

Aptean

WCS Common Activities Guide

WCS - 3.4

22 July 2011 - 1.2

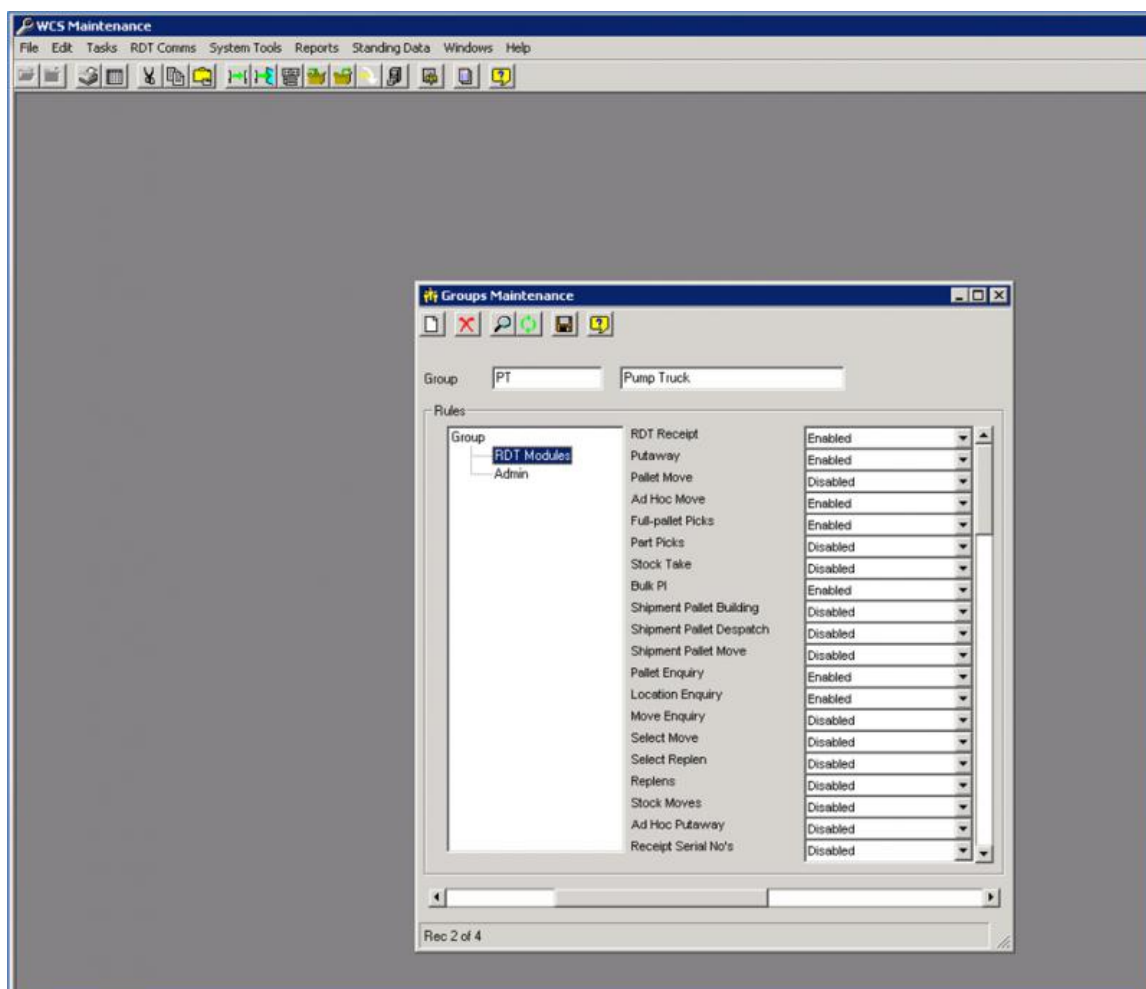
Reference: APT/WCS/TNG-COMM

Contents

1 Assigning Users to a Group.....	1
2 Changing the IP of an RF Unit.....	3
3 Summary.....	5
4 Details.....	6
4.1 Set-up Requirements.....	6
4.2 Create a Link Database.....	6
4.3 Create an ODBC Data Source.....	9
4.4 Access the Data in Microsoft Excel.....	11
4.5 Adding Parameters.....	15
5 Introduction.....	20
6 Remote Data Reporting.....	21
6.1 Set-up Requirements.....	21
6.2 Create a Link Database.....	21
6.3 Create an ODBC Data Source.....	24
6.4 Access the Data in Microsoft Excel.....	26
6.5 Adding Parameters.....	30
7 Clearing Down Data.....	35
7.1 Clearing Logging Information.....	35
7.2 Cleardown.....	36
8 Archive Database Queries.....	38
9 Restricting WCS Maintenance User Access.....	39
9.1 Setting User Access.....	39
9.2 Setting System Defaults.....	40
9.3 Setting Group Defaults.....	41
10 Failsafe WMS/WCS Recovery Process.....	43
10.1 Summary of Steps.....	43
11 Changing WCS/WMS Connectivity.....	51
11.1 Requirements.....	51
12 Appendices.....	55
12.1 WCS File Layout.....	55

1 Assigning Users to a Group

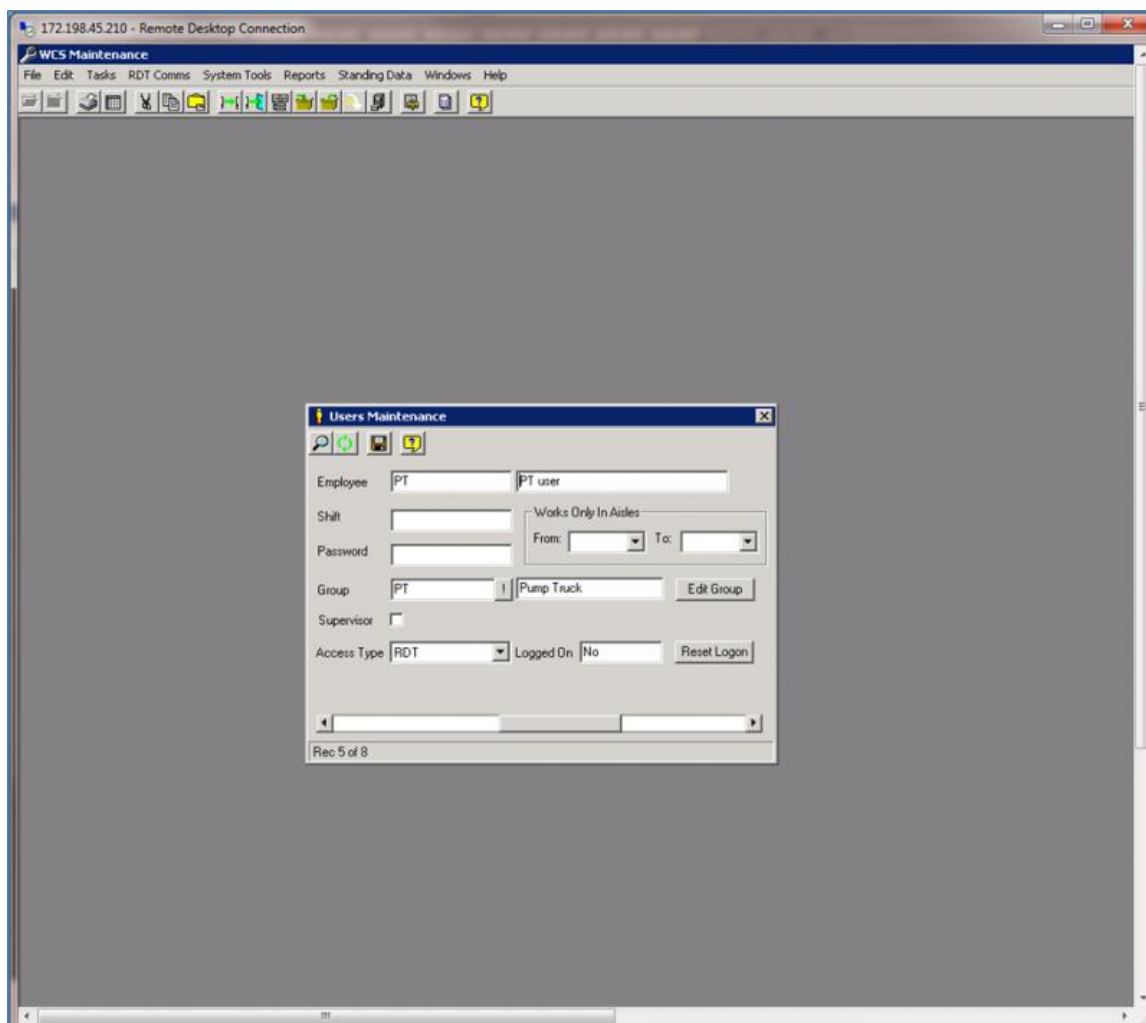
WCS Maintenance -> Standing Data -> Group Maintenance



Three new user groups have been created PT, RT & VN.

Which modules appear on the RF are controlled by enabling or disabling the listed functions. ? WCS Maintenance -> Standing Data -> User Maintenance





To assign a user to the correct group, when they have been created on the WMS the employee code is also created on the RF.

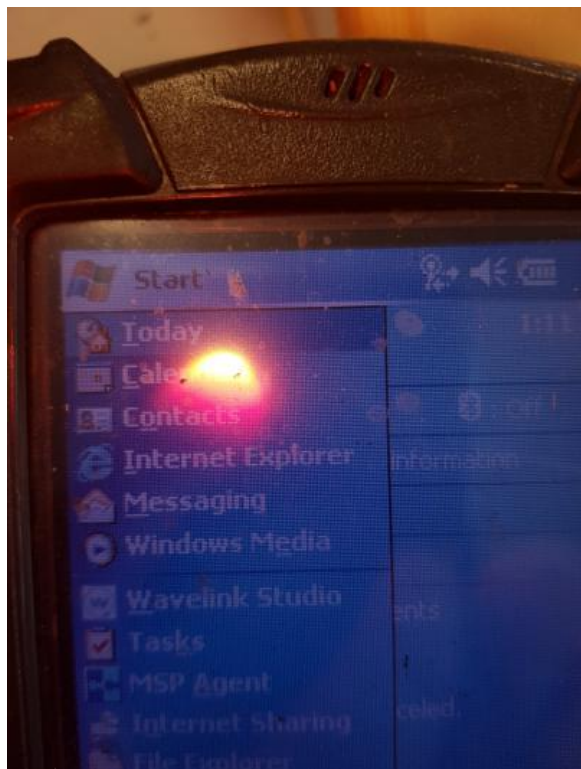
Find the user and then assign them to their relevant group.

NB by default they will automatically be assigned to the warehouse group which is the current menu structure that you are currently working with.

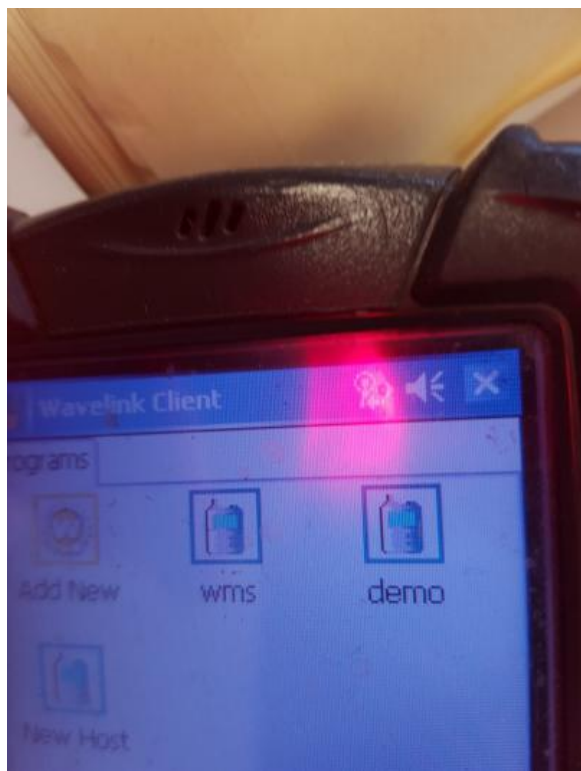


2 Changing the IP of an RF Unit

1. From the ?Start? menu, open the ?Wavelink Studio? option



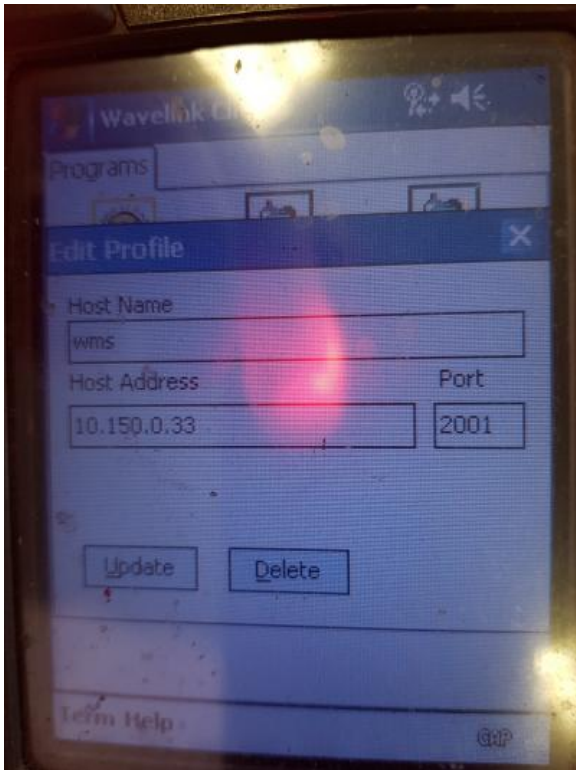
2. When you click on ?Wavelink Studio? this will display the RF application icons
3. Press and hold (long hold) on the required RF icon (*the name is part of the configuration so will be different to the name displayed in the screen shot displayed below*)



4. The configuration options for the chosen icon will be displayed.



5. Enter the updated I.P. address in the ?Host Address? box and click the ?Update? button
6. This will save the configuration change to the selected icon



3 Summary

The Calidus 3pl-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



4 Details

4.1 Set-up Requirements

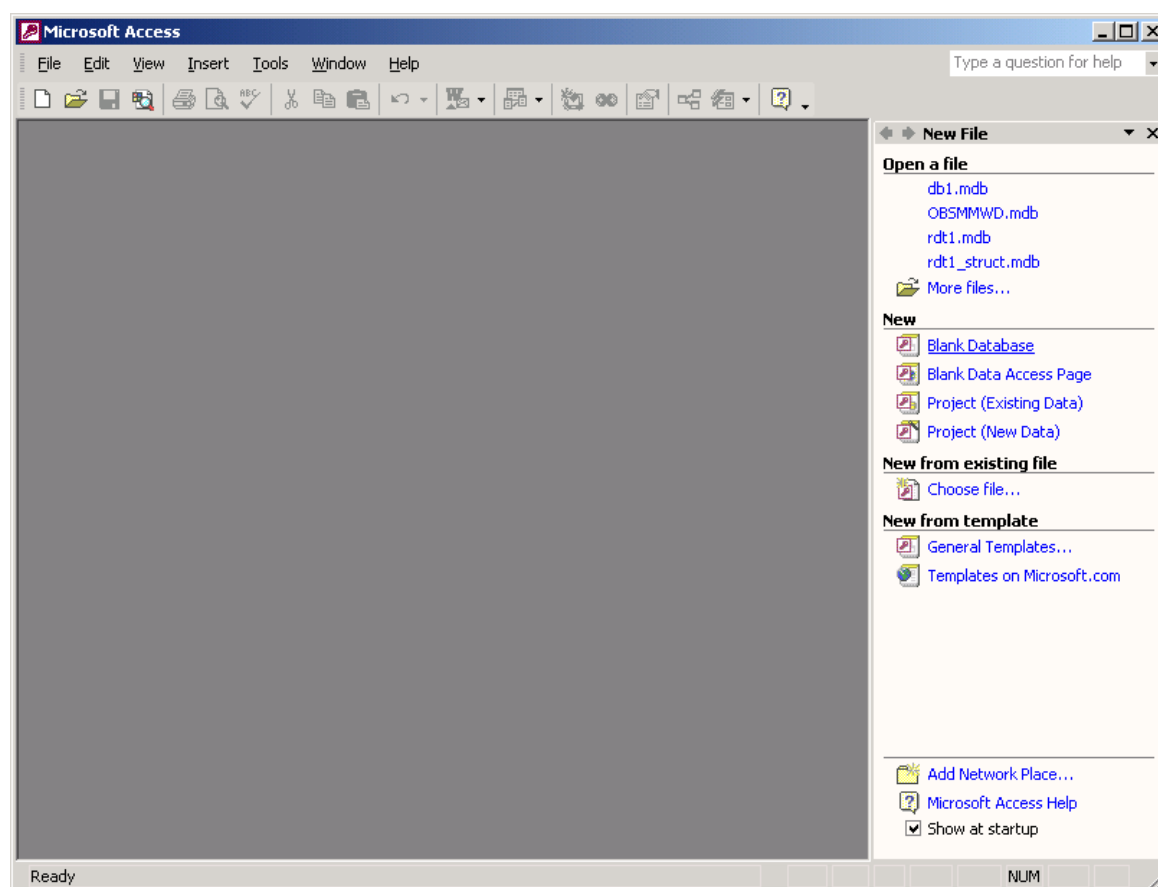
The Calidus 3*p*/Mobile system must be set up for your data.

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

4.2 Create a Link Database

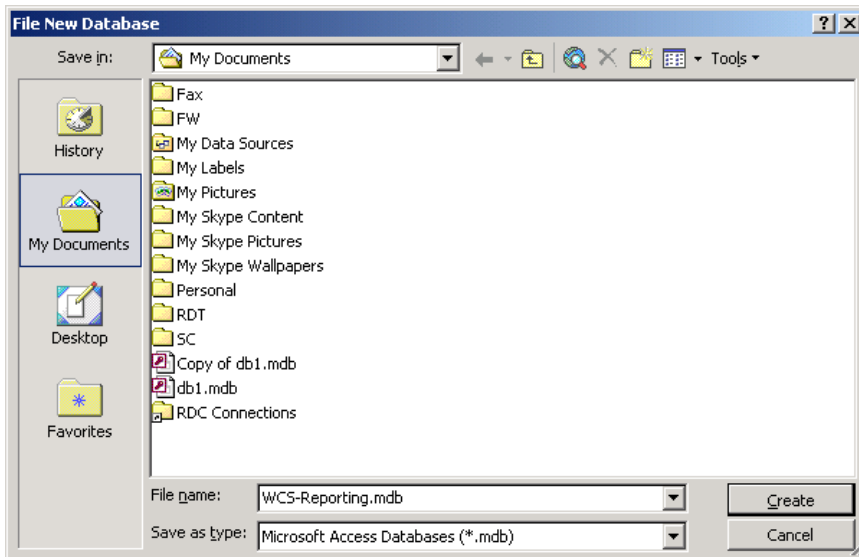
In order to minimise the impact of the query on the Calidus 3*p*/Mobile system, this should be performed on a link database. It is possible to access the database directly, but this is **not** recommended by OBS.

Create a new Access database.

