The Systems House, Inc. **ODBC Installation** and User Guide

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Introduction

- ODBC 4.0 Client
 - For use with Reporting Tools

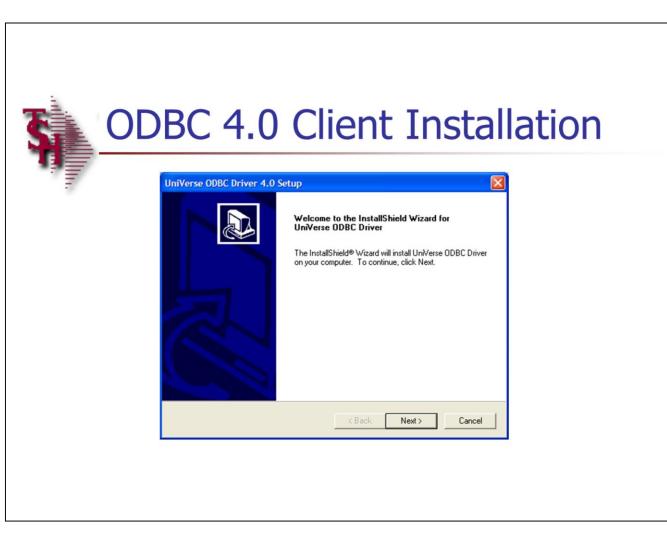
Introduction

The first section of ODBC training guide describes how to install, configure, and use UniVerse ODBC drivers on client systems.

The second section of the ODBC training guide shows you how to add, delete, and/or change dictionary fields in a specific file, as well as it's accompanying reports.

The third section of the ODBC training guide will show you how to create queries in Excel, using a single file.

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Installation

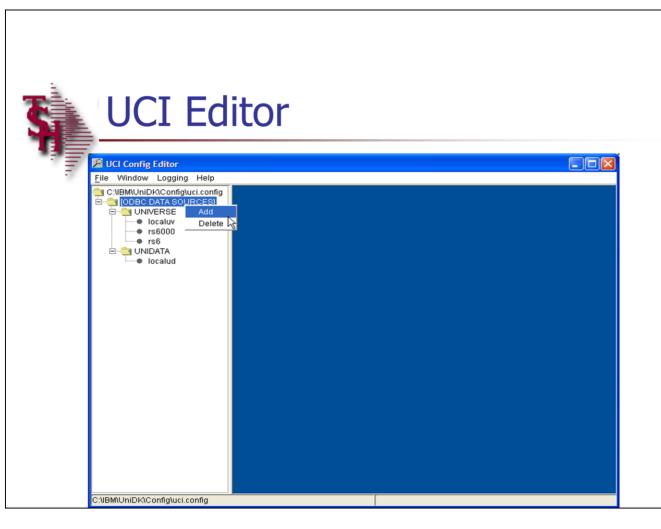
On your PC, download the ODBC drivers .ZIP file to your hard drive. Extract all files to a folder.

Go to the folder, then click on the folder "ODBCCLI" Click on the folder "I386"

Then double click on the setup.exe file to start the installation process.

Click on the "NEXT" button throughout the installation process to install the software into the default directory.

Note: You must have administrator privileges to install the drivers and data sources.



UCI Editor

Adding New Data Source

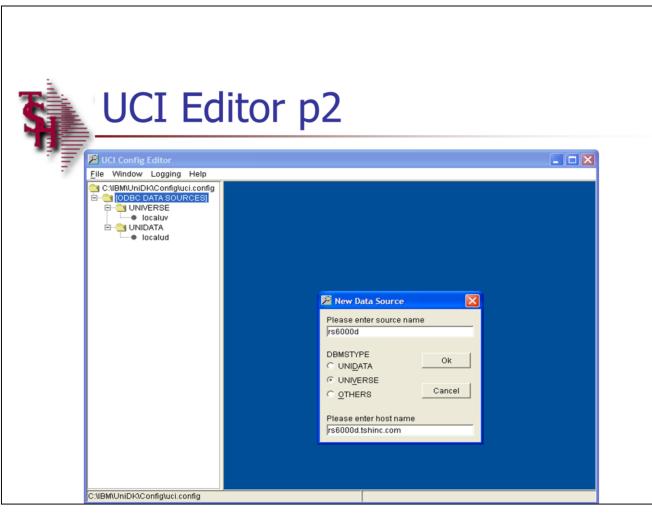
Once the ODBC 4.0 client is installed, you will need to add the data source to the UCI Editor. This process creates the connection to your server.

Go to Start -> All Programs -> IBM U2 -> UniVerse ODBC Driver -> UCI Editor

In the UCI Editor, right click on "[ODBC DATA SOURCES], then click on "ADD".

A "New Data Source" box will be displayed.

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UCI Editor

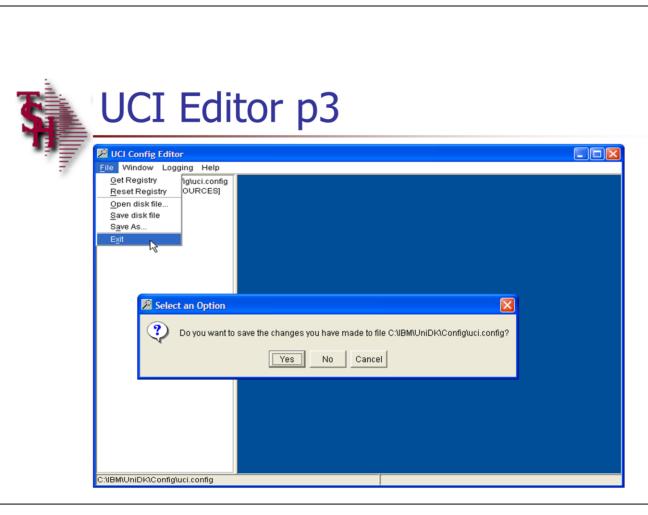
Adding New Data Source

Please enter source name: Enter your server's name.

DBMSTYPE: Select "UNIVERSE" as the database type.

Please enter host name: Enter the host name, or ip address, of your server.

When completed, click on the "OK" button. The information just added will now be showing in window titled "Data Source Adding". From here, click on "SAVE".



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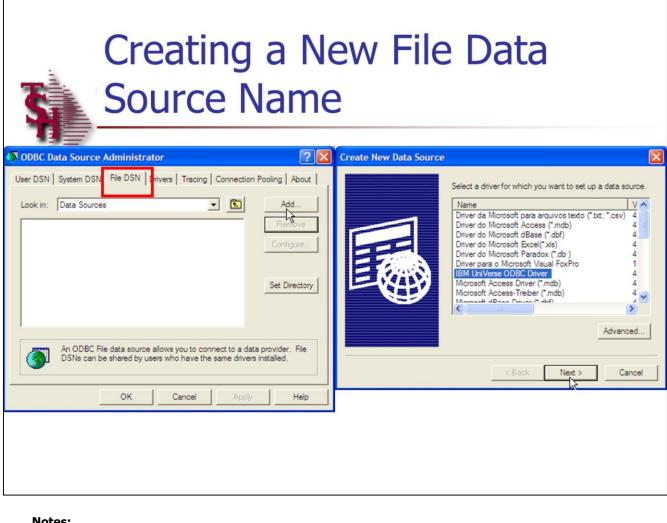
UCI Editor

Adding New Data Source

To complete the process, click on File -> then click on Exit. The system will prompt:

"Do you want to save the changes you have made to file C:\IBM\UniDK\Config\uci.config" $\label{lem:change}$

Click on "Yes" to save the changes.



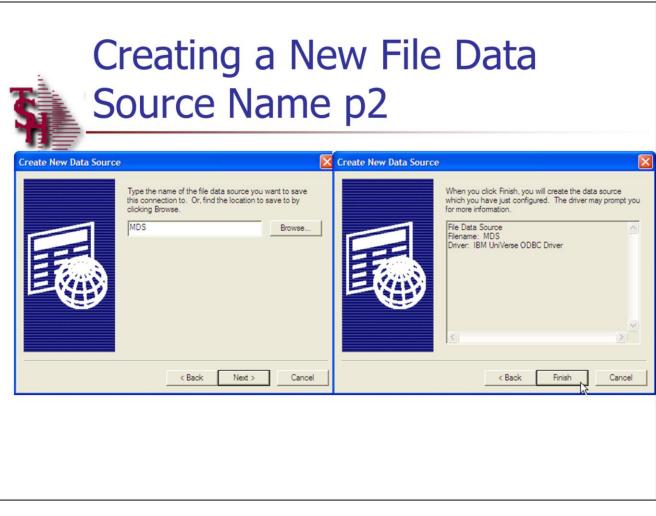
Creating A New File Data Source Name

This step will create a file data source name to use in reporting tools such as: Excel, Crystal Reports, and Access.

Click on Start -> click on Control Panel -> click on Administrative Tools -> click on Data Sources (ODBC)

From here, click on the tab labeled "File DSN", then click on the "ADD" button to create a new File DSN. See example on the left of page.

A box titled "Create New Data Source" is displayed. Click on the driver "IBM UniVerse ODBC Driver", then click on "Next".

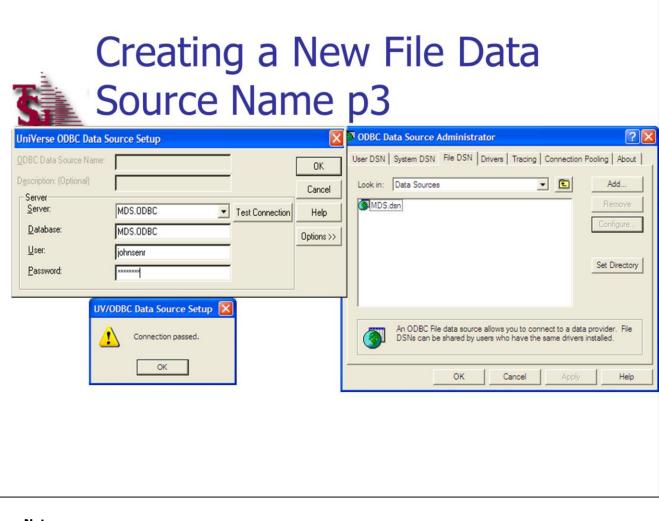


Creating A New File Data Source Name

While creating the new data source, you must give it a name, type in the name of the file data source you want to save the connection to. Then click on the "Next" button.

