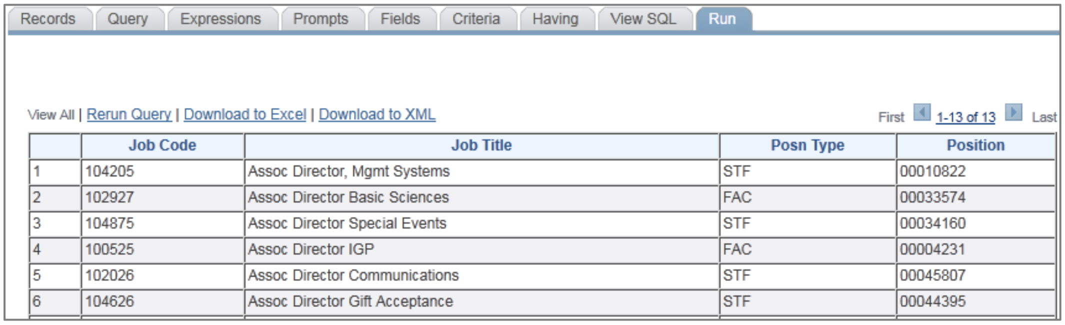
3. Select the **Condition Type** drop-down box and choose "like."

4. Enter your search string in the **Constant** box, using the % as a wildcard. Since we want to match all Job Titles that begin with "Assoc Director," we will enter <u>Assoc Director%</u> in the box:



5. Click OK.

6. Click the Run tab to run the query and test your results. You can see that all titles beginning with "Assoc Director" within your myHR security access are produced:



Keep in mind that you can use the % wildcard anywhere in your constant. For example, is we had typed "%Business%" into the **Constant** box, we would have received all titles that include the word "Business" anywhere in the title.

Note: Conditions are always case sensitive. Like "%Business%" will return a different set of results than like "%business%."

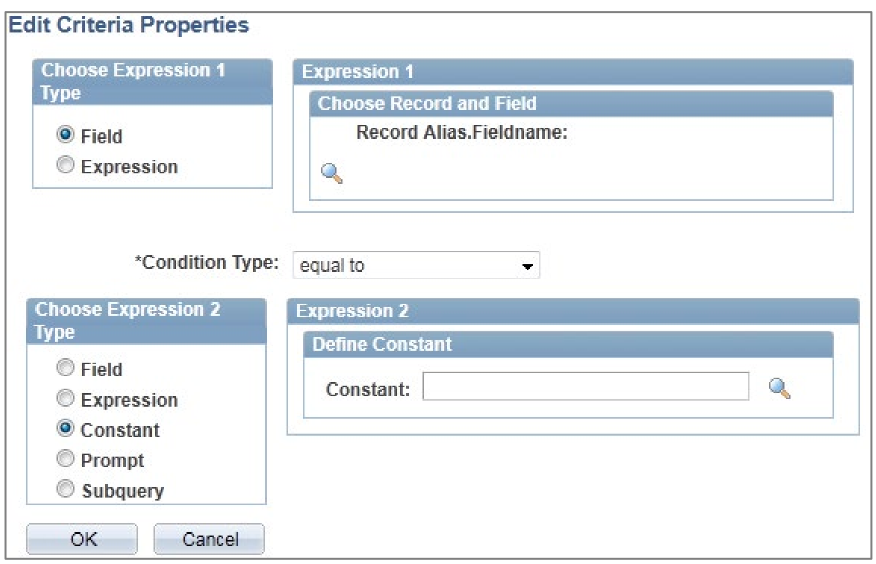
"In List" Condition Type

The **In List** condition retrieves data which matches one of a list of constants that you create. As long as the data matches *one* of the entries in the list, it will be returned in the results.

In this example, we begin with a basic query of the NW_GL_TABLE that provides all general ledger entries for our employees. While the GL includes information about all deductions and taxes, we only want to see an employee's total earnings and journals entries. Earnings and journals are identified in the NW_GL_TABLE by using the NW_ENTRY_TYPE field: earnings with have an NW_ENTRY_TYPE of "ERN" and journals, "JNL."

Procedure

1. In the Criteria tab of your query, click the Add Criteria button to begin a new criterion entry:



2. In the **Expression 1** box, use the button to select the NW_ENTRY_TYPE field.

3. Select the **Condition Type** drop-down box and choose "in list."

4. In the **Expression 2** box, click the button to open the Edit List page.

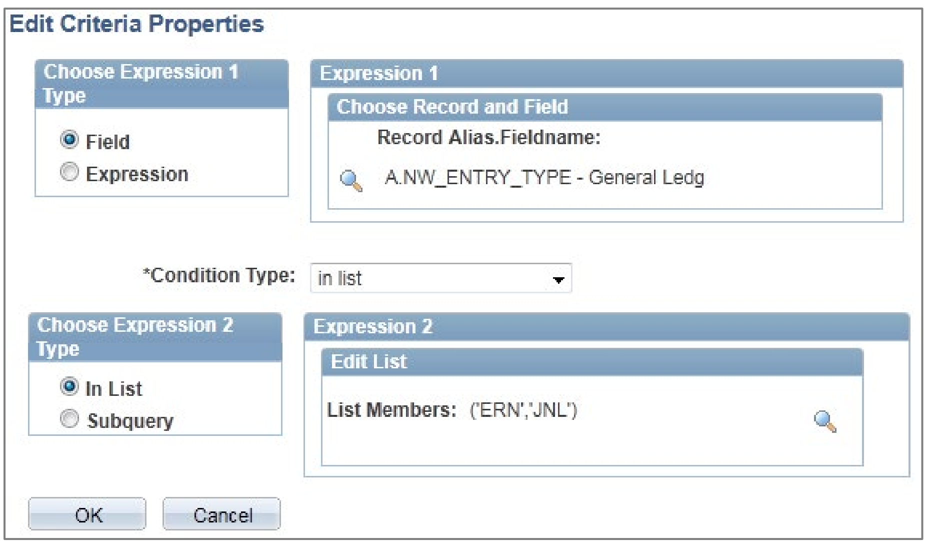
5. Using the Edit List page, enter one value for the list and click Add Value. Do this for each list item you wish to add; in this case we will add ERN and JNL:

6. After you add the first value, a List Members box will pop up; it will update every time you add a value to the list:

After adding all values, click OK.

Note: If you want to remove a value from the list, click the checkbox next to it and press the "Delete Checked Values" button.

7. The **Expression 2** box will show all the list values you have added:

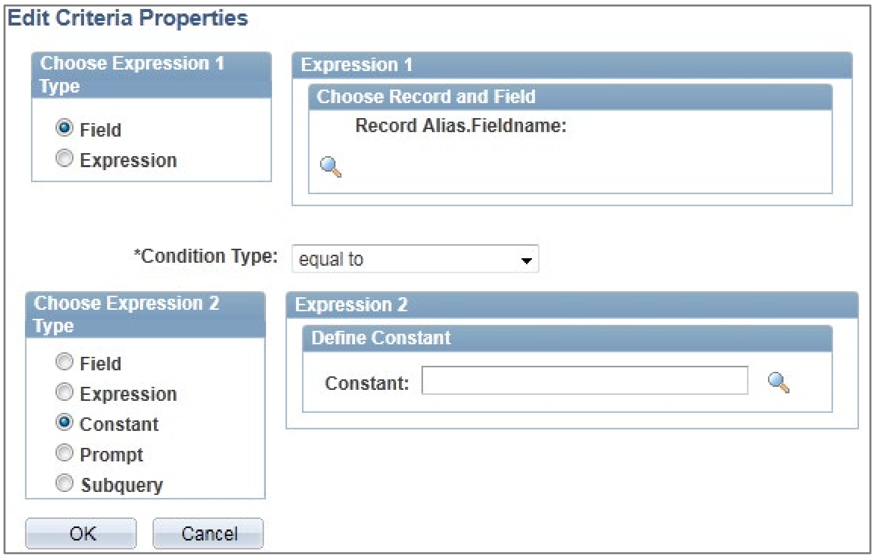
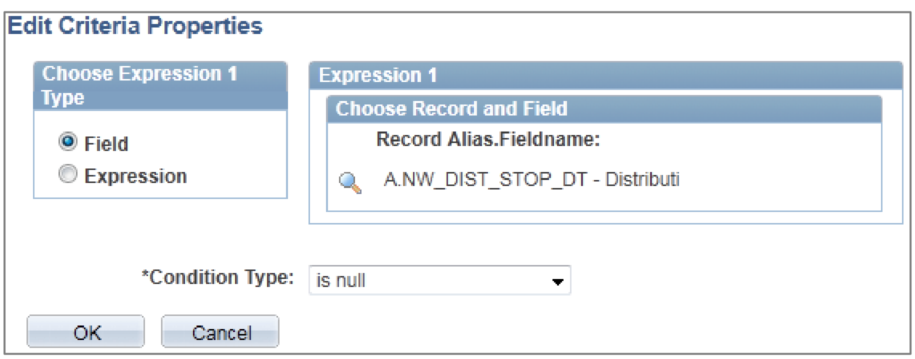


Click OK to save the criteria.

"Is Null" Condition Type

The **Is Null** will match fields that are completely blank, i.e. where no data exists. It is important to note that "null" is *not the same* as a zero or a space.

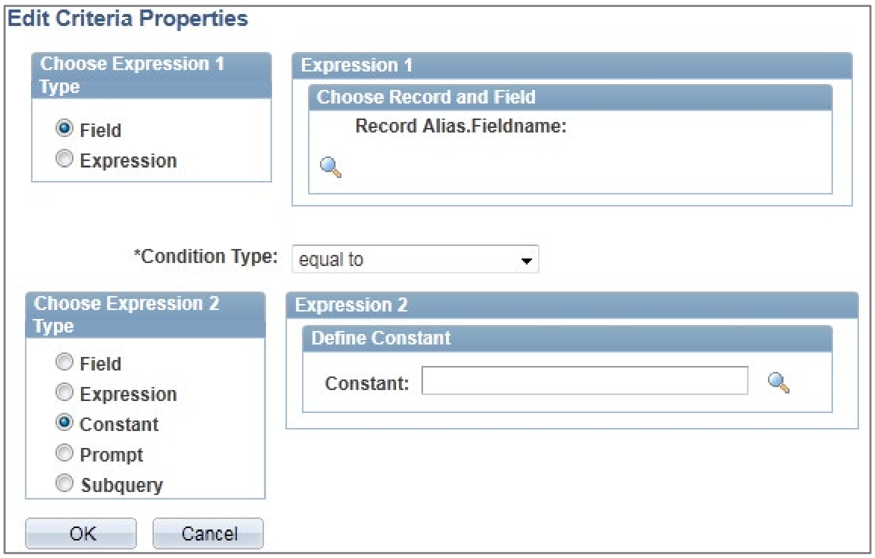
In myHR, position funding can have an Indefinite End Date. When funding has an Indefinite End, it is stored as "null" in the NW_DIST_STOP_DT field; otherwise, the stop date is stored. In this example, we have a query that displays position information and funding information using the POSITION_DATA and NW_POSN_DIST records. We want to see only position funding that has an Indefinite End Date, so we will set a criteria to check for a NW_DIST_STOP_DT of null.

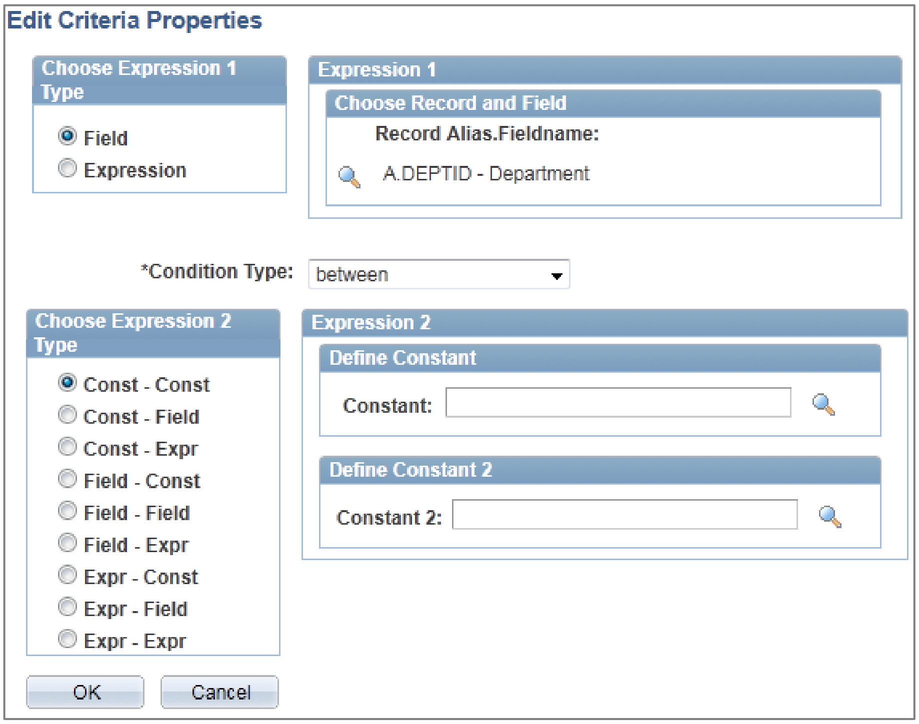
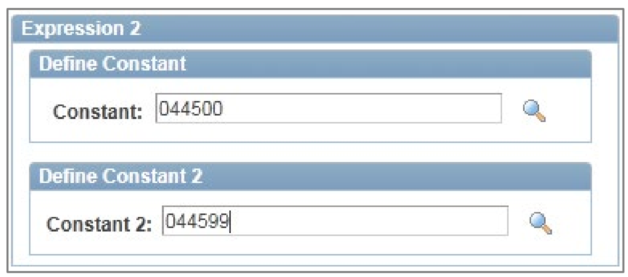
Procedure	
1.	In the Criteria tab of your query, click the Add Criteria button to begin a new criterion entry: 
2.	In the **Expression 1** box, use the button to select the NW_DIST_STOP_DT field from the NW_POSN_DIST table.
3.	Select the **Condition Type** drop-down box and choose "is null."
4.	After selecting "is null," the **Expression 2** box disappears. There is nothing more you need to enter when using the "is null" condition: 
5.	Click OK to save the criteria.

"Between" Condition Type

The **Between** condition allows users to find data that falls in between two specified values. This is particularly useful when searching for a range of dates or a range of numbers, such as Department IDs.

In this example, we are using a query that pulls basic department information from the DEPT_TBL record. However, we only want to see the departments that are between 044500 and 044599.

	Procedure
1.	In the Criteria tab of your query, click the  button to begin a new criterion entry: 
2.	In the **Expression 1** box, use the  button to select the DEPTID field.

3.	Select the **Condition Type** drop-down box and choose "between." The **Expression 2** box will update with 2 blank spaces: 
4.	Place the first value of the range in **Constant**, and the last value in **Constant 2:** 
5.	Click  to save the criteria.

Using Logical Operators and Grouping Criteria

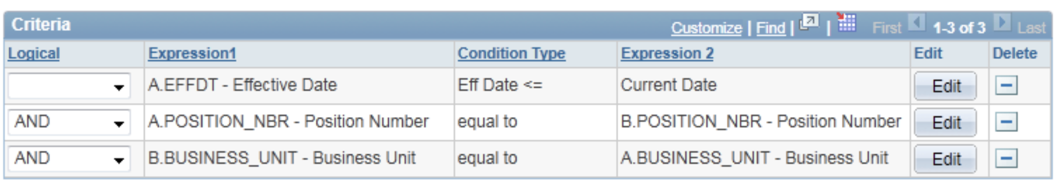
Overview

This section demonstrates how to change the logical operators and the groupings of your criteria to impact the information that is retrieved.

To illustrate the use of these criteria functions, we will create a query that pulls active positions that have funding established.

Creating the Initial Query

We will first create the initial stages of a query that uses POSITION_DATA and NW_POSN_DIST. Steps are described below to create the query, but see the previous sections in this manual for further explanation of these steps.

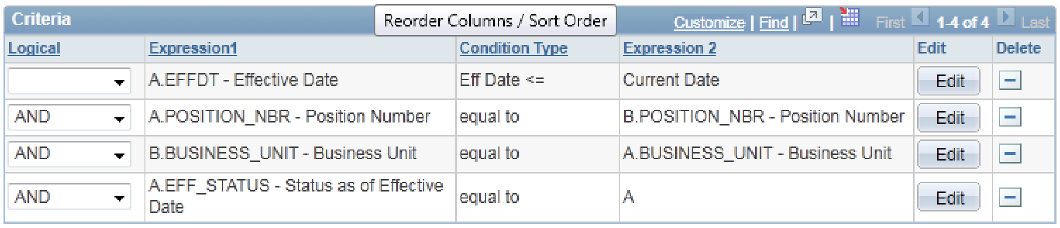
	Procedure
1.	Create a new query and add the POSITION_DATA record.
2.	On the Query tab, select these fields to display in your report: POSITION_NBR, DESC (this is the position title), DEPTID.
3.	Return to the Records tab and search for record NW_POSN_DIST. Click "Join Record" and create the join to POSITION_DATA. Accept all of the Auto Join Criteria and click "Add Criteria."
4.	On the Query tab, select these fields from the NW_POSN_DIST record to display in your report: NW_DIST_START_DT, FUND_CODE, NW_FN_DEPTID, PROJECT_ID, ACCOUNT, NW_DIST_STOP_DT, NW_DIST_PCT (this is the percentage of the funding that comes from this chartstring)
5.	View the Criteria tab and notice the Criteria that has been automatically added; we will not change these: 

Adding Criteria for Active Positions

We want to ensure that our report contains information for only active positions. To do so, we have to add a criteria where EFF_STATUS = A. This is myHR's notation that the position is Active.

	Procedure
1.	On the Criteria tab, click "Add Criteria."
2.	In the **Expression 1** box, use the magnifying glass to select the EFF_STATUS field on the POSITION_DATA record (record A).
3.	Leave the **Condition Type** drop down as "equal to."
4.	In the **Expression 2** box, type the letter A. Click OK to save the criteria.

5. In the Criteria tab, your criteria list should now look like this:



Logical	Expression1	Condition Type	Expression 2	Edit	Delete
	A.EFFDT - Effective Date	Eff Date <=	Current Date	Edit	
AND	A.POSITION_NBR - Position Number	equal to	B.POSITION_NBR - Position Number	Edit	
AND	B.BUSINESS_UNIT - Business Unit	equal to	A.BUSINESS_UNIT - Business Unit	Edit	
AND	A.EFF_STATUS - Status as of Effective Date	equal to	A	Edit	

Adding Criteria for Currently Funded Positions

The main goal of our report is to find positions that are currently funded. There are two different ways a position would be currently funded:

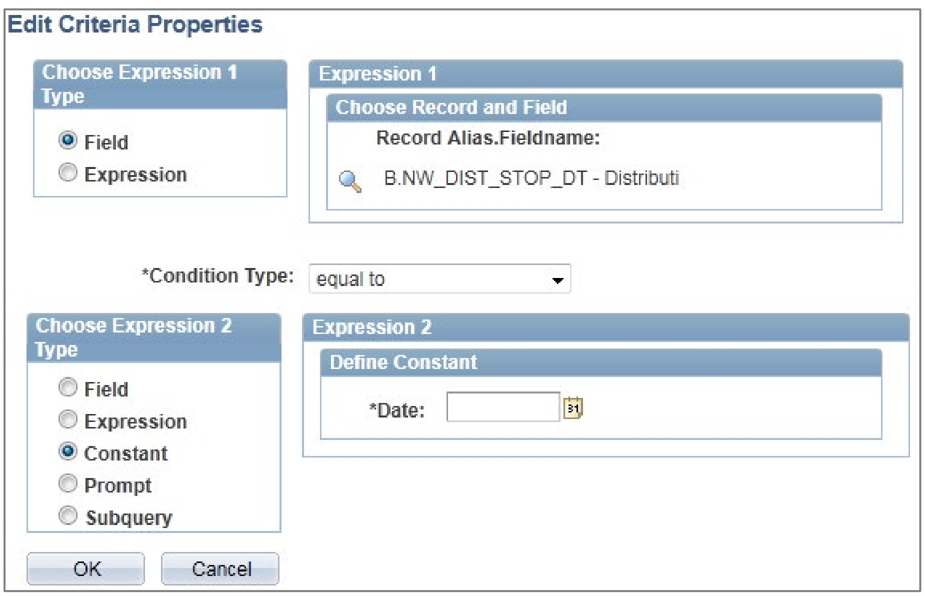
- The NW_DIST_STOP_DATE (funding stop date) is null, meaning the funding has an Indefinite End, or
- The NW_DIST_STOP_DATE is greater than today, meaning it will stop eventually, but is active today.

In order for our data to be accurate, we must include both of these possibilities. Although there are numerous ways to add criteria (discussed previously), we will add them directly using the Criteria tab for the purposes of this example.

Procedure

1. On the Criteria tab, click Add Criteria.

2. In the **Expression 1** box, use the magnifying glass to select the NW_DIST_STOP_DATE field on the NW_POSN_DIST record (record B):



3. We will first add the condition for an Indefinite End funding. For the **Condition Type** drop down, choose "is null."

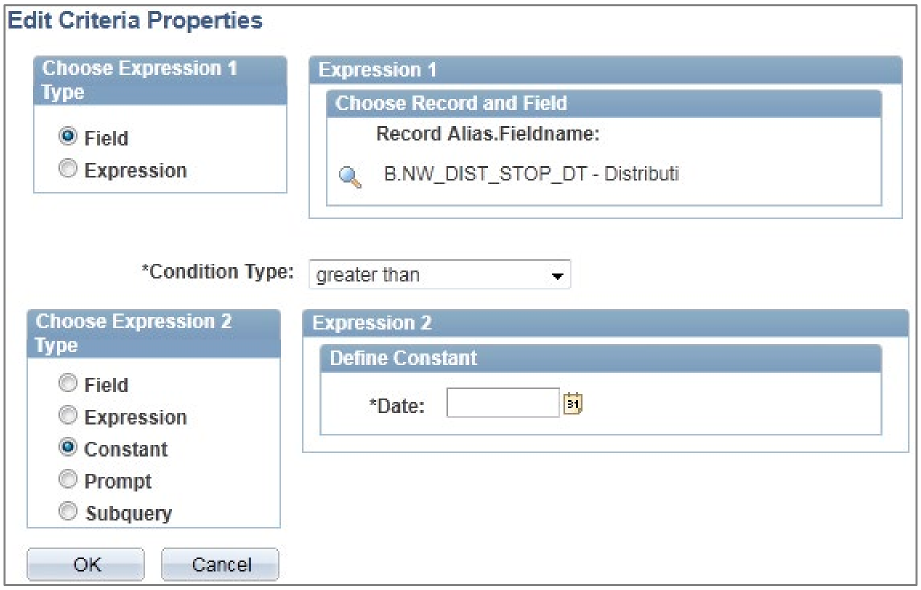
4. Click OK to save the criteria.

5. We must now add a second criteria to match the funding that does have an end date, but the end date is greater than today.

Click the Add Criteria button again.

6. In the **Expression 1** box, use the magnifying glass to again select the NW_DIST_STOP_DATE field on the NW_POSN_DIST record (record B).

7. This time, set the **Condition Type** to "greater than:"

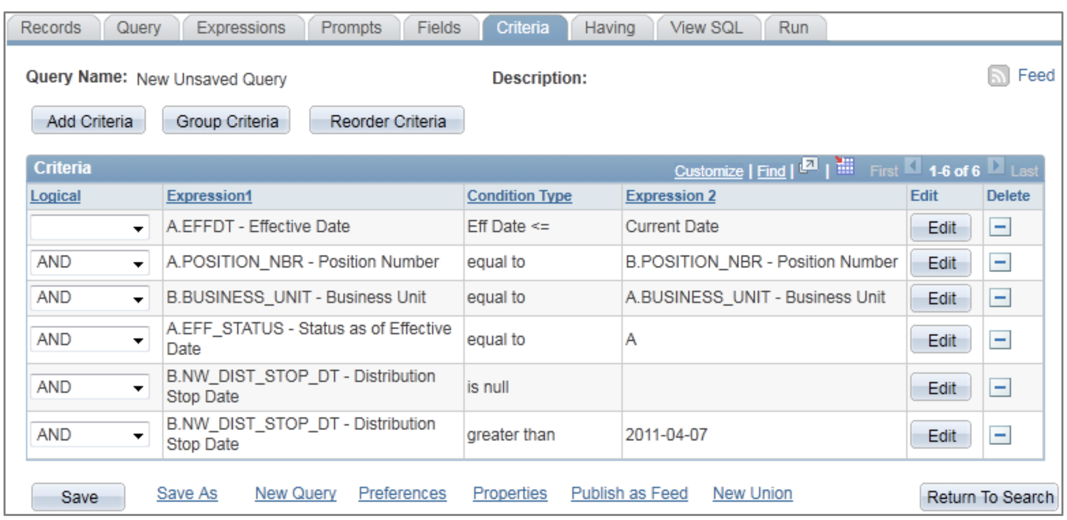


8. Notice the **Expression 2** box is expecting a date. When using a date field in **Expression 1**, it automatically knows that we will be entering a date in **Expression 2.**

Enter today's date in **Expression 2** either using the format MM/DD/YYYY or by clicking the calendar icon and choosing the date.

9. Click OK to save the criteria.

10. Your Criteria tab should now look similar to this:



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

Query Name: New Unsaved Query Description: Feed

Add Criteria | Group Criteria | Reorder Criteria

Criteria — Customize | Find | First 1-6 of 6 Last

Logical	Expression1	Condition Type	Expression 2	Edit	Delete
	A.EFFDT - Effective Date	Eff Date <=	Current Date	Edit	
AND	A.POSITION_NBR - Position Number	equal to	B.POSITION_NBR - Position Number	Edit	
AND	B.BUSINESS_UNIT - Business Unit	equal to	A.BUSINESS_UNIT - Business Unit	Edit	
AND	A.EFF_STATUS - Status as of Effective Date	equal to	A	Edit	
AND	B.NW_DIST_STOP_DT - Distribution Stop Date	is null		Edit	
AND	B.NW_DIST_STOP_DT - Distribution Stop Date	greater than	2011-04-07	Edit	

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

Changing the Logical Operators for the Criteria and Grouping Criteria

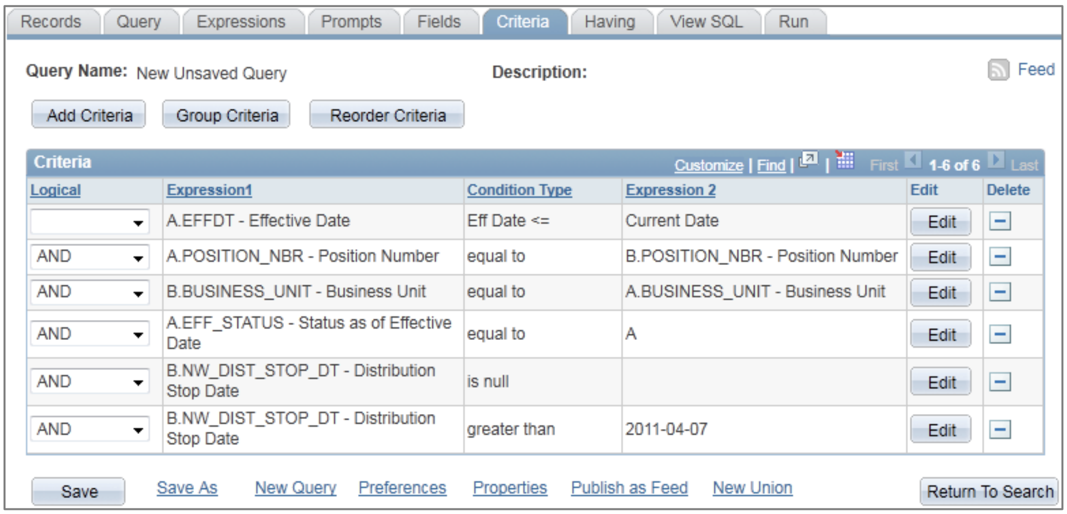
The logical operators in the criteria list always default to "AND" (notice the criteria list in the previous step). Usually this is what we want, but in this case, it presents a problem. If we leave it as is, the query will only pull positions with funding that has an Indefinite End AND has a date greater than 2001-04-07. This is clearly not what we want, and in fact will produce no results at all!

To get the expected results, we must tell the query that we want funding with an Indefinite End OR a stop date greater than 2011-04-07.

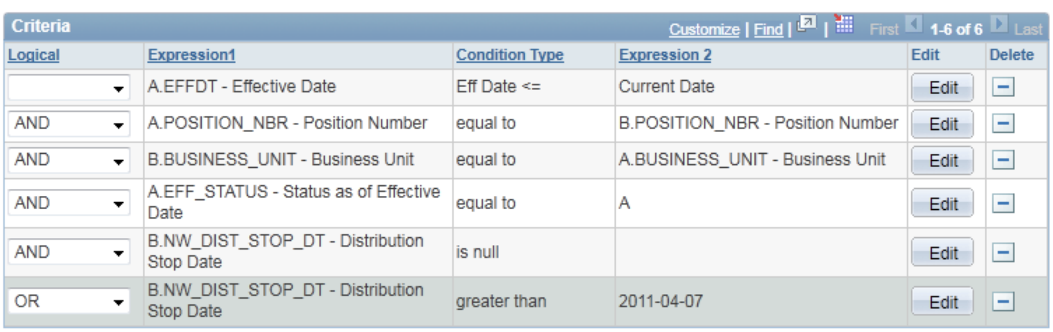
To accomplish this, the logical operators on criteria can always be changed to match what is needed. In this case, we must change the last logical operator to OR.

Procedure

1. Your Criteria tab should now look similar to this:



2. Using the **Logical** drop-down box on the last line, change it from AND to OR:



3. Now, when reading the criteria list left-to-right and top-to-bottom, it states that results will be found when NW_DIST_STOP_DT is null (indefinite end) OR when NW_DIST_STOP_DT is greater than 2011-04-07.