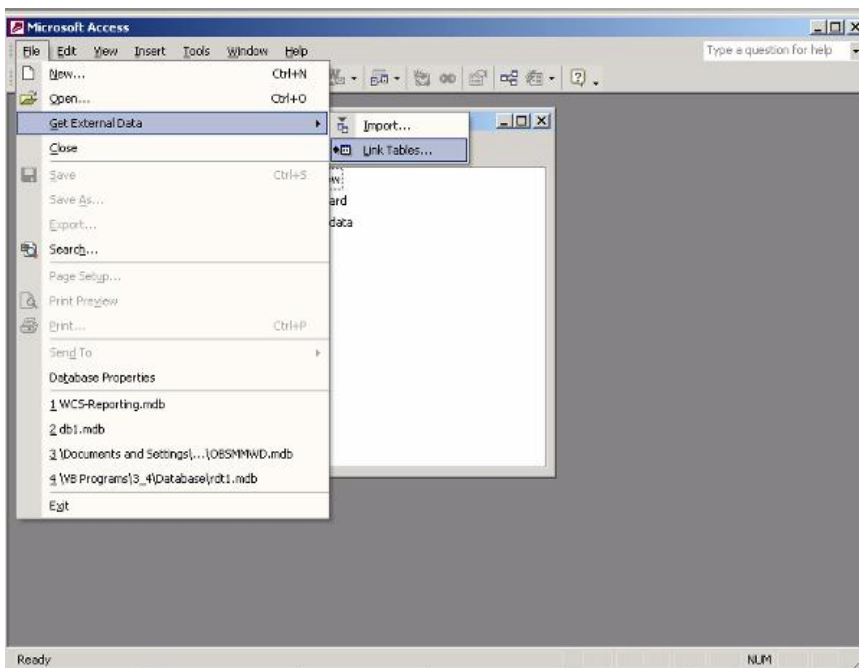


This database can be created locally (or your PC) if this is only being used by you, or can be created on any network machine (for example, the WCS Server) if used by many people.



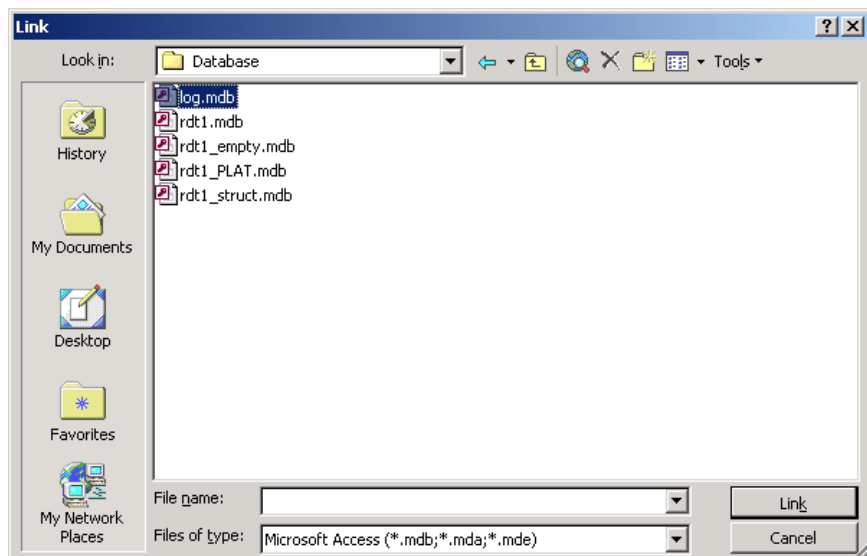


In this case this has been called WCS-Reporting.mdb, created in My Documents

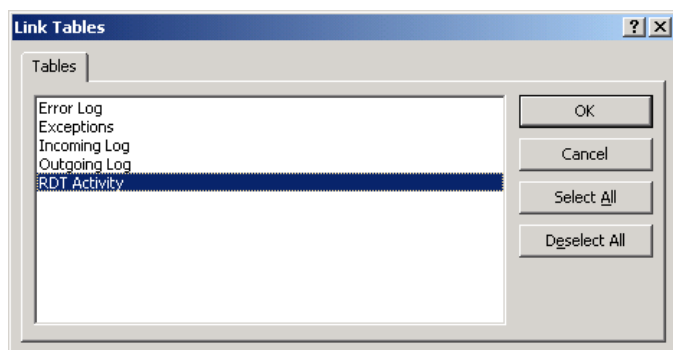


Choose Get External Data/Link Tables from the File menu.



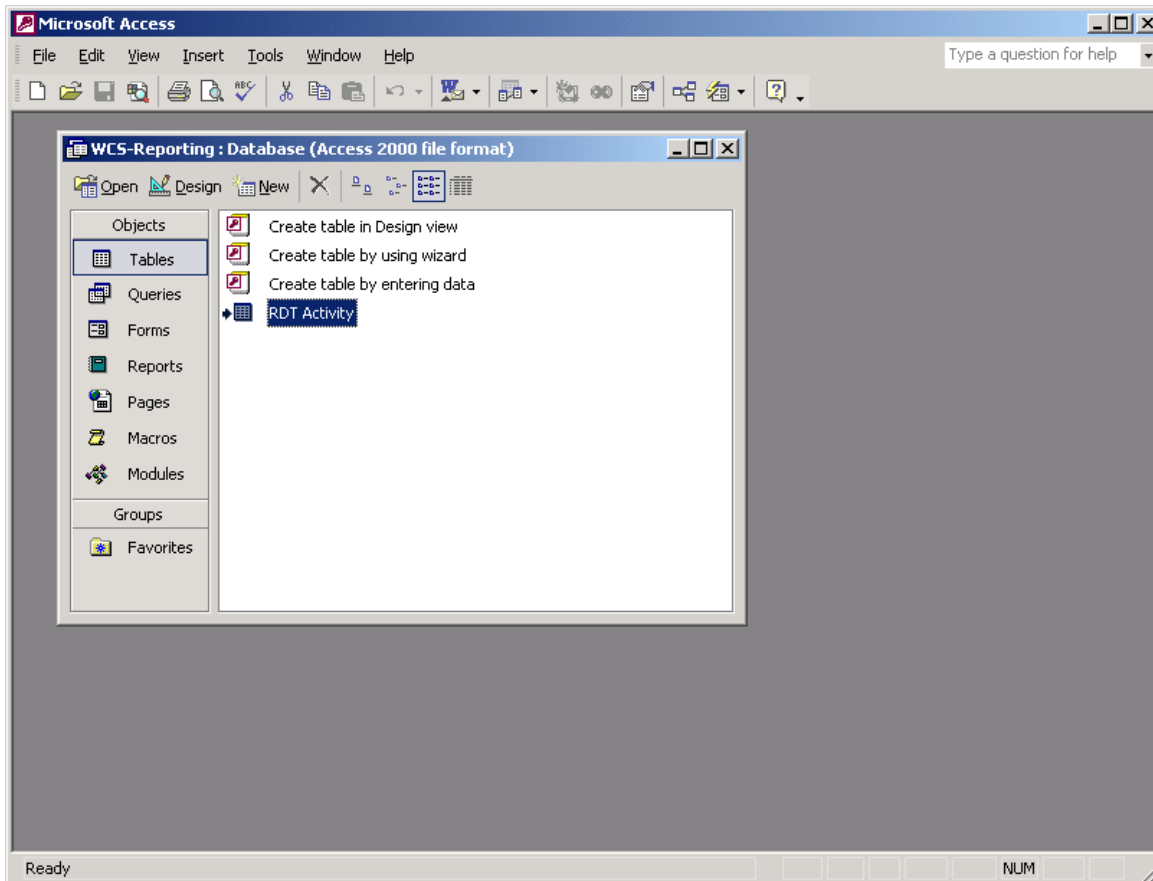


Link to your Calidus 3p/-Mobile logging database. This is normally in X:\Log.mdb or X:\Log1.mdb.



Link the table ?RDT Activity?



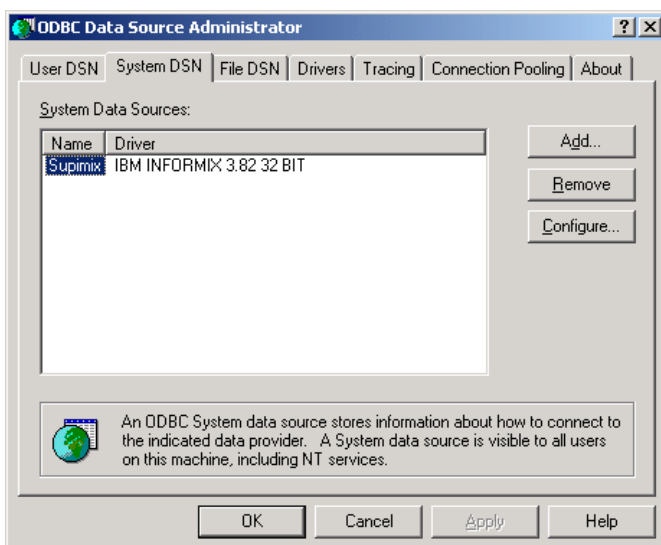


Save your new database by closing Access.

4.3 Create an ODBC Data Source

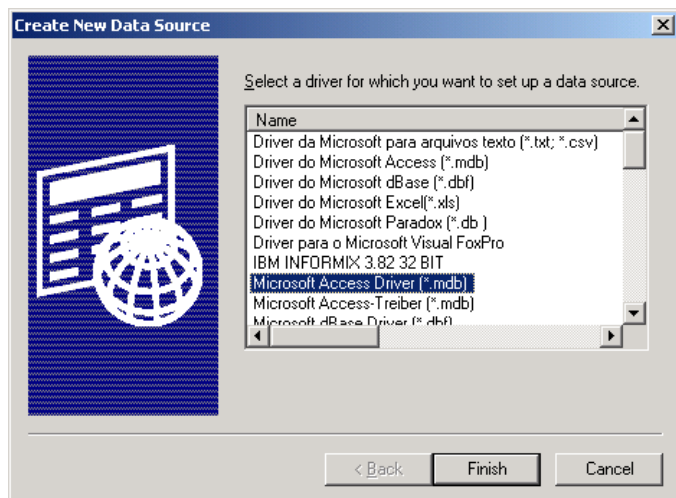
Choose Start/Settings/Control Panel/Administrative Tools/Data Sources (ODBC) from the Start menu.

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



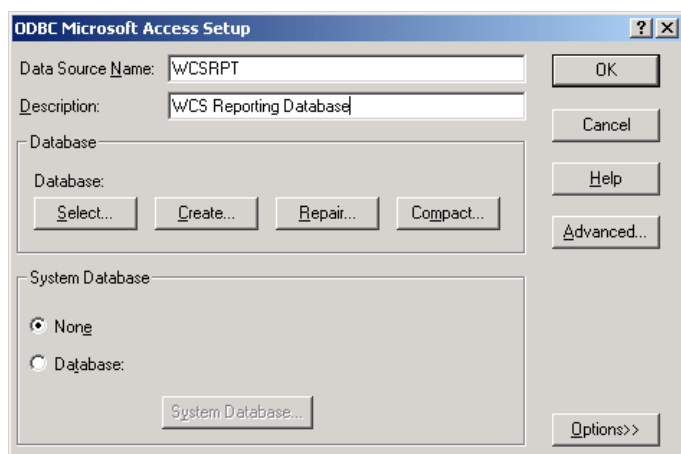
Create a new System DSN





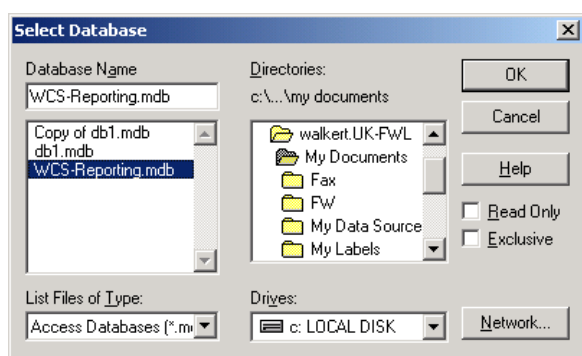
Choose ?Microsoft Access Driver (*.mdb)?.

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



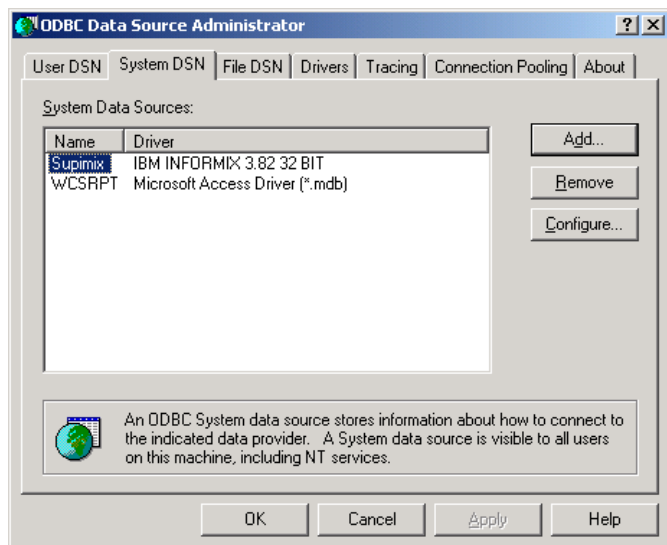
Ensure the Data Source Name is 8 characters or less.

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



Click ?OK? to save the new data source

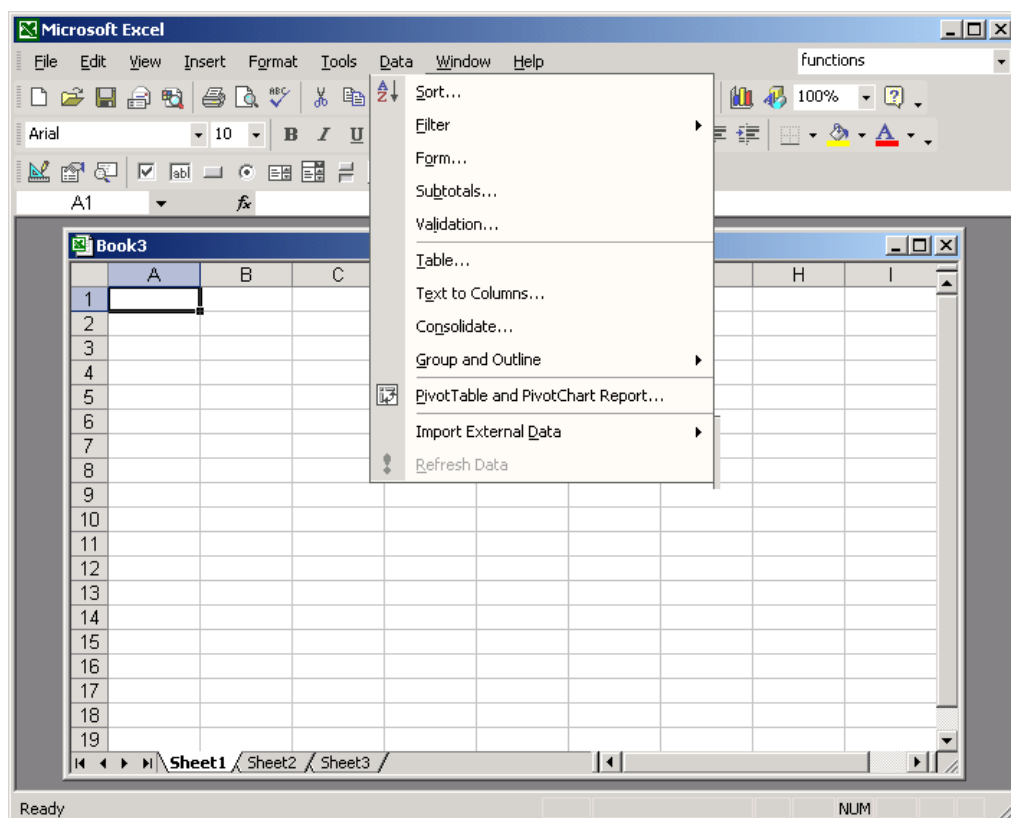




4.4 Access the Data in Microsoft Excel

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.

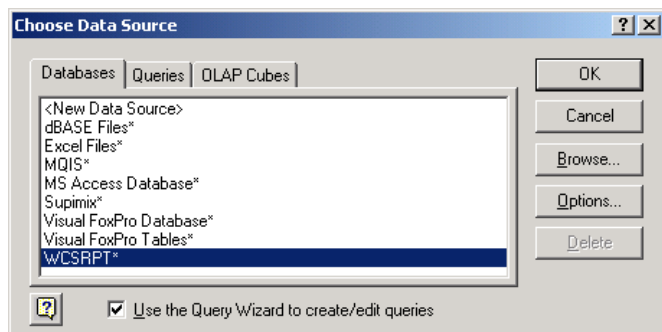
Open Excel and create a new workbook.



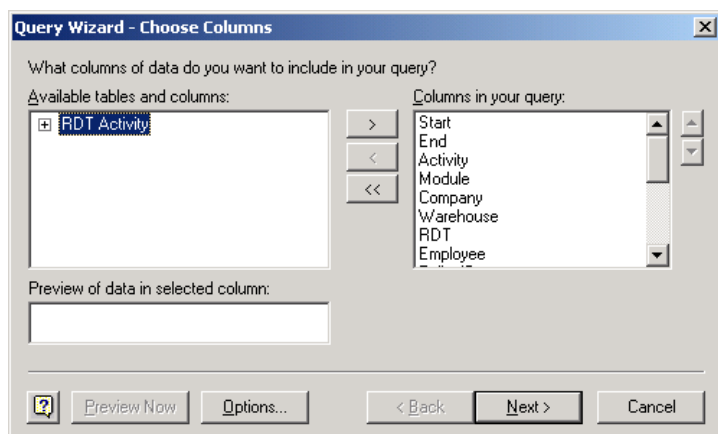
Choose Import External Data/New Database Query from the Data menu.

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

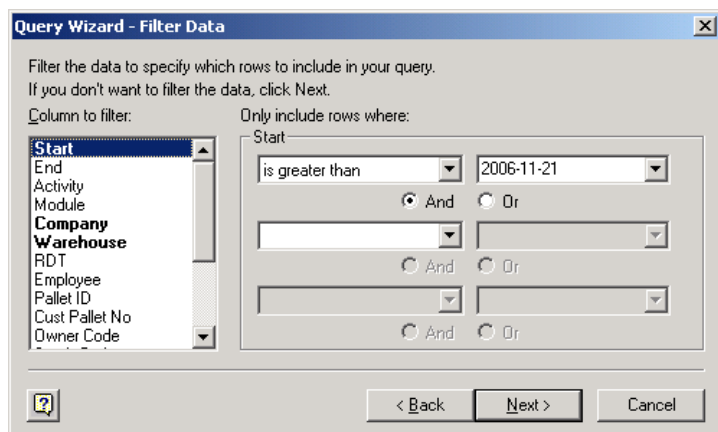




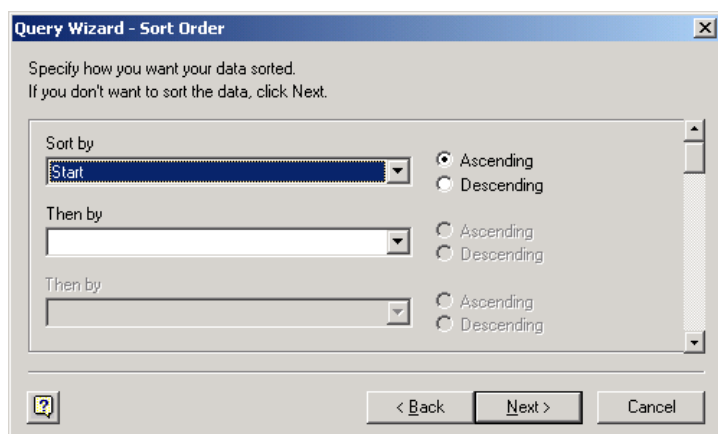
Choose the WCS Reporting Data Source we set up earlier.



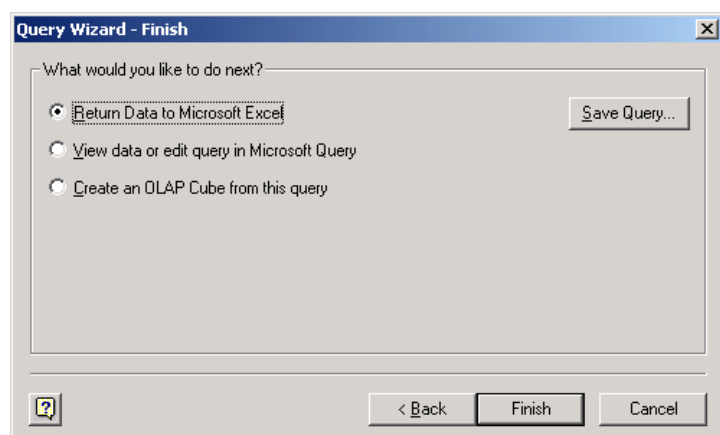
Choose the table to report. In this case, you will want the RDT Activity table.



