

Query Basics

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Chapter 1 Technology Overview

What is PeopleSoft Query?

PeopleSoft Query is an end-user reporting tool. You use queries to retrieve information from the database to a web interface.

With PeopleSoft Query, you can extract the precise information that you're looking for by using visual representations of the PeopleSoft database and without writing Structured Query Language (SQL) statements.

Queries are comprised of the following database elements:

Tables (records)

Tables are composed of columns and rows. In PeopleSoft databases, tables are built from record definitions (or records for short). Record definitions are used by PeopleSoft Query to represent the tables (example below).

Example of the Course Catalog

	Home Worklist MultiChannel Console Add to Favorites Sign out
Menu 🗖	
Search:	New Window Help Customize Page 🖳 🔼
(>>	
My Favorites	Catalog Data Cofferings Components Cal Interface
Self Service	
Manager Self Service	Course ID: 000000
Recruiting Workforce Administration	Eind View All First 🕙 1 of 1 🕨 Last
> Benefits	*Effective Date: 05/07/2008 🛐 *Status: Active 🗸 Course Offering 🕢 1 of 1 🕨 🛨
Compensation	
> Stock	*Description:
 Time and Labor Payroll for North America 	
> Global Payroll & Absence	Long Course Title:
Mgmt	Long Description:
 Payroll Interface Workforce Development 	
 Organizational Development 	
Enterprise Learning	Course Units/Hours/Count
Workforce Monitoring	
 Pension Campus Community 	Minimum Units: 0.00 Last Course of Mult Term Seq:
Student Recruiting	Maximum Units: 0.00 *Enrollment Unit Load Calc Type: Actual Units
Student Admissions	Academic Progress Units: 0.00 Course Count: 1.00
Records and Enrollment	
⊂ Curriculum Management ⊂ Course Catalog	Financial Aid Progress Units: 0.00 Course Contact Hours: 0.00
- Browse Catalog	
- Course Catalog	Course Grading
- Print Course Catalog	*Grading Basis: Graded v *Grade Roster Print: Component v
- Course Equivalencies	Graded Component:
 <u>Catalog Summary</u> Course Catalog Search 	
N Schodulo of Classos	Repeat for Credit Rules



How do I find out what tables I need to Query?

Control+J

Browser	IE/7.0
Operating System	WINXP
Browser Compression	ON (gzip)
Tools Release	8.48.06
Application Release	HRMS and Campus Solutions 9.00.00.000
Service Pack	0
Page	CRSE_CATALOG
Component	CRSE_CATALOG
Menu	ESTABLISH_COURSES
Component Buffer Size (KB)	365

<u>continue</u>

Example of a table - CRSE_CATALOG_TBL table

COURSE_ID	EFFDT	EFF_STATUS	DESCR	DESCRLONG
000001	02/01/2008	A	PSQuery	The History of Bingo
000001	05/26/2008	A	Query Basic	The History of Bingo II
000002	05/20/2008	A	Life	How did I get this far
000003	06/01/2008	A	Acct prin	Accounting Principals
000004	09/29/2008	1	ERPSIS	How to Navigate

Columns (fields)

Columns store single pieces of information for each row (example above). Course ID: (COURSE_ID) is a column in the CRSE_CATALOG_TBL table.

Rows (field data)

A row contains all the information for a unique combination of key values on the table.

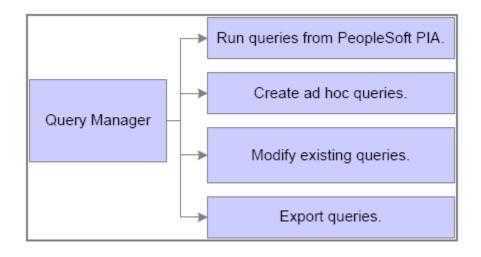
For example, in the CRSE_CATALOG_TBL table a row includes the data for these fields: COURSE_ID, EFFDT, EFF_STATUS, DESCR, and DESCRLONG

Keys

Keys are one or more columns on a table that make each row unique.

The key fields for the CRSE_CATALOG_TBL are Course ID and Effective Date (COURSE_ID and EFFDT)





Query Manager

Query Manager provides the following:

- Ability to run queries from the PeopleSoft Pure Internet Architecture.
- The ability to easily retrieve user-requested information.
- The ability to easily access and modify existing queries.
- The option to export data to various report types.

Obtaining information using Query Manager

Query Manager uses these methods to obtain information from the database:

- Filtering data by using the criteria feature.
- Creating expressions.
- Using multiple record joins to obtain detailed information that is not found in a single record.
- Using runtime prompts, which enables users to enter values at runtime to obtain specific results.

Common Terms Used in Query Manager

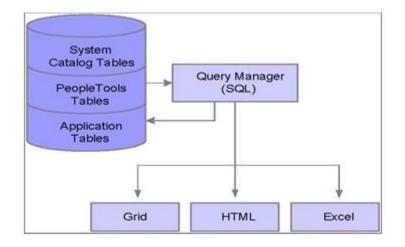
Term	Definition
Aggregate	Performs a computation on a set of values rather
	than on a single value. (add, average, etc)
Criteria	Refines the query by specifying conditions that the
	retrieved data must meet.
Data Row	Contains the values for each field in a table.
	To identify each data row uniquely, the system uses a key consisting of one or more fields in the table.



Distinct	Removes duplicate rows of data.
Effective Date	Dates information in the system giving the capability
	to have future, current and historical data stored in
	the database and ready to retrieve with the
	appropriate security.
	Example : entering information before it goes into effect.
Expression	Calculates a formula that PeopleSoft Query returns
	as a part of a query.
	Example : Constant Value Course Type = ACCT
Field	Contains the smallest unit of information that you
	access.
Metadata	Information about data.
Primary Key Fields	One or more columns on a table that make each row
	unique from the others.
Record Hierarchy Join	A record hierarchy join is a virtual connection
	between a parent table and a child table.
SQL	Accesses and manipulates data in databases.

PeopleSoft Query Data Retrieval from Database to Report

This diagram illustrates how PeopleSoft Query accesses PeopleSoft databases and how queries are exported to other file types:



Using the PeopleSoft Database

In a PeopleSoft Database:

- Query definitions (metadata) are stored in the PeopleTools tables.
- The data values of the selected fields are stored in the application tables.



Commonly used Tables in Campus Solutions

CLASS_TBL

- 1. COURSE_ID
- 2. CRSE_OFFER_NBR
- 3. STRM Term
- 4. SESSION_CODE
- 5. CLASS_SECTION

FACILITY_TBL

- 1. SETID
- 2. FACILITY_ID
- 3. EFFDT

CLASS_INSTR

RQ_GRP_TBL

CLASS_ASSOC

CLASS_ATTRIBUTE

CLASS_NOTES_TBL

CLASS_FEE_TBL

CLASS_MTG_PAT

SCTN_CMBND

Key Admissions, Student Records Tables

- o ACAD_PROG
 - 1. A student's effective dated Program Statuses (Active, Discontinued, Dismissed, etc.).
 - 2. A student's Academic Program.
 - 3. Program Action Reason that describes the corresponding action.
 - 4. A student's Expected Graduation Term.
 - 5. A student's Degree Checkout Status.
 - 6. A student's Admit Term.
- ACAD_PLAN (child table of ACAD_PROG)
 - 1. A student's major(s) and minor(s).
- **ACAD_SUBPLAN** (child table of ACAD_PLAN)



7

1. A student's subplan (specialization in their major).

• STDNT_ENRL

1. Historical Student Enrollment (by term). The table that holds the detail of all courses/grades taken in residence.

• STDNT_CAR_TERM

- 1. A student's cumulative units and term units.
- 2. A student's cumulative GPA.
- 3. A student's academic level (freshmen, sophomore, junior, senior, graduate, postbac).
- 4. A student's academic load (full time, part time) for a term.
- 5. A student's primary academic program (for a term).
- 6. A student's eligible to enroll flag (for a term).

• ACAD_DEGR

1. Student Degrees earned at this institution.

• ACAD_DEGR_PLAN

1. The plan(s) in which the student has earned a degree at this institution

• CLASS_TBL

1. Schedule of Classes

• CRSE_CATALOG

1. Course data like DESCRIPTION, UNIT VALUES, GRADING BASIS

• CRSE_OFFER

1. Course data like SUBJECT, CATALOG NBR, REQUIREMENT GROUP

• STDNT_SPCL_GPA (populated by a custom CMS Baseline Process)

- 1. Transfer Total GPA-Cumulative and Term
- 2. Resident GPA-Cumulative and Term
- 3. Cal Grant GPA.

• STDNT_GRPS_HIST

1. All Student Group(s) that the student is (was) active in or inactive in.

• ACAD_STDNG_ACTN

1. The student's end of term academic standing.



• SRVC_IND_DATA

1. The student's current Service Indicators (holds).

• STDNT_ENLR_APPT

1. The student's enrollment appointment (assigned per term/session).

• STDNT_CAR_MLSTN (effective dated)

1. The student's milestones, levels and completion status.

• STDNT_TEST_COMP

1. All student test scores.

• GRADE_RSTR_TYPE & GRADE_ROSTER

1. Grade Rosters.

• ADM_APPL_DATA joined to ADM_APPL_PROG (parent to child)

- 1. All applicant data that has been posted to PeopleSoft from MENTOR.
- 2. The applicant's Admit Term is found in ADM_APPL_PROG.
- 3. The applicant's status (APPL, ADMT, DENY, MATR, WAPP) is found in ADM_APPL_PROG.
- 4. The applicant's Academic Program is found in ADM_APPL_PROG.
- 5. The applicant's Admit Type is found in ADM_APPL_DATA
- 6. The applicant's self reported Academic Level is found in ADM_APPL_DATA.

Transfer Credit:

TRNS_CRSE_DTL

STDNT_CAR_TERM

TRNS_TEST_DETAIL

Financial Aid:

ISIR_00_1_EC - 1999-2000 ISIR Sect 1 EC

ISIR_00_2_EC - 1999-2000 ISIR 2 EC

ISIR_00_3_EC - ISIR 3 EC

ISIR_COMMENTS - ISIR Comment Codes



ISIR_COMMT_TBL - ISIR Comment Descriptions ISIR_COMPUTED - Computed Data from INAS/DOE ISIR_CONTROL - ISIR Internals/Control Data **ISIR PARENT - Fed Parent Application Data** ISIR_STUDENT - Fed Student Application Data STDNT_FA_TERM - Student Fin Aid Term Table STDNT_TERM_BDGT - Student Term Budget STDNT_AWARDS - Student Awards STDNT_AWRD_ACTV - Student Award Activity STDNT_AWRD_DISB - Student Award Disbursements STDNT DISB VW1 - Stdnt Disbursement By Term STDNT_AID_ATRBT - Student Aid Attributes Table STDNT_FA_TRM_VW - Student Fin Aid Term View STDNT_PKG_VAR - Student Packaging Variables STDNT BGT IT VW - Stdnt Bdgt Item Summary Vw ITEM_TP_FA_AWRD - Item Tp Prompt for Awards ITEM TP FA DISB - Item Type Disb Plan/Split Cd ITEM_TP_FA_PKG - Item Tp Prompt for Packaging SFA_ASG_ELIG - ACG/SMART Eligibility SFA_ASG_ORG - ACG/SMART Origination Record SFA_ASG_DSB - ACG/SMART Disbursement

Student Financials:

ITEM_SF

ITEM_LINE

SF_ACCTG_LINE



TUIT_CALC_TBL

BILL_HEADER

ITEM_TYPE_TBL

REFUND_HDR

REFUND_DTL

BILL_HEADER_VW

COLLECTION_SF



Chapter 2 Using the Query Manager

Query Manager Search

Use the Query Manager Search page to locate and manage queries. This illustration shows the usages of this page:

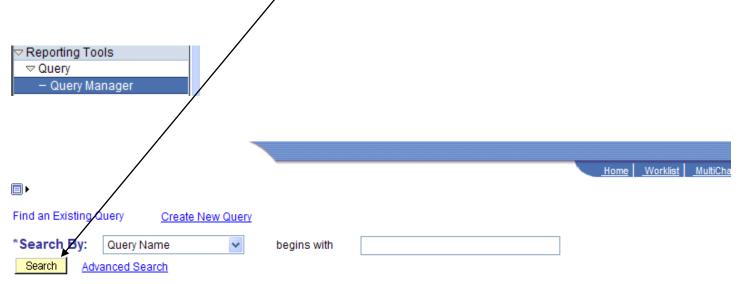
Query Manager Search Uses	
Run queries.	
Rename queries.	
Export queries.	
Copy queries to users.	
Organize queries in folders.	
Delete queries.	



How do I Search and Manage Queries?

Navigation:

- Reporting Tools
- Query
- Query Manager Click the Search button



Search Results

Too many items met your search criteria. Only the first 300 items displayed.

*Folde	r View: All Folders 💉						
Ch	eck All Uncheck All		*Action:	Choose		*	Go
Que	ry	Customize Find Vie	<u>w 100 </u> 📜 🛛 First	▲ 1-30 of	300 🕨 L	ast	
<u>Sele</u>	ect Query Name	Descr	Owner Folder	<u>Edit</u>	<u>Run to</u> <u>HTML</u>	<u>Run to</u> Excel	<u>Schedule</u>
	AD701ADMISSIONS_ACTIONS_TBL	AD701Admissions Actions Tbl	Public	<u>Edit</u>	<u>HTML</u>	Excel	Schedule
	AD702TEST_TABLES	AD702Test Tables	Public	Edit	HTML	Excel	Schedule
	AD703RECRUIT_CATEGORY_TBL	AD703Recruit Category Tbl	Public	Edit	HTML	Excel	Schedule
	AD704REFERRAL_SOURCE_TBL	AD704Referral Source Tbl	Public	<u>Edit</u>	HTML	Excel	Schedule
	AD705REGION_TABLE	AD705Region Table	Public	<u>Edit</u>	<u>HTML</u>	Excel	Schedule
	AD710SUMMARY_TYPE_TABLE	AD710Summary Type Table	Public	Edit	HTML	Excel	Schedule
	AD711ADMIT_TYPE_TABLE	AD711Admit Type Table	Public	<u>Edit</u>	<u>HTML</u>	Excel	Schedule
	AD712APPLICATION_CENTER_TAB	AD712Application Center Tab	Public	Edit	HTML	Excel	Schedule
	AD713EVALUATION_TABLE	AD713Evaluation Table	Public	<u>Edit</u>	<u>HTML</u>	Excel	Schedule



Features of Query manager Search Page

Feature	Usage
Search by:	Perform a quick search using any field in the drop-down list box.
Advanced Search	Select this link to narrow a query search using eight search categories and other
	conditional criteria.
Folder View	Displays queries by folder name.
Action	Organize, copy, delete, and rename queries.
Select	Select this check box to flag a query for an action.
Check All and Uncheck All	Click these buttons to select or deselect all queries that are in the search list.
HTML	Select this link to run a query to HTML format.
Excel	Select this link to run to Excel
Schedule	Select this link to access the Process Scheduler Request page and set the particular
	date and time to run the query.

Security Permissions

If the Query Manager link does not appear under the Query folder, the security administrator must grant access to the Query Manager component (QUERY_MANAGER) and pages.



Query Manager Advanced Search

You can narrow the focus of a search by using the Query Manager advanced search. This page enables you to search using:

- Eight different search fields.
- Ten conditional logic operators.

Click the Advanced Search link

Find an Existing Que	y Create New Query		
*Search By: Q	Jery Name 🔽	begins with	
Search Advance	ed Search		



Advanced Search

Query Manager

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

Find an Existing Query	Create New Query
------------------------	------------------

Query Name:	begins with	*		
Description:	begins with	*		
Uses Record Name:	begins with	*		
Uses Field Name:	begins with	*		
Access Group Name:	begins with	*		Q
Folder Name:	begins with	~		
*Query Type:	=		User 🗸	
Owner:	=		~	

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

Search Clear Basic Search

Find an Existing Query | Create New Query

Eight Fields on Query Manager Advanced Search Page

Field	Description
Query Name	Enter the name of the query.
Description	Enter a description of partial description of the query.
Uses Record Name	Enter the record with which the query is associated.
	Note: The record might be used by multiple queries, so you might get more results than you plan.
Uses Field Name	Enter a field that the query uses.
	Note: The field might be used by multiple queries, so you might get more results than you plan.
Access Group Name	Enter the access group with which the query is associated.
Folder Name	Enter the name of the folder that stores the query.
Query Type	Enter the query types: role, user, process, or archive.
Owner	Enter whether the query is public or private.



