

Aptean

External Data Access Guide

WCS - 3.4

24th November 2011 - 11.1
Reference: UG 106181

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1 Summary

The Calidus 3*p*/Mobile database can be accessed for client reporting purposes using a Microsoft-standard ODBC data connection.

The suggested mechanism for accessing the data is:

1. Create a link database
2. Create an ODBC Data Source
3. Get the data from the ODBC data source with Microsoft Excel



2 Details

2.1 Set-up Requirements

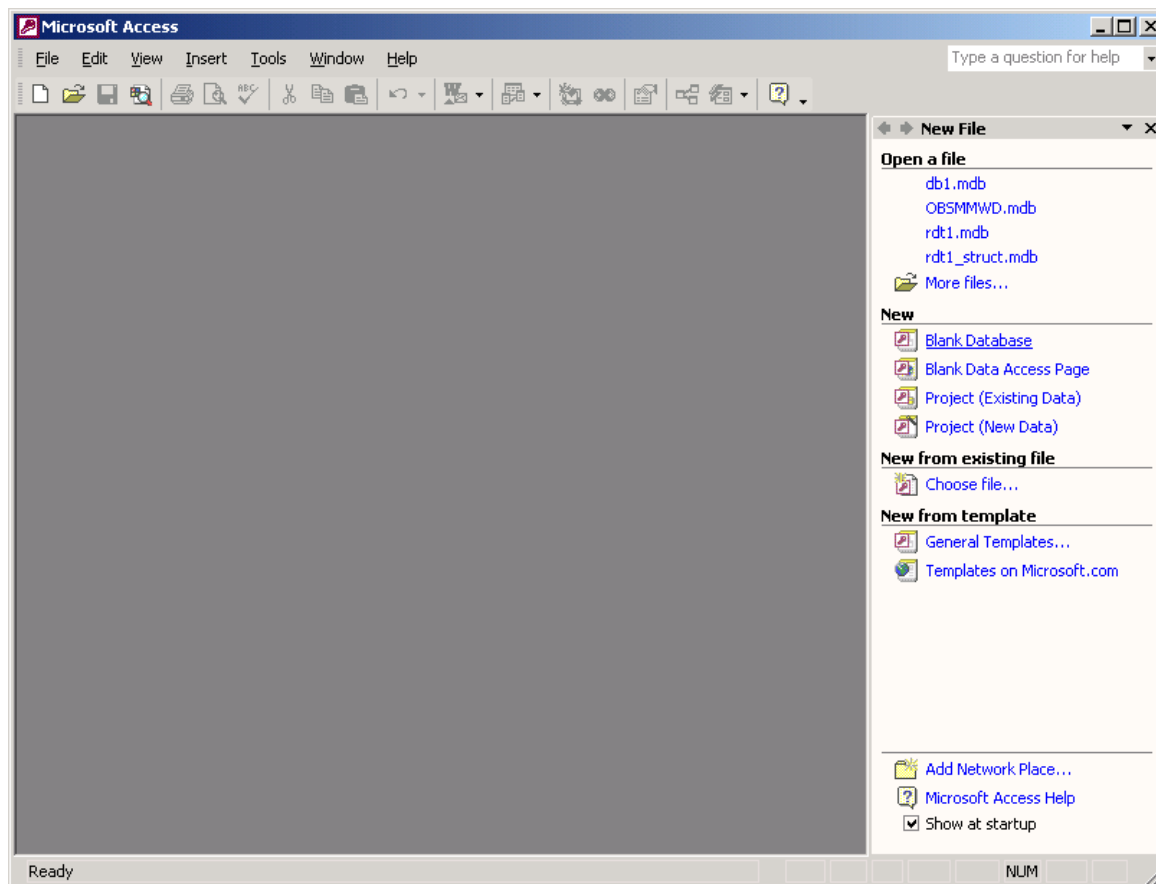
The Calidus 3*p*-Mobile system must be set up for your data.

You must have access to the logging database. This document assumes that this has been created under a network drive X:

2.2 Create a Link Database

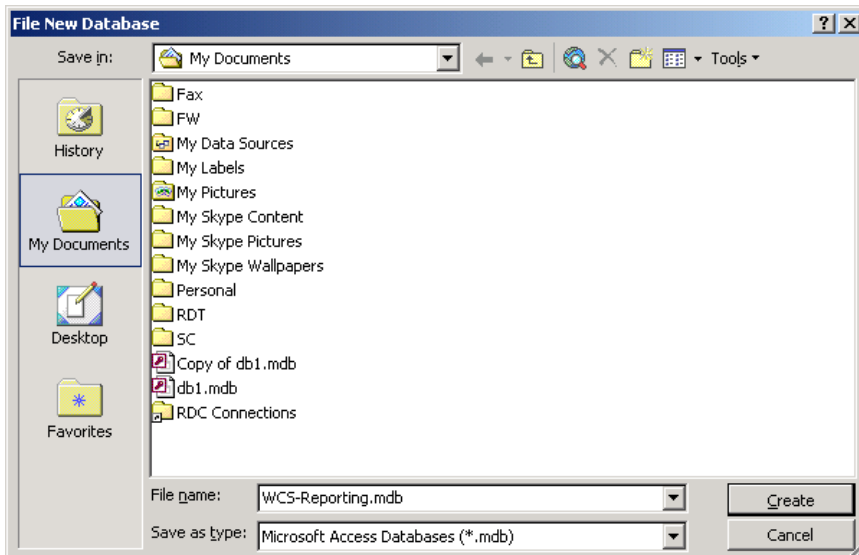
In order to minimise the impact of the query on the Calidus 3*p*-Mobile system, this should be performed on a link database. It is possible to access the database directly, but this is **not** recommended by OBS.

Create a new Access database.

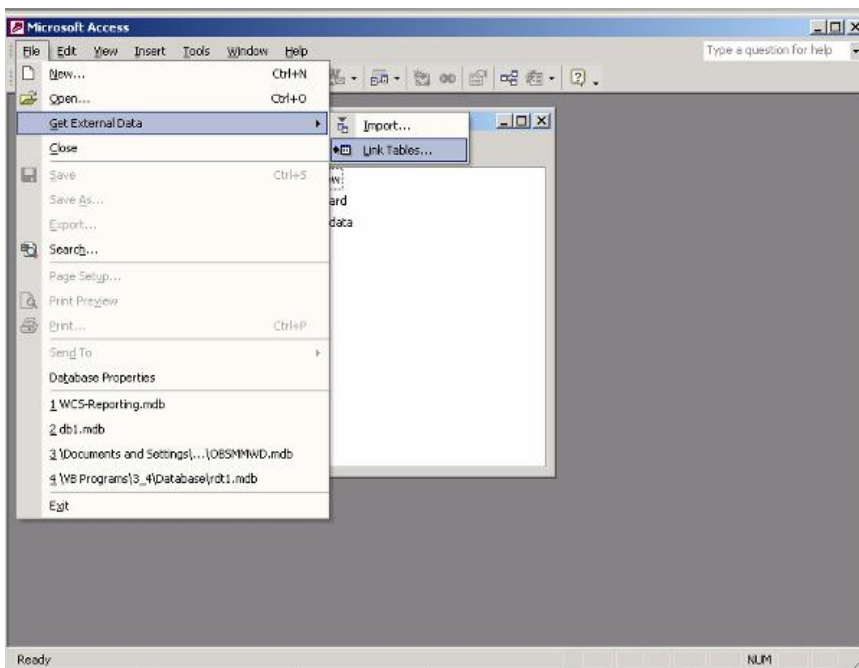


This database can be created locally (or your PC) if this is only being used by you, or can be created on any network machine (for example, the WCS Server) if used by many people.