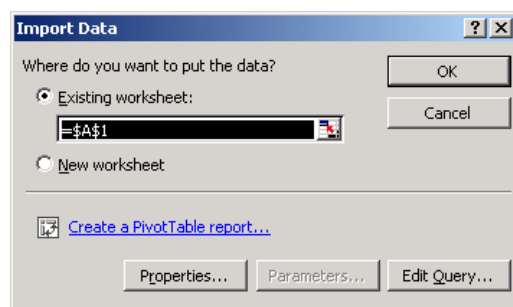
Choose the data you want to filter.



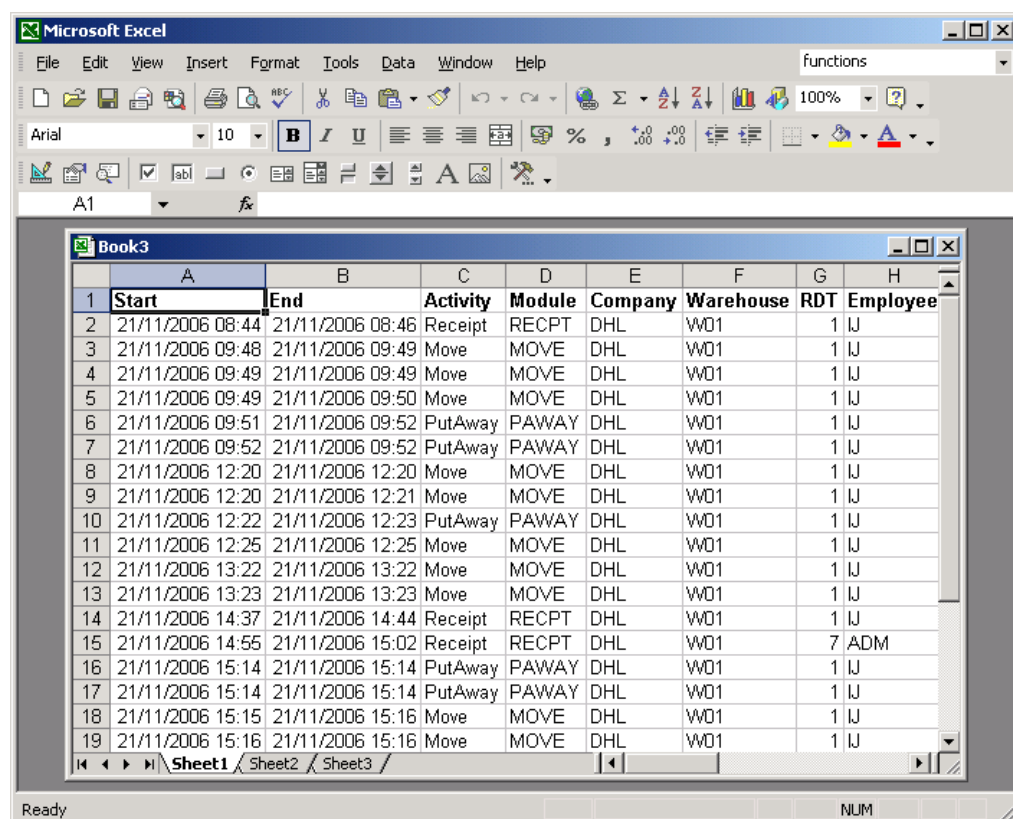
Choose the Sort Order



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
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	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

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 Cot
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.

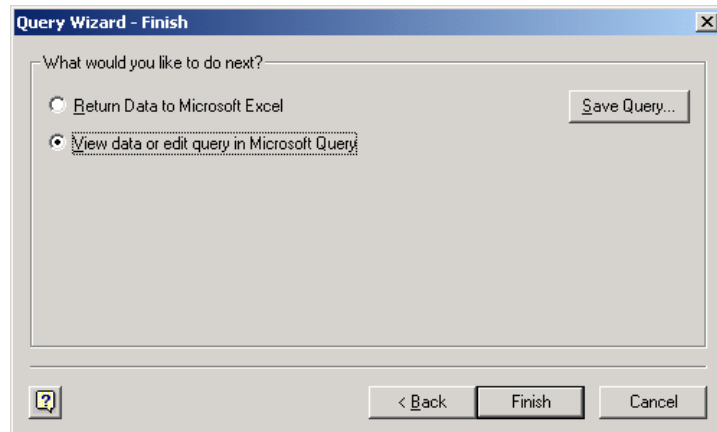


4.5 Adding Parameters

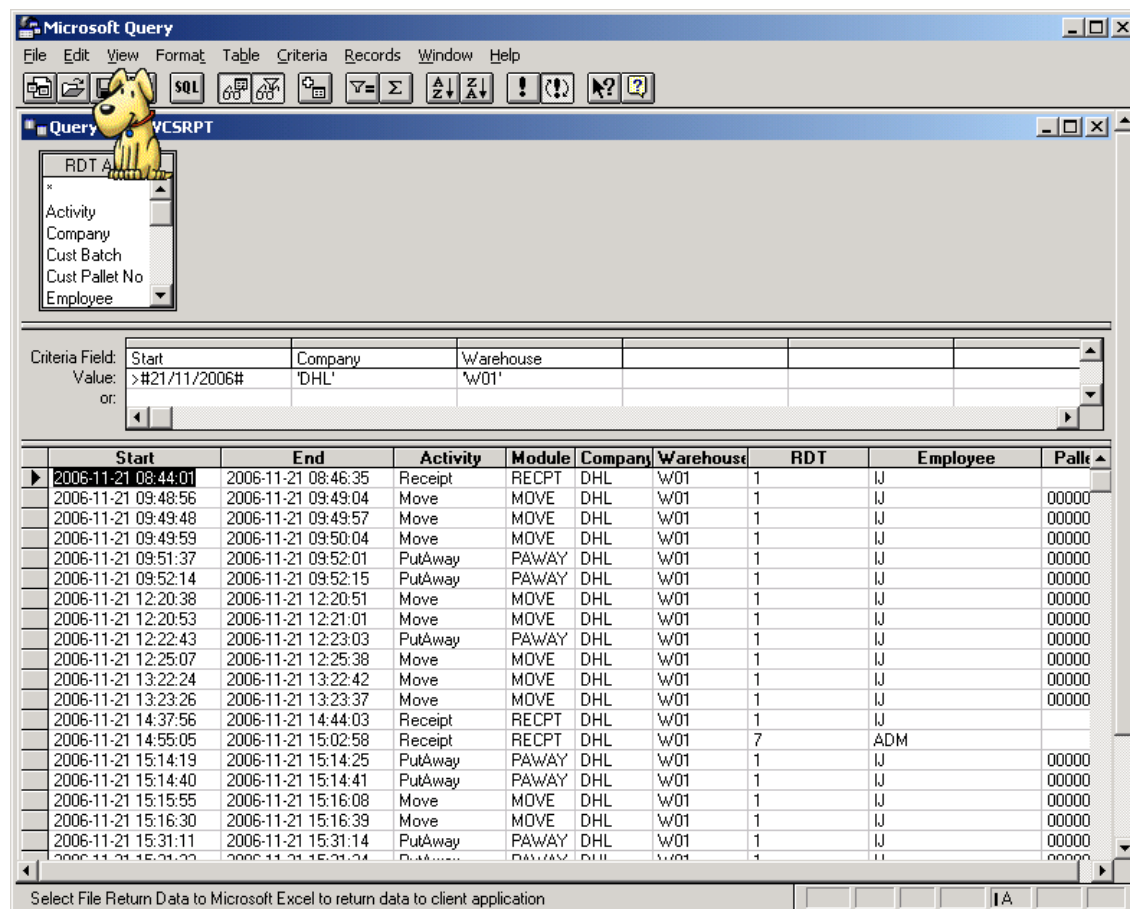
Parameters allow you to specify the data to be returned ?on the fly? by saying what you want it to match.

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

RD T 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	RD T	Employee	Palle
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 15:31:23	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

RD T 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	RD T	Employee	Palle
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 15:31:23	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	RDT	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

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.



	A	C	H	I	J	K	
	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:

Enter Parameter Value

Enter an Employee

☐ Use this value/reference for future refreshes

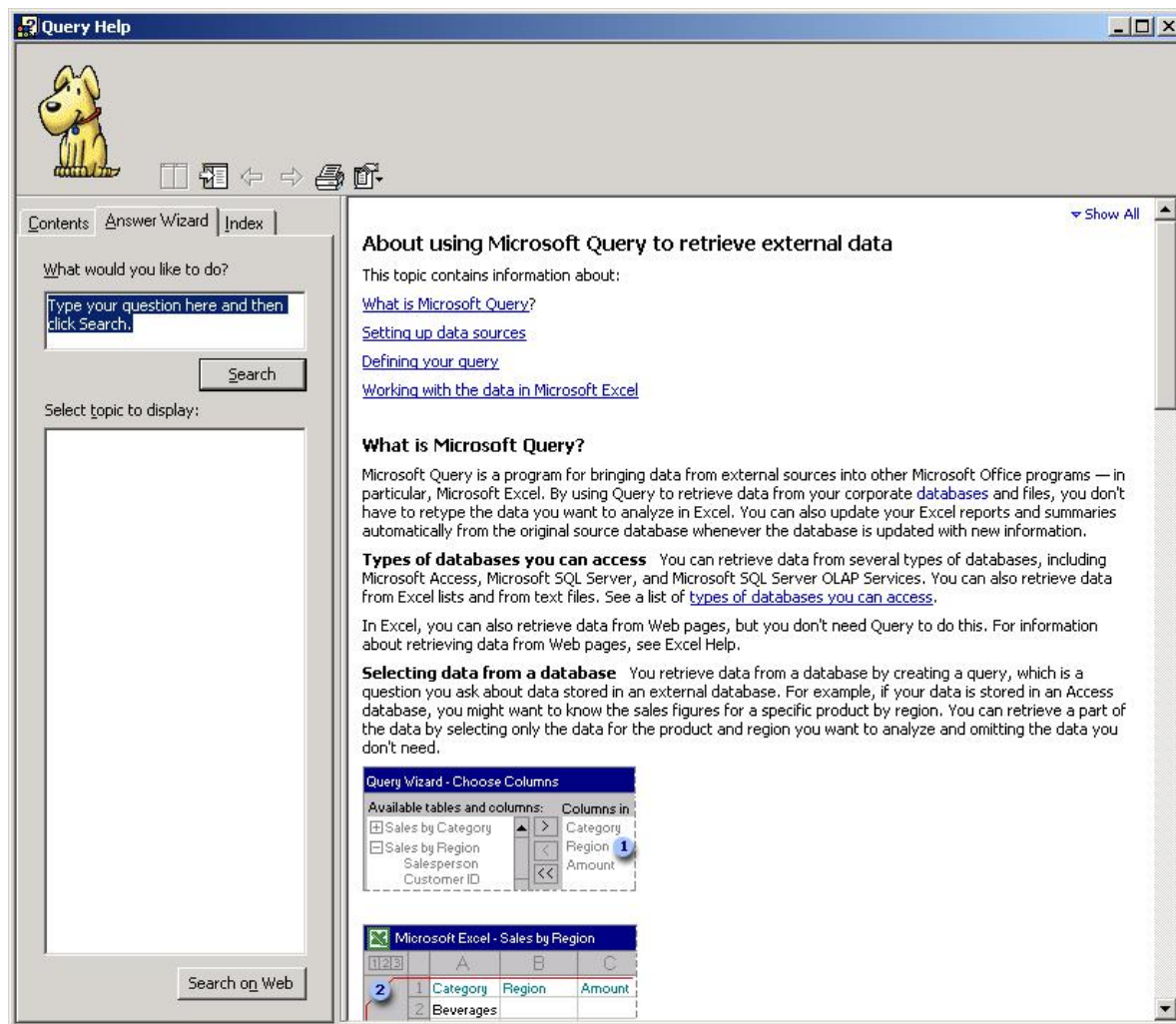
☐ Refresh automatically when cell value changes

OK Cancel

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



5 Introduction

This document is intended to show many common activities within the WCS, with detailed instructions on how these extraneous tasks may be performed.

This document is intended for technical supervisors or IT staff.

Due to the nature of the subjects covered, this document is necessarily technical in nature.



6 Remote Data Reporting

The Calidus WCS 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

6.1 Set-up Requirements

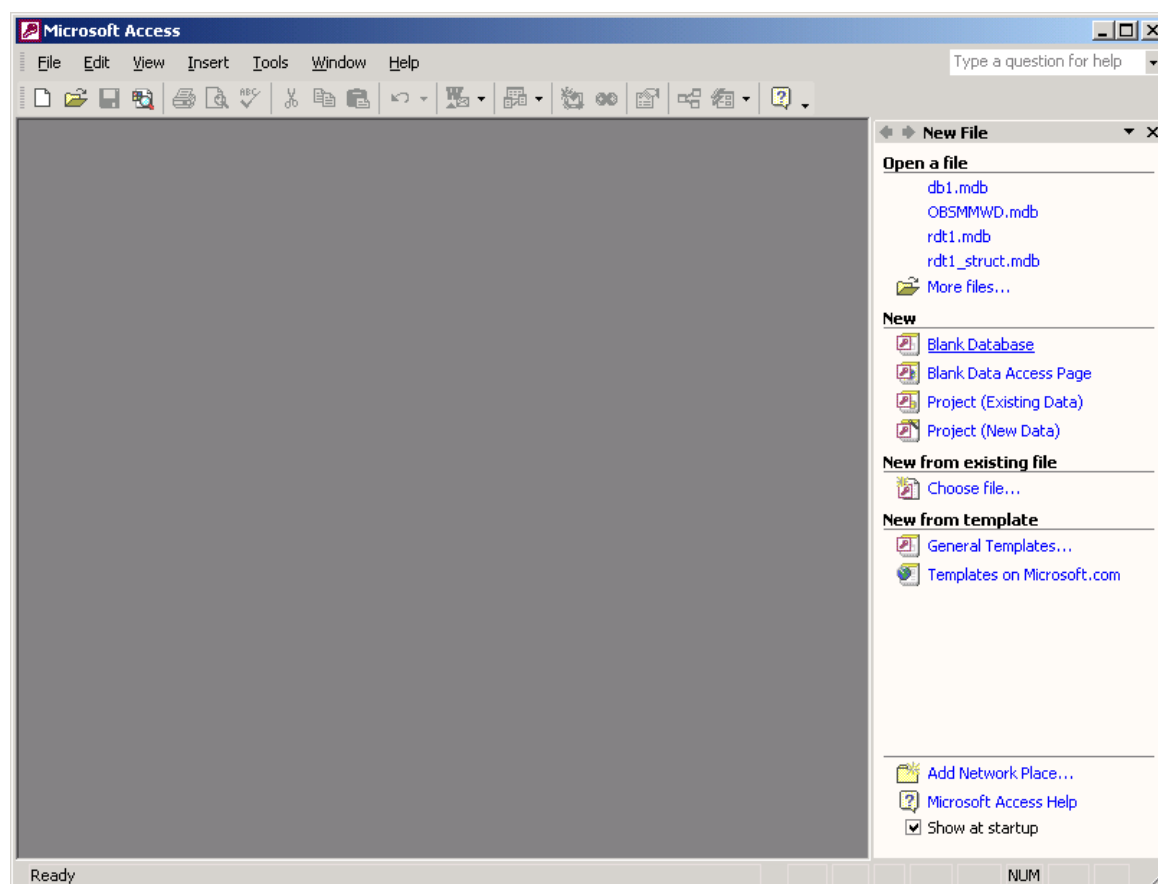
The Calidus WCS system must be set up for your data.

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

6.2 Create a Link Database

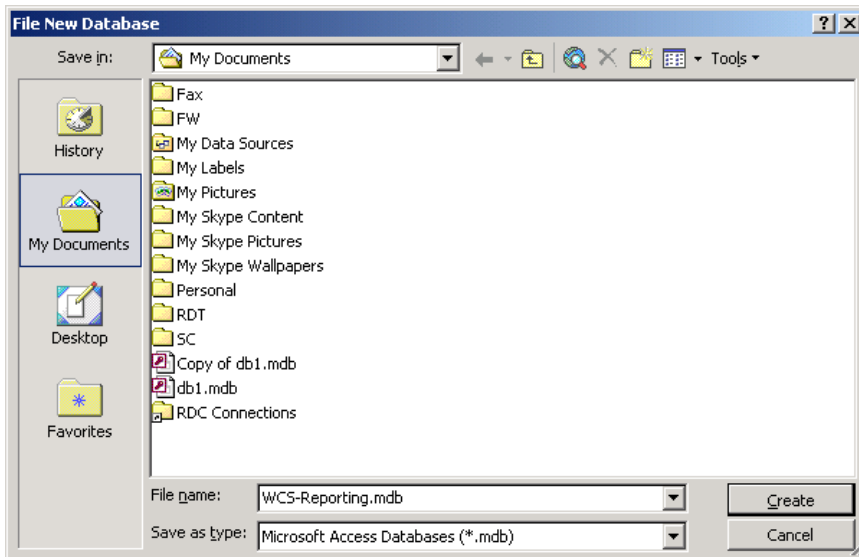
In order to minimise the impact of the query on the Calidus WCS system, this should be performed on a link database. It is possible to access the database directly, but this is **not** recommended by OBSL.

Create a new Access database.

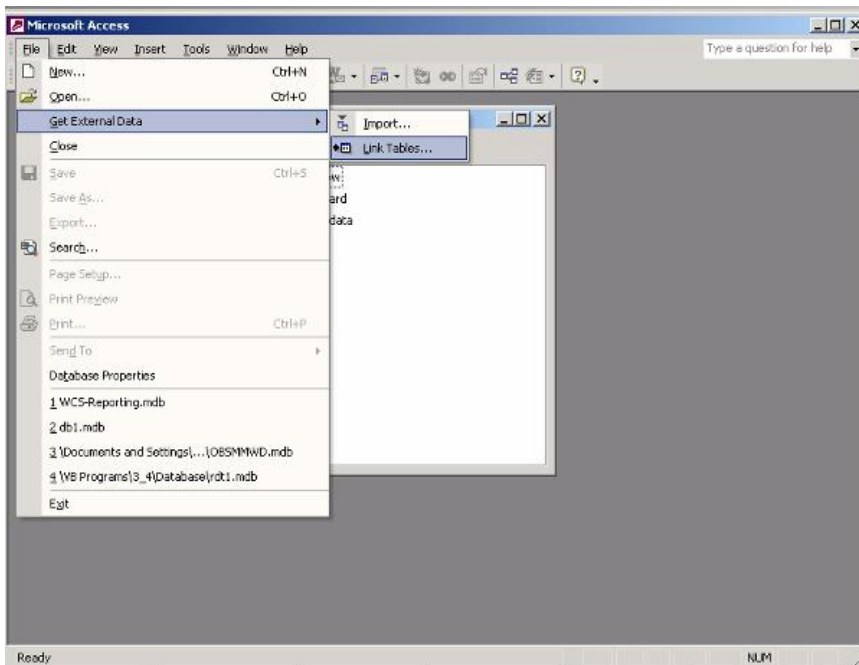


This database can be created locally (on your PC) if this is only being used by you, or can be created on any network machine (for example, the WCS Server) if used by many people.



