PeopleSoft Query Training

I. Introduction

Overview

The Query Designer provides PeopleSoft users with a simple, intuitive way to create and run queries. The results can be viewed online or exported to an Excel spreadsheet or a CSV text file.

You will learn basic functions of the query tool and how to create queries: selecting specific records and fields. You will learn how to modify column headings and how to retrieve the short or long descriptions for the translate value rather than the field name.

Once you know the basics, you will learn how to retrieve information based on criteria requirements such as equal to, greater than, in a list, between and like. You will also learn how to add runtime prompts. Runtime prompts give the user the ability to enter specific values for a designated field. The values are used as criteria for retrieving the information for your report. You will learn to create queries using effective dates because PeopleSoft uses effective dating in order to show data in a historical perspective.

In addition, you will explore how to create complex queries using multiple tables using predefined joins.

Objectives

- Reviewing Query Types

- Finding, Selecting and Running a Predefined Query

- Create Simple Queries

- Specify Criteria for Retrieving Data

- Creating Complex Queries using Multiple Tables

- Sorting and Ordering Query Results

II. Reviewing the Types of Queries

PeopleSoft Query provides the following different types of queries:

User queries
Create and run queries to retrieve data from the database directly from Windows-based Query Designer, or the web-based Query Manager/Query Viewer applications.

Process queries
Write queries that are intended to run periodically by batch processes, most likely using PeopleSoft Application Engine and the Query API (application programming interface).

Role queries
Write queries that PeopleSoft Workflow uses to determine to whom to send emails, forms, or worklist entries.

III. Basic Query Concepts

Overview

You will learn the basic features and concepts of Query, including how to run a predefined query, how to create a query from one record, how to modify your view preferences and how to manipulate data in your query.

Running a Query: Browser

PS query provides powerful querying capabilities within the PeopleSoft Internet Architecture. Through your browser you can define and modify queries, run queries and schedule queries to be run on a regular basis.

The query viewer is the primary place for the end user to run and view queries. Once the query is found you can choose to run the query immediately in the browser or schedule it to be run at a later time.

IV. Finding and Selecting and Running a Predefined Query

Step 1. Navigate to the Query Manager

Reporting Tools > Query > Query Manager

V. Creating a Basic Query

Terminology

Record Definitions
The record definitions are the design specifications that determine the structure of your PeopleSoft application data tables and online processing.
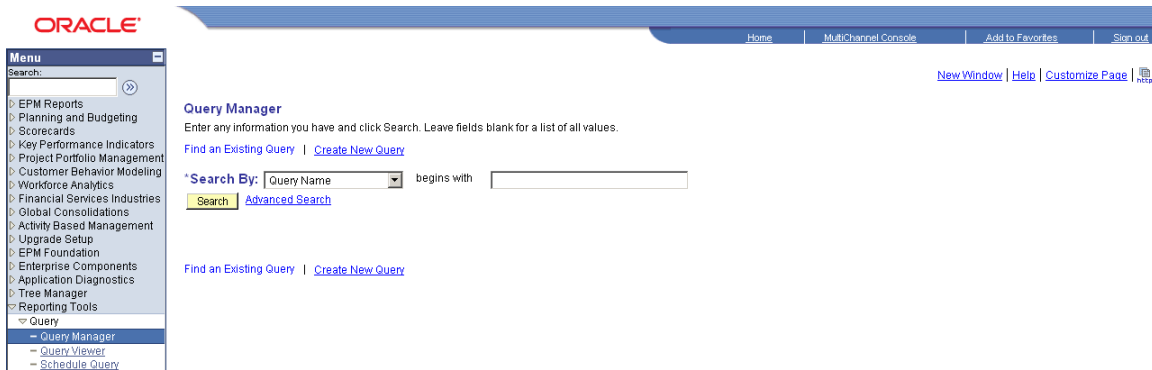
Tables
The table is made up of columns and rows. Columns determine how the data will be stored. Rows represent the actual data stored in the database.

Creating a Basic Query

Step 1. Navigate to the Query Manager

Reporting Tools > Query > Query Manager

Step 2. Click on Create New Query

This will open the Find an Existing Record search page where you select the table that you want to use

If you weren't sure of the name of the table, you can leave that field blank. This is not the most efficient way to search because it will bring up the 1st 300 tables.

