Advanced ARC Reporting

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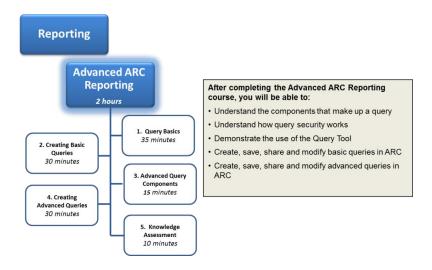
Advanced ARC Reporting



Advanced ARC Reporting

This is the *Advanced ARC Reporting* course within the *Reporting* curriculum.

If you need a reminder on how to navigate through this course using ARC's web-based training tool (WBT), click here for a quick reference guide.





Query Basics

This is the *Query Basics* lesson of the *Advanced ARC Reporting* course. Upon completion of this lesson, you will be able to:

- Understand the use of the Query Tool
- Identify what types of data can be retrieved
- Run an existing query

Estimated Time to Complete Lesson: 35 minutes



Query Overview

The PeopleSoft Query is an end user reporting tool that allows you to extract precise information from the ARC database without having to write SQL code.

- Query: Request for information retrieval from one or more data sources
- SQL (Structured Query Language): Programming language to manage data within databases
- PeopleSoft Query Manager is a tool to help users build SQL statements and view query output



How the Query Tool Works

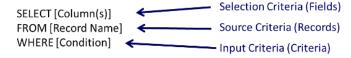
The Query Tool uses SQL in order to retrieve data from the database.

SQL (Structured Query Language) is a programming language designed for managing data within databases. The data is stored in tables and the relationships among the data are also stored in tables. The data can be accessed or reassembled in many different ways without having to change the table forms. The Query Tool uses User Input in order to generate SQL. When a Query is run, this SQL is executed at the database level, and the results are returned to the user through the Query Tool.

Database Elements

- Tables (Records): Tables are composed of columns and rows. These tables are called Records in PeopleSoft.
- Columns (Fields): Columns are single pieces of information for each row, they are the fields (Headers) in the database.
- Rows (Field Data): A row contains all the information for a unique combination of key values on the table, they are the data that is contained in the fields.
- Keys: Keys are unique identifiers for a set of data— a combination of keys can never be repeated.

Basic SQL Select Statement:





Benefits

Some of the benefits of the Query tool are as follows:

- Reporting flexibility
 Queries can be one-time, ad-hoc or can be used repeatedly
 User friendly functionality



Query Security

Public versus Private Queries

Public Queries are visible to anyone who has access to the records in a specific query. Private queries are only visible to the specific user who has created it, or has been given access through the copy function.

Row Level Security

When a user runs a query, the query is subject to Row Level Security. Row Level Security is enabled for Business Units (COLUM, COCIN, REIDH, etc). This means that if the user doesn't have access to a particular Business Unit, the query will not return any rows of data associated with that Business Unit.

Secured Records

In order to enable ChartField Security on queries (i.e. allow users only to see data in specific accounts and departments) all of the transactional tables are marked as secured. You can identify a secured record by looking at the 'View SQL' tab. If there a table there that you did not join, then it is a security record. This ensures that the query will return only transactions with departments and accounts that you have access to.



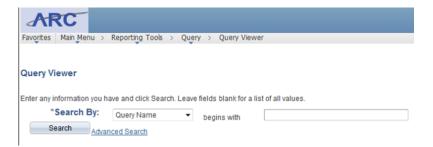
Query Viewer

Query Viewer is the place to run and view queries. Upon searching for a query, you can choose to run the query immediately and view the results in a new browser window or to schedule it to be run at a later time (or predefined schedule).

Queries Viewer provides the ability to:

- Search for a query
- Preview a query in the active browser window
- Run a query and display results in a new browser window
- Export and print a query
- Schedule a query

Navigation: Reporting Tools > Query > Query Viewer





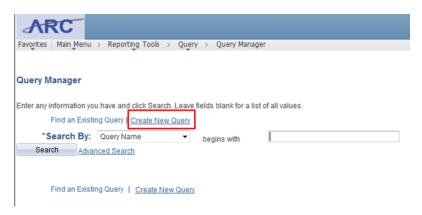
Query Manager

Query Manger is the administrative area where you can build, search for, organize and edit queries.

In addition to the Query Viewer capabilities, Query Manager provides the ability to:

- Create New Queries
- Delete Queries
- Edit Queries
- Rename Queries
- Copy Queries
- Move Queries across folders

Navigation: Reporting Tools > Query > Query Manager





Query Search

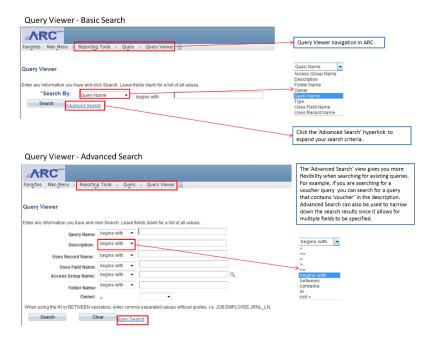
You can either use the 'Basic Search' or the 'Advanced Search' when searching for existing queries. Both search types allow you to select the following 'search by' criteria: access group name, description, folder name, owner, query name, type, uses field name, uses record name.

The Basic Search is useful when you know what the query name or the description of the query begins with.

- The search function is not case sensitive
- You can enter partial or full name in this field. You can leave the field blank and click on the search button in which case the system will retrieve all the Queries available. (**Note**: Clicking Search without entering any description will return the only first 300 queries in the system)
- The following symbols are used as wild cards '%' and ' '

The Advanced Search allows for more flexibility. You can specify additional search methods for the desired field(s) (e.g. equals, does not equal, contains etc).

• The advanced search enables you to perform a narrower search by using one or more search by criteria and selecting from a choice of conditions for each search criterion



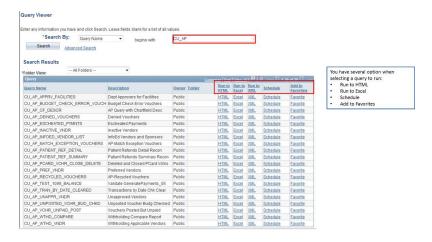


Basic Search

When using the basic search screen, keep in mind that all query names begin with 'CU'. You can begin to narrow down the search by specifying which module owns the query (e.g. KK, GL, AP, PO, PC).

The image below shows the search results for query names that begin with 'CU_AP'.

Please note that you will only be able to search for queries that you have been granted access to.

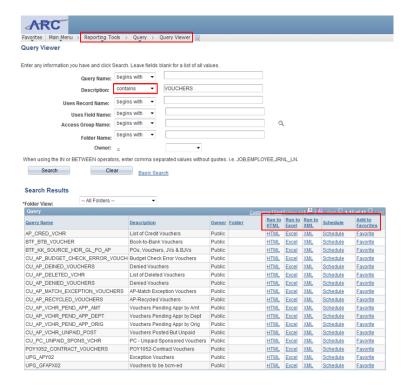




Advanced Search

The Advanced Search screen gives you additional flexibility when searching for existing queries. You can specify one or more fields either to broaden or narrow down your search.

In the example below, we are searching for all queries that contain 'voucher' in the description field.





Output Options

Once you locate the query you wish to run, you have the following options:

- Run the query to HTML (query results are displayed in a new web page)
- Run the query to Excel (query results are displayed in an Excel document)
- Run the query to XML (query results are displayed in an XML document)
- Schedule the query to be run within a specific date range
- Add the query to your list of Favorites



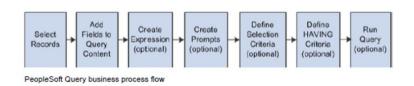
Note: Queries can also be added to a favorite list, doing so allows you to create a separate logical list for some of your most frequently accessed Queries.

My Favorite Queries are listed in a separate group box below the Query search results box. You can remove the Queries at any time from the list by clicking on the Remove button.



Query Components

This process flow illustrates the Query business processes:



Each of these processes have its own tab in the Query Manager page:



In this lesson we will introduce Records, Query, Fields, Criteria, View SQL and Run Query. Expression, Prompts, and Having will be covered in the *Advanced Query Components* lesson.

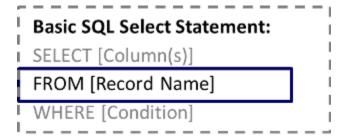


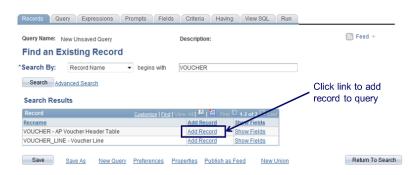
Records

The first step in creating a query is adding records.

Records are added via the 'Records' tab.

On the 'Records' tab you will select the records (tables) to be included in the query. You can search for records via the basic or the advanced search windows.



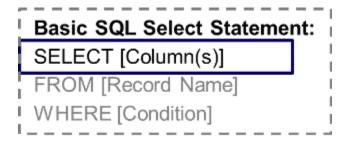


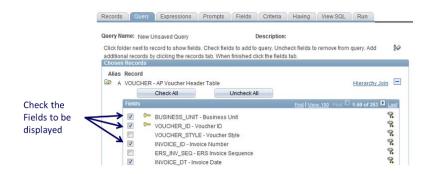


Query

The second step when creating a query is to select the Fields to display.

- Fields are selected via the Query tab
- Check fields to be displayed
- Do not select fields here that will be used as conditions but not displayed
- You can add additional records by performing joins.







Fields

The Fields tab displays the selected fields for the output in the query. Edit field properties, such as column number, heading text, sort order and aggregate functions. You can delete a field from the query and you can also select a field on which to set criteria.



Aggregate Functions

- Sum Sums by all the other fields
- Count Counts by all the other fields
- Min finds the minimum with the same fields
- Max finds the maximum with the same fields
- Average finds the average with the same fields

Translate Values

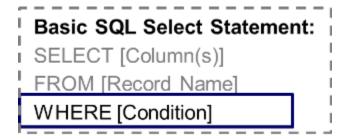
These values replace a simple status ('A' or 'P') with the 'Short' or 'Long' Descriptions ('Approved' or 'Pending') name for that value in a query. You can Effective Date these descriptions.

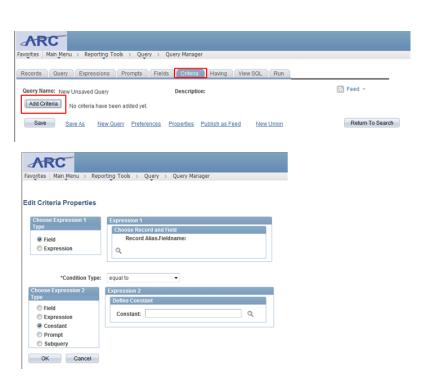


Criteria

The third step when creating a query is to add criteria.

- Entered via Criteria tab
- Can view translates for a field
- Ability to group conditions using AND/OR statement

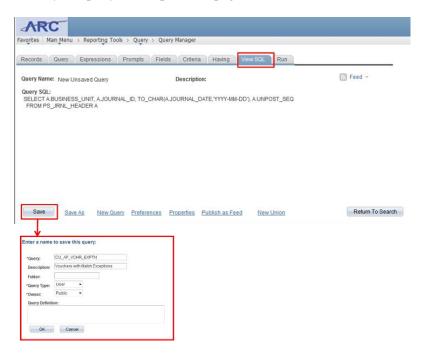






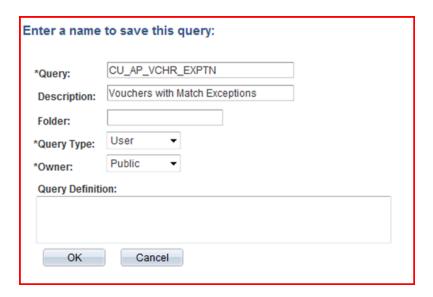
View SQL

The View SQL page displays the SQL SELECT statement that Query Manager creates after you create your query on the previous pages.





Saving a Query



Query: The name of your query is what you can use to search for it. Please remember to name it according to the following naming convention:

Part	Description	Example
1	Query names should always begin with 'CU'	CU
2	Identifies the owning module	GL, KK, PC, AP, PO
3	Brief description of the query	Journals, Status (active, inactive, deleted etc)
4	Describes any filters or sorts in the query	BY DATE, OPRID, etc
5	Identifies what type of transaction the query returns	Reconciliation, Allocation

^{**}Private and public queries can not have the same name

Description: This is a description that all users will see when searching for the query

Folder: You can create folders and add queries to them. This can help with your searching – for instance if you have a certain set of GL or AP queries, you can create folders, and filter your searches by them.

Query Type: Defines the purpose of the query. There are five types: user, reporting, process, role, archive, ps/nVision

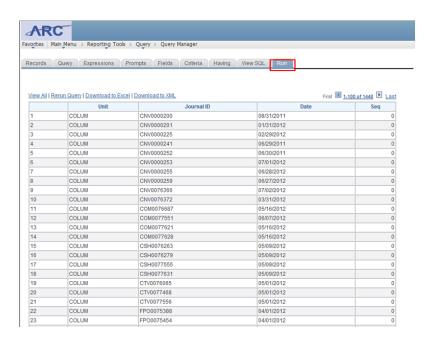
Owner: This is where you define the query a public or private

Query Definition: This is a long description that only users with Query Manager Access will be able to see



Run

- Use the Run tab when ready to view output
- Note the column headers and sort order.





Creating Basic Queries

This is the *Creating Basic Queries* lesson of the *Advanced ARC Reporting* course. Upon completion of this lesson, you will be able to:

- Create and run a simple query using Query Manager functionality
- Demonstrate how to use comparison values on a query
- Distinguish the different comparison operators that can be used to specify query criterion
- Demonstrate how to run and save queries
- Demonstrate how to view the underlying SQL code of a query

Estimated Time to Complete Lesson: 30 minutes



Group Exercise: Creating a Query

In this scenario you will learn how to create a basic query.

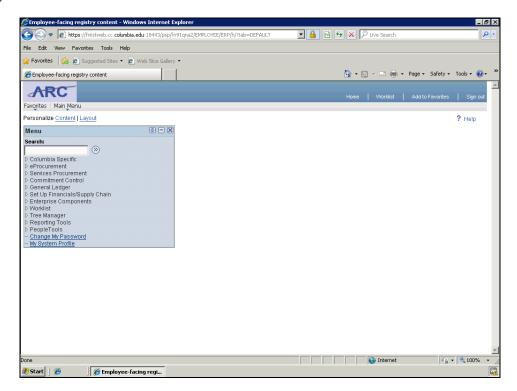
- Voucher Count Example



Creating a Basic Query

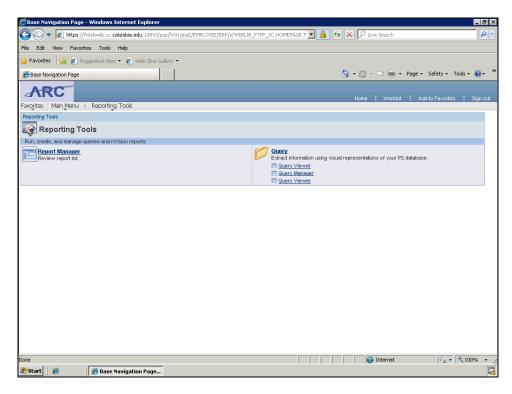
Procedure

Welcome to the *Creating a Basic Query* topic. In this topic you will learn how to create a basic query in ARC.

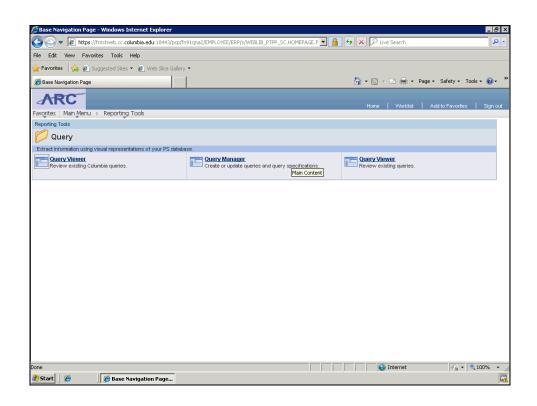


Step	Action
1.	Click the Reporting Tools link.
	▶ Reporting Tools



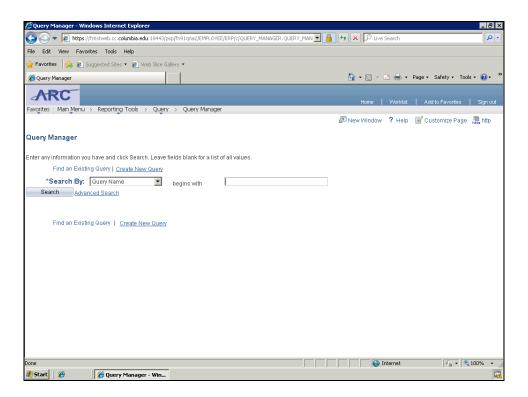


Step	Action
2.	Click the Query link.
	Query



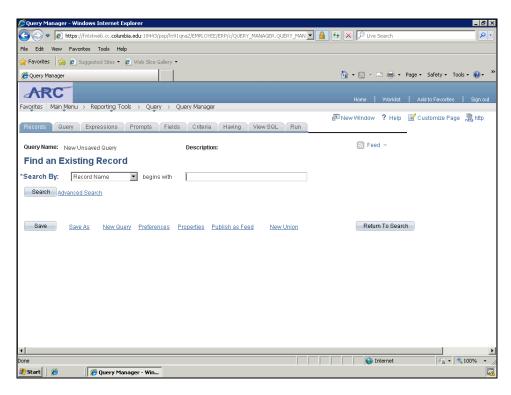


Step	Action
3.	Click the Query Manager link.
	Query Manager

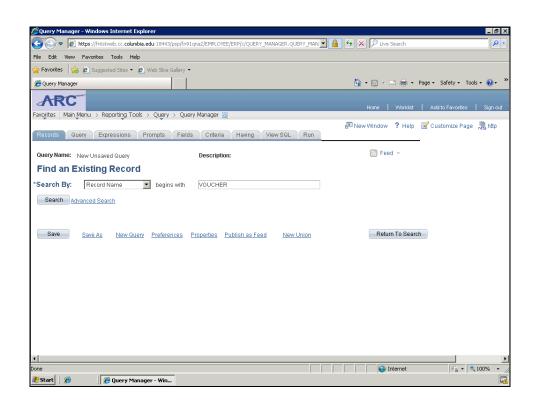


Step	Action
4.	Click the Create New Query link.
	Create New Query



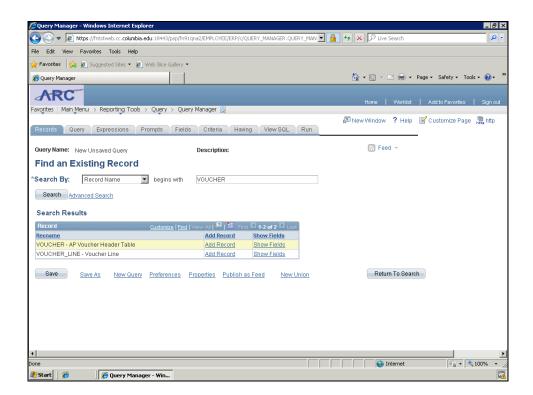


Step	Action
5.	Enter the desired information into the begins with field. Enter " VOUCHER ".