The last screen titled "Create New Data Source" is displayed. The data source configuration that was just created is listed below. To save information, click on the "FINISH" button. To make any necessary changes, click on the "BACK" button.

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Creating A New File Data Source Name UniVerse ODBC Data Source Setup

Server: Enter the server's name (source name) that was used when creating the data source in the UCI Editor. You can click on the drop down arrow next to the field and choose your server name from the list.

Database: Enter the MDS Database name. The standard MDS Database name is: YOURACCOUNTNAME.ODBC

User: Enter the user's login

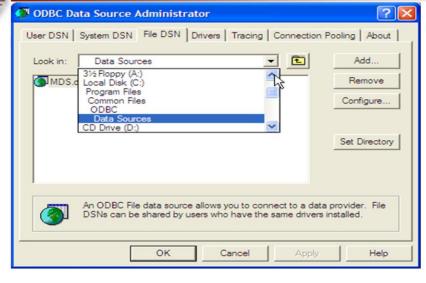
Password: Enter the user's password.

Once completed, click on the button "Test Connection". If the data source is setup correctly, you should receive the message, "Connection passed".

Next, click on "OK" to save the file data source. Once saved, you should be able to see the data source listed (as in example on right).

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Creating a New File Data Source Name p4

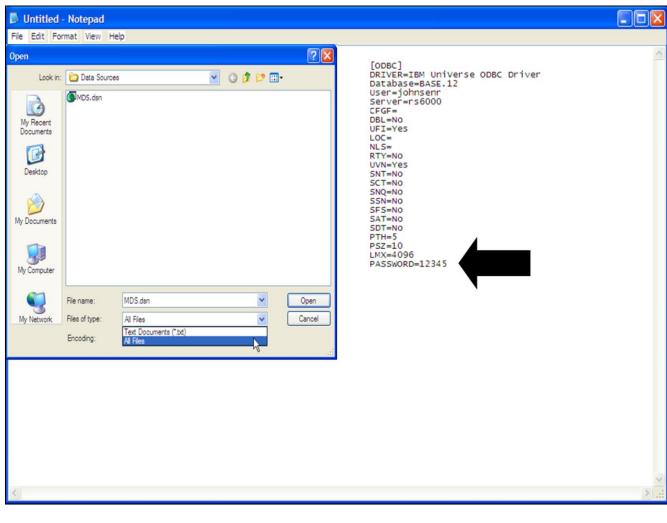


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Creating A New File Data Source Name Data Source path

The next 2 slides walks you through saving your password on the system. These steps alleviate the need for the user to enter in his or her password every time they connect to their MDS database, while using a reporting tool, such as Excel. This step is **OPTIONAL**.

Click on the drop down arrow listed as "Data Sources". Take note of the directory path that this .dsn is located in. In the example, the data source is located in C:\Program Files\Common Files\ODBC\Data Sources



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Creating A New File Data Source Name Adding User's Password to DSN file

Go to Start -> click on Run -> type "NOTEPAD" and hit <ENTER>. The notepad program should open on the screen. Go to the path that the file data source is located.

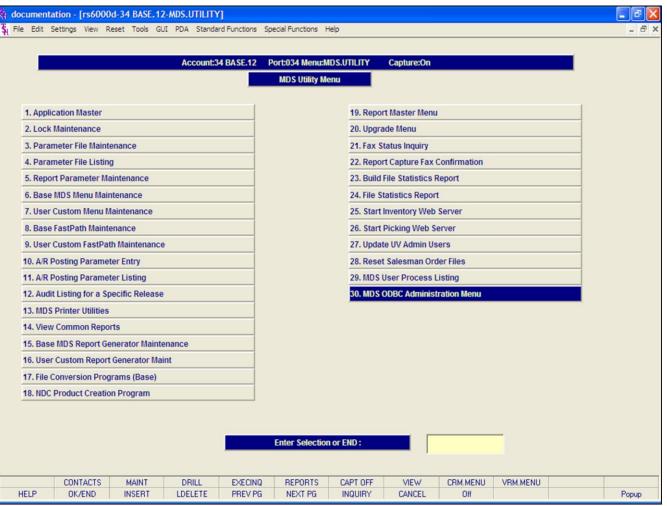
Next, go to the drop down box titled "Files of type" and select "All Files". You should now see your data source. Click on your data source and choose "Open".

Go to the bottom of the file, and on the next line add:

PASSWORD= enter user's password -See example on right

When completed, click on "File" then "Save". You can then close out of Notepad.

Now, when using Excel or another reporting tool, you will be able to use this file data source.

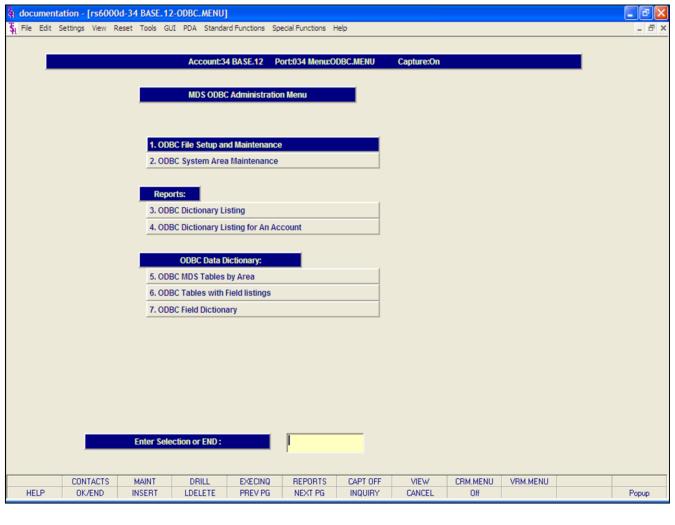


Notes:

MDS ODBC Administration Menu

The MDS ODBC Administration Menu is located off the MDS Utility Menu.

Customer Reporting System 12



MDS ODBC Administration Menu Menu items discussed on following pages of guide:

ODBC File Setup and Maintenance

Reports

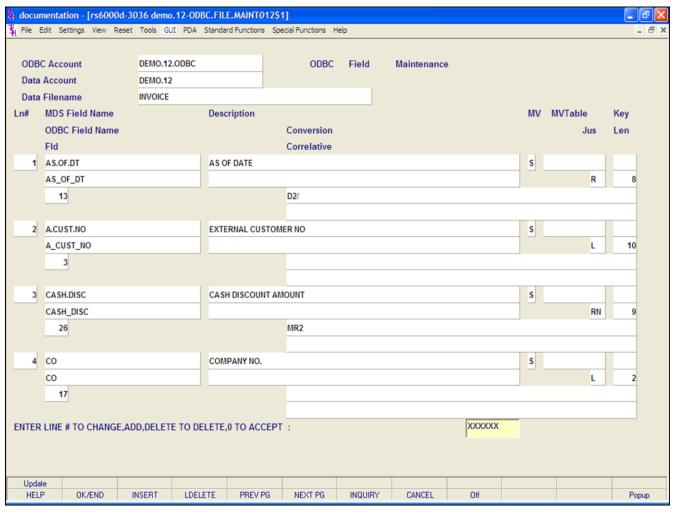
ODBC Dictionary Listing
ODBC Dictionary Listing for an Account

ODBC Data Dictionary

ODBC MDS Tables by Area ODBC Tables with Field Listings ODBC Field Dictionary

Notes:

Customer Reporting System 13



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ODBC File Setup and Maintenance Overview

In this program, you can add, change, and/or delete fields and files for ODBC accessibility. MDS provides 1 standard ODBC account, which only TSH personnel have access to change. If changes need to be made, an additional ODBC account can be created. Changes that need to be done, by your staff, would only be done on this additional account.

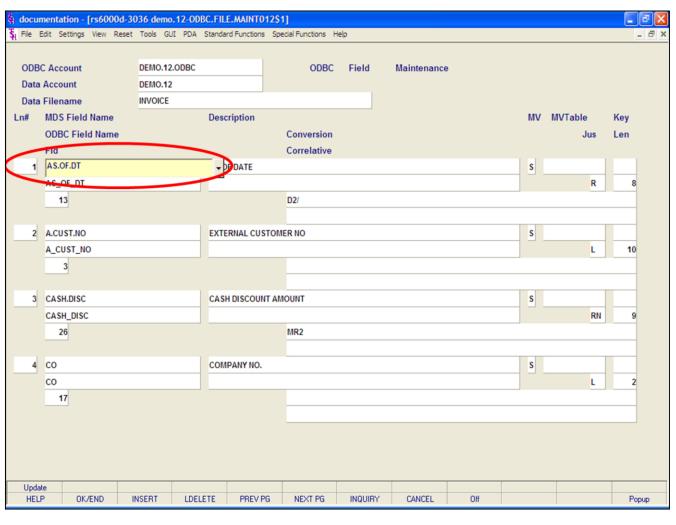
In this example we will make a change to a existing field.

ODBC Account – Enter the ODBC account and hit <ENTER>. The standard MDS Database name is: YOURACCOUNTNAME.ODBC

Data Account — Enter the data account and hit <ENTER>. This is your account name.

Data Filename – Enter the file name that you wish to change.

All of the dictionaries for the selected file are displayed. To change a dictionary, just click on the dictionary name or type the corresponding number in and hit <ENTER>.



Notes:			

ODBC File Setup and Maintenance Changing a File continued

You are now on that field, see above. You can change the field you are on, or hit <ENTER> to advance to the next field. You may also click on any field to just change that field.

MDS Field Name - Enter the dictionary name. You may enter NEW for temporary dictionaries (NOT for ODBC definition).

ODBC Field Name - Enter the field name for ODBC or the temporary dictionary name.

Fld - Enter the field attribute number for this field.

