



### Creating a Query Using Having Criteria

## Concept

With SQL, a **Having** clause is similar to a **Where** clause for rows of data that have been aggregated into a single row of output. The system evaluates **Where** clauses by looking at the individual table rows before they are grouped by the aggregate function, and then it evaluates **Having** clauses after applying the function. Therefore, if you want to check the value returned by the function, you must define **Having** criteria.



For example, suppose you need a list of the careers in which the minimum amount due for student fees is greater than \$100. In this case, you first use the aggregate function to group the careers based on the amount due. Then, you use the **Having** clause to obtain the list of the careers in which the minimum amount due is greater than \$100.

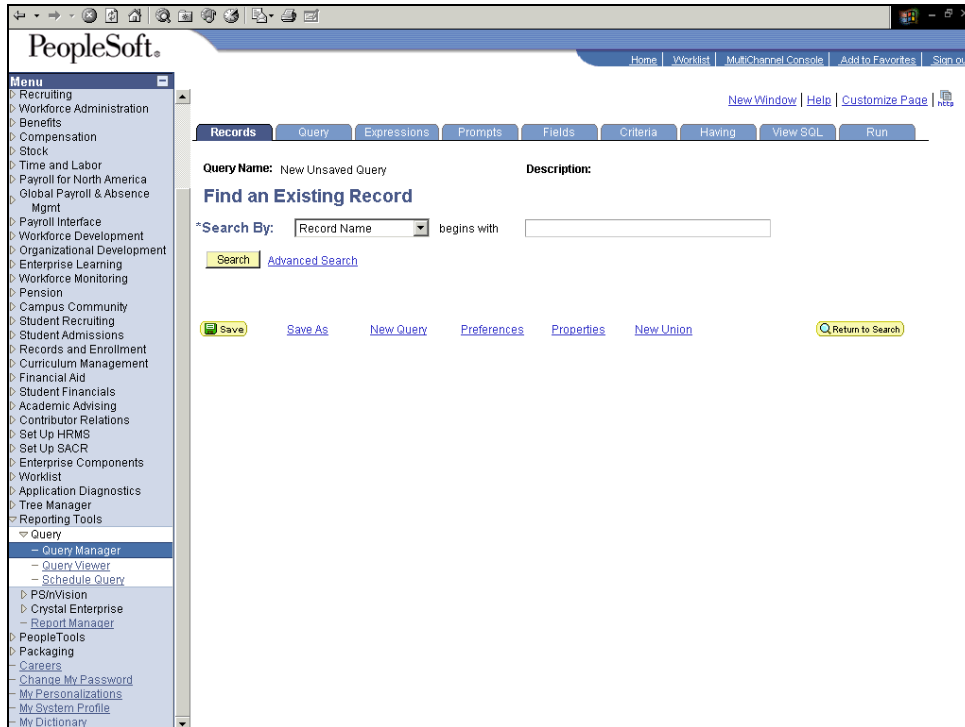
In this topic, you want to calculate the total amount of fees owed from all the service indicators that have been placed on a person's records. You want to display only the IDs whose sum is greater than \$9.00. You will use **Having** criteria to do this.