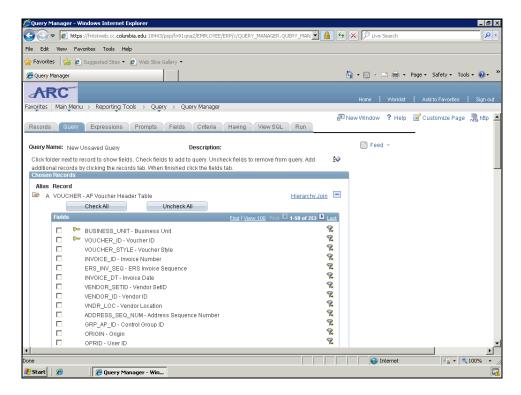


Step	Action
6.	Click the Search button.
	Search

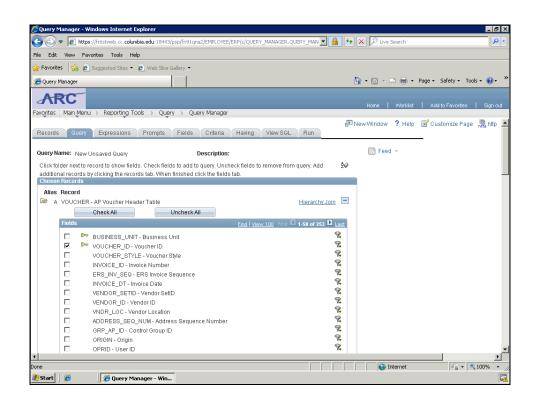


Step	Action
7.	Click the Add Record link.
7.	



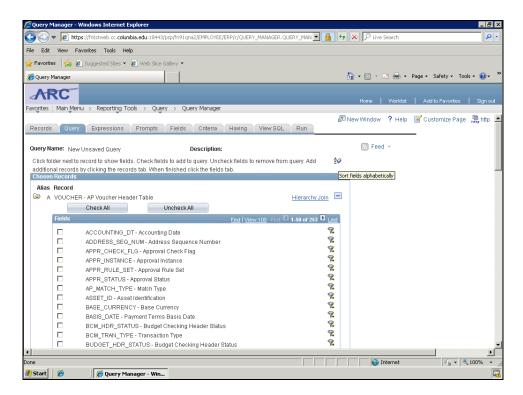


Step	Action
8.	Click the Select option.



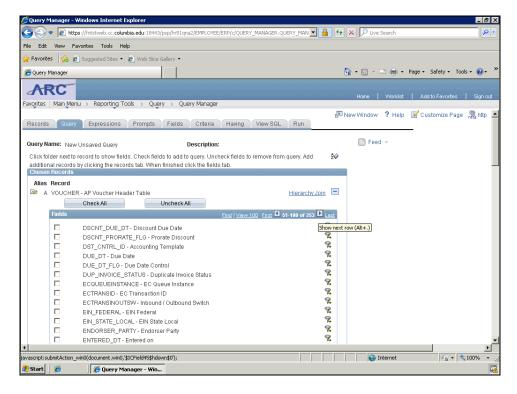


Step	Action
9.	Click the Sort fields alphabetically button.
	2€

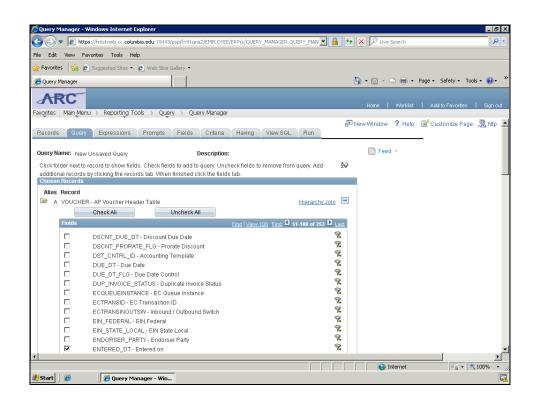


Step	Action
10.	Click the Show next row (Alt+.) button.



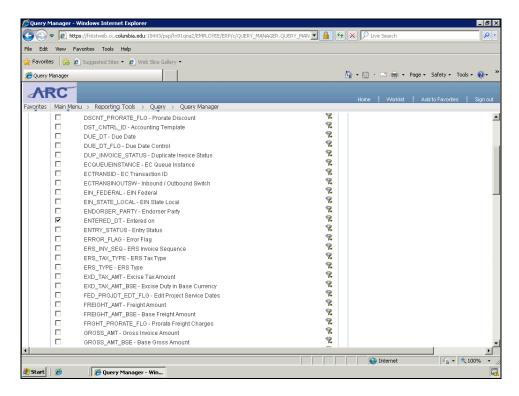


Step	Action
11.	Click the Select option.



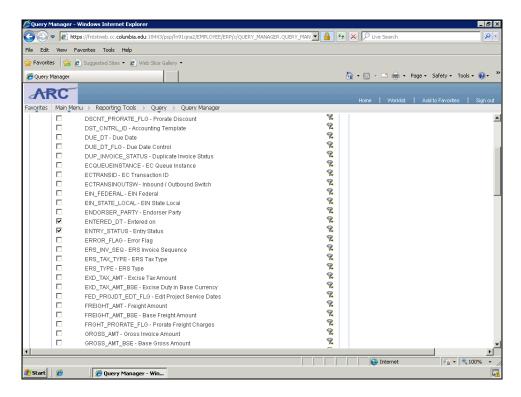


Step	Action
12.	Click the scrollbar.

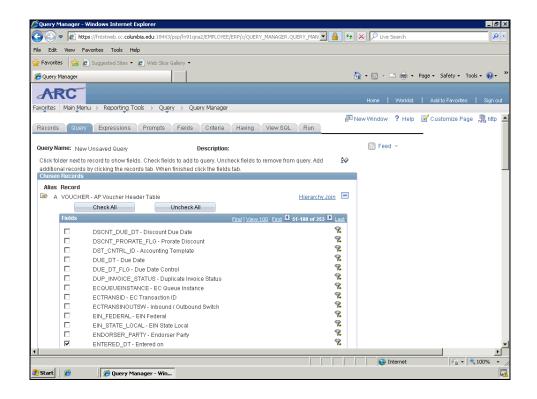


Step	Action
13.	Click the Select option.



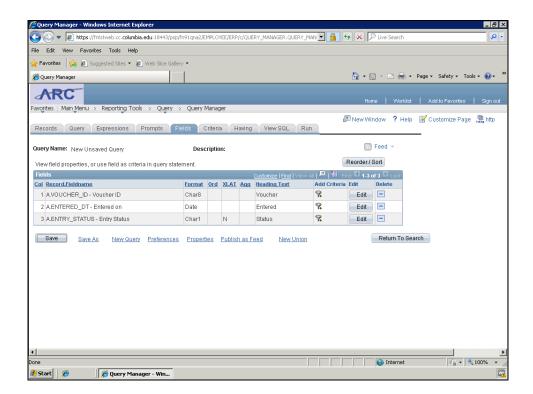


Step	Action
14.	Click the scrollbar.



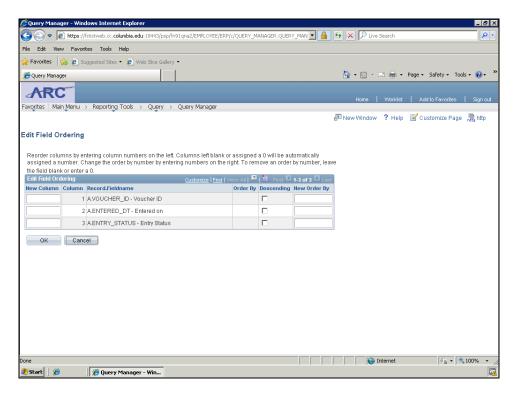


Step	Action
15.	Click the Fields tab.
	Fields

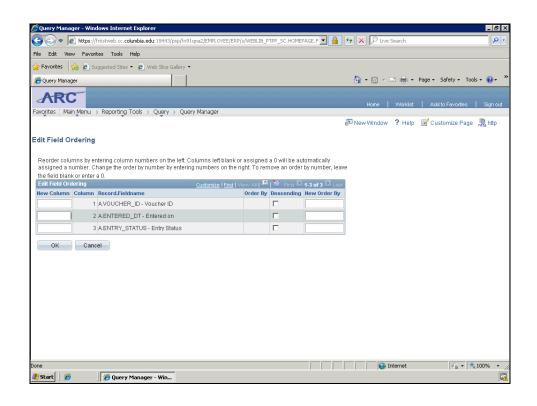


Step	Action
16.	Click the Reorder / Sort button. Reorder / Sort



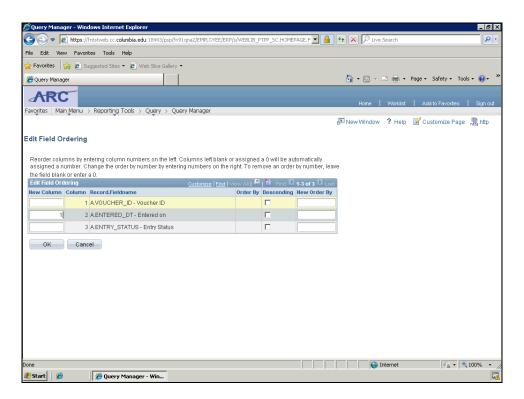


Step	Action
17.	Click in the New Column field.



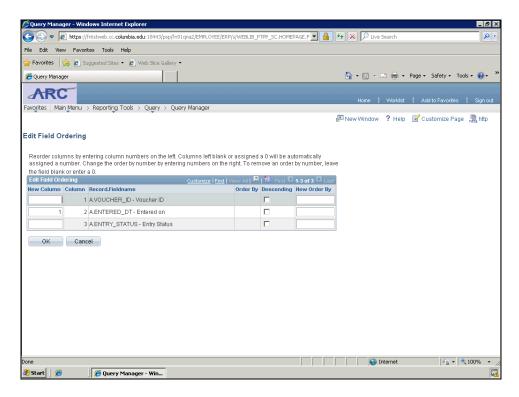


Step	Action
18.	Enter the desired information into the New Column field. Enter "1".

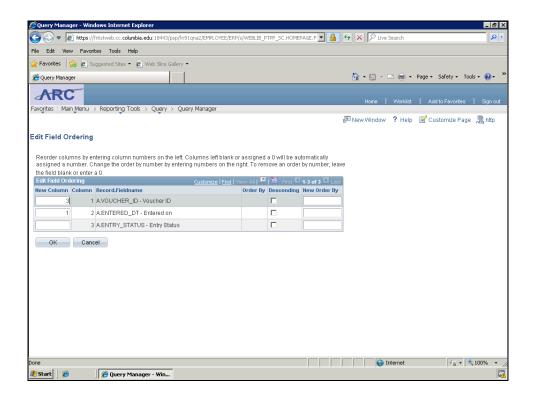


Step	Action
19.	Click in the New Column field.



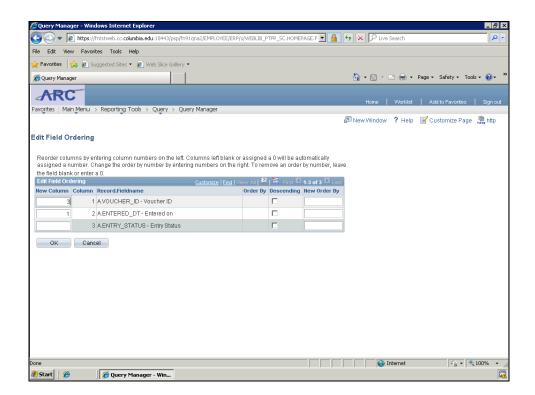


Step	Action
20.	Enter the desired information into the New Column field. Enter "3".



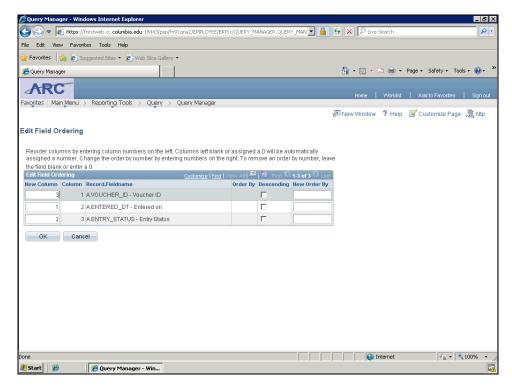


Step	Action
21.	Click in the New Column field.

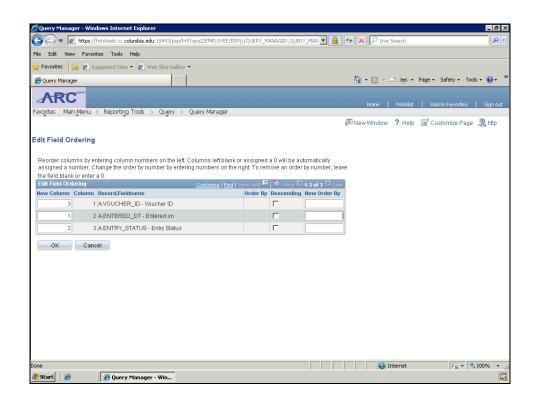


Step	Action
22.	Enter the desired information into the New Column field. Enter "2".



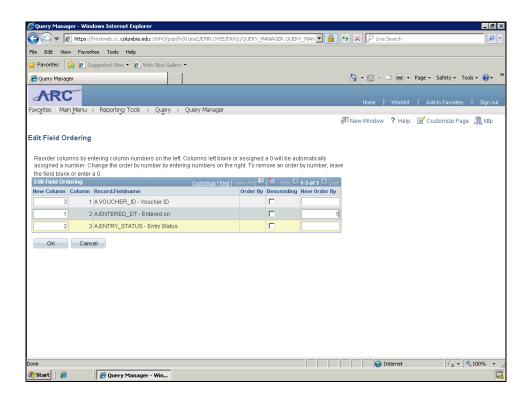


Step	Action
23.	Click in the New Order By field.



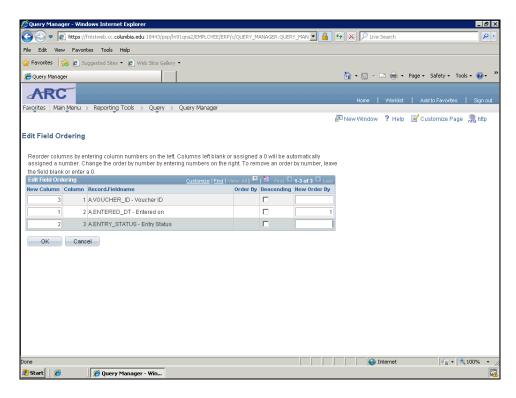


Step	Action
24.	Enter the desired information into the New Order By field. Enter "1".

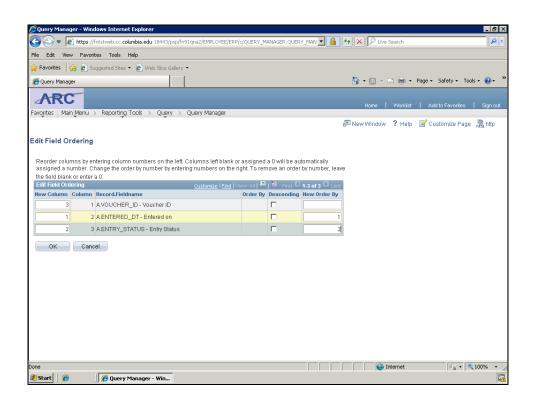


Step	Action
25.	Click in the New Order By field.



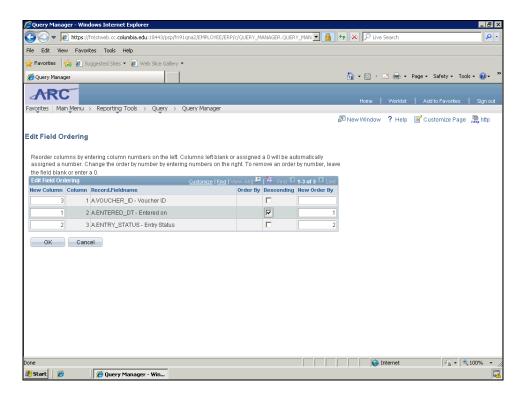


Step	Action
26.	Enter the desired information into the New Order By field. Enter "2".



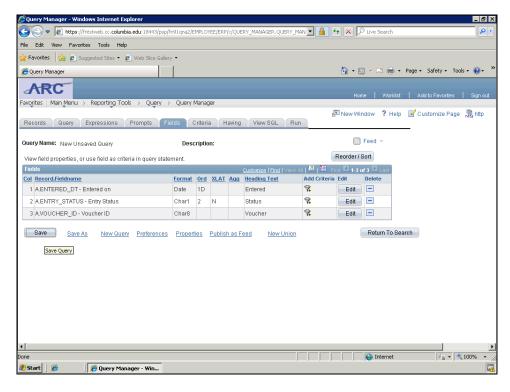


Step	Action
27.	Click the Descending option.

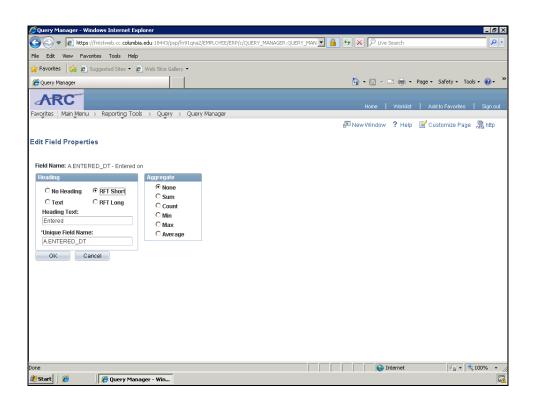


Step	Action
28.	Click the OK button.
	ок



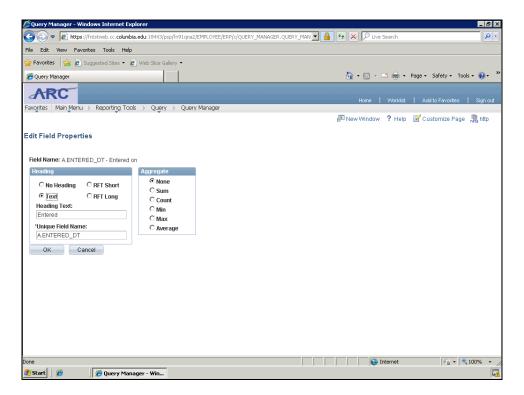


Step	Action
29.	Click the Edit button.



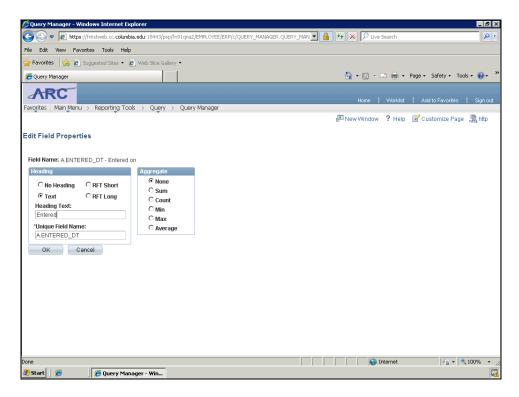


Step	Action
30.	Click the Text option.
	○ Text

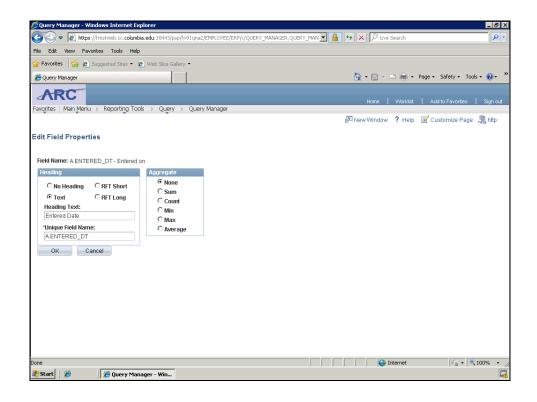


Step	Action
31.	Click in the Heading Text field.
	Entered



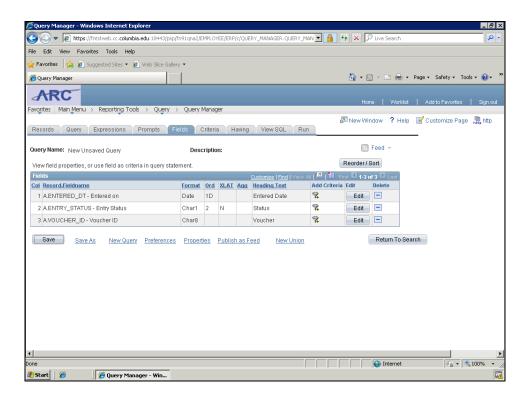


Step	Action
32.	Enter the desired information into the Heading Text field. Enter " Entered Date ".