Step 3. Enter UW_HR in the begins with box and click on the Search icon

Step 4. Find UW_HR_ALLJOB_VW table and click on the Add Record icon.

All the fields in the table will be available for selection.

Records	Query	Expressions	Prompts	Fields	Criteria	Having	View SQL	Run

Query Name: New Unsaved 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 UW_HR_ALLJOB_VW - OWE - All Job/Comp/Per Org Vw   Hierarchy Join ▢

Check All	Uncheck All

Fields   Find | View 100   First ◄ 1-50 of 122 ► Last

☐	🔑 EMPLID - EmplID	
☐	🔑 EMPL_RCD - Empl Rcd Nbr	
☐	🔑 EFFDT - Effective Date	
☐	🔑 EFFSEQ - Effective Sequence	
☐	NAME - Name	
☐	ACCT_CD - Combination Code	
☐	UW_ACCT_CD_DESCR - UW_ACCT_CD_DESCR	
☐	ACTION - Action	
☐	UW_ACTION_DESCR - Action Description	
☐	ACTION_DT - Action Date	
☐	ACTION_REASON - Reason Code	
☐	UW_ACTN_RSN_DESCR - Action Description	
☐	BARG_UNIT - Bargaining Unit	

Step 5. Choose the following fields:

BUSINESS_UNIT
DEPTID
EMPLID
NAME
EMPL_RCD
HIRE_DT
EXPECTED_END_DATE
HR_STATUS
EMPL_CLASS
ACTION
ACTION_REASON
JOBCODE
UW_JOBCODE_DESCR
COMPRATE
FTE

Step 6. Click on the Fields tab

Records	Query	Expressions	Prompts	Fields	Criteria	Having	View SQL	Run

Query Name: New Unsaved Query   Description:

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

Fields					Customize	Find	View All			First ◄ 1-15 of 15 ► Last

Col	Record.Fieldname	Format	Ord	XLAT	Agg	Heading Text	Add Criteria	Edit	Delete
1	A.BUSINESS_UNIT - Business Unit	Char5				Unit	🔽	Edit	▬
2	A.DEPTID - Department	Char10				DeptID	🔽	Edit	▬
3	A.EMPLID - EmplID	Char11				ID	🔽	Edit	▬
4	A.NAME - Name	Char50				Name	🔽	Edit	▬
5	A.EMPL_RCD - Empl Rcd Nbr	Num3.0				Empl Rcd#	🔽	Edit	▬
6	A.HIRE_DT - First Start Date	Date				Start Date	🔽	Edit	▬
7	A.EXPECTED_END_DATE - Expected Job End Date	Date				Planned Exit	🔽	Edit	▬
8	A.EMPL_CLASS - Employee Classification	Char3		N		Empl Class	🔽	Edit	▬
9	A.HR_STATUS - HR Status	Char1		N		HR Status	🔽	Edit	▬
10	A.ACTION - Action	Char3		N		Action	🔽	Edit	▬
11	A.ACTION_REASON - Reason Code	Char3				Reason	🔽	Edit	▬
12	A.JOBCODE - Job Code	Char6				Job Code	🔽	Edit	▬
13	A.UW_JOBCODE_DESCR - UW_JOBCODE_DESCR	Char30				UW_JOBCODE_DESC	🔽	Edit	▬

Step 7. Click on the 🔽 Add Criteria icon for HR_STATUS

Edit Criteria Properties

Choose Expression 1 Type
- ⦿ Field
- ◯ Expression

Expression 1

Choose Record and Field

Record Alias.Fieldname:

🔍 A.HR_STATUS - HR Status

'Condition Type: [equal to ▼]

Choose Expression 2 Type
- ◯ Field
- ◯ Expression
- ⦿ Constant
- ◯ Prompt
- ◯ Subquery

Expression 2

Define Constant

Constant: [   ] 🔍

[OK]   [Cancel]

The Edit Criteria Properties page is displayed.

Step 8. Enter HR Status in the Constant box and click on the [OK] icon.
Be sure to enter the HR status as it is configured in the system, as PeopleSoft query is case sensitive.