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## Procedure

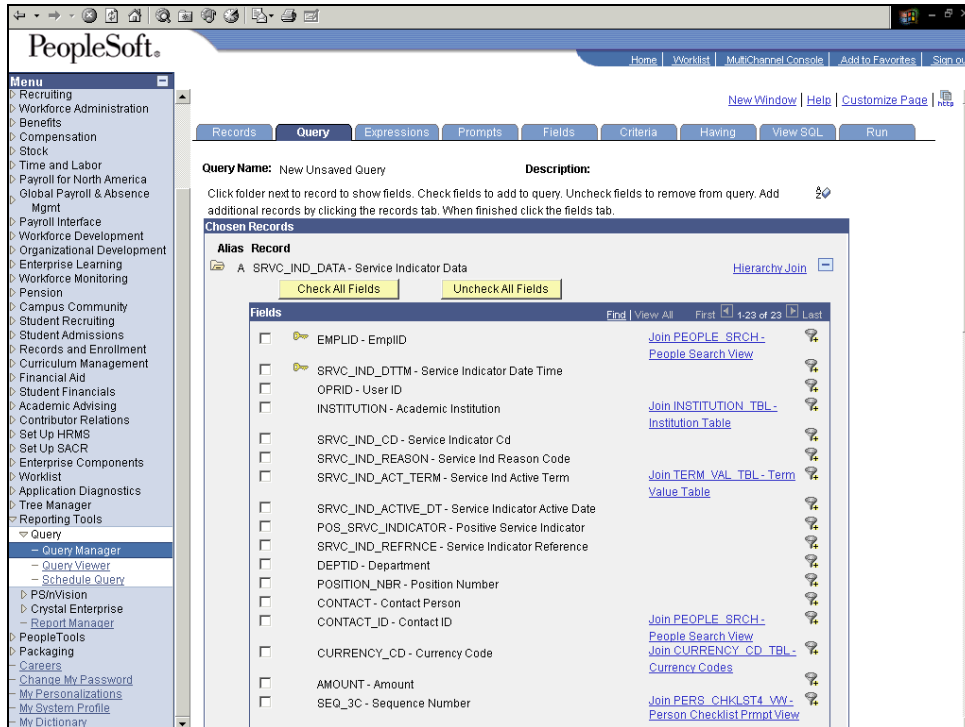
Step	Action
1.	Begin by navigating to the <b>Records</b> page. Click the <b>Reporting Tools</b> link. 
2.	Click the <b>Query Manager</b> link. 
3.	Click the <b>Create New Query</b> link.



Step	Action
4.	The first step in creating a query is to find an existing record for the query. In this example, you will locate and use the Service Indicator Data record. Enter the desired information into the <b>Description</b> field. Enter " <b>SRVC_IND_DATA</b> ".
5.	Click the <b>Search</b> button. 
6.	Click the <b>Add Record</b> link. 

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Step	Action
7.	Next, select the fields for the query. Click the <b>EMPLID</b> option. <input type="checkbox"/>
8.	Click the <b>AMOUNT</b> option. <input type="checkbox"/>



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**Query Name:** New Unsavd Query **Description:**

Click folder next to record to show fields. Check fields to add to query. Uncheck fields to remove from query. Add additional records by clicking the records tab. When finished click the fields tab.

**Chosen Records**

**Alias Record**

A SRVC\_IND\_DATA - Service Indicator Data

[Check All Fields](#) [Uncheck All Fields](#) [Hierarchy Join](#)

Fields	Find	View All	First	1-23 of 23	Last
<input checked="" type="checkbox"/> EMPLOY - EmpID					<a href="#">Join PEOPLE_SRCH - People Search View</a>
<input type="checkbox"/> SRVC_IND_DTTM - Service Indicator Date Time					
<input type="checkbox"/> OPRID - User ID					
<input type="checkbox"/> INSTITUTION - Academic Institution					<a href="#">Join INSTITUTION_TBL - Institution Table</a>
<input type="checkbox"/> SRVC_IND_CD - Service Indicator Cd					
<input type="checkbox"/> SRVC_IND_REASON - Service Ind Reason Code					
<input type="checkbox"/> SRVC_IND_ACT_TERM - Service Ind Active Term					<a href="#">Join TERM_VAL_TBL - Term Value Table</a>
<input type="checkbox"/> SRVC_IND_ACTIVE_DT - Service Indicator Active Date					
<input type="checkbox"/> POS_SRVC_INDICATOR - Positive Service Indicator					
<input type="checkbox"/> SRVC_IND_REFRNCE - Service Indicator Reference					
<input type="checkbox"/> DEPTID - Department					
<input type="checkbox"/> POSITION_NBR - Position Number					
<input type="checkbox"/> CONTACT - Contact Person					
<input type="checkbox"/> CONTACT_ID - Contact ID					<a href="#">Join PEOPLE_SRCH - People Search View</a>
<input type="checkbox"/> CURRENCY_CD - Currency Code					<a href="#">Join CURRENCY_CD_TBL - Currency Codes</a>
<input checked="" type="checkbox"/> AMOUNT - Amount					
<input type="checkbox"/> SEQ_3C - Sequence Number					<a href="#">Join PERS_CHKLIST_WV - Person Checklist Prmot View</a>

Step	Action
9.	Click the <b>Fields</b> tab.