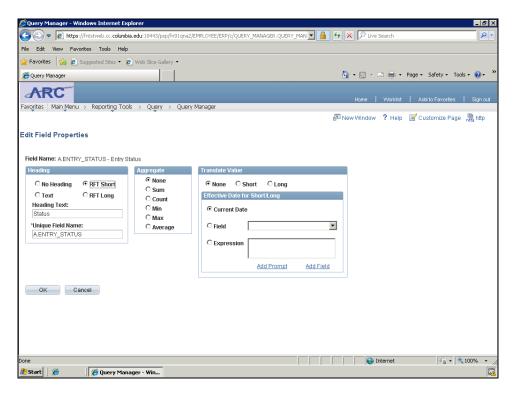


Step	Action
33.	Click the OK button.
	OK OK

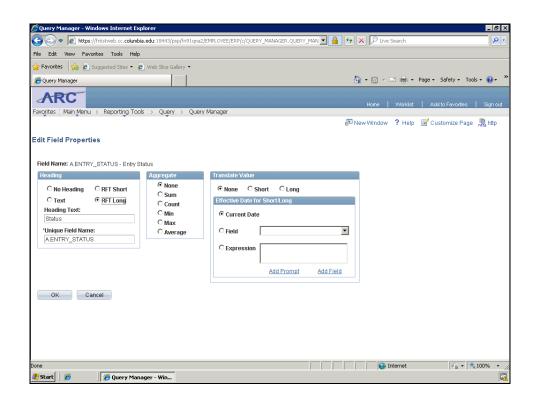


Step	Action
34.	Click the Edit button.
	Edit



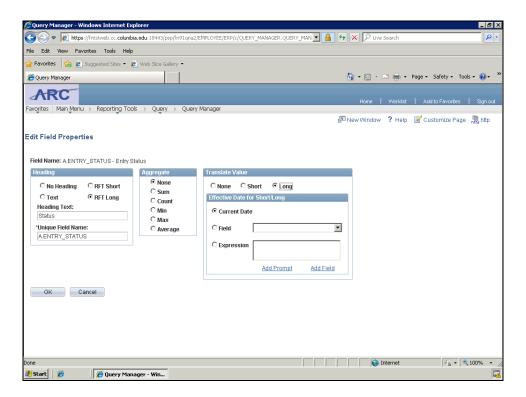


Step	Action
35.	Click the RFT Long option. © RFT Long



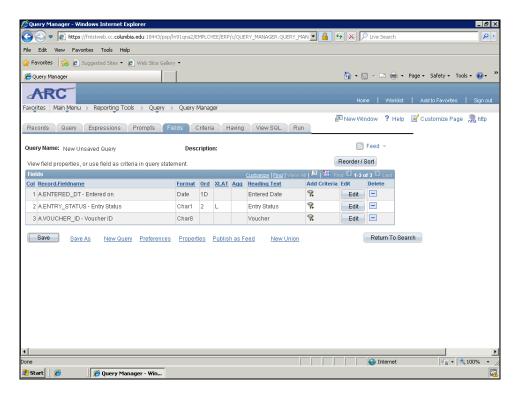


Action
Click the Long option.

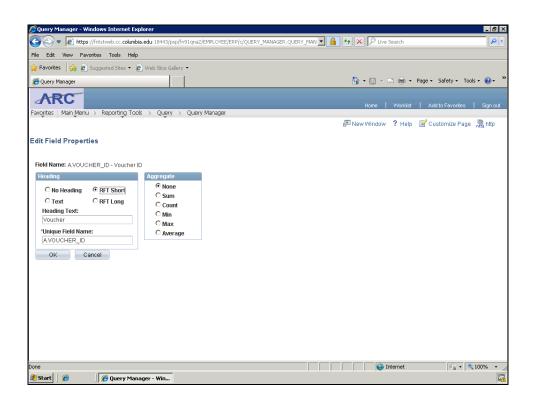


Step	Action
37.	Click the OK button.
	OK .



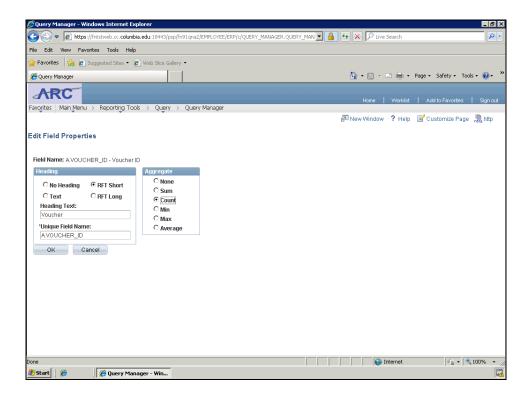


Step	Action
38.	Click the Edit button.



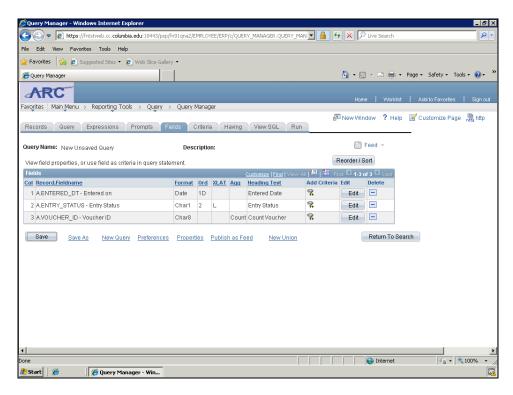


Step	Action
39.	Click the Count option.
	○ Count

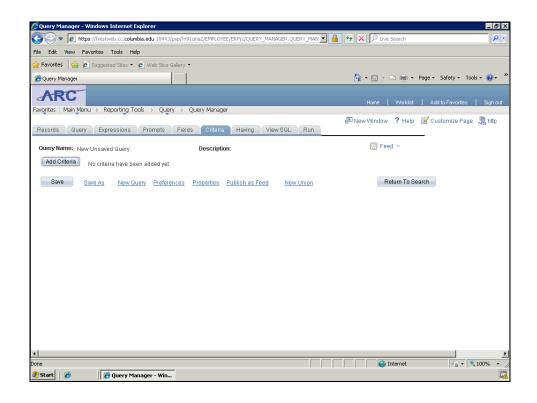


Step	Action
40.	Click the OK button.
	OK OK



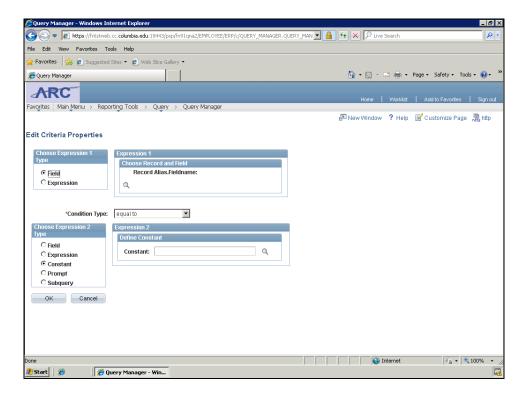


Step	Action
41.	Click the Criteria tab.



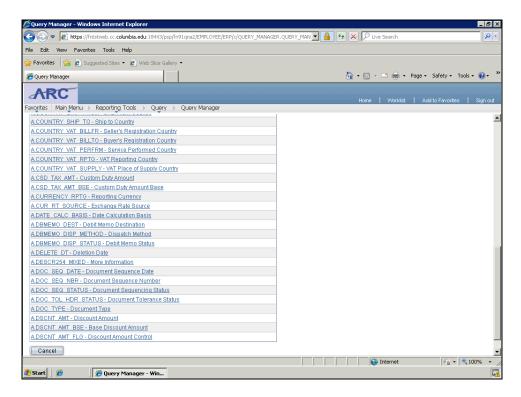


Step	Action
42.	Click the Add Criteria button. Add Criteria

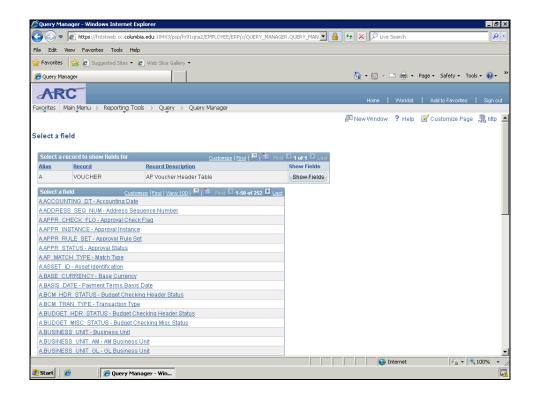


Step	Action
43.	Click the Select Record and Field button.
	Q



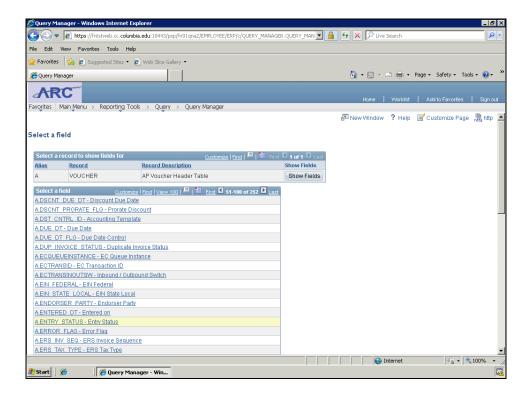


Step	Action
44.	Click the scrollbar.



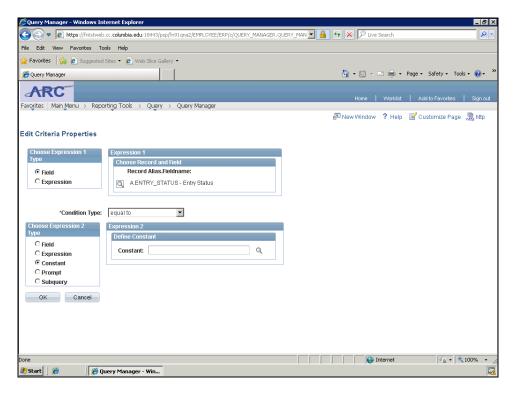


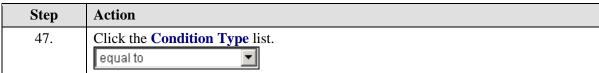
Step	Action
45.	Click the Show next row (Alt+.) button.

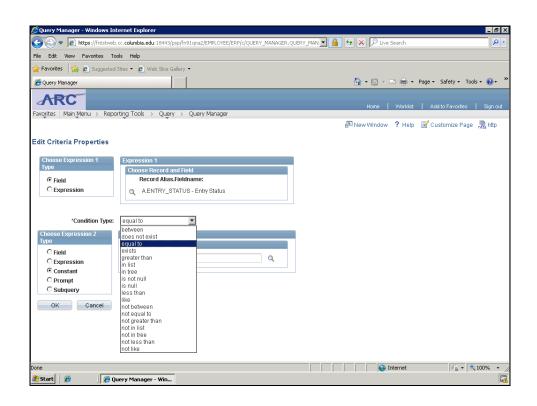


Step	Action
46.	Click the A.ENTRY_STATUS - Entry Status link.
	A.ENTRY STATUS - Entry Status



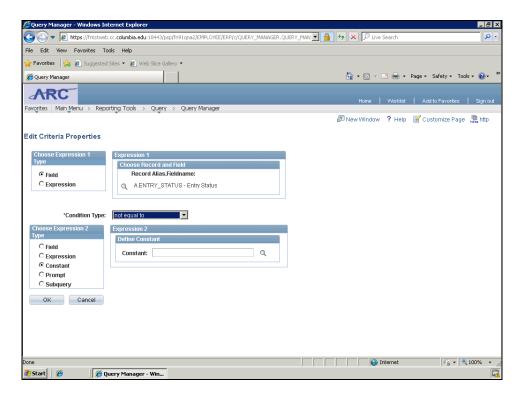






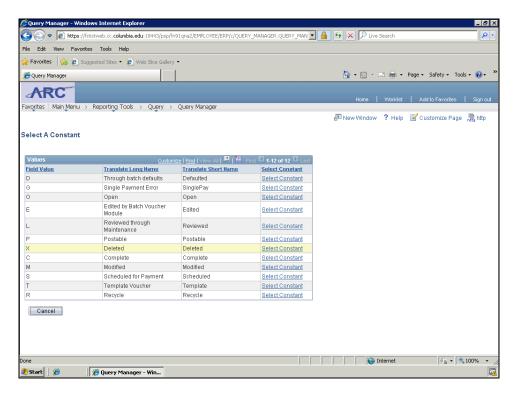


Step	Action
48.	Click the not equal to list item.
	not equal to

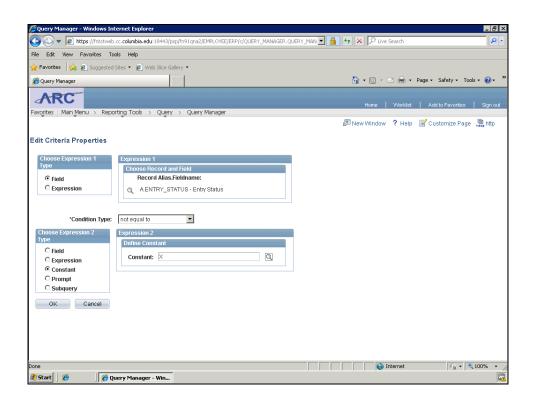


Step	Action
49.	Click the Select Constant From List button.



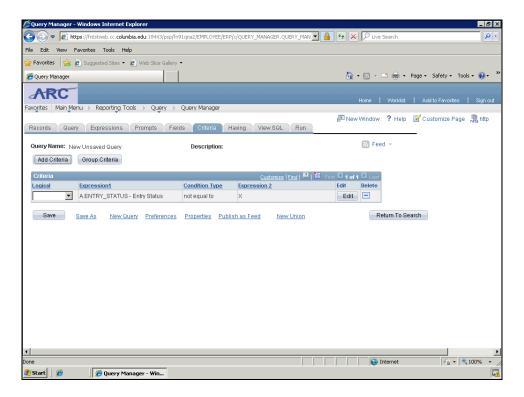


Step	Action
50.	Click the Select Constant link.
	Select Constant



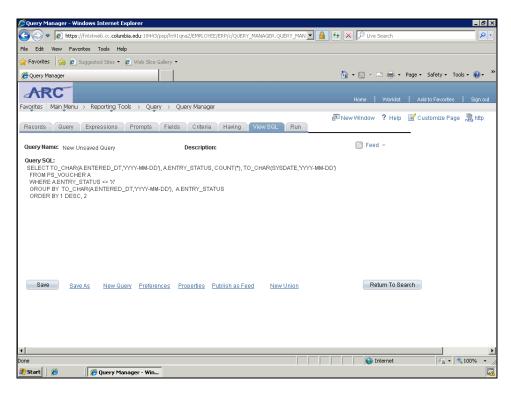


Step	Action
51.	Click the OK button.
	OK

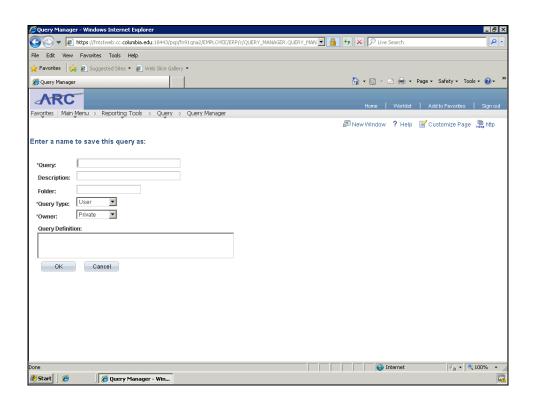


Step	Action
52.	Click the View SQL tab.



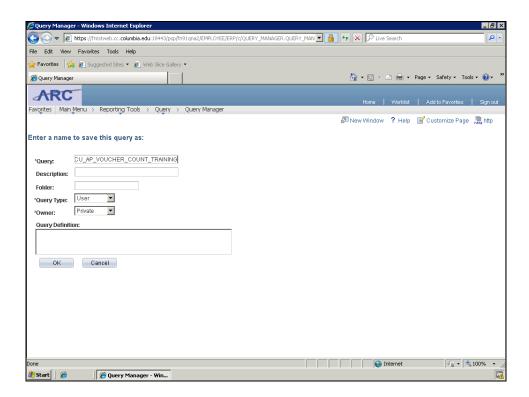


Step	Action
53.	Click the Save As link.
	Save As



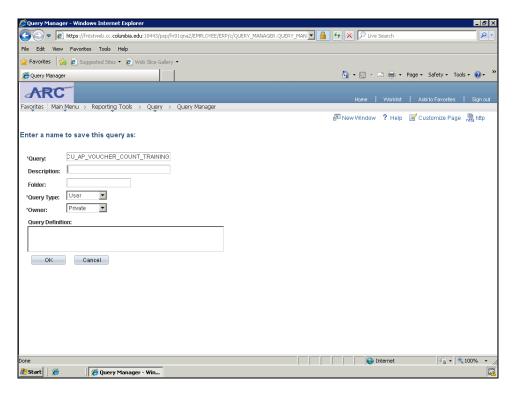


Step	Action
54.	Enter the desired information into the Query field. Enter
	"CU_AP_VOUCHER_COUNT_TRAINING".

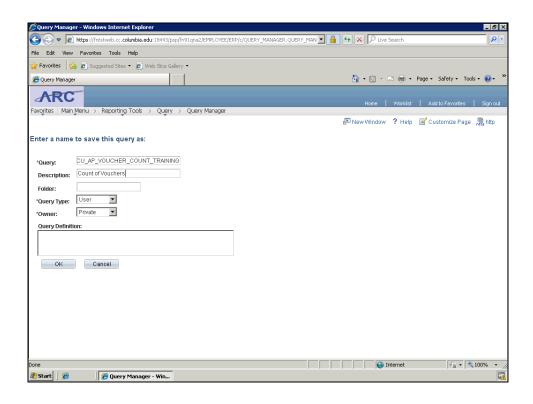


Step	Action
55.	Click in the Description field.



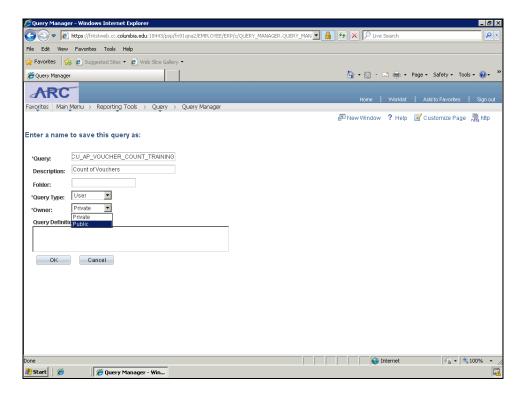


Step	Action
56.	Enter the desired information into the Description field. Enter "Count of Vouchers".



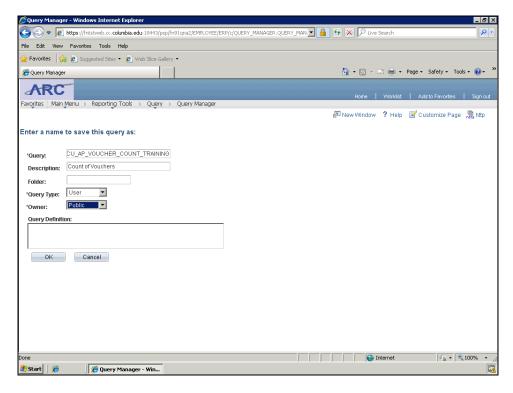


Step	Action
57.	Click the Owner list.
	Private

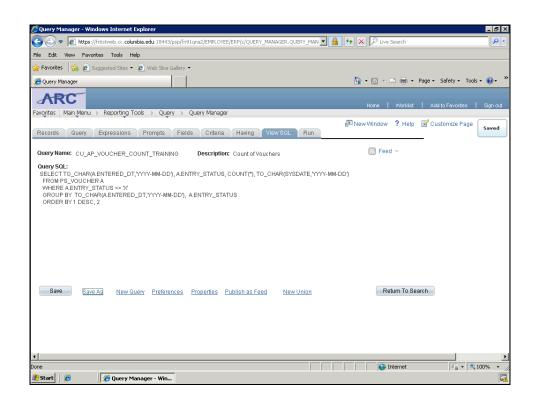


Step	Action
58.	Click the Public list item.
	Public



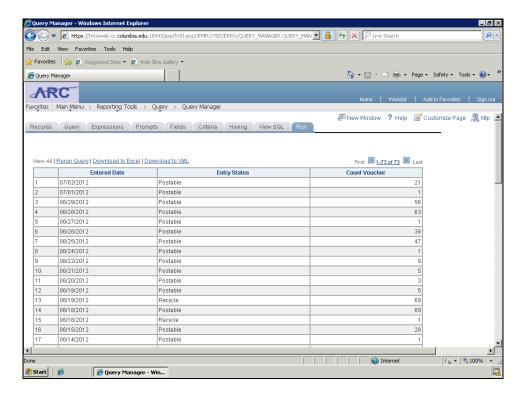


Step	Action
59.	Click the OK button.