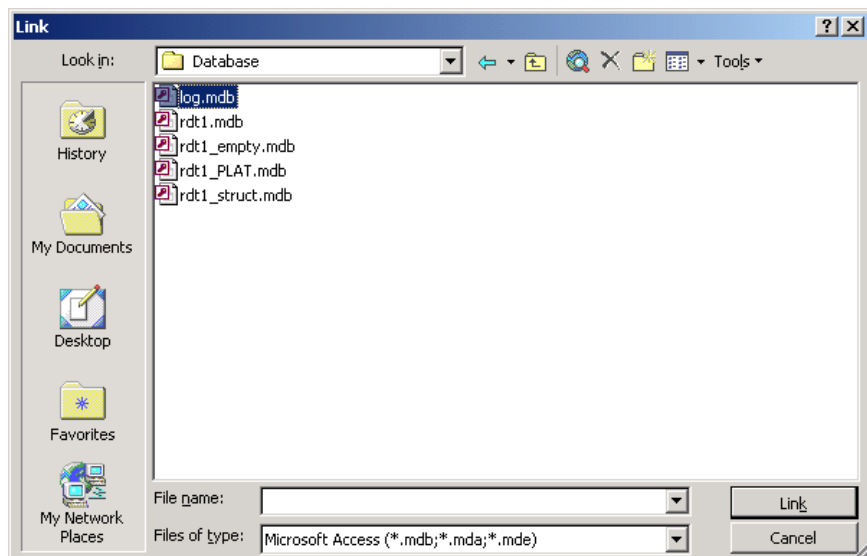


In this case this has been called WCS-Reporting.mdb, created in My Documents

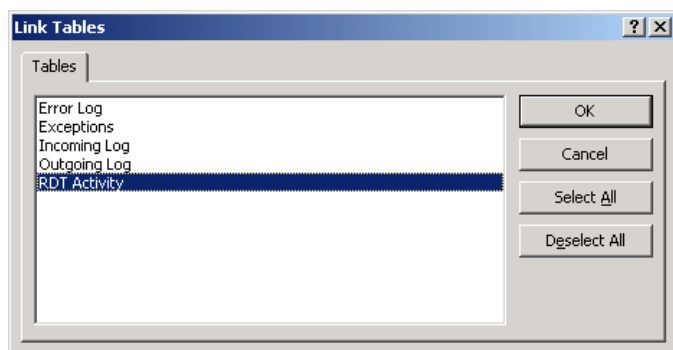


Choose Get External Data/Link Tables from the File menu.



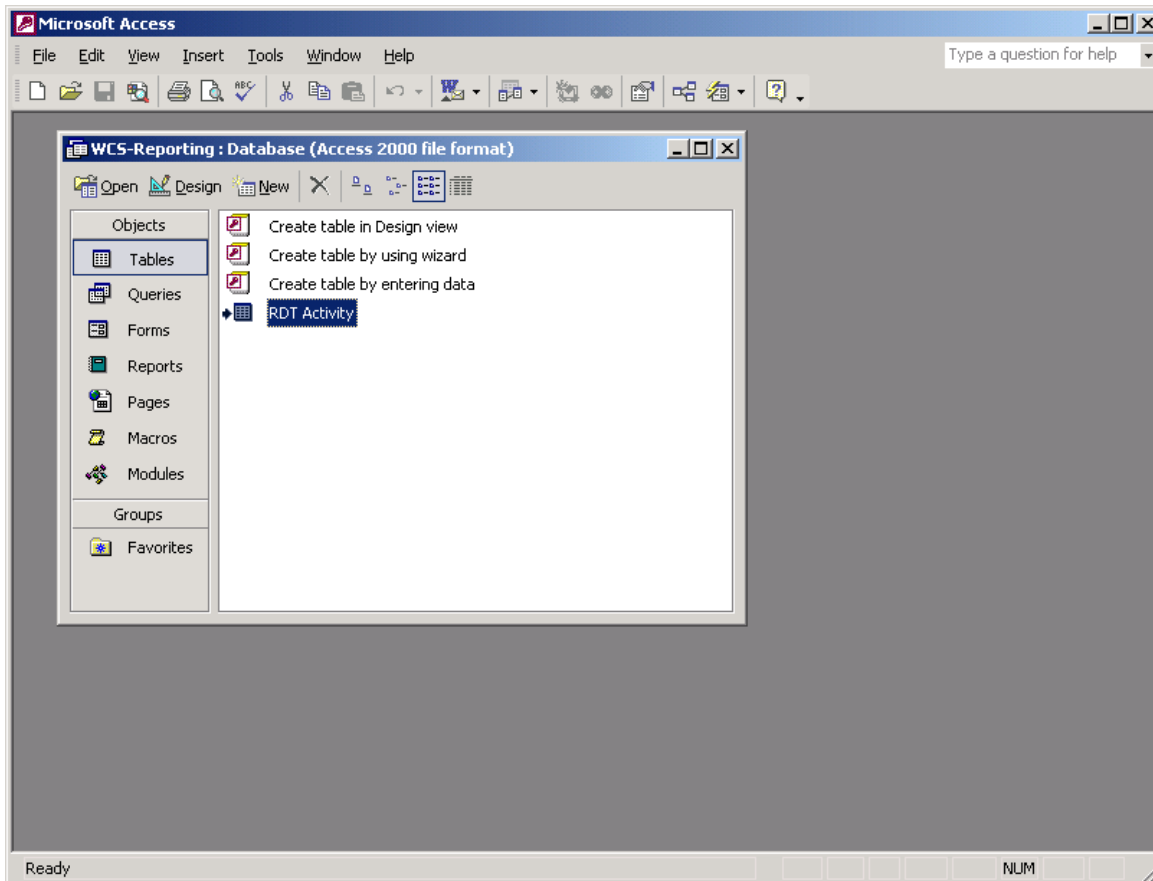


Link to your Calidus WCS logging database. This is normally in X:\Log.mdb or X:\Log1.mdb.



Link the table 'RDT Activity'



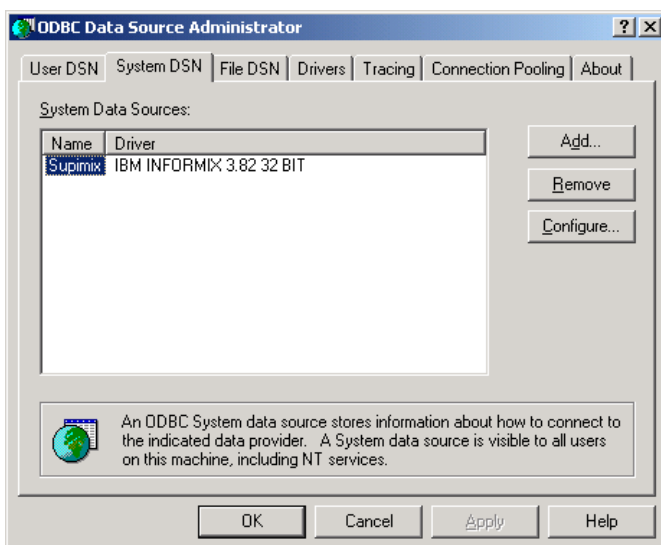


Save your new database by closing Access.

6.3 Create an ODBC Data Source

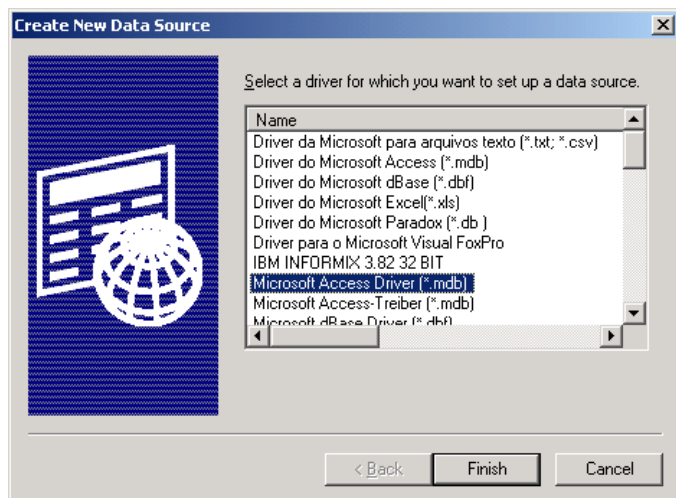
Choose Start/Settings/Control Panel/Administrative Tools/Data Sources (ODBC) from the Start menu.

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



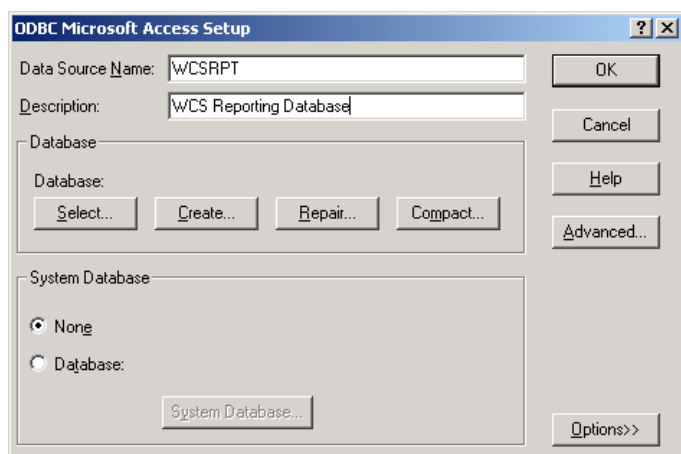
Create a new System DSN





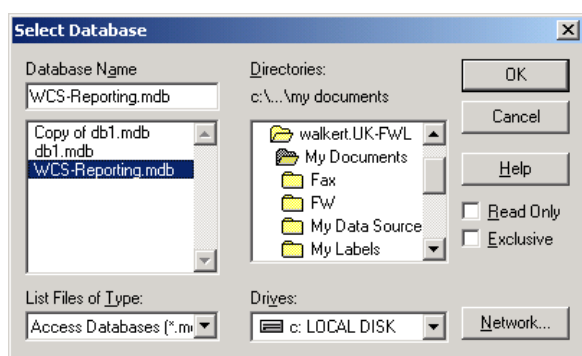
Choose 'Microsoft Access Driver (*.mdb)'.

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



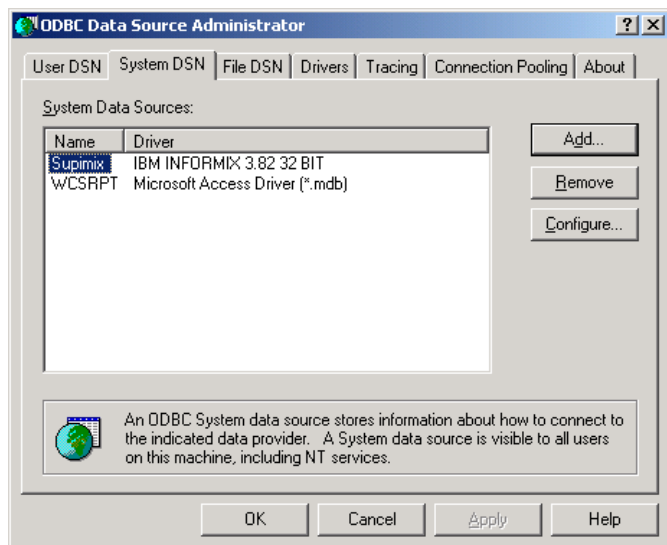
Ensure the Data Source Name is 8 characters or less.

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



Click 'OK' to save the new data source

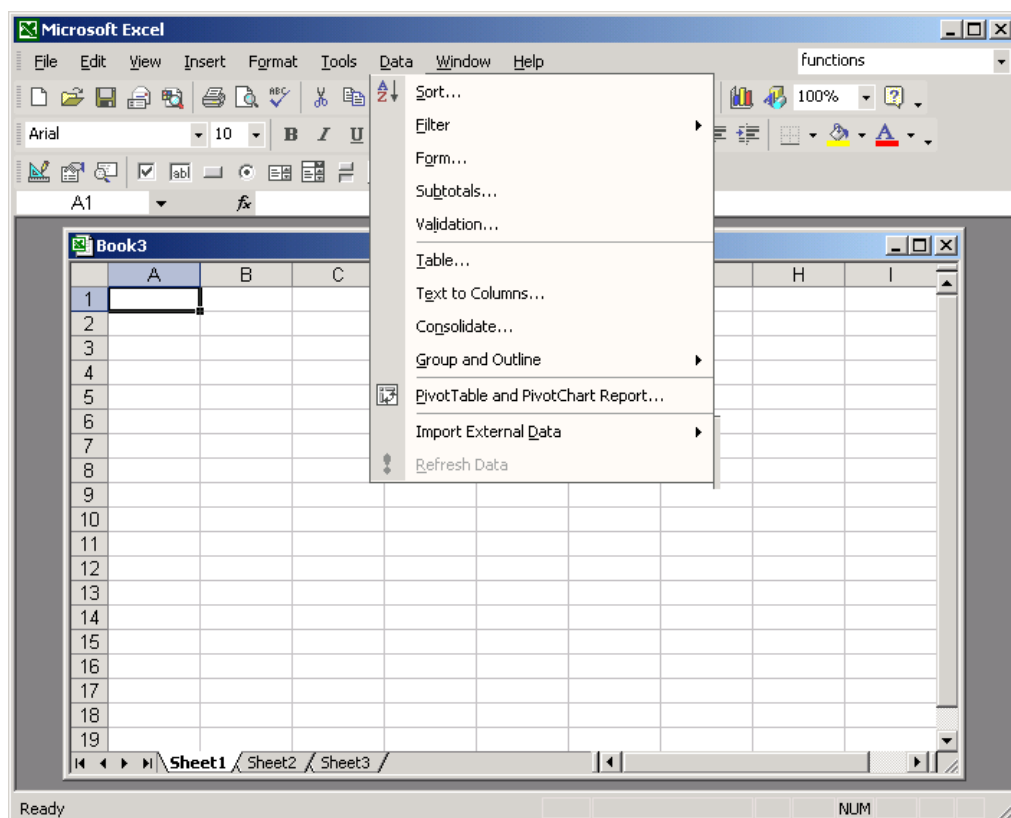




6.4 Access the Data in Microsoft Excel

Now that this is set up, you can access the Calidus WCS 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.

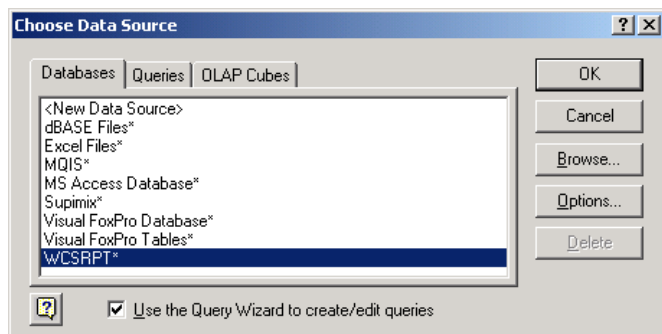
Open Excel and create a new workbook.



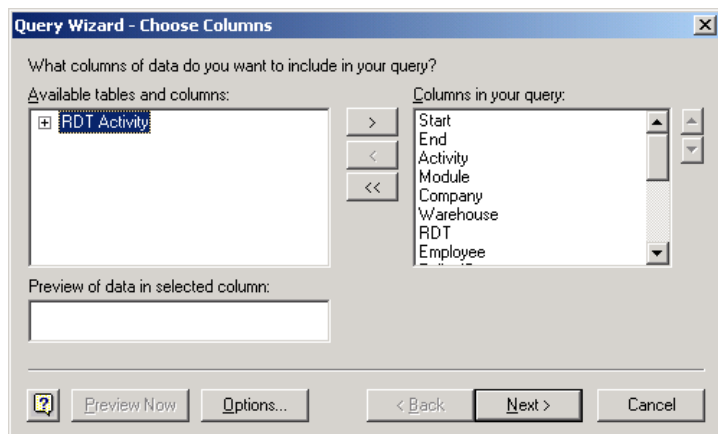
Choose Import External Data/New Database Query from the Data menu.

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

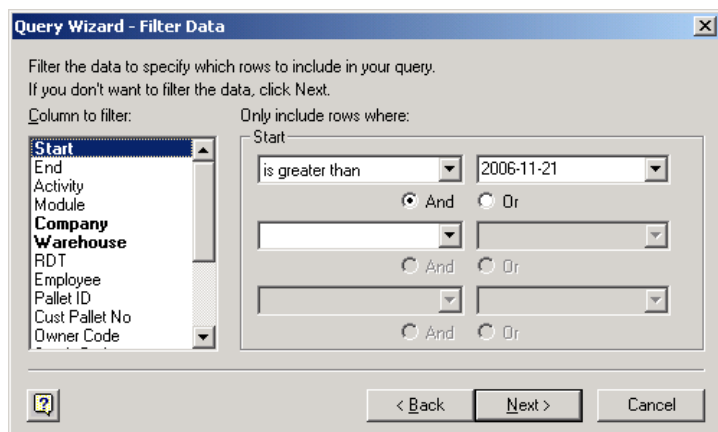




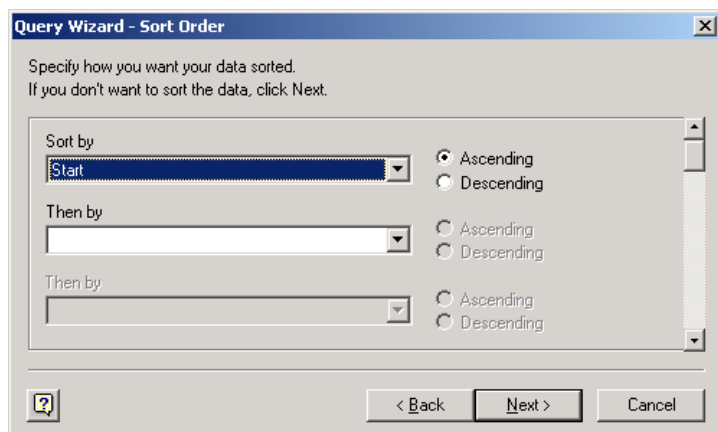
Choose the WCS Reporting Data Source we set up earlier.



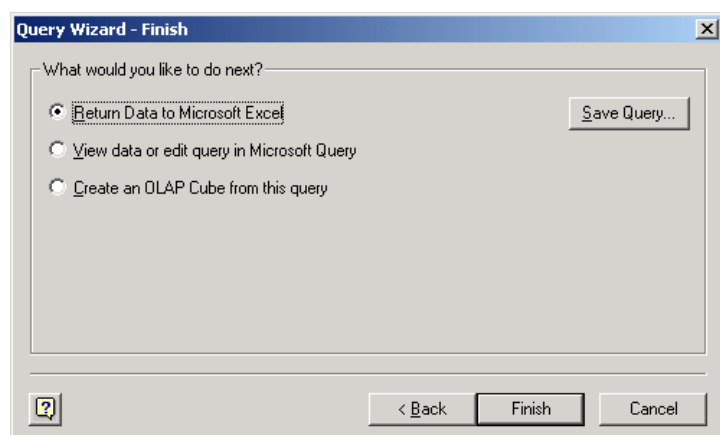
Choose the table to report. In this case, you will want the RDT Activity table.



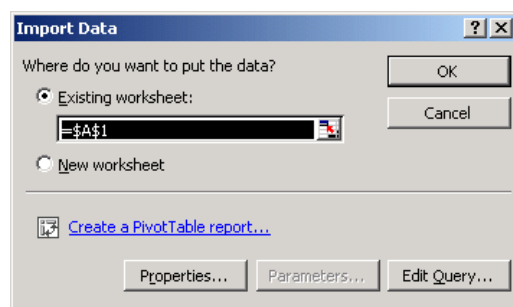
Choose the data you want to filter.