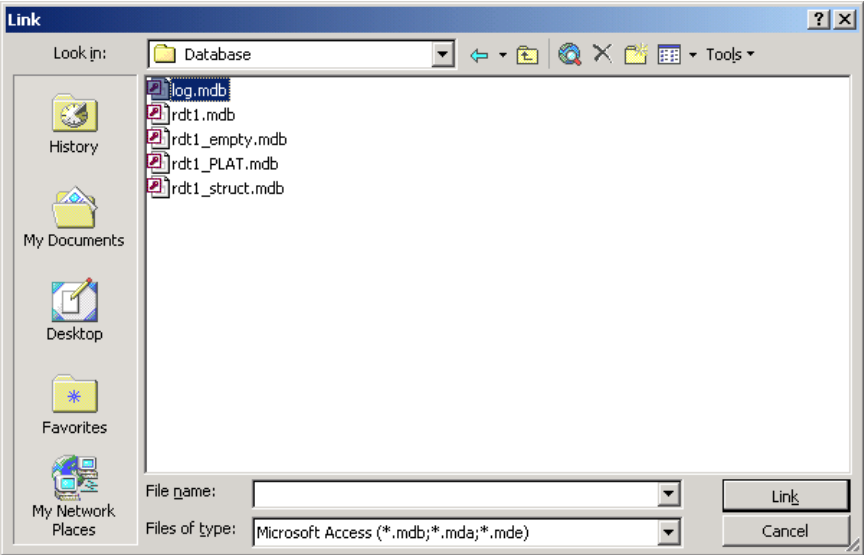


In this case this has been called WCS-Reporting.mdb, created in My Documents

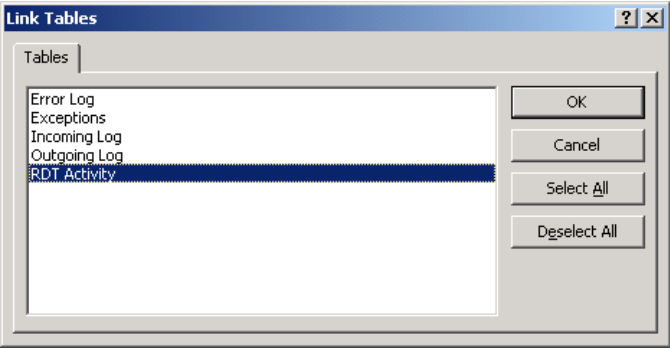


Choose Get External Data/Link Tables from the File menu.



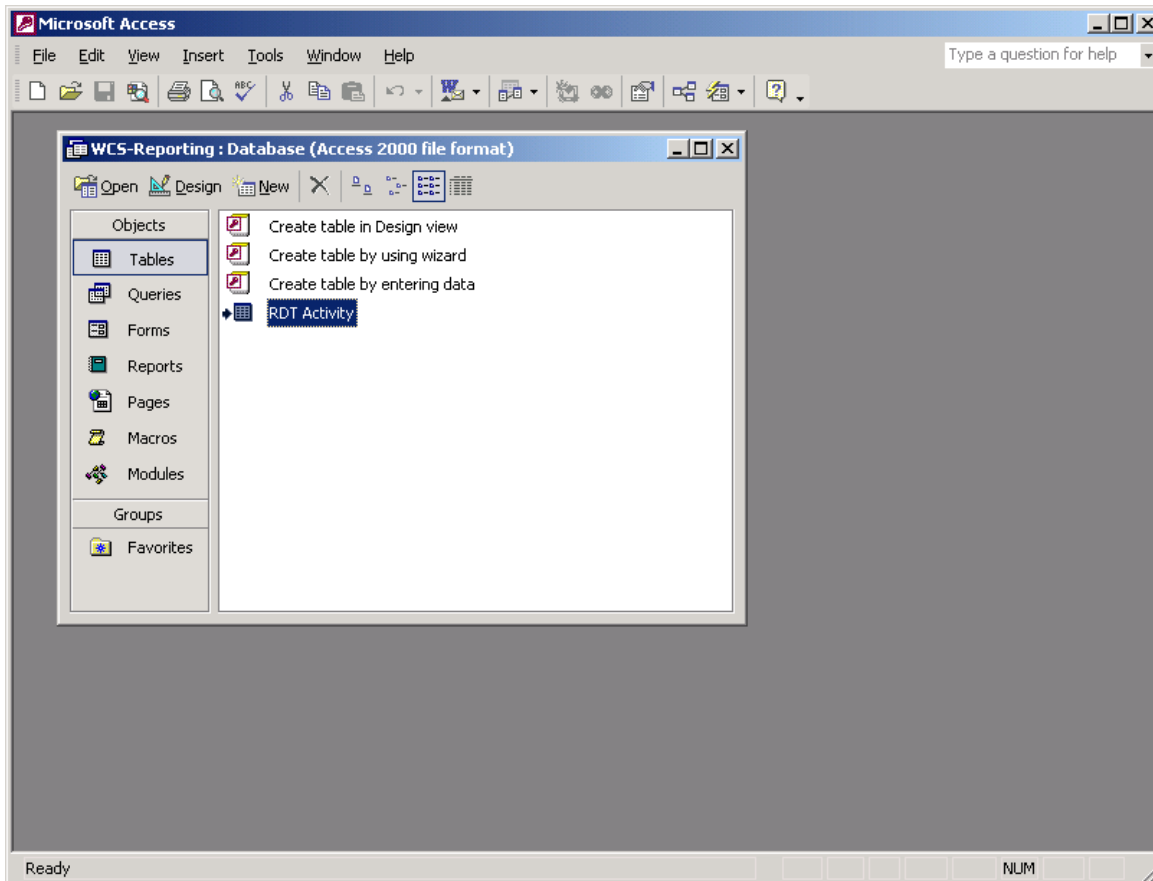


Link to your Calidus 3p-Mobile logging database. This is normally in X:\Log.mdb or X:\Log1.mdb.



Link the table ?RDT Activity?