Edit Criteria Properties

Choose Expression 1 Type

- ● Field
- ○ Expression

Expression 1

Choose Record and Field

Record Alias.Fieldname:

🔍 A.HR_STATUS - HR Status

'Condition Type: | equal to ▼ |

Choose Expression 2 Type

- ○ Field
- ○ Expression
- ● Constant
- ○ Prompt
- ○ Subquery

Expression 2

Define Constant

Constant: | A | 🔍

| OK | | Cancel |

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

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

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

Fields   Customize | Find | View All | 🎞   First ◀ 1-15 of 15 ▶ Last

Col Record.Fieldname	Format	Ord	XLAT	Agg	Heading Text	Add Criteria	Edit	Delete
1 A.BUSINESS_UNIT - Business Unit	Char5				Unit	🔧	Edit	−
2 A.DEPTID - Department	Char10				DeptID	🔧	Edit	−
3 A.EMPLID - EmplID	Char11				ID	🔧	Edit	−
4 A.NAME - Name	Char50				Name	🔧	Edit	−
5 A.EMPL_RCD - Empl Rcd Nbr	Num3.0				Empl Rcd#	🔧	Edit	−
6 A.HIRE_DT - First Start Date	Date				Start Date	🔧	Edit	−
7 A.EXPECTED_END_DATE - Expected Job End Date	Date				Planned Exit	🔧	Edit	−
8 A.EMPL_CLASS - Employee Classification	Char3		N		Empl Class	🔧	Edit	−
9 A.HR_STATUS - HR Status	Char1		N		HR Status	🔧	Edit	−
10 A.ACTION - Action	Char3		N		Action	🔧	Edit	−
11 A.ACTION_REASON - Reason Code	Char3				Reason	🔧	Edit	−
12 A.JOBCODE - Job Code	Char6				Job Code	🔧	Edit	−

Step 9. Click on the 🔧 Add Criteria icon for EMPL_CLASS
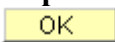
Step 10. Enter your employee classification in the Constant box and click on the
OK icon.

Step 11. Click on the Run tab.

The query results will automatically be displayed in a grid format.

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

View All | Rerun Query | Download to Excel   First ◀ 1-46 of 46 ▶ Last

	Unit	DeptID	ID	Name	Empl Rcd#	Start Date	Planned Exit	Empl Class	HR Status	Action	Reason	Job Code	UW_JOBCODE_DESC	Comp Rate	FTE
1	UWMSN	A534200	AMEE079	Waggener,Savannah	0	01/01/2009	06/21/2011	CJ	A	HIR	010	16100		20.000000	1.000000
2	UWMSN	A535005	AMEE081	Wafer,Susan	0	01/01/2009	01/01/2010	CJ	A	XFR	010	46072		20.000000	1.000000
3	UWMSN	A536700	TLEE012	Sweetgum,Mallory F	0	02/01/2009	06/01/2009	CJ	A	HIR	010	76200		20.000000	1.000000
4	UWMSN	A561000	TLEE013	Southern,Maria F	0	01/01/2009	06/01/2009	CJ	A	HIR	010	46401		20.000000	1.000000
5	UWMSN	A534200	AMEE124	Guertin,Truesdell	0	01/01/2009	01/01/2010	CJ	A	REH	050	24060		20.000000	1.000000
6	UWOSH	F301600	BNEE130	Mulberry,BN-TS-271	0	01/31/2010	09/01/2010	CJ	A	SBK	004	41161		20.000000	1.000000
7	UWMSN	A481500	HREE142	Magnolias,Ethan G	0	02/01/2009	03/01/2010	CJ	A	HIR	010	41161		20.000000	1.000000
8	UWMSN	A340270	PYEE241	Ashcroft,Emma O	0	01/01/2010	07/01/2010	CJ	A	HIR	010	89161		20.000000	1.000000
9	UWEAU	C032000	00000591	HARRISON,KEVIN K	0	08/10/2010	12/31/2011	CJ	A	HIR	010	00520		0.000000	0.000000
10	UWMIL	B487800	HREE101	Guerrero,Olivia M	0	02/01/2009	12/31/2015	CJ	A	HIR	010	00160		20.000000	1.000000
11	UWMSN	A853933	TLEE134	Persimmon,Julian	0	02/01/2009	07/31/2009	CJ	A	HIR	010	77262		20.000000	1.000000
12	UWOSH	F301600	BNEE090	Redbay,BN-TS-233	0	01/31/2010	07/31/2010	CJ	A	HIR	010	41161		20.000000	1.000000
13	UWOSH	F301600	BNEE299	Persimmon,BN-TS-059	0	01/01/2009	09/01/2010	CJ	A	DTA	004	00101		20.000000	1.000000
14	UWOSH	F301600	BNEE327	Wahlers,BN-TS-274-2	0	09/01/2010	12/31/2010	CJ	A	HIR	010	41161		10.000000	1.000000

The results of your query can now be saved as an Excel spreadsheet.