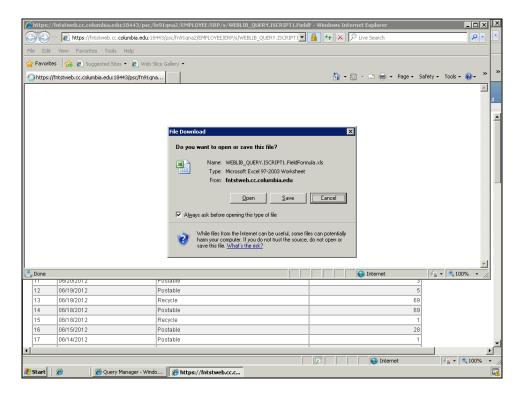


Step	Action
60.	Click the Run tab.

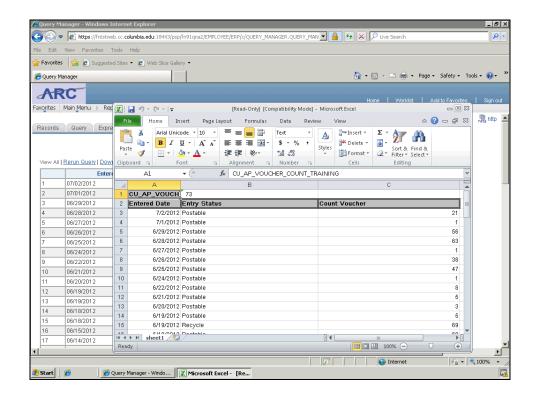


Step	Action
61.	Click the Download to Excel link.
	Download to Excel



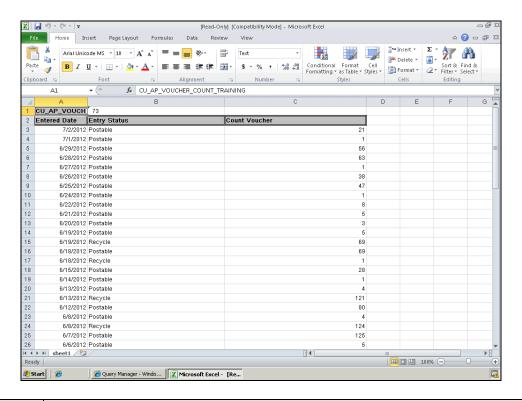


Step	Action
62.	Click the Open button.





Step	Action
63.	Click the Maximize button.



Step	Action
64.	You have successfully created a basic query in ARC and downloaded the results to excel. End of Procedure.



Instructions - Creating a Query Creating a Query Instructions:

- 1. Click the Create New Query link to create a new query.
 - The Query page with all its tabs will appear
- 2. **Type** a specific name in the 'begins with' text box and then click the Search button to display a list of records that match your search criteria.
 - If you do not know the name of the record, leave the field blank and click the Search button. This will display a list of up to 300 records. You can also perform a partial search by entering part of a record name or description in the 'Search By' field.

Note: Enter a partial description followed by the wildcard symbol (%) to bring up all matching entries that include that description.

- 3. To select a specific record from the search results list, **click** the **Add Record** link, corresponding to that Record.
 - An effective date criteria is added whenever an effective-dated table is selected and a dialog box is displayed indicating it.
 - The following Query page appears, listing the fields associated with that record.
- 4. **Select** the **checkboxes** for the fields to be included in the Query.

Note: The options under the Expressions and Prompts tabs are considered advanced options and will be discussed in the *Advanced Query Components* lesson of this course.

- 5. Click the Fields tab.
 - The Fields tab is used for viewing or modifying fields for the selected output.
- 6. Click the Reorder/Sort button to change the Column and Sort Order for multiple fields.
 - The "Edit Field Ordering" page lets you reorder columns by entering column numbers on the left.
- 7. **Enter a number** in the **New Column** text box next to the field to be repositioned.
- 8. Click the OK button.
 - The selected field is repositioned.
- 9. Click the Edit button to the right of the desired field to edit field properties



- The Heading Text field properties can be used to display a more user friendly name for the selected field.
- 10. **Click** the **Text** radio button and then enter an appropriate heading text description on the '**Heading Text**' textbox.
 - The Edit Field Properties page is used to specify column heading properties for the selected field.

11. Click the OK button.

Criteria can be specified for a field by using the Add Criteria icon next to the required field. Additionally, you can specify criteria by selecting the Criteria tab

- 12. Click the Add Criteria icon for the field for which a criteria will be specified for.
 - When you access the Edit Criteria Properties page by clicking the 'Add Criteria' icon on the Fields page Query Manager displays the Edit Criteria Properties page with the selected field populated in the Expression 1 field.

Condition Types:

The condition type determines how Query Manager compares the values of the first expression (Expression 1) to the second expression (Expression 2).

For more information about expression type and condition type click here.

- 13. **Enter** criteria properties for the selected field and then **click OK**.
- 14. Click the Criteria tab.
- 15. Click the Add Criteria button to specify selection criteria.
- 16. Click the Select Record and Field lookup icon.
- 17. **Select** the field to specify criteria for.
 - The procedure for Choose Expressions differs depending on what kind of value you are entering. If you are comparing one field to another, select the second record fields; if you are comparing the rows to a constant value enter the Constant.
- 18. **Type** specific criteria in the **Constant** text box and then click **OK**.
 - Using PeopleSoft Query, you can relate multiple criteria in specific ways that you define
 using the AND, AND NOT, OR, and OR NOT operators. You can also group criteria
 using parentheses.

Note: 'AND NOT' and 'OR NOT' Logical operators are combined with Condition Type operators to give users more choices while establishing criteria.



- 19. Click the Add Criteria button again to specify criteria for a specific field.
- 20. Click the Select Record and Field lookup icon.
- 21. **Select** a field to specify criteria for.
- 22. **Type** a specific criteria in the **Constant** text box and then click **OK** to specify a condition using the 'OR' operator.
- 23. **Click** the Logical drop down box next to the Field to use to be used with an 'OR' logical operator and select '**OR**'.

Note: You can use a field from a record as criteria even if you do not choose that field for Query output.

- 24. Click the Query tab.
- 25. **Uncheck** the **selection box** for the field to be hidden.
 - The criteria can be seen on the View SQL tab.
- 26. Click on the View SQL tab to see the criteria.

Note: When your query includes multiple criteria, PeopleSoft Query evaluates criteria linked by ANDs before those linked by ORs.

- 27. Click the Criteria tab and then click the Group Criteria button.
- 28. Use parenthesis to group the OR condition and then click OK.
- 29. Click the Run tab.

Note: Prompts are used to refine a query when you run it. When you run a query with a prompt, a prompt page requests the required value. After entering the value into the field, the query uses it as the comparison value. More than one prompt can be used.



Instructions - Saving a Query

- 1. Once you've created a new query, **click** the **View SQL** tab.
 - You can view the SQL for the Query created using the View SQL tab. You cannot modify SQL on this page, but can use it to review the query prior to running it in order to identify errors.

Note: Save queries that are expected to be used on a repeated basis and to ensure development efforts are recorded. Save queries by clicking either the **Save** button or the **Save As** link from any Query Manager page except from the Run page.

Use a naming convention to make it easier to find the query at a later time.

Query naming convention:

- 2. **Click** the **Save** button at the bottom of the page.
- 3. **Enter** field information and then **click OK**.



Instructions - Running a Query

Navigation: Reporting Tools > Query > Query Manager

1. Enter query name or part of it in the 'begins with' text box



Advanced Query Components

This is the *Advanced Query Components* lesson of the *Advanced ARC Reporting* course. Upon completion of this lesson, you will be able to:

• Understand how advanced query options are used in query building

Estimated Time to Complete Lesson: 15 minutes



Joins

Joins allow users to retrieve data from multiple records and present the data as one table. The tables are linked based on common fields. There are primarily two types of joins used in the Query: Related Joins and Hierarchical Joins. Other joins can be made in the Criteria tab by specifying the criteria in the query.

Related Joins

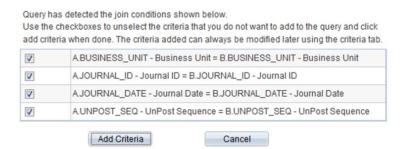
Related Joins are those where records are related by common fields. For instance, you may have an employee table listing all employees and an FSA (Flexible Spending Account) table listing employees participating in the program. You can join the tables using the Employee ID common field.

Hierarchical Joins

Hierarchical joins use records that have a parent-child relationship. A record hierarchy join is used to join a parent table to a child table.



Auto Join Criteria

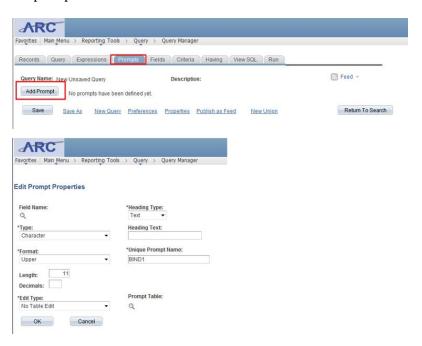




Prompts

Prompts allow the user to enter in run time controls. This is useful if you plan on reusing the query and would like to run it for different transaction ids, transaction types, dates, etc.

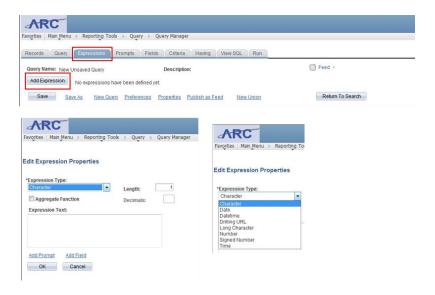
The Prompts tab allows you to create and edit input criteria for your query. Run-Time prompts allow you to enter a value to satisfy the criterion for a specific field at the time that the query is run. The query results will include only those rows of information that match the value entered in the prompt.







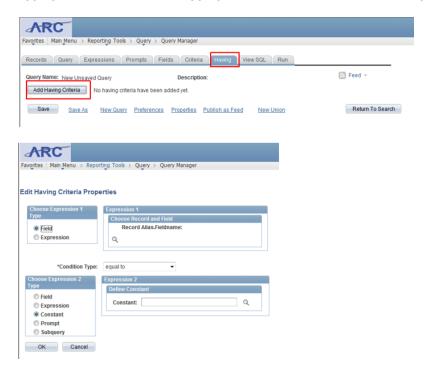
Expressions





Having

The Having page displays the specific fields and values that will limit the data returned when an aggregate function is used. Aggregate functions include Sum, Average, Max, Min, and Count.





Subquery

A sub query, sometimes called a sub-SELECT, is a query whose results are used by another query. The main query uses the sub query's result set as a comparison value for a selection criterion.







Union

Unions enable you to get the results from two or more separate queries at the same time. You can create a union of multiple queries only when the queries have the same number of selected fields with the same data types for all fields and they are all displayed in the same order.





Limitations of the Query Tool

Exporting to Excel

Whenever you export more than 64,000 rows, the additional rows will be added to subsequent sheets in the same document.

Advanced SQL

Not all SQL commands are not allowed to be part of the query tool. Some examples are below:

- Inline Views
- Right/Outer Join



Creating Advanced Queries

This is the Creating Advanced Queries lesson of the *Advanced ARC Reporting* course. Upon completion of this lesson, you will be able to:

• Create advanced queries using components such as joins, unions, and expressions

Estimated Time to Complete Lesson: 30 minutes



Group Exercise

In this scenario you will learn how to add advanced components to the Voucher Count query that you created in the *Creating Basic Queries* lesson of this course.

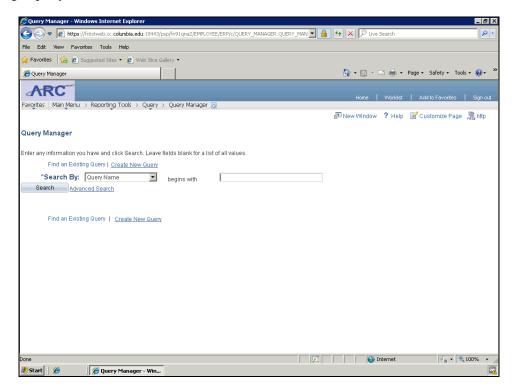
• CU_AP_VOUCHER_COUNT_TRAINING



Joining Records

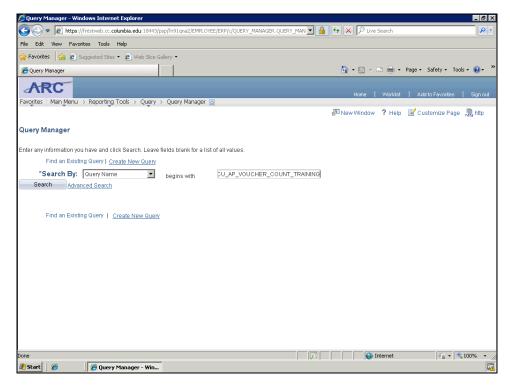
Procedure

Welcome to the Joining Records topic. In this topic you will learn how to join two records when creating a query.

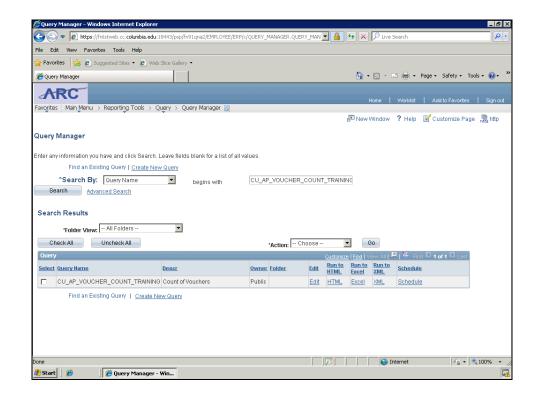


Step	Action
1.	Enter the desired information into the Search By field. Enter
	"CU_AP_VOUCHER_COUNT_TRAINING".



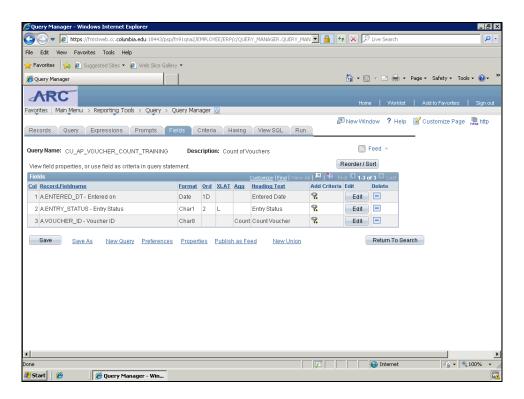


Step	Action
2.	Click the Search button.
	Search



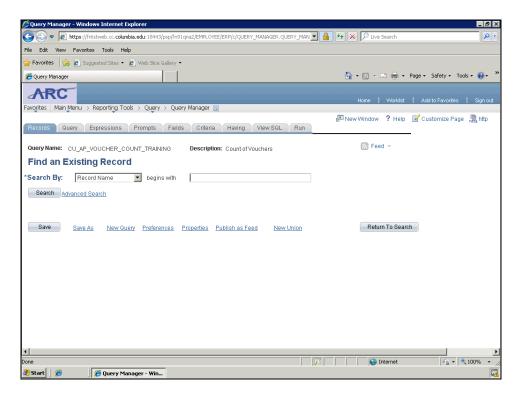


Step	Action
3.	Click the Edit link.
	Edit

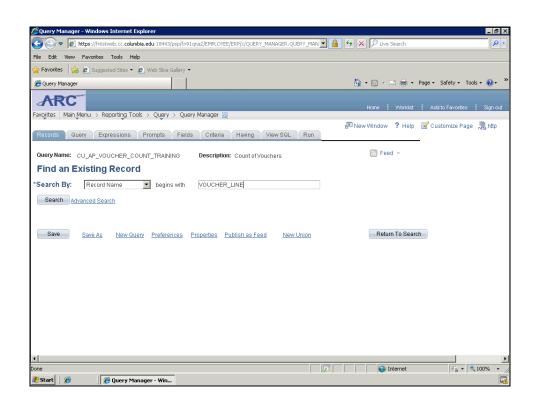


Step	Action
4.	Click the Records tab.

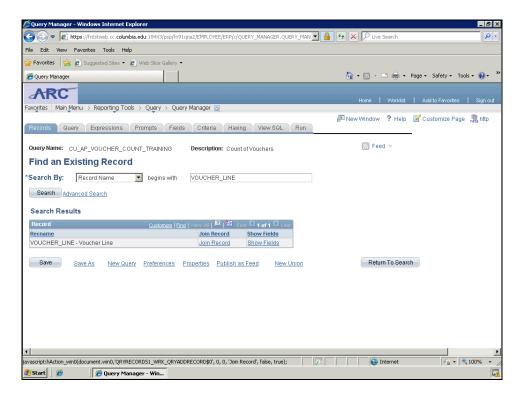




Step	Action
5.	Enter the desired information into the begins with field. Enter "VOUCHER_LINE".

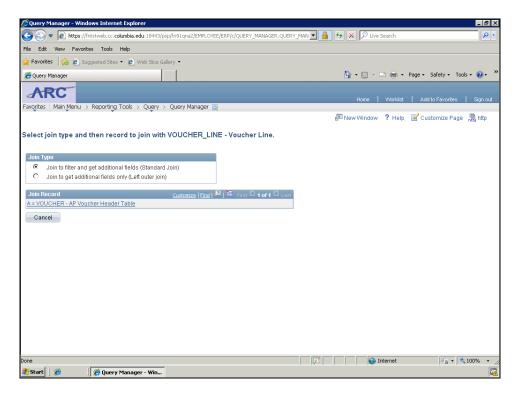




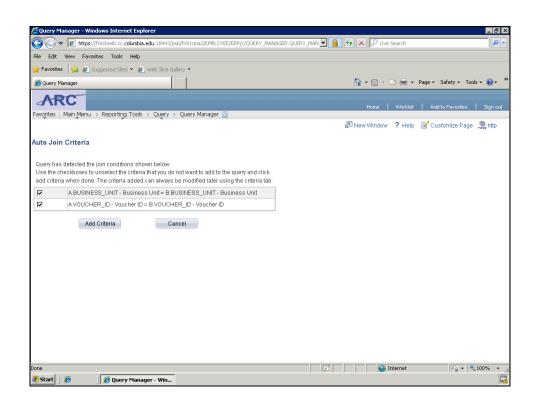


Step	Action
7.	Click the Join Record link.
	Join Record



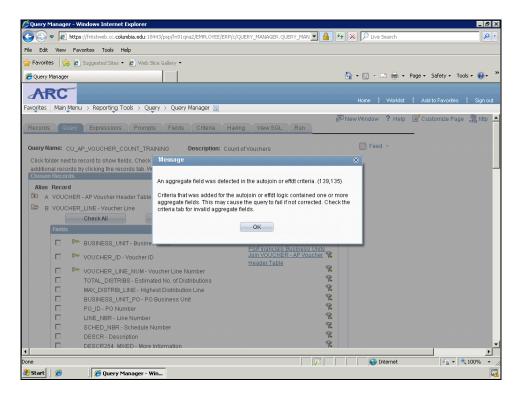


Step	Action
8.	Click the A = VOUCHER - AP Voucher Header Table link.
	A = VOUCHER - AP Voucher Header Table



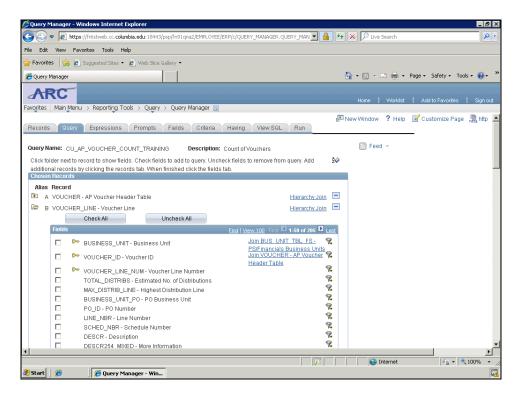


Step	Action
9.	Click the Add Criteria button.
	Add Criteria

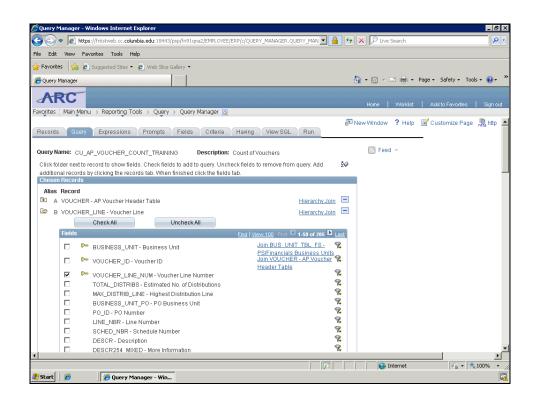


Step	Action
10.	Click the OK button.