**Query Name:** New Unsavd Query **Description:**

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

[Column Order](#) [Sort Order](#)

Col	Record	Fieldname	Format	Ord	XLAT	Amg	Heading Text	Add Criteria	Edit	Delete
1	A	EMPLID - EmpID	Char11				ID	<a href="#">Add Criteria</a>	<a href="#">Edit</a>	<a href="#">Delete</a>
2	A	AMOUNT - Amount	SNm17.3				Amount	<a href="#">Add Criteria</a>	<a href="#">Edit</a>	<a href="#">Delete</a>

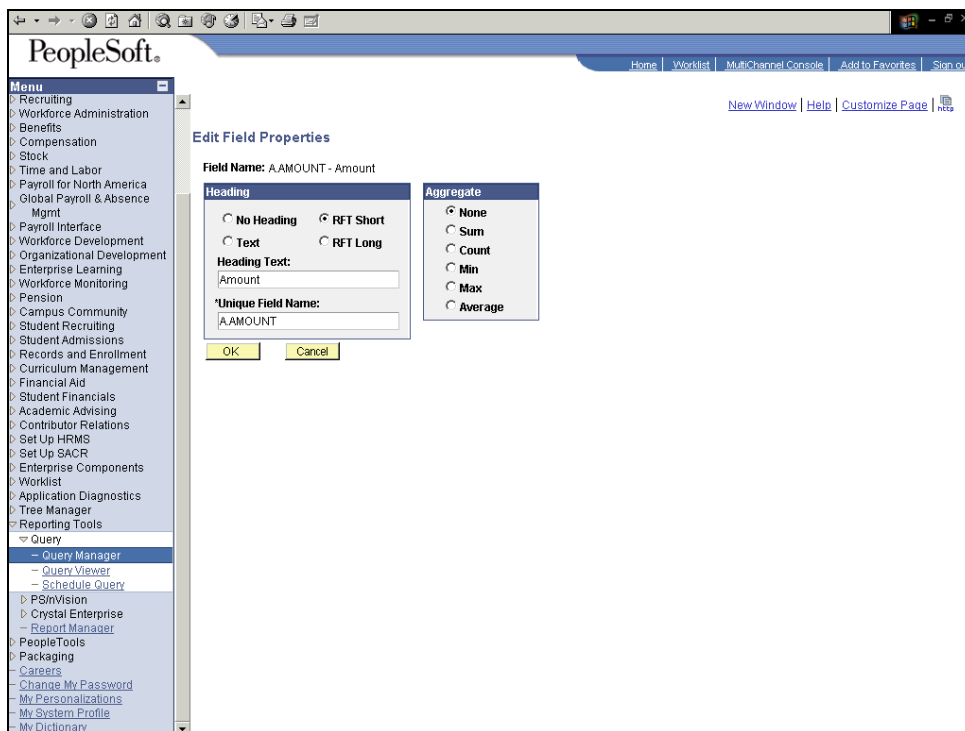
[Save](#) [Save As](#) [New Query](#) [Preferences](#) [Properties](#) [New Union](#) [Return to Search](#)

