Active Datasource field

Purpose: The Active Datasource field displays the current <u>datasource</u> you are connected to. It is for informational purposes only and can only be changed by connecting to a datasource.

See Also:

Connect To Datasource

Datasources Window

Add WHERE Clause

Purpose: This button/menu option is used to add a SQL WHERE clause to the <u>Where</u> <u>Clause List field</u>. The information used in building the WHERE clause is the Column Name Selected, the Comparison selected, the Column Value Entered, and the And/Or value (if entered).

For example if the column name selected is FIRST_NAME, the comparison selected is CONTAINS, the column value entered is A, and the And/Or value selected is AND, the following line will be added to the Where Clause List:

FIRST NAME like '%A%' AND

Each time this button/menu option is selected an additional line is added to the end of the Where Clause List. The lines in the Where Clause List are combined to build a single SQL WHERE clause used with a SQL SELECT statement.

For example if the following lines are added to the Where Clause List :

FIRST_NAME like '%A%' AND

LAST_NAME = 'Smith' AND

The SQL WHERE Clause added to a SQL SELECT statement would be:

SELECT * FROM TABLE1 WHERE FIRST_NAME like '%A%' AND LAST_NAME = 'Smith'

Notice the last And/Or value has been removed from the WHERE clause built.

When Active:

This button/menu option is only visible when the SQL Where Clause Criteria Window is being used. It is enabled after a column name has been selected in the Column Name List field.

Quick Key: None



<u>Using Menu:</u> Add to WHERE Clause from the <u>WHERE Clause Menu</u> See Also:

Creating Queries

SQL Where Clause Criteria Window

And/Or Selection field

Purpose: The And/Or Selection field is used to chain multiple WHERE clause statements together when a SQL WHERE clause is built. The WHERE statements are stored in the Where Clause List field.

For example if the following WHERE statements are added to the Where Clause List field :

FIRST_NAME like '%A%' AND

LAST_NAME = 'Smith' **AND**

The SQL WHERE Clause built would be:

WHERE FIRST_NAME like '%A%' AND

LAST_NAME = 'Smith'

Notice the last And/Or value is removed from the WHERE clause built.

Using: To select an And/Or value, click on the arrow at the right of the list box to display both the AND and OR values. Then click on one of the values to select it.

For example if you wanted to create the following SQL WHERE clause :

WHERE NAME = "MIKE" AND STATE = "GA"

You would select **AND** from the And/Or Selection field when building the first WHERE statement (NAME = "MIKE").

This field is disabled until a column name is selected from the <u>Column Name List</u> <u>field</u>.

Note: An AND/OR value is always added to the end of a WHERE statement regardless if multiple WHERE statements are added. The last AND/OR value is then removed when the WHERE clause is actually built.

For example, after adding two WHERE statements to the Where Clause List field, the WHERE clause list may look like this:

NAME = "MIKE" AND

STATE = "GA" **AND**

When the WHERE clause is actually built, the second AND (STATE = "GA" **AND**) will be removed and the WHERE clause built will be:

WHERE NAME = "MIKE" AND STATE = "GA"

See Also:

Column Name List field

Creating Queries

SQL Where Clause Criteria Window

Auto Execute Query field

Purpose: The Auto Execute Query field determines whether a Query is automatically

executed after the Build SQL button

or menu option is selected.

Using: If box is checked: After selecting the Build SQL button or menu option, the query that gets built is automatically executed. You do not need to use the Run Query button or menu option to run the query.

If box is not checked: After selecting the Build SQL button or menu option, you must use the Run Query button or menu option to run the SQL that was built.

See Also:

Build SQL

Run Query

Preferences Window

Build SQL

Purpose: This button/menu option is used to build a SQL SELECT statement using the following information:

- * Selected columns from the Column List field
- * WHERE Clause, if entered
- * ORDER BY Clause, if entered
- * GROUP BY Clause, if entered
- * DISTINCT if selected on the Query Menu
- **Note:** If the AUTO EXECUTE SQL Preference option is turned on, the SQL Query created as a result of this button/menu option will be automatically executed. You will not have a chance to view or change the SQL Query prior to it's execution.

When Active:

Datasources Window

This button/menu option is enabled if at least 1 column is selected in the Column List Field.

SQL Where Clause Criteria Window

This button/menu option is always enabled. However, if no WHERE Clause information has been entered, the SQL SELECT will be built without a WHERE Clause and a message will be displayed acknowledging this.

Order/Group By Clause Window

This button/menu option is always enabled. However, if no ORDER/GROUP BY Clause has been entered, the SQL SELECT will be built without an ORDER/GROUP BY Clause and a message will be displayed acknowledging this.

Quick Key: CTRL-B



<u>Using Menu:</u> <u>Build SQL Statement</u> from the <u>Query Menu</u> See Also:

Auto Execute Query field

Column List field

Creating Queries

Datasources Window

Run Query

Order/Group By Clause Window

Query Window

SQL Where Clause Criteria Window

Clear Window

Purpose: This button/menu option is used to clear (erase) information from a window or list. The information cleared depends on which field/window the cursor is in (See below).

When Active:

Query Window

This button/menu option is always active. When pressed, the text in the Query Window will be erased. If there is no text to be erased, nothing happens.

SQL Where Clause Criteria Window

This button/menu option is always active. When pressed, all of the Where Clause statements in the Where Clause List field will be erased. If the list is empty, nothing happens

Order/Group By Clause Window

This button/menu option is always active. If the cursor is in the <u>Order By Clause List</u> <u>field</u>, all of the entries in the Order By Clause list will be erased. If the cursor is in the <u>Group By Clause list field</u>, all of the entries in the Group By Clause list will be erased.

Quick Key: None



<u>Using Menu:</u> Clear from the <u>Edit Menu</u> See Also:

Group By Clause list field

Order By Clause List field

Order/Group By Clause Window

Query Window

SQL Where Clause Criteria Window

Column Details Window

Purpose: The Column Details Window is used to display the following information about a column in a table:

Column Name Data Type (Character, Date, Number, etc.) Length Can the column have a NULL value **USED WITH SQL SERVER DATABASES ONLY:** SQL Server Rule bound to the column

SQL Server Default bound to the column

Accessing: The Column Details Window can be accessed in the following ways:

From the Column List Field on the Datasources Window:

- 1) Double Click on a column name
- 2) Click on column name then select the **<u>C</u>OLUMN DETAILS** menu option on the Datasources Menu or the Pop Menu.

From the Table Columns List Field on the Table Details Window:

- 1) Double Click on a column row
- 2) Click on Column name then select the **<u>C</u>OLUMN DETAILS** menu option on the Datasources Menu or the Pop Menu.
- **Drag and Drop:** The following Drag and Drop operations may be performed from this window:

Both the SQL Server Default and SQL Server Rule may be dragged and dropped onto a Query Window. This will retreive the source for the Default or Rule and display it in the Query Window.

Fields: The following fields are located on the Column Details Window. Click on the field name to view information about the field.

Column List field

Column Name List field

SQL Server Default field

SQL Server Rule field

Table Columns List field

See Also:

Datasources Menu

Drag and Drop

Pop Up Menu

Table Details Window

Extended Selection

Extended Selection enables you to quickly select multiple items within a list. The following key combinations are used in Extended Selection:

(Shift+Click) or (Shift+Arrow Key) extends the selection from the previously selected item to the current item. For example, if you select the first item in a list, then while holding down the Shift Key click on the fifth item in the list, items 1 **through** 5 will be selected (hilighted). If you first select the fifth item in a list, then while holding down the Shift Key click on the list, items 1 **through** 5 will also be selected (hilighted). Therefore, you do not need to click on items in any given order.

(Ctrl+Click) selects or deselects an item in the list. This enables you to select/deselect multiple columns. For example, if you select the first item in a list, then while holding down the CTRL Key click on the fifth item in the list, both items 1 **and** 5 will be selected (hilighted). If you then while holding down the CTRL Key click on the third item in the list, items 1, 3 and 5 will be selected (hilighted).

If neither the CTRL nor Shift keys are pressed while clicking on an item in the list, only the item selected will be hilighted. All other previously selected (hilighted) items will be deselected.

Column List field

- **Purpose:** The Column List field displays column names for selected tables in the Table List Field. The column name is displayed in the format **table_name.column_name** where table_name is the name or the table the column belongs to and column name is the name of the column.
 - **Using:** The primary purpose of the column list field is to select one or more columns to be used in building SQL SELECT Queries. For further information about building SQL SELECT Queries refer to the help topic <u>Creating Queries</u>.

Selecting/Deselecting Columns

To **select a column**, click on the column name. The column should now be selected (hilighted). To **deselect a column** click on the hilighted column. The column should no longer be hilighted.

Selecting All Columns in the list

To **select all columns** in the column list, select **SELECT ALL COLUMNS** from the Query Menu or the Pop Menu.

Deselecting All Columns in the list

To **quickly deselect all columns** in the column list, double-click on the Columns button **Columns** above the column list field.

Viewing Column Information

To **view detailed information about a column**, double-click on a column name. This will display the <u>Column Details Window</u>.

Pop Menu: The following selections are on the <u>Pop Up Menu</u> for this field:

Column Details - Displays Column Details for the last selected column.

Build SQL Statement - Builds a SQL SELECT query using the selected columns.

Select All Columns - Selects all columns in the column list and Builds a SQL SELECT query using all the selected columns.

See Also:

Column Details Window

Creating Queries

Datasources Window

Pop Up Menu

Column Name List field

Purpose: The Column Name List field is displayed on the following windows :

SQL Where Clause Criteria Window

Order/Group By Clause Window

On both windows, the field displays all columns listed in the <u>Column List field</u> on the Datasources Window. These columns are available to build a SQL WHERE Clause, SQL ORDER BY Clause, or SQL GROUP BY Clause depending on the window you are on. The column names are displayed in the format **table_name.column_name** where table_name is the name of the table the column belongs to and column_name is the name of the column.

Using: The use of this field varies between the windows it is used on and will therefore be explained by window.

SQL WHERE Clause Criteria Window

Selecting/Deselecting Columns

To **select a column** to be used in a WHERE statement, click on the column name. The column should now be selected (hilighted). The name of the selected column will also be displayed below the column name list field. Only one column may be selected at a time. To select a different column, you must first deselect the prior column selected. This is necessary because of the drag and drop feature described below.

To **deselect a column** click on the hilighted column. The column will no longer be hilighted.

Once a column is selected, the other fields on the window may be completed. After completing the necessary field, the WHERE statement for that column may be built by using the Add To Where Clause toolbar/menu option.

Joining Two Tables

Once a column is selected, a different column in the list may be dragged and dropped onto the Value Field. This is an easy way to create SQL JOINS between one or more tables.