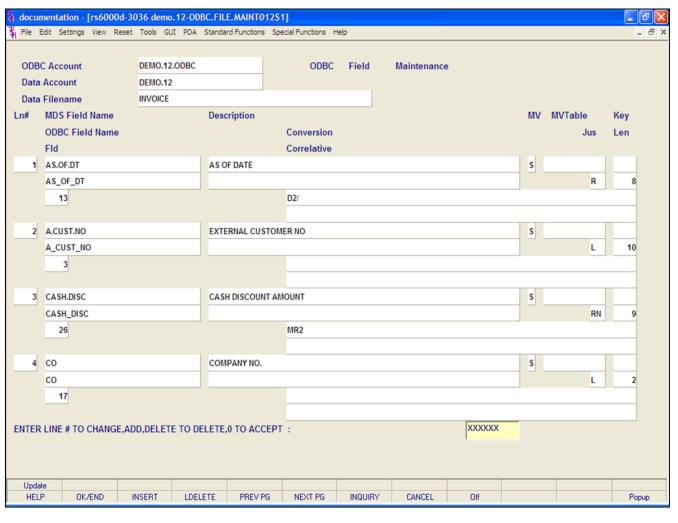
Description - Enter Description of this field.

MV - If this field is multi-valued, enter M to make sure the ODBC processing recognizes this field as multi-valued.

Jus – Justification; R – Right, L – Left, RN – Right Numeric.

Len - Enter the length of this field.

Conversion Correlative - Enter the conversion code to use. Valid codes include date conversions (D , D2/ , DY, etc.), Numeric conversions (MR2 , MR2,M , MR2 , etc.), Text extraction (T1,5 , T10 , etc.), Group extraction (G*1, G2*1 , etc.), File translation (Tfilename;X;1;1).



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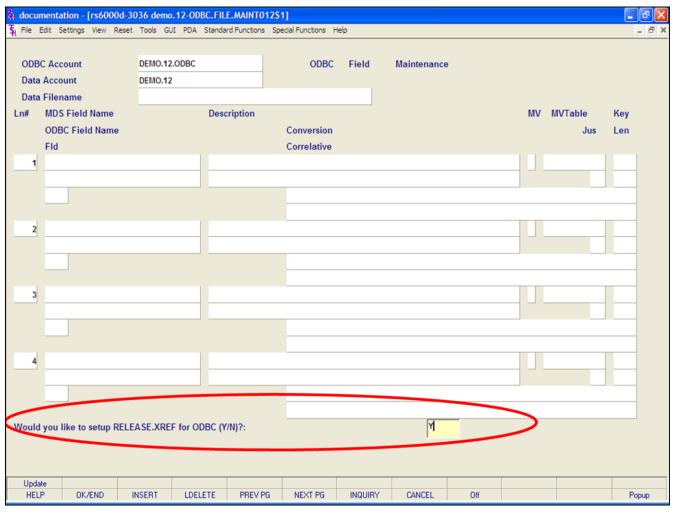
ODBC File Setup and Maintenance Saving Changes

When completed making changes, click on the "OK/END" button, or hit <F2>, to go to the bottom of the screen.

ENTER LINE# TO CHANGE,ADD,DELETE TO DELETE,0 TO ACCEPT:

16

To update your changes, click on the "Update" button, or hit Shift+<F1>.



Notes:

ODBC File Setup and Maintenance Adding a New File

If there is a file on the system, that has not been added to your ODBC database, you can enter it in the same ODBC Field Maintenance screen.

ODBC Account – Enter the ODBC account and hit <ENTER>. The standard MDS Database name is: YOURACCOUNTNAME.ODBC

Data Account – Enter the data account and hit <ENTER>. This is your account name.

Data Filename — Enter the file name that you wish to add.

The system will prompt:

Would you like to setup *NEWFILENAME* for ODBC (Y/N)?:

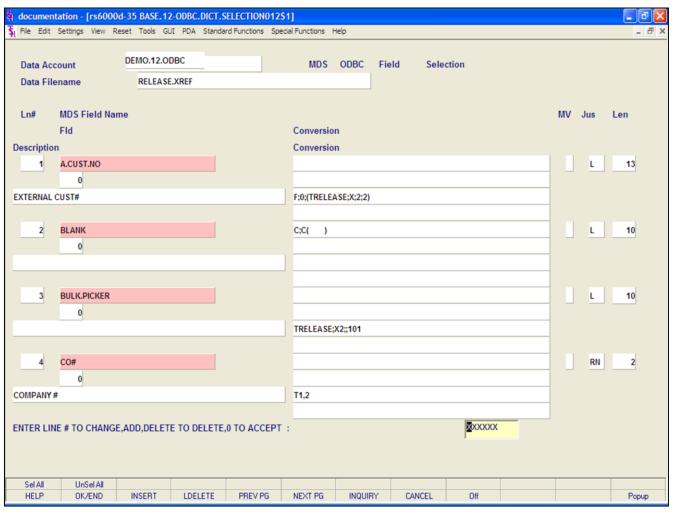
Enter "Y" and hit <ENTER>.

Data Acco Data Filen Ln#		DEMO.12	.ODBC	Standard Functions		Help						_ !
Data Filen	name				MDS							
Ln# M		RELEASE	.XREF		MDS	ODBC	Field	Selecti	ion			
	MDS Field Name											
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r	WD3 Fleid Name									MV	Jus	Len
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	0											
COMPANY#					T1,2							
ENTER LINE	# TO CHANGE,A	DD,DELETI	E TO DE	LETE,0 TO ACC	EPT :				XXXXXX			
Sel All	UnSel All											
HELP		INSERT	LDEL	ETE PREV P	G NEXT PG	INQUIR	RY CA	NCEL	Off			Popup

ODBC File Setup and Maintenance Adding a New File

To select all fields to be added for usage, click on the button "Sel ALL" or hit the Shift+F1 function key. You may also click on the MDS Field Name to choose each field separately.

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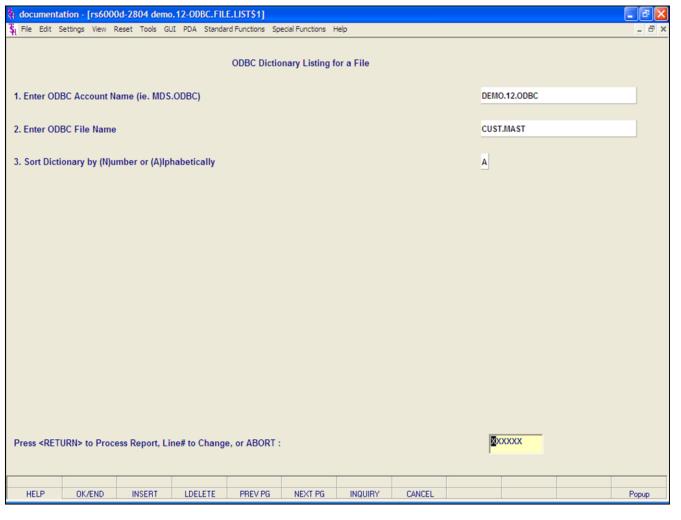
ODBC File Setup and Maintenance Adding a New File

When all fields are selected, you can deselect a single field, by clicking on the MDS Field Name.

To deselect all fields, click on the button labeled, "UnSel All", or hit the Shift+F2 function key.

ENTER LINE # TO CHANGE, DELETE TO DELETE, 0 TO ACCEPT:

When you are done selecting the fields, you can click on the "OK/END" button to save your changes.



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ODBC Dictionary Listing for a File

This report will generate a listing of all ODBC dictionary fields for an ODBC file.

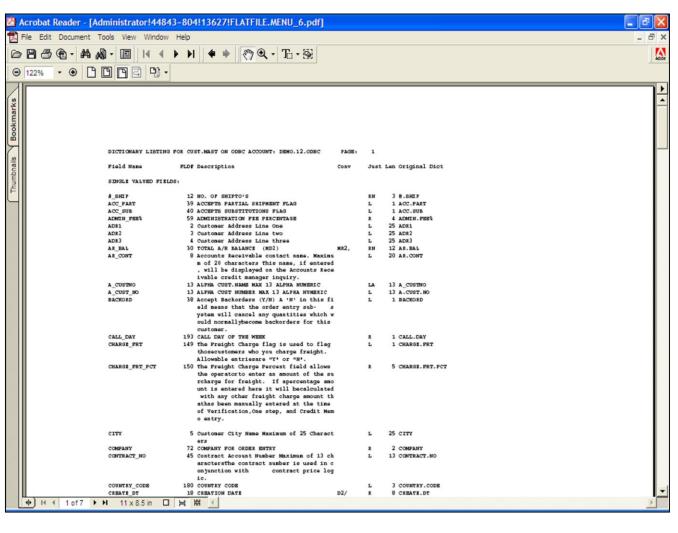
Enter ODBC Account Name (i.e. MDS.ODBC) —
Enter your ODBC account name and hit <ENTER>.
The standard MDS Database name is:
YOURACCOUNTNAME.ODBC

Enter ODBC File Name – Enter the ODBC file name, then hit <ENTER>.

Sort Dictionary by (N)umber or (A)Iphabetically – Enter a "N" to sort the dictionary fields on the report by their corresponding number. Enter "A" to sort the dictionary fields on the report alphabetically.

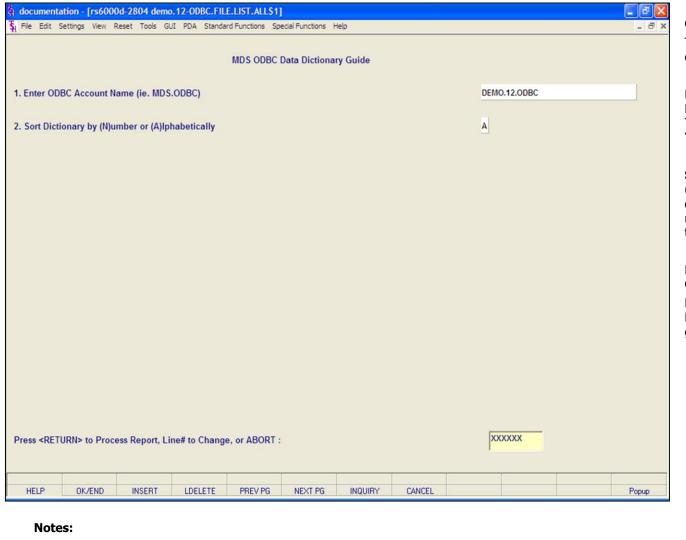
Press < RETURN> to Process Report, Line# to Change, or ABORT:

Hit <ENTER> to generate the report. Remember: if Report Capture is enabled, then the report will be generated there.