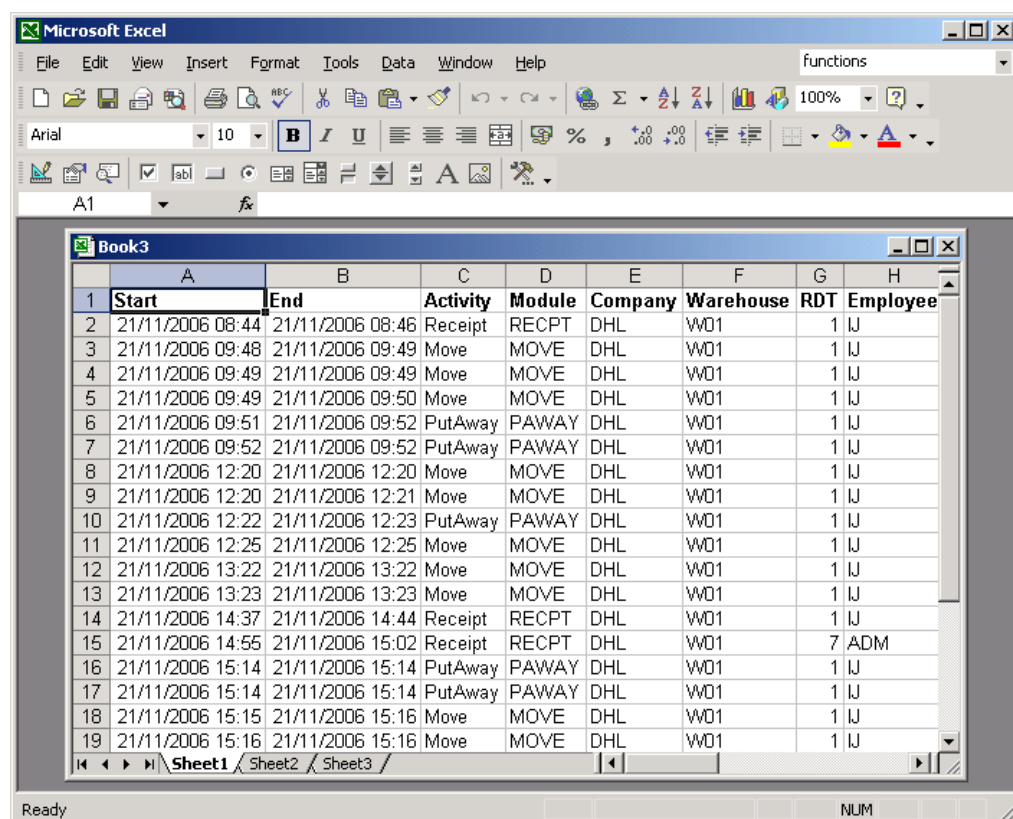
Choose the Sort Order



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
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	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	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	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

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
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.

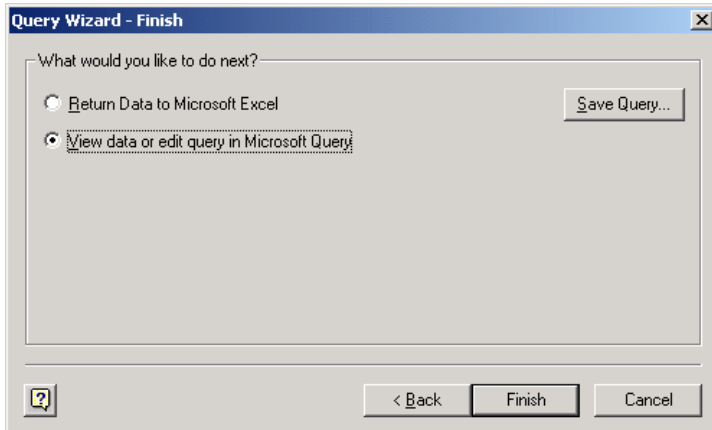


6.5 Adding Parameters

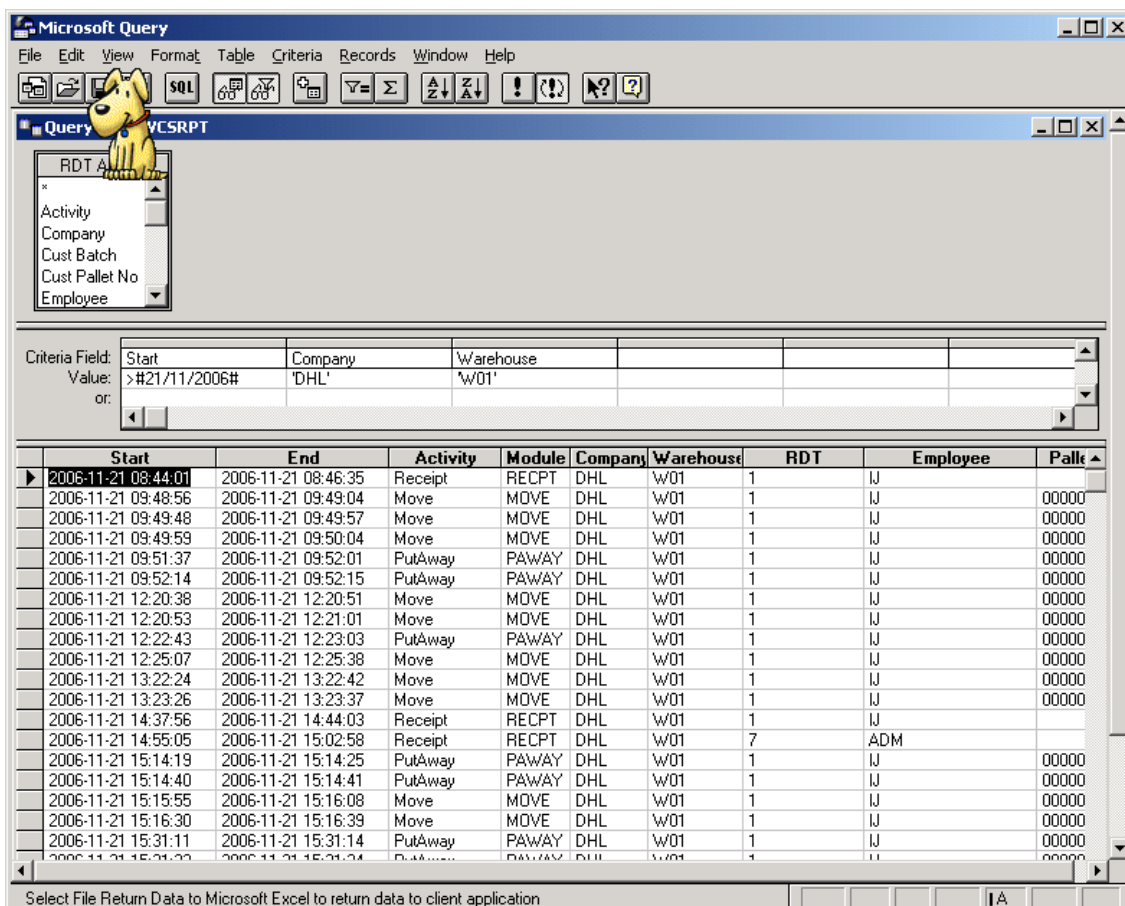
Parameters allow you to specify the data to be returned 'on the fly' by saying what you want it to match.

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

RD T 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	RD T	Employee	Palle
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 15:31:23	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

RD T 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	RD T	Employee	Palle
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 15:31:23	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	RDT	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

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.



Microsoft Excel - parameter

Book3

	A	C	H	I	J	K	
1	Start	Activity	Employee	Pallet I	Cust Pallet No	Owner Code	Stock
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

Ready NUM

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

Enter Parameter Value

Enter an Employee

☐ Use this value/reference for future refreshes

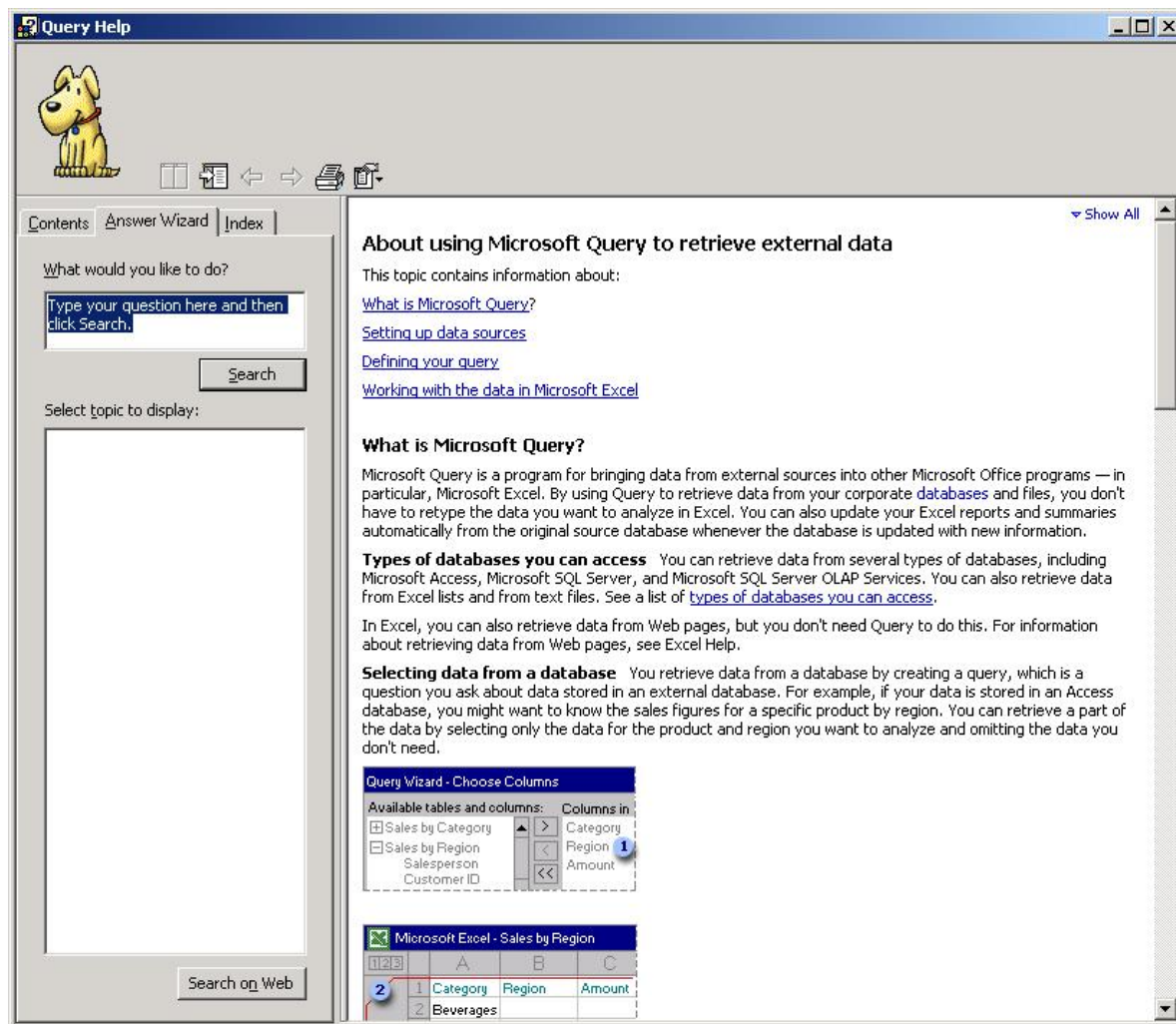
☐ Refresh automatically when cell value changes

OK Cancel

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.





7 Clearing Down Data

After use for some time, data may need to be cleared down from the WCS databases.

The WCS generally has two databases:

- rdt1.mdb
- log1.mdb (optional)

As the Logging database contains details of all messages sent to and from the WCS, this is the most likely database to get very large.

You will be warned when starting WCS Maintenance whether the databases are getting close to their maximum size.

The WCS databases can only go to 2Gb in size. If they get to that size, the system will stop working as expected.

As mentioned, the most likely database to reach 2Gb is the Logging database, if the system has one. To find out where this is, check the WCS Maintenance form **System Settings** on the **System Tools** menu. Click the **WCS Settings** rule group, and check out the value of the last rule, **Log Path**. If it is set, the system uses a Logging database.

7.1 Clearing Logging Information

7.1.1 Renaming the Logging Database

The easiest way to reset the database size is to rename the Logging database, following the procedures below:

1. Ensure that all WCS Maintenance users are logged out.
2. Stop the WCS Server (RDT users do not necessarily have to be logged out, but it is best practice to do so).
3. Rename the logging database to a suitable name (for example, log2.mdb or log1_<date>.mdb).
4. Re-start the WCS Server. This will create a new, empty logging database as it starts.

7.1.2 Clear Logging Files

Alternatively, run the clear-down options on WCS Maintenance:

- *Clear Out Error Log*
- *Clear Out Incoming and Outgoing Logs*

Both of these are available on the System Tools menu. Full details of this Cleardown process can be seen in the following section.

 **Note:** Once this is done, you need to compact and repair the logging database. Either:

- Stop and Start the WCS Server - it should compact the database automatically, if no WCS Maintenance users are logged on.

Or:

1. Ensure that all WCS Maintenance user are logged out.
2. Stop the WCS Server (again, RF users do not necessarily have to log out, but it is best practice to do so).
3. Run Database Utilities from the **Start/WCS Utilities** menu.
4. Choose **Compact Database** from the *Tools* menu. Find the database and wait.
5. When DBUtils comes back with a message that the database is compacted, re-start the WCS Server.



7.2 Cleardown

The cleardown settings control how the database is cleared of old or redundant data.

7.2.1 Cleardown Settings

In normal circumstances, the main WCS database will never accrue redundant data as, when it is completed, it is deleted from the database. The Log files (incoming, outgoing and Error) can be cleared down to a smaller time, as they are really only needed for support.

The Activities and Exceptions files are there for your analysis of the work done and exceptions made by employees. It would normally be expected to want to keep between 1 and 3 months of data in these files

Reasonable general cleardown settings are:

System Settings

Rules | Message Types | Maintenance Settings | **Clear Down**

Location of log files: C:\Shared Area\WCS Test Latest\Log\ Browse...

Data		Logs	
	Period (Days)		Period (Days)
Clear Database	☒ 7	Clear Incoming Log Table	☒ 14
Clear Log Archive	☐	Clear Outgoing Log Table	☒
Clear Exceptions	☒ 90	Clear Error Log	☒
Clear Activities	☒ 90		
Clear Deleted Records	☒ 1		

OK Cancel Apply

7.2.2 Running Cleardown

The cleardown process is a manually run process, as and when you want to run it.

It leaves behind the days' amount of data in specified files according to the settings. The process can be scheduled instead, using the standard Windows scheduler.

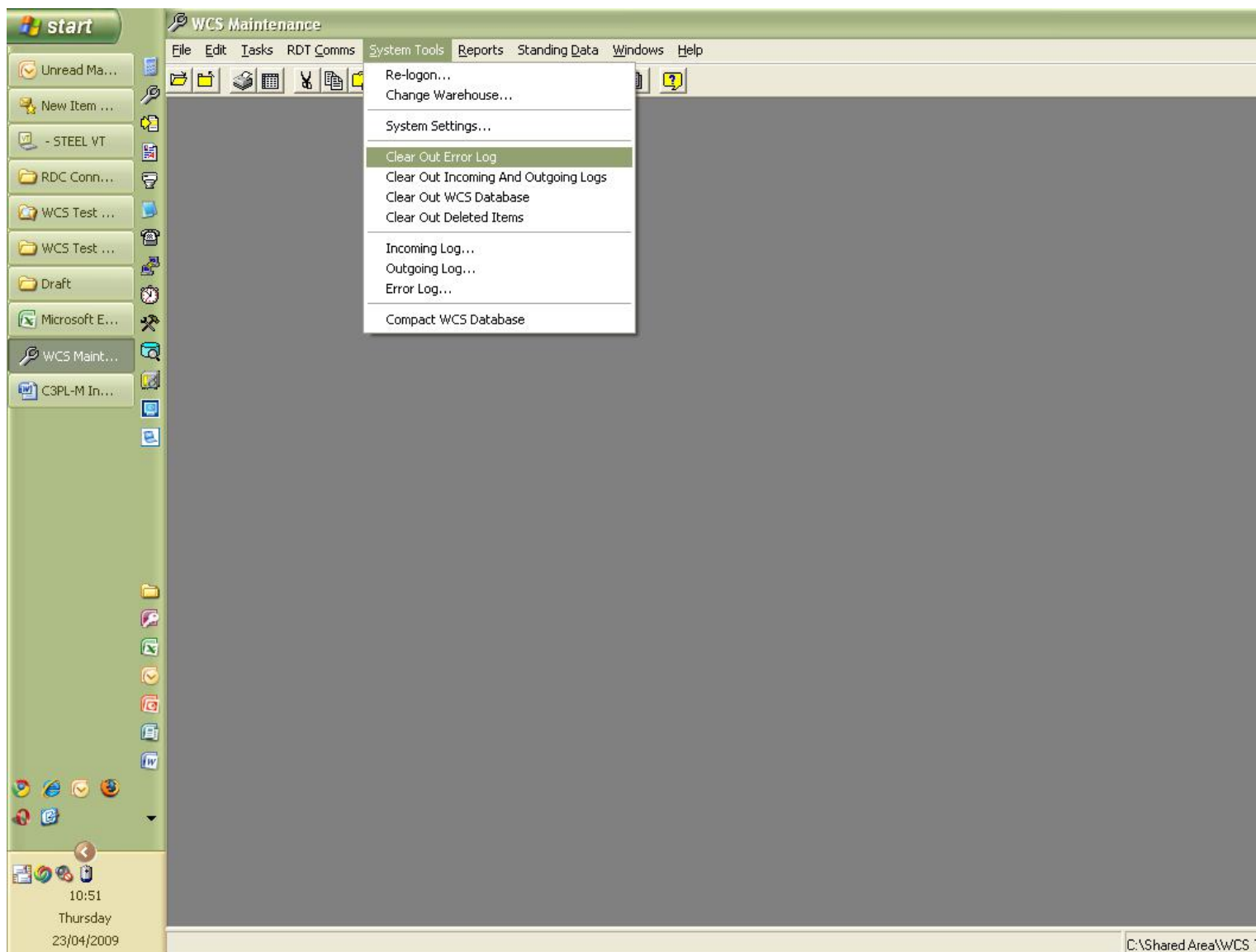
When the process runs, it creates a new cleardown database in your Logs area (also a parameter set in this form), containing all the data that has been removed from the database. Each time cleardown is run, a new archive database is created, so I suggest that this process is run infrequently (perhaps once a month or less).

The data in from each cleardown run (in each archive database) is still accessible (for enquiry purposes) and the process for doing this can be seen later in this mail.

This process should **only** be set up and run on the Maintenance session that runs on the WCS Server machine, as the Cleardown database will be created on the machine that ran the process.

The process can be run in several ways:





- To clear down just the Error Log, choose the option Clear Out Error Log from the System Tools menu.
- To clear down just the Incoming and Outgoing logs, choose the option Clear Out Incoming and Outgoing Logs from the System Tools menu.
- To clear down just data marked for deletion in the database (i.e. data deleted by WCS Maintenance users), choose the option Clear Out Deleted Items from the System Tools menu.
- To clear down the all the WCS databases according to the Cleardown Settings, choose the option Clear Out WCS Database from the System Tools menu.

All space cleared in the database will be recovered the next time the WCS Server application is re-started.



8 Archive Database Queries

When you create a logging database copy or clear down data from the logging database, the users may need to enquire against it. The easiest way to set them up for this is to create an Archive database. This can be done by copying the existing WCS database rdt1 to a name like rdt1archive.