For example, assume columns for two tables (T1 and T2) are displayed in the column name list (accomplished by selecting two tables from the table list field on the Datasources Window). Each table has a column named CUSTOMER_NUMBER. To create a JOIN between the two tables, you would first select the CUSTOMER_NUMBER column from one of the tables. After selecting the column, drag the column named CUSTOMER_NUMBER from the

second table (you should see the drag icon COLUMN) and drop it onto the Value Field. The WHERE statement built for the join will be:

WHERE T1.CUSTOMER_NUMBER = T2.CUSTOMER_NUMBER

Order/Group By Clause Window

Selecting/Deselecting Columns

To **select a column** to be used in an ORDER BY/GROUP BY statement, click on the column name. The column should now be selected (hilighted). Only one column may be selected at a time. To select a different column, simply click on the new column. The first selected column will automatically be deselected.

To **deselect a column** click on the hilighted column or click on a different column. The column will no longer be hilighted.

Once a column is selected, it may be added to either the Order By or Group By List Field by selecting the appropriate menu option.

Dragging a Column Name to the Order By or Group By List

A column can be dragged and dropped onto either the Order By or Group By List Field. Doing so will automatically create the appropriate ORDER BY/GROUP BY statement.

Pop Menu: The following selections are on the **Pop Up Menu** for this field:

SQL WHERE Clause Criteria Window

Add To WHERE Clause - Adds a WHERE statement to the WHERE Clause List Field based on the information entered into the various fields on the window.

Build SQL Statement - Builds a SQL SELECT statement using the following information:

- * Selected columns from the Column List Field on the Datasources Window
- * WHERE Clause, if entered
- * ORDER BY Clause, if entered
- * GROUP BY Clause, if entered
- * DISTINCT if selected on the Query Menu

Order/Group By Clause Window

Add To Order By Clause - Adds an ORDER BY statement to the Order By List Field based on the column selected and the <u>Order By Sort Sequence</u> <u>field</u>.

Add To Group By Clause - Adds an GROUP BY statement to the Group By List Field based on the column selected.

Build SQL Statement - Builds a SQL SELECT statement using the following information:

- * Selected columns from the Column List Field on the Datasources Window
- * WHERE Clause, if entered
- * ORDER BY Clause, if entered
- * GROUP BY Clause, if entered
- * DISTINCT if selected on the Query Menu

See Also:

And/Or Selection field Column Value field Comparison List field Group By Clause list field Order By Clause List field Order By Sort Sequence field Pop Up Menu SQL Where Clause Criteria Window

Column Value field

- **Purpose:** The Column Value field is used to build the SQL WHERE clause. It is the value to which the Selected column will be compared.
 - **Using:** After selecting a column from the Column Name field and specifying a comparison value, you enter a value into the Column Value field to be compared to the selected column. For example, if you want to create a WHERE clause which compares the column USER_NAME to the value "MIKE", you would perform the following steps :
 - 1) Select the Column Name USER_NAME from the Column Name field.
 - 2) Select the value EQUAL from the Comparison List field.
 - 3) Enter the value MIKE into the Column Value field.
 - 4) Build the Add the statement to the WHERE Clause.

Drag and Drop: Once a column name is selected, a different column in the Column Name field may be dragged and dropped onto the Column Value Field. This is an easy way to create SQL JOINS between one or more tables.

For example, assume columns for two tables (T1 and T2) are displayed in the column name list (accomplished by selecting two tables from the table list field on the Datasources Window). Each table has a column named CUSTOMER_NUMBER. To create a JOIN between the two tables, you would first select the CUSTOMER_NUMBER column from one of the tables. After selecting the first column, drag the column named CUSTOMER_NUMBER

from the second table (you should see the drag icon COLUMN) and drop it on the Value Field. The WHERE statement built for the join will be:

WHERE T1.CUSTOMER_NUMBER = T2.CUSTOMER_NUMBER

See Also:

And/Or Selection field

Column Name List field

Comparison List field

Creating Queries

SQL Where Clause Criteria Window

Comparison List field

- **Purpose:** The Comparison List field is used to build the SQL WHERE clause. It specifies the comparison (equals, greater than, less than, etc.) between the Column Name selected and the Column Value entered.
 - **Using:** After selecting a column from the Column Name field, select one of the following values from the Comparison List field. The WHERE statement built by each value is displayed.

Equals (Used with numbers and text)

Creates: COLUMN_NAME = COLUMN VALUE

Not Equal (Used with numbers and text)

Creates: COLUMN_NAME <> COLUMN VALUE

Greater Than (Used with numbers only)

Creates: COLUMN_NAME > COLUMN VALUE

Less Than (Used with numbers only)

Creates: COLUMN_NAME < COLUMN VALUE

Starts With (Used with text only)

Creates: COLUMN_NAME LIKE COLUMN VALUE%

<u>Contains</u> (Used with text only)

Creates: COLUMN_NAME LIKE %COLUMN VALUE%

See Also:

And/Or Selection field

Column Name List field

Column Value field

Creating Queries

SQL Where Clause Criteria Window

Connect To Datasource

Purpose: This button/menu option is used to connect to (log onto) a <u>datasource</u>. This is necessary prior to performing any database activity.

Upon selecting this button/menu option the following will occur:

- A list of datasources will be displayed. This list must have been previously established using the <u>ODBC Administrator Facility</u>. Select which datasource you want to connect to.
- If additional information is required to connect to the datasource, the appropriate windows will be displayed. One of these windows may require a user ID and/or Password to be entered. If a User ID and/or Password is required, the following default information will be used:
 - **User ID:** The User ID displayed will be the last User ID used to connect to the datasource. If there is was no previous connection made to the datasource, the User ID will be the User ID used to connect to the previous datasource. If there was no previous User ID, the User ID used will be the User ID entered in the <u>User ID field</u> on the Preferences Window. If a Preferences User ID has not been entered, the User ID field will be blank and required to be entered.
 - **Password:** The Password displayed will be the last password used to connect to the datasource if the <u>Store Datasource Passwords</u> <u>field</u>. on the Preferences Window is turned on. If this field is turned off, the password used will be the password used to connect to the previous datasource.. If there was no previous password used, the password used will be the Password entered in the <u>Password field</u> on the Preferences Window if one was entered. If no default password was entered on the Preferences Window, the password will be left blank and required to be entered.
- 3) Upon connecting to the datasource, all tables residing in the datasource/database will be retrieved and loaded into the <u>Table List Field</u>. The datasource connected to is displayed in the <u>Active Datasource field</u>. The current database within the datasource (if applicable) is displayed in the <u>Database field</u>.

When Active: This button/menu option is always active.

Quick Key: CTRL-T



<u>Using Menu:</u> Connect to Datasource from the <u>Datasources Menu</u> See Also:

Preferences Window

Connecting To a Datasource

Prior to performing any database activity, you must first connect to a <u>datasource</u>. The first step in connecting to a datasource is to define the datasource using the <u>ODBC</u> <u>Administrator Facility</u>.. This facility is used to tell MDS PowerBase what type of database the datasource is (i.e. Dbase IV, SQL Server, Oracle, etc.) and where the datasource "lives" (i.e. network information, which sub directory it is located in, etc.).

Connecting to a datasource is synonymous with logging onto or signing onto a database. There are three ways to connect to a datasource. You can press the Connect To

Datasource toolbar button . You can select Connect to Datasource from the Datasources Menu, or you can use the <u>Quick Key:</u> **CTRL-T**.

Upon selecting the button or menu option a list of datasources that have been previously defined using the ODBC Administrator Facility will be displayed. From this list, you select which datasource you want to connect to. After connecting to the datasource, all tables residing in the datasource/database will be retrieved and loaded into the <u>Table List Field</u>. The datasource connected to is displayed in the <u>Active Datasource field</u>. The current database within the datasource (if applicable) is displayed in the <u>Database field</u>.

At this time you are ready to begin creating and executing SQL queries.

See Also:

Connect To Datasource

Creating Queries

Installing ODBC

Creating Queries

There are various ways to create queries within MDS PowerBase. Queries are always created within MDS PowerBase using one of the Query Windows. Up to 10 query windows may opened and in use at one time. To create a query use one of the following techniques:

Note: After using any one of the techniques below, the query that is created may be changed before executing it.

Use the Column List field to build a SQL SELECT query.

The <u>Column List field</u> contains column names for tables that have been selected from the <u>Table List Field</u>. Select one or more columns from the Column List field by clicking on the appropriate column name. If you want the SELECT statement to be built as a DISTINCT query, select DISTINCT from the Query Menu. After the columns you want to create a SQL SELECT query for are selected, perform one of the following actions to create the SQL SELECT query in the current Query Window:

Press the Build SQL button on the toolbar



Select **BUILD SQL Statement** from the Column List field <u>Pop Up Menu</u> Select **BUILD SQL Statement** from the Query menu.

To create a SQL SELECT query using all the columns displayed in the Column List field, select the **SELECT ALL COLUMNS** menu option on either the Column List field Pop-Up menu, or on the Query menu.

After the SQL SELECT query is created, you can use the SQL WHERE Clause Criteria Window, and SQL ORDER/GROUP BY Window to add the appropriate SQL statements to the SQL SELECT Query that was created.

Note: If the SQL SELECT query built uses columns from more than one table, you will need to use the SQL WHERE Clause Criteria Window to create a table join between the tables. Failure to do so will most likely result in a Cartesian product result set.

Manually enter a query in a Query Window

Once you have connected to a <u>datasource</u> you can enter any type of SQL query (SELECT, CREATE, DROP, etc.) into one of the Query Windows. When you manually create queries, the SQL WHERE Clause Criteria Window and SQL ORDER/GROUP BY Window cannot be used to append their associated SQL statements to the query you entered.

Drag and Drop a table name onto a Query Window

Using this <u>Drag And Drop</u> approach will create a SQL SELECT query selecting all columns in the table dropped. If you want the SELECT statement to be built as a DISTINCT query, select DISTINCT from the Query Menu prior to dragging and dropping the table.

Drag and Drop a SQL SERVER Object (Stored Procedure, Trigger, etc.) onto a Query Window

From the Referencing Objects Window (available only with SQL SERVER Datasources), Drag and Drop one of the objects onto a Query Window to retrieve the source for that object into the Query Window. The source retrieved will be the CREATE statement for that object. Once the objects' source is retrieved, you can modify it and re-load it back to the Datasource (Server) by running the query (SQL).

Note: Prior to running the query, you will need to add a DROP statement to DROP the object before it is re-loaded.

Load a previously saved query into a Query Window

Queries can be loaded from files by using the **OPEN** menu option. This menu option is located on the Query Window Pop-Menu and the File menu. Selecting **OPEN** from one of these menus will present you will a window from which you can select a file to open. Opening a file will retrieve the text of the file into the current Query Window. At this time, the query can be changed or executed as-is.

See Also:

<u>DISTINCT Parameter</u> <u>Order/Group By Clause Window</u> <u>Referencing Objects Window</u> <u>Run Query</u> <u>Query Window</u> <u>SQL Where Clause Criteria Window</u> <u>Using the Menu</u> <u>Using the Toolbar</u>

Database field

Purpose: The Database field displays the current database within the <u>datasource</u> you are connected to. It is for informational purposes only and can only be changed when connecting to a datasource.