ODBC Dictionary Listing continuedShown above is an example of the report.

Notes:			



ODBC Dictionary Listing for an Account

This report will generate a listing of all ODBC dictionary files, and its' fields, for an ODBC account.

Enter ODBC Account Name (i.e. MDS.ODBC) — Enter the ODBC account name and hit <ENTER>. The standard MDS Database name is: YOURACCOUNTNAME.ODBC

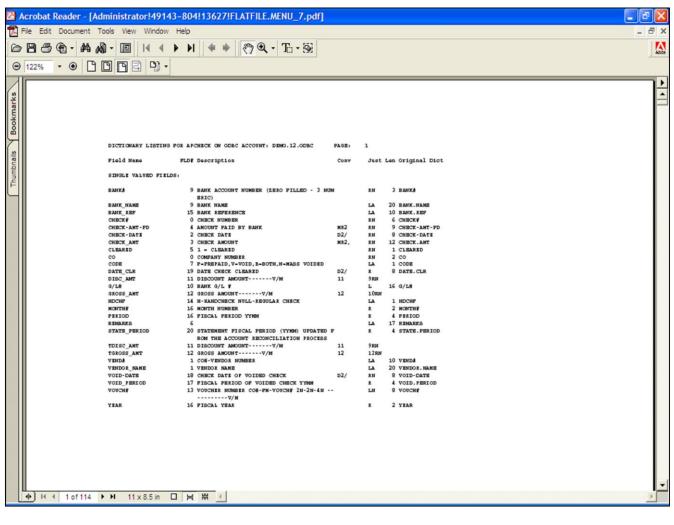
Sort Dictionary by (N)umber or (A)Iphabetically - Enter a "N" to sort the dictionary fields on the report by their corresponding number. Enter "A" to sort the dictionary fields on the report alphabetically.

Press <RETURN> to Process Report, Line# to Change, or ABORT:

Hit <ENTER> to generate the report. Remember: if Report Capture is enabled, then the report will be generated there.

Notes:

Customer Reporting System 22

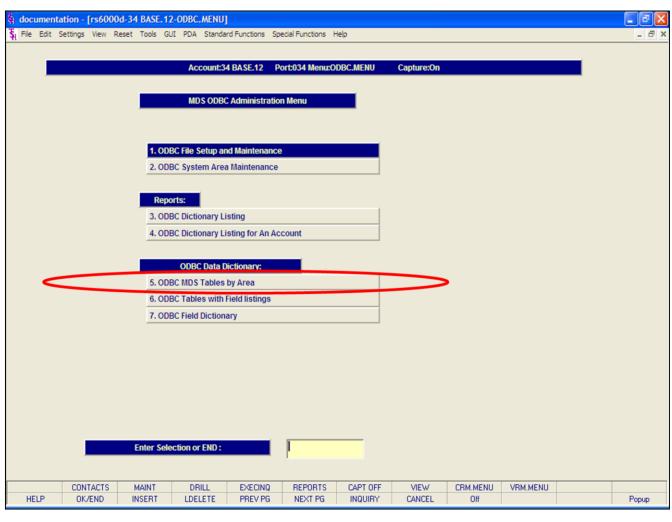


ODBC Dictionary Listing for an Account continued

Shown above is an example of the report.

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Customer Reporting System 23



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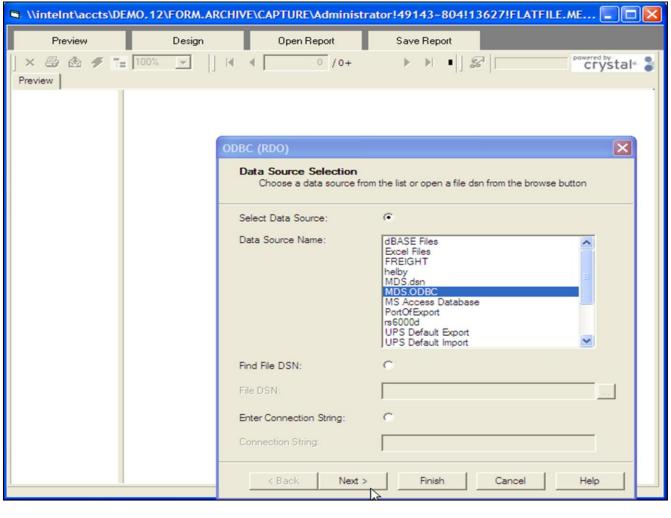
ODBC MDS Tables by Area

This Crystal Report, will define each area of the MDS system as well as list specific files in that area. This will help the user choose the appropriate files when creating the query.

Once the report title is clicked, the system will open the report in the Crystal Report viewer.

24

Note: You must have a data source already configured to run this report.



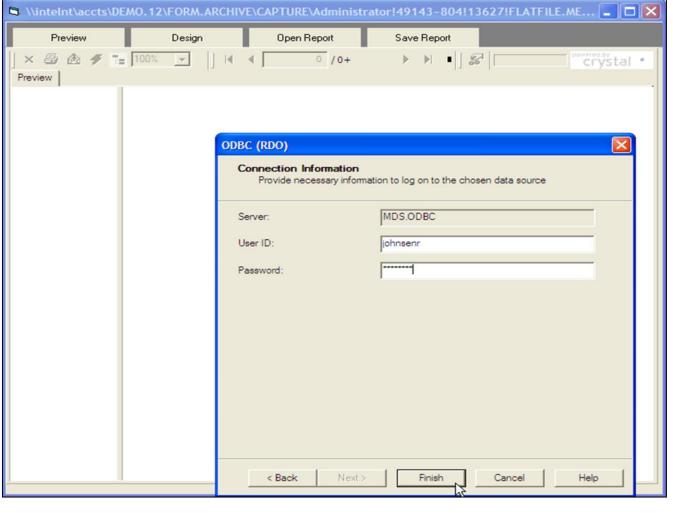
ODBC MDS Tables by Area Data Source Selection

The Select Data Source radio button should be selected.

Under the field, Data Source Name, select your Data Source Name from the list.

Then click on the "Next" button.

Notes:			



ODBC MDS Tables by Area Connection Information

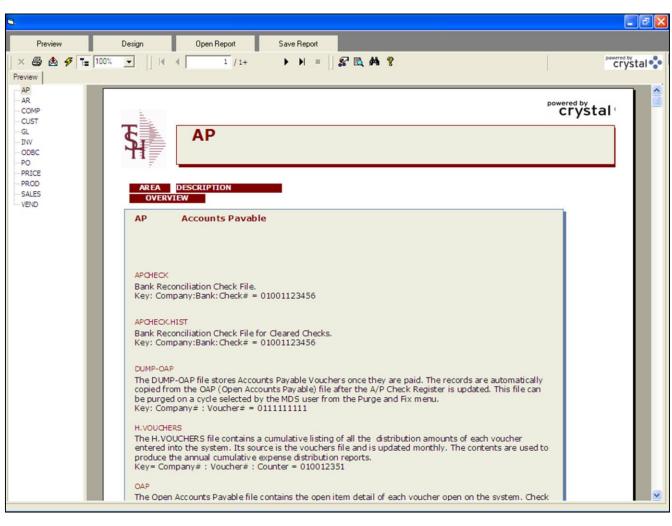
The server information is displayed. This should match the data source that was entered on the previous page.

User ID – Enter your user id

Password – Enter your password

Click on the "Finish" button to display the report.

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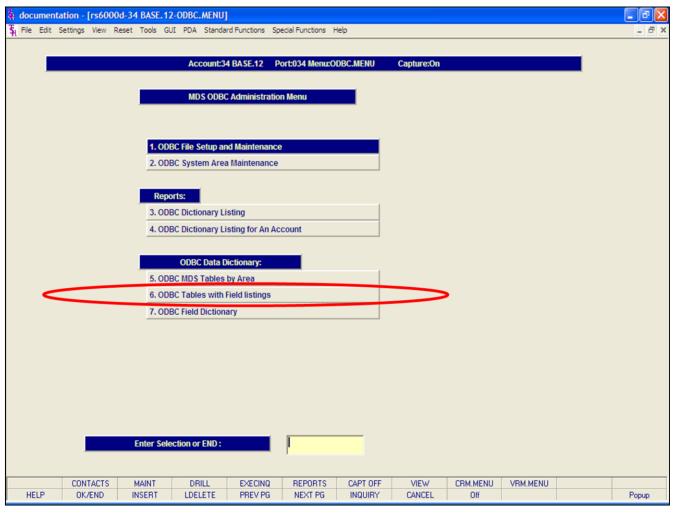
Notes:

ODBC MDS Tables by Area

The report is displayed in the Crystal Reports viewer.

On the left hand side, the different system areas are displayed. By clicking on a system area, the viewer will display the information regarding it on the right hand side.

This report informs the user which files are related to a specific area.



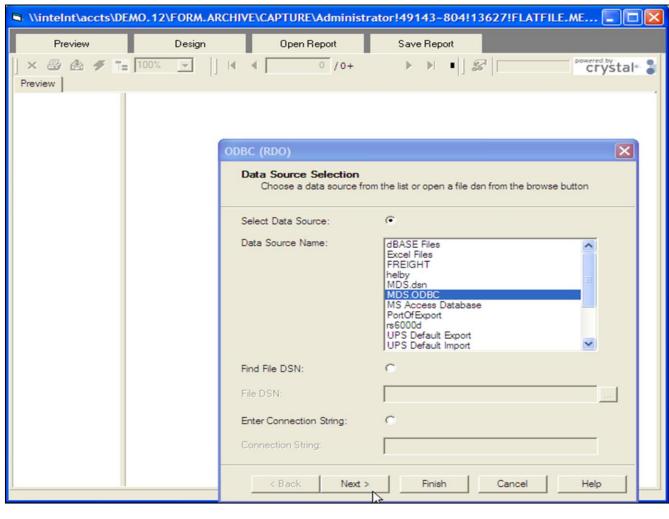
Notes:

ODBC Tables with Field Listings

This Crystal Report, will list all fields in a specific MDS file. This will help the user choose the appropriate fields when creating the query.

Once the report title is clicked, the system will open the report in the Crystal Report viewer.

Note: You must have a data source already configured to run this report.