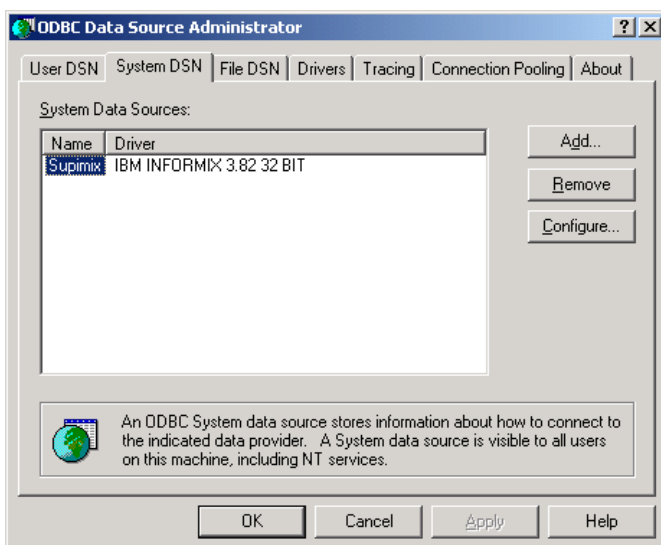


Save your new database by closing Access.

2.3 Create an ODBC Data Source

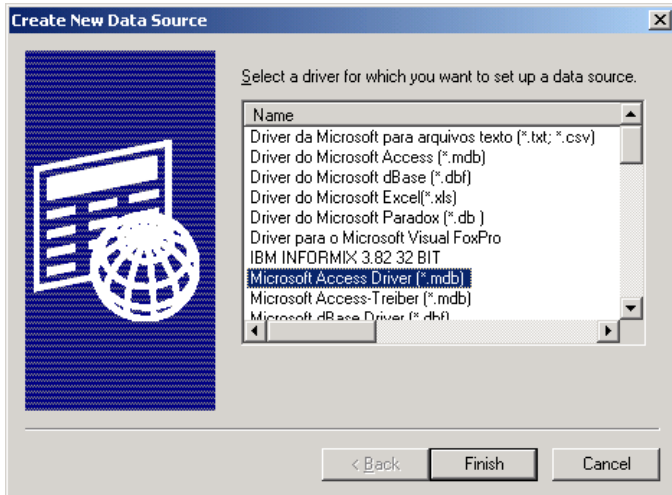
Choose Start/Settings/Control Panel/Administrative Tools/Data Sources (ODBC) from the Start menu.

If this option is unavailable on your PC, you must have an Administrator user do this for you.



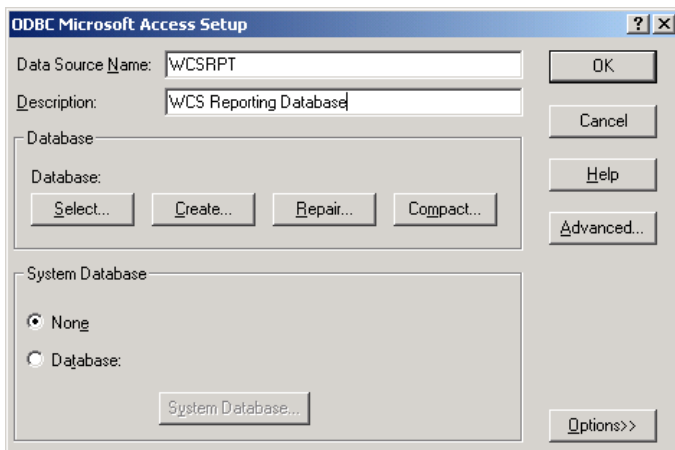
Create a new System DSN





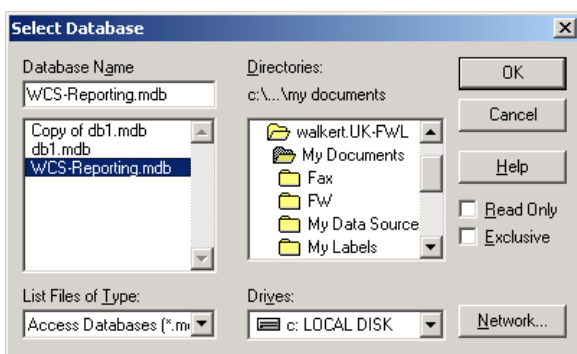
Choose ?Microsoft Access Driver (*.mdb)?.

If this option is unavailable on your PC, the Microsoft Data Access Components (MDAC) must be installed on your PC.



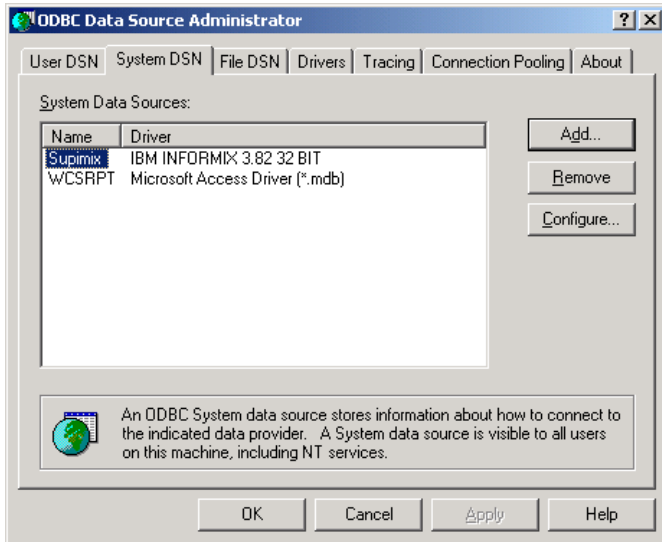
Ensure the Data Source Name is 8 characters or less.

Select your data source using the ?Select?? button.