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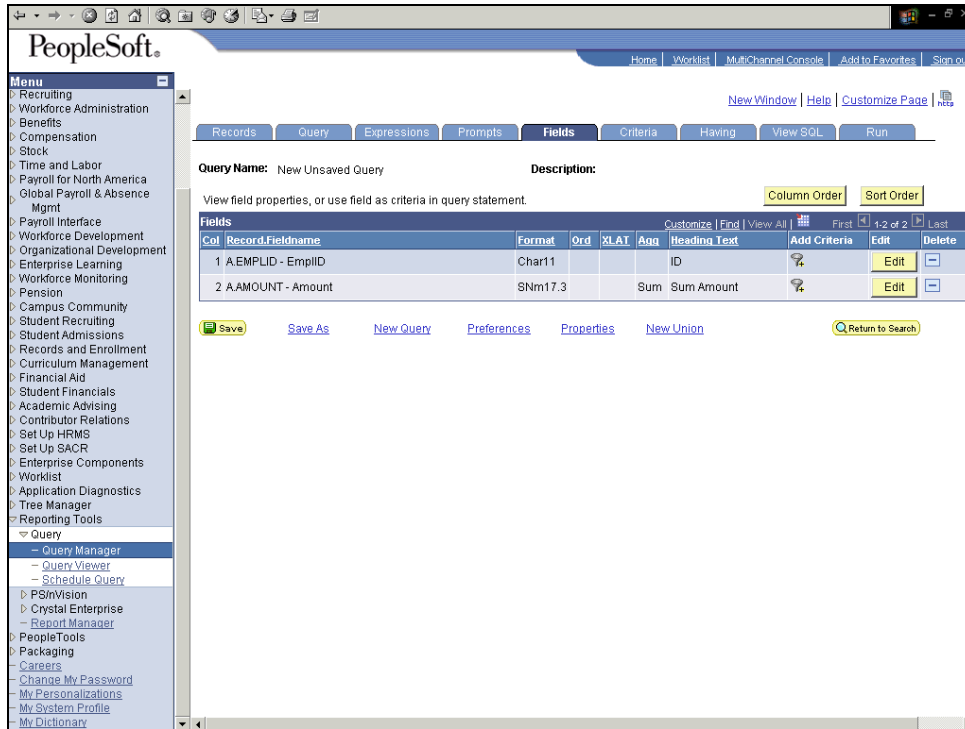
## Creating a Query Using Having Criteria



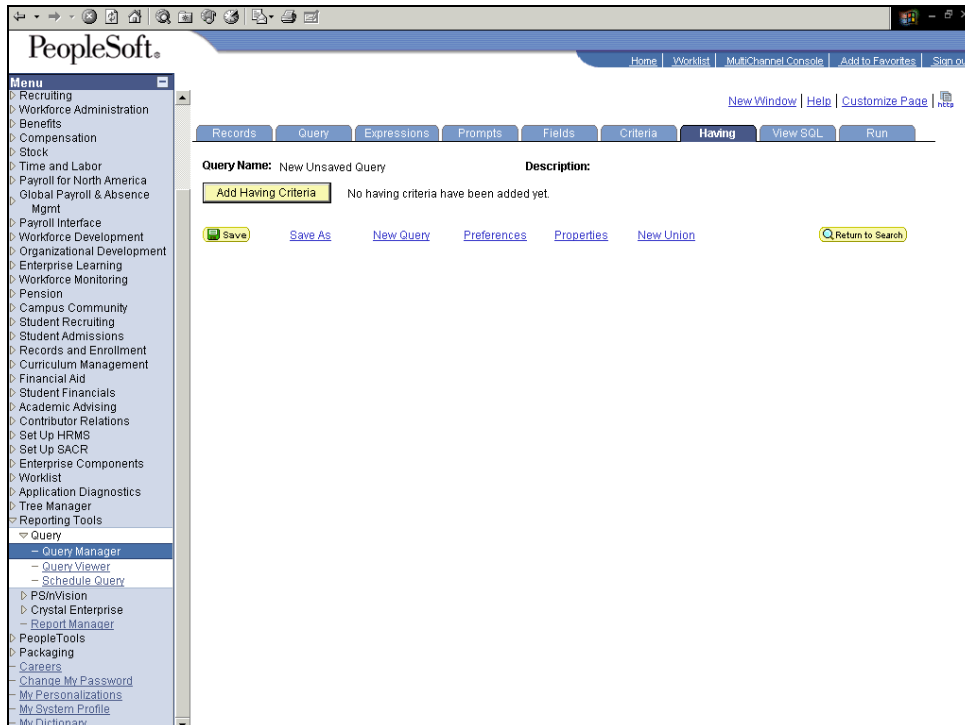
Step	Action
10.	<p>Use the <b>Fields</b> page to view how fields are selected for output, view the properties of each field, change headings, change column and sort orders, and apply aggregate values.</p> <p>In this example, you first need to apply an aggregate function to the AMOUNT field. Aggregate functions must be assigned before you are able to apply Having criteria. Click the <b>Edit</b> button.</p> <p><b>Edit</b></p>



Step	Action
11.	<p>Click the <b>Sum</b> option.</p> <p><b>Sum</b></p>
12.	<p>Click the <b>OK</b> button.</p> <p><b>OK</b></p>



Step	Action
13.	Click the <b>Having</b> tab.