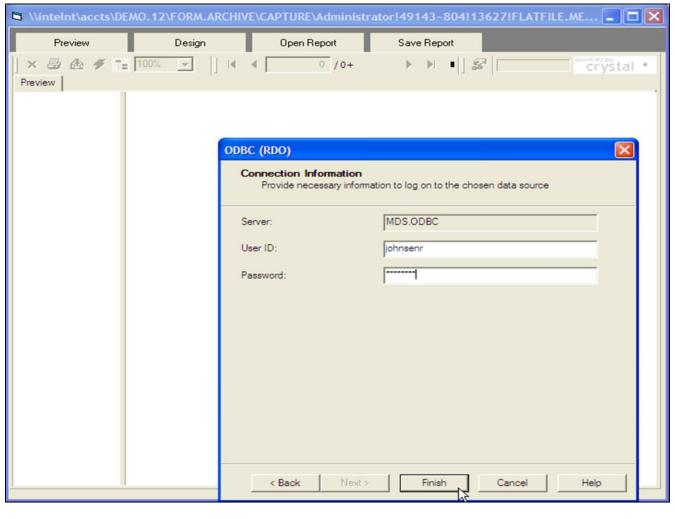
ODBC Tables with Field Listings Data Source Selection

The Select Data Source radio button should be selected.

Under the field, Data Source Name, select your Data Source Name from the list.

Then click on the "Next" button.

Notes:			



ODBC Tables with Field Listings Connection Information

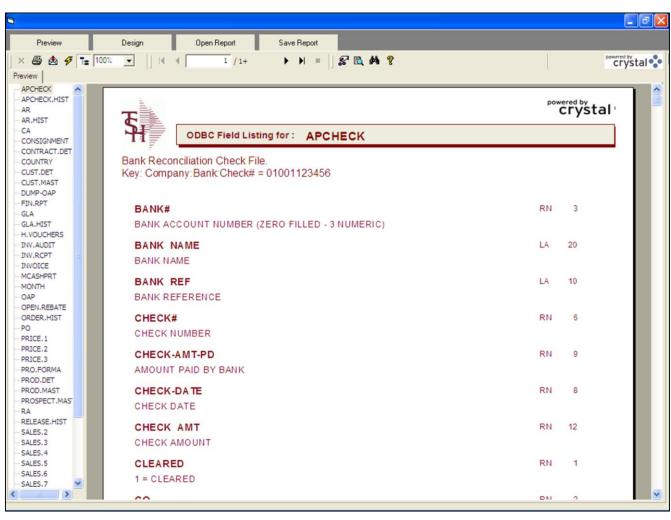
The server information is displayed. This should match the data source that was entered on the previous page.

User ID – Enter your user id

Password – Enter your password

Click on the "Finish" button to display the report.

Notes:



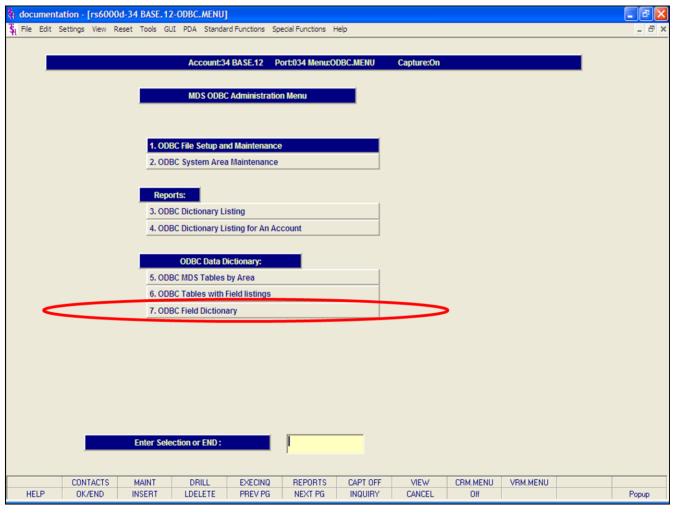
Notes:

ODBC Tables with Field Listings

The report is displayed in the Crystal Reports viewer.

On the left hand side, all of the MDS ODBC files are displayed. By clicking on a file name, the viewer will display all of the associated field on the right.

This report informs the user which fields are located in a specific MDS ODBC file.



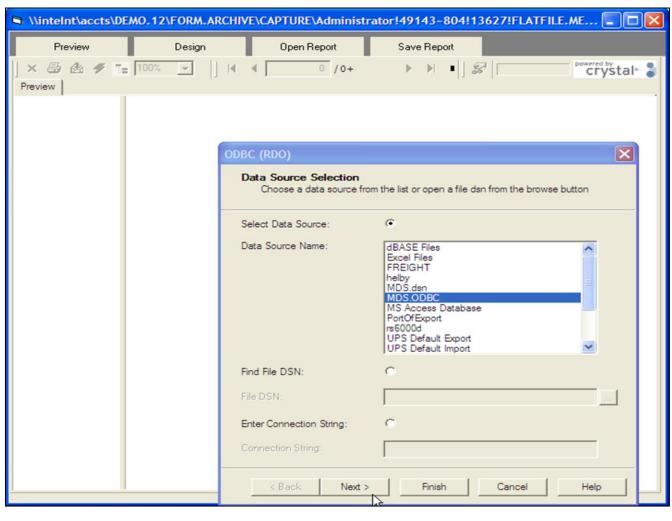
Notes:

ODBC Field Dictionary

This Crystal Report, will list specific information regarding a field, and what MDS ODBC file it is located in. This will help the user choose the appropriate fields when creating the query.

Once the report title is clicked, the system will open the report in the Crystal Report viewer.

Customer Reporting System 32



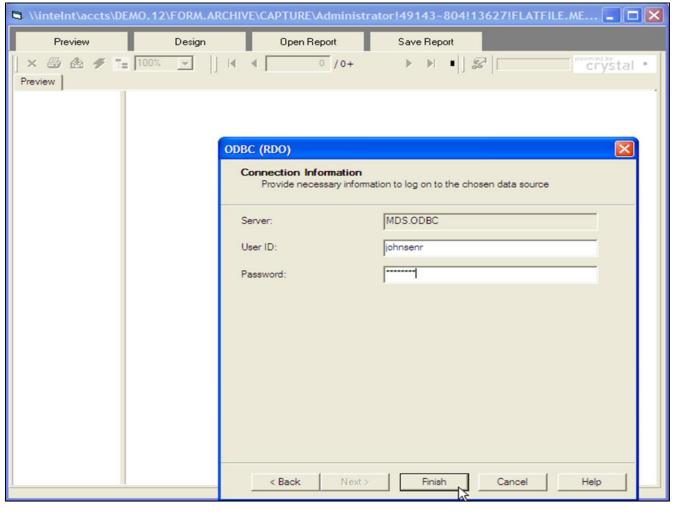
ODBC Field	Dictionar
Data Source	e Selection

The Select Data Source radio button should be selected.

Under the field, Data Source Name, select your Data Source Name from the list.

Then click on the "Next" button.

Notes:		



ODBC Field Dictionary Connection Information

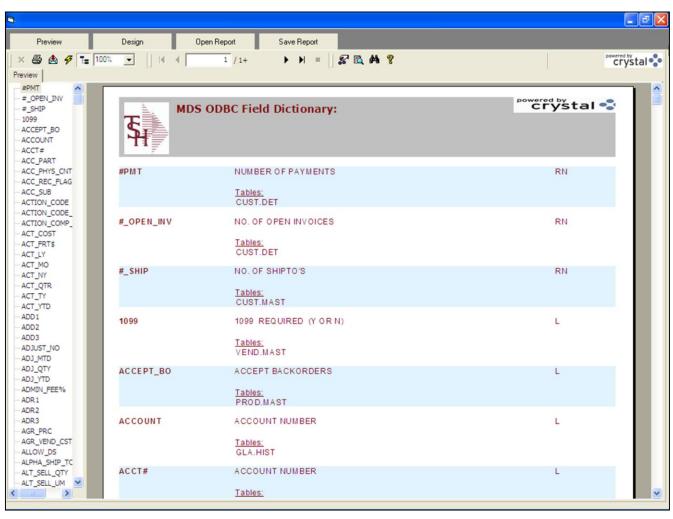
The server information is displayed. This should match the data source that was entered on the previous page.

User ID – Enter your user id

Password – Enter your password

Click on the "Finish" button to display the report.

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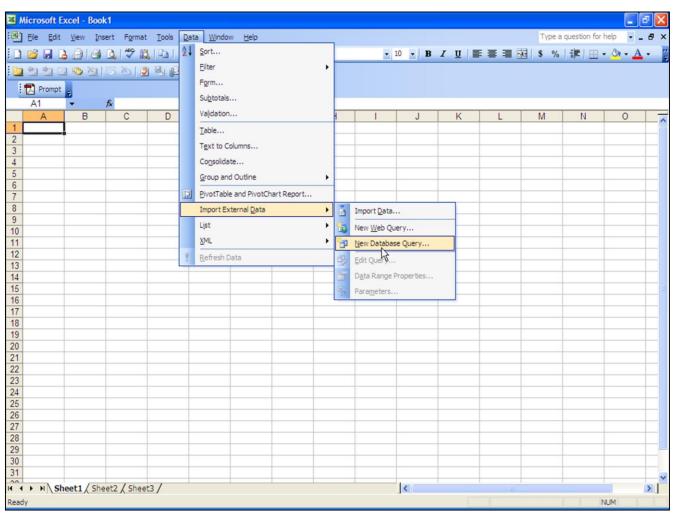
ODBC Field Dictionary

The report is displayed in the Crystal Reports viewer.

On the left hand side, all of the MDS ODBC field dictionaries are displayed. By clicking on a MDS ODBC Field Dictionary name, the viewer will display the fields, with it's description, on the right.

This report informs the user where a specific field is located on the system. For example, MDS ODBC Field Dictionary ACCEPT_BO, is located in the table PROD.MAST.

This report is useful when creating queries using multiple files.