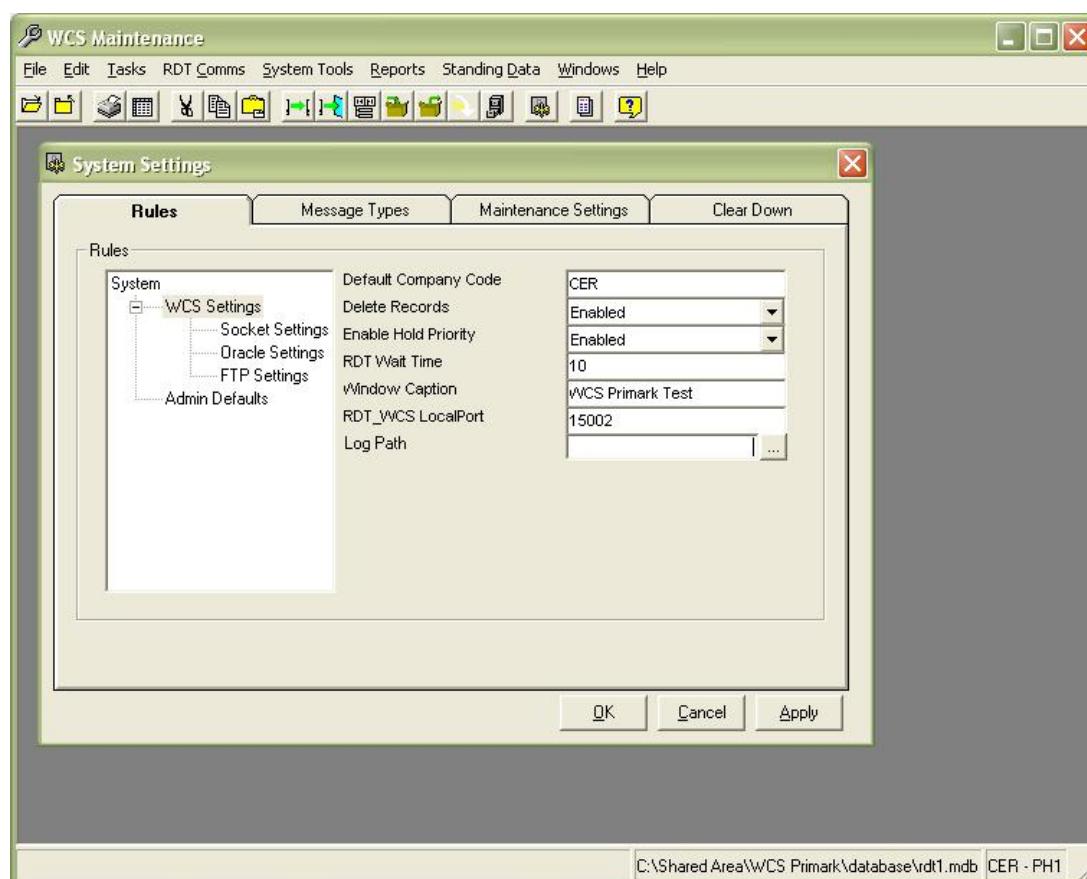
To access archive logging databases:

Start WCSMaintenance as normal.

Do not open the normal database (rdt1) but instead open the new database rdt1archive.

Log in as normal.

Click on **System Tools/'System Settings** from the menu.



Click on the **Rules** tab and the **WCS Settings** group.

Click on the **Log Path** rule and enter the full file specification of the archive logging database you want to enquire on. Alternatively, use the Browse (...) button to the right of the **Log Path** rule to search for the archive logging database.

Click **Apply** and/or **OK** to close the form.

Close the database by choosing **Close WCS Database** from the **File** menu.

Open the Archive database again by choosing **Open WCS Database** from the **File** menu and choosing the archive database from the pop-up browser.

This Archive database will now show the logging data from the archive logging database chosen, allowing users to enquire and report against this information.

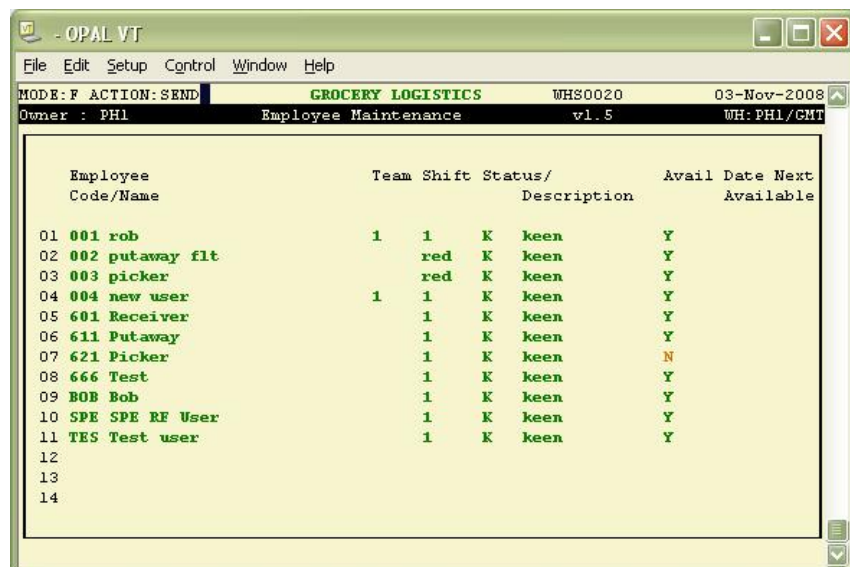


9 Restricting WCS Maintenance User Access

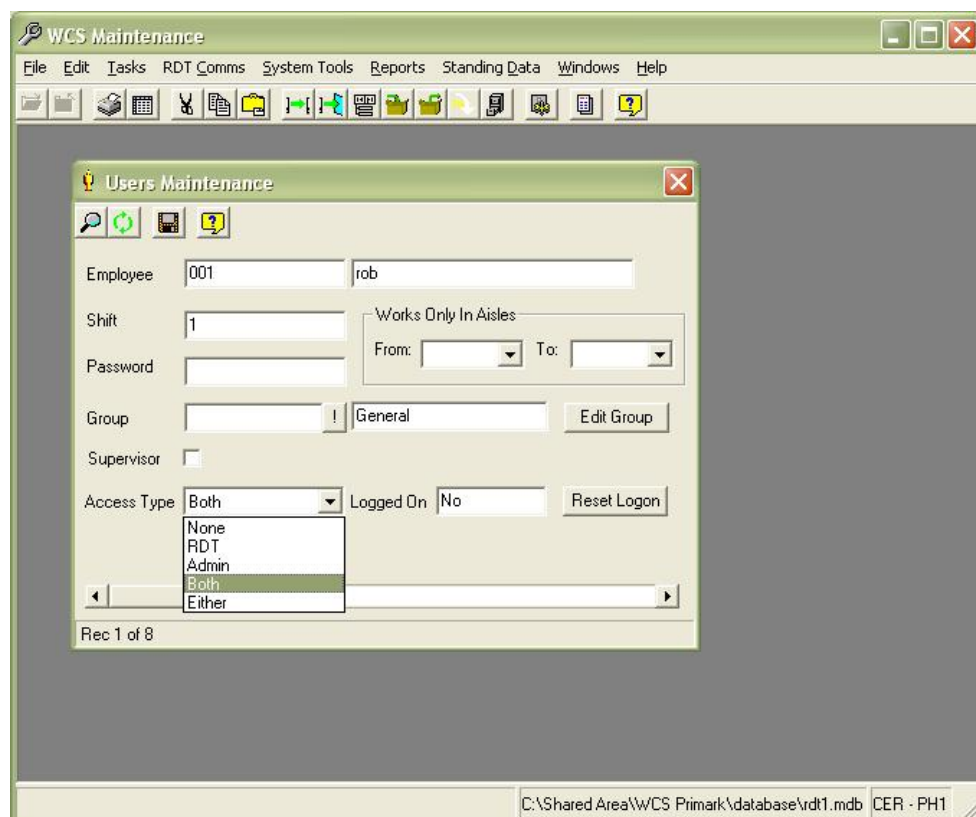
9.1 Setting User Access

The first stage is to ensure all employees are sent across to Calidus 3pl-Mobile from Calidus 3pl. The procedure for this can be seen in the RDT Training Guide WMS v4, section 4.1.

This basically comprises typing SEND from the Employees Maintenance screen in WMS:



Once sent across, all users will be set by default to be RDT users. For any users that require WCS Maintenance access, the access type of that user must be modified, as below:



For users who require access to WCS Maintenance ONLY, choose type "Admin".

For users who require access to WCS Maintenance OR RDT functions, choose type "Either".



For users who require access to WCS Maintenance AND RDT functions at the same time, choose type "Both".

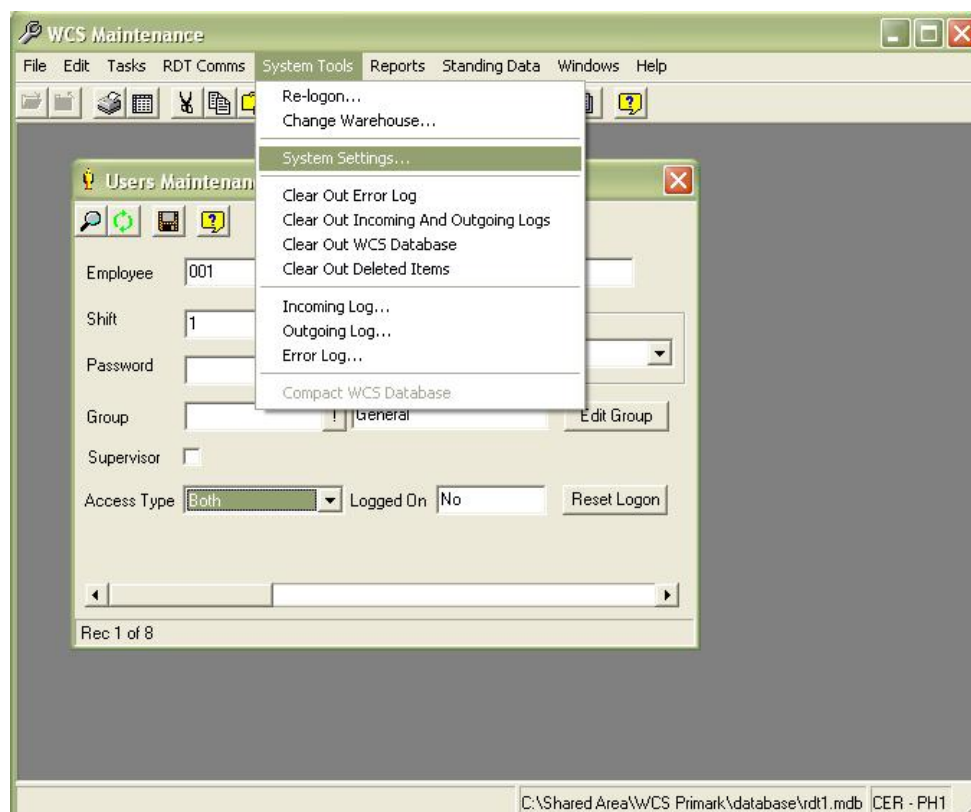
Click the save button when you are finished.

If a user is set to any of the options listed above, the menu options allowable for them are then limited by the group or, if they do not have one, by the system defaults (see section 5.2).

To set a Group, they must first be set up by the Groups Maintenance form (see section 5.3).

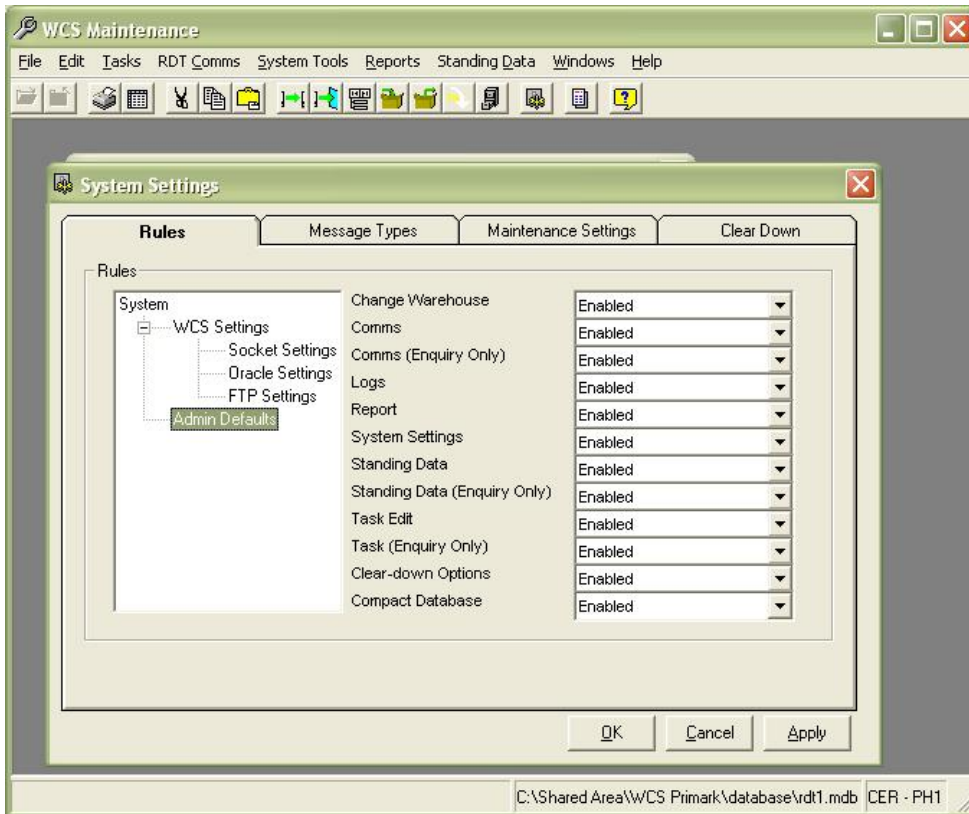
9.2 Setting System Defaults

The system defaults are maintained on System Tools/System Settings.



Click the Rules tab, and then the 'Admin Defaults' group.





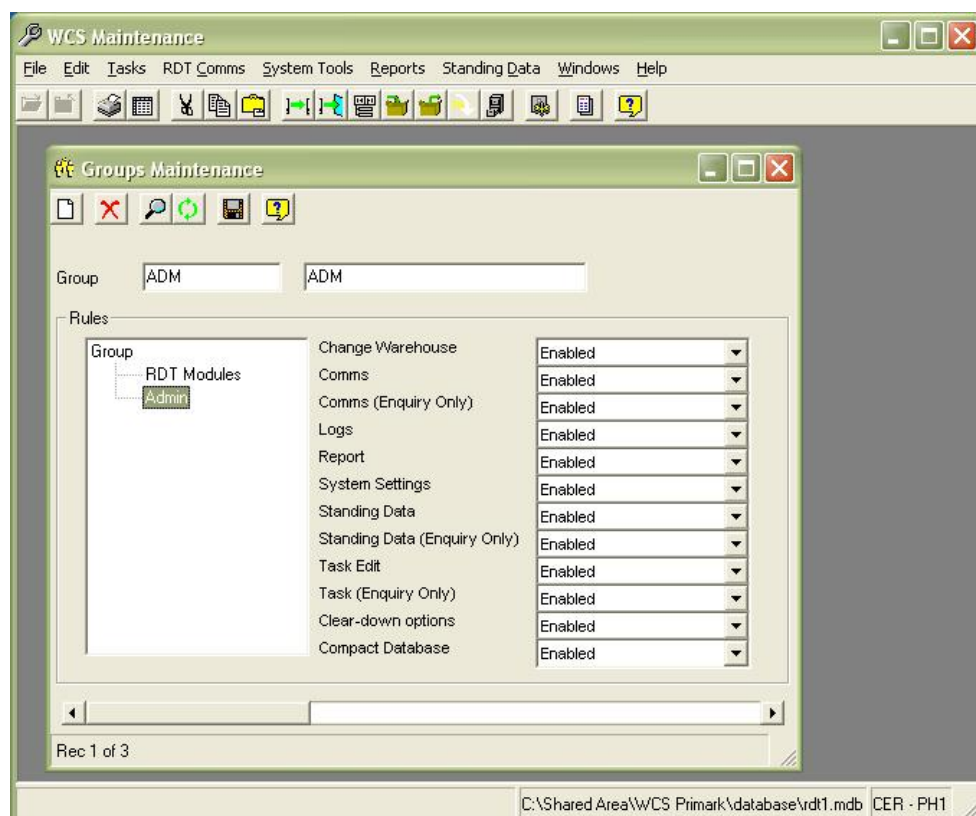
Each rule affects the menu items that can be seen and used within maintenance, if the user does not have a group.

Rule	Description
Change Warehouse	If enabled, allows the user to change the default warehouse they can see.
Comms	Allows the user full access to the RDT Comms menu. If this is enabled, the following option need not be.
Comms (Enquiry Only)	Allows the user Enquiry-only access to the top 2 items on the RDT Comms menu.
Logs	Allows the user access to the Logs Enquiry screens in the System Tools menu. That is: Incoming Log; Outgoing Log and; Error Log.
Report	Allows the user access to the Reports menu
System Settings	Allows the user access to the System Settings option on the System Tools menu. NOTE: This option should only be enabled for super-users, and even then should only be enabled sparingly.
Standing Data	Allows the user full access to all items on the Standing Data menu. If this is enabled, the following option need not be. NOTE: This option will allow users to see other users' passwords, and should therefore be limited only to those users who require it.
Standing Data (Enquiry Only)	Allows the user access to the Enquiry screens only on the Standing Data menu. That is all the items on the menu in the second group on the menu list. The top and bottom groups will not be enabled.
Task Edit	Allows the user full access to all the screens on the Tasks menu. If this is enabled, the following option need not be.
Task (Enquiry Only)	Allows the user access to all the screens on the Tasks menu, but for enquiry purposes only.
Clear-down Options	Allows the user access to the Clear-Out options on the System Tools menu. NOTE: This should only be available for super-users.
Compact Database	Allows the user access to the Compact Database option on the System Tools menu.

9.3 Setting Group Defaults

Groups are maintained by the Groups Maintenance screen, accessed from the Standing Data Maintenance menu.





Full help for maintaining and creating Groups can be found in the on-line help and the WCS Maintenance user Guide.

Click the Admin group to see the settings that affect the WCS Maintenance options available to users assigned to this group.

Each rule affects the menu items that can be seen and used within maintenance, if the user does not have a group.

Rule	Description
Change Warehouse	If enabled, allows the user to change the default warehouse they can see.
Comms	Allows the user full access to the RDT Comms menu. If this is enabled, the following option need not be.
Comms (Enquiry Only)	Allows the user Enquiry-only access to the top 2 items on the RDT Comms menu.
Logs	Allows the user access to the Logs Enquiry screens in the System Tools menu. That is: Incoming Log; Outgoing Log and; Error Log.
Report	Allows the user access to the Reports menu
System Settings	Allows the user access to the System Settings option on the System Tools menu. NOTE: This option should only be enabled for super-users, and even then should only be enabled sparingly.
Standing Data	Allows the user full access to all items on the Standing Data menu. If this is enabled, the following option need not be. NOTE: This option will allow users to see other users' passwords, and should therefore be limited only to those users who require it.
Standing Data (Enquiry Only)	Allows the user access to the Enquiry screens only on the Standing Data menu. That is all the items on the menu in the second group on the menu list. The top and bottom groups will not be enabled.
Task Edit	Allows the user full access to all the screens on the Tasks menu. If this is enabled, the following option need not be.
Task (Enquiry Only)	Allows the user access to all the screens on the Tasks menu, but for enquiry purposes only.
Clear-down Options	Allows the user access to the Clear-Out options on the System Tools menu. NOTE: This should only be available for super-users.
Compact Database	Allows the user access to the Compact Database option on the System Tools menu.