Conditional Logic Operators

begins with	~
<	
<=	
=	
>	
>=	
begins with	
between	
contains	
in	
not =	

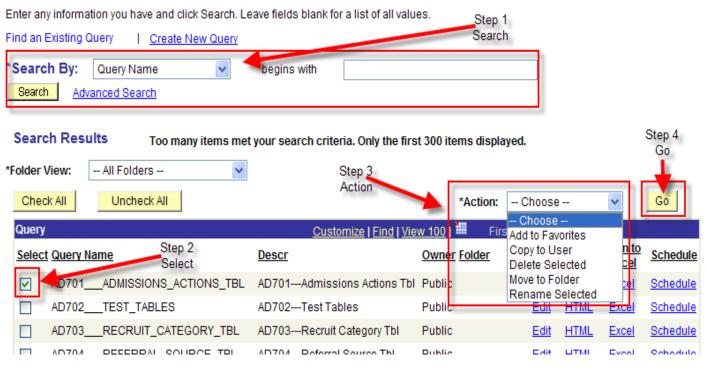
Organizing Queries

Once you locate the desired queries, you use the Actions options to help you organize the selected queries.

The process to perform any action on queries is shown in this diagram



Query Manager



Options in the Action Field – Step 3 from the Action dropdown list box:

Action	Purpose
Add to Favorites	Adds queries to the My Favorite Queries list.
Copy to User	Copies private queries to other users.
	Note: The user that you copy to must have access to the records with which the query is associated
Delete Selected	Deletes the selected queries from the database.
Move to Folder	Moves queries to folders.
Rename Selected	Changes the name of the selected queries.

My Favorite Queries

You can quickly access a frequently used query from the Query Manager search page by designating the query as a favorite. After you create a favorite, the favorites appear on the search page automatically.

Click the triangular arrow next to the My Favorite Queries label to expand and collapse the list.

Note: Queries in the My Favorite Queries list are linked to the user ID.

Adding Queries to the My Favorite Queries List

To add queries to the My Favorite Queries List:

- 1. Search for queries to add to the My Favorite Queries List.
- 2. Select the query by selecting the Select check box.
- 3. Select *Add to favorites* from the Actions dropdown list box.
- 4. Click the Go button.

Removing Queries from the My Favorite Queries List

To remove queries from the My Favorite Queries List:

- 1. Click the Remove button (the minus button) to remove one query from the list.
- 2. Click the Clear Favorites List button to remove all queries from the list.



Creating and Using Folders

Use folders to organize queries. Create a folder structure that suits the needs of users.

Keep the following in mind when using folders:

- All folders are visible to all users.
- Private queries appear in a folder.
- A query can be stored in only one folder other than the All Folders view.

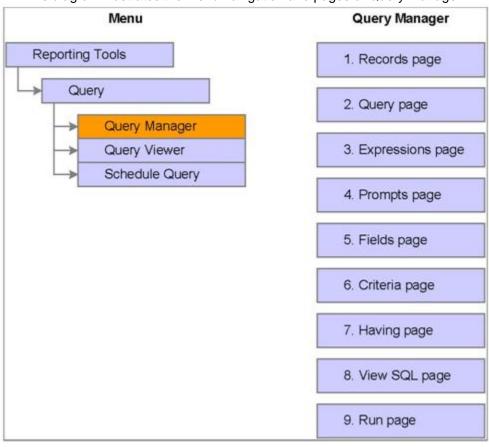
Moving Queries to Folders

To move queries to folders:

- 1. Select the queries.
- 2. Select *Move to Folder* from the Action dropdown list box.
- 3. Click the Go button.
- 4. Select an option.
 - a. The option enables you to select an existing folder.
 - b. The second option enables you to create a folder.
- 5. Click the Go button.

Query Manager

You can create, edit, and organize using Query Manager.



This diagram illustrates the menu navigation and pages of Query Manager:



Query Manager:

- Is browser-based.
- Is organized to facilitate ease of use.
- Enables you to create queries that retrieve data without having to know Structured Query Language (SQL).

Query Manager Pages:

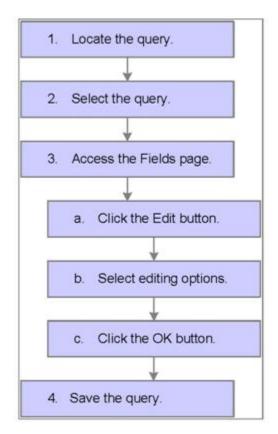
The pages of Query Manager enable you to tailor queries to retrieve data that is specific to the business needs of users.

		Home Worklist MultiChannel C	onsole Add to Favorites Sign out
		New Window	(<u>Help</u> <u>Customize Page</u> 📳
Records Query Expressions Prompts	Y Fields Y Criteria Y Having	View SQL Run	
Query Name: New Unsaved Query	Description:		
Find an Existing Record			
*Search By: Record Name v begins with			
Search Advanced Search			
(E Save) Save As New Query Preference	ces Properties New Union	Q Return to Search	

This table lists the name and purpose of each of the Query Manager pages:

Query Manager Page	Purpose	Required/Optional
Records	Select the records you use in the query.	
	You must select at least one record before you can create	
	and save a query.	
Query	Select the fields that you need for the query.	
	You must select at least one record before you can create	
	and save a query.	
Expressions	Create formulas to use with the query.	
Prompts	Create runtime prompts.	
Fields	View, edit, sort, and reorder fields that appear in a query.	
Criteria	Filter data to retrieve only those rows that you need to see.	
Having	Create criteria for fields that use aggregate functions.	
View SQL	View the SQL that is generated when the query is created.	
Run	View the results of the query.	





Use the following steps to edit fields in an existing query:



Pages Used to Edit Fields in an Existing Query

- 1. Navigate Select Reporting Tools, Query, Query Manager
- 2. Search for and open an existing query. (for example you can enter a qualifier of NC_)
- 3. Select the Fields tab.
- 4. Click the appropriate Edit button on the Fields page.

				Ho	<u>me _Worklist _Multi</u>
〕►					New
Records Y Query Y Expressions Y	Prompts F	ields Cri	teria / Having	View SQL	Run
Query Name: PER703COURSE_TBL	Desc	ription: PER703	Course Tbl		
View field properties, or use field as criteria in que	ery statement.				Reorder / Sort
Fields		<u>Cust</u>	tomize Find View Al	I I 📕 🛛 First 🛛	1 1-10 of 10 🕨 Last
Col Record.Fieldname	<u>Format</u>	Ord XLAT Agg	Heading Text	Add Criteria	Edit Delete
1 A.COURSE - Course Code	Char6		Course	9	Edit 📃
2 A.DESCR - Description	Char30		Description	%	Edit 📃
3 A.DESCRSHORT - Short Description	Char10		Short Desc	%	Edit 📃
4 A.COURSE_STATUS - Course Status	Char1	N	Status	9	Edit
5 A.COURSE_TYPE - Course Type	Char1	S	Туре	9	Edit 📃
6 A.INTERNAL_EXTERNAL - Internal/External	Char1	N	Int/Ext	9.	Edit 📃
7 A.DURATION_TIME - Duration Time	Num5.1		Duration	9.	Edit 🖃
8 B.DESCRSHORT - Short Description	Char10		Duration Interval	9.	Edit 📃
9 A.SCHOOL_CODE - School Code	Char10		School Cd	9	Edit 🖃
10 A.SCHOOL - School Name	Char30		School Name	9	Edit
🗐 Save As <u>New Query</u>	Preferences	Properties	New Union	(Return to Search



Using the Fields Page

Button	Usage
Reorder / Sort	Click this button to determine:
	 Field-by-field the sort order and direction of the query results.
	 The order that the columns will appear in the query results.
Add Criteria	Click this button \Re to determine any conditional criteria for the selected field.
Edit	Click the Edit button to display the properties of the individual field.
Delete (minus sign)	Click this button to delete the associated field from the query.

Note: The fields that you select on the Records page determine the fields that appear on the Fields page. Expressions that you use as fields also appear on this page.

After selecting the Edit button on the specific field you wish to change the following page will display. Use this page to edit your field properties.

Edit Field Properties

Field Name: A.COURSE_STATUS - Course Status

Heading	Aggregate	Translate Value	
 No Heading RFT Short Text RFT Long Heading Text: Status *Unique Field Name: Status 	 None Sum Count Min Max Average 	 None Short Long Effective Date for Short/Long Current Date Field Expression 	V
		Add Prompt Add Fi	eld

Group Box	Usage
Heading	Use this field to edit the label heading in a query.
Aggregate	Use this feature to apply aggregate functions to a field.
Translate Value	Only if the field has Translate values will this box appear.
	We will discuss Translate values in a later chapter.



ACTIVITY 1 – Using Query Manger

(Approximately 20 min)

Activity overview:

- Sign into the training database training ID given to you
- Search for an existing query and create a copy
- Create a folder and move your newly named query to that folder
- Add a query to the My Favorite Queries list
- Edit a query

Finding an Existing Query and Save As:

- 1. Click Home to start from the homepage.
- 2. Select Reporting Tools, Query, Query Manager.
- 3. Click the Advanced Search link.
- 4. Enter **SESSION_CODE** in the Uses Field Name field and a Capital **T** in the Query Name field.
- 5. Click the Search button.
- 6. Select the **TRAINING_SESSION** query check box in the search results.
- 7. Click the Edit link.
- 8. Scroll to the bottom of the page and click the Save As link.
- 9. Change the Query field to XXX_TRAINING_SESSION (XXX represents your initials).
- 10. Click the OK button to save.
- 11. Go back and click the Query Manager link from the left navigation menu and search for your newly named query. XXX_TRAINING_SESSION

Creating a Folder:

- 1. From the Action dropdown list select Move to Folder (make sure you have your query selected first by placing a check in the checkbox).
- 2. Click the Go button.
- 3. On the move to Folder page, select the second radio button, and enter your **ONYEN** in the blank field.
- 4. Click the OK button.

Adding Queries to My Favorite Queries List:

- 1. Select the Select check box of the XXX_TRAINING_SESSION query in the query search list.
- 2. Select the Add to Favorites option from the Actions dropdown list box.
- 3. Click the Go button and examine the search page.
- 4. You should be able to see your new folder in the dropdown list in the first radio button option.
- 5. Select your folder and click the OK button.
- 6. Go back to the search page.



Editing a Query:

- 1. On the Search page search for your query again.
- 2. Click the Edit link of the XXX_TRAINING_SESSION query in the My Favorite Queries list.
- 3. Select the Run tab from Query Manager to view the query results.
- 4. Select the Fields tab to edit the column headings.
- 5. Click the Edit button of the SESSION_CODE field.
- 6. Select the Text option from the Edit Field Properties page.
- 7. Enter Course Session for the Heading Text, and click the OK button.
- 8. Click the Delete button for the HOLIDAY_SCHEDULE field.
- 9. Save the query.
- 10. Select the Run tab to view the results of the XXX_TRAINING_SESSION query.

Chapter 3 Creating a Simple Query

Methods to Create a Query

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

- Click the Create new Query link on the Query Manager search page.
- Click the new Query link at the bottom of the pages that are in Query Manger.

Creating a Simple Query

To create a simple query:

- Access Query Manager,
- Select a record on the Records page that you want to create a query from
- Select fields on the Query page.
- Save and run the query.

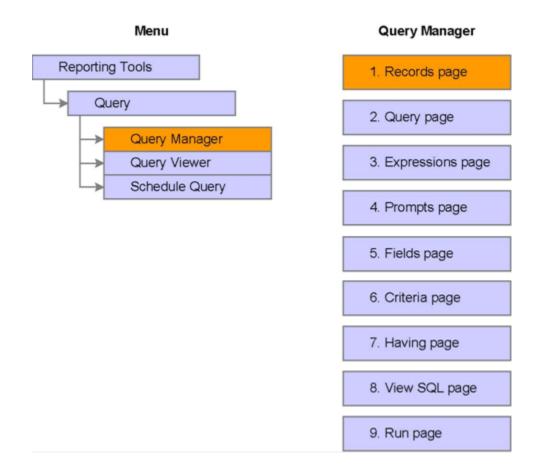


Selecting Query Output and Editing Query Properties

Records Page

The first step in creating a query is selecting a record in the Records page. The record that you select establishes the primary focus of the query.

This diagram shows how to access the Records page of the Query Manager Component:



Navigation:

- Select Reporting Tools, Query, Query Manager.
- Click the Create New Query link.
- Click the Advanced Search link.



Use this page to search for and select records:

		-						
						Home	Worklist	MultiC
■ ►								
								New
Records Qu	ery Y Expressions	Y Prompts Y	Fields	Criteria	Having	View SQL	Run	
Query Name: New U	nsaved Query	D	escription:					
Find an Exist	ting Record							
Record Name:	begins with 💌							
Description:	begins with 💌							
Uses Field Name:	begins with 💌							
Access Group Name:	begins with 💌			Q				
When using the IN or I	BETWEEN operators, e	enter comma separa	ted values witho	ut quotes. i.e.	. JOB,EMPLO	YEE, JRNL_LN.		
Search	Basic Search							
Save Save	As <u>New Query</u>	Preferences	Properties	New Unio	n		turn to Search)

Using the Records Page

- The Records page appears after you click the Create New Query or the New Query link. •
- •
- The Records search page provides basic and advanced search options. You have to click the Search button to display a list of records based on the search criteria that you • enter.
- You must select at least one record and at least one field to create a query. •



Links and Buttons on the Records Search Page

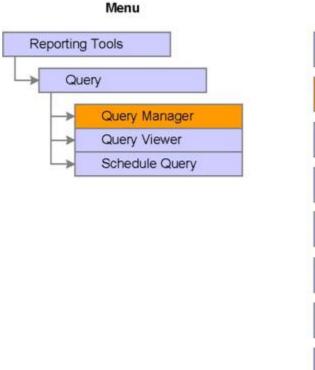
This table explains the links and buttons on the Record basic and advanced search page:

Link or Button	Usage
Basic Search	Click this link to access the Records basic search page.
Advanced Search	Click this link to access the Records advanced search page that offers more fields to use when
	filtering the search results.
Search	Click this button to retrieve results from the entered search criteria.
Clear	Click this button to clear any entered criteria from the search fields.
Add Record	Click this link to add the record to the new query.
Show Fields	Click this link to view the fields prior to selecting a record for the query.

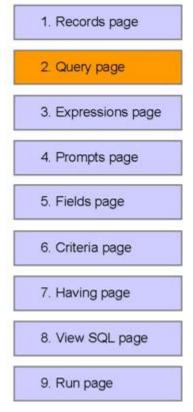


Query Page

After you select a record, the Query page appears and enables you to select the fields used in the query.



This diagram shows how to access the Query page of the Query Manager component:



Query Manager



Navigation:

- Select Reporting Tools, Query, Query Manager.Click the Create New Query link.
- Click the Search button.
- Click the appropriate Add Record link.