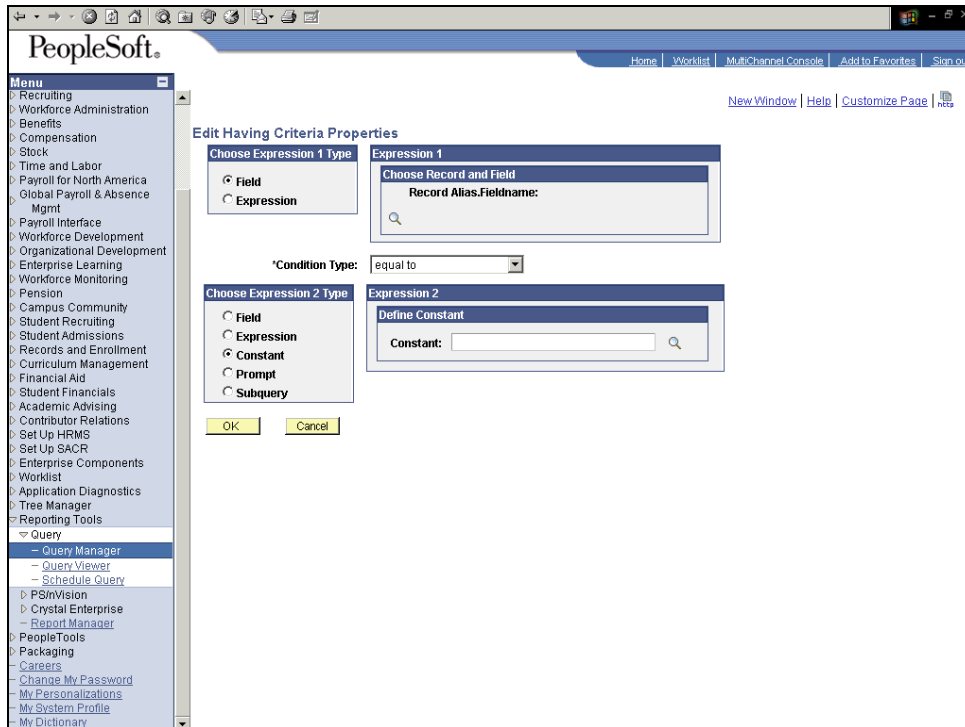



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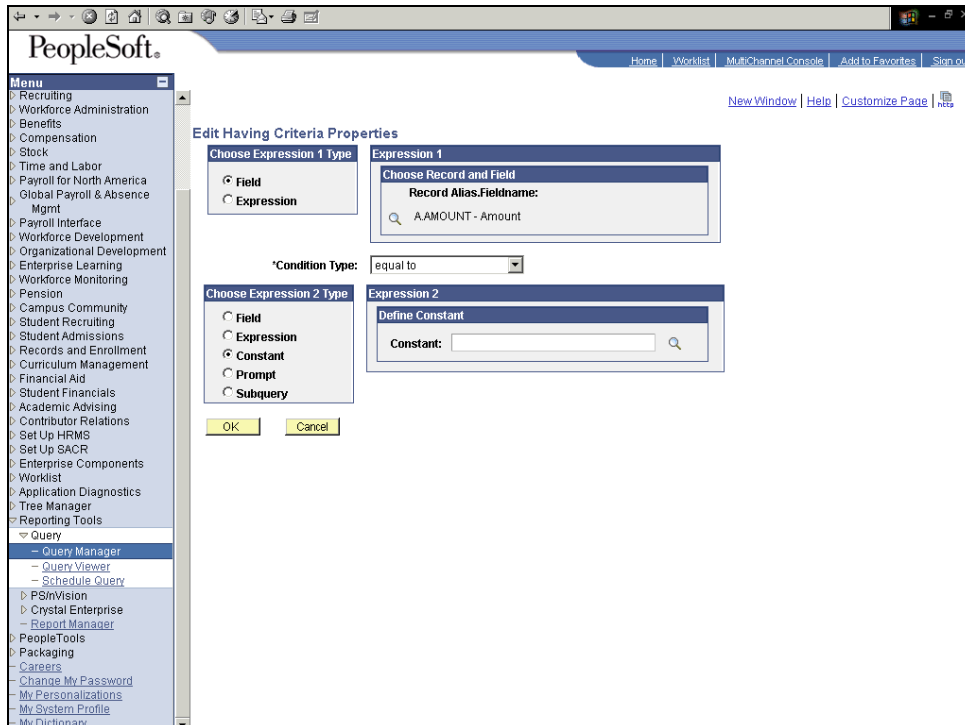
Step	Action
14.	<p>Add selection criteria using the <b>Having Criteria</b> tab in the same way you add selection criteria using the <b>Criteria</b> tab.</p> <p>In this example, you are adding the criteria for IDs whose sum is greater than \$9. Click the <b>Add Having Criteria</b> button.</p> <p><b>Add Having Criteria</b></p>