See Also:

Connect To Datasource

Datasources Window

Datasources Menu

The Datasources Menu contains selections specific to a <u>datasource</u> and it's objects (tables, databases, columns). The following selections are available from the menu:

Connect To Datasource

This selection is used to connect to (log onto) a datasource. This is necessary prior to performing any database activity.

See also: Connect To Datasource

Table Details

This selection displays the <u>Table Details Window</u>.

Column Details

This selection displays the Column Details Window

See Also:

<u>Pop Up Menu</u>

Using the Menu

Using the Toolbar

Datasources Window

- **Purpose:** The Datasources Window is used to process tables and table columns within the datasource. MDS PowerBase uses these two objects in creating SQL SELECT queries.
 - **Using:** A sample flow of processing on the Datasources Window is:
 - 1) Connect to a <u>datasource</u>.
 - 2) Select 1 or more tables from the Table List Field to Process.
 - 3) Select 1 or more columns from the Column List Field to Process.
 - 4) Build a SQL SELECT query using the Columns selected.
 - **Fields:** The following fields are located on the Datasources Window. Click on the field name to view information about the field.

Active Datasource field

Database field

Table List Field

Column List field

See Also:

<u>Build SQL</u>

Column Details Window

Connect To Datasource

Datasources Menu

Table Details Window

Directories List field

- **Purpose:** The Directories List Field is located on the SQL Script Facility Window. It is used to select a directory in which files will be displayed in the Files List field. The directories displayed in this field are affected by the selection made in the Drives List field.
 - **Using:** To list files in the Files List field within a given directory, select the directory in this field by double clicking the mouse button while pointing the mouse arrow over the appropriate directory.

Each directory displayed in this field has a folder displayed next to it. The folder will either be open or closed.

If the **folder is closed**, double-clicking on the directory will open the folder and display all sub-directories (if they exist) of the directory clicked on. In addition, any files with the extension selected in the File Types Field within the selected directory will be displayed in the File List field.

See Also:

Drives List field

Files List field

File Types List field

SQL Script Facility Window

Display Query Results In field

- **Purpose:** The Display Query Results In field determines whether the results of an executed query will be displayed in a Query Result Window within MDS PowerBase, or be loaded into a text editior. The field is located on the Preferences Window.
 - **Using: Text Editor:** Selecting this option will cause the results of an executed query to be displayed in the text editor identified in the Text Editor field. If this option is selected, the path and name of a text editor must be entered in the the Text Editor field or an error will occur when the query results are displayed.

Window: Selecting this option will cause the results of an executed query to be displayed in a Query Result Window within MDS PowerBase. If this option is selected, the Use Separate Query Result Windows field will be enabled. The Use Separate Query Result Windows field controls whether a single query result window is re-used to display query results, or separate query result windows (up to 10) will be used to display the results of different queries.

See Also:

Preferences Window

Query Result Window

Text Editor field

Use Separate Query Result Windows field

DISTINCT Parameter

- **Purpose:** The Distinct parameter is a selection on the Query Menu and Query Pop-Up menu. It is used to create SQL SELECT DISTINCT queries. It is only used when building queries using the <u>Build SQL</u> toolbar or menu selection.
 - **Using:** If the DISTINCT menu selection is checked: Upon selecting the Build SQL button or menu option, the query that gets built will include the DISTINCT keyword. For example:

SELECT **DISTINCT** EMPLOYEE ID FROM EMPLOYEE TABLE

If the DISTINCT menu selection is not checked: Upon selecting the Build SQL button or menu option, the query that gets built will not include the DISTINCT keyword. For example:

SELECT EMPLOYEE_ID FROM EMPLOYEE_TABLE

See Also:

Creating Queries

Pop Up Menu

<u>Query Menu</u>

Using the Menu

Drag And Drop

Drag and Drop is technique by which you click on a field, and while holding down the mouse button drag the field over another field or button, and release the mouse button (drop the object). Upon dropping the field, an action is taken.

A typical use of drag and drop is clicking on file name, dragging the file name over a button of a trash can, then dropping the file onto the trash can which causes the file to be deleted.

The following fields within MDS PowerBase have drag and drop capabilities :

<u>Drag Field</u>	Drop On Field	Action Taken
Table List Field	Query Window	SQL SELECT query is built selecting all columns in the table
File List field	Query Window	Text in file is loaded into Query Window
	Execute SQL Script Toolbar Button	Text in file is executed as a query
	Text Editor Toolbar Button	Text in file is loaded into the text editor specified in the Preferences Window
Object List Field	Query Window	Object source is retreived from SQL Server into Query Window
SQL Server Default	Query Window	SQL Server Default source is retreived from SQL Server into Query Window
SQL Server Rule	Query Window	SQL Server Rule source is retreived from SQL Server into Query Window
Table Triggers	Query Window	SQL Server Trigger source is retreived from SQL Server into Query Window
Column Name field (WHERE Clause Window)	Column Value Field	Creates JOIN between Column Name selected and the Column Name dropped onto the Column Value Field
Column Name field (ORDER/GROUP BY Window)	Order By List Field	Creates ORDER BY statement for the Column Name dropped
Column Name field (ORDER/GROUP BY Window)	Group By List Field	Creates GROUP BY statement for the Column Name

dropped

Drives List field

- **Purpose:** The Drives List Field is located on the SQL Script Facility Window. It is used to select a drive in which directories and files will be displayed in the Directory List Field and Files List field respectively.
 - **Using:** To list files in the Files List field within a given directory and drive, select the drive from the list presented. Upon selecting a drive, the directories within the drive will be displayed in the Directory List Field. Also, any files with the extension selected in the File Types Field within the current directory will be displayed in the File List field.

See Also:

Directories List field

Files List field

File Types List field

SQL Script Facility Window

database drivers

A database driver is a Dynamic Link Library (DLL) that implements ODBC function calls and communicates with one or more database management systems.

datasource

A data source includes the data a user wants to access within a specific database management system (DBMS) and the information necessary to retreive that data.

Examples of data sources are :

- Microsoft Access Databases (MDB'S) and the directories in which they reside SQL Server Databases and the servers they reside on.

Edit Menu

The Edit Menu contains selections for managing text within various MDS PowerBase windows. The following selections are available from the menu:

<u>Clear</u>

This selection clears (erases) the text from a window. For example, choosing this selection while on a Query Window will erase the text in the query window.

<u>Copy</u>

This selection copies selected (hilighted) text to the Windows Clipboard.

<u>Cut</u>

This selection cuts (deletes) the selected (hilighted) text from a given window/field and copies it to the Windows Clipboard.

Paste

This selection copies text from the Windows Clipboard to a given field. The text is inserted where the cursor is within the field being copied to.

<u>Find</u>

This selection displays a window to be used for locating text within a Query Result Window.

Find Next

This selection finds the next location of the text being searched for within a Query Result Window. It assumes the FIND selection had been previously made.

Find Previous

This selection finds the previous location of the text being searched for within a Query Result Window. It assumes the FIND selection had been previously made.

See Also:

Pop Up Menu

Using the Menu

Using the Toolbar

Exceute SQL Script

Purpose: This button/menu option is used to execute the SQL in the files selected on the SQL Script Facility Window.

Upon selecting this button/menu option the following will occur:

- 1) The text in each selected file (starting at the top of the list) is read and executed.
- 2) The result set(s), if any, are displayed either in a query window or text editor (based on the value of the <u>Display Query Results In field</u>. The results of each file are separated in the query results by a label specifying the name of the file being processed. Any errors encountered during the query execution are also listed.
- 3) The result of processing the file is displayed in the SUCCESSFUL or FAILED field on the SQL Script Facility Window.
- **Drag and Drop:** Files may also be dragged from the File List Field and dropped onto the Execute SQL Script button. Doing so will run the SQL in the file dropped onto the button.
- **When Active:** This button/menu option is active only while working on the SQL Script Facility Window.

Quick Key: None



<u>Using Menu:</u> Execute SQL in Selected Files from the <u>Query Menu</u> See Also:

<u>Drag And Drop</u> <u>Files List field</u> <u>SQL Script Facility Window</u> <u>Using the Menu</u> Using the Toolbar

Exit MDS PowerBase

Purpose: This button/menu option is used exit the MDS PowerBase Program.

When Active: Always Active.

Quick Key: None



Toolbar Button: **Using Menu:** Exit from the File Menu See Also: <u>File Menu</u> Using the Menu

Using the Toolbar

File Menu

The File Menu contains selections for processing files, opening and closing windows, printing information, launching the various utilities within MDS PowerBase, and exiting MDS PowerBase. The following selections are available from the menu:

<u>New</u>

This selection opens a new Query Window. A maximum of 10 Query Windows can be opened at the same time.

<u>Open</u>

This selection retreives a files text into a Query Window.

<u>Save</u>

This selection saves the text in a Query Window or Query Result Window into a file.

<u>Close</u>

This selection closes the current window.

<u>Print</u>

This selection prints table detail information for the tables selected in the <u>Table List</u> <u>Field</u>. If it is used while you are working on the Table Details Window, it will print table detail information for the table whose information you are viewing.

While working on the <u>Referencing Objects Window</u>, this selection prints the objects listed in the <u>Object List Field</u>.

Referencing Objects Window

Print Setup

This selection displays a printer setup window which enables you to specify printer information. For example, margins, number of copies to be printed, whether to print landscape or portrait, etc.

SQL Script Facility

This selection displays the SQL Script Facility Window.

DOS Shell

This selection runs a DOS session within a window.

Configure ODBC

This selection launches the ODBC Administrator Facility...

Launch Editor

This selection runs the editor specified in the $\underline{\text{Text Editor field}}$ on the Preferences Window.

Preferences

This selection opens the Preferences Window.

<u>Exit</u>

This selection exits the MDS PowerBase application.

See Also:

Pop Up Menu Preferences Window <u>Using the Menu</u> <u>Using the Toolbar</u>

File Save

Purpose: This button/menu option is used to save information to a file. The two types of information that can be saved are Queries and Query Results.

When Active:

Query Window

This button/menu option is enabled if there is any text in the Query Window. In addition, the cursor must be within the Query Window. For example, if the Query Window has text in it, but the cursor is in the Column List field of the Datasources Window, the save button will not be enabled.

Query Result Window

This button/menu option is enabled if there is any text in the Query Result Window. In addition, the cursor must be within the Query Result Window.

Quick Key: CTRL-S

	SAUE
Toolbar Button:	

Using Menu: Save from the File Menu

File Types List field

- **Purpose:** The File Types List Field is located on the SQL Script Facility Window. It is used to filter the files displayed in the Files List field.
 - **Using:** The File Types List contains various entries each representing a different file extension. Selecting a specific File Type will list only those files with the file extension selected. For example, if you select the File Type **SQL Files (*.sql)**, only files with the extension **SQL** will be listed in the Files List field.

Selecting the File Type **All Files (*.*)** lists all files in the selected directory regardless of their file extensions.