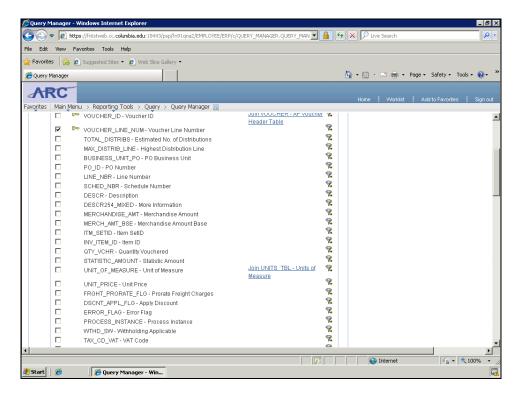


Step	Action
11.	Click the Select option.



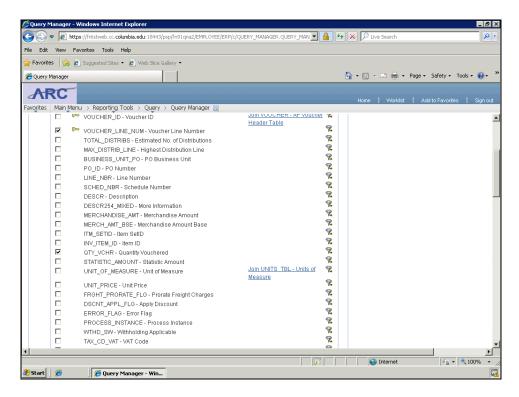


Step	Action
12.	Click the scrollbar.

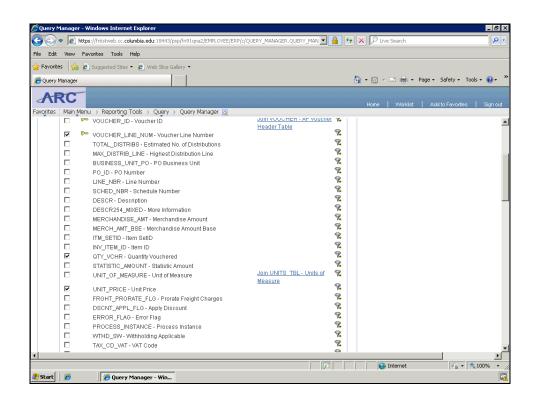


Step	Action
13.	Click the Select option.



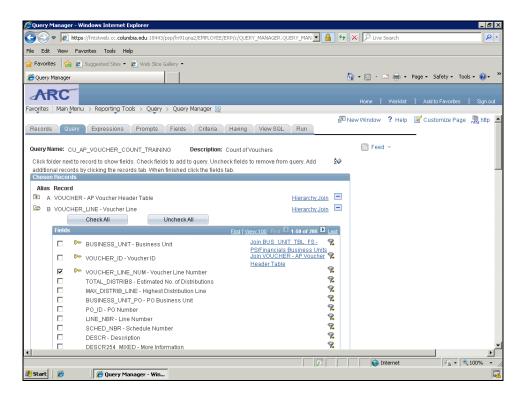


Step	Action
14.	Click the Select option.



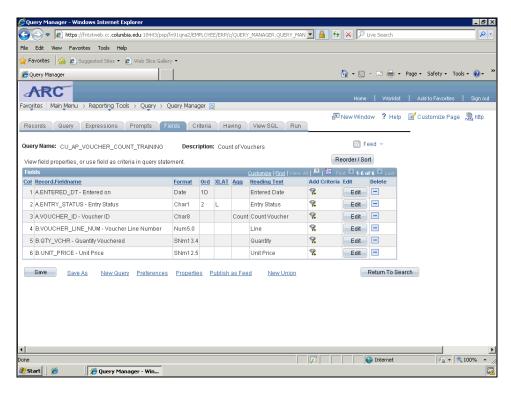


S	Step	Action
-	15.	Click the scrollbar.

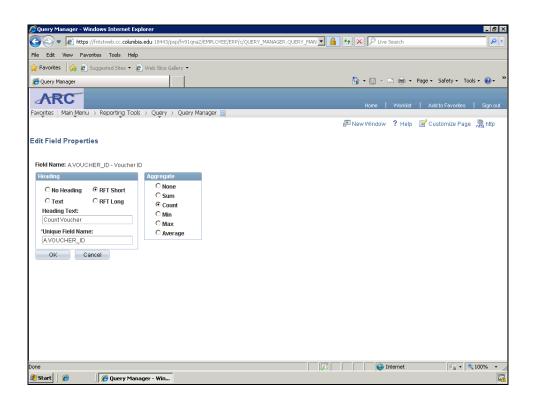


Step	Action
16.	Click the Fields tab.



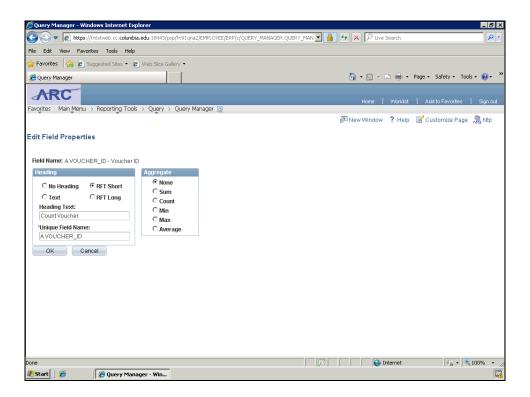


Step	Action
17.	Click the Edit button.



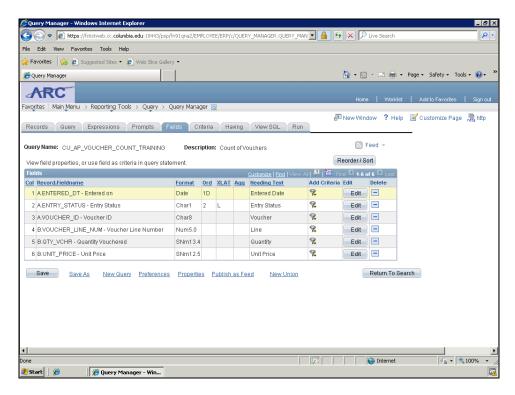


Step	Action
18.	Click the None option.
	○ None

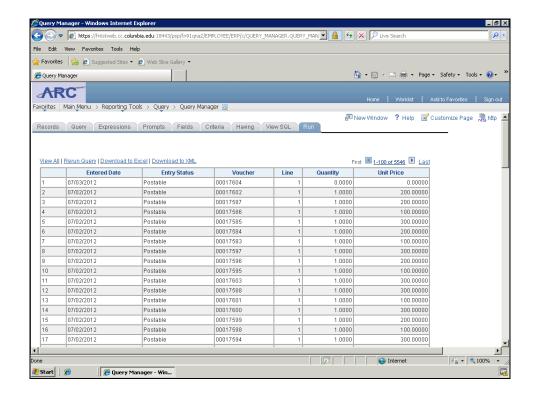


Step	Action
19.	Click the OK button.
	OK





Step	Action
20.	Click the Run tab.





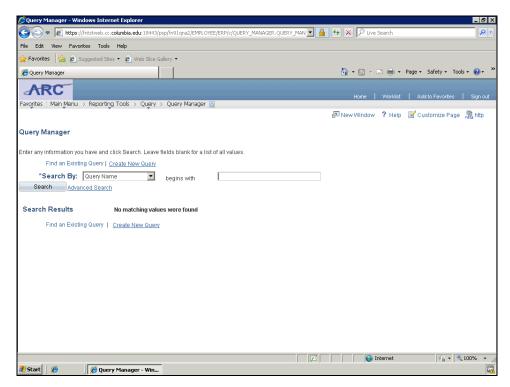
Step	Action
21.	You have successfully joined two records in a query. End of Procedure.



Creating an Advanced Query

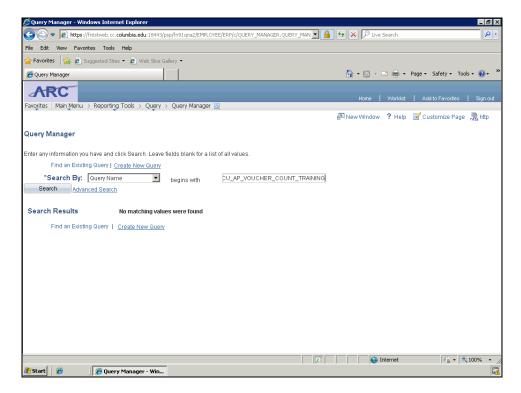
Procedure

Welcome to the Creating an Advanced Query topic. In this topic you will learn how to add expressions, prompts and other advanced components to your query.

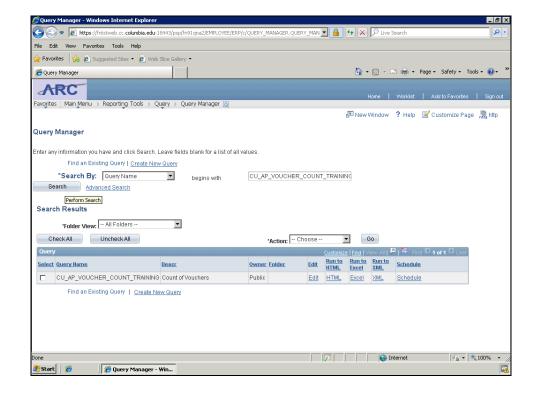


Step	Action
	Enter the desired information into the Search By field. Enter "CU_AP_VOUCHER_COUNT_TRAINING".



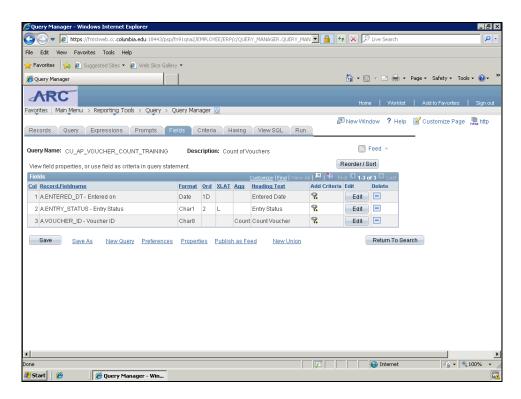


Step	Action
2.	Click the Search button.
	Search



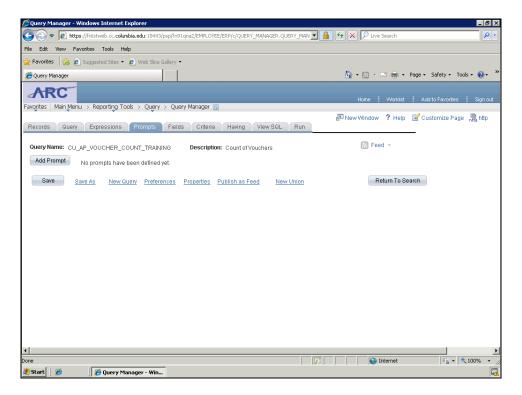


Step	Action
3.	Click the Edit link.
	Edit

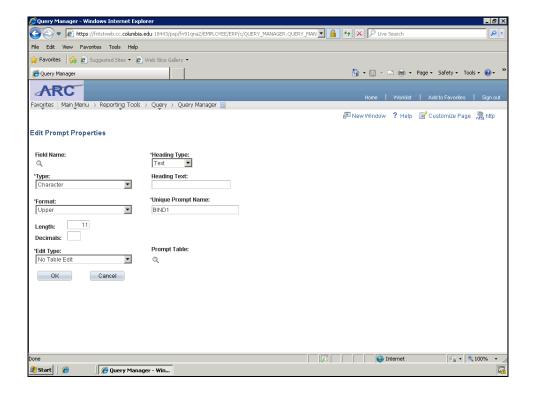


Step	Action
4.	Click the Prompts tab. Prompts



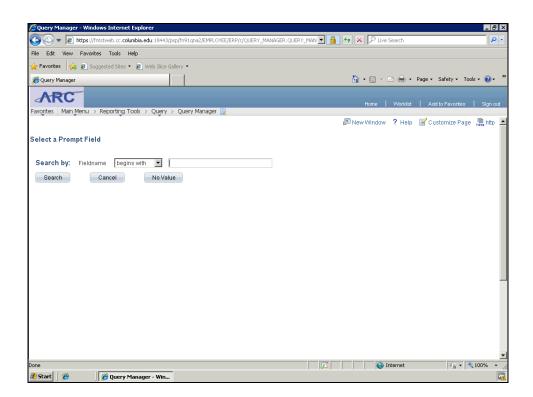


Step	Action
5.	Click the Add Prompt button.
	Add Prompt



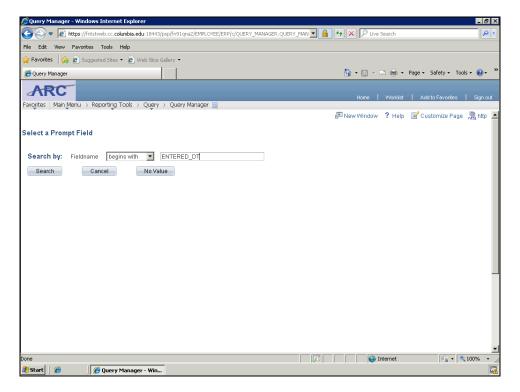


Step	Action
6.	Click the Select Field button.

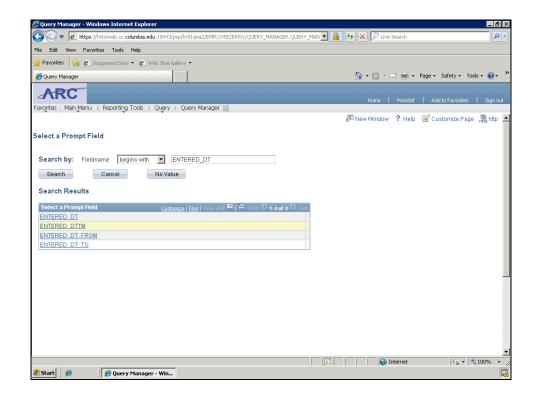


Step	Action
7.	Enter the desired information into the Search by field. Enter " ENTERED_DT ".



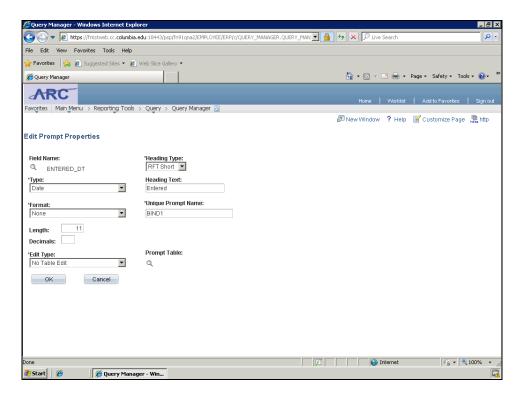


Step	Action
8.	Click the Search button.



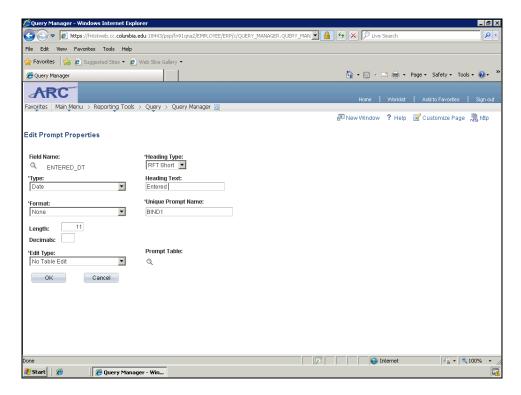


Step	Action
9.	Click the ENTERED_DT link.
	ENTERED DT



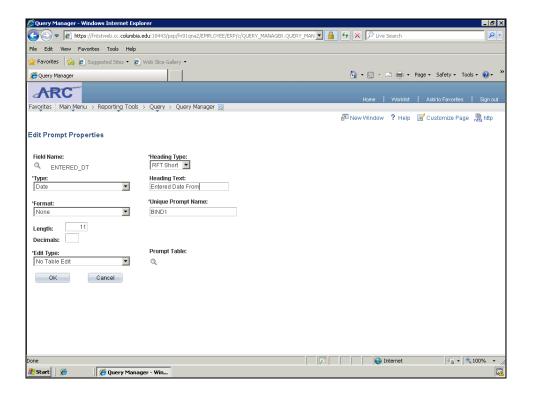
Step	Action
10.	Click in the Heading Text field.
	Entered





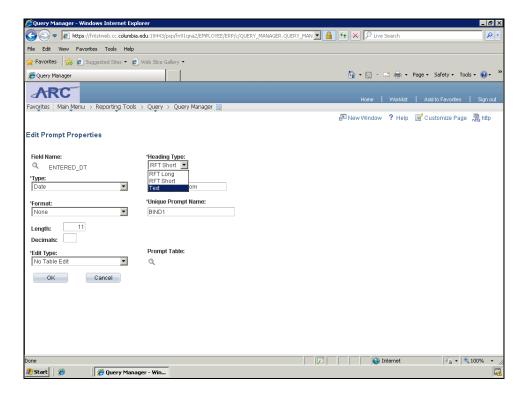
Step Action

11. Enter the desired information into the Heading Text field. Enter "Entered Date From".



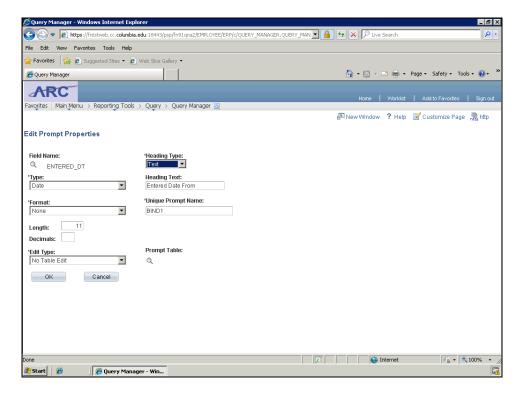


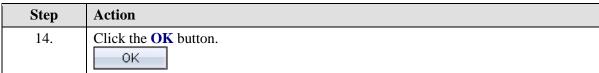
Step	Action
12.	Click the Heading Type list.