Step 12. To save the query click on the 💾 Save) icon.

Enter a name to save this query:

'Query: PRJ_EMPL_RPT

Description:

Folder:

'Query Type: User ▼

'Owner: Private ▼

Query Definition:

OK   Cancel

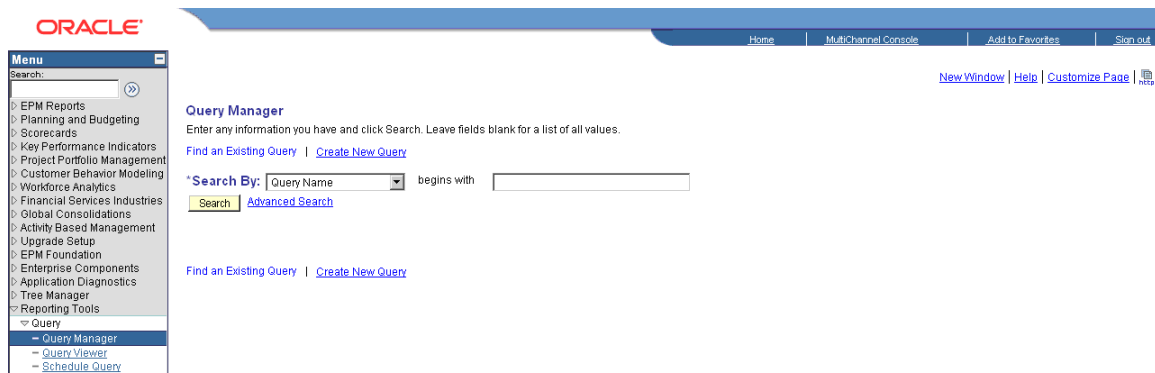**Step 13.** Enter a query name and click on the OK icon.

Queries can be saved Private or Public queries. If you are saving the query as a public query, you will want to use the naming conventions developed by the organization.

VI. Creating a Query using Multiple Tables

Step 1. Navigate to the Query Manager

Reporting Tools > Query > Query Manager

Step 2. Click on Create New Query

This will open the Find an Existing Record search page where you select the table that you want to use

Step 3. Enter UW_HR in the begins with box and click on the Search icon.

Step 4. Find UW_HR_ALLJOB_VW table and click on the Add Record icon.

Records	Query	Expressions	Prompts	Fields	Criteria	Having	View SQL	Run

Query Name: New Unsaved 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 UW_HR_ALLJOB_VW - OWE - All Job/Comp/Per Org Vw   Hierarchy Join ☐

Check All	Uncheck All

Fields   Find | View 100   First ◄ 1-50 of 122 ► Last

- ☐ 🔑 EMPLID - EmplID
- ☐ 🔑 EMPL_RCD - Empl Rcd Nbr
- ☐ 🔑 EFFDT - Effective Date
- ☐ 🔑 EFFSEQ - Effective Sequence
- ☐   NAME - Name
- ☐   ACCT_CD - Combination Code

Step 5. Choose the following fields:

> BUSINESS_UNIT
> DEPTID
> EMPLID
> NAME

Step 6. Click on the Records tab. Find UW_HR_ADDRES_VW and click on the Join Record icon.

Records	Query	Expressions	Prompts	Fields	Criteria	Having	View SQL	Run

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

Find an Existing Record

*Search By: [Record Name ▼] begins with [   ]

[Search] Advanced Search

Search Results

Customize | Find | View All | First ◄ 1-5 of 5 ► Last

Record	Join Record	Show Fields
Recname		
UW_HR_ADDRES_VW - Address View - MV Snapshot	Join Record	Show Fields
UW_HR_ALLJOB_VW - OWE - All Job/Comp/Per Org Vw	Join Record	Show Fields
UW_HR_CURJOB_VW - OWE-Current Job/Comp/PerOrg Vw	Join Record	Show Fields
UW_HR_FMLA_VW - UW FMLA Request Record	Join Record	Show Fields
UW_HR_MNGPRF_VW - OWE Manage Profile Mat. View	Join Record	Show Fields

🖫 Save   Save As   New Query   Preferences   Properties   New Union   🔍 Return to Search

The Select join type page is displayed.
Using Query Manager, you can create a join between two records (any record join) by selecting your initial base record, defining its output fields and associated criteria, and then returning to the Record page to select the second record.