4. Whenever we use both AND and OR operators, we must tell the query how to group them together using parentheses. If we forget to use paretheses, the query results may not be what we intended. For this query, we will group together the last two criteria into one set: we want rows that are Active AND (that have no stop date OR have a stop date in the future).

5. At the top of the Criteria tab, click the Group Criteria button. You will see a grouping page similar to the following:

Edit Criteria Grouping

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

Edit Criteria Grouping — Customize | Find | First 1-6 of 6 Last

Logical	Left Paren	Expression1	Condition Type	Expression 2	Right Paren
		A.EFFDT - Effective Date	Eff Date <=	Current Date	
AND		A.POSITION_NBR - Position Number	equal to	B.POSITION_NBR - Position Number	
AND		B.BUSINESS_UNIT - Business Unit	equal to	A.BUSINESS_UNIT - Business Unit	
AND		A.EFF_STATUS - Status as of Effective Date	equal to	A	
AND		B.NW_DIST_STOP_DT - Distribution Stop Date	is null		
OR		B.NW_DIST_STOP_DT - Distribution Stop Date	greater than	2011-04-07	

OK Cancel

6. Notice there are two new columns with empty boxes: **Left Paren** and **Right Paren**. Using these boxes, enter left/open parenthesis in the left column and a right/close parenthesis in the right column to create groups.

Remember, the criteria list is read left-to-right and top-to-bottom. If we put an open parenthesis BEFORE the 5th criteria, and a close parenthesis after the last one, we combine them into a group via the parentheses:

Edit Criteria Grouping — Customize | Find | First 1-6 of 6 Last

Logical	Left Paren	Expression1	Condition Type	Expression 2	Right Paren
		A.EFFDT - Effective Date	Eff Date <=	Current Date	
AND		A.POSITION_NBR - Position Number	equal to	B.POSITION_NBR - Position Number	
AND		B.BUSINESS_UNIT - Business Unit	equal to	A.BUSINESS_UNIT - Business Unit	
AND		A.EFF_STATUS - Status as of Effective Date	equal to	A	
AND	(	B.NW_DIST_STOP_DT - Distribution Stop Date	is null		
OR		B.NW_DIST_STOP_DT - Distribution Stop Date	greater than	2011-04-07	)

Not only will these two criteria now be processed together, but they will be processed first: when your query runs, anything found in parentheses will be applied first.

7. Don't forget to save your query after making any changes to your criteria!

Section 6:
Additional Query Topics

USING RUN-TIME PROMPTS

Overview

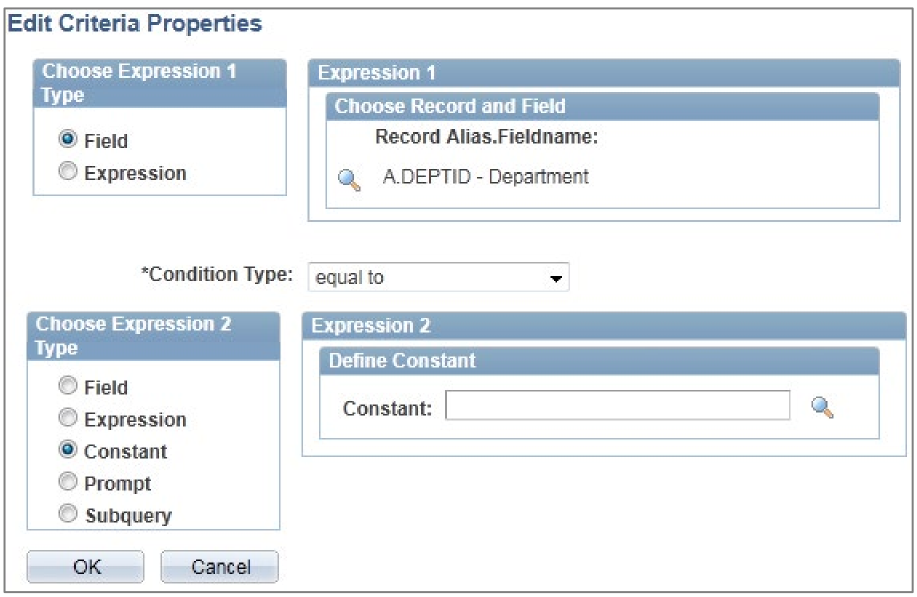
A **Run-Time Prompt** allows users to enter a value for a specific field at the time the report is run. When used in conjunction with a Criteria, the report will display only rows of information that match the value entered into the prompt. This method allows a user to create one query for multiple purposes without the need to rewrite the criteria.

This section outlines the practical use of a prompt and how the prompt looks to a user when the query is executed.

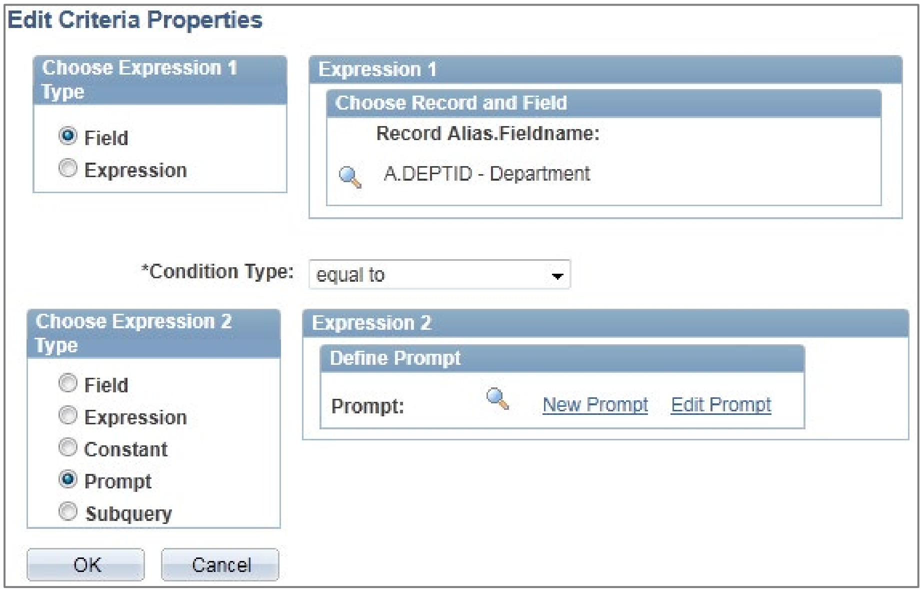
Creating the Prompt

In this example, we begin with a query using NW_EMPLOYEES that displays basic employee information. To make the query more useful, we will create a prompt that allows users to enter a 6-digit Department ID when it is run. The prompt value will be used as a Criteria so that only data that matches that Department ID will be displayed.

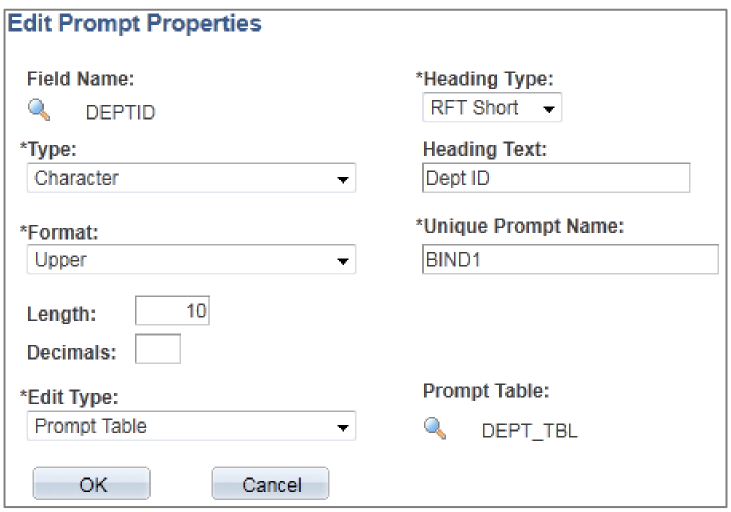
	Procedure
1.	Click on the "Criteria" tab -- we begin by adding the Criteria which will contain the prompt.
2.	Click the Add Criteria button.
3.	In the **Expression 1** box, click the button and select the A.DEPTID field – this is the field we will be matching the prompt entry to:



4. In the **Choose Expression 2 Type** box, click the "Prompt" radio button. The **Expression 2** box will update with Prompt details:

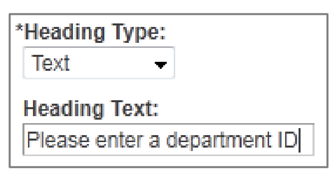


5. In the **Expression 2** box, click "New Prompt" to create your prompt. You will see the "Edit Prompt Properties" screen:

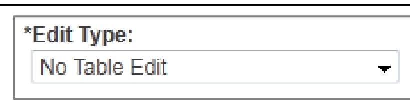


6. The **Heading Text** is the title that will be displayed when the user is asked to enter a value. It will default to the field name, but may be changed to provide more clarity.

If you wish to change the heading text, set the **Heading Type** drop-down to "text" and enter the header in the **Heading Text.** In our example, we will change it to:



7. Change the **Edit Type** to "No Table Edit;" if you do not change this, your prompt will not work correctly.



8. Click 

.

Notice that the **Expression 2** box now contains your prompt name. Prompt names are always identified by a colon and a number; in this case, our new prompt is named ":1."

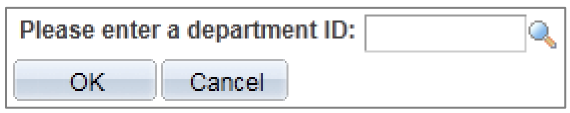
Note: Prompts can also be set up independently from the "Prompt" tab and then added into the Criteria. However, creating the prompt this way will save you an extra step.

9. Click 

to save the criteria.

How the Prompt Appears to a User

When the above query is run by any user, the prompt is displayed and information must be entered before any results are provided. In this case, the user sees the following request first:



After entering a department ID, the query will run and display only the results that match that department number.