10 Failsafe WMS/WCS Recovery Process

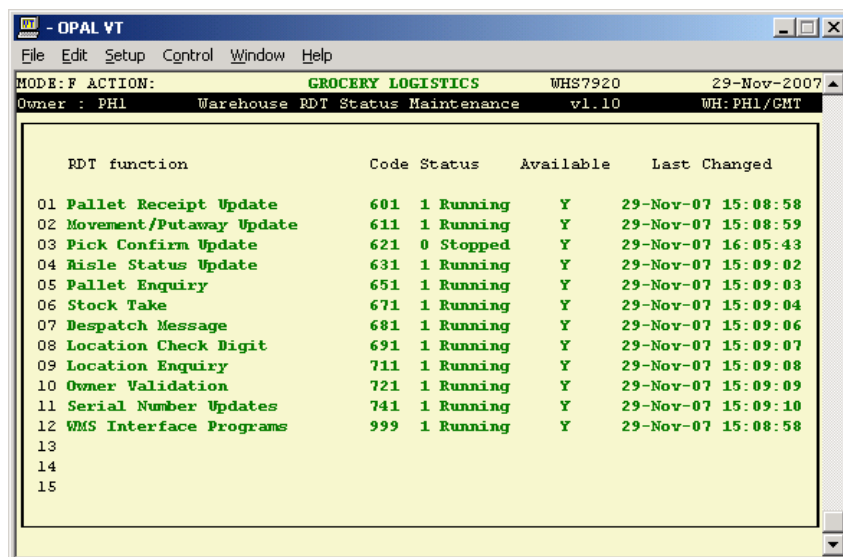
In the event of failure of any portion of the systems, a full-restart of all processes associated to RF processes will normally resolve the problem. The full process normally takes less than 15 minutes.

10.1 Summary of Steps

- Check running WMS Update Processes
- Check WMS Interfaces
- Re-start all WMS Update processes
- Re-start WCS-Server application
- Re-start WCS Server machine

10.1.1 Check running WMS Update processes

On the UNISON RDT Menu, run the RDT Start/Stop screen:



The screenshot shows a terminal window titled "OPAL VT" with a menu bar (File, Edit, Setup, Control, Window, Help). The main display area shows the following information:

MODE: F ACTION: **GROCERY LOGISTICS** WHS7920 29-Nov-2007
 Owner : PH1 Warehouse RDT Status Maintenance v1.10 WH: PH1/CMT

RDT function	Code	Status	Available	Last Changed
01 Pallet Receipt Update	601	1 Running	Y	29-Nov-07 15:08:58
02 Movement/Putaway Update	611	1 Running	Y	29-Nov-07 15:08:59
03 Pick Confirm Update	621	0 Stopped	Y	29-Nov-07 16:05:43
04 Risle Status Update	631	1 Running	Y	29-Nov-07 15:09:02
05 Pallet Enquiry	651	1 Running	Y	29-Nov-07 15:09:03
06 Stock Take	671	1 Running	Y	29-Nov-07 15:09:04
07 Despatch Message	681	1 Running	Y	29-Nov-07 15:09:06
08 Location Check Digit	691	1 Running	Y	29-Nov-07 15:09:07
09 Location Enquiry	711	1 Running	Y	29-Nov-07 15:09:08
10 Owner Validation	721	1 Running	Y	29-Nov-07 15:09:09
11 Serial Number Updates	741	1 Running	Y	29-Nov-07 15:09:10
12 WMS Interface Programs	999	1 Running	Y	29-Nov-07 15:08:58
13				
14				
15				

Should any of the processes be stopped, start them by entering START from the action prompt.

At this point, check with the operation that the problem has resolved. If not, move on to the next stage.

10.1.2 Check WMS Interfaces

On the UNISON RDT Menu, run the RDT Start/Stop screen:



OPAL VT

File Edit Setup Control Window Help

MODE: F ACTION: **GROCERY LOGISTICS** WHS7920 29-Nov-2007

Owner : PH1 Warehouse RDT Status Maintenance v1.10 WH: PH1/CMT

RDT function	Code	Status	Available	Last Changed
01 Pallet Receipt Update	601	1 Running	Y	29-Nov-07 15:08:58
02 Movement/Putaway Update	611	1 Running	Y	29-Nov-07 15:08:59
03 Pick Confirm Update	621	0 Stopped	Y	29-Nov-07 16:05:43
04 Risle Status Update	631	1 Running	Y	29-Nov-07 15:09:02
05 Pallet Enquiry	651	1 Running	Y	29-Nov-07 15:09:03
06 Stock Take	671	1 Running	Y	29-Nov-07 15:09:04
07 Despatch Message	681	1 Running	Y	29-Nov-07 15:09:06
08 Location Check Digit	691	1 Running	Y	29-Nov-07 15:09:07
09 Location Enquiry	711	1 Running	Y	29-Nov-07 15:09:08
10 Owner Validation	721	1 Running	Y	29-Nov-07 15:09:09
11 Serial Number Updates	741	1 Running	Y	29-Nov-07 15:09:10
12 WMS Interface Programs	999	1 Running	Y	29-Nov-07 15:08:58
13				
14				
15				

Stop and start the WMS Interface processes by first entering KILL:

OPAL VT

File Edit Setup Control Window Help

MODE: F ACTION: **KILL** **GROCERY LOGISTICS** WHS7920 29-Nov-2007

Owner : PH1 Warehouse RDT Status Maintenance v1.10 WH: PH1/CMT

RDT function	Code	Status	Available	Last Changed
01 Pallet Receipt Update	601	1 Running	Y	29-Nov-07 15:08:58
02 Movement/Putaway Update	611	1 Running	Y	29-Nov-07 15:08:59
03 Pick Confirm Update	621	1 Running	Y	29-Nov-07 16:08:07
04 Risle Status Update	631	1 Running	Y	29-Nov-07 15:09:02
05 Pallet Enquiry	651	1 Running	Y	29-Nov-07 15:09:03
06 Stock Take	671	1 Running	Y	29-Nov-07 15:09:04
07 Despatch Message	681	1 Running	Y	29-Nov-07 15:09:06
08 Location Check Digit	691	1 Running	Y	29-Nov-07 15:09:07
09 Location Enquiry	711	1 Running	Y	29-Nov-07 15:09:08
10 Owner Validation	721	1 Running	Y	29-Nov-07 15:09:09
11 Serial Number Updates	741	1 Running	Y	29-Nov-07 15:09:10
12 WMS Interface Programs	999	1 Running	Y	29-Nov-07 15:08:58
13				
14				
15				

Stopping Receive/Transmit interface processes...

OPAL VT

File Edit Setup Control Window Help

MODE: F ACTION: **GROCERY LOGISTICS** WHS7920 29-Nov-2007

Owner : PH1 Warehouse RDT Status Maintenance v1.10 WH: PH1/CMT

RDT function	Code	Status	Available	Last Changed
01 Pallet Receipt Update	601	1 Running	Y	29-Nov-07 15:08:58
02 Movement/Putaway Update	611	1 Running	Y	29-Nov-07 15:08:59
03 Pick Confirm Update	621	1 Running	Y	29-Nov-07 16:08:07
04 Risle Status Update	631	1 Running	Y	29-Nov-07 15:09:02
05 Pallet Enquiry	651	1 Running	Y	29-Nov-07 15:09:03
06 Stock Take	671	1 Running	Y	29-Nov-07 15:09:04
07 Despatch Message	681	1 Running	Y	29-Nov-07 15:09:06
08 Location Check Digit	691	1 Running	Y	29-Nov-07 15:09:07
09 Location Enquiry	711	1 Running	Y	29-Nov-07 15:09:08
10 Owner Validation	721	1 Running	Y	29-Nov-07 15:09:09
11 Serial Number Updates	741	1 Running	Y	29-Nov-07 15:09:10
12 WMS Interface Programs	999	0 Stopped	Y	29-Nov-07 16:08:40
13				
14				
15				

Receive/Transmit interface processes stopped.

Re-start them by typing START.



OPAL VT

File Edit Setup Control Window Help

MODE: F ACTION: START GROCERY LOGISTICS WHS7920 29-Nov-2007

Owner : PH1 Warehouse RDT Status Maintenance v1.10 WH: PH1/CMT

RDT function	Code	Status	Available	Last Changed
01 Pallet Receipt Update	601	1 Running	Y	29-Nov-07 15:08:58
02 Movement/Putaway Update	611	1 Running	Y	29-Nov-07 15:08:59
03 Pick Confirm Update	621	1 Running	Y	29-Nov-07 16:08:07
04 Risle Status Update	631	1 Running	Y	29-Nov-07 15:09:02
05 Pallet Enquiry	651	1 Running	Y	29-Nov-07 15:09:03
06 Stock Take	671	1 Running	Y	29-Nov-07 15:09:04
07 Despatch Message	681	1 Running	Y	29-Nov-07 15:09:06
08 Location Check Digit	691	1 Running	Y	29-Nov-07 15:09:07
09 Location Enquiry	711	1 Running	Y	29-Nov-07 15:09:08
10 Owner Validation	721	1 Running	Y	29-Nov-07 15:09:09
11 Serial Number Updates	741	1 Running	Y	29-Nov-07 15:09:10
12 WMS Interface Programs	999	0 Stopped	Y	29-Nov-07 16:08:40
13				
14				
15				

Receive/Transmit interface processes not started. Starting...

At this point, check with the operation that the problem has resolved. If not, move on to the next stage.

10.1.3 Re-start all WMS Update processes

On the UNISON RDT Menu, run the RDT Start/Stop screen:

OPAL VT

File Edit Setup Control Window Help

MODE: F ACTION: GROCERY LOGISTICS WHS7920 29-Nov-2007

Owner : PH1 Warehouse RDT Status Maintenance v1.10 WH: PH1/CMT

RDT function	Code	Status	Available	Last Changed
01 Pallet Receipt Update	601	1 Running	Y	29-Nov-07 15:08:58
02 Movement/Putaway Update	611	1 Running	Y	29-Nov-07 15:08:59
03 Pick Confirm Update	621	0 Stopped	Y	29-Nov-07 16:05:43
04 Risle Status Update	631	1 Running	Y	29-Nov-07 15:09:02
05 Pallet Enquiry	651	1 Running	Y	29-Nov-07 15:09:03
06 Stock Take	671	1 Running	Y	29-Nov-07 15:09:04
07 Despatch Message	681	1 Running	Y	29-Nov-07 15:09:06
08 Location Check Digit	691	1 Running	Y	29-Nov-07 15:09:07
09 Location Enquiry	711	1 Running	Y	29-Nov-07 15:09:08
10 Owner Validation	721	1 Running	Y	29-Nov-07 15:09:09
11 Serial Number Updates	741	1 Running	Y	29-Nov-07 15:09:10
12 WMS Interface Programs	999	1 Running	Y	29-Nov-07 15:08:58
13				
14				
15				

Stop the Update processes by entering STOP



OPAL VT

File Edit Setup Control Window Help

MODE: F ACTION: **GROCERY LOGISTICS** WHS7920 29-Nov-2007

Owner : PH1 Warehouse RDT Status Maintenance v1.10 WH: PH1/CMT

RDT function	Code	Status	Available	Last Changed
01 Pallet Receipt Update	601	0 Stopped	Y	29-Nov-07 16:11:32
02 Movement/Putaway Update	611	0 Stopped	Y	29-Nov-07 16:11:32
03 Pick Confirm Update	621	0 Stopped	Y	29-Nov-07 16:11:32
04 Risle Status Update	631	0 Stopped	Y	29-Nov-07 16:11:32
05 Pallet Enquiry	651	0 Stopped	Y	29-Nov-07 16:11:32
06 Stock Take	671	0 Stopped	Y	29-Nov-07 16:11:32
07 Despatch Message	681	0 Stopped	Y	29-Nov-07 16:11:32
08 Location Check Digit	691	0 Stopped	Y	29-Nov-07 16:11:32
09 Location Enquiry	711	0 Stopped	Y	29-Nov-07 16:11:32
10 Owner Validation	721	0 Stopped	Y	29-Nov-07 16:11:32
11 Serial Number Updates	741	0 Stopped	Y	29-Nov-07 16:11:32
12 WMS Interface Programs	999	1 Running	Y	29-Nov-07 16:09:22
13				
14				
15				

Stop the WMS Interface processes by entering KILL:

OPAL VT

File Edit Setup Control Window Help

MODE: F ACTION: **KILL** **GROCERY LOGISTICS** WHS7920 29-Nov-2007

Owner : PH1 Warehouse RDT Status Maintenance v1.10 WH: PH1/CMT

RDT function	Code	Status	Available	Last Changed
01 Pallet Receipt Update	601	0 Stopped	Y	29-Nov-07 16:11:32
02 Movement/Putaway Update	611	0 Stopped	Y	29-Nov-07 16:11:32
03 Pick Confirm Update	621	0 Stopped	Y	29-Nov-07 16:11:32
04 Risle Status Update	631	0 Stopped	Y	29-Nov-07 16:11:32
05 Pallet Enquiry	651	0 Stopped	Y	29-Nov-07 16:11:32
06 Stock Take	671	0 Stopped	Y	29-Nov-07 16:11:32
07 Despatch Message	681	0 Stopped	Y	29-Nov-07 16:11:32
08 Location Check Digit	691	0 Stopped	Y	29-Nov-07 16:11:32
09 Location Enquiry	711	0 Stopped	Y	29-Nov-07 16:11:32
10 Owner Validation	721	0 Stopped	Y	29-Nov-07 16:11:32
11 Serial Number Updates	741	0 Stopped	Y	29-Nov-07 16:11:32
12 WMS Interface Programs	999	1 Running	Y	29-Nov-07 16:09:22
13				
14				
15				

Stopping Receive/Transmit interface processes...

OPAL VT

File Edit Setup Control Window Help

MODE: F ACTION: **GROCERY LOGISTICS** WHS7920 29-Nov-2007

Owner : PH1 Warehouse RDT Status Maintenance v1.10 WH: PH1/CMT

RDT function	Code	Status	Available	Last Changed
01 Pallet Receipt Update	601	0 Stopped	Y	29-Nov-07 16:11:32
02 Movement/Putaway Update	611	0 Stopped	Y	29-Nov-07 16:11:32
03 Pick Confirm Update	621	0 Stopped	Y	29-Nov-07 16:11:32
04 Risle Status Update	631	0 Stopped	Y	29-Nov-07 16:11:32
05 Pallet Enquiry	651	0 Stopped	Y	29-Nov-07 16:11:32
06 Stock Take	671	0 Stopped	Y	29-Nov-07 16:11:32
07 Despatch Message	681	0 Stopped	Y	29-Nov-07 16:11:32
08 Location Check Digit	691	0 Stopped	Y	29-Nov-07 16:11:32
09 Location Enquiry	711	0 Stopped	Y	29-Nov-07 16:11:32
10 Owner Validation	721	0 Stopped	Y	29-Nov-07 16:11:32
11 Serial Number Updates	741	0 Stopped	Y	29-Nov-07 16:11:32
12 WMS Interface Programs	999	0 Stopped	Y	29-Nov-07 16:12:14
13				
14				
15				

Receive/Transmit interface processes stopped.

Re-start them all by typing START.



OPAL VT

File Edit Setup Control Window Help

MODE: F ACTION: START GROCERY LOGISTICS WHS7920 29-Nov-2007

Owner : PH1 Warehouse RDT Status Maintenance v1.10 WH: PH1/CMT

RDT function	Code	Status	Available	Last Changed
01 Pallet Receipt Update	601	0 Stopped	Y	29-Nov-07 16:11:32
02 Movement/Putaway Update	611	0 Stopped	Y	29-Nov-07 16:11:32
03 Pick Confirm Update	621	0 Stopped	Y	29-Nov-07 16:11:32
04 Risle Status Update	631	0 Stopped	Y	29-Nov-07 16:11:32
05 Pallet Enquiry	651	0 Stopped	Y	29-Nov-07 16:11:32
06 Stock Take	671	0 Stopped	Y	29-Nov-07 16:11:32
07 Despatch Message	681	0 Stopped	Y	29-Nov-07 16:11:32
08 Location Check Digit	691	0 Stopped	Y	29-Nov-07 16:11:32
09 Location Enquiry	711	0 Stopped	Y	29-Nov-07 16:11:32
10 Owner Validation	721	0 Stopped	Y	29-Nov-07 16:11:32
11 Serial Number Updates	741	0 Stopped	Y	29-Nov-07 16:11:32
12 WMS Interface Programs	999	0 Stopped	Y	29-Nov-07 16:12:14
13				
14				
15				

Receive/Transmit interface processes not started. Starting...

OPAL VT

File Edit Setup Control Window Help

MODE: F ACTION: START GROCERY LOGISTICS WHS7920 29-Nov-2007

Owner : PH1 Warehouse RDT Status Maintenance v1.10 WH: PH1/CMT

RDT function	Code	Status	Available	Last Changed
01 Pallet Receipt Update	601	0 Stopped	Y	29-Nov-07 16:11:32
02 Movement/Putaway Update	611	0 Stopped	Y	29-Nov-07 16:11:32
03 Pick Confirm Update	621	0 Stopped	Y	29-Nov-07 16:11:32
04 Risle Status Update	631	0 Stopped	Y	29-Nov-07 16:11:32
05 Pallet Enquiry	651	0 Stopped	Y	29-Nov-07 16:11:32
06 Stock Take	671	0 Stopped	Y	29-Nov-07 16:11:32
07 Despatch Message	681	0 Stopped	Y	29-Nov-07 16:11:32
08 Location Check Digit	691	0 Stopped	Y	29-Nov-07 16:11:32
09 Location Enquiry	711	0 Stopped	Y	29-Nov-07 16:11:32
10 Owner Validation	721	0 Stopped	Y	29-Nov-07 16:11:32
11 Serial Number Updates	741	0 Stopped	Y	29-Nov-07 16:11:32
12 WMS Interface Programs	999	1 Stopped	Y	29-Nov-07 16:12:14
13				
14				
15				

Receive/Transmit interface processes started. Continuing...

OPAL VT

File Edit Setup Control Window Help

MODE: F ACTION: GROCERY LOGISTICS WHS7920 29-Nov-2007

Owner : PH1 Warehouse RDT Status Maintenance v1.10 WH: PH1/CMT

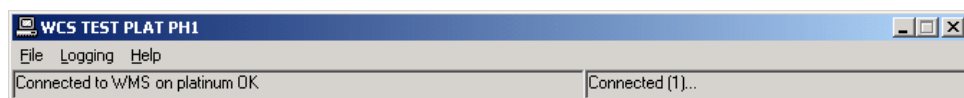
RDT function	Code	Status	Available	Last Changed
01 Pallet Receipt Update	601	1 Running	Y	29-Nov-07 16:12:28
02 Movement/Putaway Update	611	1 Running	Y	29-Nov-07 16:12:30
03 Pick Confirm Update	621	1 Running	Y	29-Nov-07 16:12:31
04 Risle Status Update	631	1 Running	Y	29-Nov-07 16:12:32
05 Pallet Enquiry	651	1 Running	Y	29-Nov-07 16:12:33
06 Stock Take	671	1 Running	Y	29-Nov-07 16:12:34
07 Despatch Message	681	1 Running	Y	29-Nov-07 16:12:36
08 Location Check Digit	691	1 Running	Y	29-Nov-07 16:12:37
09 Location Enquiry	711	1 Running	Y	29-Nov-07 16:12:38
10 Owner Validation	721	1 Running	Y	29-Nov-07 16:12:39
11 Serial Number Updates	741	1 Running	Y	29-Nov-07 16:12:40
12 WMS Interface Programs	999	1 Running	Y	29-Nov-07 16:12:28
13				
14				
15				

At this point, check with the operation that the problem has resolved. If not, move on to the next stage.

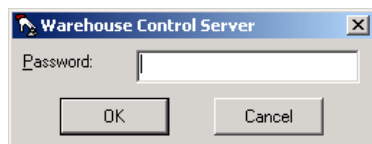


10.1.4 Re-start WCS-Server application

Log on the WCS Server machine and locate the WCS-Server application:



To stop, click the X in the corner:

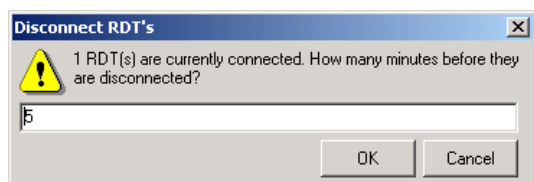


Enter the password.