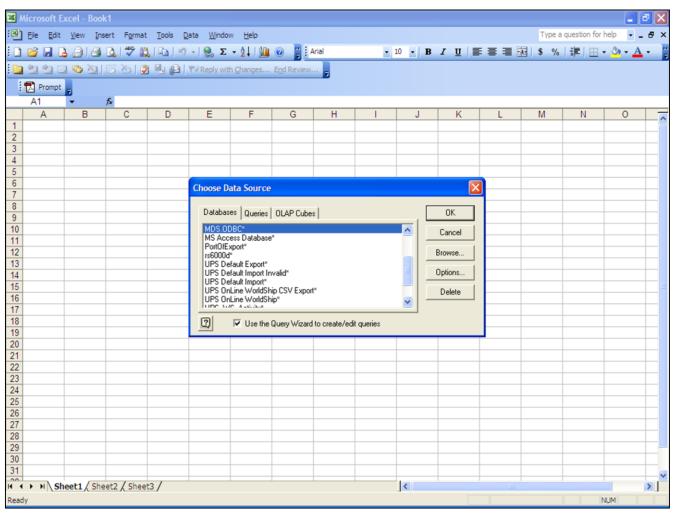
Notes:

Creating New Queries

To create a new query through Microsoft Excel, follow the steps below. At this point, Microsoft Excel must be installed on your pc.

Open a new workbook in Microsoft Excel.

Go to Data -> Import External Data -> New Database Query.

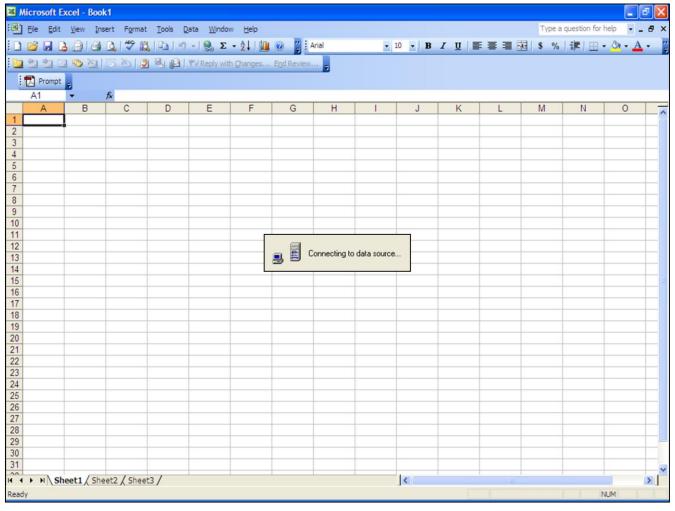


Notes:			

Creating New Queries

A "Choose Data Source" box will appear, select your data source that was created earlier.

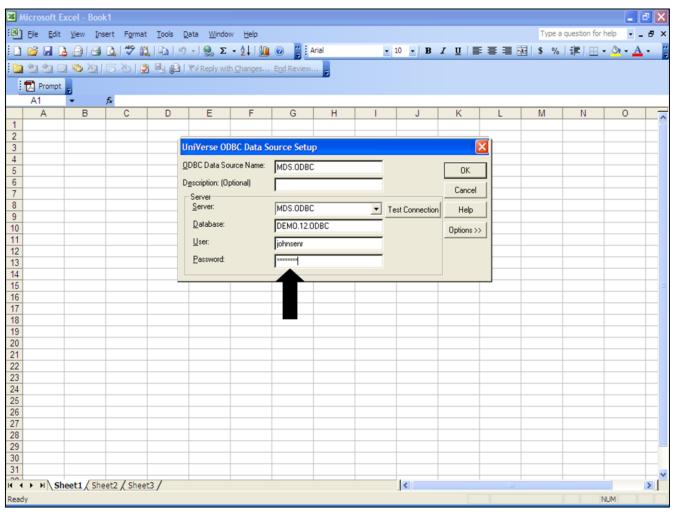
Once it is chosen, click on the OK button.



Creating New Queries

At this point, the system will try connecting to your data source.

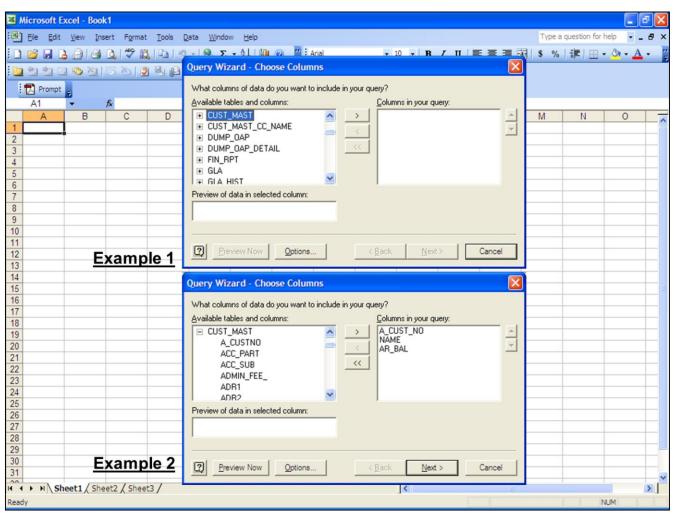
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Creating New Queries

If a password was not saved, then the system will display the "UniVerse ODBC Data Source Setup" box. You will need to enter your password, then click on the "OK" button.

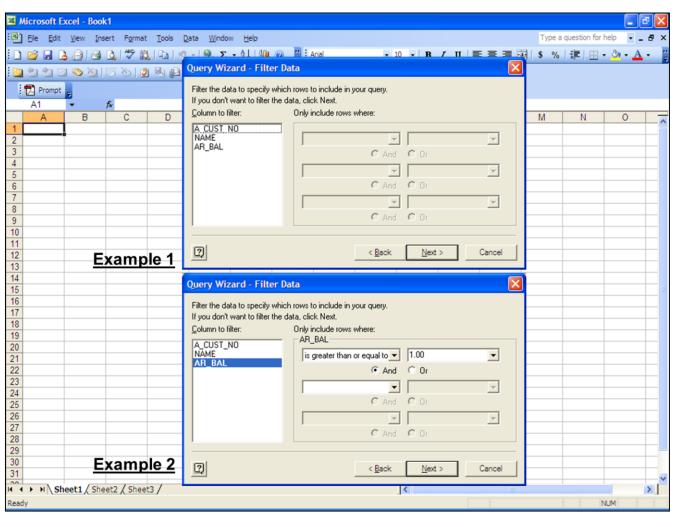


Notes:			

Creating New Queries Query Wizard - Choose Columns

The Query Wizard is displayed, and the "Choose Columns" box will appear. On the left hand side, under "Available tables and columns", the MDS ODBC tables are displayed, double click on the table you want to use. For example, scroll down and double click on CUST.MAST. See example #1.

Underneath the CUST.MAST table, you can choose your column names (ODBC fields). Either double click or highlight the column and hit the ">" button. For this example, choose A_CUST_NO, NAME, and AR_BAL, and then click the "Next" button. See example #2.



Notes:			

Creating New Queries Query Wizard — Filter Data

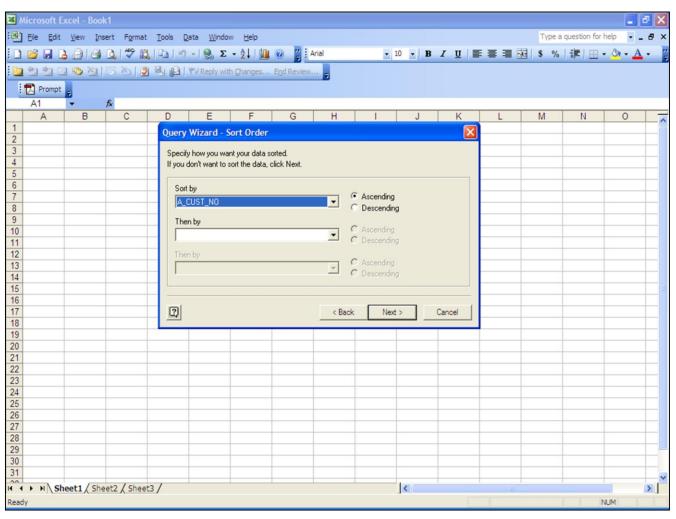
If you want to filter your query to include only a portion of the data, this section filters the query for you. See example #1.

Column to filter – Click on the column you wish to use. For this example, I am using AR BAL.

Only include rows where — click on the drop down arrow to select the operation you wish to use. You will then be forwarded to the next field where you then enter the data you want in the list on the right. For this example, I chose, under field, "Only include rows where" to be equal to "is greater than or equal to", and entered "1.00" in the column on the right. See example #2.

You can also filter the query further, by clicking on the radio buttons, "And" or "Or".

Once completed, click on the "Next" button.



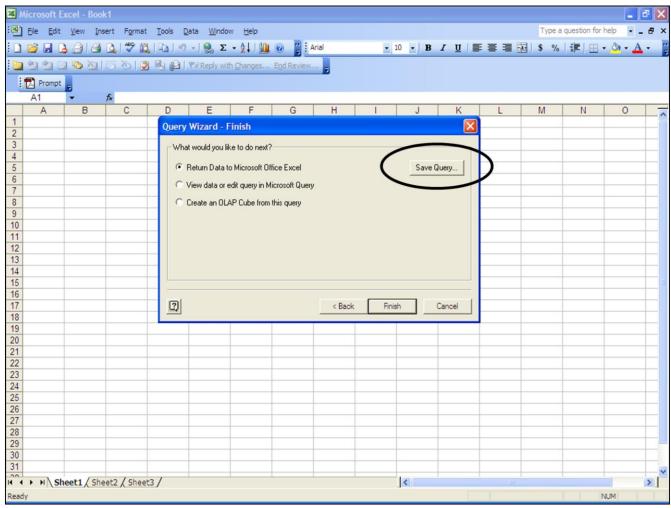
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Creating New Queries Query Wizard — Sort Order

If you want to sort your data, choose how you want this done here.

Sort by – Click on the drop down arrow and choose a column in the "Sort By" field, then click the sort order that you want, Ascending or Descending. For my example, I chose "A_CUSTNO" and the Ascending radio button.

Once completed, click on the "Next" button.