See Also:

Directories List field

Drives List field

Files List field

SQL Script Facility Window
Files List field

Purpose: The Files List Field is located on the SQL Script Facility Window. It lists all files meeting the criteria selected in the Drives, Directories, and File Types fields. One or more files may be selected from the list, and the SQL text within each file can be executed by using the Execute SQL Script button/menu selection.

The text within the files listed may also be viewed in the text editor specified in the Text Editor field on the Preferences Window.

The main purpose of the SQL Script Facility is to process files containing SQL queries. For example, if you have a number of queries that you run each day, you could save the queries in one or more files. Then using the SQL Script Facility Window, you could list and select each of the files from the Files List. After selecting the files from the list, you could press the Execute SQL Script toolbar button, and the queries in each of the files would be executed. This approach is alot simpler than executing each query separately.

Another good use for the SQL Script Facility is to perform routine database maintenance. For example, in a SQL Server environment you may store all the source for your stored procedures and triggers in text files. Anytime you need to make a change to one of these objects you could use the SQL Script Facility to list the text files, load the text into a text editor, change the source, save it , and re-load the source.

Using: When the SQL Script Facility Window is first opened, the File List will display all files within the current drive/directory with the extension **SQL**. By changing the Drive, Directory, or File Type, a different list of files can be displayed. This field supports <u>Extended Selection</u> processing.

Viewing The Text Within Files

There are three ways to view the text within a file in the Files List. They are:

- 1) Double Click on a file in the list.
- 2) Drag and Drop a file from the list onto the Text Editor toolbar button.
- 3) Select a file from the list, then click on the Text Editor toolbar button or select Launch Editor from the File Menu.

Executing SQL Queries Stored Within The Files

There are two ways to execute the SQL queries stored within the files listed in the Files List. They are:

1) Drag and Drop a file from the list onto the Execute SQL Script toolbar



2) Select a file from the list, then click on the Execute SQL Script toolbar button or select Process SQL In Selected Files from the Query Menu.

Drag and Drop: There are three Drag and Drop features available from this field. They are:

- 1) Drag and Drop a file from the File List onto the Execute SQL Script toolbar button to execute the SQL query within that file.
- 2) Drag and Drop a file from the File List onto the Text Editor toolbar button to load the text within the file into the text editor specified in the Text Editor field on the Preferences Window.
- 3) Drag and Drop a file from the File List onto a Query Window to load the

text within the file into the Query Window.

Pop Menu: The following selections are on the <u>Pop Up Menu</u> for this field:

Execute SQL In Selected Files - Executes the SQL within the files selected in the File List.

Launch Editor - Loads the last selected file into the text editor specified in the <u>Text Editor field</u> on the Preferences Window.

See Also:

Directories List field Drag And Drop Drives List field Exceute SQL Script File Menu File Types List field SQL Script Facility Window Using the Menu Using the Toolbar

Find Next

Purpose: This button/menu option finds the next location of the text being searched for within a Query Result Window. It assumes the FIND selection had been previously made.

When Active: Active only when there are Query Results available to be searched.

Quick Key: CTRL-N

Toolbar Button: None.

Using Menu: Find Next from the Edit Menu

See Also:

<u>Find Previous</u> <u>Search Criteria Window</u> <u>Using the Menu</u>

Find Previous

Purpose: This button/menu option finds the previous location of the text being searched for within a Query Result Window. It assumes the FIND selection had been previously made.

When Active: Active only when there are Query Results available to be searched.

Quick Key: CTRL-B (for Backwards)

Toolbar Button: None.

Using Menu: Find Previous from the Edit Menu

See Also:

<u>Find Next</u>

Search Criteria Window

<u>Using the Menu</u>

Getting Help

There are two types of help available within MDS PowerBase. They are **Field Level Help** and **Window Level Help**. Field Level Help provides help about the current field you are working in. Window Level Help provides help about the current window you are working on.

To obtain Field Level Help, press the **F1** key or select Active Field from the Help Menu.

To obtain Window Level Help, press the <u>Quick Key</u> combination **SHIFT-F1** or select Active Window from the Help Menu.

See Also:

Help Menu

Getting Started

Installing ODBC Getting Help Setting Up Preferences Connecting To a Datasource Creating Queries Running Queries See Also: Using the Toolbar Using the Menu

Group By Clause list field

Purpose: The Group By Clause Field is located on the Order/Group By Window. It lists all the columns that will be used to build the GROUP BY clause of a SQL SELECT statement built using the <u>Build SQL</u> button/menu option. This field has <u>Extended</u> <u>Selection</u> capabilities.

Using: Adding A Column Name To The List

There are two ways to add a column name to the Group By List Field (GROUP BY statement). They are:

- 1) **Drag and Drop** a column name from the Column Name field onto the Group By List Field. Doing this will add a GROUP BY statement for the column name dropped to the end of the list.
- Select (click on) a column name in the Column Name field. Next select Add to Group By Clause from the Order/Group By menu, or from the Pop-Up menu of the Column Name field. This will add a GROUP BY statement for the column name selected to the end of the list.

Regardless of the method used, the column name field is what is actually added to the Group By List. The GROUP BY statement for all the columns in the list is built upon selecting the Build SQL toolbar/menu option.

Removing A Column Name From The List

There are two ways to remove one or more column names from the Group By List Field (GROUP BY statement). They are:

- 1) Select (click on) one or more column names in the list. Press the DELETE key on your PC.
- Select (click on) one or more column names in the list. Select the **Remove From Group By Clause** menu option from the Order/Group By Menu or the Group By List Field Pop-Up Menu.

Clearing (Removing All Column Names) The List

There are two ways to remove all the column names from the Group By List Field (GROUP BY statement). They are:

- 1) Select the **Clear Group By Clause** menu option from the Order/Group By Menu or the Group By List Field Pop-Up Menu.
- 2) Click on any item in the Group By List Field, then use the Clear Toolbar/menu option.

Drag and Drop: There is only one Drag and Drop feature available from this field. It is:

1) Drag and Drop a column name from the Column Name field onto the Group By List Field. Doing this will add a GROUP BY statement for the column name dropped to the end of the list.

Pop Menu: The following selections are on the <u>Pop Up Menu</u> for this field:

Remove From Group By Clause - Removes the column names selected in the Group By List Field from the list.

Clear Group By Clause - Removes all column names in the Group By List Field from the list.

See Also:

<u>Column Name List field</u> <u>Drag And Drop</u> <u>Order/Group By Clause Window</u> <u>Order/Group By Menu</u>

Help Menu

The Help Menu contains selections for viewing help text on the fields and windows within MDS PowerBase. It is also used to display the license agreement and an information window about MDS PowerBase. The following selections are available from the menu:

Contents

This selection displays the Table Of Contents for MDS PowerBase help.

<u>Search</u>

This selection displays the Help Search window which allows you to search for MDS PowerBase help based on keywords. For example, if you would like help on Creating SQL, you would enter **Creating SQL** in the Help Search window. A list of all help topics associated with **Creating SQL** would then be listed.

Active Field

This selection displays help on the active field. If no field is active, help on the active window will be displayed.

Active Window

This selection displays help on the active window.

Help On Using Help

This selection displays help on how to use the Windows Help Facility. It is only available if the Windows Help file WINHELP.HLP is installed on your PC.

Using the ODBC Administrator

This selection displays help on using the ODBC Administrator Facility.

License Agreement

This selection displays the license agreement for using MDS PowerBase.

<u>About</u>

This selection displays information about MDS PowerBase including the release and version. It also displays the product <u>serial number</u> in the window title until the product is registered.

See Also:

Using the Menu

Index Definition Window

- **Purpose:** The Index Definition Window displays the SQL that was used to create the index selected in the <u>Table Indexes List field</u> on the Table Details Window. This window is only accessible using the <u>Table Details Window</u>. It is an information only window and **DOES NOT** create an index.
 - **Using:** To get to this window, double-click on one of the indexes listed in the Table Indexes List field on the Table Details Window. After viewing the SQL which created the index, click on the OK button to close the window.

Installing ODBC

MDS PowerBase is delivered with an <u>ODBC</u> installation diskette. To install ODBC perform the following steps:

- 1) Insert the MDS PowerBase ODBC installation diskette (#2) into a disk drive. If you are installing from your hard disk, change directories to where the MDS PowerBase ODBC installation diskette (#2) was copied to.
- 2) Run the ODBC setup program (SETUP.EXE)
- 3) Select the ODBC drivers you want to install. MDS PowerBase delivers the ODBC drivers for the SQL Server and Oracle database management systems.

Note: If you install the SQL Server ODBC driver, you must install the procedures delivered in the file INSTCAT.SQL which is on the MDS PowerBase ODBC installation diskette (#2). Each SQL Server datasource must have the procedures loaded onto the server. Loading of procedures is usually done by your SQL Server Administrator.

4) After completing the ODBC installation, you need to run the ODBC Administration Facility to maintain datasources. To run the the ODBC Administration Facility use the

ODBC Administration Facility toolbar button , or select CONFIGURE ODBC (or press CTRL-G) from the MDS PowerBase File menu.

See Also:

Obtaining Additional ODBC Database Drivers

ODBC Administrator Facility

License Agreement

The following license agreement applies to you if you are using MDS PowerBase.

This is a legal agreement between you (either an individual or an entity) and Analytical Solutions, Inc. By installing and using this product you are agreeing to be bound by the terms of this agreement. If you do not agree to the terms of this agreement, you are not authorized to use the MDS PowerBase product.

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MDS PowerBase - Table Of Contents

Overview Getting Started Setting Up Preferences Connecting To a Datasource Creating Queries Using the Toolbar Using the Menu Using the Menu Using the SQL Script Facility Window Using the ODBC Administrator Facility Running a DOS Session Running a Text Editor Registering MDS PowerBase Obtaining Additional ODBC Database Drivers

Microsoft, SQL Server, and ODBC are registered trademarks of Microsoft Corporation Oracle is a registered trademark of Oracle Corporation. dBASE is a registered trademark of Ashton-Tate Corporation. SYBASE is a registered trademark of Sybase Corporation.

Object List Field

- **Purpose:** The Object List Field is located on the Referencing Objects Window which is only available while connected to a SQL Server <u>datasource</u>. It lists all SQL Server objects (stored procedures, triggers, and views) which reference the last table selected in the Table List Field. If no table is selected, all SQL Server objects (stored procedures, triggers, and views) within the current datasource/database are listed.
 - **Using:** When the Referencing Objects Window is first displayed, stored procedures are displayed. To view different objects, click on one of the following buttons :

Procedures: Lists stored procedures.

Triggers: Lists triggers.

Views: Lists views.

All: Lists all of the above objects at the same time.

Viewing The Source of an Object

There are two ways to view the source of an object. In each case, the SQL CREATE statement used to create the object is displayed.

- 1) Double Click on an object in the list. This approach will retreive the objects' source from the server and display it in a Query Result Window.
- Drag and Drop an object in the list onto a Query Window. This approach will retreive the objects' source from the server and display it in the Query Window. Using this approach enables you to modify the objects' source and re-load the object to the server.