CHUNKING QUERIES

Overview

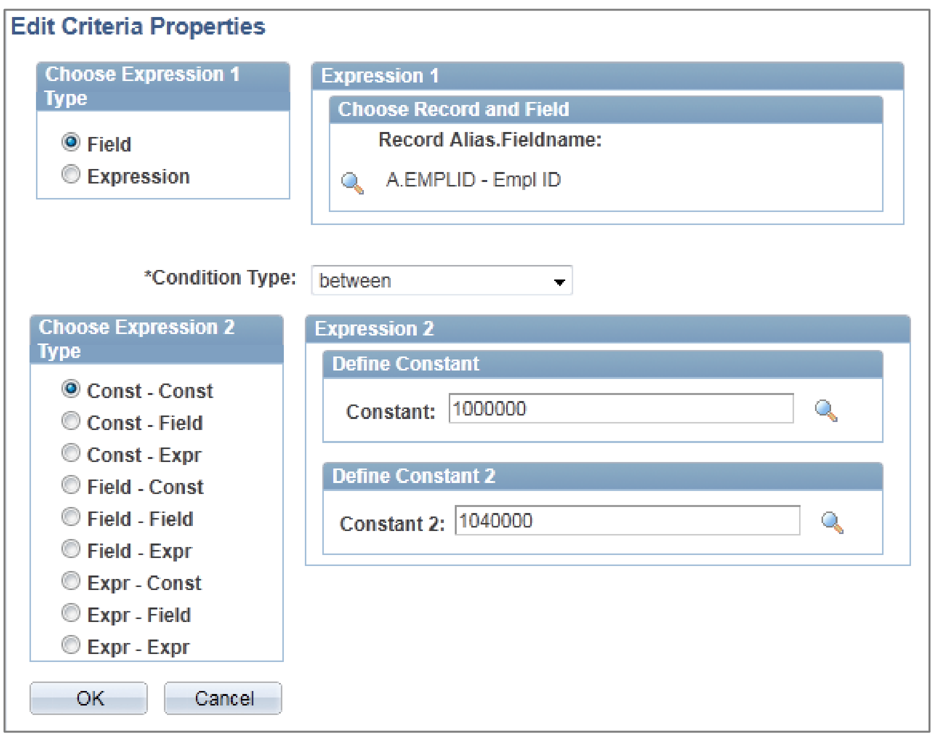
Occasionally, a query may run very slow or even stop if it is trying to handle too much data at once. If you have a query that typically returns a very large amount of data, chunking the query will help you achieve faster results.

"**Chunking**" simply refers to breaking one large query into several smaller queries by using criteria. We can then manually copy results from all of the smaller queries into one Excel spreadsheet.

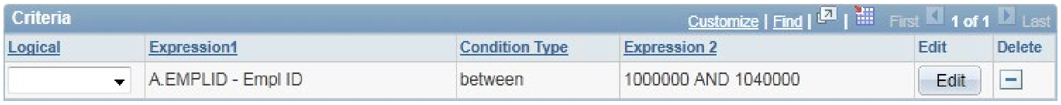
Chunking Example

One common method is to chunk a query based on Empl ID. If we have access to a very large number of employees, pulling a list from the NW_EMPLOYEES table may take a long time. To counteract this, we can run the query a couple of times, first pulling employees whose ID numbers are between 1000000 and 1040000, and second pulling employees with IDs between 1040001 and 1080000.

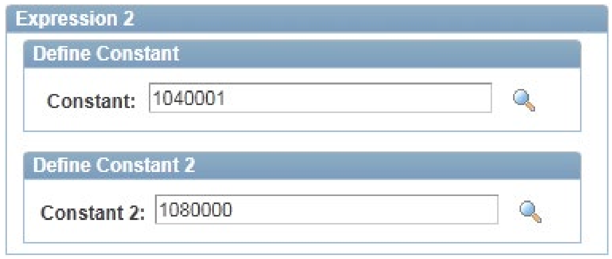
In this example, we will work with an existing query that provides employee details from NW_EMPLOYEES. We will add a new criterion to assist in the chunking effort.

	Procedure
1.	Click either the "Query" or "Fields" tab and click the button next to the EMPLID field – this will create a new Criterion for the Empl ID.
2.	For the first "chunk," we want to pull employees with an ID number between 1000000 and 1040000. We will set the **Condition Type** to "between" and enter the constants accordingly: 
3.	Click OK to save the criteria.
4.	Click the "Run" tab and download your query results into an Excel or CSV file.

5. We now have our first "chunk" of data. To get the second piece, go to the "Criteria" tab, find the criteria we just created, and click the Edit button to change it:



6. In the **Expression 2** box of the criteria, update the constants to the new "chunk" – 1040001 and 1080000:



7. Click OK to save the criteria.

8. Click the "Run" tab and download your query results into an Excel or CSV file.

Although the new results will open in another Excel or CSV file, you can simply select and copy the data into the first Excel file to create your complete results.

Section 7:
Appendices and Reference Information

A. COMMON FIELDS FOR FILTERING

The fields and codes below are commonly used in creating criteria to help limit your data.

<table>
<tr><th colspan="2">Fields and Definitions</th></tr>
<tr><td>HR DEPARTMENT ID</td><td>myHR Field Name: DEPTID

Found in Tables: NW_EMPLOYEES, JOB, DEPT_TBL, POSITION_DATA, NW_POSN_DIST, all NW_GL tables<hr>Description: The department code is a 6-digit number that identifies the department where the person is located. The first 4 digits determine the designated area, while the 2 digits at the end (nodes) identify the types of employees designated to that department. For example:
XXXX92 – The Medical School Faculty being paid from VA
XXXX93 – Graduate students being paid from The Graduate School
XXXX95 – The NMFF Common Paymaster People
XXXX96 – Officers in the University
XXXX97 – Professor Emeritus
XXXX98 – Work Study students being paid from that Department
XXXX99 – Graduate students being paid from that Department
Use To: Limit your results to data within a particular DeptID.</td></tr>
<tr><td>PAYROLL STATUS</td><td>myHR Field Name: EMPL_STATUS

Found in Tables: NW_EMPLOYEES, JOB<hr>Description: Describes an employee's payroll status in these terms:
"A" (Active) – employees currently targeted to be paid in myHR. For monthly staff, faculty and graduate students, this means they have received payment in the last month. For Temporary (Paygroup BIT) and Bi-weekly Employees (Paygroup BIR), it does not guarantee that the person has been paid, only that the person will, potentially, receive a check in the future.
"T" (Terminated) – the employee has been terminated for this particular job. There is no indicator that a person has been terminated from all jobs; this code is based on each job record number for a particular individual.
"L" (Unpaid Leave) – the employee is on an unpaid Leave of Absence for a particular job.
"P" (Paid Leave) – the employee is on a paid Leave of Absence for this job.
Use To: Limit your results to active, leave, or terminated appointments.</td></tr>
<tr><td>PAY GROUP</td><td>myHR Field Name: PAYGROUP

Found in Tables: NW_EMPLOYEES, JOB, all NW_GL tables<hr>Description: Used to select individuals who have common features including pay period end dates (monthly or biweekly), salary type (hourly or salaried), etc. For a complete list of current Pay Groups, refer to the myHR website.

Use To: Limit your results to a particular type of employee based on Pay Group.</td></tr>
</table>

Position Type / Position Category	**myHR Field Name:** NW_POSN_TYPE, NW_POSN_CATEGORY **Found in Tables:** NW_EMPLOYEES, JOB, POSITION_DATA --- **Description:** The Position Type and Category describe the general type of position (and thus appointment). **Use To:** Narrow your results by a particular Position Type (Faculty, Staff, Student, Non-Employee) and/or Category (e.g. Regular Faculty). A full list of current Position Type and Category codes can be found on the myHR website.
Action / Action Reason Codes	**myHR Field Name:** ACTION, ACTION_REASON **Found in Tables:** NW_EMPLOYEES, JOB, POSITION_DATA --- **Description:** Anytime position or appointment data is added or changed, a set of Action/Action Reason codes are assigned to describe what occurred. **Use To:** Look for particular instances of employment transactions (such as the Hire row on JOB, or a Supervisor Change on POSITION_DATA). A full list of current Action/Action Reason codes can be found on the myHR website.
Appointment End Date	**myHR Field Name:** NW_APPT_END_DT **Found in Tables:** NW_EMPLOYEES, JOB --- **Description:** This field is used for Appointments (Jobs) that are to be renewed through the reappointment process or if the position was funded for a specific period of time. Appointments supported by grants should reflect when the appointment is ending, which should correspond with the Funding Stop Date.
Position End Date	**myHR Field Name:** NW_POSN_END_DT **Found in Tables:** POSITION_DATA, NW_POSN_DIST --- **Description:** This field identifies how long the position will be available in a given department. For staff positions the end date should be indefinite, unless there was a limitation by Budget Operations for the position to be available for a certain number of years. The same would apply to research positions that are being funded by a research grant. The end date of the position should equal the end date of the funding source.
Location Code	**myHR Field Name:** LOCATION **Found in Tables:** NW_EMPLOYEES, LOCATION_TBL, DEPT_TBL, JOB, POSITION_DATA, POSN_VACANT --- **Description:** This code describes where a position is physically located at the University.
Name	**myHR Field Name:** NAME **Found in Tables:** NW_EMPLOYEES, PERSONAL_DATA, PERSON_NAME, NW_LABEL --- **Description:** This field reflects an individual's legal name that is listed on their Social Security Card. This is the name used for the NU Online Directory and any official business conducted through the University, including W-2 prints.

Benefits Program	**myHR Field Name:** BENEFIT_PROGRAM **Found in Tables:** NW_EMPLOYEES **Description:** Identifies the types of benefits the individual is eligible to receive. This field is used to determine an employee's benefits eligibility in the Benefits Administration process. It is important to note that all benefit programs are recorded on Job Record zero with the exception of NFT which is recorded on Job Record 1.
Original Hire Date	**myHR Field Name:** HIRE_DT **Found in Tables:** NW_EMPLOYEES **Description:** This is the date that the person was originally (first) hired at the University. This could reflect a hiring to a temporary or regular position.
Benefits Service Date	**myHR Field Name:** NW_LTD_SERVICE_DT **Found in Tables:** NW_EMPLOYEES **Description:** This is the date that is used to determine years of service for benefit eligibility. If a person leaves the university and subsequently returns, this date reflects the rehire date.