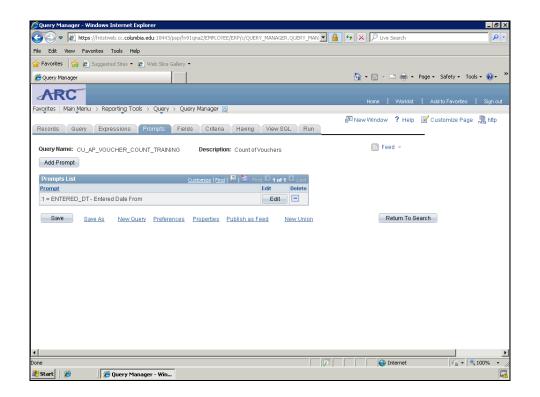


Step	Action
13.	Click the Text list item.
	Text



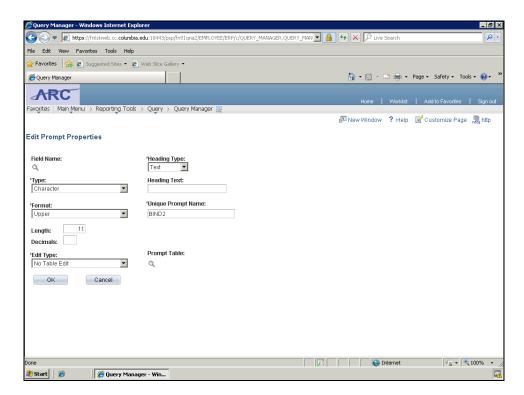






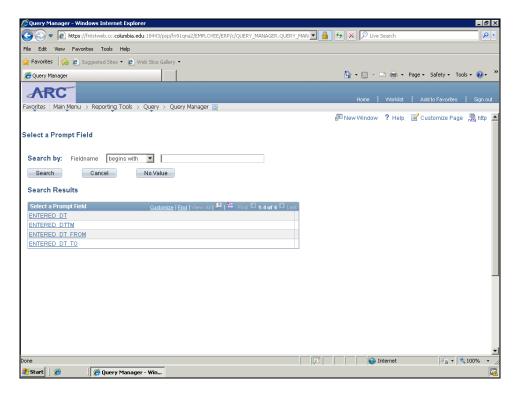


Step	Action
15.	Click the Add Prompt button. Add Prompt

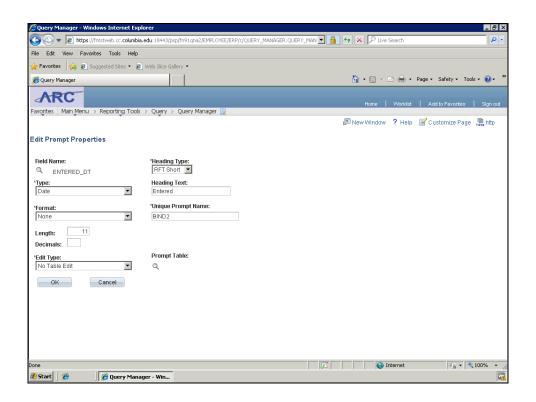


Step	Action
16.	Click the Select Field button.



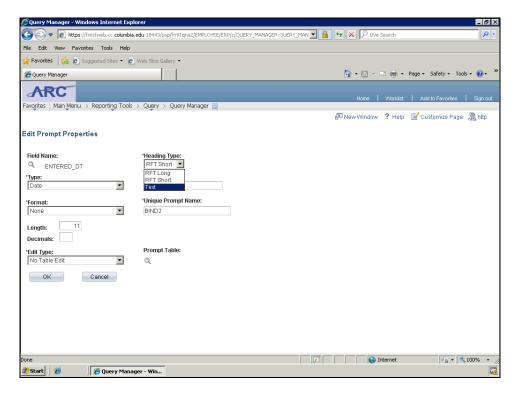


Step	Action
17.	Click the ENTERED_DT link.
	ENTERED DT



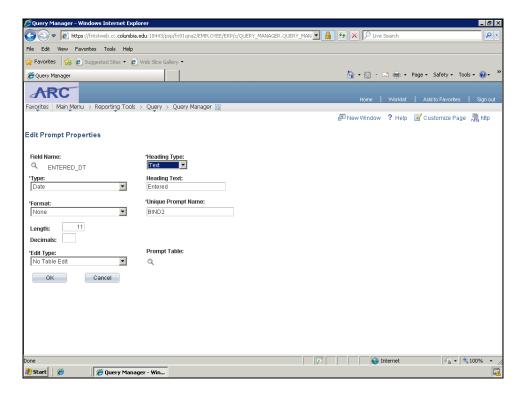


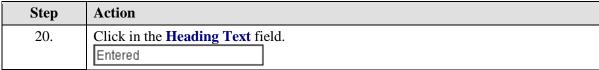
Step	Action
18.	Click the Heading Type list.

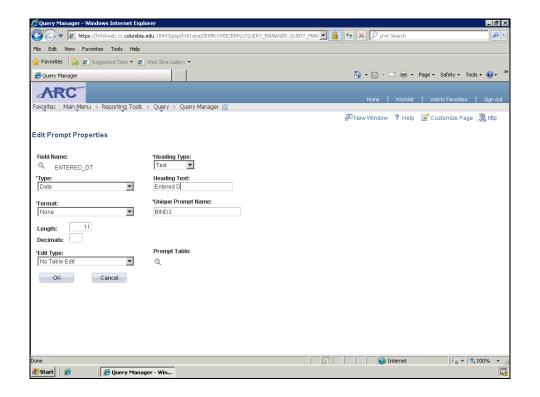


Step	Action
19.	Click the Text list item.
	Text



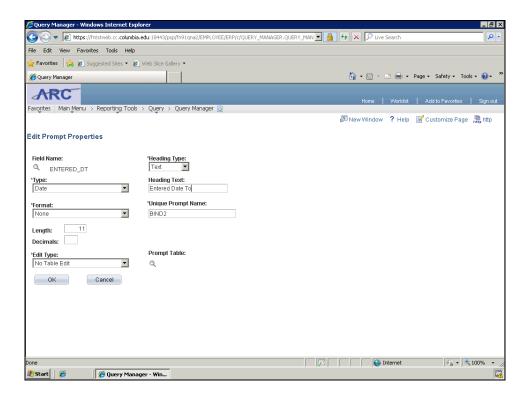






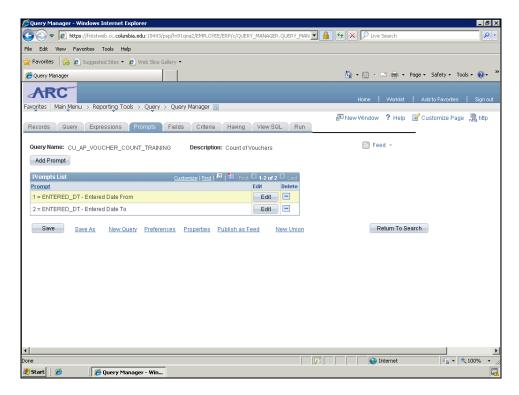


Step	Action
21.	Enter the desired information into the Heading Text field. Enter " Entered Date To ".

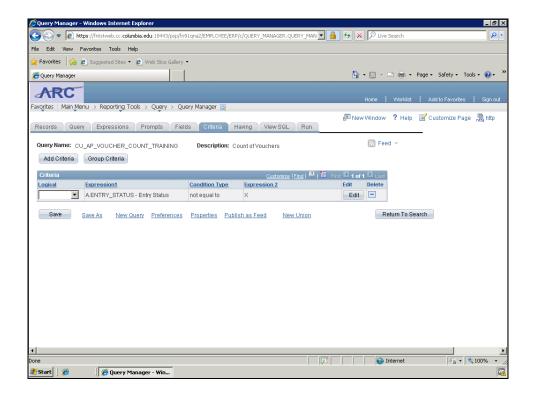


Step	Action
22.	Click the OK button.
	OK OK



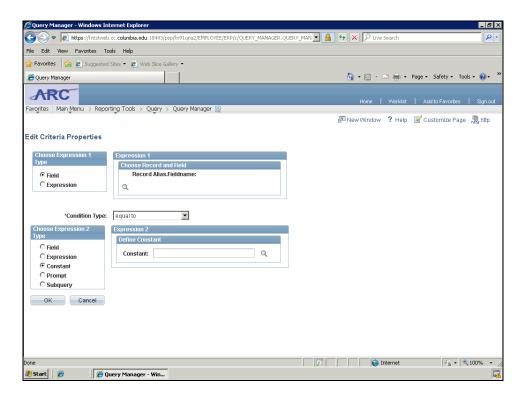


Step	Action
23.	Click the Criteria tab.



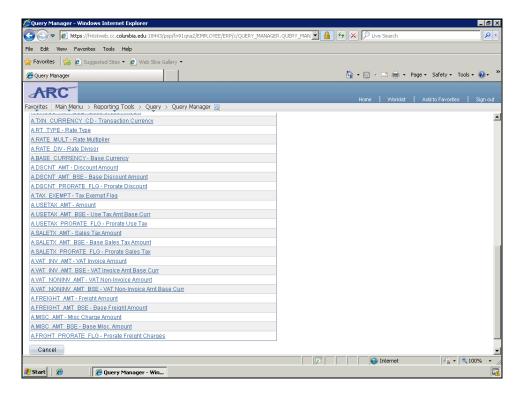


Step	Action
24.	Click the Add Criteria button. Add Criteria

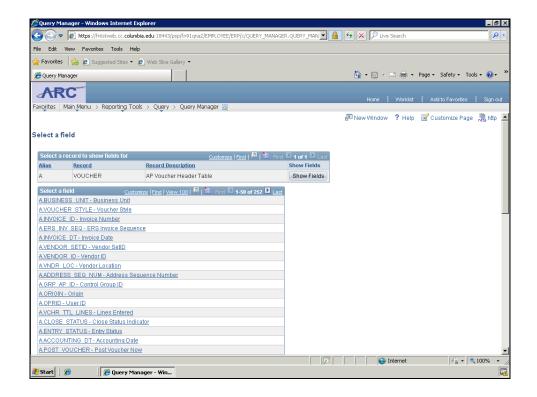


Step	Action
25.	Click the Select Record and Field button.



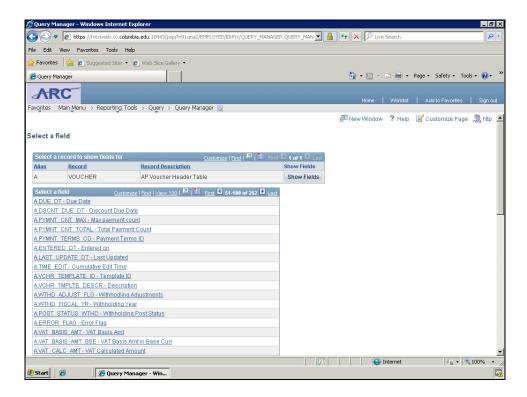


Step	Action
26.	Click the scrollbar.



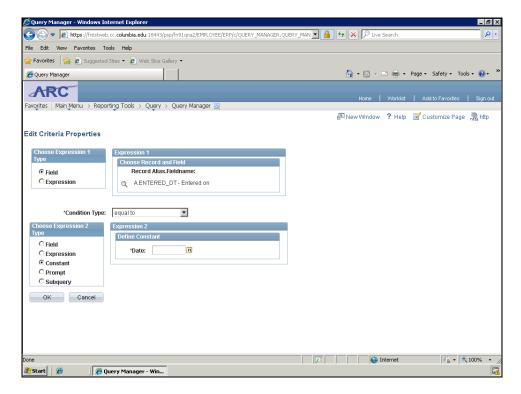


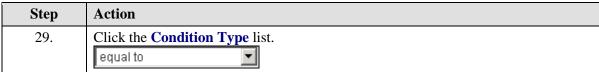
Step	Action
27.	Click the Show next row (Alt+.) button.

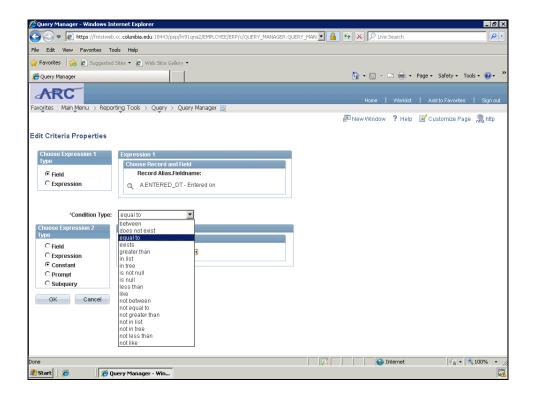


Step	Action
28.	Click the A.ENTERED_DT - Entered on link.
	A.ENTERED DT - Entered on



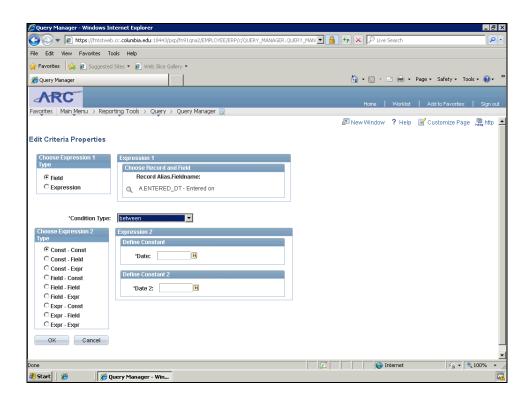






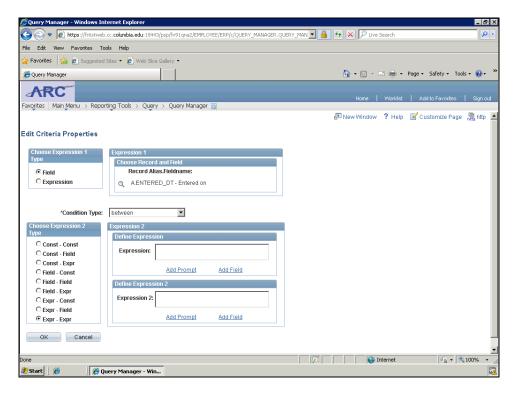


Step	Action
30.	Click the between list item.
	between

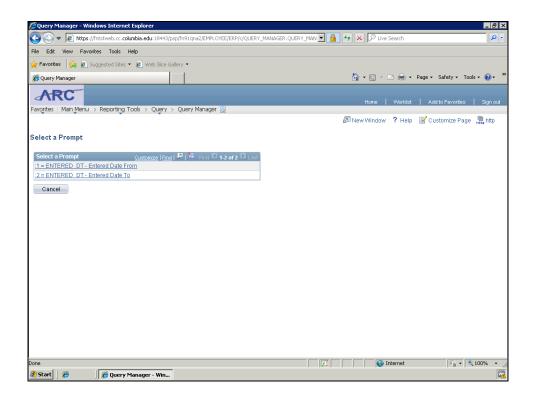


Step	Action
31.	Click the Expr - Expr option. C Expr - Expr



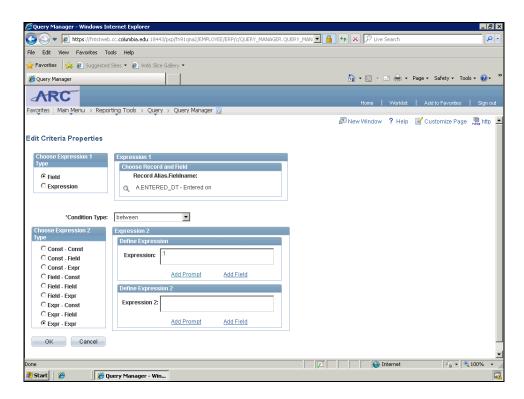


Step	Action
32.	Click the Add Prompt link.
	<u>Add Prompt</u>



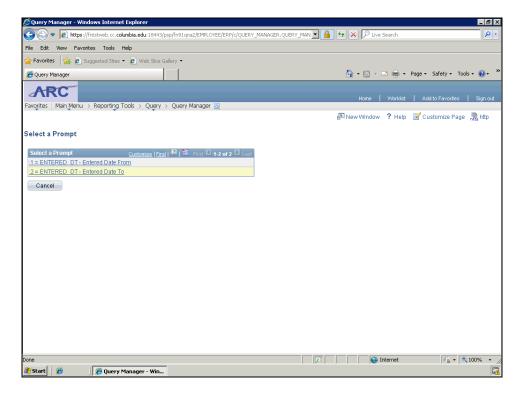


Step	Action
33.	Click the :1 = ENTERED_DT - Entered Date From link.
	:1 = ENTERED DT - Entered Date From

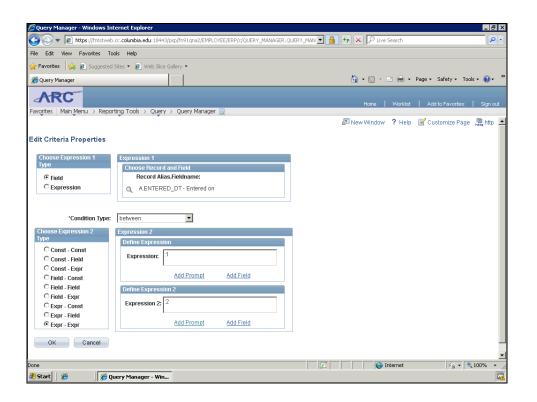


Step	Action
34.	Click the Add Prompt link.
	Add Prompt



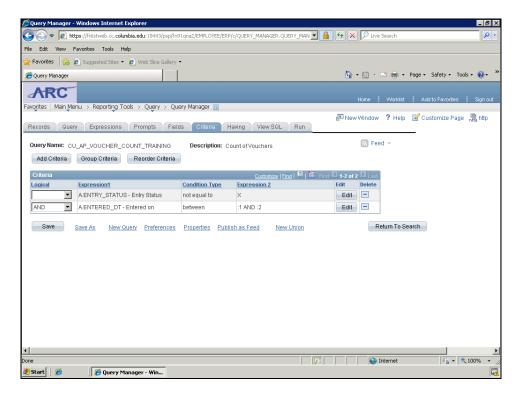


Step	Action
35.	Click the :2 = ENTERED_DT - Entered Date To link.
	:2 = ENTERED DT - Entered Date To



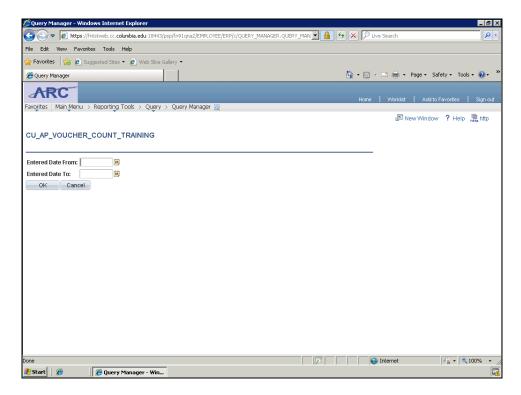


Step	Action
36.	Click the OK button.

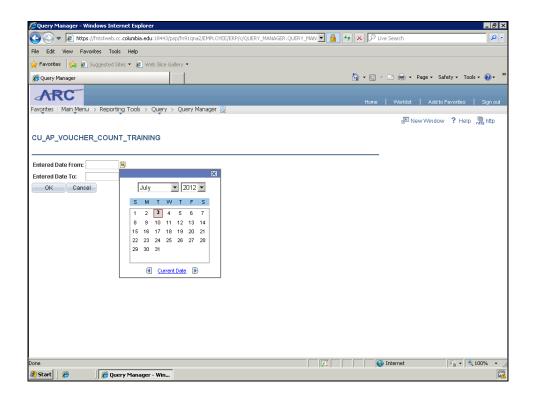


Step	Action
37.	Click the Run tab.



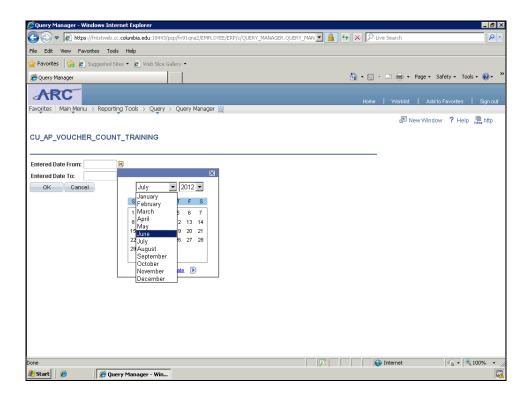


Step	Action
38.	Click the Choose a date (Alt+5) button.