If you have AutoJoin Wizard option enabled, then PeopleSoft Query automatically attempts to join the new record to the existing record by looking for matching columns on the two records. This function does not always create the correct join.

Select join type and then record to join with UW_HR_ADDRES_VW - Address View - MV Snapshot.

Join Type
⦿ Join to filter and get additional fields (Standard Join)
○ Join to get additional fields only (Left outer join)

Join Record	Customize | Find | ▦	First ◀ 1 of 1 ▶ Last
A = UW_HR_ALLJOB_VW - OWE - All Job/Comp/Per Org Vw		

Cancel

Step 7. Click on A = UW_HR_ALLJOB_VW - OWE - All Job/Comp/Per Org Vw icon.
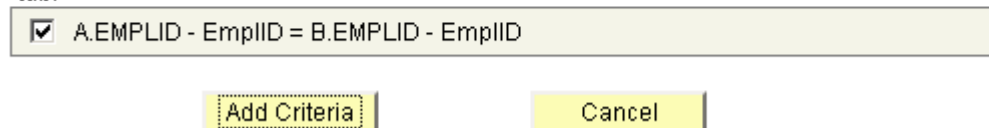
The Auto Join automatically brings back the fields it has determined that the join should be made on.

Step 8. Click on the Add Criteria icon.

Auto Join Criteria

Query has detected the join conditions shown below.

Use the checkboxes to unselect the criteria that you do not want to add to the query and click add criteria when done. The criteria added can always be modified later using the criteria tab.

☑ A.EMPLID - EmplID = B.EMPLID - EmplID

Add Criteria   Cancel

Step 9. Choose the following fields from UW_HR_ADDRES_VW:

      ADDRESS_TYPE
      ADDR_TYPE_DESCR
      ADDRESS1
      ADDRESS2
      ADDRESS3
      ADDRESS4

Records	Query	Expressions	Prompts	Fields	Criteria	Having	View SQL	Run

Query Name: New Unsaved 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	UW_HR_ALLJOB_VW - OWE - All Job/Comp/Per Org Vw	Hierarchy Join	⊟
⌷ B	UW_HR_ADDRES_VW - Address View - MV Snapshot	Hierarchy Join	⊟

Check All	Uncheck All

Fields   Find | View All   First ◄ 1-31 of 31 ► Last

		Field	
☐	🔑	EMPLID - EmplID	🔍₊
☐		NAME - Name	🔍₊
☑	🔑	ADDRESS_TYPE - Address Type	🔍₊
☑		ADDR_TYPE_DESCR - Address Type	🔍₊
☐	🔑	EFFDT - Effective Date	🔍₊
☐		EFF_STATUS - Status as of Effective Date	🔍₊
☐		UW_EFF_STATS_DESCR - Effective Status Description	🔍₊
☑		ADDRESS1 - Address Line 1	🔍₊
☑		ADDRESS2 - Address Line 2	🔍₊
☑		ADDRESS3 - Address Line 3	🔍₊
☑		ADDRESS4 - Address Line 4	🔍₊

Step 10. Click on the Fields tab.

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

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

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

Fields   Customize | Find | View All | ▦   First ◄ 1-10 of 10 ► Last

Col	Record.Fieldname	Format	Ord	XLAT	Agg	Heading Text	Add Criteria	Edit	Delete
1	A.BUSINESS_UNIT - Business Unit	Char5				Unit	🔍₊	Edit	⊟
2	A.DEPTID - Department	Char10				DeptID	🔍₊	Edit	⊟
3	A.EMPLID - EmplID	Char11				ID	🔍₊	Edit	⊟
4	A.NAME - Name	Char50				Name	🔍₊	Edit	⊟
5	B.ADDRESS_TYPE - Address Type	Char4				Addr Type	🔍₊	Edit	⊟
6	B.ADDR_TYPE_DESCR - Address Type	Char30				Address Type	🔍₊	Edit	⊟
7	B.ADDRESS1 - Address Line 1	Char55				Address 1	🔍₊	Edit	⊟
8	B.ADDRESS2 - Address Line 2	Char55				Address 2	🔍₊	Edit	⊟
9	B.ADDRESS3 - Address Line 3	Char55				Address 3	🔍₊	Edit	⊟
10	B.ADDRESS4 - Address Line 4	Char55				Address 4	🔍₊	Edit	⊟