Note: Prior to re-loading the objects' source you will need to add a DROP statement to DROP the object before it is re-loaded.

Printing The List Of Objects

The list of objects in the Object List field can be printed by using the Print selection on the Object List field Pop-Up menu. Note that only the list is printed. Not the source for each object in the list.

Drag and Drop: The following Drag and Drop feature is available from this field:

 Drag and Drop an object in the list onto a Query Window. This will retreive the objects source from the server and display it in the Query Window. Using this approach enables you to modify the objects' source and re-load the object to the server.

Note: Prior to re-loading the objects' source you will need to add a DROP statement to DROP the object before it is re-loaded.

Pop Menu: The following selections are on the <u>Pop Up Menu</u> for this field:

Retreive Selected Object - Retreives the objects' source from the server and displays it in a Query Result Window.

Print - Prints the list of objects in the Object List field. Only the list is printed. Not the source for each object in the list.

See Also:

<u>Drag And Drop</u> <u>Table List Field</u> <u>Referencing Objects Window</u>

Obtaining Additional ODBC Database Drivers

MDS PowerBase is delivered with <u>ODBC</u> drivers which support the SQL Server (Microsoft and SYBASE) and ORACLE database management systems. MDS PowerBase however can access data in any database management system which supports the ODBC interface.

The text file ODBCDRV.TXT located in the MDS PowerBase directory contains a list of known suppliers you can purchase ODBC drivers from for various DBMS. Additionally, you can contact Microsoft Corp. or use COMPUSERVE for further information about ODBC Driver Suppliers.

ODBC Administrator Facility

Purpose: This button/menu option is used to launch the ODBC Administrator Facility. The ODBC Administrator is used to create and manage a <u>datasource</u>.. Each datasource is identified by a unique name.

For further Information about the ODBC Administrator Facility and managing datasources, refer to <u>Using the ODBC Administrator Facility</u>.

When Active: This button is always active.

Quick Key: None



Using Menu: Configure ODBC from the <u>File Menu</u> See Also:

Using the Toolbar

Using the Menu

ODBCADM.EXE Location field

- **Purpose:** The ODBCADM.EXE Location field is displayed on the Preferences Window. It is used to point to the location (directory) of the ODBC Administrator Facility program ODBCADM.EXE. The ODBCADM.EXE is installed from the MDS PowerBase Installation Diskette #1 into the Windows Directory. This field enables you to move the ODBCADM.EXE program to another directory and still run it from the MDS PowerBase Application.
 - **Using:** Unless you move the program ODBCADM.EXE from the Windows directory, you do not need to change the information defaulted into this field. If you do move the ODBCADM.EXE from the Windows directory, enter the complete path of where you moved the ODBCADM.EXE program to.

See Also:

Installing ODBC ODBC Administrator Facility Preferences Window

Open Database Connectivity (ODBC)

The Open Database Connectivity Interface is a product of Microsoft Corporation. It is a C programming language which provides a standard interface to all database management systems which support the ODBC.

The benefits of ODBC are that applications, similar to MDS PowerBase, can be written independently of specific DBMS's. Users can then add modules for a specific DBMS (called database drivers) which enable them to access the various database management systems.

Open New Query Window

- **Purpose:** This button/menu option is used to open a new query window. MDS PowerBase enables up to 10 query windows to be opened simultaneously. Each query window can contain a different query which can be executed.
- **When Active:** This button/menu option is always enabled. If 10 query windows are already in use when this button/option is selected, a message will be displayed stating no more query windows may be opened. In this case, you will need to re-use one of the already open query windows.

Quick Key: None



<u>Using Menu:</u> <u>New</u> from the <u>File Menu</u> See Also:

Creating Queries

Query Window

Using the Menu

Using the Toolbar

Open Order/Group By Window

- **Purpose:** This button/menu option opens up the <u>Order/Group By Clause Window</u>. This window is used to build SQL ORDER BY and GROUP BY statements to be used with SQL SELECT queries.
- <u>When Active</u>: This button/menu option is enabled if at least 1 column is selected in the <u>Column List field</u>.

Quick Key: CTRL-G



<u>Using Menu:</u> Order/Group By Clause from the <u>Query Menu</u> <u>See Also:</u>

Creating Queries

Using the Toolbar

Using the Menu

Open Preferences Window

Purpose: This button/menu option opens up the <u>Preferences Window</u>. This window is used to set up options and policies (preferences) that affect the way MDS PowerBase runs. These preferences are normally entered the first time you run MDS PowerBase and are infrequently changed.

When Active: This button/menu option is always active.

Quick Key: None



Using Menu: Preferences... from the File Menu See Also:

Using the Toolbar

Using the Menu

Open Referencing Objects Window

Purpose: This button/menu option opens up the <u>Referencing Objects Window</u>. This window lists all SQL Server (Microsoft and SYBASE) objects (stored procedures, triggers, and views) which reference the last table selected in the Table List Field. If no table is selected, all SQL Server objects (stored procedures, triggers, and views) within the current datasource/database are listed.

When Active: This button/menu option is only active when the current <u>datasource</u>. is a SQL Server datasource.

Quick Key: CTRL-J



Using Menu:Referencing Objects from the SQL Server MenuSee Also:

<u>Object List Field</u>

<u>Using the Menu</u>

Using the Toolbar

Open SQL Script Facility Window

Purpose: This button/menu option opens up the SQL Script Facility Window. This window is used to execute SQL stored in one or more text files.

When Active: This button/menu option is active after a datasource. has been connected to.

Quick Key: CTRL-Y



Toolbar Button: **Using Menu:** SQL Script Facility from the File Menu See Also: Using the Menu

Using the Toolbar

Open Where Clause Window

- **Purpose:** This button/menu option opens up the <u>SQL Where Clause Criteria Window</u>. This window is used to build SQL WHERE clauses to be used with SQL SELECT queries.
- <u>When Active</u>: This button/menu option is enabled if at least 1 column is selected in the <u>Column List field</u>.

Quick Key: CTRL-W



<u>Using Menu:</u> <u>WHERE Clause</u> from the <u>Query Menu</u> <u>See Also:</u> <u>Creating Queries</u>

<u>Creating Queries</u>

Using the Toolbar

<u>Using the Menu</u>

Order By Clause List field

- **Purpose:** The Order By Clause List Field is located on the Order/Group By Window. It lists all the columns that will be used to build the ORDER BY clause of a SQL SELECT statement built using the <u>Build SQL</u> button/menu option. This field has <u>Extended Selection</u> capabilities.
 - **Using:** Prior to adding a column name to the Order By Clause List Field, you should select the sort sequence the column is going to be ordered in using the <u>Order By</u> <u>Sort Sequence field</u>.

Adding A Column Name To The List

There are two ways to add a column name to the Order By List Field (ORDER BY statement). They are:

- 1) **Drag and Drop** a column name from the Column Name field onto the Order By List Field. Doing this will add an ORDER BY statement for the column name dropped to the end of the list.
- 2) Select (click on) a column name in the Column Name field. Next select **Add to Order By Clause** from the Order/Group By menu, or from the Pop-Up menu of the Column Name field. This will add an ORDER BY statement for the column name selected to the end of the list.

Regardless of the method used, the column name field is what is actually added to the Order By List. The ORDER BY statement for all the columns in the list is built upon selecting the Build SQL toolbar/menu option.

Removing A Column Name From The List

There are two ways to remove one or more column names from the Order By List Field (ORDER BY statement). They are:

- 1) Select (click on) one or more column names in the list. Press the DELETE key on your PC.
- Select (click on) one or more column names in the list. Select the **Remove From Order By Clause** menu option from the Order/Group By Menu or the Order By List Field Pop-Up Menu.

Clearing (Removing All Column Names) The List

There are two ways to remove all the column names from the Order By List Field (ORDER BY statement). They are:

- 1) Select the **Clear Order By Clause** menu option from the Order/Group By Menu or the Order By List Field Pop-Up Menu.
- 2) Click on any item in the Order By List Field, then use the Clear toolbar/menu option.

Drag and Drop: There is only one Drag and Drop feature available from this field. It is:

1) Drag and Drop a column name from the Column Name field onto the Order By List Field. Doing this will add an ORDER BY statement for the column name dropped to the end of the list.

Pop Menu: The following selections are on the **Pop Up Menu** for this field:

Remove From Order By Clause - Removes the column names selected in the Order By List Field from the list.

Clear Order By Clause - Removes all column names in the Order By List Field

from the list.

See Also:

<u>Column Name List field</u> <u>Drag And Drop</u> <u>Order/Group By Clause Window</u> <u>Order/Group By Menu</u>

Order By Sort Sequence field

- **Purpose:** The Order By Sort Sequence Field is located on the Order/Group By Window. It is used in conjunction with the Order By List Field to create the ORDER BY clause of a SQL SELECT statement. This field determines whether a column will be ordered in Ascending or Descending sequence.
 - **Using:** This field has two values; **Ascending** and **Descending**. The value selected at the time a column is added to the Order By List Field determines whether that column will be ordered in Ascending or Descending sequence.

For example, if the column selected is EMPLOYEE_ID and the sort value chosen is Ascending, the ORDER BY statement for that column would be:

ORDER BY EMPLOYEE_ID ASC

See Also:

Column Name List field

Order By Clause List field

Order/Group By Clause Window

Order/Group By Clause Window

- **Purpose:** The Order/Group By Clause Window is used to build SQL ORDER BY and GROUP BY clauses. These clauses are used when SQL SELECT queries are built using the BUILD SQL toolbar/menu option.
- **Accessing:** The Order/Group By Clause Window can be accessed in the following ways:
 - ORDER
 - 1) Use the Open Order/Group By toolbar button
- Select <u>Order/Group By Clause</u> from the <u>Query Menu</u>.

Using: A sample flow of processing on the Order/Group By Clause Window is:

- 1) Select a Column Name from the Column Name List field to add to the Order By or Group By list.
- 2) Add the Column Name to the proper list (Order By or Group By) by selecting the proper menu option in the Order/Group By Menu.
- 3) Repeat steps 1 and 2 until you have selected all the columns required to build the ORDER BY and GROUP BY clauses
- 4) Build the SQL SELECT query using the BUILD SQL toolbar/menu option. The SQL SELECT query will include the ORDER BY and/or GROUP By clauses built.
- **Fields:** The following fields are located on the Order/Group By Clause Window. Click on the field name to view information about the field.

Column Name List field

Group By Clause list field

Order By Clause List field

Order By Sort Sequence field

See Also:

Building SQL Queries

Creating Queries

Open Order/Group By Window

Order/Group By Menu

SQL Where Clause Criteria Window

Order/Group By Menu

The Order/Group By Menu contains selections used to create SQL ORDER BY and GROUP BY statements. It is visible only while working on the <u>Order/Group By Clause Window</u> The following selections are available from the menu:

Add To Order By Clause

This selection adds the column name selected in the Column Name List Field to the Order By Clause List field. The sort order of the column is determined by the value of the <u>Order By Sort Sequence field</u>.