Click OK

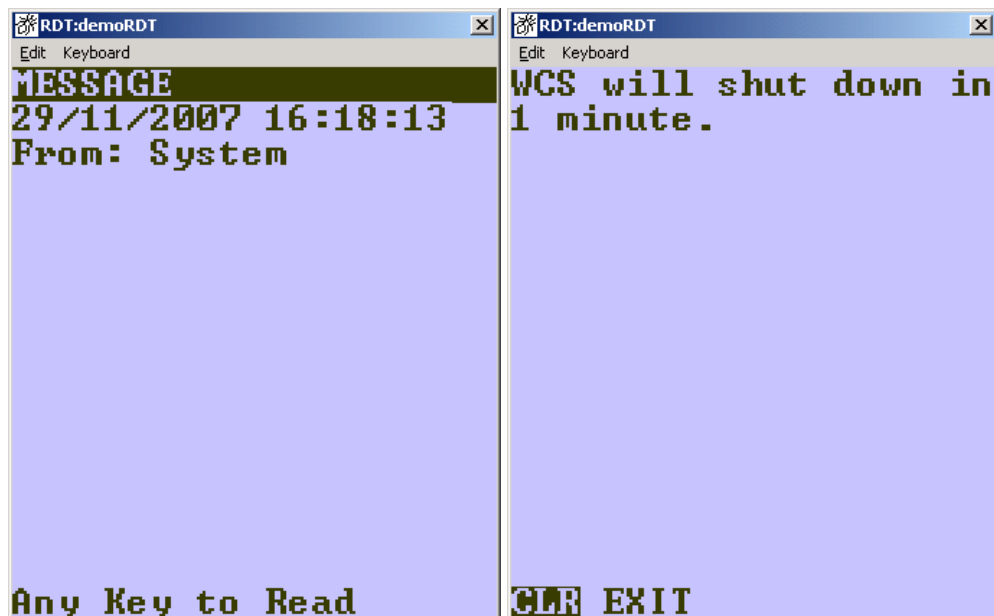
If any RDT users are connected, you will be prompted how long to wait before logging them off:



If you enter 0, the WCS-Server application will exit immediately without informing any connected RF users.

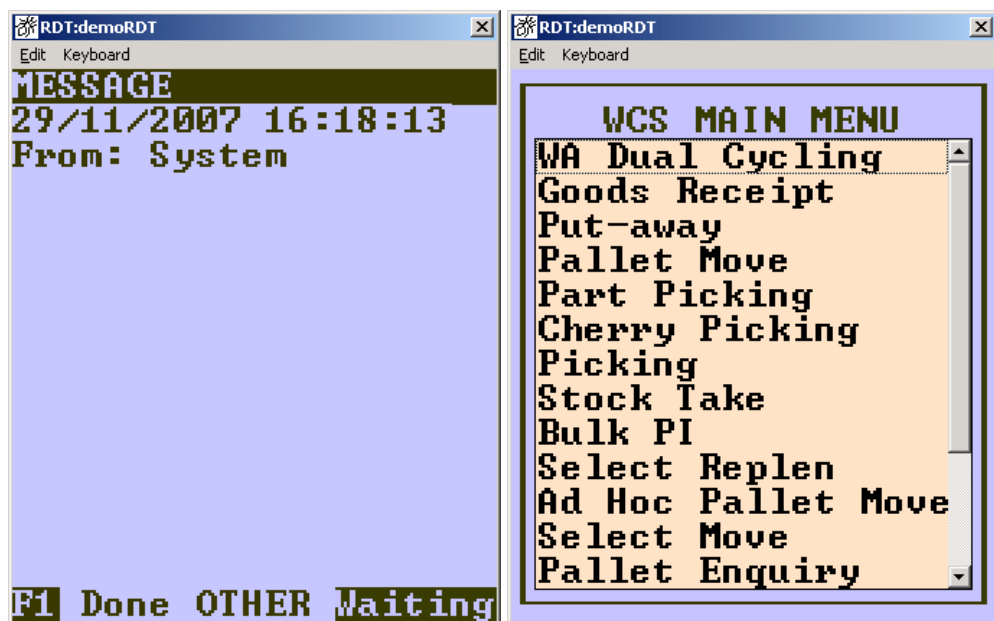
If you leave a positive number of minutes in here, the WCS-Server will commence a countdown on the screen, and will send each connected RF user a message, to exit the system immediately.





To restart the WCS-Server application, choose the application from the Start menu/Programs/Warehouse Control Server/WCS Server shortcut.

When the server restarts, the WCS will reconnect to any RDT users when they next press a key:



Note: If you are quick enough stopping and starting the WCS-Server application, the users will not know that the application has been re-started - they will simply continue to work as usual, as long as you get it re-started within 30 seconds.

At this point, check with the operation that the problem has resolved. If not, move on to the next stage. Also, contact OBSL support.

10.1.5 Re-start WCS Server machine

Ensure all users have logged off the system, including RF users and WCS Maintenance users.

Reboot the WCS Server machine.

When the machine has re-booted, restart the WCS application.





11 Changing WCS/WMS Connectivity

It is sometimes necessary to change the connectivity settings on the WMS and/or WCS (for example, a site move). The following is a standard process covering this procedure.

 **Note:** If the WCS IP address is being changed then a new authorisation code may be required. This can be requested from OBS Logistics.

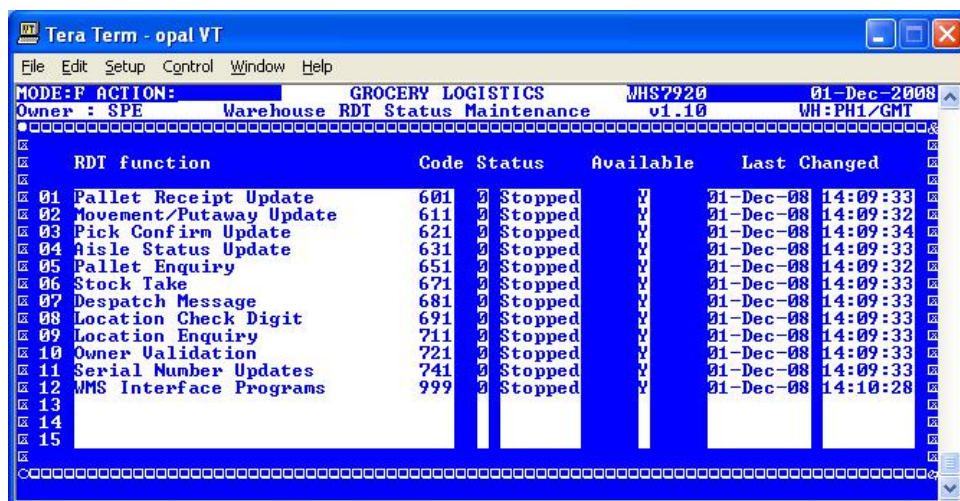
11.1 Requirements

Before this process is started, you will need to know:

- The WMS IP address.
- The port number used to send messages from the WMS to the WCS.
- The port number used to send messages from the WCS to the WMS.

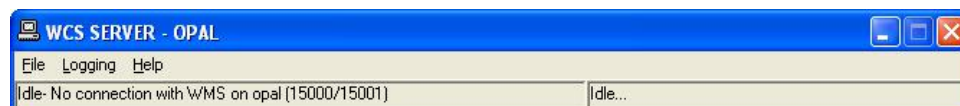
11.1.1 Stop the existing WMS - WCS Interface

Stop the existing WMS/WCS interface using the 'RDT Start/Stop Screen' (WHS7920). This is done by entering 'STOP' at the action prompt to stop the RF processes followed by entering 'KILL' at the action prompt to stop the interface. Once the RF processes and interface have been stopped, the screen should display all of the processes as status 0 (stopped). An example of this can be seen in the screenshot below:



RDT function	Code	Status	Available	Last Changed
01 Pallet Receipt Update	601	0 Stopped	Y	01-Dec-08 14:09:33
02 Movement/Putaway Update	611	0 Stopped	Y	01-Dec-08 14:09:32
03 Pick Confirm Update	621	0 Stopped	Y	01-Dec-08 14:09:34
04 Aisle Status Update	631	0 Stopped	Y	01-Dec-08 14:09:33
05 Pallet Enquiry	651	0 Stopped	Y	01-Dec-08 14:09:32
06 Stock Take	671	0 Stopped	Y	01-Dec-08 14:09:33
07 Despatch Message	681	0 Stopped	Y	01-Dec-08 14:09:33
08 Location Check Digit	691	0 Stopped	Y	01-Dec-08 14:09:33
09 Location Enquiry	711	0 Stopped	Y	01-Dec-08 14:09:33
10 Owner Validation	721	0 Stopped	Y	01-Dec-08 14:09:33
11 Serial Number Updates	741	0 Stopped	Y	01-Dec-08 14:09:33
12 WMS Interface Programs	999	0 Stopped	Y	01-Dec-08 14:10:28

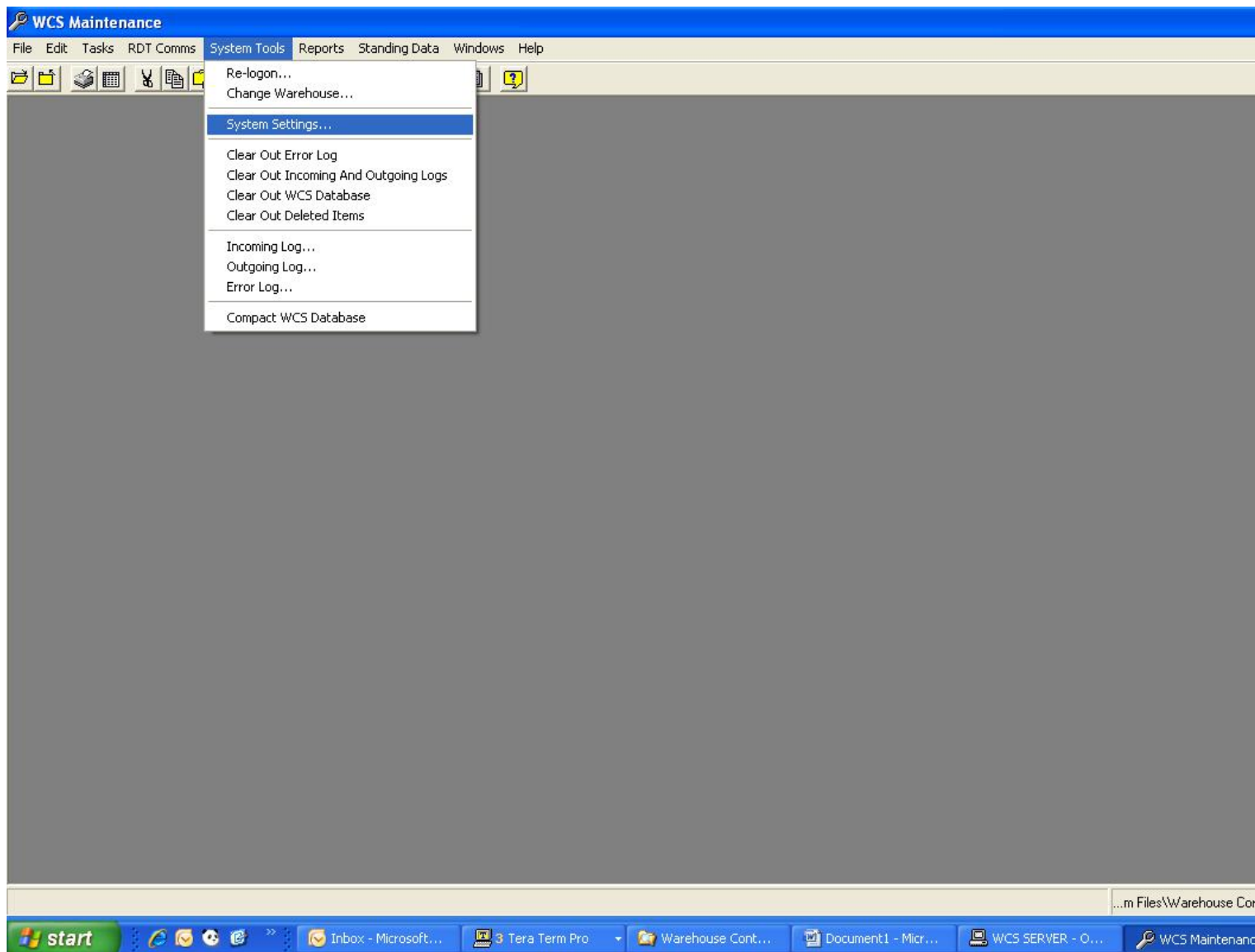
The WCS should also display a message showing that there is no connection between the WCS and WMS:



11.1.2 Update the WCS Connection Settings

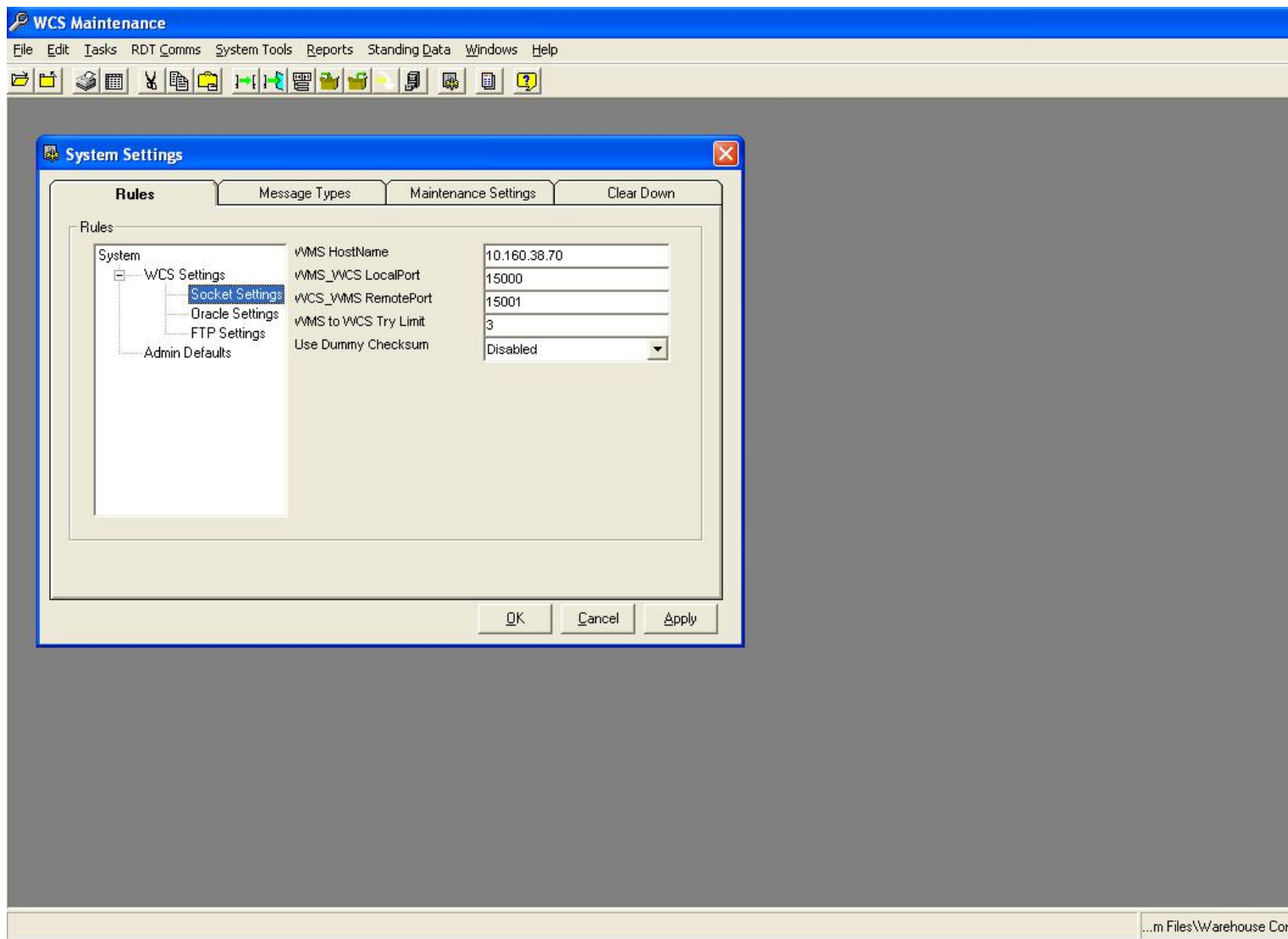
Stop the WCS Server application. Start a WCS Maintenance session and open the 'System Settings' screen which can be done by selecting the 'System Settings?' option from the 'System Tools' drop down list. This can be seen in the screenshot below:





Once the 'System Settings' screen has opened, select the 'Socket Settings' option before entering the WMS IP Address (WMS HostName), the WMS to WCS port number (WMS_WCS LocalPort) and WCS to WMS port number (WCS_WMS RemotePort) with the relevant values. An example is shown in the screenshot below:





11.1.3 Update the WMS Connection Settings

If the IP address of the WCS PC has changed then follow the steps below:

At a UNIX prompt on the WMS change directory to the RDT directory using the following command:

```
cd $RDT_LOCATION
```

Once in this directory, open the 'start_int' file. Once the 'start_int' file has been opened, locate the lines of code that contain the connection settings. An example of the code is displayed below:

```
nohup $RDT_LOCATION/wms_xmit3 $WMSWCS_MBX 1024 15000 10.43.0.124 0 1 1 0 60000 0
$RDT_LOCATION/ >>$RDT_LOCATION/wms_if_msgs.log &
nohup $RDT_LOCATION/wms_recv3 $RDT_LOCATION/rmp.ctrl 15001 1 0 5 $RDT_LOCATION >
>$RDT_LOCATION/wms_if_msgs.log &
```

Ensure that the IP address of the WCS PC (highlighted above in blue), the WMS to WCS port number (highlighted above in green) and the WCS to WMS port number (highlighted above in red) are populated correctly. If they are not correct, amend the values before saving the changes.

Note: If the RDT directory (\$RDT_LOCATION) or the 'start_int' program does not exist then contact OBS Logistics support.

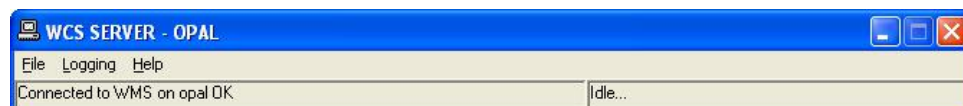


11.1.4 Start the WCS and Interface

Start the WCS Server application, it should still show as no connection to the WMS. Start the WMS/WCS interface on the new machine using the 'RDT Start/Stop Screen' (WHS7920). This is done by entering 'START' at the action prompt. Once the RF processes and interface have been started, the screen should display all of the processes as status 1 (Running). An example of this can be seen in the screenshot below:

RDT function	Code	Status	Available	Last Changed
01 Pallet Receipt Update	601	1 Running	Y	01-Dec-08 14:42:15
02 Movement/Putaway Update	611	1 Running	Y	01-Dec-08 14:42:16
03 Pick Confirm Update	621	1 Running	Y	01-Dec-08 14:42:17
04 Aisle Status Update	631	1 Running	Y	01-Dec-08 14:42:19
05 Pallet Enquiry	651	1 Running	Y	01-Dec-08 14:42:20
06 Stock Take	671	1 Running	Y	01-Dec-08 14:42:21
07 Despatch Message	681	1 Running	Y	01-Dec-08 14:42:22
08 Location Check Digit	691	1 Running	Y	01-Dec-08 14:42:23
09 Location Enquiry	711	1 Running	Y	01-Dec-08 14:42:25
10 Owner Validation	721	1 Running	Y	01-Dec-08 14:42:26
11 Serial Number Updates	741	1 Running	Y	01-Dec-08 14:42:27
12 WMS Interface Programs	999	1 Running	Y	01-Dec-08 14:42:15

The WCS should also display a message showing that it is connected to the WMS:



The WCS should be available to use now.



12 Appendices

12.1 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