Click ?OK? to save the new data source

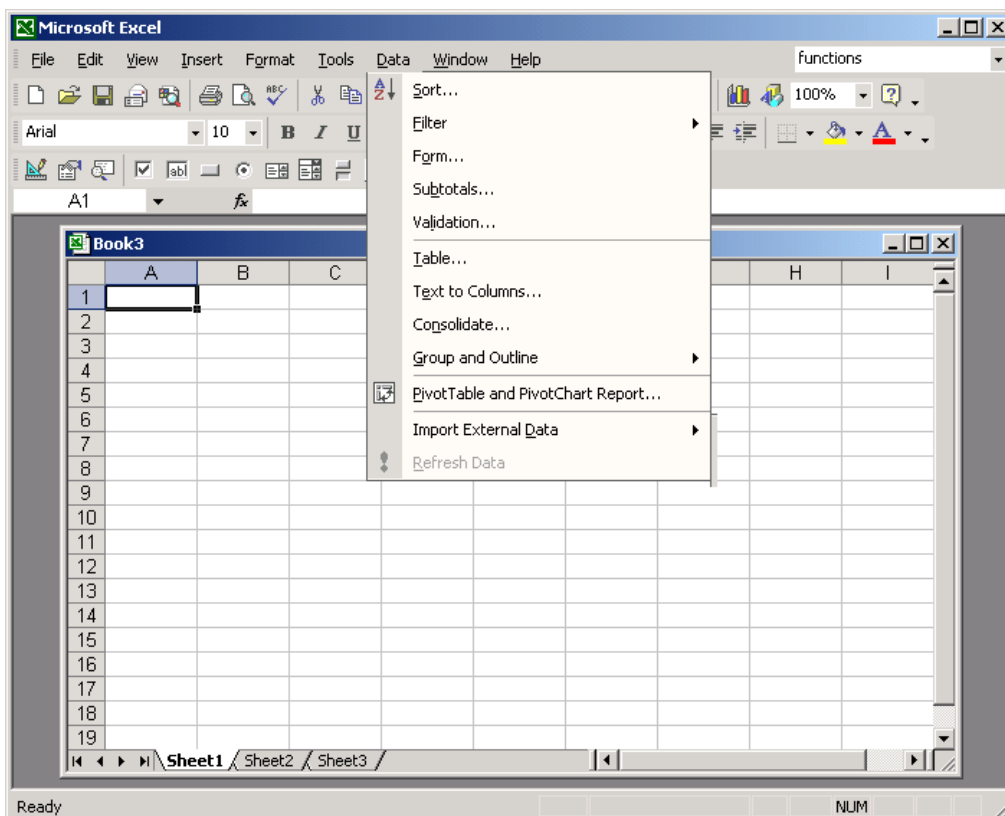




2.4 Access the Data in Microsoft Excel

Now that this is set up, you can access the Calidus 3p-Mobile logging data from external sources. In this example, this is from Microsoft Excel, but could just as easily be from any ODBC-compliant reporting tool, such as Crystal Reports or Cognos Impromptu.

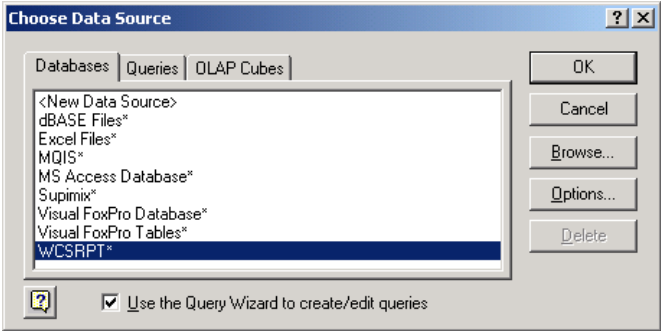
Open Excel and create a new workbook.



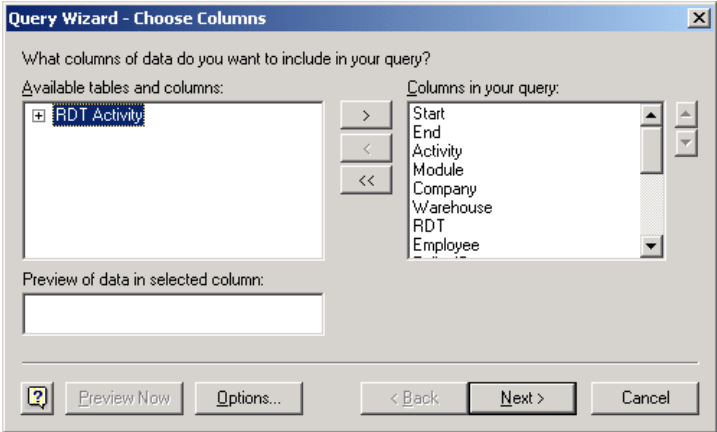
Choose Import External Data/New Database Query from the Data menu.

At this point, you may be prompted to install Microsoft Query for Excel. This may have to be completed by an Administrator.

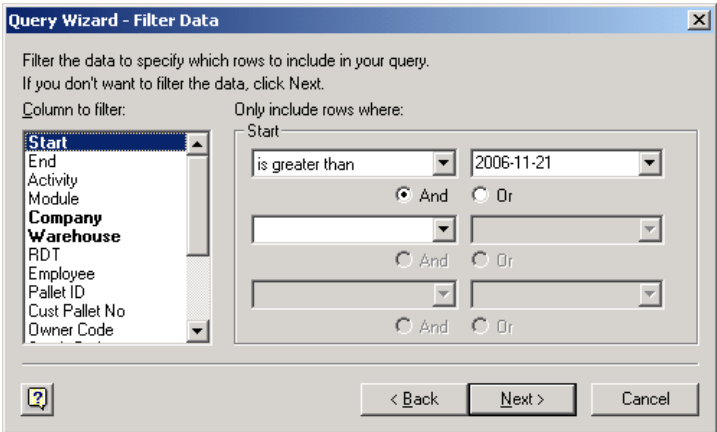




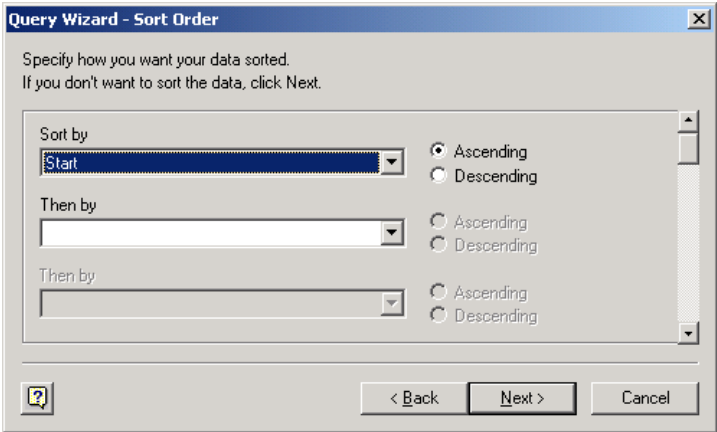
Choose the WCS Reporting Data Source we set up earlier.



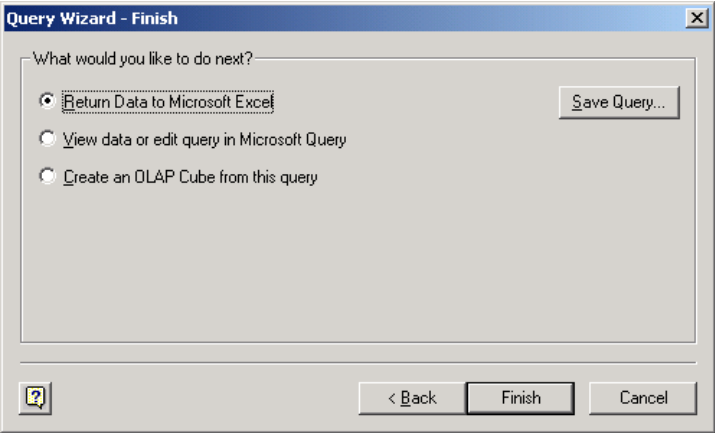
Choose the table to report. In this case, you will want the RDT Activity table.