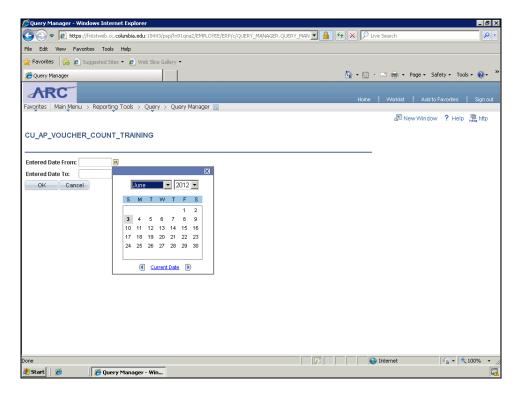


Step	Action
39.	Click the list. July

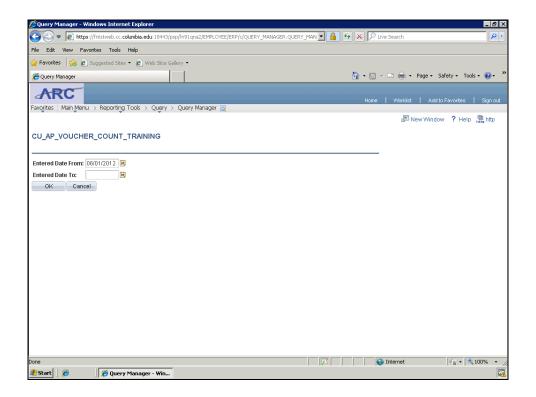


Step	Action
40.	Click the June list item. June



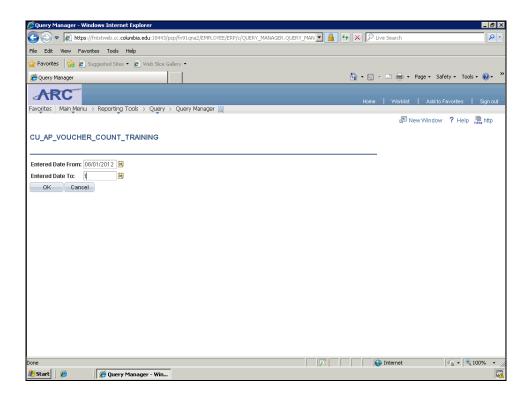


Step	Action
41.	Click the 1 link.



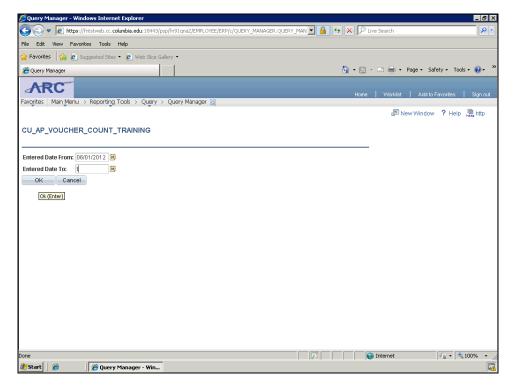


Step	Action
42.	Click in the Entered Date To field.

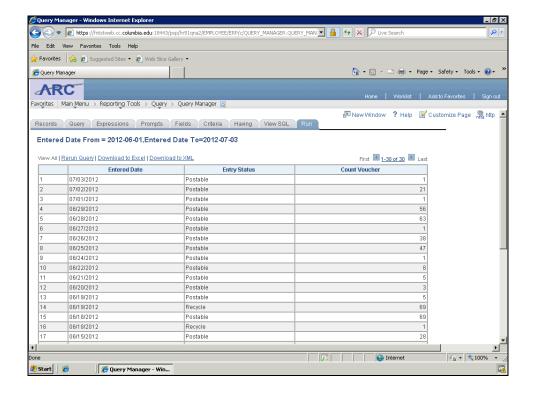


Step	Action
43.	Enter the desired information into the Entered Date To field. Enter "t".



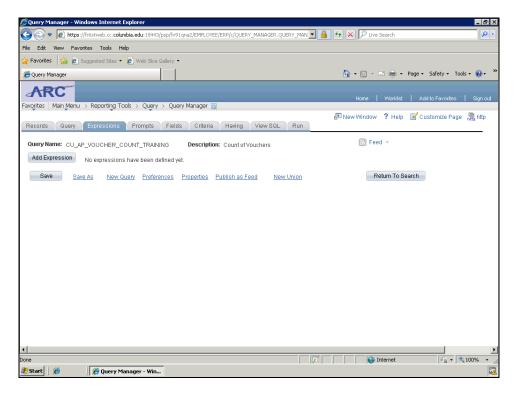


Step	Action
44.	Click the OK button.



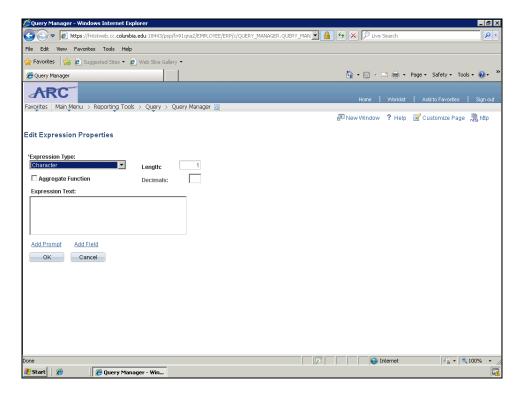


Step	Action
45.	Click the Expressions tab. Expressions

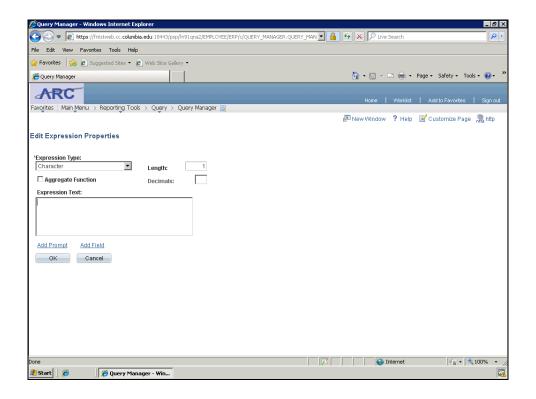


Step	Action
46.	Click the Add Expression button.
	Add Expression



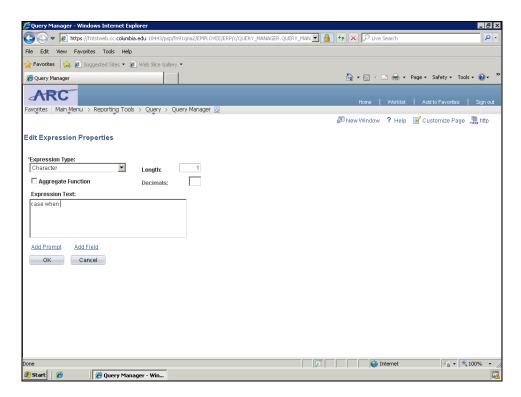


Step	Action
47.	Click in the Expression Text field.



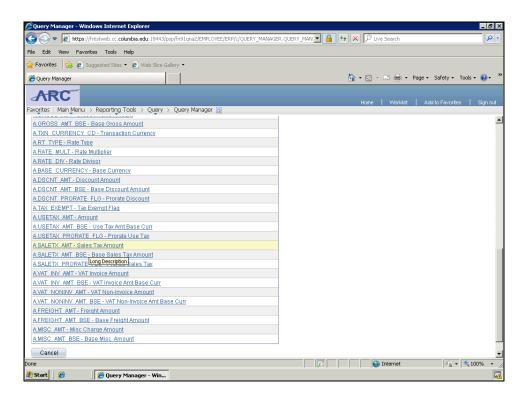


Step	Action
48.	Enter the desired information into the Expression Text field. Enter "case when".

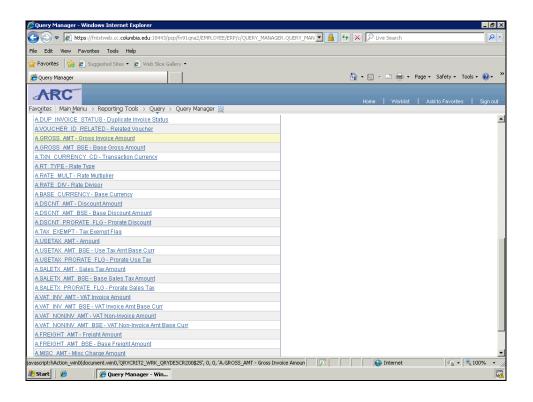


Step	Action
49.	Click the Add Field link.
	Add Field



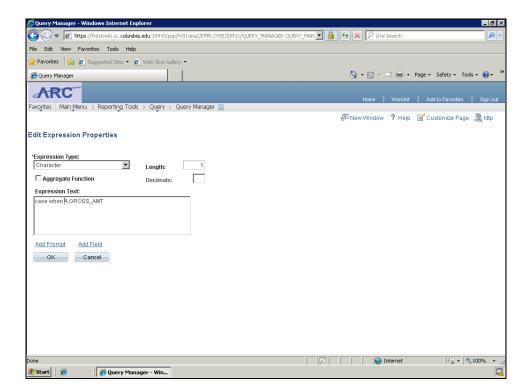


Step	Action
50.	Click the scrollbar.



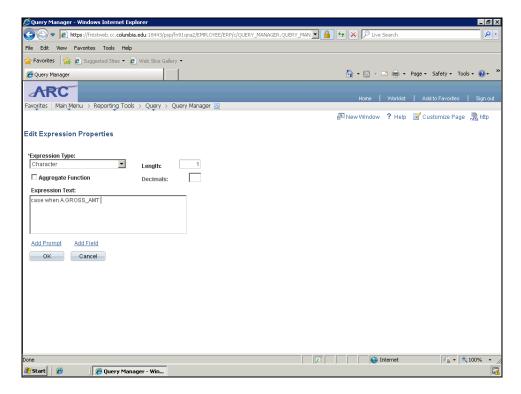


Step	Action
51.	Click the A.GROSS_AMT - Gross Invoice Amount link.
	A.GROSS AMT - Gross Invoice Amount

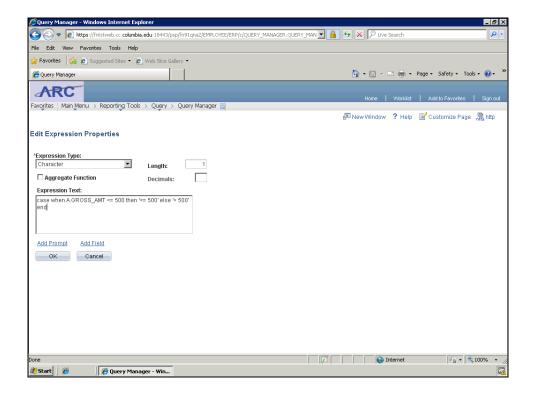


Step	Action
52.	Click in the Expression Text field.



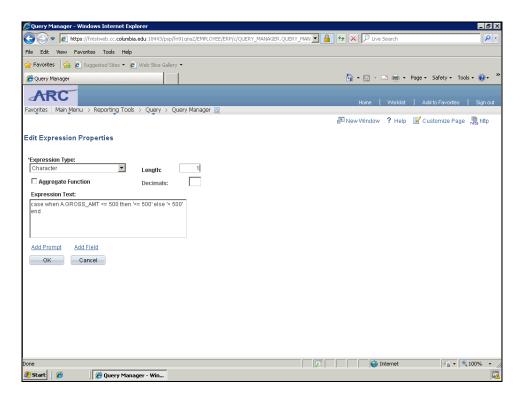


Step	Action
53.	Enter the desired information into the Expression Text field. Enter " <= 500 then '<= 500' else '> 500' end".



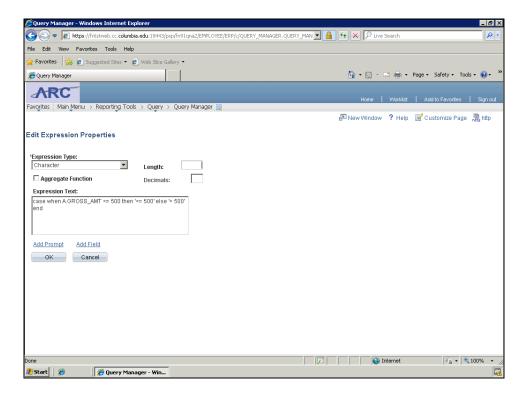


Step	Action
54.	Click in the Length field.
	1

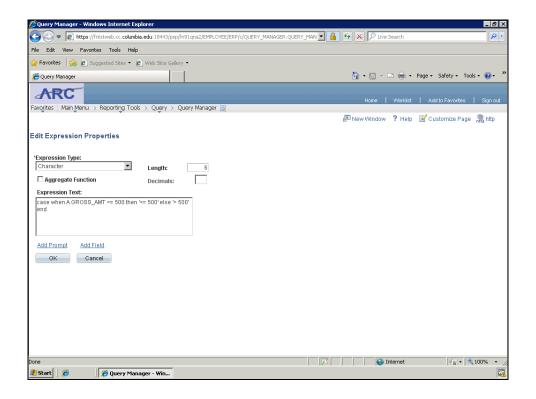


Step	Action
55.	Press [Backspace].



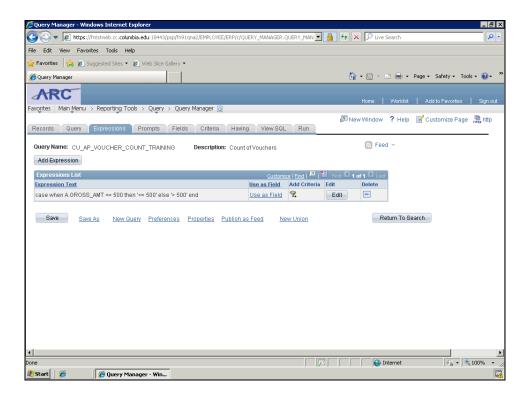


Step	Action
56.	Enter the desired information into the Length field. Enter "6".



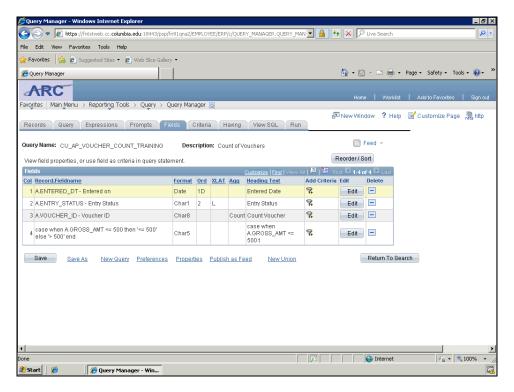


Step	Action
57.	Click the OK button.

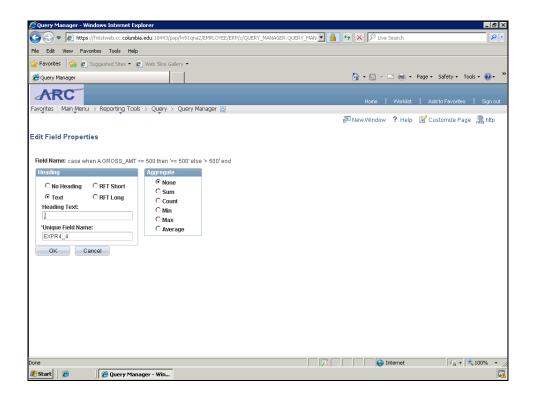


Step	Action
58.	Click the Use as Field link. Use as Field



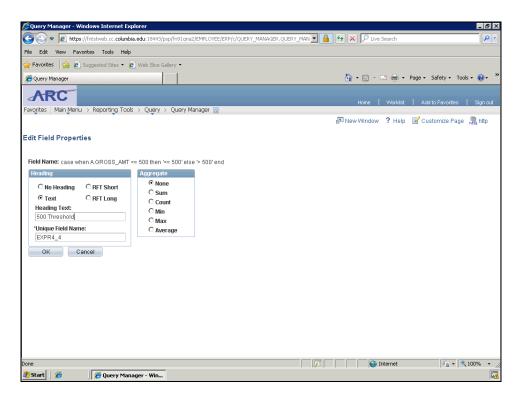


Step	Action
59.	Click the Edit button.



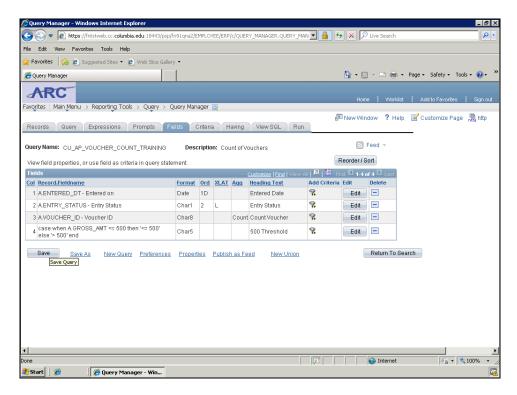


Step	Action
60.	Enter the desired information into the Heading Text field. Enter "500 Threshold".

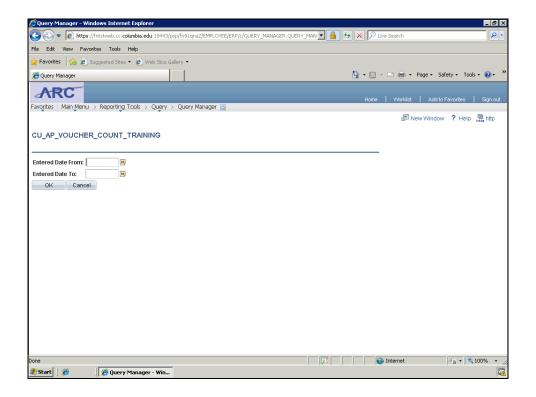


Step	Action
61.	Click the OK button.



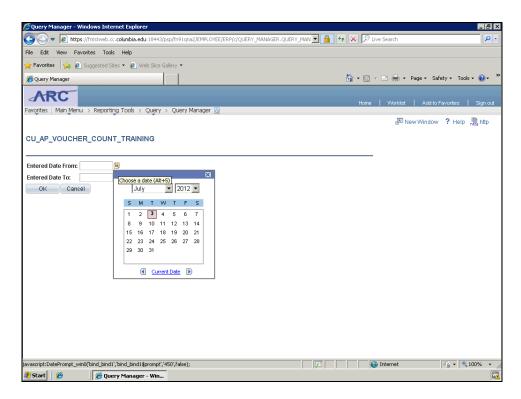


Step	Action
62.	Click the Run tab.



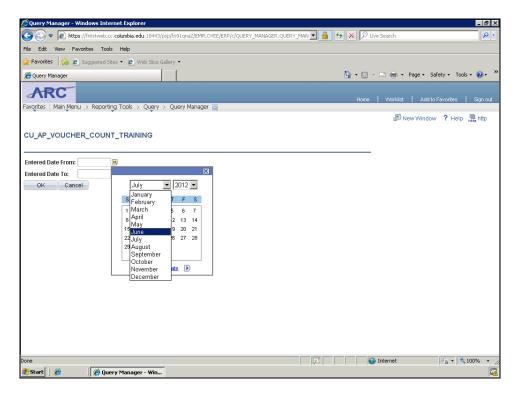


Step	Action
63.	Click the Choose a date (Alt+5) button.