Step	Action
15.	<p>Click the <b>Select Record and Field</b> button.</p> <p></p>



Step	Action
16.	Click the <b>AMOUNT</b> link. <a href="#">A.AMOUNT - Amount</a>

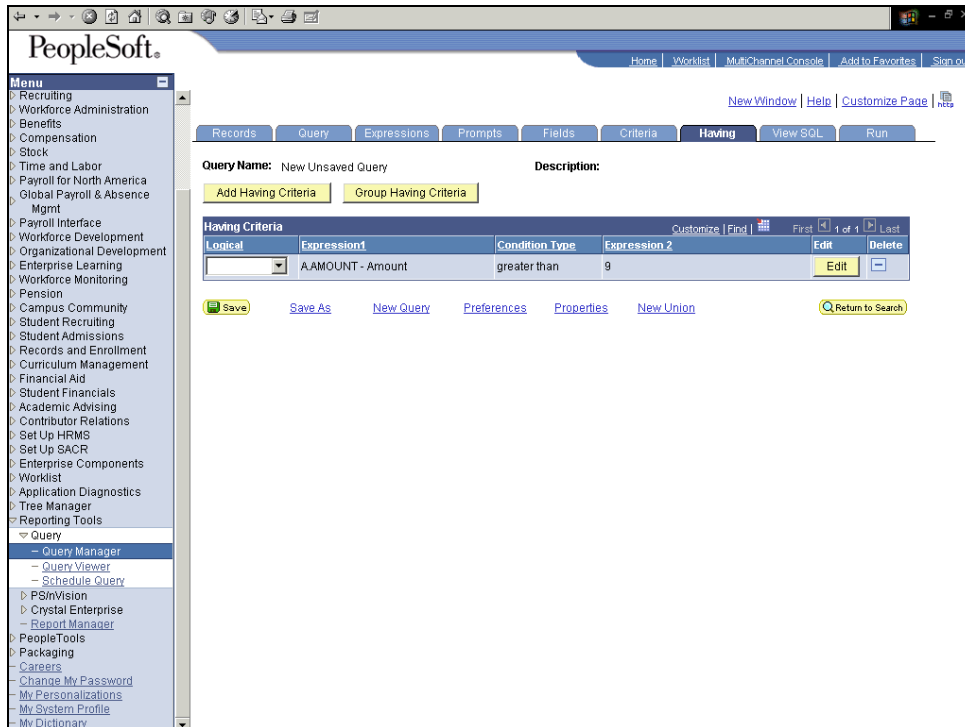


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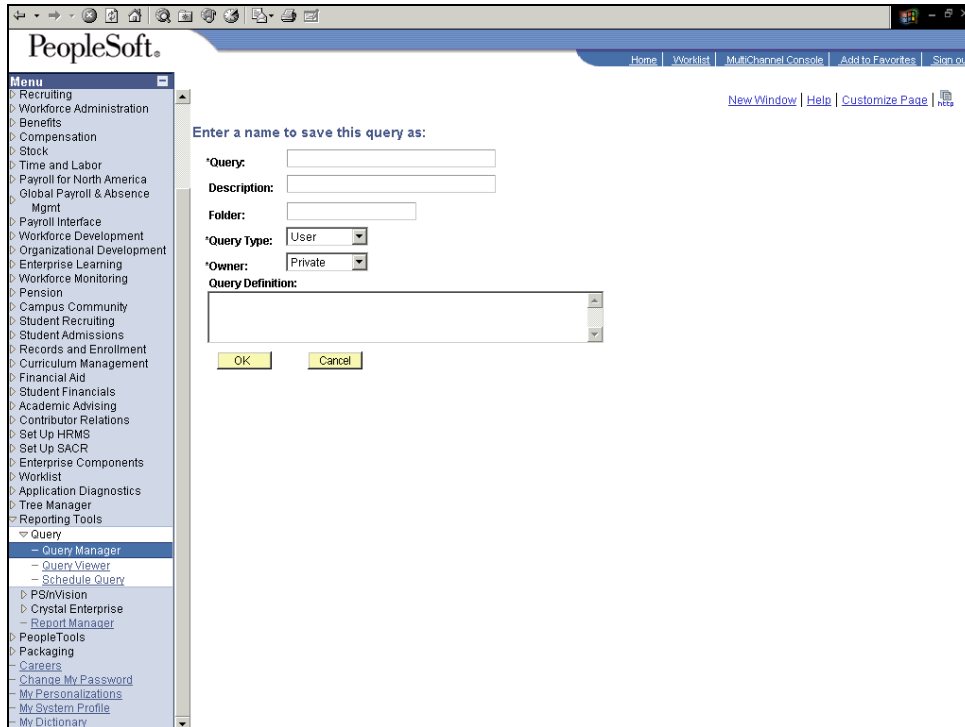
## Creating a Query Using Having Criteria



Step	Action
17.	Click the <b>*Condition Type</b> list. <input type="text" value="equal to"/>