Remove From Order By Clause

This selection removes one or more column names selected in the Order By Clause List Field from the list.

Clear Order By Clause

This selection removes all column names from the Order By Clause List field.

Add To Group By Clause

This selection adds the column name selected in the Column Name List Field to the Group By Clause List field.

Remove From Group By Clause

This selection removes one or more column names selected in the Group By Clause List Field from the list.

Clear Group By Clause

This selection removes all column names from the Group By Clause List field.

Build SQL Statement

Builds a SQL SELECT statement using the following SQL SELECT information:

- * Selected columns from the Column List Field on the Datasources Window
- * WHERE Clause, if entered
- * ORDER BY Clause, if entered
- * GROUP BY Clause, if entered

See Also:

<u>Creating Queries</u> <u>Order/Group By Clause Window</u> <u>Using the Menu</u> <u>Using the Toolbar</u>

Overview

MDS PowerBase is a SQL database front-end tool which utilizes Microsoft's Open Database Connectivity (<u>ODBC</u>) interface to access database information. It's primary purpose is to enable you to easily access data in virtually any Database Management System (DBMS) from a single tool using a common interface. This makes MDS PowerBase unique compared to other tools which can only access data from a single DBMS.

For example, MDS PowerBase enables you to execute a SQL based query against a SQL Server DBMS, ORACLE DBMS, and Microsoft Access DBMS using the same easy to use interface without ever having to leave the program.

In addition, as more database vendors support the ODBC interface, additional ODBC drivers will become available. This will enable you to access additional DBMS's without having to purchase a new version of MDS PowerBase.

Look at some of the major features of MDS PowerBase:

Access to an unlimited number of ODBC compliant database management systems.

• Create multiple Queries with the ability to save and retreive the SQL created thereby eliminating re-entry of commonly used SQL.

 <u>Drag and Drop</u> tables to automatically build SQL SELECT statements against the tables.

 Drag and Drop stored procedures, triggers, and views directly from a SQL Sever database to view their text.

 <u>SQL Script Facility Window</u> which enables you to easily run queries stored in one or more text files.

 View query results in result windows or have the results automatically loaded to your favorite text editor

• Easily build SQL SELECT statements against one or more tables including WHERE, ORDER/GROUP BY, and JOIN criteria.

And Much More......

MDS PowerBase is marketed under the <u>Shareware</u> concept. This means you have 30 days to evaluate the product free of charge. During this time you are encouraged to duplicate and re-distribute the product as you received it. If after 30 days, you'd like to continue using the product, the product must be registered. Refer to the <u>Registering MDS</u> <u>Powerbase</u> Help Topic for information about registering the product.

The unregistered product you are evaluating has the following limitations:

- Only 1 Query window is available for entering SQL
- Only 1 table can be selected at a time
- Table information is unavailable
- You cannot execute SQL statements from the SQL Script Facility
- The **SELECT ALL COLUMNS** menu option which automatically builds a SQL SELECT statement for all columns in the column list has been disabled

All Drag and Drop features have been disabled including:

- Drag and Drop of tables to automatically create SQL SELECT queries
- Drag and Drop of procedures, triggers, and views to view their text
- Drag and Drop of text files to execute and/or view the SQL stored within the files

Refer to the Help Topic <u>Drag and Drop</u> for a complete list of Drag and Drop facilities within MDS PowerBase.

After registering the product, all of the features within MDS PowerBase will be enabled.

Password field

- **Purpose:** The Password field is located on the <u>Preferences Window</u>. It is used along with the User ID field as a default value when connecting to a <u>datasource</u>.
 - **Using:** The Password field is used to save time when connecting to a datasource by defalting in the password entered if no previous password has been entered. When connecting to a datasource, the password used is determined by the following:
 - 1) If the <u>Store Datasource Passwords field</u>. on the Preferences Window is turned on, the password used will be the last one used while connecting to that datasource.
 - 2) If the Store Datasource Password field is turned off, or there was no previous connection to the datasource, the password used will be the Password used to connect to the previous datasource.
 - 3) If there was no previous password entered, the password used will be the Password entered in the Password field on the Preferences Window.
 - 4) If no password was entered in the Password field on the Preferences Window, the password will be left blank and required to be entered.

See Also:

Connecting To a Datasource

Pop Up Menu

A Pop-Up menu is a special type of menu which displays items related to a particular field. This makes menu navigation very easy because all of the functions for a given field are presented on a single menu. For example, the Pop-Up menu for the Query Window only contains selections pertaining to building, executing, and saving queries.

Pop-Up menus are accessed in two ways. While working in a given field, press the <u>Quick</u> <u>Key</u> combination **ALT-M** or click the right mouse button over the field you are working in. In either case, a menu will be displayed with selections applicable to the field you are working in.

Fields with an associated Pop-Up menu have a section in their help text labeled **Pop-Up Menu**.

Preferences Window

- **Purpose:** The Preferences Window is used to establish parameters which MDS PowerBase uses to run. The Preferences Window is usually used when MDS PowerBase is first installed. After that, the parameters on this window are rarely changed.
- **Accessing:** The Preferences Window can be accessed in the following ways:
 - 1) Use the Open Preferences toolbar button .
- 2) Select **Preferences...** from the File Menu
 - **<u>Fields</u>**: The following fields are located on the Preferences Window. Click on the field name to view information about the field.

Auto Execute Query field

Display Query Results In field

ODBCADM.EXE Location field

Password field

Query Timeout field

Show System Tables field

Store Datasource Passwords field

Text Editor field

Use Separate Query Result Windows field

<u>User ID field</u>

Query Menu

The Query Menu contains selections used to create, execute, and save SQL Queries. It is visible only while working on windows associated with one of the above tasks. The following selections are available from the menu:

Set Rowcount

This selection presents a window that enables you to limit the number of rows returned in the result set of a query. The number of rows to be returned is displayed in the <u>Status Bar</u> and is controlled by the <u>ROWCOUNT</u> parameter.

If all rows are to be displayed, the status bar will display the value **ALL ROWS**. If the number of rows has been limited, the status bar will display the number of rows to be returned.

Distinct

This selection determines whether the SQL SELECT query built using the <u>Build SQL</u> will be built as SELECT DISTINCT or not. If this value is checked, the SQL SELECT query will be built as **SELECT DISTINCT**. If this value is not checked, the SQL SELECT query will be built as **SELECT**.

Select All Columns

This selection selects all columns in the <u>Column List field</u> on the <u>Datasources Window</u> and builds a SQL SELECT query using all the selected columns.

Build SQL Statement

Builds a SQL SELECT statement using the following information:

- * Selected columns from the Column List Field on the Datasources Window
- * WHERE Clause, if entered
- * ORDER BY Clause, if entered
- * GROUP BY Clause, if entered
- * DISTINCT if selected on the Query Menu

Where Clause

This selection displays the <u>SQL Where Clause Criteria Window</u> which is used to build a WHERE clause for a SQL SELECT query.

Order/Group By Clause

This selection displays the <u>Order/Group By Clause Window</u> which is used to build an ORDER BY and/or GROUP BY clause for a SQL SELECT query.

Run Query

This selection is used to execute the SQL in the current Query Window. The current query window is considered the query window that the cursor is currently in. This selection is usually used after entering SQL manually or creating SQL using the Build SQL button/menu selection.

Execute SQL In Selected Files

This selection executes the SQL within the files selected in the File List field on the \underline{SQL} Script Facility Window.

See Also:

Creating Queries
<u>Using the Menu</u> <u>Using the Toolbar</u>

Query Result Window

- **Purpose:** MDS PowerBase uses the Query Result Window to display the results of queries that are run. Query results are only displayed in a Query Result window if the <u>Display Query Results In field</u> on the <u>Preferences Window</u> is set to WINDOW. Otherwise, query results are displayed within a text editor.
- **Accessing:** Only MDS PowerBase can open a Query Result Window. However, you can quickly locate the last used Query Result window by pressing the <u>Quick Key</u> **CTRL-R**. You can also access the last used Query Result window using the <u>Windows Menu</u>.

Up to 10 Query Result windows can be opened at one time. This is controlled by the <u>Use Separate Query Result Windows field</u> on the Preferences Window. If this field is turned off, each new query result will overlay the result of the previously run query.

Pop Menu: The following selections are on the **Pop Up Menu** for this window:

Save - This selection saves the text in the Query Result Window into a file.

Close - This selection closes the Query Result Window.

Find - This selection displays a window to be used for locating text within the Query Result Window.

Find Next - This selection finds the next location of the text being searched for within the Query Result Window. It assumes the FIND selection had been previously made.

Find Previous - This selection finds the previous location of the text being searched for within the Query Result Window. It assumes the FIND selection had been previously made.

Clear - This selection clears (erases) the text from the Query Result Window.

Cut - This selection cuts (deletes) the selected (hilighted) text from the Query Result Window and copies it to the Windows Clipboard.

Copy - This selection copies the selected (hilighted) text in the Query Result Window to the Windows Clipboard.

Paste - This selection copies text from the Windows Clipboard to the Query Result Window . The text is inserted where the cursor is within the window.

See Also:

<u>Auto Execute Query field</u>

Clear Window Toolbar Button

Find Next

Find Previous

File Save Toolbar Button

<u>Running a Query</u>

Search Criteria Window

Using the Menu

Using the Toolbar

Query Timeout field

- **Purpose:** The Query Timeout field is located on the <u>Preferences Window</u>. It is used to specify the number of seconds MDS PowerBase should wait for a query to execute.
 - **Using:** The number entered in this field is used to limit the amount of time MDS PowerBase waits to hear back from the datasource when a query is run. It is used to prevent a situation in which a query is sent to a datasource, but the datasource does not communicate with MDS PowerBase for a long period of time. In this situation, your PC would be locked up waiting for the datasource to return contol to MDS PowerBase. By specifying a limit in this field, MDS PowerBase is ensured to get control back after the number of seconds specified.

An acceptable number of seconds to wait is different for each person. However a number between 15 - 30 seconds is usually sufficient to let most queries execute successfully.

You should note, that once the datasource communicates with MDS PowerBase, the timeout limit is no longer in effect. The result set of a query does not have to be fully processed in the time limit set.

See Also:

Run Query

Query Window

- **Purpose:** The Query Window is used to build and run queries. There are various ways to create queries within MDS PowerBase. Refer to the Help topic <u>Creating</u> <u>Queries</u> for a list of ways to create queries within MDS PowerBase.
- **Accessing:** Query Windows can be accessed in the following ways:

Opening a New Query Window:

Select the Open Query Window toolbar button • or

Select **New** from the <u>File Menu</u>

Accessing an Existing Query Window:

Select Query from the Windows Menu or

Use the Quick Key CTRL-Q

Up to 10 Query Windows can be opened at one time. If an attempt is made to open more than 10 Query Windows, an error message will be displayed.