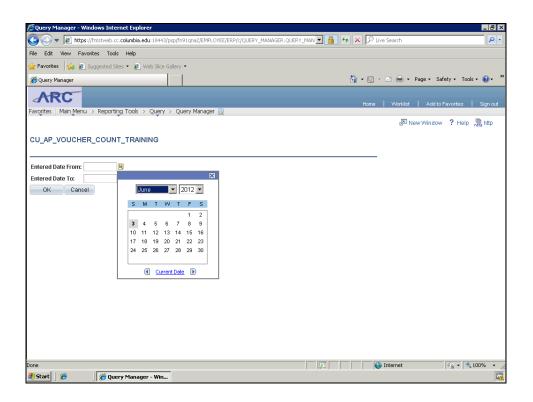


Step	Action
64.	Click the list. July



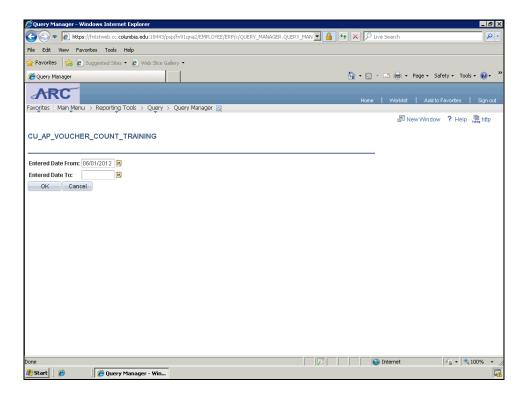


Step	Action
65.	Click the June list item. June



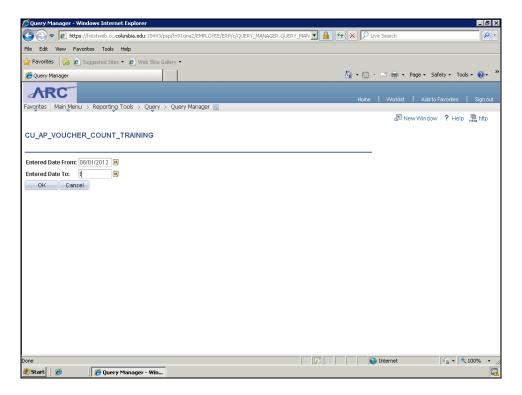


Step	Action
66.	Click the 1 link.

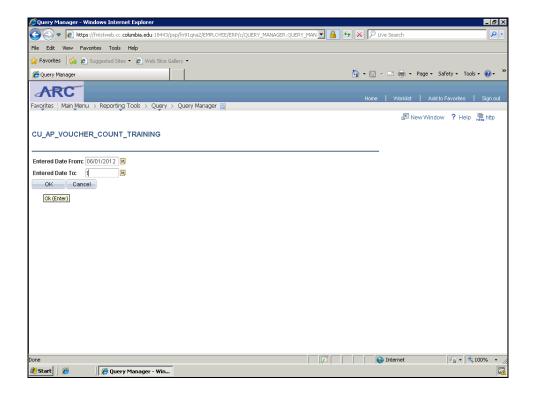


Step	Action
67.	Click in the Entered Date To field.



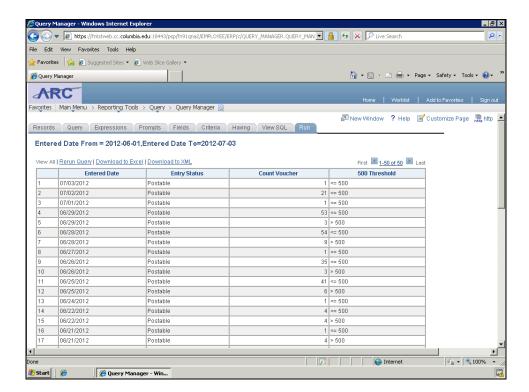


Step	Action
68.	Enter the desired information into the Entered Date To field. Enter "t".



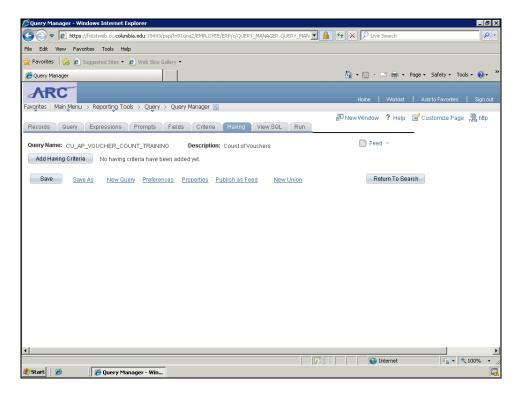


Step	Action
69.	Click the OK button.

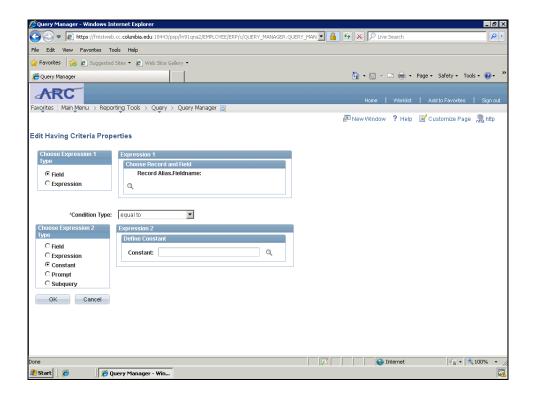


Action
Click the Having tab.
C.



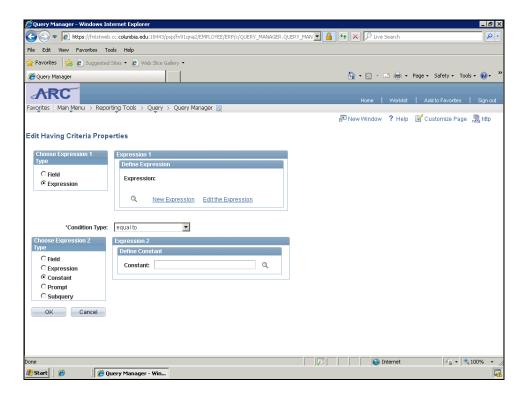


	Step	Action
Ī	71.	Click the Add Having Criteria button.
		Add Having Criteria



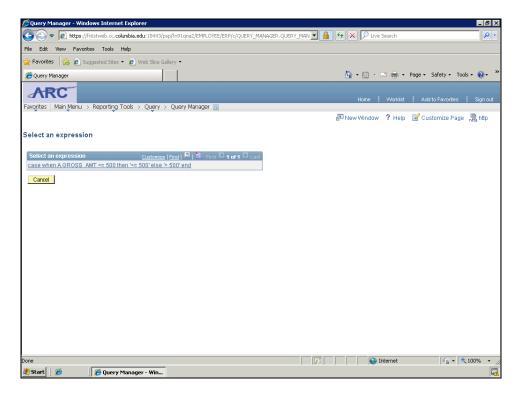


Step	Action
72.	Click the Expression option. C Expression

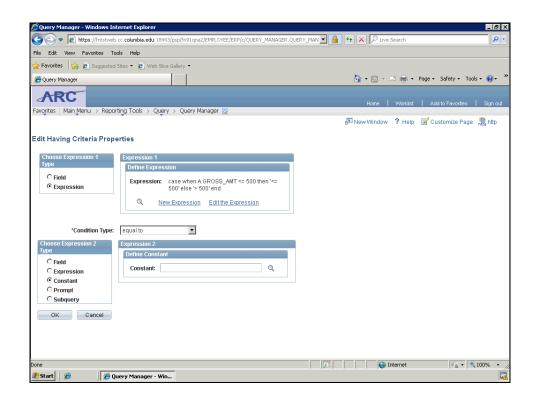


Step	Action
73.	Click the Select Expression button.



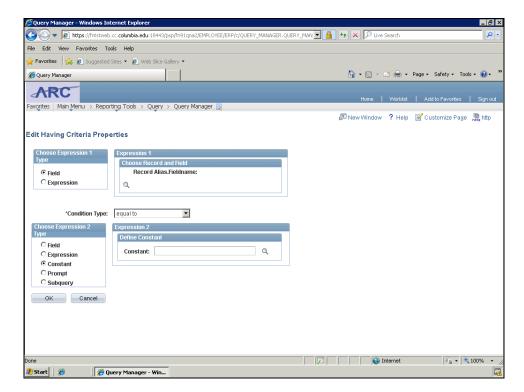


Step	Action
74.	Click the case when A.GROSS_AMT <= 500 then '<= 500' else '> 500' end link.



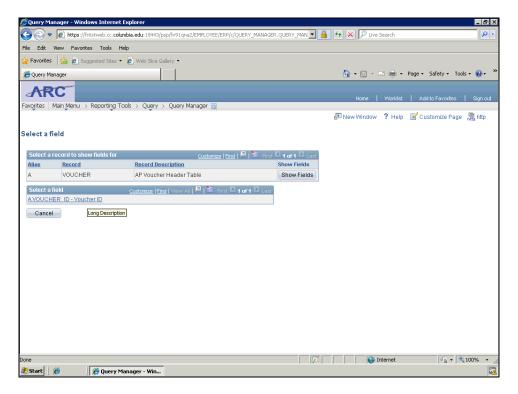


Step	Action
75.	Click the Field option. C Field

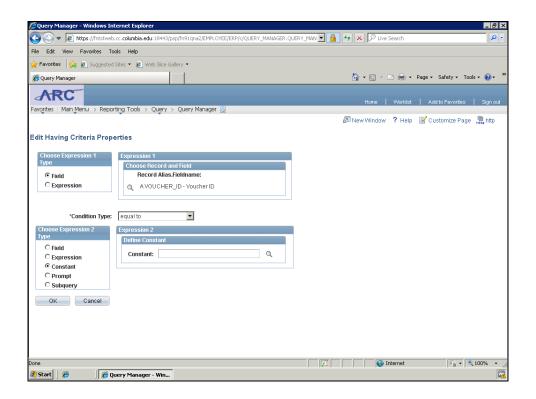


Step	Action
76.	Click the Select Record and Field button.



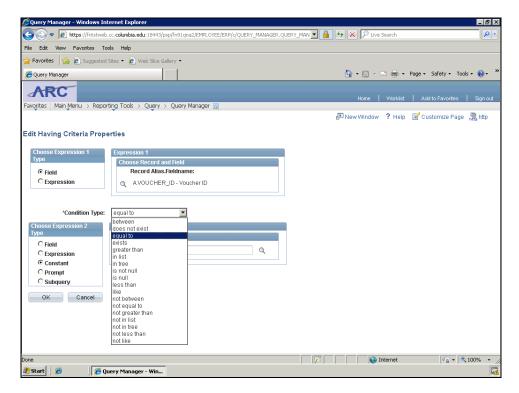


Step	Action
77.	Click the A.VOUCHER_ID - Voucher ID link.
	A.VOUCHER ID - Voucher ID



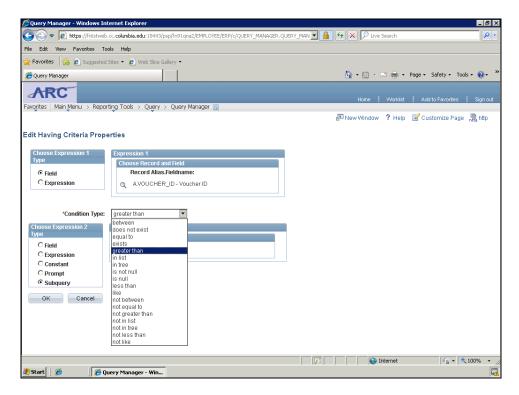


Step	Action
78.	Click the Condition Type list.
	equal to

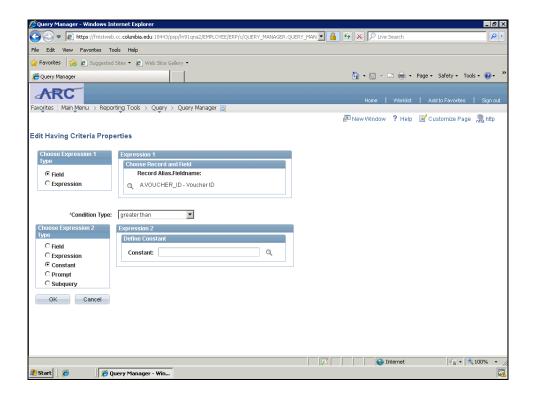


Step	Action
79.	Click the greater than list item.
	greater than



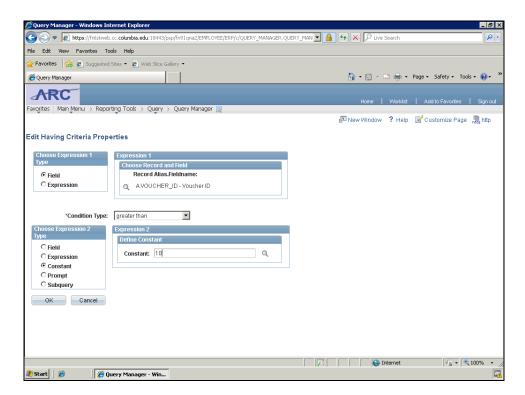


Step	Action
80.	Click the Constant option.
	C Constant



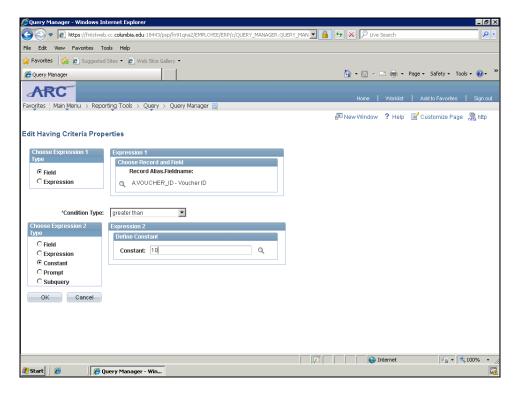


Step	Action
81.	Click in the Constant field.

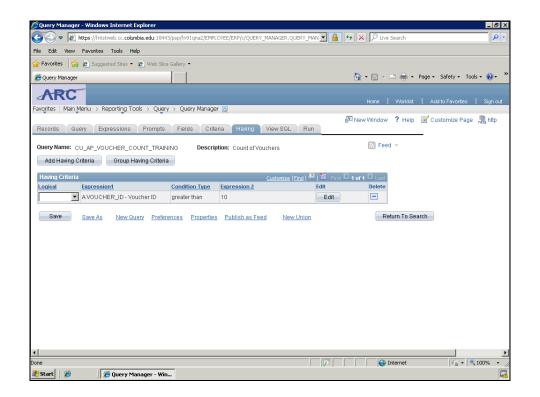


Step	Action
82.	Enter the desired information into the Constant field. Enter "10".



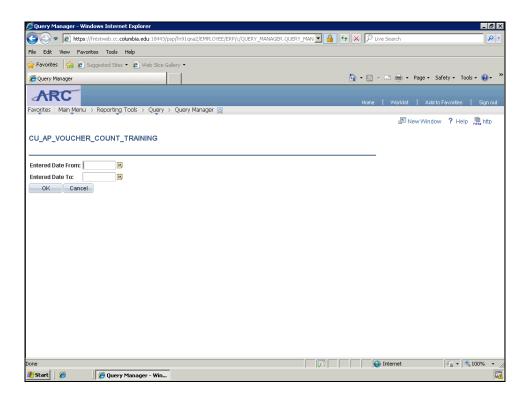


Step	Action
83.	Click the OK button.
	OK OK



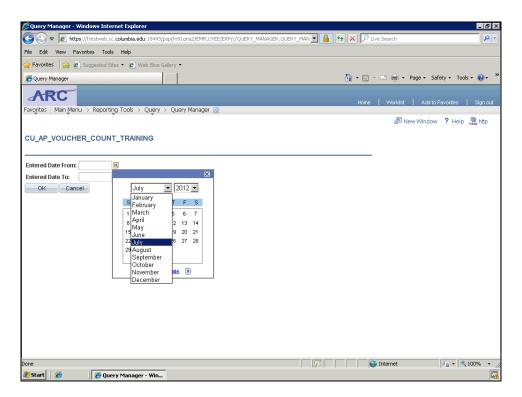


Step	Action
84.	Click the Run tab.

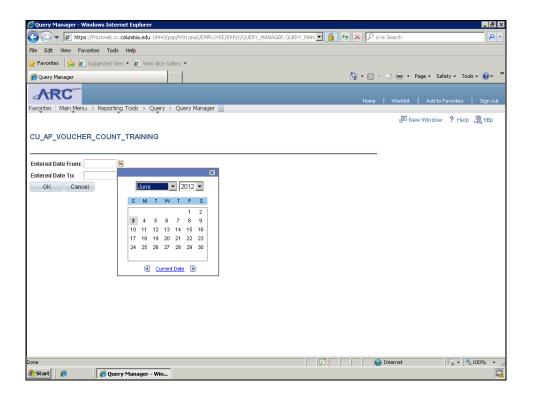


Step	Action
85.	Click the Choose a date (Alt+5) button.



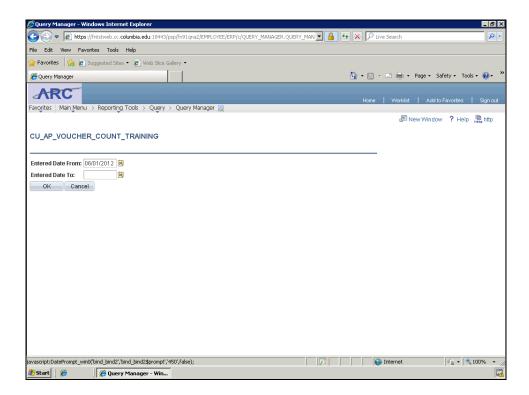


Step	Action
86.	Click the June list item.
	June



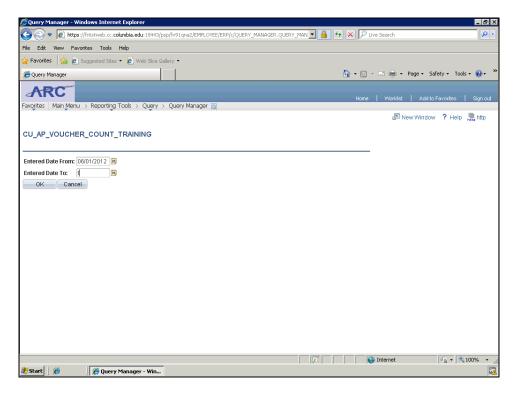


Step	Action
87.	Click the 1 link.
	1

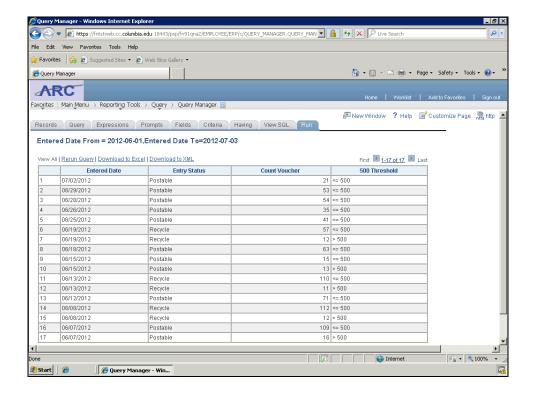


Step	Action
88.	Enter the desired information into the Entered Date To field. Enter "t".





Step	Action
89.	Click the OK button.





Step	Action
90.	You have successfully created an advanced query using expressions, prompts, and having criteria. End of Procedure.



Knowledge Assessment

If you are taking this course to obtain security access to one of Columbia University's Financial Systems, please ensure you have completed the following:

- 1. **Security Application Request:** All security roles must be requested by the user through the Columbia University Financial Systems Security Application which can be found in the Service Catalog of ServiceNow (https://columbia.service-now.com/ (https://columbia.service-now.com/)). Note: All security roles must be approved by both the user's manager and Department Security Administrator (DSA) for the School/Admin Unit to which access is being requested.
- 2. **Training Requirements:** Security access will only be granted once all training requirements have been fulfilled. After a user has reviewed all of the applicable training material for a particular role, users must complete the Knowledge Assessment associated with that training course with a score of 90% or higher. The Knowledge Assessments can be found in New CourseWorks by clicking here (https://newcourseworks.columbia.edu/samigo-app/servlet/Login?id=4c76aeef-f828-4d54-a825-594f946816261341498243885). If you have any questions about the training required for any security role, click here (http://gateway-7.webservices.lamptest.columbia.edu/files/gateway/content/training/job_aids/Job_Aid_Role to Course_Directory.pdf) for the Role to Course Directory job aid.

If you are taking this course for information purposes only, i.e., you are not requesting a security role, no Knowledge Assessment is required.



Course References

Please find links to all of the Job Aids, Policies, and Procedures that were referenced throughout this course:

Job Aid: Getting Started With the Web-Based Training Tool Advanced ARC Reporting Training Guide