18.	Click an entry in the list. <input type="text" value="greater than"/>
19.	Click in the <b>Constant</b> field. <input type="text"/>
20.	Enter the desired information into the <b>Constant</b> field. Enter "9".
21.	Click the <b>OK</b> button. <input type="button" value="OK"/>



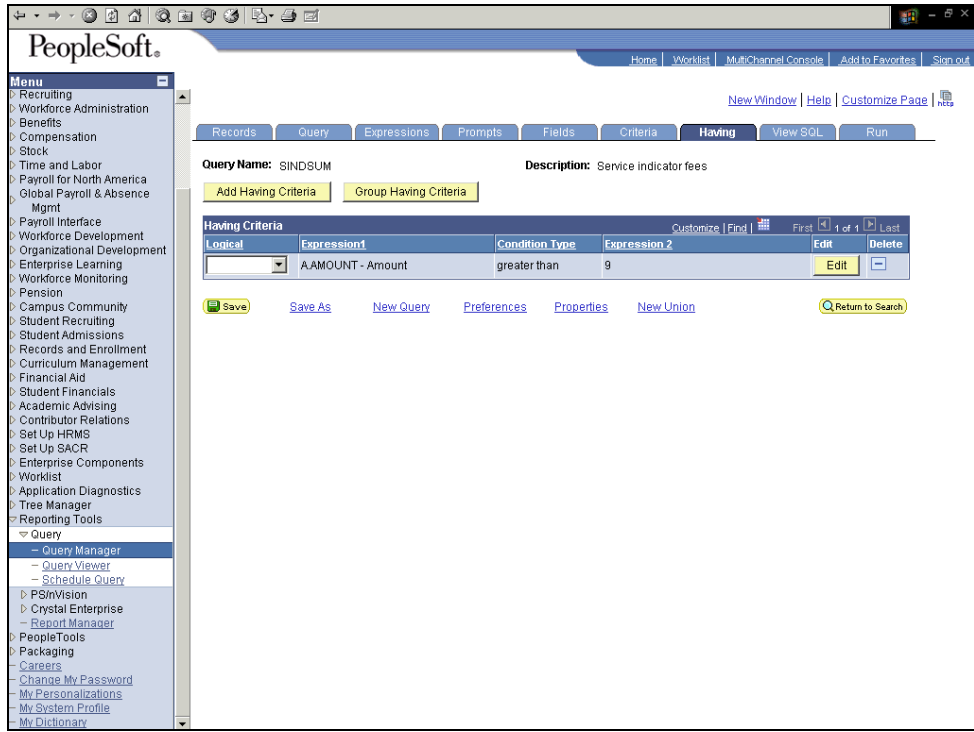
Step	Action
22.	Next, save the query. Click the <b>Save As</b> link. <input type="button" value="Save As"/>