			Home	Worklist	MultiCh
_					<u>New V</u>
Records Query Expressions	Prompts Fields	Criteria Having Vie	ew SQL	Run	
Query Name: New Unsaved Query	Description	:			
Click folder next to record to show fields. Che additional records by clicking the records tab.			₽¢		
Chosen Records	when initiated click the fields	tab.			
Alias Record			loin 🗖		
A CRSE_CATALOG - Course Catalog Check All Fields	Uncheck All Fields	<u>Hierarchy</u>	Join		
Fields		Find View All First 🛃 1-28 of 28	▶ Last		
CRSE_ID - Course ID			9.		
EFFDT - Effective Date			9 <u>4</u> 9 <u>4</u>		
EFF_STATUS - Status a DESCR - Description	as of Effective Date		°		
EQUIV_CRSE_ID - Equ	iivalent Course Group	Join CRSE_EQUIV_TBL - Course Catalog	94		
CONSENT - Type of Co	nsent Required	Equivalencies	9 <mark>.</mark>		
			~		



Effective-Dated Tables

If you select a record that contains the EFFDT field, PeopleSoft Query automatically add effective date criteria to the query and displays a message as in the example:

_		Ho	me Worklist MultiCh	
			New M	
Records Query Express	ions Prompts Fields	Y Criteria Y Having Y View SQL	- Run	
Query Name: New Unsaved Query	Windows Internet Explorer	ia has been automatically added for this effective dat	ed record (139.60)	
Click folder next to record to show field: additional records by clicking the record		a has been automatically added for this effective dat	ed record. (139,60)	
Chosen Records		ок		
Alias Record				
A CRSE_CATALOG - Course Catalog Data				
Check All Fields	Uncheck All Fields			
Fields		Find View All 🛛 First 🗹 1-28 of 28 🕨 Las	st	
🔲 🗁 CRSE_ID - Cour	se ID	9		
EFFDT - Effective	Date	9.		
EFF_STATUS - S	Status as of Effective Date	9.		
DESCR - Descri	ption	9.		
	D - Equivalent Course Group	<u>Join CRSE_EQUIV_TBL -</u>	,	
CONSENT - Type	e of Consent Required	Equivalencies 9		

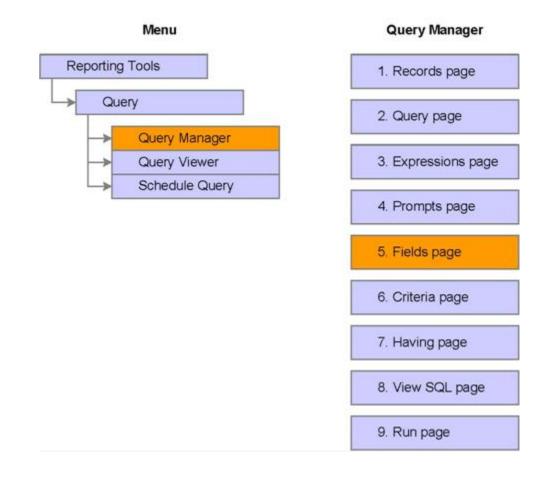
Fields and Buttons on the Query Page

This table describes the fields and buttons on the Query page:

Field or Button	Description		
AZ	Click this button to sort fields.		
Hierarchy Join	Click this link to join parent-child records.		
Delete button (minus sign)	Click this button to delete the displayed record.		
Check All Fields	Click this button to select all of the fields in the record.		
Uncheck All Fields	Click this button to clear all selected fields.		
Key	Identifies the key fields in a record.		
Join link	Identifies related-record joins by using record prompts.		
Add Criteria	Click to filter data from the query.		
Fields column	Select these check boxes to select fields.		



The Fields Page



Navigation:

- Select Reporting Tools, Query, Query Manager.
- Click the Create new Query link.
- Click the Search button, and click the appropriate Add Record link.
- Select the Fields tab.



Use this page to edit field properties and to determine column and sort order.

					Но	me Worklist MultiCh
						<u> </u>
						<u>New V</u>
Records Query Expressions Prompts		Fields	C	riteria / Having	View SQL	Run
Query Name: TRAINING_SESSION	Des	criptio	on: Table f	or Query Basics		
View field properties, or use field as criteria in query state	ment.					Reorder / Sort
Fields			<u>Cu</u>	stomize Find View All	First 🛛	🛃 1-20 of 20 🕩 Last
Col Record.Fieldname	<u>Format</u>	<u>Ord</u>	<u>XLAT</u> Aq		Add Criteria	a Edit Delete
1 A.INSTITUTION - Academic Institution	Char5			Institution	%	Edit 📃
2 A.ACAD_CAREER - Academic Career	Char4	1		Career	9	Edit
3 A.STRM - Term	Char4	2		Term	9	Edit 📃
4 A.SESSION_CODE - Session	Char3		N	Session	9	Edit
5 A.SESS_BEGIN_DT - Session Beginning Date	Date			Begin Date	9	Edit
6 A.SESS_END_DT - Session End Date	Date			End Date	9	Edit
7 A.ENROLL_OPEN_DT - Open Enrollment Date	Date			Open Enrl	9	Edit 📃
8 A.SESSN_ENRL_CNTL - Enrollment Control Session	Char3			Session	9	Edit
9 A.SESSN_APPT_CNTL - Appointment Control Session	Char3			Session	9 <mark>4</mark>	Edit
10 A.FIRST_ENRL_DT - First Date to Enroll	Date			Enr Dt 1st	9	Edit

Fields and Buttons on the Fields Page

This table describes the fields and buttons on the Fields page:

Field or Button	Usage		
Reorder/Sort	Displays the Edit Field Ordering page, which enables users to change the column order and sort		
	properties of the query.		
Col	Indicates the order in which the field appears in the query results.		
Record Fieldname	Displays the field name, as it is stored in the database.		
Format	Indicates the format of the field as it is defined in the database.		
Ord	Indicates if the field is selected for sorting.		
XLAT	Indicates if the field is a code from the Translate table.		
Agg (aggregate)	Indicates if an aggregate function is assigned to this field.		
Heading Text	Displays the default text as defined in the database.		
Add Criteria	Click to add a row of criteria to the query.		
	Criteria are used to filter data in a query.		
Edit	Click to access the Edit Field Properties page and format the query output.		
Delete	Click to delete the associated field from the query.		



Order By Feature

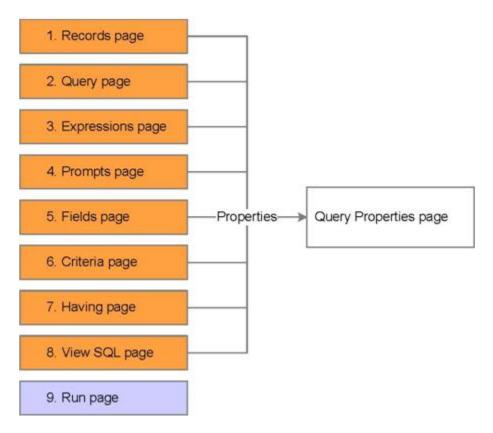
The Order By feature places a number next to the field indicating which field is:

- A primary sort (1)
- A secondary sort (2)
- A descending primary sort (D1), and so on

Note: Descending sort means sorting from Z to A. Ascending sort means sorting from A to Z.

Query Properties Page

This diagram shows how to access the Query Properties page:



Query Properties Page

The Query Properties page enables you to enter or view additional information regarding the query, such as:

- The query name.
- The query description.
- The query user type.
- The folder with which the query is associated.
- Whether the query is public or private.
- The query definition.



Note: The first time that you save a new query, the Query Properties page appears to enable you to document the query. Be aware, however, that you cannot save queries by using the Query Properties page.

Navigation:

- Select Reporting Tools, Query, Query Manager.
- Create a new query or open an existing query.
- Click the Properties link.

Use this page to document additional information regarding the query.

Query Properties

*Query:	TRAINING_SESSION					
Description:	Table for Query Basics					
Folder:						
*Query Type:	User 🗸					
*Owner:	Public V Distinct					
Query Definition	on:					
This query was Basics Trainin	s created for the purpose of being utilized in the Query og classes.					
Last Update	ed Date/Time: 05/07/2008 3:34:39PM					
ОК	Cancel					



Fields on the Query Properties Page

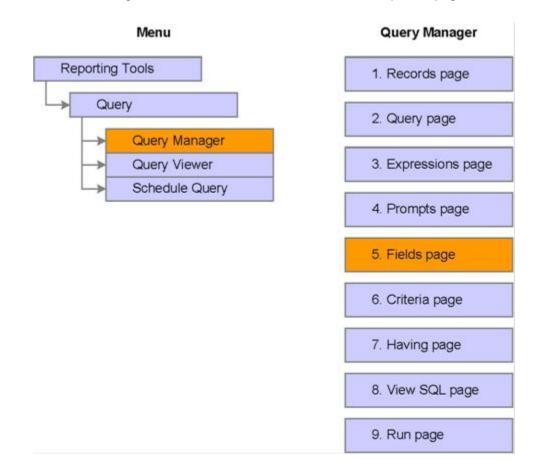
This table explains the fields that are on the Query Properties page:

Field	Usage						
Query	Enter a query name. Query names are uppercase and can be up to 30 characters.						
	You cannot have spaces or any special characters except an underscore.						
Description	Enter a description up to 30 characters. Descriptions can include mixed case and special characters.						
Folder	Assign or create folders to store the queries.						
Query Type	Assign one of four query types to a query: Archive, Process, Role, or User						
Owner	Displays who has access to the query.						
	Private : The default value that appears in the Owner field.						
	Only the user that creates the query can open, modify, or delete the query.						
	Only the user who creates the query can open, run, modify, delete the query or change the owner to <i>Public</i> .						
	Public : Any user with access to all records used for the query can run the query. Public security access is needed open, run, modify or delete the query.						
	Only the user who creates the query can open, run, modify, delete private queries, or change security access. Any user with access to all records in the query can perform any operation on a public query if that user has rights to create a public query.						
Distinct	Select to remove duplicate rows of data in a query.						
Query Definition	(Optional) Enter text to further describe the query definition.						



Editing Field Properties Page

This diagram shows how to access the Edit Field Properties page:



Navigation:

- Select Reporting Tools, Query, Query Manager.
- Click the Create New Query link.
- Click the Search button.
- Click the appropriate Add Record link.
- Select the Fields tab, and click the appropriate Edit button. Or
- Select Reporting Tools, Query, Query Manager.
- Search for an existing query and click the Edit link.
- On the Fields tab, click the appropriate Edit button.



Use this page to change field column heading and to apply an aggregate function to this field:

Edit Field Properties

Field Name: A.SESSION_CODE - Session

Heading	Aggregate	Translate Value
Heading No Heading RFT Short Text RFT Long Heading Text: Session *Unique Field Name: A.SESSION_CODE	Aggregate None Sum Count Min Max Average 	 None Short Long Effective Date for Short/Long Current Date Field
OK Cancel		Expression Add Prompt Add Field

Changing Field Headings

To change field headings:

- 1. On the Fields page, click the Edit button associated with the field.
- 2. Select any one of the options in the Headings group box, or enter text to change the field heading.



Fields with Translate Values

When you edit a field that has translate values, the Edit Field properties page displays translate value options. You can select whether the output displays the short or long translate value.

Translate tables are effective-dated, so you must select which effective date to use for them. For most tables, PeopleSoft Query defaults to the current date, meaning that it uses the currently active list of Translate table values.

Steps Used to Set Translate Value Properties

To set Translate value properties:

- 1. Select the Fields page, and then click the Edit button for the field.
- 2. Select an option from the Translate value group box of the Edit Field Properties page.
- 3. Click the OK button.

Buttons and Fields on the Edit Field Properties page

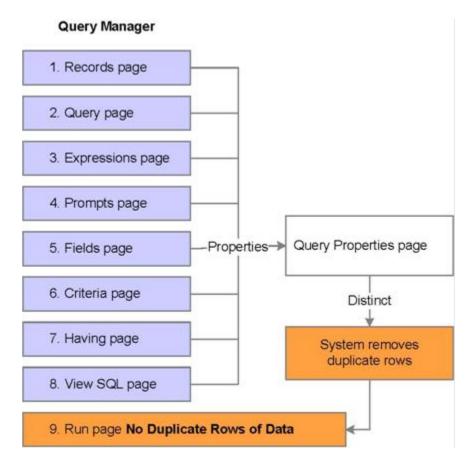
This table describes the fields and options on the Edit Field Properties page:

Field or Option	Description				
No Heading	Select to display the data without a column heading.				
RFT Short and RFT Long	Select the Record Field Text (RFT) short or long description as defined in the record				
	definition.				
Text	Select to manually enter the text to appear as the column heading.				
Heading Text	If you select the Text option, enter the text to appear in the query results.				
Unique Field Name	Used for Translations.				



Removing Duplicate Rows of Data

This diagram shows the process flow to remove duplicate rows of data from a query:



Distinct Feature

Sometimes query results display the same row of data more than once.

If you enable the Distinct feature on the Query Properties page, the system removes duplicate rows of data in the results.

Removing Duplicate Rows of Data from a Query

To remove duplicate rows of data from a query:

- 1. Create a new query or open an existing query using Query Manager.
- 2. Click the Properties link found at the bottom of any page of Query Manager except the Run page.
- 3. Select the Distinct check box and click the OK button.
- 4. Save the query.
- 5. View the reports in the Run page.



ACTIVITY 2 – Create a Query, Remove Duplicate Rows and Edit

(Approximately 15 min)

Activity overview:

- Create a query using the RESIDENCY_SELF record
- Remove duplicate rows of data
- Edit a query

Create a query

- 1. If necessary, sign in to the database.
- 2. Access Query Manager.
- 3. Create a new query using the RESIDENCY_SELF record.
- 4. Select the following fields from the record COUNTRY and POSTAL and STATE.
- 5. Save the query as your XXX_DISTINCT, (XXX is your initials) and view the query results.
- 6. Answer the following question:
 - a. How many rows of data were returned?

Removing Duplicate Rows of Data

- 1. Select the Fields tab.
- 2. Click the Properties link to select the Query Properties page.
- 3. Select the Distinct check box, and click the OK button.
- 4. Save the query, and view the query results.
- 5. Answer the following question:
 - a. How many rows of data were returned?

Editing a Query

- 1. Click the Query page and select and COUNTY in addition to the other fields.
- 2. Select the Fields page.
- 3. Click the appropriate Edit buttons and make the following changes:

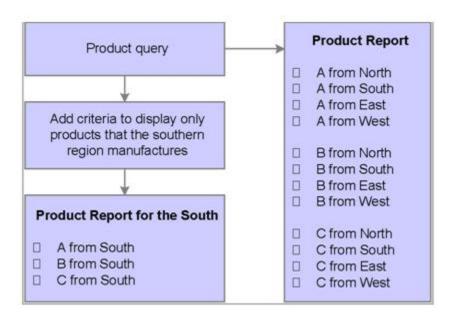
Field	Heading
COUNTY	Select text radio button
	Change to Preferred County

- 1. Click the Reorder/Sort button on the Fields page.
- 2. Enter 1 in the New Column field for the POSTAL, 2 in the STATE field, and click the OK button.
- 3. Save the query, and view the query results.



Chapter 4 Filtering Output with Criteria

Applying Criteria to Queries



This diagram shows an example of applying criteria to query:

Purpose of Applying Criteria to Queries

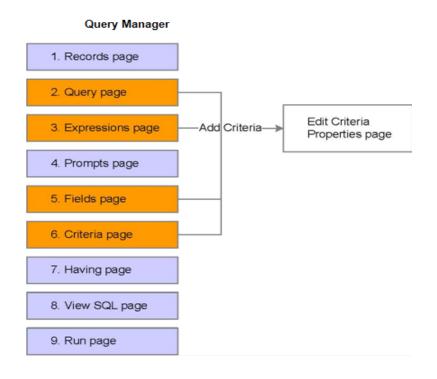
Often you do not want to retrieve every row of data from the record that you are accessing. Criteria serve as a condition that the system applies to each row of data in the tables that you are querying. If the row meets the condition, the system retrieves it; if the row does not meet the condition, the system does not retrieve it. By defining criteria rows in the query, you:

- Potentially reduce the number of rows of data that are returned.
- Retrieve only the information that you need.



Editing Criteria Properties Page

This diagram shows the pages that you can use to access the Edit Criteria Properties page:



Accessing the Edit Criteria Properties Page

Query manager enables you to add criteria to a query in multiple ways:

- Click the Use as Criteria button (filter icon \Re) on the Query page.
- Click the Add Criteria button (filter icon $\frac{9}{4}$) on the Fields page.
- Click the Add Expression button
 Add Expression
 on the Expressions page.
- Click the Add Criteria button
 Add Criteria
 on the Criteria page.



Add Criteria Button

The Add Criteria button appears as a filter icon or as a push button depending on the page that you use. When you click the Add Criteria button from any page other than the Criteria page:

- You automatically add the associated field to the Edit Criteria Properties page.
- The Edit Criteria Properties page appears, enabling you to complete the criteria as necessary.

Pages Used to Add or Modify Criteria

Page Name	Navigation
Query	Reporting Tools, Query, Query Manager
Expressions	Reporting Tools, Query, Query Manager
Fields	Reporting Tools, Query, Query Manager
Criteria	Reporting Tools, Query, Query Manager

Use this page to select fields and add criteria to queries:

Records	s /	Query Expres	sions / P	rompts	Fields	Criteria	Having	View SQL	Run
Click fold	ler next al recore	RAINING_SESSION to record to show fiel ds by clicking the reco s		lds to add to qu	uery. Unche			∕. Add Ŝ∳	
Alias	Record	t						_	
🗁 A	SESSI	ON_TBL - Session D	efinition Table	е			<u>Hie</u>	erarchy Join	Add
	Check All Fields Uncheck All Fields				ds				Criteria
	Fields					Find View A	I 🛛 First 🗹 1-2	0 of 20 🕑 Last	
	✓] 🕞 INSTITUTION - Academic Institution					n INSTITUTION titution Table		
	~	阿 ACAD_CAREE	R - Academic	Career			n ACAD CAR T		
	🗹 📴 STRM - Term				Joi	ademic Career T n TERM_TBL - T finition Table	(3)		
	SESSION_CODE - Session								
SESS_BEGIN_DT - Session Beginning Date					9				
SESS_END_DT - Session End Date					9.				
	ENROLL_OPEN_DT - Open Enrollment Date							9.	
		SESSN_ENRL	_CNTL - Enro	ollment Control	Session			94	
	~	SESSN_APPT	_CNTL - Appo	pintment Contro	ol Session			9	



Use this page to work with expressions and add criteria to queries:

Records Query	Expressions	Prompts	Fields	Criteria	Having	View SQL	Run	
Query Name: TRAINING_SESSION Description: Table for Query Basics								
Add Expression								
Expressions List				<u>Custor</u>	nize Find	📕 🛛 First 🗹 1	-2 of 2 🕑 Last	
Expression Text				<u>Use as</u>		d Criteria Edit	Delete	
A.INSTITUTION				<u>Use as</u>	Field 🐕	Ec	lit 📃	
A.SESSION_CODE				<u>Use as</u>	Field 🐕	Ec	<mark>iit</mark> 📃	
(I Save) Save As	New Query	Preferences	<u>Propertie</u>	s <u>New Union</u>	1	Q	Return to Search)	

Use this page to edit fields and add criteria to queries:

1	Records	Query	Expressions	Prompts	Fields	Criteria	Having	View SQL	Run	1

Query Name: TRAINING_SESSION

Description: Table for Query Basics

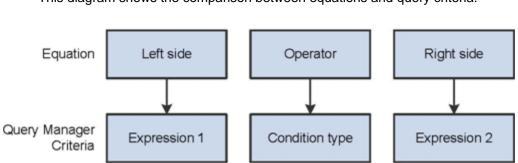
View field properties, or use field as criteria in query statement.

Fields			<u>(</u>	Custo	mize Find View All	1	First 🛃 1-13 of 1	3 🕨 Last
Col Record.Fieldname	<u>Format</u>	Ord			Heading Text		Criteria Edit	Delete
1 A.INSTITUTION - Academic Institution	Char5				Institution	%	Edit	-
2 A.ACAD_CAREER - Academic Career	Char4	1			Career	?	Edit	-
3 A.STRM - Term	Char4	2			Term	%	Edit	-
4 A.SESSION_CODE - Session	Char3		Ν		Session	%	Edit	-
5 A.SESS_BEGIN_DT - Session Beginning Date	Date				Begin Date	%	Edit	-
6 A.ENROLL_OPEN_DT - Open Enrollment Date	Date				Open Enrl	9	Edit	-
7 A.SESSN_APPT_CNTL - Appointment Control Session	Char3				Session	%	Edit	
8 A.FIRST_ENRL_DT - First Date to Enroll	Date				Enr Dt 1st	%	Edit	-
9 A.HOLIDAY_SCHEDULE - Holiday Schedule	Char6				Hol Sched	%	Edit	-
10 A.WEEKS_OF_INSTRUCT - Weeks of Instruction	Num2.0				Instr Week	%	Edit	-
11 A.FACILITY_ASSIGNMNT - Facility Assignment Run Date	Date				Run Date	9	Edit	



Reorder / Sort

Query criteria are like an equation. As with an equation, query criteria consist of a left side, an operator, and a right side.



This diagram shows the comparison between equations and query criteria:

Page Used to Filter Data

Page Name	Navigation
Edit Criteria Properties	1. Select the Query page.
	Click the appropriate Use as Criteria button.
	Or
	1. Select the Expressions page.
	2. Click the appropriate Add Criteria icon.
	Or
	1. Select the Fields page.
	2. Click the appropriate Add Criteria icon.



Edit Criteria Properties	
Choose Expression 1 Type	Expression 1
 Field Expression 	Choose Record and Field Record Alias.Fieldname: Q A.STRM - Term
*Condition Type:	equal to
Choose Expression 2 Type	Expression 2
◯ Field	Define Prompt
Constant	Prompt: :1 Q New Prompt Edit Prompt
 Prompt Subquery 	
OK	

Areas Used to Filter Data

This table explains each element of the Edit Criteria properties page:

Element	Purpose
Choose Expression 1 Type	Determines whether the first part of the selection criteria is based on a field or an
	expression.
Expression 1	Contains the value of the first part of the selection criteria.
Condition Type	Determines how Query Manager compares the first expression value to the second
	expression value.
Choose Expression 2 Type	Determines whether the second part of the selection criteria is based on a field, an
	expression, a constant, a prompt, a subquery, etc.
Expression 2	Contains the value of the second part of the selection criteria.

Using Fields as Criteria in Expression 1

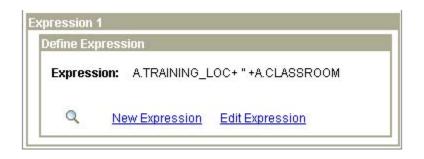
To use a field as criteria in expression 1, click the lookup button to select one field from the list of fields in the record:





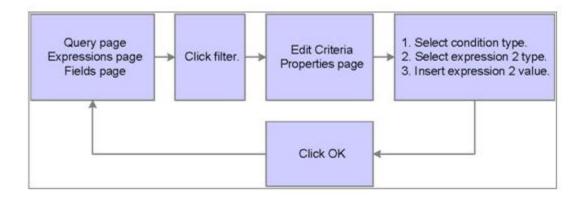
Using Expressions as Criteria in Expression 1

To use an expression as criteria in expression 1, use one of the links or the lookup button to search for or edit an existing expression, or create a new expression.



Steps used to Add Criteria

This diagram shows the process flow that you use to add criteria:



Using the Edit Criteria properties Page

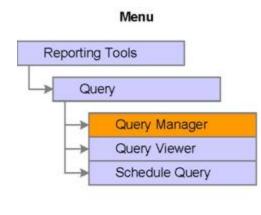
When you use the Criteria Properties page, you should note that:

- Clicking Add Criteria button whether from the Query page, the Fields page, or the Expression page automatically inserts the associated field or expression in the Expression 1 section of the Edit Criteria Properties page.
- The Choose Expression 2 Type field varies depending on the option that you select in the Condition Type field.
- The Expression 2 field varies depending on the option that you select in the Choose Expression Type 2 field.



Criteria Page

This diagram shows how to access the Criteria page of Query Manager:





Page Used to Enter Selection Criteria for the Query

Page Name	Navigation
Criteria	1. Select Reporting Tools, Query, Query Manager.
	2. Click the Create New Query link.
	3. Search for records, and click the appropriate Add Record link.
	4. Select fields on the Query page.
	5. Select the Criteria tab.



Use this page to add and edit criteria or to view the new row of criteria after you create it from the Edit Criteria Properties page:

	Query Y Expressions Y Prompts		Criteria Having V	iew SQL 🌾 Run
Add Criteria	Group Criteria Reorder Criteria			
Criteria			<u>Customize Find 🛗</u>	First 🛃 1-2 of 2 🕨 Last
Logical	Expression1	Condition Type	Expression 2	Edit Delete
~	A.SESS_BEGIN_DT - Session Beginning Date	between	2008-05-01 AND 2008-05-30	Edit
AND 🗸	A.SESSION_CODE - Session	equal to	:1	Edit
🖶 Save)	Save As New Query Prefere	ences <u>Properties</u>	New Union	Q Return to Search

Functionality of the Criteria Page

You can add criteria directly on the Criteria page, but the user must then take the extra step of selecting the field for expression 1, which might be a considerable task on larger records.

This table describes the elements of the Criteria page:

Element	Use
Add Criteria	Inserts a row of criteria into the query.
	Note: Query Manager enables you to use one or multiple rows of criteria in a single query.
Group Criteria	Enables you to apply multiple selection criteria as one criterion.
Reorder Criteria	Enables you to reorder criteria rows without deleting the existing criteria.
Logical operator list	Enables you to select the Boolean operators AND, AND NOT, OR and OR NOT.
Edit	Modifies the existing row of criteria.
Delete (minus sign)	Deletes the row of selected criteria.



Refining Criteria

Condition Types

The more you use Query Manager, the more you are likely to refine queries with conditions other than the *equal to* condition.

- Query Manager provides 18 conditions that you can apply to the criteria.
- Each condition type correlates to certain expression 2 types.

This table lists the condition types and their correlation to expression 2 types:

Condition Type	Expression 2 Type
equal to	Field
not equal to	Expression
greater than	Constant
not greater than	Prompt
less than	Subquery
not less than	
like	Constant
not like	Prompt
in list	In list
not in list	Subquery
between	Const – Const
not between	Const – Field
	Const – Expr Field – Const
	Field – Field
	Field – Expr Expr – Const Expr – Field
	Expr - Expr
exists	Subquery
does not exist	
in tree	Tree option
not in tree	
is not null	<no 2="" expression="" type=""></no>
is null	



Results from the Commonly Used Conditions

This table shows the results of these commonly used conditions:

Condition Type	Results
equal to	The value that is in the selected record field exactly matches the comparison value.
like	The value that is in the selected field matches a specified string pattern.
is null	The selected record field does not have a value in it. You do not specify a comparison value for this operator.
	Key fields, required fields, character fields, and numeric fields do not allow null values.
between	The value that is in the selected record field falls between two comparison values. The range is inclusive.
in tree	The value that is in the selected record field appears as a node in a tree that you create with PeopleSoft Tree Manager.
	The comparison value for this operator is a tree or branch of a tree that you want PeopleSoft Query to search.



Expression 2 Type

After you select a condition, you then select an expression 2 type.

Use these guidelines to choose the appropriate expression 2 type, and specify the expression to which expression 1 type compares:

Expression 2 Type	Description
Field	Compares to a field within the records selected for this query.
Expression	Compares to an expression that you create.
	PeopleSoft Query evaluates each row with this expression.
Constant	Compares to a single fixed value.
Prompt	Compares to a prompt that requires the user to enter values when the query runs.
Subquery	Compares to a field from another query.

Examples: Using Expression 2 Type

If you select Field as the type, the lookup button appears for you to select a field for expression 2:

Choose Expression 2 Type	Expression 2	
• Field	Choose Record and Field	
C Expression	Record Alias.Fieldname:	
C Constant	Q	
C Prompt		
C Subquery		

Edit Criteria Properties page

If you select Expression as the type, the Add Prompt or Add Field links appear for you to select an expression for expression 2:

Choose Expression 2 Type E	xpression 2			
C Field	Define Expression	1		
© Expression	Expression:			*
C Prompt C Subquery		Add Prompt	Add Field	

Edit Criteria Properties page

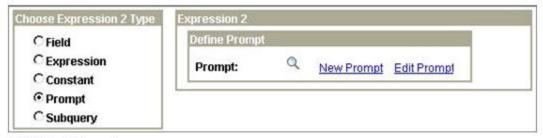


If you select Constant as the type, the Constant field appears for you to enter the expression or constant for expression 2:

oose Expression 2 Type	Expression 2	
C Field	Define Constant	
C Expression Constant	Constant:	٩
C Prompt C Subquery		

Edit Criteria Properties page

If you select Prompt as the type, the lookup button, and the New Prompt and Edit Prompt links appear for you to define the expression or prompt for expression 2:



Edit Criteria Properties page

If you select Subquery as the type, the Define/Edit Subquery link appears for you to enter the expression or Subquery for expression 2:

Expression 2
Define Subquery
Define/Edit Subquery

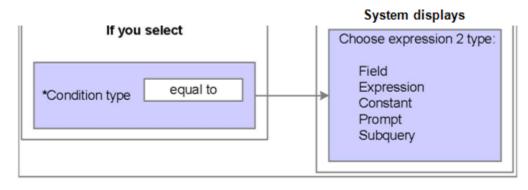
Edit Criteria Properties page



Equal to Condition

The equal to condition finds rows of data with values that match the constant that you specify in expression 2.

This diagram shows the expression 2 types available when you select the equal to condition type:



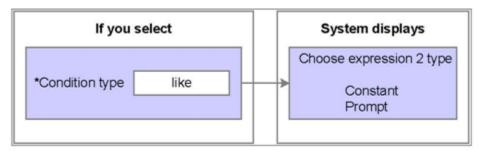
Example: Using the Equal to Condition

You can apply the condition equal to for retrieving students who are in the U.S. and by information in their program of study.

Like Condition

The *like* condition retrieves data that matches a portion of a character string.

This diagram shows the expression 2 types when you select the *like* condition type:





Constant Expressions used with the Like Condition

Any constant expression that you use with the like condition is case-sensitive. You can use wildcard characters to assist in the search for data. This table describes the use of wildcard characters:

Wildcard Character	Use
%	Any string of zero or more characters.
	For example, C% finds any string beginning with the letter
	С.
_	Any single character.
	For example, _ones finds any string of five characters
	ending with ones, such as bones and Cones.

Examples

This table gives examples of the result set when you use the *like* condition with wildcard characters:

Constant Value Result				
%Dakota	Finds anything ending in Dakota.			
South%	Finds anything beginning with South.			
199_	String beginning with 199 and one more character.			
_an%	Finds anything with one character followed by the			
	characters an.			
%, S%	PeopleSoft name format.			

Identifying Mistakes

Minor mistakes with wildcards can return radically different results, especially when using the *like* condition. Some common mistakes are:

- Entering extra spaces.
- Entering two consecutive underscores.
- Using wildcards with a condition other than the like condition.
- Discounting case-sensitivity.



Is Null Condition

You use the *is null* condition to search for fields that have no value.

The fields that PeopleSoft supports for the *is null* condition type are:

- Long character
- Image
- Date
- Time
- Datetime fields

If you select the *is null* condition, expression 2 disappears because is null defines the criteria for the second expression.



Between Condition

Use the between condition to filter data based on a range of two values that you specify in expression 2.

Example: Using the Between Condition

Suppose you need to retrieve students whose session begins date is *between* May 1, 2008 and May 30, 2008. This is an example of using date fields with the *between* condition:

Edit Criteria Properties

Choose Expression 1 Type Field Expression 	Expression 1 Choose Record and Field Record Alias.Fieldname: A.SESS_BEGIN_DT - Session Begi
*Condition Type:	between 💌
Choose Expression 2 Type	Expression 2
 Const - Const Const - Field Const - Expr Field - Const Field - Field Field - Expr Expr - Const Expr - Field Expr - Field Expr - Expr 	Define Constant *Date: 05/01/2008 Define Constant 2 *Date 2: 05/30/2008

OK

Cancel



Home Worklist MultiChannel Console

 Home Worklist
 MultiChannel Console

 New Window
 Help

 Records
 Query
 Expressions

 Fields
 Criteria
 Having
 View SQL

 Run
 Line
 Line
 Line

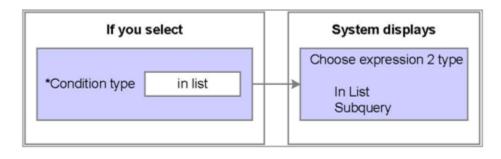
	View All Rerun Query Download to Excel						Fir	st 🖲 1-1	1 of 11	▶ Last					
	Institution	Career	Term	Session	Begin Date	End Date	Open Enrl	Session	Session	Enr Dt 1st	Enr Dt Last	Wait Dt	Hol Sched	lnstr Week	Census Dt
1	CASE1	DENT	2086	1	05/27/2008	07/18/2008	03/10/2008			03/10/2008		05/26/2008	CASEHS	8	07/03/2008
2	CASE1	GRAD	2086	3W1	05/12/2008	05/30/2008	04/07/2008		8W1	03/10/2008		05/11/2008	CASEHS	3	07/03/2008
3	CASE1	GRAD	2086	D05	05/01/2008	05/31/2008	04/07/2008		8W1	03/10/2008			CASEHS	4	
4	CASE1	LAW	2086	1	05/19/2008	07/11/2008	04/01/2008			03/10/2008		05/18/2008	CASEHS	8	07/03/2008
5	CASE1	MGMT	2086	D05	05/01/2008	05/31/2008	07/10/2008		8W1	03/10/2008			CASEHS	4	
6	CASE1	NOND	2086	3W1	05/12/2008	05/30/2008	05/15/2008		8W1	03/10/2008		05/11/2008	CASEHS	3	07/03/2008
7	CASE1	NOND	2086	D05	05/01/2008	05/31/2008	05/01/2008		8W1	03/10/2008			CASEHS	8	
8	CASE1	NURS	2086	D05	05/01/2008	05/31/2008	04/07/2008		8W1	03/10/2008			CASEHS	4	
9	CASE1	SASS	2086	D05	05/01/2008	05/31/2008	03/20/2008		8W1	03/10/2008			CASEHS	8	
10	CASE1	UGRD	2086	3W1	05/12/2008	05/30/2008	03/31/2008		8W1	03/10/2008		05/11/2008	CASEHS	3	07/03/2008
11	CASE1	UGRD	2086	D05	05/01/2008	05/31/2008	03/31/2008		8W1	03/10/2008			CASEHS	8	



In List Condition

Use the in list condition to limit data retrieval to a predefined set of values.

This diagram shows the expression 2 types when you select the between condition type:



Example: Using the In List Condition

This is an example of using a list of career codes:

Edit Criteria Properties	
Choose Expression 1 Type	Expression 1 Choose Record and Field
 Field Expression 	Record Alias.Fieldname: Q A.ACAD_CAREER - Academic Caree
*Condition Type:	in list
Choose Expression 2 Type	Expression 2
💿 In List	Edit List
Subquery	List Members: ('DENT','MGMT','NOND','UGRD','LAW',' SASS')
OK	



Adding Comparison Values to the List

To add comparison values to the list:

- On the Edit Criteria Properties page, click the lookup button in the Edit list group box.
 a. The Edit List page appears
- 2. Enter data in the value field.
- 3. Click the Add Value button.
- 4. Click the OK button.

Edit List

List Members	Customize Find 🚟	First 🛃 1-6	of 6 🕑 Last
DENT			
MGMT			
NOND			
UGRD			
LAW			
SASS			
Value:	Add Value	Search	Delete Checked Va
OK Cancel	Δ	dd Prompt	

Searching for Values

To search for values:

- 1. Click the Search button.
- 2. Click the Look Up button and select a value.
- 3. Click the OK button.

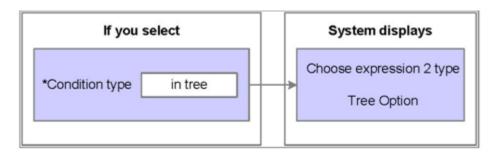
Academic Ir	Q		
Academic C	areer:	Q	
ОК	OK Cancel		



In Tree Condition

Trees depict hierarchical structures that represent a group of summarization rules for a particular database field.

The *in tree* condition provides access to PeopleSoft Tree Manager to retrieve hierarchical data for the query.



This illustration shows the expression 2 types when you select the *in tree* condition type:

Using the PeopleSoft Tree Manager Tree Structure

Think of a tree as a visual representation of a set of summarization rules for a database field. The tree specifies how the system groups the values of the field for purposes of reporting or security access.

The in tree condition enables you to create conditions based on a hierarchy.

Example: Using the In Tree Condition

A tree can specify how to summarize or roll up Academic Organizations for reporting purposes.

Using trees, you can access information in ways that match the groupings and hierarchies that already exist in the organization.



The tree in the following example is called the ACAD_ORGANIZATION tree. This tree is built on the ACAD_ORG field and shows the subject rolls up to a particular academic organization that rolls up to the main business unit of the University.

Tree Viewo SetID: Effective Date: Tree Name:	Er Last Audit: 01/01/1901 Status: ACAD_ORGANIZATION	Valid Tree Active Academic Organization
CASE1 >DEN >	Display Options Print Format AEGD (pand All <u>Find</u>	First Page 🖪 25 of 330 🕩 Last Page
CAS - Coll CIM - Cleve CIM - Cleve DEN - Sch AEGD E BSCI -	e Western Reserve Univ ege of Arts and Sciences eland Institute of Music ool of Dental Medicine - Adv Educ in General Dentistry Biological Sciences - Community Dentistry	کم ۲

PeopleSoft Tree Manager

Query Manager provides the *in tree* condition to access hierarchical summarized data from PeopleSoft Tree Manager.

You can take advantage of the *in tree* criteria in that when you select nodes, all nodes beneath the selected nodes are automatically included.



Example: Retrieving Data Using the In Tree Condition

To retrieve a list of subjects from the School of Dental Medicine:

1. Use the ACAD_ORG field for expression 1 to retrieve the information from the ACAD_ORGANIZATION tree.

Edit Criteria Properties						
Choose Expression 1 Type	Expression 1					
 Field Expression 	Choose Record and Field Record Alias.Fieldname: Q A.ACAD_ORG - Academic Organiza					
*Condition Type:	in tree 🗸 🗸					
Choose Expression 2 Type	Expression 2					
Tree Option	Select Tree Node List					
	Node List:					
	Display Detail Values New Node List					
OK						

2. To access the ACAD_ORGANIZATION tree, click the <u>New Node List</u> in the Expression 2 group box on the Edit Criteria Properties page.

The Select a Tree page appears.

67

3. Click the Search button to display all trees on the tree list, as shown:

Select a Tree)				
Tree Name:	contains	*		Search	
Select a Tree				Find View All	First 🛃 1-2 of 2 🕨 Last
Tree Name	SetID	SetControlValue	Effective Date	Description	Saved As
ACAD ORGAN	IZATION		01/01/1901	Academic Organization	Valid Tree
STUDENT FIN	VANCIALSCASE1		01/01/1901	Student Financials	Valid Tree
Cancel					

onnect

4. Select the appropriate tree for the query. In this case, use the ACAD_ORGANIZATION tree.

The Display and Select TreeNodes page appears, as shown.

Display and Selec	t TreeNodes				
SetID:		Effective Date:	01/01/1901		
Tree Name:	ACAD_ORGANIZATION				
Selected Nodes Li	ist				
Manual Selection					
Collapse All Expan	i <u>d All Find</u>	Firs	st Page 🖪	14 of False	🕞 Last Page
CIM - Clevelan DEN - School o ENG - Case So	of Arts and Sciences d Institute of Music of Dental Medicine chool of Engineering of Graduate Studies				

- 5. Click the Add to node Selection list icon as shown below and then click the OK button.
 - 4

Add To Node Selection List

The Edit Criteria Properties page displays the DEN which is for the School of Dental Medicine.



Edit Criteria Properties Choose Expression 1 Type **Choose Record and Field** Field **Record Alias.Fieldname:** Expression A.ACAD_ORG - Academic Organiza *Condition Type: in tree * Choose Expression 2 Type Tree Option Node List: "ACAD_ORGANIZATION, 1901-01-01,DEN New Node List Edit Node List Display Detail Values 0K Cancel



6. Select the Criteria page to view the *in tree* condition that you added:

_					<u>Home Worklist N</u>
•					<u>1</u>
Records	Query Y Expressions Y F	Prompts	Fields	Criteria Having Vie	w SQL Cran
Query Name: Ne	ew Unsaved Query	D	escription:		
Add Criteria	Group Criteria Reorder	Criteria			
Criteria				<u>Customize Find 🏪</u> F	First 🛃 1-2 of 2 🕨 Last
Logical	Expression1	Conc	lition Type	Expression 2	Edit Delete
~	A.EFFDT - Effective Date	Eff D	ate <=	Current Date	Edit 📃
AND 🗸	A.ACAD_ORG - Academic Organization	in tre	e	"ACAD_ORGANIZATION,1901-0 01,DEN	1- Edit 🖃
📄 Save	Save As New Query	Preferences	Properties	New Union	Q Return to Search

7. Select the Run page to view the results with rows of data showing the subjects from the academic organization of the Dental School.



-			<u>Home</u> <u>Worklist</u>	MultiChannel Console
				New Window Hel
Records Query Expressions P	rompts Fields	Criteria Having	View SQL Run	<u> </u>

/iew	v All Rerun Query Download to Excel				First 🖪 1-12 of 12 🕨 L	
	Acad Org	Eff Date	Status	Descr	Institution	
1	ORDX	05/01/2008	A	Oral Diagnosis & Radiology	CASE1	
2	ORPT	05/01/2008	A	Oral Pathology	CASE1	
3	PEDS	05/01/2008	A	Pediatric Dentistry	CASE1	
4	OMFS	05/01/2008	A	Oral & Maxillofacial Surgery	CASE1	
5	ENDO	05/01/2008	A	Endodontics	CASE1	
6	PERI	05/01/2008	A	Periodontics	CASE1	
7	DEN	05/01/2008	A	School of Dental Medicine	CASE1	
8	BSCI	05/01/2008	A	Biological Sciences	CASE1	
9	AEGD	05/01/2008	A	Adv Educ in General Dentistry	CASE1	
10	CMDN	05/01/2008	A	Community Dentistry	CASE1	
11	ORTH	05/01/2008	A	Orthodontics	CASE1	
12	COMP	05/01/2008	A	Comprehensive Care	CASE1	



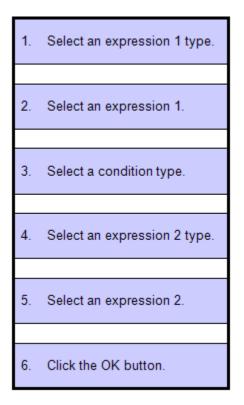
Using the In Tree and In List Conditions

The *in tree* condition works almost like the *in list* condition. The differences between using the *in tree* and *in list* condition are:

- When using the *in tree* condition, if you add field values to a tree node (for example, you add another subject to the School of Medicine), the values are automatically brought in at runtime.
- When using the in list condition, if you decide to add field values (for example, a new instructor or manager starts in the School of Medicine), you must update all the queries with the value.

Steps Used to Refine Criteria

This diagram shows the steps used to refine criteria and retrieve query results:





Using Multiple Criteria Statements

Boolean Expressions

There are four types of Boolean expressions available on the Criteria page.

- AND
- AND NOT
- OR
- OR NOT

If you add multiple lines of criteria to a query, you must use Boolean operators to specify the way that the system applies each criterion.

Boolean Operators

This is a list of Boolean operators and example of how you interpret each operator:

- AND: Returns only rows that meet the conditions of all criteria.
 - Use the AND operator to view only international students with a capital D in their names.
- **AND NOT**: Returns only rows that meet the condition that precedes this operator *but yet* do not meet the condition that follows this operator.
 - Use AND NOT operator to view only international students except for those who have a capital D in their names.
- **OR**: Returns rows that meet any condition in the criteria.
 - Use the OR operator to view all international students and all students who have a capital D in their names regardless of their citizenship status.
- **OR NOT**: Returns rows that meet the condition that precedes this operator and rows that do not meet the condition that follows this operator.
 - Use the OR NOT operator if you want to return all international students and students whose name does not have a capital D regardless of their citizenship status.

Note: The AND NOT and the OR NOT operators are likely to force table scans instead of index reads to pull data. When needed you should use NOT IN or <> for better performance.



Example: using Boolean Logic in Criteria

Suppose you want to view all courses that have all of the following conditions:

Use the record of **SESSION_TBL**

Criteria:

- The session beginning date is in 08/25/2008.
- The term is 2088
- The career is NOND

Let's test out the Boolean logic

1. Run the query with no criteria and selecting the following fields.

Records Query Expressions Prompts	s / I	Fields	Criteria	Having	View SQL) R	un
Query Name: New Unsaved Query	Desc	cription:					
View field properties, or use field as criteria in query state	ment.					Reorder	Sort
Fields			Custom	ize Find View Al	I 📕 📕 First	1-7 of	7 🕑 Last
Col Record.Fieldname	<u>Format</u>	Ord XLA		ding Text	Add Criteria	Edit	Delete
1 A.INSTITUTION - Academic Institution	Char5		Insti	itution	%	Edit	
2 A.ACAD_CAREER - Academic Career	Char4		Car	eer	9	Edit	
3 A.STRM - Term	Char4		Terr	n	9	Edit	
4 A.SESSION_CODE - Session	Char3	N	Ses	sion	9	Edit	
5 A.SESS_BEGIN_DT - Session Beginning Date	Date		Beg	in Date	9	Edit	
6 A.HOLIDAY_SCHEDULE - Holiday Schedule	Char6		Hol	Sched	9.	Edit	
7 A.SSR_VAL_APT_APPROV - Validation Appointments	Char1		Valie	dation	9	Edit	-
(Save As New Query Prefere	nces	Properties	s New L	Jnion	(Return to S	earch)

- 2. We will add the criteria.
- 3. Run the query.
- 4. Change the Boolean criteria order and operators.



As you become proficient in adding multiple rows of criteria, you may need to reorder the rows of criteria to achieve the wanted results.

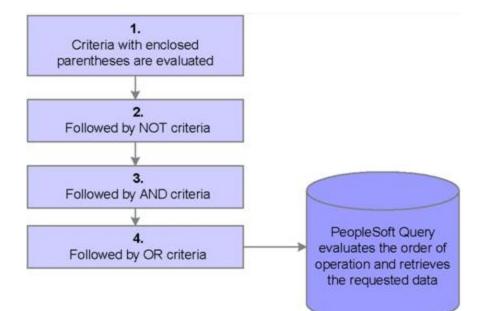
The Reorder Criteria button on the Criteria page provides the ability to reorder rows of criteria without deleting and re-entering existing criteria.

				<u>Home</u> <u>Worklist</u> <u>Mu</u>
_				Ne
Records	Query Expressions Prompts	s Fields	Criteria Having	View SQL Run
Query Name: N	ew Unsaved Query	Description:		
Add Criteria	Group Criteria Reorder Criteria			
Criteria			Customize Find 🚟	First 🛃 1-3 of 3 🕨 Last
Logical	Expression1	Condition Type	Expression 2	Edit Delete
~	A.ACAD_CAREER - Academic Career	equal to	NOND	Edit
AND NOT 💌	A.STRM - Term	equal to	2088	Edit
OR 🗸	A.SESS_BEGIN_DT - Session Beginning Date	equal to	2008-08-25	Edit
🔚 Save	Save As New Query Prefer	ences <u>Properties</u>	New Union	Q Return to Search

Order of Processing Criteria

Query Manager uses the following rules when processing criteria:







Grouping Criteria

When you have more than one criteria row, you can use the group Criteria feature to control the order in which Query Manager applies the criteria row.

You enclose the criteria within parentheses to force the system to evaluate those criteria first.

		Home Worklist
■ ►		

Edit Criteria Grouping

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

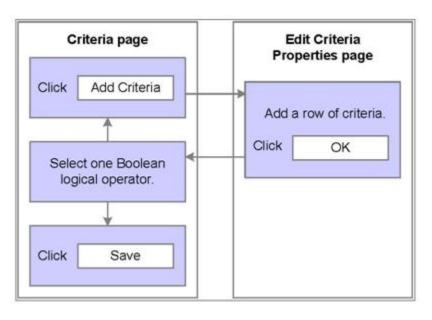
Edit Criteria Grouping	1		Customize Find 🚟	First 🛃 1-3 of 3 🕑 Last
Logical	Expression1	Condition Type		
	A.ACAD_CAREER - Academic Career	equal to	NOND	
AND NOT 🚺	A.STRM - Term	equal to	2088	
OR	A.SESS_BEGIN_DT - Session Beginning Date	equal to	2008-08-25	D
ОК Са	ncel			

Steps Used to Group Criteria

- 1. Click the Group Criteria button on the Criteria page.
- 2. Use the text boxes to enter parentheses, which enclose expressions.
- 3. Click the OK button.



Process to Create Multiple Rows of Criteria



This diagram shows the process you use to create multiple rows of criteria:

Creating Multiple Rows of Criteria

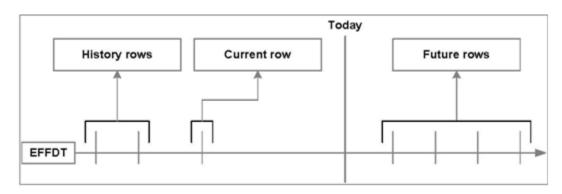
- 1. Click the Add Criteria button on the Criteria page.
- 2. Add the row of criteria by using the Edit Criteria Properties page, and then click the OK button.
- 3. Select a Boolean logical operator from the logical drop-down list box that is on the Criteria page.
- 4. Repeat steps 1 to 3 to add additional rows of criteria.
- 5. Reorder and group criteria as necessary.
- 6. Save the query.



Effective Date

PeopleSoft applications use the effective date field (EFFDT) to enable you to view data that changes over time.

This diagram shows how the system classifies data into categories based on the effective date:



Effective Date Categories

With effective-dated queries, rows of data are classified in one of three categories.

Category	Description
Current	The Current row of data is defined by closest to without exceeding the current days date. There
	can only be on current row per high-level key to a table.
History	The effective date is less than the effective date of the current row.
Future	The effective date is greater than today's date (system date on the server).



Effective-Dated Record

When you start a new query and select an effective-dated record, a new effective-dated criteria row is created, and an informational message appears on the screen:

Microsof	t Internet Explorer	×
<u>.</u>	An effective date criteria has been automatically added for this effective dated record. (139,6)	0)

Condition Types of the Effective Date Fields

If you choose an effective-date condition (visible on the Criteria page in the Conditions Type column), you return one effective-dated row of information per item. You can vary what you want the effective date compared against.

Effective-Date Condition	Description
Effective Date <=	Maximum Effdt {<=,<} {current date, constant, field}
Effective Date <	
Effective Date >=	Minimum Effdt {>=,>} {current date, constant, field}
Effective Date >	
First Effective Date	Return the row with the oldest effective date, the first row that is entered for an item.
Last Effective Date	Return the row with the latest effective date, even if that date is still in the future.

Often, effective-dated tables have an effective status field. The effective status (EFF_STATUS – has two field associated with it as translate values Active and Inactive). If you are working with effective-dated tables and looking for the current row of information, you may also want to add criteria in the EFF_STATUS field to specify only active rows. The table may also include the effective sequence field (EFF_SEQ) used when multiple transactions occur on the same effective date.



ACTIVITY 3 – Creating, Editing and Refining Queries with Effective-Dates and Complex Criteria

(Approximately 25 min)

Activity overview:

- Create a query using the ITEM_TYPE_TBL
- Applying Effective Dates
- Add criteria
- Group criteria
- Apply Boolean logic

Create a query:

- 1. If necessary, sign in to the database.
- 2. Access Query Manager, and create a new query using the ITEM_TYPE_TBL.
- 3. It will indicate to you the table is effective dated, you will accept the criteria and click OK.
- 4. Select the following fields:

Page Element	Value or Status
SETID	Selected
ITEM_TYPE	Selected
DESCR	Selected
ITEM_TYPE_CD	Selected
TAXABLE_Y_N	Selected

- Save the query as your XXX_ITEM_TYPES (XXX is your initials).
 a. Put a description of XXX Training Item Types
- 6. Run the query and answer the following question.
- 7. How many rows of data are returned?



Results

Pe	opleSo	ft.			<u>Home</u> Worklist
					New Window
Reco	rds Que	ry Expressions	Prompts Fields Criteria	Having View SQL	Run
			Ŧ		
iew 4	III Rerun Ouen	Download to Excel	L		First 🖪 1-100 of 991 🕨 La
10117	SetID	Item Type	Descr		Item Code Taxable
1	DHCMP	40000000010	Cash Payment	P	N
2	DHCMP	950232022700	Natl Assoc of Realtors	F	N
3	DHCMP	950232073700	Natl Merit Scholarship	F	N
1	DHCMP	950232014800	Natl Strength & Conditioni	F	N
5	DHCMP	950232034200	Norred Family Foundation	F	N
6	DHCMP	950232052700	Northrop Grumman Schol	F	Ν
7	DHCMP	950232015300	Nursing Scholarship	F	N
3	DHCMP	950232076700	Nuziard Health Care Scholar	F	N
9	DHCMP	950292010900	Oneida Tribe of Wisconsin	F	N
10	DHCMP	950232079300	Orange County's United Way	F	Ν
11	DHCMP	950232044700	Orangewood Children's Foundat	F	Ν
12	DHCMP	950232076400	Orig Palm Spgs Writers Schl	F	Ν
13	DHCMP	950232061100	Orphan Found of America	F	Ν
14	DHCMP	950232032000	Overlake Hosp Med Center Sch	F	Ν
15	DHCMP	950232059100	PHEAA Penn H.E. Agency	F	Ν
16	DHCMP	910690000014	PLUS Program - AFSA	F	Ν
17	DHCMP	950232015800	Pacific Care Scholarship	F	N

Adding IN TREE Criteria

- 1. Select the Criteria page, and then click the Add Criteria button. (When you first click on the Criteria page you will see the first row is the EFFDT criteria).
- 2. Enter the following information:

Page Element	Value or Status
Expression 1 Type	Field
Expression 1	ITEM_TYPE
Condition Type	In Tree
Expression 2 Type	Tree Option
Expression 2	Follow directions below

- 3. Click the New Node List link.
- 4. Click the Search button.
- 5. Select the tree named **ITEM_TYPE_TREE.**
- 6. Select the FUTURE USE 3 node from the tree.
- 7. Click the Add to Node Selection List button $\frac{1}{4}$.
- 8. Select the CEE BAL PRIOR TERM node from the tree.
- 9. Click the Add to Node Selection List button $\frac{1}{2}$.



- 10. Select the CEE LATE FEES node from the tree.
- 11. Click the Add to Node Selection List button 🛱.
- 12. Click the OK button to return to the Edit Criteria Properties page.
- 13. Click the OK button again to return to the Criteria page.
 - a. Review the criteria in the Expression 2 group box.
 - b. Click the SQL tab and review what was written on the SQL page.
 - c. Click the Run page and view the query.
- 14. Click the Criteria page.
- 15. Add a second criteria row, and enter the following information: (this is actually the third row of criteria, but the second row you are adding).

Page Element	Value or Status	
Expression 1 Type	Field	
Expression 1	TAXABLE_Y_N	
Condition Type	Equal to	
Expression 2 Type	Constant	
Expression 2	Y	

- 16. Click the OK button.
- 17. TEST by clicking the **RUN tab**
- 18. Add a third criteria row, and enter the following information:

Page Element	Value or Status
Expression 1 Type	Field
Expression 1	ITEM_TYPE
Condition Type	In Tree
Expression 2 Type	Tree Option
Expression 2	Follow directions below

- 19. Click the New Node List link.
- 20. Click the Search button.
- 21. Select the tree named **ITEM_TYPE_TREE.**
- 22. Select the **CEE MISC FEES** node from the tree.
- 23. Click the Add to Node Selection List button $\frac{1}{2}$.
- 24. Click the OK button to return to the Edit Criteria Properties page.
- 25. Click the OK button again to return to the Criteria page.



		Ne
Fields	Criteria Having View SQ	L Run
Description:		
	Customize Find 🚟 First [∎ 1-4 of 4 🕨 Last
Condition Type	Expression 2	Edit Delete
Eff Date <=	Current Date	Edit 🖃
in tree	DHCMP,,ITEM_TYPE_TREE,1901- 01-01,FUTURE USE 3,CEE BAL PRIOR TERM,CEE LATE FEES	Edit
equal to	Y	Edit 📃
in tree	DHCMP,,ITEM_TYPE_TREE,1901- 01-01,CEE MISC FEES	Edit 📃
	Description: <u>Condition Type</u> Eff Date <= in tree equal to	Customize Find First Customize Find First Condition Type Expression 2 Eff Date <=

Applying Boolean Logic

- 1. Select the **OR** option in the Logical dropdown list box for the field of TAXABLE_Y_N
- 2. Save the query, and view the query results.



Pe	eopleSo	oft.		Hom	e <u>Worklist</u> .
		2			New Window He
Rec	ords Qu	iery Expressions	Prompts Fields Criteria Hav	ing View SQL Rur	1
View	All Rerun Que	ery Download to Excel		First 🗹	🛙 1-66 of 66 🕩 Last
	SetID	Item Type	Descr	Item Code	e Taxable
1	DHCMP	05000000100	Extension Late Fee	С	Y
2	DHCMP	05000000101	Special Sessions late Fee	С	Y
3	DHCMP	05000000200	Extension Late Fee Adv.	С	Y
4	DHCMP	05000000201	Special Session Late Fee Adv.	С	Y
5	DHCMP	06000000100	Extension Miscellaneous Fees	С	Y
6	DHCMP	06000000101	Special Session Miscellaneous	С	Y
7	DHCMP	06000000105	Credit Extension ITFS Fees	С	Y
8	DHCMP	06000000102	Art Lab Fee for CEE students	С	Y
9	DHCMP	06000000103	Biology Lab fee for CEE studen	С	Y
10	DHCMP	06000000104	Chemistry Lab Fee for CEE stud	С	Y
11	DHCMP	06000000106	Special Session ITFS Fees	С	Y
12	DHCMP	06000000107	O& P fee for CEE students	С	Y
13	DHCMP	06000000108	P.E. Crse Fee for CEE students	С	Y
14	DHCMP	06000000109	ALCP Reimbursement Activity	С	Y
15	DHCMP	06000000110	Cr. Ext. CEE Book Receipts	С	Y
16	DHCMP	06000000111	Special Sessions Book Receipts	С	Y
17	DHCMP	06000000112	CEE Book refd to students	R	Y
10	пцеме	06000000112	OEE Book Transfer to yondor	0	v

- 3. Move your newly created query to the folder you created in the previous exercise.
- 4. Add the query to your favorites list in Query Manager.

Reorder Criteria

1. Click the Reorder button and reorder your criteria as indicated in the following screen shot.



PeopleSoft.				
•				N
Records	Query Expressions Prompts	Fields	Criteria Having View SQ	L Run
Query Name: Net	w Unsaved Query	Description:		
Add Criteria	Group Criteria Reorder Criteria			
Criteria		,	Customize Find 🛗 First	🛯 1-4 of 4 🕑 Last
Logical	Expression1	Condition Type	Expression 2	Edit Delete
~	(A.EFFDT - Effective Date	Eff Date <=	Current Date	Edit 🖃
AND	A.ITEM_TYPE - Item Type	in tree	DHCMP,,ITEM_TYPE_TREE,1901- 01-01,FUTURE USE 3,CEE BAL PRIOR TERM,CEE LATE FEES	Edit
OR 💌	A.ITEM_TYPE - Item Type	in tree	DHCMP,,ITEM_TYPE_TREE,1901- 01-01,CEE MISC FEES)	Edit 🖃
AND 💌	A.TAXABLE_Y_N - Taxable	equal to	Υ	Edit 🖃
(B Save) S	ave As <u>New Query</u> Preferer	nces Properties	New Union	Q Return to Search)

Grouping Criteria

- 1. You will be utilizing the same query you just created.
- 2. On the Criteria page click the Group Criteria button.
- 3. Enter open parentheses in the left text box of row 1 (EFFDT field).
- 4. Enter close parenthesis in the right text box of row 3 (ITEM_TYPE,).

PeopleSoft.

Νe

Hom

Edit Criteria Grouping

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

E	Edit Criteria Grouping First 🗹 1-4 of 4 🕨 Las					. ▶ _{Last}
	Logical		Expression1	Condition Type		
		(A.EFFDT - Effective Date	Eff Date <=	Current Date	
	AND		A.ITEM_TYPE - Item Type	in tree	DHCMP,,ITEM_TYPE_TREE,1901-01- 01,FUTURE USE 3,CEE BAL PRIOR TERM,CEE LATE FEES	
	AND		A.ITEM_TYPE - Item Type	in tree	DHCMP,,ITEM_TYPE_TREE,1901-01- 01,CEE MISC FEES	X
	OR A.TAXABLE_Y_N - Taxable equal to Y					
	OK Cancel					



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- 5. Click the OK button.
- 6. Save the query.
- 7. Run and view the query.

Results



View All | Rerun Query | Download to Excel

First 🔳 1-100 of 454 🕨 Last

	SetID	Item Type	Descr	Item Code	Taxable
1	DHCMP	60000000010	Application Fee	С	Y
2	DHCMP	91000000200	Resident Advisor Housing	F	Y
3	DHCMP	03000000105	Non Cr. Ext.Contract	С	Y
4	DHCMP	03000000106	Non Cr. Ext.Vendor	С	Y
5	DHCMP	03000000107	Non Cr. Ext. Olli	С	Y
6	DHCMP	03000000110	Non Cr. Ext. Training Prog.	С	Y
7	DHCMP	03000000111	Non Cr. Ext. Activity	С	Y
8	DHCMP	03000000112	Non Cr. Ext. Intl Training Pro	С	Y
9	DHCMP	03000000200	Non Cr. Ext. CEU Adv.	С	Y
10	DHCMP	03000000201	Non Cr. Ext. Contract CEU Adv.	С	Y
11	DHCMP	03000000202	Non Cr. Ext. Vendor CEU Adv.	С	Y
12	DHCMP	03000000203	Non Cr. Ext. ALCP Adv.	С	Y
13	DHCMP	03000000204	Non Cr. Ext. Regular Adv.	С	Y
14	DHCMP	03000000205	Non Cr. Ext.Contract Adv.	С	Y
15	DHCMP	03000000206	Non Cr. Ext. Vendor Adv.	С	Y
16	DHCMP	03000000207	Non Cr. Ext. Olli Adv.	С	Y
47	DUCHD	020000000000	Non Or Est Ompilors Adv	0	v

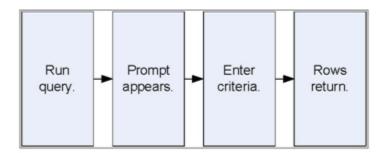


Chapter 5 Filtering Output with Runtime Prompts

Describing Runtime Prompts

Prompts extend the life of a query and make the query more flexible for future requests.

This diagram shows the process flow for using runtime prompts:



The query becomes more flexibly because you do not have to create multiple queries with hard-coded values for each specific parameter in which to search on.

Runtime Prompt Types

Prompt Type	Source of Value
Prompt Table	User selects from a list of values defined in another
	application data table.
Translate Table	User selects from a list of values defined in the translate
	table.
Yes/No Table	User selects either yes or no.