Save   Save As   New Query   Preferences   Properties   New Union   Return to Search

Step 11. Click on the 🔍₊ Add Criteria icon for BUSINESS_UNIT

Edit Criteria Properties

Choose Expression 1 Type	Expression 1
● Field ○ Expression	**Choose Record and Field** **Record Alias.Fieldname:** 🔍 A.BUSINESS_UNIT - Business Uni

'Condition Type: [equal to ▼]

Choose Expression 2 Type	Expression 2
○ Field ○ Expression ● Constant ○ Prompt ○ Subquery	**Define Constant** Constant: [ ] 🔍

[OK] [Cancel]

Step 12. Enter your business unit in the Constant box and click on the [OK] icon.

Edit Criteria Properties

Choose Expression 1 Type	Expression 1
● Field ○ Expression	**Choose Record and Field** **Record Alias.Fieldname:** 🔍 A.BUSINESS_UNIT - Business Uni

'Condition Type: [equal to ▼]

Choose Expression 2 Type	Expression 2
○ Field ○ Expression ● Constant ○ Prompt ○ Subquery	**Define Constant** Constant: [UWMSN|] 🔍

[OK] [Cancel]

Step 13. Click on the Run page. The query results will automatically be displayed in a grid format.

Records	Query	Expressions	Prompts	Fields	Criteria	Having	View SQL	Run

View All | Rerun Query | Download to Excel   First ◀ 1-100 of 798 ▶ Last

	Unit	DeptID	ID	Name	Addr Type	Address Type	Address 1	Address 2	Address 3	Address 4
1	UWMSN	A481500	00000523	Wade,Luke S	HOME	Home	1601 GOLDEN OAK LN	-	-	-
2	UWMSN	A062040	00000543	JEMS-CLinkler,Aouse	BUSN	Business	1210 W DAYTON ST	-	-	-
3	UWMSN	A062040	00000543	JEMS-CLinkler,Aouse	BUSN	Business	1210 W DAYTON ST	-	-	-
4	UWMSN	A062040	00000546	JEMS-CLinkler,Louse	BUSN	Business	1210 W DAYTON ST	-	-	-
5	UWMSN	A062040	00000546	JEMS-CLinkler,Louse	BUSN	Business	1210 W DAYTON ST	-	-	-
6	UWMSN	A062040	00000547	JEMS-CLinkler,Aouse	BUSN	Business	1210 W DAYTON ST	-	-	-
7	UWMSN	A062040	00000547	JEMS-CLinkler,Aouse	BUSN	Business	1210 W DAYTON ST	-	-	-
8	UWMSN	A534900	00000551	Jems-Park,Jim	HOME	Home	12 Main	-	-	-
9	UWMSN	A534900	00000551	Jems-Park,Jim	BUSN	Business	1656 LINDEN DR	-	-	-
10	UWMSN	A481500	AMEE002	Gubbe,Maya F	HOME	Home	3001-3003 HERMINA STREET	-	-	-
11	UWMSN	A535005	AMEE083	Wadford,Sienna	HOME	Home	3600 N. 55TH STREET	-	-	-
12	UWMSN	A532000	AMEE087	Smoothleaf,Sophia	HOME	Home	4610 BONNER LANE	-	-	-
13	UWMSN	A534200	AMEE099	Ioms,Tristan	HOME	Home	3700 N. 37TH STREET	-	-	-
14	UWMSN	A534200	AMEE134	Guajardo,William	HOME	Home	3706 LEXINGTON AVENUE	-	-	-

Step 14. Enter a Query Definition and save the query as a private query.

Enter a name to save this query:

*Query:	MSN_EMPL_ADDR
Description:	
Folder:	
*Query Type:	User ▼
*Owner:	Private ▼

Query Definition:

[OK] [Cancel]