B. COMMONLY USED MYHR RECORDS

<table>
<tr><th colspan="2">Appointment & Position Information</th></tr>
<tr><td>NW_EMPLOYEES</td><td>Use When Looking For: Active or leave employees only. Does not include any historical or future information, or any terminated employees.

Sample Fields/Information: Name, Home Address, Position Type and Category, Appointment End Date, Pay Group, Department Number and Name, Compensation information, Benefits information, Timecard Approver

Tips:
• This is a commonly used table for most employee-related queries.
• This table is effective-dated.
• Includes the most current job information for every active or leave employment record for each employee.</td></tr>
<tr><td>JOB</td><td>Use When Looking For: Current, historical, and future job/appointment information for active, leave, or terminated employees.

Sample Fields/Information: Position Number, Job Code, Pay Group, Appointment End Date, Department, Compensation information

Tips:
• This record is effective-dated.
• JOB is a huge record. When using this, expect your query to run longer and slower than usual.
• Use this record when you either need historical information or information on terminated employees.</td></tr>
<tr><td>NW_REPORTS_TO</td><td>Use When Looking For: The myHR approvers for an employee.

Sample Fields/Information: The Staff COI, Training, Performance Evaluation, and Timecard/Leave Accrual approvers for each employee. Includes historical information.

Tips:
• If you only need information for active and on-leave employees, you can use the NW_EMPLOYEES table instead.
• This record is effective-dated.
• The table shows the position number of the approver, not the employee ID number.</td></tr>
</table>

POSITION_DATA	**Use When Looking For:** Information about active or inactive positions. Note that no funding is included in this record. **Sample Fields/Information:** Position Title (DESCR), Department ID, Pay Group, Position Type and Category, Location Code, Benefits Eligibility, Tenure Track Indicator, Position End Date **Tips:** • This table is effective-dated. • Join NW_POSN_DIST with this record to include position funding information. • To specify only active positions, use a criterion of EFF_STATUS = A.
NW_POSN_DIST	**Use When Looking For:** Funding information for active and inactive positions. This record does *not* include department, location, pay group, or other position information. **Sample Fields/Information:** Chartstring information, Funding Percentage, Funding Start Date, Funding Stop Date, Indefinite Stop Date **Tips:** • Join POSITION_DATA with this record to create a list of positions and their funding. • This record is *not* effective-dated. When you wish to see only current funding, use two criteria: NW_DIST_STOP_DT is null or NW_DIST_STOP_DT is greater than Current Date.
NW_EMPL_DIST	**Use When Looking For:** Funding for temp and work-study employees. **Sample Fields/Information:** Chartstring information, Funding Percentage, Funding Start Date, Funding Stop Date, Indefinite Stop Date

Personal & Contact Information	
PERSON_NAME	**Use When Looking For:** Name of a current or terminated employee **Sample Fields/Information:** Name, First Name, Last Name
PERSONAL_DATA	**Use When Looking For:** Demographic information for any current, leave, or terminated employee. **Sample Fields/Information:** Name, Home Address, Gender, Phone Number **Tips:** • Join this record to NW_EMPLOYEES to include demographic information.
EMAIL_ADDRESS	**Use When Looking For:** Email addresses or NetIDs for employees. **Tips:** • To find the University email address, use Email Address Type = "CAMP;" the NetID is listed as Type "NTID." • University Email addresses and NetIDs also reside on the NW_EMPLOYEES table for current, active employees.
EMERGENCY_CNTCT	**Use When Looking For:** Emergency contacts for employees.

Code Lookup Tables *Use these tables to include a name or description with a code field on another table. These tables are effective dated.*	
JOBCODE_TBL	**Use to Include:** Job Titles and other job code information, based on JOBCODE. **Sample Fields/Information:** Job Title (DESCR), default payroll account code, Salary Plan and Grade, Standard Hours
DEPT_TBL	**Use to Include:** Department Name and other department information, based on DEPTID. **Sample Fields/Information:** HR Department Number, Department Name (DESCR), Admin Unit, Position Number for the department manager
NW_ADMIN_UNIT	**Use to Include:** School and administrative unit information for a department. **Sample Fields/Information:** School/Unit name (DESCR), public name (NW_PUB_ADMIN_UNIT)
LOCATION_TBL	**Use to Include:** Campus mailing information based on the LOCATION code. **Sample Fields/Information:** Location Name (DESCR), building, street address, campus mail code

Financial Lookup Tables	
NW_CUR_ENCB_TBL	**Contains:** Current encumbrances for active positions
NW_FN_DEPT_TBL	**Contains:** List of all chartstring Financial Departments, including the NU Financials Dept Name
PROJECT	**Contains:** All Chartstring Projects, including the grant/project title
PROJ_ACTIVITY	**Contains:** The start and end dates for each Project

GL / Payroll Tables		
Record	**System**	**Description**
NW_GL_TABLE	NUFin	This is the NU Financials General Ledger Interface data. It includes earnings, journals, deductions, taxes and benefits charged to departments since fiscal year 2009. It includes emplid, check date, and chartstring information. The data from 9/1/2008 thru 11/26/2008 is converted CUFS data. **Tips:** • Use this table to get paycheck information for employees • Use this table to get chartstring information for already-paid paychecks
NW_GL_ACCOUNT	NUFin	All of the accounts that can be used in funding an employee. This also includes if the Account should be encumbered; the federal and non-federal benefit rates; the benefit account to use; if this is work study account; and the category that this account belongs to.
NW_GL_ACCTNG_VW	NUFin	This is the view used by NUFin Reporting for drill thru reporting.
NW_GL_DATA	NUFin	This is the data reported on the Payroll Expense Distribution reports (PEDs). This includes payroll expenses, journals, encumbrances, and fiscal year-to-date. This data is month-to-date. Encumbrances and fiscal year-to-date are as of the last check date. **This table has only the current month on it, if this is March you will not see February data on this table.**
NW_GL_DATA_HIST	NUFin	This is the data reported on the PEDs for each check date. This includes payroll expenses, journals, encumbrances, and fiscal year-to-date. This data has been accumulating since December 2008.
NW_GL_HIST	CUFS	This is the historical CUFS data from 9/13/1996 to 11/26/2008.
NW_GL_SUSP_ERRS	NUFin	The suspense errors from the last GL Interface run.
GL_ACCOUNT_TBL	NUFin	This table is from NUFin and is all valid accounts and their descriptions.

C. COMMON QUERY "HOW TO" EXAMPLES

Overview

This section provides details for criteria that can be set up to create common results in your report output.

How To Pull Part-Time or Full-Time Employees

To determine if an employee is part-time or full-time, the NW_TOTAL_FTE field on NW_EMPLOYEES is used. This field combines all of an employee's active appointments to show whether they are considered full- or part-time across the University.

Record	Field	Criteria	Results
NW_EMPLOYEES	NW_TOTAL_FTE	NW_TOTAL_FTE is equal to 1.0	Pulls Full-Time Employees only
NW_EMPLOYEES	NW_TOTAL_FTE	NW_TOTAL_FTE is less than 1.0	Pulls Part-Time Employees only

How To Pull Positions That Have Current Funding

To determine if a position is currently funded, the NW_DIST_STOP_DT on NW_POSN_DIST is used. If NW_DIST_STOP_DT is null, the position is funded indefinitely. If it is a date greater than the current date, it is still being funded but will stop in the future.

Record	Field	Criteria	Results
POSITION DATA and NW_POSN_DIST	NW_DIST_STOP_DT	NW_DIST_STOP_DT is null OR NW_DIST_STOP_DT is greater than "today's date"	Pulls all currently funded positions

Remember to change the logical operator to "OR" on the second criteria and group criteria using parentheses, as discussed earlier in this manual.

How To Pull Active Employees with Current Funding

Build on the query above by joining the NW_EMPLOYEES record. This will ensure only active employees with funding are returned.

To pull only faculty or staff, join NW_EMPLOYEES record to the query above. Then add one of the following criteria:

Record	Field	Criteria	Results
NW_EMPLOYEES	NW_POSN_TYPE	NW_POSN_TYPE equal to STF	Pulls all active staff employees with current funding
NW_EMPLOYEES	NW_POSN_TYPE	NW_POSN_TYPE equal to FAC	Pulls all active faculty employees with current funding

D. POSITION TYPE / CATEGORY CODES

Posn Type	Description	Posn Cat	Description
FAC	Faculty	ADF	Administrative Faculty
FAC	Faculty	ADJ	Adjunct
FAC	Faculty	CLA	Clinical Assoc/Faculty Assoc
FAC	Faculty	CNT	Contributed Services
FAC	Faculty	COT	Coterminous
FAC	Faculty	EME	Emeritus
FAC	Faculty	END	Named Professorship
FAC	Faculty	HSC	Health Service Clinician
FAC	Faculty	LIB	Librarian
FAC	Faculty	NMF	NMG
FAC	Faculty	REG	Regular
FAC	Faculty	RES	Research
FAC	Faculty	UNC	University College
FAC	Faculty	VIS	Visiting
NON	Non-Employee	ABF	American Bar Foundation
NON	Non-Employee	AFF	Affiliate
NON	Non-Employee	CHA	Chaplain Affiliate
NON	Non-Employee	COB	Cobra Dependent
NON	Non-Employee	IDP	Id Purposes, non-paid
NON	Non-Employee	IND	Indep Contractor
NON	Non-Employee	NMF	NMG Member
NON	Non-Employee	NRO	NROTC staff
NON	Non-Employee	PDC	PostDoctorate
NON	Non-Employee	RET	Retiree
NON	Non-Employee	RPK	Research Park
NON	Non-Employee	SUP	Supplemental (Non-Compensation) Pay
NON	Non-Employee	TRN	Visiting Ungrd Stud- Training
NON	Non-Employee	TRU	Trustee
NON	Non-Employee	VSC	Visiting Scholar
NON	Non-Employee	VSS	Visiting Student
STF	Staff	EXM	Exempt
STF	Staff	NEX	Non-Exempt
STU	Student	GRA	Graduate Non Work Study
STU	Student	GWK	Graduate Work Study
STU	Student	SUM	Summer Session
STU	Student	UNG	Undergraduate Non Work Study
STU	Student	UWK	Undergraduate Work Study

E1. PAY GROUP CODES

Pay Group Code	Description
BIR	Biweekly Regular
BIT	Biweekly temporaries
IND	Independent Contractors
LTD	Long Term Disability
MGW	Monthly Graduate Wages
MOF	Monthly Faculty
MON	Monthly Staff
NMF	Monthly NMG
OTH	Other
TRN	Training for Students & POI

E2. EMPLOYMENT STATUS CODES

Employment Status	Description
Active Employment	
A	Active
L	Unpaid Leave of Absence
P	Paid Leave of Absence
S	Suspended
Inactive Employment	
T	Terminated
D	Deceased

E3. BENEFITS PROGRAMS CODES

Benefits Code	Benefit Program Description
046	Union 46 Employees-Eligible
399	Union 399 Employees-Eligible
681	Union 681 Employees-Eligible
ACT	Active Employees Benefit Prog
BAC	BIR Active EEs Benefit Prog
BIW	Biweekly Employees-Eligible
CBN	Cobra/Retiree Benefit Program
MTH	Monthly Employees-Eligible
NBE	Non Benefits Eligible Employee
NBN	Not Benefits Eligible
NFT	NMFF Full-Time Faculty
NON	Non Employees (contractors)
NRS	NRSA Post Docs
QAT	Qatar Employees
RET	Retired Employees
STD	STD Ben Pgm
TER	Terminated Employees
TMP	Temporary Employees

F1. NW_EMPLOYEES TABLE

Description: Basic appointment and personal information for all active and on-leave employees. To see information for terminated employees, you must use JOB.

Alternate Table: EMPLOYEES contains some of the same employment information for active employees, but does not include some Northwestern-specific fields (fields beginning with "NW_").

Effective Dated: NW_EMPLOYEES is effective-dated and will show only the most recent information for a job record. To show all rows for a job record, use the JOB table.

Keys: EMPLID, EMPL_RCD

Keys and Effective Dated Information		
EMPLID	Employee ID	*Join with PERSONAL_DATA to get more personal information.*
EMPL_RCD	Employment Record Number	
EMPL_STATUS	Payroll Status	"A" (Active), "L" (Unpaid Leave), "P" (Paid Leave)
NAME **NAME_PREFIX** **PREF_FIRST_NAME**	Name Fields	Full Name (LN,FN), Prefix (e.g. Dr. or Mrs.), and Preferred First Name. To obtain separate fields for First Name and Last Name, join with PERSON_NAME.
EFFDT	Effective Date	The date this row took effect.
EFFSEQ	Effective Sequence Number	If more than one action took effect on the same date, the sequence will display the order in which they took effect, beginning with "0."
ACTION **ACTION_REASON**	Action and Reason Codes	The 3-letter action and reason codes associated with this new row; filter on these to look for specific action instances.
ACTION_DT	Date of Entry	The date this change was *entered* (not necessarily the effective date).
Full-time, Contract Period, and Salary Fields		
GRADE	Salary Grade	
PAYGROUP	Pay Group	*Use Pay Group list to filter on specific values (e.g. MON for monthly staff, BIT for temporary employees)*
SAL_ADMIN_PLAN	Salary Administration Plan	
NW_FULL_TIME_PCT **STD_HOURS** **NW_CONTRACT_PD**	Percent Full-Time, Standard Hours, and Contract Period for this appointment	
COMPRATE **COMP_FREQUENCY**	Compensation Rate and Frequency	COMP_FREQUENCY displays "M" (Monthly) or "H" (Hourly); COMPRATE will then display the Monthly or Hourly rate, respectively.
HOURLY_RT **MONTHLY_RT** **ANNUAL_RT**	Hourly, Monthly, and Annual Rates	Determined using the current COMPRATE and COMP_FREQUENCY fields. Note that the rate is for this employment record, not the total pay of the person with multiple records.
NW_MONTHLY_CONT_RT	Monthly Contract Rate	
NW_ANNUAL_FTE_RT	Annual FTE Salary for this Appt	
NW_BUDGETED_SALARY	Budgeted Salary	
NW_EXCLD_MER_BASE	Exclude from Merit Base	Will include an explanation if this salary is to be excluded from the employee's merit base.
NW_TOTAL_PCT_TIME **NW_TOT_ANNL_SAL** **NW_TOTAL_FTE**	Employee's Total Percent Full Time, Annual Salary, and FTE Salary	Total Percent Full Time, Annual Salary, and FTE Salary for all active appointments.
Position Information		
POSITION_NBR	Position Number	
NW_POSN_END_DT	Position End Date	Will be blank if the position has an indefinite end.
NW_POSN_TYPE **NW_POSN_CATEGORY**	Position Type and Category	*Use Position Type/Category list to filter on specific values.*
DEPTID **DEPTNAME**	HR DeptID and Dept Name	
JOBCODE	Job Code	
JOBTITLE **BUSINESS_TITLE**	University and Business (Department) Titles	These titles will be equivalent unless a specific Business Title was requested and approved for the employee.

Appointment Information		
NW_APPT_START_DT **NW_APPT_END_DT**	Appointment Start and End Dates	NW_APPT_END_DT will be blank if the appointment has an indefinite end.
NW_PRIM_ROLE_IND	Primary Role Indicator	"Y" (Primary Role), "N" (Not Primary Role). Primary role flag is not maintained for temporary and graduate student employees, only use for faculty and regular staff.
NW_PRIM_ACAD_IND	Academic Appointment Indicator	"P" (Primary), "J" (Joint), "S" (Secondary).
EXPECTED_RETURN_DT	Expected Leave Return Date	Will display for employees on leave.
NW_TENR_CL_BEG_DT **NW_TENURE_STATUS**	Tenure Clock Begin Date and Tenure Status for Faculty	NW_TENURE_STATUS: "A" (Attained), "T" (Tenure Eligible), "N" (Not Tenure Eligible).
NW_APPT_INDIC	Appointment Indicator	
NW_APPT_ANNL_RENEW	Annual Renewable Indicator	"Y" (Annual Renewable appointment), "N" (Not Annual Renewable).
BENEFIT_PROGRAM **BENEFIT_RCD_NBR**	Employee Benefit Data	The employee's current benefit program enrollment and the Employment Record Number from which their benefits contribution is calculated.
Northwestern Contact Information		
WORK_PHONE	Work Phone	
LOCATION	Work Address Location Code	*Join to LOCATION_TBL or LOCATION_VW to get address for location.*
NW_ADDRESS_ROOM	Room Number	
NW_EMAIL_ADDRESS	NU Email Address	*Join to EMAIL_ADDRESSES to get additional emails from PERSONAL_DATA.*
NW_NETID	NetID	
NW_CHK_ADDR	Check Address Code	*Join to NW_CHK_ADDR_TBL to get full check address.*
Personal Information		
ADDRESS1 **ADDRESS2** **CITY** **STATE** **POSTAL** **COUNTRY**	Primary Home Address Information	*Join with ADDRESSES to get additional address details other than the Primary.*
HOME_PHONE **SEX** **BIRTHDATE**	Additional Information from PERSONAL_DATA	*Join with PERSONAL_PHONE to get additional employee phone numbers other than the Primary Home Phone.*
NW_CITIZEN_COUNTRY **NW_RES_COUNTRY** **NW_VISA_PERMIT_TYP** **NW_VISA_EXP_DT**	Visa Information: Country of Citizenship, Country of Residency Visa Type, Visa Expiration Date	
FT_STUDENT	Full-Time Student	Will display "Y" if employee is also a full-time student.
Approver Information		
NW_ACCRUL_REPTS_TO **NW_ACCRUL_RPT_EMAI** **NW_ACCRUL_RPT_EMPL** **NW_ACCRUL_RPT_NAME**	Timecard/Leave Accrual Approver: Position Number, Email Address, EmplID, and Name	
NW_CNFL_REPTS_TO **NW_CNFL_RPT_EMAIL** **NW_CNFL_RPT_EMPLID** **NW_CNFL_RPT_NAME**	Staff Conflict of Interest Approver: Position Number, Email Address, EmplID, and Name	
NW_PERFRM_REPTS_TO **NW_PERFRM_RPT_EMAI** **NW_PERFRM_RPT_EMPL** **NW_PERFRM_RPT_NAME**	Performance Evaluation Approver: Position Number, Email Address, EmplID, and Name	
NW_TRAIN_REPTS_TO **NW_TRAIN_RPT_EMAIL** **NW_TRAIN_RPT_EMPL** **NW_TRAIN_RPT_NAME**	Training Approver: Position Number, Email Address, EmplID, and Name	

F2. NW_GL_TABLE TABLE

Description: All General Ledger payroll line items FY2009 and later (NU Financials). For CUFS system data (FY08 and earlier), use the GL record that ends in the appropriate fiscal year (NW_GL_TABLE1997 through NW_GL_TABLE2008).

Alternate Tables:

- NW_GL_DATA – The data reported on Payroll Expense Distribution reports (PEDs) (expenses, journals, encumbrances, fiscal ytd) for the **current month only.**
- NW_GL_DATA_HIST – Includes the PED data for each check date since December 2008.

Key: NW_GL_NUM_ASSIGN *(You may have to include this key to get complete GL results including all entry types.)*

Appointment Information		
DEPTID	HR Department ID	*Join with DEPT_TBL to get Department Name.*
EMPLID	Employee ID	*Join with JOB to get job information or PERSON_NAME to get name.*
EMPL_RCD	Employment Record Number	
POSITION_NBR	Position Number	
JOBCODE	Job Code	*Join with JOBCODE_TBL to get Job Title.*
NW_POSN_TYPE **NW_POSN_CATEGORY**	Position Type and Category	*Use Position Type/Category list to filter on specific values.*
PAYGROUP	Pay Group	*Use Pay Group list to filter on specific values.*
Chartstring Information		
FUND_CODE	Fund	*Join with FUND_TBL to get Fund details.*
NW_FN_DEPTID	Financial Department	*Join with NW_FN_DEPT_TBL to get FN Dept details.*
PROJECT_ID	Project/Grant	*Join with PROJECT_TBL to get project/grant details.*
ACTIVITY_ID	Activity	
PROGRAM_CODE	Program	*Join with PROGRAM_TBL to get program details.*
CHARTFIELD1	Chartfield 1	Filter to show "SUSP" to see suspense transactions.
ACCOUNT	Account Code	
NW_POS_PCT	Position Distribution	Percent of pay for this position that was charged to this chartstring (at the time of the GL run).
NW_ERROR_DESCR	Reason for Suspense	If CHARTFIELD1 shows "SUSP," this will display the reason for suspense.
GL Dates		
PERIOD_BEGIN_DT **PAY_END_DT**	Pay Period Begin and End Dates	Official pay period beginning and end dates.
EARNS_BEGIN_DT **EARNS_END_DT**	Earnings Begin and End Dates	These dates may differ from Pay Period dates depending on the employee's hire/termination date or the start/stop date of the funding.
CHECK_DT	Paycheck Issue Date (Pay Date)	
OFF_CYCLE	Off Cycle Payment	Displays "Y" if the check was issued on an off-cycle adjustment run or manual check print.
FISCAL_YEAR	Fiscal Year	4-digit fiscal year.
NW_FISCAL_QTR	Fiscal Quarter	Fiscal Quarter: "1" (Sep-Nov), "2" (Dec-Feb), "3" (Mar-May), "4" (Jun-Aug).
GL Pay Information		
NW_ENTRY_TYPE	General Ledger Entry Type	"TBL" (Tax Table), "BEN" (Fringe Benefits), "JNL" (Journal), "ERN" (Earnings), "DED" (Deduction), "NET" (Net Pay), "BOF" (Benefits Recovery), "JBN" (Journal Fringe Benefits).
NW_GL_TYPE_CD	Earnings Type Code	Provides further details about the earnings type or tax.
NW_GL_AMT	General Ledger Amount	Amount charged for the Entry Type.
HOURLY_RT	Hourly Rate	An hourly rate is used to calculate the correct monthly pay.
NW_GL_HOURS	Hours Charged	Hours worked.
Journal Details – *provides additional information if the line refers to a Journal Entry*		
NW_JRNL_APPL_DT	Date Journal was Entered	
NW_JRNL_FRM_DT **NW_JRNL_THRU_DT**	Journal From and Thru Dates	
NW_JRNL_DESCR	Journal Description	

F3. PERSON_NAME TABLE

Description: Primary name for all past and current employees.

Tip: Use PERSON_NAME instead of PERSONAL_DATA to get name. PERSON_NAME does not have security restrictions, so you will be able to see data for past employees who transferred to a different department.

Key: EMPLID

Names		
EMPLID	Employee ID	*Join with JOB to get job details.*
NAME	Full Name (FN LN)	
NAME_PREFIX **NAME_SUFFIX**	Name Prefix and Suffix	
LAST_NAME **FIRST_NAME** **MIDDLE_NAME**	Separate Last, First, and Middle Name Fields	

F4. PERSONAL_DATA TABLE

Description: Name and personal information for all past and current employees.

Alternate Table: When creating mailings, use NW_LABEL instead; this table includes the names and University mailing address for all employees within your access.

Additional Personal Data Tables: Join PERSONAL_DATA to any of these additional tables to get more personal information:

- ADDRESSES (All off campus and personal mailing addresses an employee has set up in Self-Service)
- EMAIL_ADDRESSES (All Northwestern and personal email addresses set up in Self-Service)
- NAMES (All current and past names for an individual)
- PERSONAL_PHONE (All phone numbers set up in Self-Service)
- PERSON_NAME (Current Primary name for an individual)
- *Do NOT use NW_EMAIL_ADDR; it does not contain correct information*

Key: EMPLID

Names		
EMPLID	Employee ID	*Join with JOB to get job details.*
NAME	Full Name (LN,FN)	
NAME_PREFIX **NAME_SUFFIX**	Name Prefix and Suffix	
LAST_NAME **FIRST_NAME** **MIDDLE_NAME**	Separate Last, First, and Middle Name Fields	
PREF_FIRST_NAME	Preferred First Name	
NAME_DISPLAY	Display Name	A more readable name, usually in the form of "FN LN."
Contact Information		
ADDRESS1 **ADDRESS2** **CITY** **STATE** **POSTAL** **COUNTRY**	Primary Home Address Information	*Join with ADDRESSES to get additional address details other than the Primary.*
PHONE	Primary Work Phone	
SEX **MARITAL_STATUS** **BIRTHDATE**	Additional Personal Details	
FT_STUDENT	Full-Time Student	Will display "Y" if employee is also a full-time student.

G. PUBLIC QUERIES

This list contains some of the more common public queries that can be accessed and run in the Reporting database. Any public query can be modified for your own use by first saving a copy for yourself. For a list of all available public queries, simply search for "PUB" in the Query Manager.

Query Name	Description	Tables	Fields
PUB_GL_DATA	Provides salary information with journal entries for the general ledger for employees in your chartstring for that specific Fiscal Year.	NW_GL_TABLE, PERSONAL_DATA	Name, EmplID, Empl Record Number, Department, Earnings BeginDate, Earnings End Date, Paycheck Issue Date, Paycheck Number, Fiscal Year, Fiscal Quarter, Job Code, Fund, FN Department, Project, Chartfield, Account, General Ledger Hours, General Ledger Amount, Assigned GL Number, General Ledger Type Code, Grant Account Code, Journal Description, Journal From Date, Journal From Date, Journal Thru Date, Position category, Position Type, Pay Group, Position Number
PUB_GL_DATA_EMPLID	Provides salary information with journal entries for the general ledger for employees in your chartstring for that specific Employee ID.	NW_GL_TABLE, PERSONAL_DATA	Name, EmplID, Empl Record Number, Department, Earnings BeginDate, Earnings End Date, Paycheck Issue Date, Paycheck Number, Fiscal Year, Fiscal Quarter, Job Code, Fund, FN Department, Project, Chartfield, Account, General Ledger Hours, General Ledger Amount, Assigned GL Number, General Ledger Type Code, Grant Account Code, Journal Description, Journal From Date, Journal From Date, Journal Thru Date, Position category, Position Type, Pay Group, Position Number
PUB_GL_DATA_DEPT	Provides salary information with journal entries for the general ledger for employees in your chartstring in a department ID range.	NW_GL_TABLE, PERSONAL_DATA	Name, EmplID, Empl Record Number, Department, Earnings BeginDate, Earnings End Date, Paycheck Issue Date, Paycheck Number, Fiscal Year, Fiscal Quarter, Job Code, Fund, FN Department, Project, Chartfield, Account, General Ledger Hours, General Ledger Amount, Assigned GL Number, General Ledger Type Code, Grant Account Code, Journal Description, Journal From Date, Journal From Date, Journal Thru Date, Position category, Position Type, Pay Group, Position Number
PUB_APPT_END_DATES	Lists all employees in a department and the date their appointment will end.	NW_EMPLOYEES	EmplID, Name, Department ID, Department Name, Job Title, Position Number, Appointment End Date
PUB_APPT_END_DATES_EXPIRING	Lists all employees in a department sorted by their appointment end date.	NW_EMPLOYEES	EmplID, Name, Department ID, Department Name, Job Title, Position Number, Appointment End Date
PUB_APPROVERS	Lists all approvers tied to an employee.	NW_EMPLOYEES	Includes employee data and Postion Number/Name for the Supervisor, Staff COI Approver, Training Approver, Performance Evaluation Approver, Leave Accrual Approver, Primary & Backup Kronos Approvers, Department Manager
PUB_DEPARTMENT_LIST	Lists all myHR Departments.	DEPT_TBL NW_ADMIN_UNIT	Status as of the Effective date, Department, Description
PUB_EMAILS_AND_NETIDS	Returns currently active employee's name, email address, NET ID and department	NW_EMPLOYEES	Name, e-Mail Address, Department, Netid
PUB_EMPLOYEES_HOME_ADDRESS	Returns currently active employee's name, home address, and department	NW_EMPLOYEES	Name, Department, Building#, Address Line 1, Address Line 2, City, State, Zip Code, Home Phone#, Paygroup
PUB_EMPLOYEES_WORK_ADDRESS	Provides employees' work addresses for mailing labels.	NW_LABEL NW_EMPLOYEES	Name, Department, Building#, Address Line 1, Address Line 2, City, State, Postal Code, NW Campus Mail Code, EmplID

PUB_POS_REPORTS_TO	Pulls active employees and the reports to information found on each position. This Reports To field drives Kronos Security.	NW_EMPLOYEES	Emplid, Name, DeptID, DeptName, Reports To Position Number, Reports To Supervisor Name
PUB_POSITIONS_FUNDING	Provides listing of currently active filled positions. These results will provide current and future funding as well as the incumbent name.	NW_EMPLOYEES NW_POSN_DIST POSITION_DATA	
PUB_POSITION_FUNDING_EXP	Provides a listing of all the currently active filled positions you have access to that will be expiring in the date range selected. This report will also provide the current incumbent name.	NW_EMPLOYEES NW_POSN_DIST POSITION_DATA	EmplID, Empl Rcord Number, Name, Employee Status, Position Number, Job Code, Job Title, Job Entry Date, Department, Pay Group, Appointment End Date, Benefit Eligible Indicator, Percent Full Time, Account, Object of Expense, Distribution Percent, Distribution Start Date, Distribution Stop Date
PUB_POSITION_NO_FUNDING	A listing of currently active filled positions with no funding. These results have the potential to hit the suspense chartstring if the position funding is not updated.	NW_EMPLOYEES POSITION_DATA	EmplID, Empl Rcord Number, Name, Employee Status, Position Number, Job Code, Job Title, Job Entry Date, Department, Pay Group, Compensation Rate, Appointment End Date, Benefit Eligible Indicator, Percent Full Time
PUB_REPORTS_TO	Lists the active employees and their approver information for the selected departments. The approver information includes conflict of interest, training, leave accruals, and performance evaluations.	NW_EMPLOYEES	Emplid, Employee Record Number, Name, Conflict of Interest Reports to, Training Reports to, Leave Accruals Reports to, Performance Reports to (and their names)
PUB_PTA_APPROVERS	Provides a listing of FN Dept and the PTA/Backup Approvers.	NW_PTA_TBL NAMES	FN Dept, Project_ID, NW_PTA_Primary, Name, NW_PTA_BACKUP, Name, Last date updated