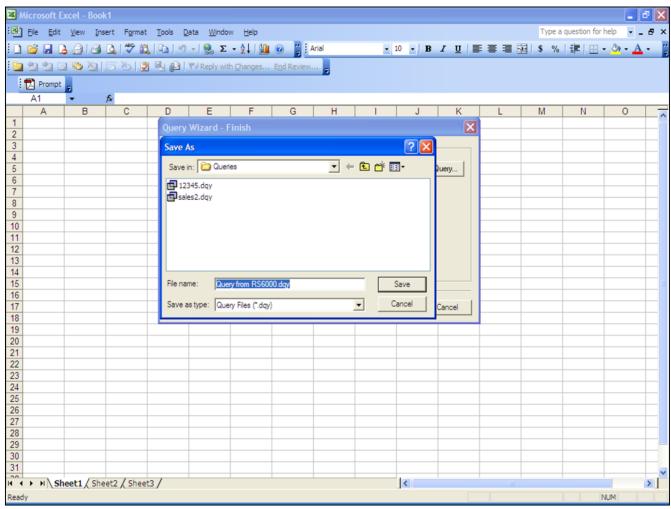


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Creating New Queries Query Wizard — Finish

If you wish to save this Query for future use, click on the button "Save Query..."

To just return the data to Microsoft Excel, click on the "Finish" button.

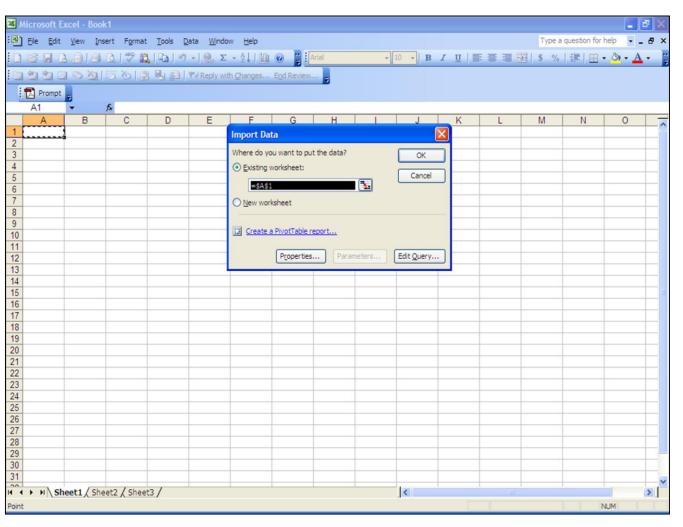


Notes:	

Creating New Queries Query Wizard — Finish Saving Query

You will only see the "Save As" box, if you chose the options "Save" or "Save As".

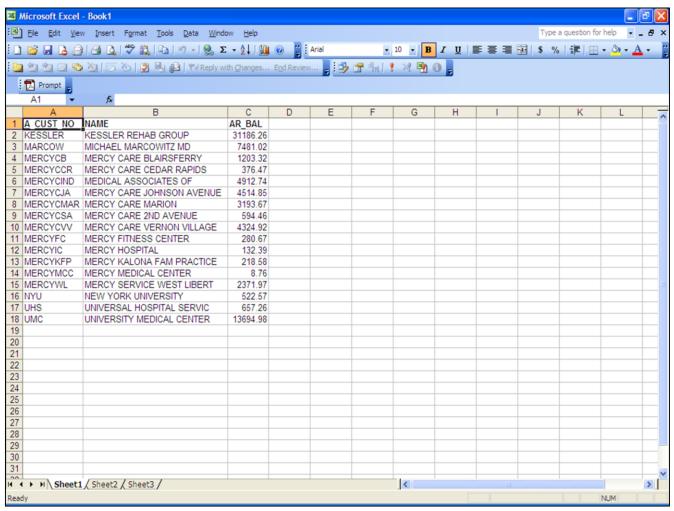
Choose the default name or change the name, then click on the "SAVE" button.



Notes:			

Creating New Queries Query Wizard — Finish

The default placement of the data is \$A\$1 in the existing worksheet. You can change this if you want to. Then click on the "OK" button.

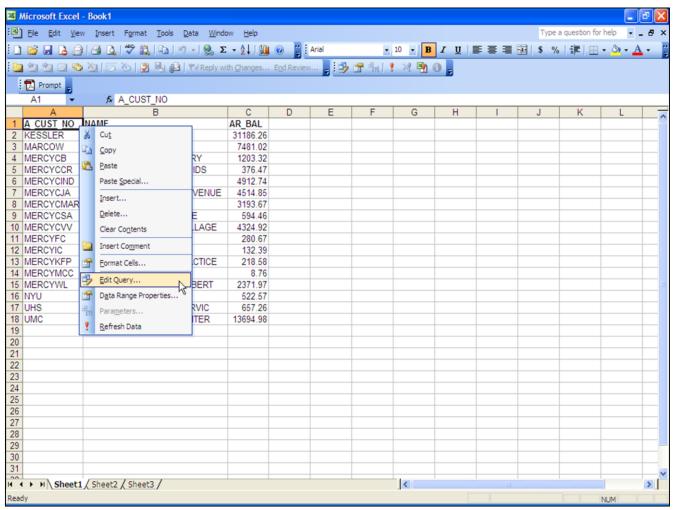


Creating New Queries Query Wizard

A simple, one file query is displayed.

Notes:			

Customer Reporting System 46

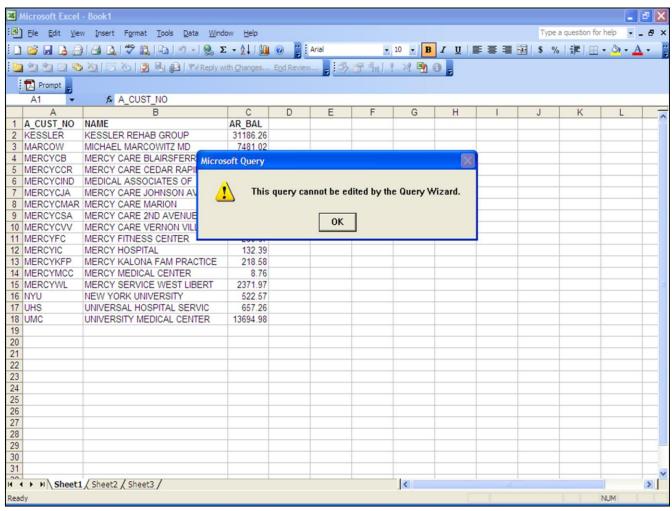


Notes:

Editing a Query Through Excel

First, run the query and have the results displayed on your screen.

Then, right click anywhere on the results, and choose "Edit Query...". See example.

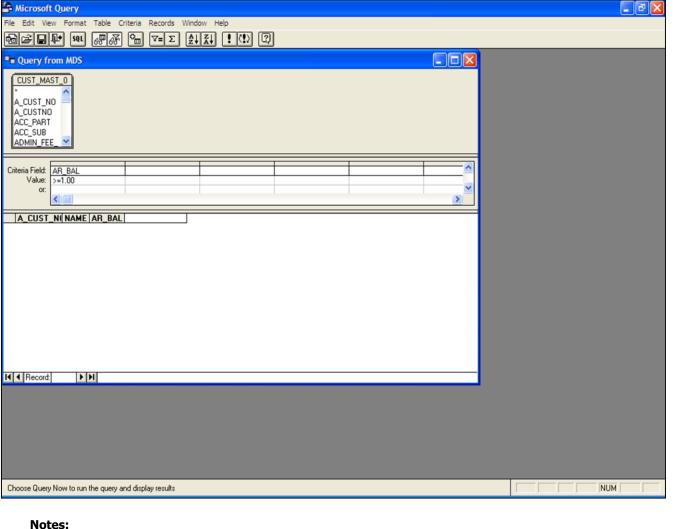


Notes:

Editing a Query Through Excel

This system will connect to your data source and return the message:

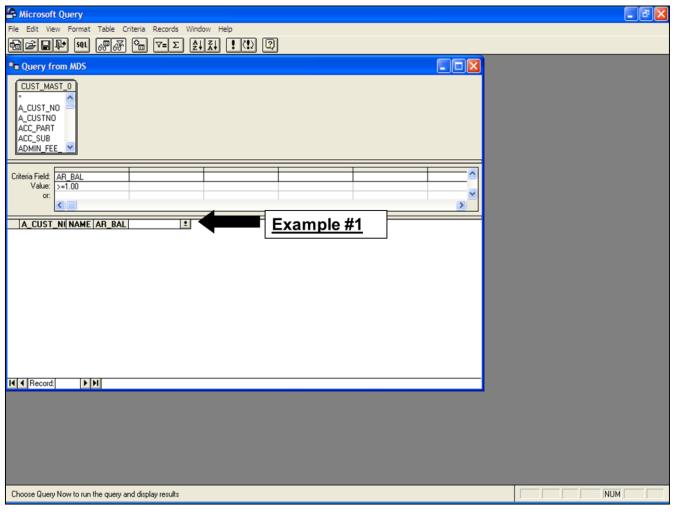
"This query cannot be edited by the Query Wizard." Click "OK" to continue.



Editing a Query Through Excel

The system will then open Microsoft Query. From here all changes can be made.

Notes:



Editing a Query Through Excel Columns

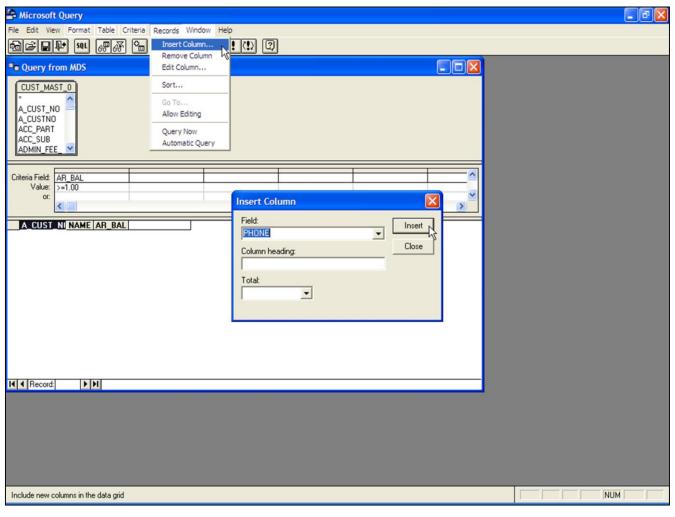
You can add and/or delete columns.