Pop Menu: The following selections are on the <u>Pop Up Menu</u> for this window:

Open - This selection opens a file and loads it's text into the Query Window.

Save - This selection saves the text in the Query Window into a file.

Close - This selection closes the Query Window.

Clear - This selection clears (erases) the text from the Query Window.

Cut - This selection cuts (deletes) the selected (hilighted) text from the Query Window and copies it to the Windows Clipboard.

Copy - This selection copies the selected (hilighted) text in the Query Window to the Windows Clipboard.

Paste - This selection copies text from the Windows Clipboard to the Query Window . The text is inserted where the cursor is within the window.

Set Rowcount - This selection presents a window that enables you to limit the number of rows returned in the result set of a query. The number of rows to be returned is displayed in the <u>Status Bar</u> and is controlled by the <u>ROWCOUNT</u> parameter.

Distinct - This selection determines whether the SQL SELECT query built using the Build SQL toolbar/menu option will be built as SELECT DISTINCT or not. If this value is checked, the SQL SELECT query will be built as **SELECT DISTINCT**. If this value is not checked, the SQL SELECT query will be built as **SELECT**.

Select All Columns - This selection selects all columns in the <u>Column List field</u> on the <u>Datasources Window</u> and builds a SQL SELECT query using all the selected columns.

Build SQL statement - Builds a SQL SELECT statement using the following information:

- * Selected columns from the Column List Field on the Datasources Window
- * WHERE Clause, if entered
- * ORDER BY Clause, if entered
- * GROUP BY Clause, if entered
- * DISTINCT if selected on the Query Menu

WHERE Clause - This selection displays the <u>SQL Where Clause Criteria Window</u> which is used to build a WHERE clause for a SQL SELECT query.

Order/Group By Clause - This selection displays the <u>Order/Group By Clause</u> <u>Window</u> which is used to build an ORDER BY and/or GROUP BY clause for a SQL SELECT query.

Run Query - This selection is used to execute the SQL in the current Query Window. This selection is usually used after entering SQL manually or creating SQL using the Build SQL button/menu selection.

Drag and Drop: The following Drag and Drop features are available on this window :

- Drag and Drop the table name from the <u>Table List Field</u> on the Datasources Window onto a Query Window. Doing this will create a SQL SELECT query selecting all columns in the table dropped. If you want the SELECT statement to be built as a DISTINCT query, select DISTINCT from the Query Menu prior to dragging and dropping the table.
- 2) Drag and Drop a file from the <u>Files List field</u> on the SQI Script Facility Window onto a Query Window to load the text within the file into the Query Window.
- 3) Drag and Drop an object in the <u>Object List Field</u> on the Referencing Objects Window onto a Query Window. This will retreive the objects source from the server and display it in the Query Window. Using this approach enables you to modify the objects' source and re-load the object to the server.

Note: Prior to re-loading the objects' source you will need to add a DROP statement to DROP the object before it is re-loaded.

4) Drag and Drop a SQL Server Default or SQL Server Rule from the <u>Column Details Window</u> onto a Query Window. This will retreive the objects source from the server and display it in the Query Window. Using this approach enables you to modify the objects' source and reload the object to the server.

Note: Prior to re-loading the objects' source you will need to add a DROP statement to DROP the object before it is re-loaded.

5) Drag and Drop a SQL Server Table Trigger from the <u>Table Details</u> <u>Window</u> onto a Query Window. This will retreive the objects source from the server and display it in the Query Window. Using this approach enables you to modify the objects' source and re-load the object to the server.

Note: Prior to re-loading the objects' source you will need to add a DROP statement to DROP the object before it is re-loaded.

See Also:

<u>Add WHERE Clause</u> <u>Build SQL</u> <u>Open New Query Window</u> <u>Query Menu</u>

Quick Key

Quick Key is a term used to describe one or more simultaneous keyboard keystrokes. For example, the quick key **CTRL-G** means to press the **CTRL** keyboard key and while it is still pressed, press the **G** keyboard key. Both the **CTRL** and **G** keys will be pressed at the same time.

Referencing Objects Window

- **Purpose:** The Referencing Objects Window is only available while connected to a SQL Server (Microsoft and SYBASE) <u>datasource</u>. It lists all SQL Server objects (stored procedures, triggers, and views) which reference the last table selected in the Table List Field. If no table is selected, all SQL Server objects (stored procedures, triggers, and views) within the current datasource/database are listed.
- **Accessing:** The Referencing Objects Window can be accessed in the following ways:
 - 1) Use the Open Referencing Objects Window toolbar button

2) Select Referencing Objects from the SQL Server Menu

Using: When the Referencing Objects Window is first displayed, stored procedures are displayed. To view different objects, cliick on one of the following buttons :

Procedures: Lists stored procedures.

<u>Triggers</u>: Lists triggers.

Views: Lists views.

<u>All</u>: Lists all of the above objects at the same time.

Viewing The Source of an Object

There are two ways to view the source of an object. In each case, the SQL CREATE statement used to create the object is displayed.

- Double Click on an object in the Object List field. This approach will retreive the objects source from the server and display it in a Query Result Window.
- 2) Drag and Drop an object in the Object List field onto a Query Window. This approach will retreive the objects source from the server and display it in the Query Window. Using this approach enables you to modify the objects' source and re-load the object to the server.

Note: Prior to re-loading the objects' source you will need to add a DROP statement to DROP the object before it is re-loaded.

Printing The List Of Objects

The list of objects in the Object List field can be printed by using the Print selection on the Object List field Pop-Up menu. Note that only the list is printed. Not the source for each object in the list.

Fields: The following fields are located on the Referencing Objects Window. Click on the field name to view information about the field.

Object List Field

- **<u>Drag and Drop:</u>** The following Drag and Drop feature is available from this window:
 - Drag and Drop an object in the Object List field onto a Query Window. This will retreive the objects source from the server and display it in the Query Window. Using this approach enables you to modify the objects' source and re-load the object to the server.

Note: Prior to re-loading the objects' source you will need to add a DROP statement to DROP the object before it is re-loaded.

Pop Menu: The following selections are on the <u>Pop Up Menu</u> for this window:

Retreive Selected Object - Retreives the source for the object selected in the Object List Field from the server and displays it in a Query Result Window.

See Also:

Creating Queries Drag And Drop

Registering MDS Powerbase

MDS PowerBase is distributed under the <u>Shareware</u> concept. This means that you may use the the product free of charge for 30 days. You are also encouraged to duplicate and re-distribute the product as you received it to your friends and co-workers. If after 30 days, you'd like to continue using this product, you must register the product.

To register the product, fill out the registration form delivered with the product (REGISTER.TXT) along with the registration fee. It is important to write down the <u>serial</u> <u>number</u> of your product in the approriate place on the registration form. The product cannot be registered without this number.

You will receive back a registration number which will be used to register the product. You register the product using the MDS PowerBase Registration Program (REGISTER.EXE). This facility will require you to enter the registration number you received along with the name of the person the product is to be registered to.

Upon registering the product, all features within MDS PowerBase will be fully functional. In addition, the name of the person the product is registered to will be displayed each time MDS PowerBase is run.

See Also:

License Agreement

Registration Number Field

Purpose: The Registration Number Field is located on the MDS PowerBase Registration Window. In this field you enter the registration number sent to you when you register the product. Upon registering the product, all features within MDS PowerBase will be fully functional. In addition, the name of the person the product is registered to will be displayed each time MDS PowerBase is run.

See Also:

Registering MDS Powerbase

ROWCOUNT

Purpose: The ROWCOUNT parameter is a selection on the Query Menu and Query Pop-Up menu. It is used to limit the number of rows returned in a result set of a query. If the ROWCOUNT parameter is not used, all the rows in a result set will be returned.

For example, if a table contains 100 people named SMITH, but you only wanted to see the first 10, you would set the ROWCOUNT parameter to 10.

The ROWCOUNT parameter is only used when a query is run. Once the ROWCOUNT parameter is set, it remains set until it is changed again.

Using: Returning All Rows In A Result Set

To return all rows in a result set select **Set Rowcount** from the Query Menu. In the Rowcount field on the Rowcount Parameter Window, enter the number zero (0) and press the OK button. The Number Of Rows To Retreive section in the <u>Status Bar</u> should read **ALL ROWS**.

Returning A Limited Number Of Rows In A Result Set

To limit the number of rows returned in a result set select **Set Rowcount** from the Query Menu. In the Rowcount field on the Rowcount Parameter Window, enter the number of rows you want retreived and press the OK button. The Number Of Rows To Retreive section in the status bar should display the number of rows to be returned.

See Also:

Running a Query

<u>Query Menu</u>

<u>Using the Menu</u>

Run DOS Shell

Purpose: This button/menu option runs a DOS session within a window. It is similar to running a DOS session from the Windows Program Manager.

When Active: This button/menu option is always active.

Quick Key: None



Using Menu: DOS Shell from the <u>File Menu</u> See Also:

Using the Toolbar

Using the Menu

Run Query

Purpose: This button/menu option is used to execute the SQL in the current Query Window. The current query window is considered the Query Window that the cursor is currently in. This button/menu option is usually selected after entering SQL manually or creating SQL using the Build SQL button/menu selection.

Upon selecting this button/menu option the following will occur:

- 1) The SQL in the Query Window executed.
- 2) The Cancel Query Window is displayed. To cancel the query at anytime, press the Cancel button on the Cancel Query Window. The execution of the query will be cancelled and only the result set(s) returned prior to the cancellation will be displayed.
- 3) If the query being executed does not run within the timeout expiration period specified by the <u>Query Timeout field</u> an error will occur.
- 4) If the query being executed returns one or more result sets, the <u>Status</u> <u>Bar</u> will display the number of rows being returned in the result set(s).

The number of rows returned can be limited by using the ROWCOUNT menu selection on the Query Menu.

5) The result set(s), if any, are displayed either in a query window or text editor (based on the value of the <u>Display Query Results In field</u>. The Preference field <u>Use Separate Query Result Windows field</u> will determine whether more than one Query Result Window is displayed, or if one is already displayed, will it be re-used.

The number of rows processed is displayed at the end of the Query Result Window and in the Comments section of the status bar.

When Active: This button/menu option is active only when there is text in the current Query Window. The red traffic light means that there is no SQL query to be executed. The green light means that there is a SQL query that can be executed.

Quick Key: CTRL-E



Using Menu: Run Query from the <u>Query Menu</u> See Also:

Auto Execute Query field

Build SQL

Creating Queries

Query Menu

Query Result Window

Query Window

The ROWCOUNT Parameter

<u>Using the Menu</u>

Using the Toolbar

Run Text Editor

Purpose: This button/menu option is used to run the text editor specified in the <u>Text</u> <u>Editor field</u> on the <u>Preferences Window</u>. Selecting this option will run/launch the editor. If no editor is specified in the Text Editor Preferences field, an error message will be displayed.

When Active: This button/menu option is always active.