Prompt Table Edit

This type of edit restricts selection to only data that is in the prompt table.

A lookup button (magnifying glass) <a>

indicates a prompt table runtime prompt.

*Academic Group:

Q

Look Up Academic Group

Academic Institution:	CASE1	
Academic Group:	begins with 👻	
Description:	begins with 🗸	

Look Up Clear Cancel Basic Lookup

Search Results

View All	First 🗃 1-14 of 14 🕞 Last
Academic Group	Description
CAS	College of Arts & Sciences
<u>CCM</u>	Cleve Clinic Lerner Coll Med
<u>CIM</u>	Cleveland Institute of Music
DEN	School of Dental Medicine
EMG	Schls of Engineering & Mgmt
ENG	Case School of Engineering
<u>GRS</u>	School of Graduate Studies
LAW	School of Law
MED	School of Medicine
MGT	Weatherhead Schl of Management
NUR	School of Nursing
SAS	Mandel Schl of Applied Soc Sci
SMG	Schis of Appl Soc Sci & Mgmt
UGR	Undergraduate Programs



Translate Table Edit

This type of edit restricts selection to only data that is in the Translate Table (PSXLATITEM). THE Translate table is a PeopleTools table predefined values that are associated with a particular field.

A drop-down list box typically indicates a Translate Table runtime prompt.

*Grade Roster Print:	Componen 🗸
*Grade Roster Print:	Componen' 🗸
	By Student
	Component
	Instructor
	None

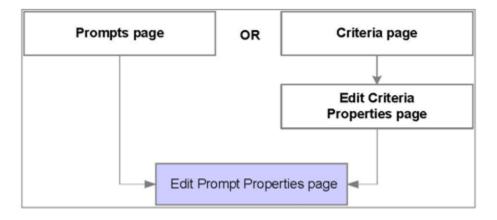
The Yes/No Table Edit

This type of edit restricts you to selecting yes (Y) or no (N) values.

Repeat for Credit

Runtime Prompt

This diagram shows the pages that you can use to access the Edit Prompt Properties page and to add runtime prompts:



There are two locations in which you can access to create runtime prompts:

- Prompts page
- Criteria page



Creating Prompts from the Prompts page

Use the following page to create and save multiple prompts that you can use later as selection criteria:



Creating a Runtime Prompt from the Criteria Page

- 1. Create a row of criteria.
- 2. Create a prompt that you use in the row of criteria.

Use this page to create prompts:

Edit Criteria Properties

Choose Expression 1 Type Field Expression 	Expression 1 Choose Record and Field Record Alias.Fieldname: A.INSTITUTION - Academic Insti		
*Condition Type:	equal to		
Choose Expression 2 Type Field Expression Constant Prompt Subquery 	Expression 2 Define Prompt Prompt: Q New Prompt Edit Prompt		



Expression 2 – Define prompt Group Box

Page Element	Usage
Prompt	View the bind variable or prompt name used for this row of
	criteria. It is read-only.
Search icon	Click to display all prompts that you create for this query.
New Prompt	Click to create a new prompt for this row of criteria.
Edit Prompt	Click to edit the existing prompt for this row of criteria.

Steps Used to Create a Runtime Prompt

- 1. Click the Add Criteria button on the Criteria page.
- The Edit Criteria Properties page appears.
 Select the record field in Expression 1 you wish to use.

Edit Criteria Properties				
Choose Expression 1 Type	Expression 1 Choose Record and Field Record Alias.Fieldname: AINSTITUTION - Academic Insti			
 Field Expression 				
*Condition Type:	equal to			
Choose Expression 2 Type	Expression 2			
O Field	Define Prompt			
Constant	Prompt: Q <u>New Prompt</u> Edit Prompt			
 Prompt Subquery 				
OK Cancel				

- 4. In the Choose Expression 2 Type select the radio button for Prompt.
- 5. In the Expression 2 group box select the New Prompt link.



Edit Prompt Properties

Field Name:	*Heading Type: RFT Short
*Type:	Heading Text:
Character 🗸	Institution
*Format:	*Unique Prompt Name:
Upper 🗸	BIND1
Length: 5	
Decimals:	
*Edit Type:	Prompt Table:
Prompt Table	
OK	

- 6. The Edit Prompt Properties for the record.field you selected appears and all properties are filled in for you.
- 7. Click the OK button.
- 8. Click the OK button again to bring you back to the Criteria tab.
- 9. Click the Run tab to see the prompt and test.
- 10. Save if you like the results if not you may go back and adjust your prompt or criteria.

Multiple Runtime Prompts

The steps to add multiple prompts are the same steps that you use to add a single prompt; you need only to additional rows of criteria, and then select an Expression 2 type of prompt each time.



ACTIVITY 4 – Creating Runtime Prompts and Date Range Prompts

(Approximately 15 min)

Activity overview:

- Create a query
- Add criteria
- Add a runtime prompt
- Create a prompt for a date range

Creating a query

- 1. If necessary sign in to the database.
- 2. Access the Query Manager, and create a new query using the ADJ_TERM_TBL record.
- 3. Enter the following information:

Field	Heading
ADJUST_REASON	Selected
	Choose text and type in – Adjustment Reason
SESSION_CODE	Selected
FROM_DAY	Selected
TO_DAY	Selected
REFUND_PCT	Selected
	Choose Long name

- 4. Save the query as your XXX_ENROLL_RANGE (XXX is your initials).
- 5. Type in a Description.
- 6. Click the dropdown list and select Public query as the type.
- 7. Run the query.
- 8. Examine the results.
- Change REFUND_PCT to be Sort Order by 1 and change the Column/position of REFUND_PCT to 1 and select the checkbox for descending order.
- 10. Save the query and examine the results.



Results

17

100.00

SNS

Peop	oleSoft.					<u>Home Worklist</u>
						New Window He
Records	Query Expr	essions Pror	npts Fields	Criteria	Having View SQ	Run
Ι						
/iew All R	erun Query Download t	o Excel				First 🔳 1-100 of 395 🕨 Last
	Refund %	Sess	ion F	rom Day	To Day	Adjust Reason
1	100.00	SNS	0	0	CEED	
2	100.00	SSD	0	0	CEED	
3	100.00	SSD	0	0	SDRP	
4	100.00		-999	999	ADMI	
5	100.00	SNS	0	0	SDRP	
6	100.00		-999	999	CEED	
7	100.00		-999	-1	SDRP	
3	100.00		-999	999	9 ADMI	
9	100.00		-999	19	SDRP	
10	100.00	SNS	0	0	CEED	
11	100.00	SNS	0	0	SDRP	
12	100.00	SSD	0	0	SDRP	
13	100.00	SNS	0	0	CEED	
14	100.00	SSD	0	0	CEED	
15	100.00	SNS	0	0	ADMI	
16	100.00	SSD	0	0	ADMI	

0

0

SDRP



Adding Runtime Prompts

- 1. Using the same query you just created, select the criteria page, and then click the Add Criteria button
- 2. Enter the following information:

Page Element	Value or Status
Expression 1 Type	Field
Expression 1	SESSION_CODE
Condition Type	equal to
Expression 2 Type	Prompt

3. Click the New Prompt link, and enter the following information:

Page Element	Value or Status
Heading Type	RFT Long
Edit Type	No Table Edit
Prompt Table	Leave blank

4. Return to the Criteria page and then save the query.

Testing:

Test 1 – Click the Run tab and type in **<u>SNS</u>** in the new prompt that appears in the upper left corner.

How many rows were returned? _____

Test 2 – Click the Rerun query link and leave the field **blank** this time.

How many rows were returned? _____

Creating a Prompt for a Range

1. Click the Add Criteria button, and enter the following information:

Page Element	Value or Status	
Expression 1 Type	Field	
Expression 1	FROM_DAY	
Condition Type	Between	
Expression 2 Type	Const - Const	
Expression 2	1	
	8	

- 2. Save and view the query.
- 3. Click the Add Criteria button, and enter the following information:

Page Element	Value or Status
96	Carolina

Expression 1 Type	Field
Expression 1	CURRENCY_CD
Condition Type	Equal to
Expression 2 Type	Prompt
Expression 2	Click the New Prompt link
	Examine the properties and click ok to return

- Click OK again to return to the Criteria page, and save the query.
 Run the query and examine the results.

PeopleSoft.	Home Worklist A
	New Window Help
Records Query Expressions Prompts Fields Criteria Hav	
Session1 = ,Currency=USD	
View All Rerun Query Download to Excel	First 🖪 1-32 of 32 🕨 Last

100710	Refut Query Download to			,	First C 1-32 of 32 C Last
	Refund %	Session	From Day	To Day	Adjust Reason
1	98.00		1	1	SINW
2	98.00		1	1	SINW
3	98.00		1	1	STDI
4	98.00		1	1	STDI
5	97.00		2	2	SINW
6	97.00		2	2	SINW
7	97.00		2	2	STDI
8	97.00		2	2	STDI
9	96.00		3	3	SINW
10	96.00		3	3	SINW
11	96.00		3	3	STDI
12	96.00		4	4	SINW
13	96.00		3	3	STDI
14	96.00		4	4	STDI
15	95.00		5	5	SINW
16	95.00		4	4	SINW
47	05.00				oto:



Chapter 6 Working with Multiple Tables

Describing the Purpose of Joins

Joining multiple Records

When you join two records (tables), you relate them to each other.

Purpose	Example
Retrieve additional fields	You join tables to retrieve a description (DESCR:
	Community Dentistry) that explains a code (ACAD_ORG:
	CMDN)
Limit the rows that are returned	You join tables to retrieve only the student information
	about students whose student IDs appear in the
	Enrollments table.

It is very important to remember that you want to perform joins on a common key value present in the tables you are joining together. Should you decide to join on other random fields you will create a Cartesian join with unpredictable results.

Differences Between Tables and Views

Table	View
 Stores physical data 	Displays logical representation of data
 Designed for data storage 	 Designed for data retrieval
 Organized for minimum redundancy 	 Organized as necessary to meet business needs
 Contains a specific type of related data 	 Displays related data, but you define the
 Typically with a naming convention of _TBL 	relationship
	 Typically with a naming convention of _VW



How do I find the tables I need for my Query?

Locating appropriate data sources is difficult if you are unfamiliar with the application. Use Query Manger to access the PeopleTools tables PSPNLDEFN and PSPNLFIELD, and query these tables for the records and fields associated with any PeopleSoft PIA page.

PeopleTools tables are in access groups in the QUERY_TREE_PT tree.

In the application from the page you are on you can press CTRL + J on a data entry page to view the page name. Then use that name to complete the prompt that is in the query. Almost all definition names consist only of uppercase letters.

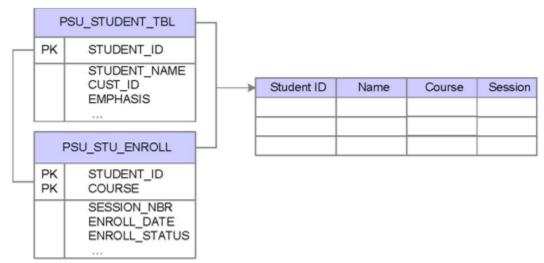
Query Elements	Explanation
A = PSPNLDEFN, B = PSPNLFIELD	The PSPNLDEFN table stores basic page data such as name and
	description.
	The PSPNLFIELD table stores the page name and its associated fields.
B.FIELDNUM	This field stores the tab order on the page. Order by this field
A.PNLNAME	This field stores the page name that you viewed when you pressed CTRL + J.
	Create a runtime prompt on this field to limit inordinate output.
A.DESCR	This field stores a useful description of the technical page name (if
	documented by the developer)
B.LBLTEXT	This field stores the label that you see on the page
B.RECNAME	This field stores the technical name of the record associated with the data.
B.FIELDNAME	This field stores the technical name of the field

Example of CTRL + J

	Browser	IE/7.0
	Operating System	WINXP
Browser Compression Tools Release Application Release		ON (gzip)
		8.48.06
		HRMS and Campus Solutions 9.00.00.000
	Service Pack	0
ſ	Page	CRSE_CATALOG
	Component	CRSE_CATALOG
Menu		ESTABLISH_COURSES
Component Buffer Size (KB)		365

<u>continue</u>

Record-Hierarchy Joins



In PeopleSoft Query, a predefined join is one of the following:

- Record-hierarchy join
- Related-record join

Record-Hierarchy Joins

Record-hierarchy joins use records that are related through a parent-child relationship.

Use the following page to create record-hierarchy join:

Records Query Expressions Prompts Fields	Criteria Having View SQL Run					
Query Name: New Unsaved Query Description	n:					
Click folder next to record to show fields. Check fields to add to query. Uncheck fields to remove from query. Add 2°						
Chosen Records						
Alias Record A ACAD_ORG_TBL - Academic Organization Table Check All Fields Uncheck All Fields	Hierarchy Join					
Fields	Find View All First 🗹 1-13 of 13 🕩 Last					
 ACAD_ORG - Academic Organization EFFDT - Effective Date EFF_STATUS - Status as of Effective Date 	9. 9. 9.					



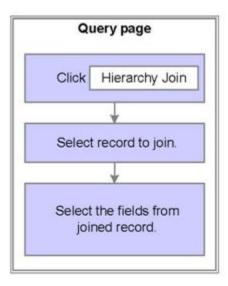
Click the Hierarchy Join link to see the page of applicable child table to create a join.

Select record for hierarchy join

Left Right

- ACAD ORG TBL Academic Organization Table
 - ACAD ORG FS OWN Acad Organization Owner Table
 - ACAD ORG HR OWN Acad Org HR Owner Tbl

Creating a Record-Hierarchy Join

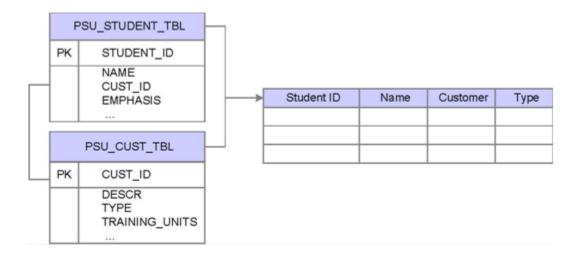


To Create a Record –Hierarchy Join:

- 1. Select the Query page, and then click the Hierarchy join link.
- 2. Select the record to join from the list of parent-child records.
 - a. This record appears on the Query page and is assigned an alias letter in the order that you added the records.
- 3. Select the necessary fields from the joined record.



Related-Record Join (smart join)



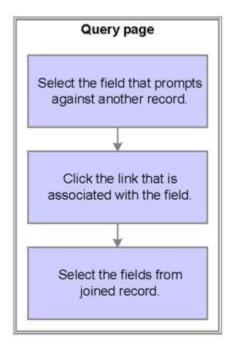
Related-record joins combine nonhierarchical records that share common fields. You determine this relationship when you define a field's prompt table relationships in the Application Designer.

Related records are specified to a field in the current record. If you use Application Designer to set field edit properties so that the field validates against a prompt table, the related record link appears to the right of the field.

Example:

					_	_				
Query Na	ame: New	Unsaved Query			Descripti	ion:				
Click fol	der next to	record to show field	ls. Check	fields to add	to query. Ur	ncheck fie	lds to rem	ove from query	/. Add	ĝ⊘
		by clicking the reco	rds tab. V	Vhen finished	I click the fie	lds tab.				
Chosen	Records									
Alias	Record									
🗁 A	ACAD_O	RG_TBL - Academi	: Organiz	ation Table				Hie	erarchy Jo	oin 🗖
	(Check All Fields		Uncheck All	Fields					
	Fields		-			Find	View All	First 🔳 1-1	2 -5 42 🕨	Last
	Tionao					<u>Fillu</u>	I VIEW AII	Filst - 1-1	3 OF 13 🗆	
		ACAD_ORG - A		Organization						9
		EFFDT - Effectiv	e Date							%
		EFF_STATUS -	Status as	of Effective D	Date					%
		DESCR - Descr	iption							%
		DESCRSHORT	- Short D	escription						%
		DESCRFORMA	L - Forma	I Description						7
		INSTITUTION -	Academic	Institution				NSTITUTION	TBL	?
							Institu	<u>ution Table</u> CAMPUS_TBL	Campi	
		CAMPUS - Cam	pus				Table		- Gampt	13 **
		MANAGER ID -	Manager	ID				PEOPLE SRC	н.	9
	_						Peop	le Search View	v	_
		INSTR EDIT - II	astructor I	Edit						94





To Create a Relate-Record Join

- Access the Query page, and then select the field that prompts against another table for its values.
 a. The related record appears as a link to the right of the field.
- 2. Click the related record link that is associated with the field.
 - a. The new record appears on the Query page and displays an alias letter that shows the order of joins.
- 3. Select the fields that you require from the joined record.



ACTIVITY 5 – Accessing Data in Multiple Tables Using Record-Hierarchy and Related-Record Joins

(Approximately 15 min)

Activity overview:

- Create a query
- Add a record-hierarchy join
- Add a related-record join

Create a query

- 1. If necessary sign in to the database.
- 2. Access Query Manager, and create a new query using the **ACAD_DEGR** record.
- 3. Select the following fields:

Page Element	Value or Status	
EMPLID	Selected	
STDNT_DEGR	Selected	
DEGREE	Selected	
ACAD_CAREER	Selected	

- 4. Save the query as your **XXX_STUDENT_JOIN.**
- 5. View the query results, and answer this question:

How many rows of data were returned? _____

Adding a Record-Hierarchy Join

- 1. Access the Query page, and then click the Hierarchy Join link.
- 2. Select the **ACAD_DEGR_HONS** child record.
- 3. Select the **HONORS_CODE** field in the **B.ACAD_DEGR_HONS** record.
- 4. Save the query.
- 5. View the query results, and answer this question:

How many rows of data were returned? _____

Adding a Related-Record Join

1. Access the Query page and locate the **B.ACAD_DEGR_HONS** record click the plus sign on the yellow file folder to expand the **B** record.

Join DEGR HONORS WV1 -

- 2. Click the Join hyperlink that is next to the HONORS_CODE field Degree Honors Table View 1.
- 3. Click the OK button to accept the default standard join, and select the **DESCR_FORMAL** field.
- 4. Save the query, and view the query results.



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Results

Re	opleSoft。					<u>Home</u> <u>Worklist</u>
						New Window
Reco	rds Query	Expressions Promp	ts Fields	Criteria	Having	View SQL Run
View /	All Rerun Query Dow					First 🗹 1-100 of 5568 🕨 La
	ID	Degree Nbr	Degree	Career	Hon Code	FormalDesc
1	000023764	01	BA	UGRD	CL	Cum Laude
2	000023790	01	BA	UGRD	CL	Cum Laude
3	000025207	01	BA	UGRD	MCL	Magna Cum Laude
4	000025415	02	BS	UGRD	SCL	Summa Cum Laude
5	000025519	01	BS	UGRD	MCL	Magna Cum Laude
6	000026234	01	BS	UGRD	MCL	Magna Cum Laude
7	000026455	01	BA	UGRD	SCL	Summa Cum Laude
8	000027755	01	BA	UGRD	MCL	Magna Cum Laude
9	000027872	01	BS	UGRD	SCL	Summa Cum Laude
10	000027963	01	BA	UGRD	SCL	Summa Cum Laude
11	000028288	01	BS	UGRD	CL	Cum Laude
12	000028574	01	BS	UGRD	SCL	Summa Cum Laude
13	000028626	03	BA	UGRD	SCL	Summa Cum Laude
14	000030485	01	BA	UGRD	MCL	Magna Cum Laude
15	000030693	02	BA	UGRD	MCL	Magna Cum Laude
16	000031213	01	BS	UGRD	SCL	Summa Cum Laude
17	000031538	01	BA	UGRD	MCL	Magna Cum Laude
		• ·				·· - · ·



Chapter 7 Using Summary Calculations

Describing Aggregate Functions and Having Criteria

Aggregate Functionality and Having Criteria

In Query Manager, you use:

- Aggregate functions to associate query fields with predefined calculation.
- Aggregate functions to return a single value for multiple rows of output.
- The Having page to access fields that use aggregate functions in selection criteria.

Using Aggregate Functions

You can use the aggregate function to group data and perform calculations on a field that is within the group.

For instance, instead of viewing all rows of data, you want to view only a count of rows; instead of viewing the price of each item, you might want to see the average price of all items.

Having Criteria

When you associate a field with an aggregate, you cannot use that field in selection criteria. Structured Query Language (SQL) supports the use of aggregate functions in the WHERE clauses, but PeopleSoft applications don't.

Because the Criteria page corresponds to a SQL statement's WHERE clause, PeopleSoft Query provides the Having page. This page enables you to add criteria on the aggregate instead of on the field generating the aggregate. The Having page criteria appear in a SQL statement's HAVING clause.



Using predefined Aggregate Functions

Uses of Aggregate Functions

When you apply an aggregate function to a field, PeopleSoft Query replaces the field, wherever it occurs, with the results of the function.

This table lists the aggregate functions in Query Manager and their uses:

Aggregate Function	Use
Avg	Adds the field values in all rows, divides the sum by the number of rows, and returns the
	quotient.
Count	Counts the number of rows and returns the total.
Max	Checks the field value in each row and returns the highest value.
Min	Checks the field value in each row and returns the lowest value.
Sum	Add the field values in all rows and returns the total.



Adding Aggregates

Fields page					
Click Edit					
Edit Field Properties page					
Select one aggregate.					
Click OK					

This flowchart shows the steps to add aggregates to query fields:

Steps to Add Aggregates

To add aggregates to query fields:

- 1. Select the Fields page, and then click the Edit button for the field to edit.
- 2. Select an aggregate function, and then click the OK button.

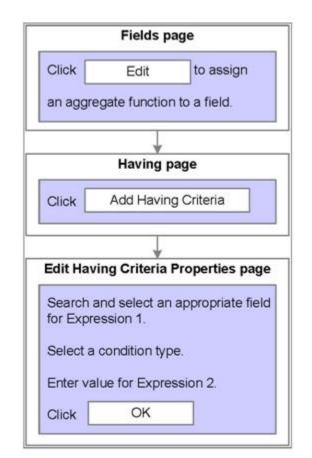
ading	Aggregate
○ No Heading ○ RFT Short ⓒ Text ○ RFT Long Heading Text:	C None C Sum C Count C Min
Count ID	⊂ Max
Unique Field Name:	C Average
A.EMPLID	

Note: You cannot use the Sum or the Average aggregate function with character fields.



Using the Having Criteria

Having Criteria



This flowchart shows the steps to create a row of Having criteria:

Creating a Row of Having Criteria

Note: You can add the criteria from the Fields page, and then the system populates Expression 1 of the Having criteria. You do not have to access the Having page or the Edit Having Criteria Properties page. Those steps are optional.

If you create a row of Having criteria using the Edit Having Criteria Properties page, then:

- 1. Click the prompt button for Expression 1, select the appropriate field from the list, and click the OK button.
- 2. Select the condition type.
- 3. Enter the value for Expression 2, and then click the OK button.



ACTIVITY 6 – Using Having Criteria and Applying Criteria to Aggregated Fields

(Approximately 15 min)

Activity overview:

- Create a query
- Apply the Count aggregate function
- Apply the Average aggregate function
- Create a second query
- Apply the Count aggregate function
- Insert Having criteria

Creating a query

- 1. If necessary, sign in to the database.
- 2. Access Query Manager, and create a new query using the TUIT_CALC_TBL record.
- 3. Select the EMPLID, STRM and PRE_POST_AMT fields.
- 4. Save the query as **XXX_COUNT** (XXX is your INITIALS).
- 5. View the output, and answer this question.
 - a. How many rows of data are returned?

Results



PeopleSoft.		<u>Home</u> <u>Worklist</u> <u>A</u>
Records Query Expr	essions Prompts Fields Criteria	New Window Helr

View All Re	run Query Download to Excel		First 🖪 1-100 of 71112 🕨 Last
	ID	Term	Pr Pst Amt
1	104775944	2088	0.00
2	201226727	2094	3.00
3	104776048	2088	0.00
4	104776048	2088	3.00
5	104776048	2088	75.00
6	104776048	2088	0.00
7	201226727	2094	0.00
8	201226727	2094	0.00
9	104776048	2088	0.00
10	104776048	2088	0.00
11	104776048	2088	5.00
12	201305416	2088	36.15
13	201226727	2094	0.00
14	201305416	2088	0.00
15	104589615	2088	0.00
16	104589615	2088	0.51
17	104589615	2088	12.75

Applying the Count Function

- 1. Using the same query as you just created, select the Fields page and then click the Edit button for the STRM field.
- 2. Select the **Count** option in the Aggregate group box, and then click the OK button.
- 3. Save the query.
- 4. View the output, and answer this question:

How many rows of data are returned?





View All Rerun Query Download to Excel				First 🔳 1-100 of 40635 🕨 Last		
	ID		Count Term	Pr Pst Amt		
1	00000078	1		30.00		
2	000000429	8		0.00		
3	000000429	1		10.00		
4	000000429	1		180.00		
5	00000468	27		0.00		
6	00000468	2		2.00		
7	00000468	2		3.00		
8	00000468	4		5.00		
9	00000468	1		64.00		
10	00000468	1		65.00		
11	00000468	1		69.00		
12	00000468	1		70.00		
13	00000468	4		75.00		
14	00000468	2		156.00		
		-				

Applying the Max Aggregate Function

- 1. Using the same query, select the Fields page, and then click the Edit button for the **PRE_POST_AMT** field.
- 2. Select the radio button for the **Max** aggregate function from the Aggregate group box, and then click the OK button.
- 3. Save the query.
- 4. View the output, and answer this question:

How many rows of data are returned? _____

Results





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

View All Rerun Query Download to Excel			First 🖪 1-100 of 18313 🕨 Last		
	ID	Count Term	Max Pr Pst Amt		
1	00000078	1	30.00		
2	00000429	10	180.00		
3	00000468	51	1878.00		
4	00000884	1	1125.00		
5	00000949	2	75.00		
6	000001755	21	1089.00		
7	000001768	1	10.00		
8	000002041	1	30.00		
9	000002223	20	1089.00		
10	000002301	11	10.00		
11	000002314	1	30.00		
12	000002496	2	90.00		
13	000002548	20	1770.00		
14	000002600	20	1089.00		
15	000002847	3	75.00		
16	000002899	48	1524.00		
17	000003367	49	885.00		

Adding a Row of Having Criteria

- 1. Select the Having page, and then click the Add Having Criteria button.
- 2. Enter the following information:

Page Element	Value or Status
Expression 1	STRM
Condition Type	greater than
Expression 2 Constant	10

- 3. Click the OK button.
- 4. Save the query, and view the output.
- 5. Compare the output with the following results.

Results



Pecpl	leSoft.				<u>_Home</u>	<u>Worklist</u>
						New Window He
Records	Query Expressi	ons Prompts Fields	Criteria	Having View	SQL Run	
/iew All Re	run Query Download to Ex	cel			First 🖪 1-100	of 12548 🕨 Las
	ID	С	ount Term		Max Pr Pst Amt	
1	00000468	51		1878.00		
2	000001755	21		1089.00		
3	000002223	20		1089.00		
4	000002301	11		10.00		
5	000002548	20		1770.00		
6	000002600	20		1089.00		
7	000002899	48		1524.00		
8	000003367	49		885.00		
9	000003692	22		1524.00		
10	000003757	46		1878.00		
11	000004953	45		885.00		
12	000005733	18		1089.00		
13	000005798	13		885.00		
14	000006045	19		1089.00		
15	000006123	18		1878.00		
16	000006357	36		1878.00		
17	000006747	24		885.00		
				005.00		



Chapter 8 Query Viewer and Report Manager

Query Viewer

Query Viewer provides access to run and print queries, but does not enable you to create, delete, or edit queries.

Query Viewer is a read-only version of Query Manager. Query Viewer enables security administrators to limit some users to read-only access for all queries so that they can only view or print queries.

Query Viewer retrieves all of the queries to which you have access but for which you have not editing or creating capabilities.

				Home Work	listMultiCh
∎ ►					
					<u>New V</u>
Query Viewer					
Enter any information you have and click Sea	arch. Leave fields blank for a list of a	II values.			
*Search By: Query Name 🗸	begins with				
Search Advanced Search					
Search Results Too many items m	et your search criteria. Only the fir	st 300 items displaye	d.		
*Folder View: All Folders 👻					
Query	<u>Customize F</u>	<u>'ind View 100 🛄</u>	First 🖪 1-30 of 30		
Query Name	Description	Owner Folder	Run to Run to HTML Excel	Schedule	<u>Add to</u> Favorites
AD701ADMISSIONS_ACTIONS_TBL	AD701Admissions Actions Tbl	Public	HTML Excel	Schedule	Favorite
AD702TEST_TABLES	AD702Test Tables	Public	HTML Excel	<u>Schedule</u>	Favorite
AD703RECRUIT_CATEGORY_TBL	AD703Recruit Category Tbl	Public	HTML Excel	Schedule	Favorite
AD704 REFERRAL SOURCE TBL	AD704Referral Source Tbl	Public	HTML Excel	Schedule	Favorite

Public

Public

Public

Public

Public

Public

Public

HTML

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<u>HTML</u>

HTML

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Excel

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Schedule Favorite

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Schedule

Note: if you cannot access Query Manager, you can still view queries through Query Viewer.

AD705---Region Table

AD710---Summary Type Table

AD713---Evaluation Table



AD705___REGION_TABLE

AD710___SUMMARY_TYPE_TABLE

AD713___EVALUATION_TABLE

AD711___ADMIT_TYPE_TABLE AD711---Admit Type Table

AD712___APPLICATION_CENTER_TAB AD712---Application Center Tab

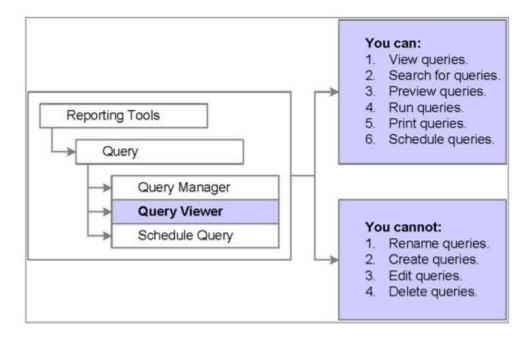
AD714___EVALUATION_COMMITTEE_T AD714---Evaluation Committee T

AD715___ADMISSIONS_EVLTN_STATU AD715---Admissions EvItn Statu

Steps to View a Query Using Query Viewer

- 1. Select Reporting Tools, Query, Query Viewer.
- 2. Search for a query.
- 3. Click the HTML, Excel link to view the output.

Uses of Query Viewer

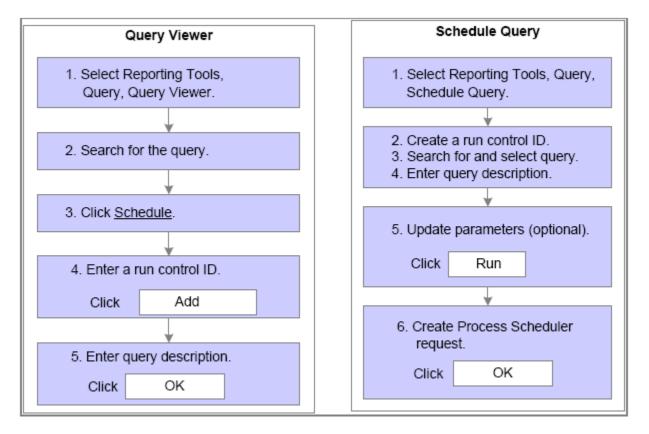




Scheduling a Query

You use the Schedule a Query component to run queries at specified times.

Steps to schedule a query:





Report Manager

Separate Handout

Congratulations!! You have completed Query Basics