To add a column to your query you can:

- 1. Click on the drop down arrow that corresponds with the next available column. See example #1.
- 2. Scroll through the table (in this example it is CUST_MAST) and double click on the column name to add.
- 3. Add the column from the toolbar. See next slide for help.

For example, scroll through the table CUST_MAST, then double click on the column name "PHONE".

To delete a column in your query, click on the column to highlight it, and hit the delete key.



Editing a Query Through Excel Columns

Adding from Toolbar

From the Toolbar, click on "Records", then click on "Insert Column..."

The "Insert Column" box will display.

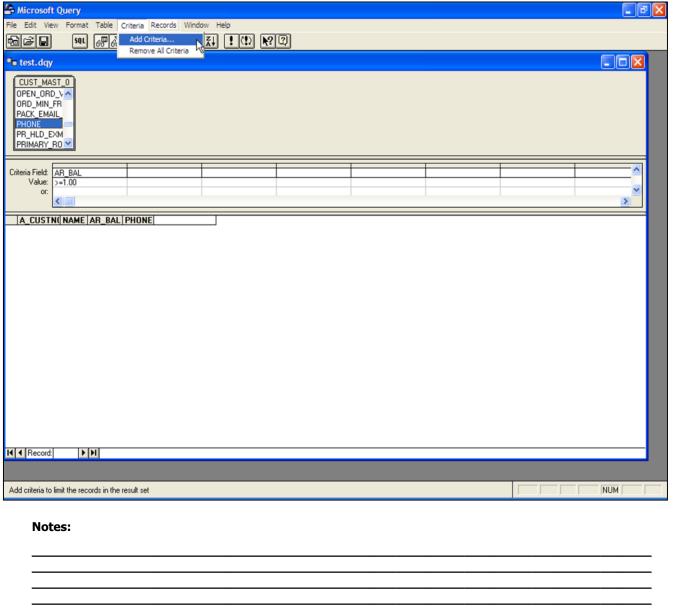
Field — Click on the drop down arrow and choose the column name you wish to add. For this example, choose "PHONE".

Column Heading – Custom column headings. For this example, use default.

Total — If this a total column, simply click on the drop down arrow and choose a variable. Your options here are: leave blank (as in this example), Sum, Avg, Count. Min, or Max.

When done adding a column, click on the "Insert" button.

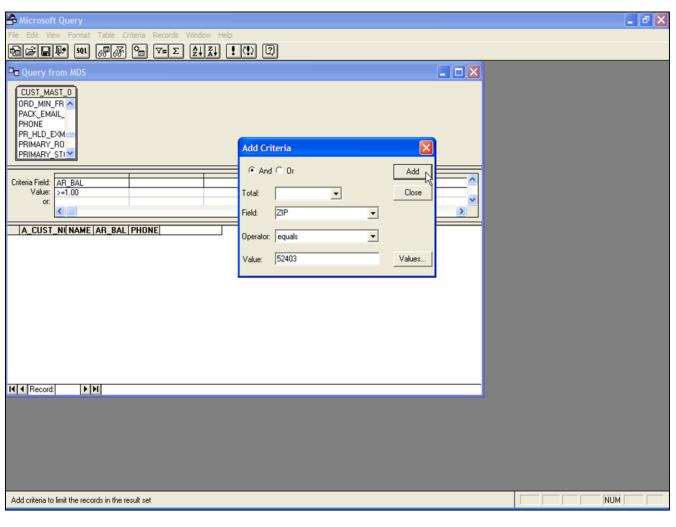
Notes:



Editing a Query Through Excel Criteria Options

From the toolbar, choose Criteria. From here you can add criteria or remove all criteria.

See the next slide to discussing adding criteria.



Notes:

Editing a Query Through Excel Add Criteria

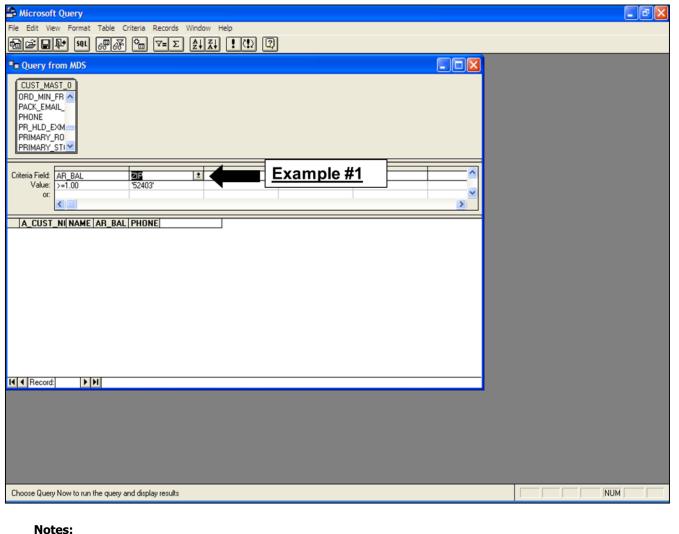
Total — You can add a total selection, choices are: Sum, Avg, Count, Min, and Max. For this example, leave it blank.

Field — All fields in the table are displayed. For this example, click on the drop down arrow and choose "ZIP".

Operator – Choose a Operator selector, choices are: leave blank, equals, does not equal, is greater than, is greater than or equal to, is less than, is less than or equal to, is one of, is not one of, is between, is not between, begins with, does not begin with, ends with, does not end with, contains, does not contain, like, not like, is null, is not null. For this example, choose "equals".

Value – Enter a value. For this example, enter a valid zip code.

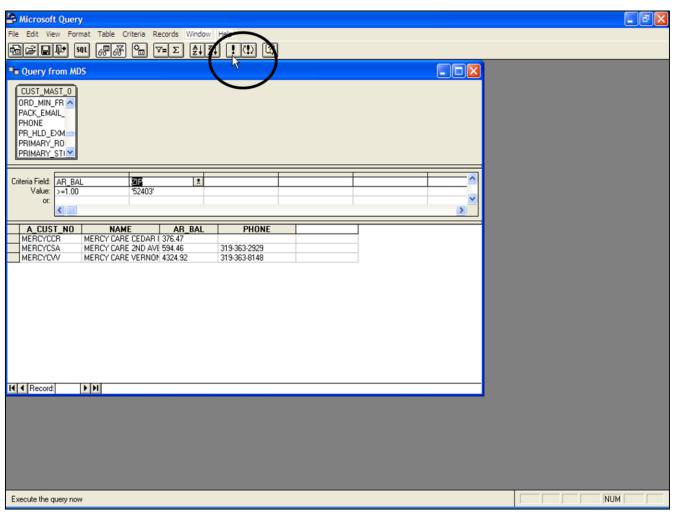
When finished, click the "Add" button.



Editing a Query Through Excel Changing Criteria

To change to an existing Criteria Field, you can click on the drop down arrow next to the field and choose a new field. See example #1.

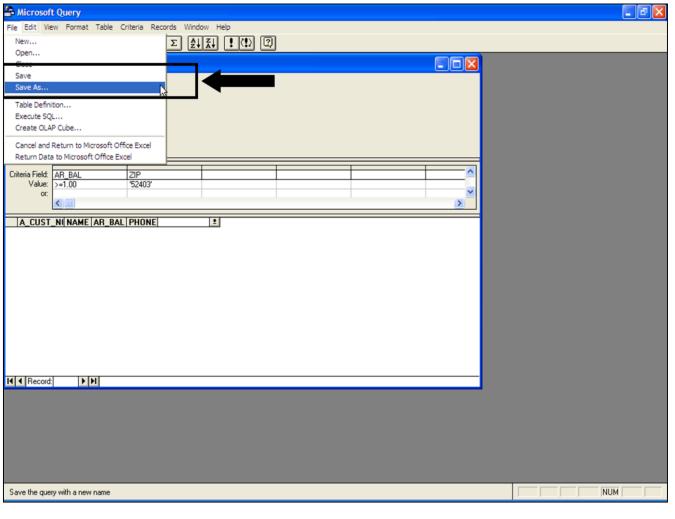
To make a change to an existing Criteria Value, just click on the value you wish to change and overwrite it



Editing a Query Through Excel Running the Query

While in Microsoft Query, look for the button "(!)", this button is called "Auto Query". When this button is depressed, whenever a change is made to your query, MS Query will automatically refresh your query. This feature is best used when only running small queries. You can simply turn this feature off by verifying that the button is not depressed.

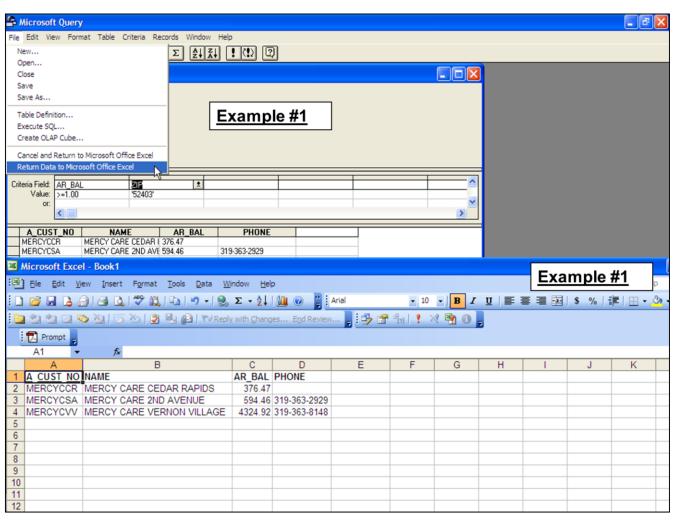
So, if the Auto Query feature is not enabled, you can simply run your query at anytime by clicking on the exclamation point. See the circled items.



Editing a Query In Excel Saving

After making your changes, you can save your query by clicking on "File" then choosing either "Save" or "Save As".

Notes:



Editing a Query Through	Excel
Returning Data to Excel	
To return the data to Excel,	after ı

To return the data to Excel, after making changes in Microsoft Query, click on File -> Return Data to Microsoft Office Excel. See example #1.

Example #2 shows the new information that was added.

Notes:			
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Where to Get More Information

- To contact support call 973-777-8050 or fax 973-777-3063.
- To access the The System's House website the address is:

www.tshinc.com.

Notes:	

Comments: