

# PeopleSoft Queries

## Effective Date Fields

### Using the Effective Date Field

The effective date (EFFDT) field is used throughout PeopleSoft applications to enable the viewing of data that changes over time. Effective date fields are used in PeopleSoft Query’s criteria. With Effective dated queries, rows of data are classified in one of three categories:

1. Current
2. History
3. Future

You can use effective date fields in criteria for:

- View all rows, regardless of their effective dates
- View rows that aren’t currently in effect
- View the rows that were effective as of a particular date

#### Summary

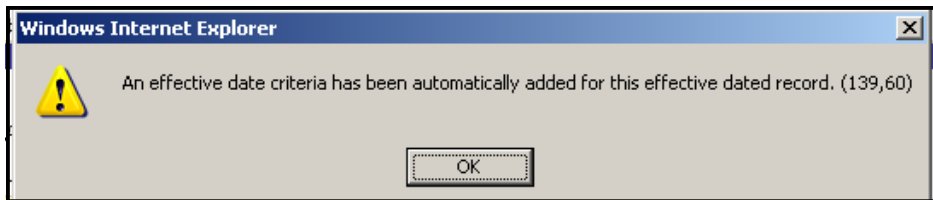
##### Effective Date Field

1. Default **Current** EFFDT
2. Conditions Edit Prop
3. Example Data (Figure 3)
4. Example Data (Figure 4)
5. Point in Time (History)
6. Date Range (Between)
7. Delete EFFDT Row

### Default Current Effective Date

When you start a new query and select an effective-dated record, a new effective date criteria row is created, and an information message (Figure 1) appears on the screen. By default, the query tool will retrieve CURRENT information. This can be changed.

**Figure 1**



This table describes the effective the effective date categories:

<b>Current</b>	The highest effective date is less than or equal to today’s date (system date on server). There can only be one current row per high level key.
<b>History</b>	The effective date is less than the effective date of the current
<b>Future</b>	The effective date is greater than today’s date.

**Effective Date Conditions on Edit Criteria Properties Page:**

If you choose an effective-date condition you return one effective dated row of information per item. You can vary what you want the effective date compared against.

This table describes the effective date conditions on the Edit Criteria Properties Page (Figure 2):

Eff Date <=	Will return the one row that is closest to or equal, without going over to the expression 2 value. If expression 2 is Current Date then this will always retrieve the most current rows from the table.
Eff Date <	Will return the one row that is closest to, without going over, the expression 2 date value.
Eff Date >=	Will return the one effective dated row that is closest to being equal to or greater than the expression 2 date.
Eff Date >	Will return the one effective dated row that is closest to being greater than the expression 2 date.
First Eff Date	Return the row with the oldest effective date, usually the first row that is entered for an item.
Last Eff Date	Return the row with the latest effective date, even if that date is still in the future.

Figure 2



**Note:** Only effective dated tables have an Effective Status field. The EFF\_STATUS field has two 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 EFF\_SEQ field. The EFF\_SEQ allows you to enter multiple data on the same date.

**Example Data (Figure 3)**

Figure 3

- 1995 FL
- 1999 VA
- 2002 NH
- 2007 CA
- 2008 AK

Using the data in **Figure 3** the following are examples:  
 If EFFDT < 2002 you only get 1999  
 If EFFDT **less than** 2002 you get 1999 and 1995  
 If EFFDT > 2002 you only get 2007  
 If EFFDT **greater than** 2003 you get 2007 and 2008

**Examples Data (Figure 4)**

**Figure 4**

ROW	EMPLID	EFFDT	EFF SQ #	JOB	ANN RATE
A	0007777	1/1/1997	0	Admin Asst	43,000
B	0007777	1/3/2000	0	HR Data Entry	49,000
C	0007777	8/16/2004	0	HR Recruiter	55,000
D	0007777	8/16/2004	1	HR Recruiter	59,000
E	0007777	12/30/2005	0	HR MGR	65,000
F	0007777	1/1/2006	0	HR Director	89,000

1. If our criteria is as follows and current date is 4/22/2005, then Row D is returned.

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

2. If our criteria is as follows and current date is 4/22/2005, then row E is returned.

Criteria					
Logical	Expression1	Condition Type	Expression 2	Edit	Delete
	B.EFFDT - Effective Date	Eff Date >=	Current Date (EffSeq = Last)	Edit	

3. If our criteria is as follows and current date is 4/22/05, then row B is returned.

Criteria					
Logical	Expression1	Condition Type	Expression 2	Edit	Delete
	B.EFFDT - Effective Date	Eff Date <=	2001-01-01 (EffSeq = Last)	Edit	

4. If our criteria is as follows and current date is 4/22/2005, then row F is returned.

Criteria					
Logical	Expression1	Condition Type	Expression 2	Edit	Delete
	B.EFFDT - Effective Date	Last Eff Date	EffSeq = Last	Edit	

## Point In Time (Historical) Query

You can build a query to retrieve data as if the date were some point in time in the past.

1. Go to the **Criteria** tab.
2. On the EFFDT row, click on **EDIT**.
3. Choose **Constant** in the **Expression 2 Type** section (Figure 5, 1).
4. Input the date you want in the **Date** box (Figure 5, 2).
5. Click on **OK**.

Figure 5

## Date Range (BETWEEN) Query

To build a query that finds information effective during a range of time you can do the following:

1. Go to the **Criteria** tab.
2. On the EFFDT row, click on **EDIT**.
3. Change the Condition Type to **Between** (Figure 6, 1).
4. Choose **CONST-CONST** in the **Expression 2 Type** section (Figure 6, 2).
5. Input the date range you want in the you want in the **Date** box (Figure 6, 3).
6. Click on **OK**.

Figure 6

## Delete EFFDT Row From Criteria

If you want all of the history from a particular EFFDT table, the best way to do this is to delete the EFFDT. T

To retrieve the JOB data history for an employee the typical set criteria set is as follows :

Logical	Expression1	Condition Type	Expression 2	Edit	Delete
	A.EFFDT - Effective Date	Eff Date <=	Current Date (EffSeq = Last)	Edit	-
AND	A.EMPLID - EmplID	equal to	0197620	Edit	-

This will retrieve only one row for the employee because the EFFDT logic I s still on the criteria tab.

	ID	DeptID	Job Code	Supv
1	0197620	3081000	E2414B	

To retrieve all of the rows for this employee, if you delete the criteria row and just have the following criteria:

Logical	Expression1	Condition Type	Expression 2	Edit	Delete
	A.EMPLID - EmplID	equal to	0197620	Edit	-

The results will retrieve all of the employee history as seen below:

	ID	DeptID	Job Code	Supv
1	0197620	3081000	E2414B	
2	0197620	3081000	E2414B	