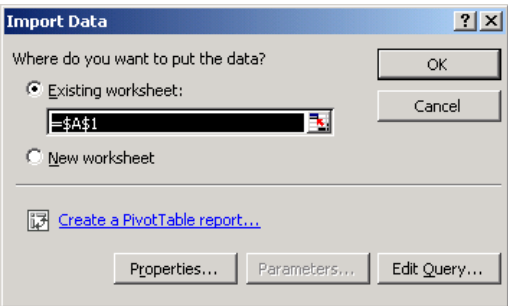
Choose the data you want to filter.



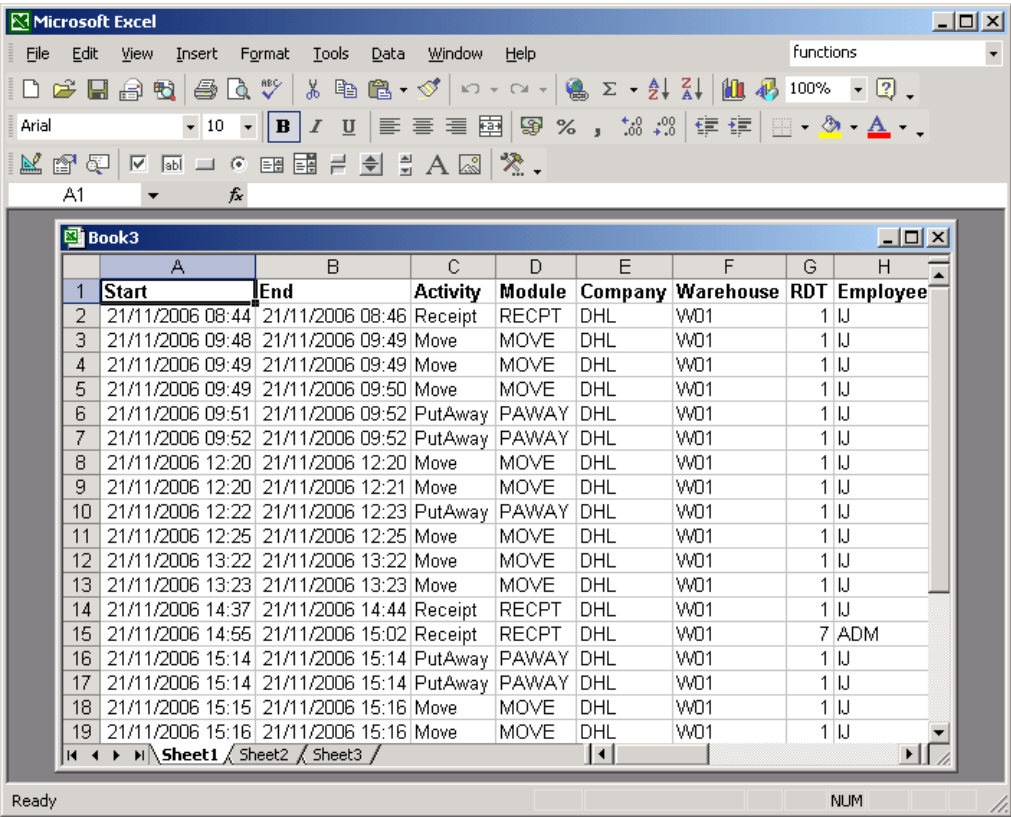
Choose the Sort Order



Return the data back into Excel.



Choose the cell into which you want the data to be loaded.



Once the data is loaded in the form, you can filter and format the data in any way you want.



Start	Activity	Employee	Pallet I	Cust Pallet No	Owner Cot	Stock Co
21/11/2006 08:44	Receipt	IJ				
21/11/2006 09:48	Move	IJ	00000203		D05	909
21/11/2006 09:49	Move	IJ	00000259	808082	D05	000
21/11/2006 09:49	Move	IJ	00000260	808081	D05	000
21/11/2006 09:51	PutAway	IJ	00000268	330576409624701472	D05	890
21/11/2006 09:52	PutAway	IJ	00000269	330576409624701489	D05	890
21/11/2006 12:20	Move	IJ	00000268	330576409624701472	D05	890
21/11/2006 12:20	Move	IJ	00000269	330576409624701489	D05	890
21/11/2006 12:22	PutAway	IJ	00000267	330576409603300788	D05	890
21/11/2006 12:25	Move	IJ	00000267	330576409603300788	D05	890
21/11/2006 13:22	Move	IJ	00000203		D05	909
21/11/2006 13:23	Move	IJ	00000203		D05	909
21/11/2006 14:37	Receipt	IJ				
21/11/2006 14:55	Receipt	ADM				
21/11/2006 15:14	PutAway	IJ	00000270	330576409624701441	D05	890
21/11/2006 15:14	PutAway	IJ	00000271	330049000628501702	D05	110
21/11/2006 15:15	Move	IJ	00000270	330576409624701441	D05	890
21/11/2006 15:16	Move	IJ	00000271	330049000628501702	D05	110

You can refresh the data by choosing Refresh Data from Data menu or the menu shown when right-clicking on the cells.

Start	Activity	Employee	Pallet I	Cust Pallet No	Owner Cot	Stock Co
21/11/2006 08:44	Receipt	IJ				
21/11/2006 09:48	Move	IJ	00000203		D05	9091
21/11/2006 09:49	Move	IJ	00000259	808082	D05	000
21/11/2006 09:49	Move	IJ	00000260	808081	D05	000
21/11/2006 09:51	PutAway	IJ	00000268	330576409624701472	D05	8907
21/11/2006 09:52	PutAway	IJ	00000269	330576409624701489	D05	8907
21/11/2006 12:20	Move	IJ	00000268	330576409624701472	D05	8907
21/11/2006 12:20	Move	IJ	00000269	330576409624701489	D05	8907
21/11/2006 12:22	PutAway	IJ	00000267	330576409603300788	D05	8907
21/11/2006 12:25	Move	IJ	00000267	330576409603300788	D05	8907
21/11/2006 13:22	Move	IJ	00000203		D05	9091
21/11/2006 13:23	Move	IJ	00000203		D05	9091
21/11/2006 14:37	Receipt	IJ				
21/11/2006 14:55	Receipt	ADM				
21/11/2006 15:14	PutAway	IJ	00000270	330576409624701441	D05	8907
21/11/2006 15:14	PutAway	IJ	00000271	330049000628501702	D05	11014
21/11/2006 15:15	Move	IJ	00000270	330576409624701441	D05	8907
21/11/2006 15:16	Move	IJ	00000271	330049000628501702	D05	11014

The sheet will retain its formatting.

You can then save this worksheet for running in the future.