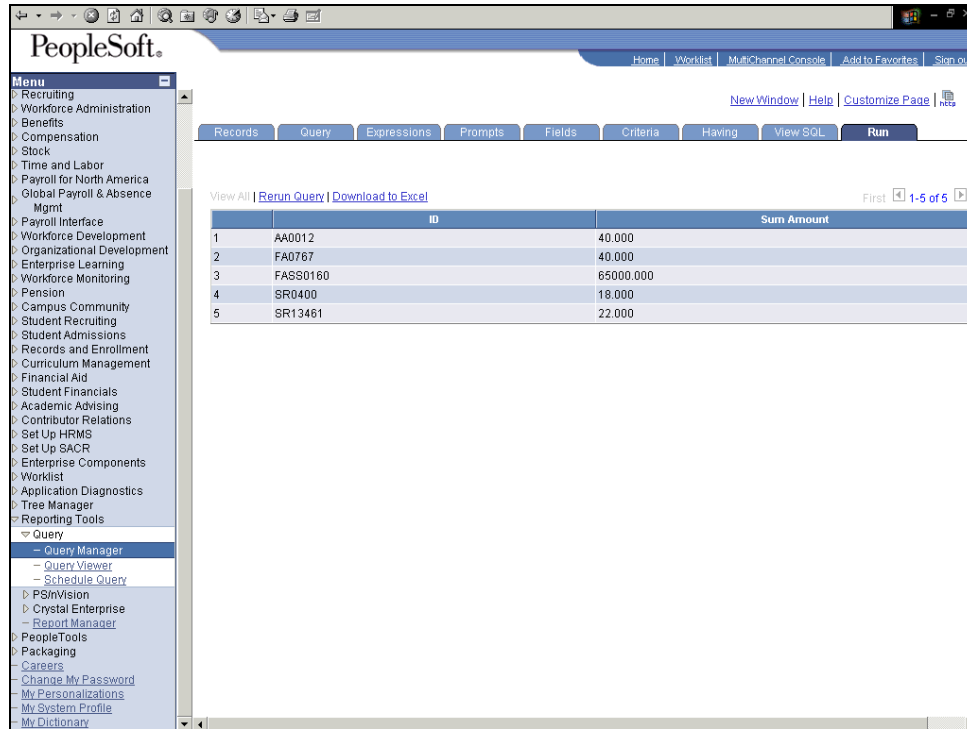
Step	Action
23.	Enter the desired information into the <b>*Query</b> field. Enter " <b>SINDSUM</b> ".
24.	Click in the <b>Description</b> field. <input type="text"/>
25.	Enter the desired information into the <b>Description</b> field. Enter " <b>Service indicator fees</b> ".
26.	Standard queries are designated as User queries. Workflow queries are either Process or Role queries. For this example, use the default.
27.	Use the <b>Owner</b> field to specify the access to this query. Private indicates that only the user ID that created the query can open, run, modify, or delete the query. Public indicates that any user with access to the records used by the query can run, modify, or delete the query. For this example, you want to make it a private query.
28.	Click the <b>OK</b> button. <input type="button" value="OK"/>

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Step	Action
29.	Finally, view the results of the query. Click the <b>Run</b> tab.



Step	Action
30.	The results display a list of IDs whose sum amount is greater than \$9.
31.	You have successfully defined Having criteria for a query. <b>End of Procedure.</b>