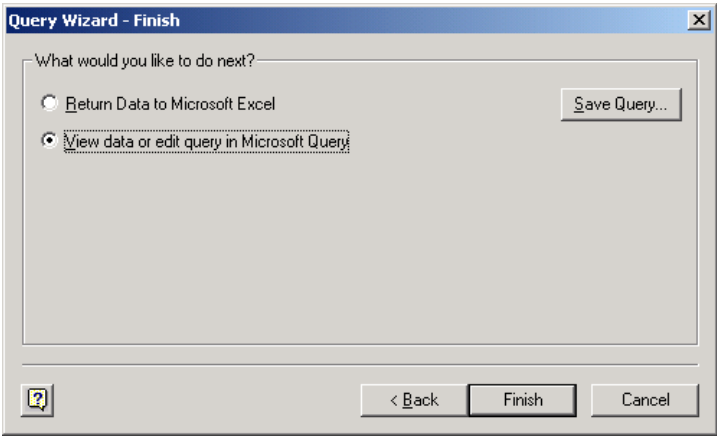


2.5 Adding Parameters

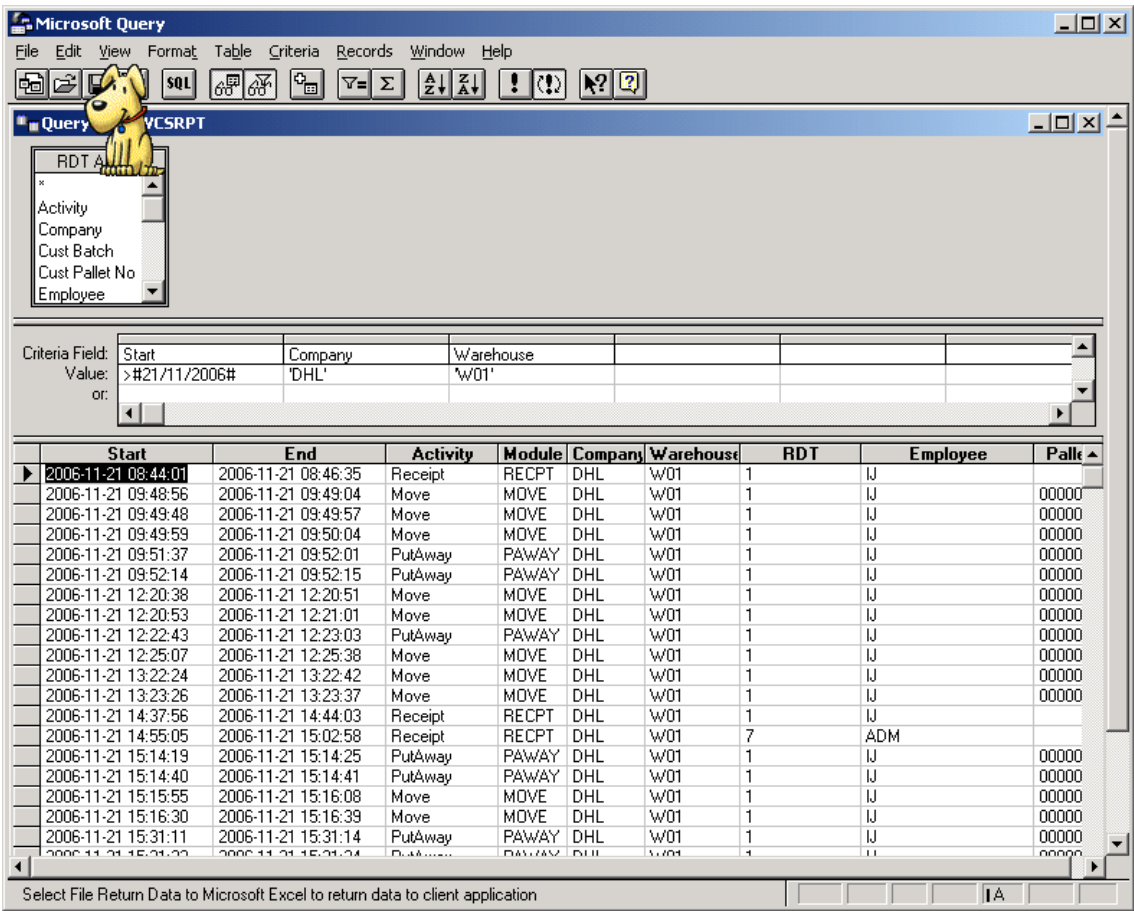
Parameters allow you to specify the data to be returned ?on the fly? by saying what you want it to match.

Choose Import External Data/Edit Query from the Data menu.

Keep hitting Next until you get to the end of the query, then click on the ?View Data in Microsoft Query? option, before clicking Finish.



You will be taken into the Microsoft Query application.



Make sure the Auto-Query button (!) is not pressed in.



Microsoft Query

File Edit View Format Table Criteria Records Window Help

Query from WCSRPT

RTD Activity

Activity
Company
Cust Batch
Cust Pallet No
Employee

Criteria Field: Start Company Warehouse
Value: >#21/11/2006# 'DHL' 'W01'

Start	End	Activity	Module	Company	Warehouse	RTD	Employee	Pallet
2006-11-21 08:44:01	2006-11-21 08:46:35	Receipt	RECPT	DHL	W01	1	IJ	
2006-11-21 09:48:56	2006-11-21 09:49:04	Move	MOVE	DHL	W01	1	IJ	00000
2006-11-21 09:49:48	2006-11-21 09:49:57	Move	MOVE	DHL	W01	1	IJ	00000
2006-11-21 09:49:59	2006-11-21 09:50:04	Move	MOVE	DHL	W01	1	IJ	00000
2006-11-21 09:51:37	2006-11-21 09:52:01	PutAway	PAWAY	DHL	W01	1	IJ	00000
2006-11-21 09:52:14	2006-11-21 09:52:15	PutAway	PAWAY	DHL	W01	1	IJ	00000
2006-11-21 12:20:38	2006-11-21 12:20:51	Move	MOVE	DHL	W01	1	IJ	00000
2006-11-21 12:20:53	2006-11-21 12:21:01	Move	MOVE	DHL	W01	1	IJ	00000
2006-11-21 12:22:43	2006-11-21 12:23:03	PutAway	PAWAY	DHL	W01	1	IJ	00000
2006-11-21 12:25:07	2006-11-21 12:25:38	Move	MOVE	DHL	W01	1	IJ	00000
2006-11-21 13:22:24	2006-11-21 13:22:42	Move	MOVE	DHL	W01	1	IJ	00000
2006-11-21 13:23:26	2006-11-21 13:23:37	Move	MOVE	DHL	W01	1	IJ	00000
2006-11-21 14:37:56	2006-11-21 14:44:03	Receipt	RECPT	DHL	W01	1	IJ	
2006-11-21 14:55:05	2006-11-21 15:02:58	Receipt	RECPT	DHL	W01	7	ADM	
2006-11-21 15:14:19	2006-11-21 15:14:25	PutAway	PAWAY	DHL	W01	1	IJ	00000
2006-11-21 15:14:40	2006-11-21 15:14:41	PutAway	PAWAY	DHL	W01	1	IJ	00000
2006-11-21 15:15:55	2006-11-21 15:16:08	Move	MOVE	DHL	W01	1	IJ	00000
2006-11-21 15:16:30	2006-11-21 15:16:39	Move	MOVE	DHL	W01	1	IJ	00000
2006-11-21 15:31:11	2006-11-21 15:31:14	PutAway	PAWAY	DHL	W01	1	IJ	00000
2006-11-21 15:31:22	2006-11-21 15:31:24	PutAway	PAWAY	DHL	W01	1	IJ	00000

Choose Query Now to run the query and display results

Choose the item you wish to parameterise.

Microsoft Query

File Edit View Format Table Criteria Records Window Help

Query from WCSRPT

RTD Activity

Activity
Company
Cust Batch
Cust Pallet No
Employee

Criteria Field: Start Company Warehouse Employee
Value: >#21/11/2006# 'DHL' 'W01'

Start	End	Activity	Module	Company	Warehouse	RTD	Employee	Pallet
2006-11-21 08:44:01	2006-11-21 08:46:35	Receipt	RECPT	DHL	W01	1	IJ	
2006-11-21 09:48:56	2006-11-21 09:49:04	Move	MOVE	DHL	W01	1	IJ	00000
2006-11-21 09:49:48	2006-11-21 09:49:57	Move	MOVE	DHL	W01	1	IJ	00000
2006-11-21 09:49:59	2006-11-21 09:50:04	Move	MOVE	DHL	W01	1	IJ	00000
2006-11-21 09:51:37	2006-11-21 09:52:01	PutAway	PAWAY	DHL	W01	1	IJ	00000
2006-11-21 09:52:14	2006-11-21 09:52:15	PutAway	PAWAY	DHL	W01	1	IJ	00000
2006-11-21 12:20:38	2006-11-21 12:20:51	Move	MOVE	DHL	W01	1	IJ	00000
2006-11-21 12:20:53	2006-11-21 12:21:01	Move	MOVE	DHL	W01	1	IJ	00000
2006-11-21 12:22:43	2006-11-21 12:23:03	PutAway	PAWAY	DHL	W01	1	IJ	00000
2006-11-21 12:25:07	2006-11-21 12:25:38	Move	MOVE	DHL	W01	1	IJ	00000
2006-11-21 13:22:24	2006-11-21 13:22:42	Move	MOVE	DHL	W01	1	IJ	00000
2006-11-21 13:23:26	2006-11-21 13:23:37	Move	MOVE	DHL	W01	1	IJ	00000
2006-11-21 14:37:56	2006-11-21 14:44:03	Receipt	RECPT	DHL	W01	1	IJ	
2006-11-21 14:55:05	2006-11-21 15:02:58	Receipt	RECPT	DHL	W01	7	ADM	
2006-11-21 15:14:19	2006-11-21 15:14:25	PutAway	PAWAY	DHL	W01	1	IJ	00000
2006-11-21 15:14:40	2006-11-21 15:14:41	PutAway	PAWAY	DHL	W01	1	IJ	00000
2006-11-21 15:15:55	2006-11-21 15:16:08	Move	MOVE	DHL	W01	1	IJ	00000
2006-11-21 15:16:30	2006-11-21 15:16:39	Move	MOVE	DHL	W01	1	IJ	00000
2006-11-21 15:31:11	2006-11-21 15:31:14	PutAway	PAWAY	DHL	W01	1	IJ	00000
2006-11-21 15:31:22	2006-11-21 15:31:24	PutAway	PAWAY	DHL	W01	1	IJ	00000

Select File Return Data to Microsoft Excel to return data to client application



Enter a prompt for the value.

Microsoft Query

File Edit View Format Table Criteria Records Window Help

Query from WCSRPT

Criteria Field: Start Company Warehouse Employee
Value: >#21/11/2006# 'DHL' 'W01' [Enter an Employee]

Start	End	Activity	Module	Company	Warehouse	RD	Employee	Pallet
2006-11-21 08:44:01	2006-11-21 08:46:35	Receipt	RECPT	DHL	W01	1	IJ	
2006-11-21 09:48:56	2006-11-21 09:49:04	Move	MOVE	DHL	W01	1	IJ	00000
2006-11-21 09:49:48	2006-11-21 09:49:57	Move	MOVE	DHL	W01	1	IJ	00000
2006-11-21 09:49:59	2006-11-21 09:50:04	Move	MOVE	DHL	W01	1	IJ	00000
2006-11-21 09:51:37	2006-11-21 09:52:01	PutAway	PAWAY	DHL	W01	1	IJ	00000
2006-11-21 09:52:14	2006-11-21 09:52:15	PutAway	PAWAY	DHL	W01	1	IJ	00000
2006-11-21 12:20:38	2006-11-21 12:20:51	Move	MOVE	DHL	W01	1	IJ	00000
2006-11-21 12:20:53	2006-11-21 12:21:01	Move	MOVE	DHL	W01	1	IJ	00000
2006-11-21 12:22:43	2006-11-21 12:23:03	PutAway	PAWAY	DHL	W01	1	IJ	00000
2006-11-21 12:25:07	2006-11-21 12:25:38	Move	MOVE	DHL	W01	1	IJ	00000
2006-11-21 13:22:24	2006-11-21 13:22:42	Move	MOVE	DHL	W01	1	IJ	00000
2006-11-21 13:23:26	2006-11-21 13:23:37	Move	MOVE	DHL	W01	1	IJ	00000
2006-11-21 14:37:56	2006-11-21 14:44:03	Receipt	RECPT	DHL	W01	1	IJ	
2006-11-21 14:55:05	2006-11-21 15:02:58	Receipt	RECPT	DHL	W01	7	ADM	
2006-11-21 15:14:19	2006-11-21 15:14:25	PutAway	PAWAY	DHL	W01	1	IJ	00000
2006-11-21 15:14:40	2006-11-21 15:14:41	PutAway	PAWAY	DHL	W01	1	IJ	00000
2006-11-21 15:15:55	2006-11-21 15:16:08	Move	MOVE	DHL	W01	1	IJ	00000
2006-11-21 15:16:30	2006-11-21 15:16:39	Move	MOVE	DHL	W01	1	IJ	00000
2006-11-21 15:31:11	2006-11-21 15:31:14	PutAway	PAWAY	DHL	W01	1	IJ	00000
2006-11-21 15:31:22	2006-11-21 15:31:24	PutAway	PAWAY	DHL	W01	1	IJ	00000

Select File Return Data to Microsoft Excel to return data to client application

Hit Enter. You will be prompted for an employee code in a popup box. Enter one.

Enter Parameter Value

Enter an Employee

IJ

OK Cancel

You can now exit Microsoft Query and return the data to the Excel spreadsheet by clicking the X in the top corner.



The screenshot shows a Microsoft Excel window with a data table. The table has the following columns: Start, Activity, Employee, Pallet I, Cust Pallet No, Owner Code, and Store. The data is filtered for Employee 'IJ'. The table contains 22 rows of data.

	A	C	H	I	J	K	L
1	Start	Activity	Employee	Pallet I	Cust Pallet No	Owner Code	Store
5	21/11/2006 09:49	Move	IJ	00000260	808081	D05	000
6	21/11/2006 09:51	PutAway	IJ	00000268	330576409624701472	D05	890
7	21/11/2006 09:52	PutAway	IJ	00000269	330576409624701489	D05	890
8	21/11/2006 12:20	Move	IJ	00000268	330576409624701472	D05	890
9	21/11/2006 12:20	Move	IJ	00000269	330576409624701489	D05	890
10	21/11/2006 12:22	PutAway	IJ	00000267	330576409603300788	D05	890
11	21/11/2006 12:25	Move	IJ	00000267	330576409603300788	D05	890
12	21/11/2006 13:22	Move	IJ	00000203		D05	909
13	21/11/2006 13:23	Move	IJ	00000203		D05	909
14	21/11/2006 14:37	Receipt	IJ				
15	21/11/2006 15:14	PutAway	IJ	00000270	330576409624701441	D05	890
16	21/11/2006 15:14	PutAway	IJ	00000271	330049000628501702	D05	110
17	21/11/2006 15:15	Move	IJ	00000270	330576409624701441	D05	890
18	21/11/2006 15:16	Move	IJ	00000271	330049000628501702	D05	110
19	21/11/2006 15:31	PutAway	IJ	00000272	330576409624701519	D05	890
20	21/11/2006 15:31	PutAway	IJ	00000273	330576409624701526	D05	890
21	21/11/2006 15:32	Move	IJ	00000272	330576409624701519	D05	890
22	21/11/2006 15:40	Move	IJ	00000273	330576409624701526	D05	890

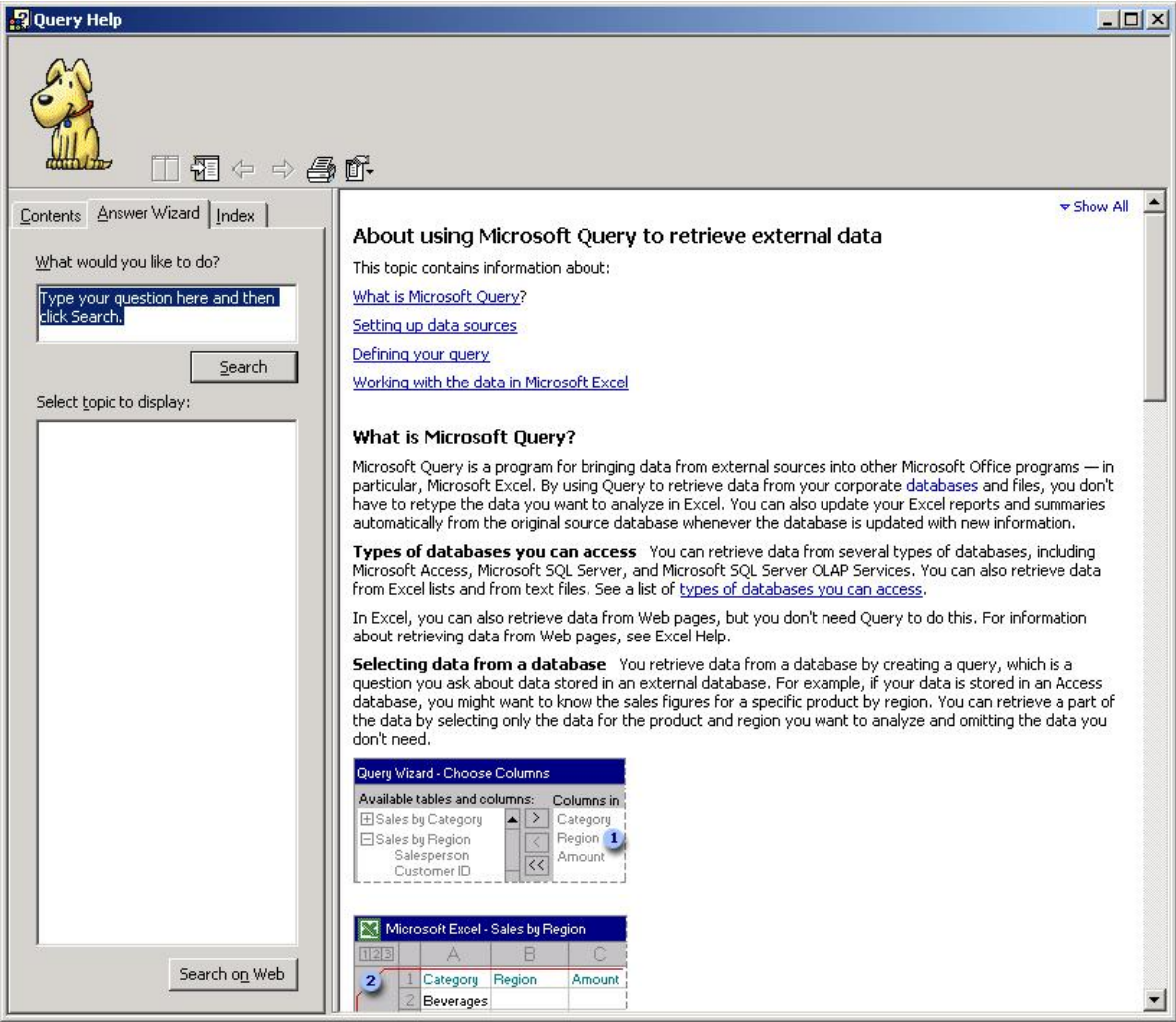
The data is now selecting only the tasks relevant to employee IJ. Whenever you refresh the data, the Employee will be prompted:

The screenshot shows a dialog box titled "Enter Parameter Value". It contains a text input field with the placeholder "Enter an Employee". Below the input field are two checkboxes: "Use this value/reference for future refreshes" and "Refresh automatically when cell value changes". At the bottom are "OK" and "Cancel" buttons.

You can add multiple parameters to a query. Each will be prompted for in turn.

Note: You have full help on how Microsoft Query works, available using the Help button on the Query forms.





1.

1. WCS File Layout

RDT Activity table

RDT Activity : Table			
	Field Name	Data Type	Desc
?	Start	Date/Time	Time activity started
	End	Date/Time	Time activity ended
	Activity	Text	Activity undertaken
	Module	Text	System module used
	Company	Text	Company Code
	Warehouse	Text	Warehouse ID
?	RDT	Number	RDT used to complete task
	Employee	Text	Employee Code who completed task
	Pallet ID	Text	Pallet ID
	Cust Pallet No	Text	Customer's Pallet ID
	Owner Code	Text	Owner of Stock
	Stock Code	Text	Stock
	Cust Batch	Text	Batch
	WMS Rotation	Text	WMS Rotation
	From Location	Text	Location pallet was moved from
	To Location	Text	Location pallet was moved to
	Move Qty	Number	Amount on pallet when moved
▶	Reference	Text	Reference under which pallet was moved