Quick Key: CTRL-H



Using Menu: Launch Editor from the <u>File Menu</u> See Also:

Drag And Drop

Using the Toolbar

Using the Menu

Search Criteria Window

- **Purpose:** The Search Criteria Window is used to Find text within a Query Result Window. It's main function is to enter the parameters used to locate the text (ie. text to locate, search direction) and initiate the search. The Search Criteria Window is the first step in the search process. It works in conjunction with the <u>Find Next</u> and <u>Find Previous</u> menu selections.
- <u>Accessing:</u> The Search Criteria Window can be accessed by selecting <u>Find</u> from the <u>Edit</u> <u>Menu</u>. It is only available while working within a Query Result Window.
 - **Using:** To search for text within a Query Result Window, perform the following:
 - 1) Enter the text to search for in the **Search For** field.
 - Select whether the Search Direction will be Forward or Backward. The search will begin at the current cursor position within the Query Result Window.
 - 3) Check the Match Case box if you want the text being searched for to match exactly the text you entered in the Search For field. For example, if you check this box, the text MIKE within the Query Result Window would not match the Search For text Mike. The text would have to match exactly if this box is checked.
 - 4) Press the **Search** button to begin the search. If you want to cancel the search, press the **Close** button instead.
 - 5) After the initial search has completed, you can continue to search for the same text in either a forward or backward direction by using the **Find Next** and **Find Previous** selections.

Shareware

Shareware is a concept by which you receive and evaluate software before purchasing it. The standard evaluation period lasts 30 days in which you may use the product free of charge. You are also encouraged to duplicate and re-distribute the product to friends, co-workers, and bulletin boards. If after 30 days, you'd like to continue using a shareware product, you must register the product.

Show System Tables field

Purpose: The Show System Tables field is displayed on the Preferences Window. It is used to control whether or not datasource system tables are displayed in the <u>Table List Field</u> on the <u>Datasources Window</u>. System tables are special tables which are used by a datasource to manage the various resources within the datasource.

For example, in a SQL Server datasource there is a system table named SYSOBJECTS which is used to manage all the objects (tables, procedures, triggers, etc.) within the datasource.

Using: If box is checked: A datasources system tables will be displayed in the Tables List field.

If box is not checked: A datasources system tables will not be displayed in the Tables List field.

Note: Changing this field will cause the table list field to be re-populated.

See Also:

Preferences Window

SQL Script Facility Window

Purpose: The SQL Script Facility Window is used to execute SQL stored in one or more text files. For example, if you have a number of queries that you run each day, you could save the queries in one or more files. Then using the SQL Script Facility Window, you could list and select each of the files from the Files List. After selecting the files from the list, you could easily execute the queries in each

of the files selected by pressing the Execute SQL Script toolbar button This approach is alot simpler than executing each query separately.



Because the results of all the queries executed are stored and displayed, the SQL Script Facility can also be used as a job scheduler type utility. For example, select all the files with the queries you want to execute, then press the Execute SQL In Selected Files button and go to lunch. When you get back each of the queries would have been run and the results would be displayed on your PC waiting to be reviewed.

Another good use for the SQL Script Facility is to perform routine database maintenance. For example, in a SQL Server environment you may store all the source for your stored procedures and triggers in text files. Anytime you need to make a change to one of these objects you could use the SQL Script Facility to list the text files, load the text into a text editor, change the source, save it , and re-load the source.

Accessing: The SQL Script Facility Window can be accessed in the following ways:

- 1) Use the Open SQL Script Facility Window toolbar button •
- 2) Select SQL Script Facility from the File Menu
- 3) Use the <u>Quick Key</u> **CTRL-Y**
 - **Using:** When the SQL Script Facility Window is first opened, the Files List will display all files within the current drive/directory with the extension **SQL**. By changing the Drive, Directory, or File Type, a different list of files can be displayed.

Viewing The Text Within Files

There are three ways to view the text within a file in the Files List. They are:

- 1) Double Click on a file in the list.
- 2) Drag and Drop a file from the list onto the Text Editor toolbar button.
- 3) Select a file from the list, then click on the Text Editor toolbar button or select Launch Editor from the File Menu.

Executing SQL Queries Stored Within The Files

There are two ways to execute the SQL queries stored within the files listed in the Files List. They are:

1) Drag and Drop a file from the list onto the Execute SQL Script toolbar



2) Select a file from the list, then click on the Execute SQL Script toolbar button or select Process SQL In Selected Files from the Query Menu.

Fields: The following fields are located on the SQL Script Facility Window. Click on the field name to view information about the field.

Directories List field

Drives List field

Files List field

File Types List field

<u>Drag and Drop:</u> The following Drag and Drop features are available from this window:

- 1) Drag and Drop a file from the File List onto the Execute SQL Script toolbar button to execute the SQL query within that file.
- 2) Drag and Drop a file from the File List onto the Text Editor toolbar button to load the text within the file into the text editor specified in the Text Editor field on the Preferences Window.
- 3) Drag and Drop a file from the File List onto a Query Window to load the text within the file into the Query Window.

See Also:

<u>Drag And Drop</u> <u>Exceute SQL Script</u> <u>Using the Menu</u> <u>Using the Toolbar</u>

SQL Server Database Window

- **Purpose:** The SQL Server Database Window is used to connect (change) to a different database within the active SQL Server datasource. This has the same effect as using the USE <database> SQL statement which also will change the current database.
- <u>Accessing</u>: The SQL Server Database Window is accessed by selecting <u>Change</u> Database from the <u>SQL Server Menu</u>.
 - **Using:** There are two ways to change the current database while on this window. They are:
 - 1) Select a database from the list presented. Next click on the Connect button.
 - 2) Double-click on a database in the list presented. This will automatically connect to the database selected.

Regardless of the method used to change the database, the <u>Table List Field</u> will be re-populated with the tables in the selected database.

If you do not want to change the database, press the Cancel button. This will keep you in the database currently being used.

SQL Server Default field

- **Purpose:** The SQL Server Default field is located on the <u>Column Details Window</u>. It is used only with a SQL Server <u>datasource</u> and displays the name of the SQL Server Default that is bound to the column being displayed. A Default causes SQL Server to automatically supply a value for the column if a value is not supplied by the user.
 - **Using:** The SQL Server Default is an informational field that may not be changed. The source of the Default can however by viewed by dragging and dropping the default to a Query Window. This will cause the source for the Default to be retreived and displayed within the Query Window.

Drag and Drop: There is only one Drag and Drop feature available from this field. It is:

1) Drag and Drop the Default from the SQL Server Default field onto a Query Window. Doing this will cause the source for the Default to be retreived and displayed within the Query Window.

See Also:

Drag And Drop

Creating Queries

SQL Server Menu

The SQL Server Menu contains selections used to retreive information from a SQL Server (Microsoft and SYBASE) <u>datasource</u>. It is visible only while connected to a SQL Server datasource. The following selections are available from the menu:

Referencing Objects

This selection displays the <u>Referencing Objects Window</u>. This window lists all SQL Server objects (stored procedures, triggers, and views) which reference the last table selected in the Table List Field. If no table is selected, all SQL Server objects (stored procedures, triggers, and views) within the current datasource/database are listed.

Change Database

This selection displays the <u>SQL Server Database Window</u> which is used to connect to a different database within the same datasource. This is a quicker approach than using the Connect To Datasource toolbar/menu option to just change the database.

SET Options

This selection is used to SET various options within SQL Server. It presents a sub-menu with the following selections. When the selection is checked, it is ON. If it is unchecked, it is OFF. Choosing one of the selections switches it's state to ON or OFF depending on it's current state.

<u>Reset Options</u>: This selection resets all options back to their original state (default value). It does not have a check mark next to it.

ARITHMETIC ABORT: When ON, causes a query to abort if a divide by zero or overflow condition occurs. The default value is OFF.

NOEXEC: When ON, causes a query to go through all steps up to compilation, but does not execute the query. It is often used with the SHOWPLAN option to determine the execution plan generated for a query. Once NOEXEC is turned on, no other statements are executed including other SET commands until the NOEXEC option is turned off. The default value is OFF.

NOCOUNT: When ON, causes the SQL Server message displayed at the end of each query statement execution indicating the number of rows affected by the statement to be suppressed. The default value is OFF.

PARSEONLY: When ON, causes a query to be parsed for syntax and semantic correctness only. Optimization, compilation, and execution of the query does not occur. The default value is OFF.

ROWCOUNT: The ROWCOUNT option is used to limit the number of rows returned in a result set of a query. If the ROWCOUNT parameter is not used, all the rows in a result set will be returned. The default value is return all rows. See also <u>ROWCOUNT</u>.

SHOWPLAN: When ON, displays the query execution plan generated by SQL Server's cost-based optimizer. The execution plan displays the exact plan the optimizer uses to process the query. Once the plan is created, it is executed unless the NOEXEC option is ON. The default value is OFF.

<u>STATISTICS IO:</u> When ON, displays the number of table scans, number of logical reads, number of physical reads, and the total number of pages written during a queries execution. The default value is OFF.

<u>STATISTICS TIME:</u> When ON, displays the time for parsing, compiling, and executing queries. This can be used in conjunction with the SHOWPLAN option to determine why a query may be taking a long time to execute. The default value is

OFF.

<u>Queries</u>

This selection is used to run various predefined queries against SQL Server system tables. The following queries are available:

TABLES COLUMN DETAILS FOR CURRENT TABLE DATABASES ACTIVE PROCESSES LOCKED PROCESSES DEFAULT CONFIGURATION OPTIONS CURRENT CONFIGURATION OPTIONS USERS GROUPS LOGINS

SQL Server Rule field

Purpose: The SQL Server Rule field is located on the <u>Column Details Window</u>. It is used only with a SQL Server <u>datasource</u> and displays the name of the SQL Server Rule that is bound to the column being displayed. A Rule causes SQL Server to validate the values entered into a field are valid values.

For example, if the valid values for the column EMPLOYEE_SEX are "M" and "F", a rule could be created to ensure that only one of these two values are stored in the column.

Using: The SQL Server Rule is an informational field that may not be changed. The source of the Rule can however by viewed by dragging and dropping the rule to a Query Window. This will cause the source for the Rule to be retreived and displayed within the Query Window.

<u>Drag and Drop:</u> There is only one Drag and Drop feature available from this field. It is:

1) Drag and Drop the Rule from the SQL Server Rule field onto a Query Window. Doing this will cause the source for the Rule to be retreived and displayed within the Query Window.

See Also:

Drag And Drop

Creating Queries

SQL Where Clause Criteria Window

- **Purpose:** The SQL Where Clause Criteria Window is used to build SQL WHERE clauses. These clauses are used when SQL SELECT queries are built using the BUILD SQL toolbar/menu option.
- **Accessing:** The SQL Where Clause Criteria Window can be accessed in the following ways:
 - 1) Use the Open Where Clause toolbar button .
- 2) Select <u>Where Clause</u> from the <u>Query Menu</u>.

Using: A sample flow of processing on the SQL Where Clause Criteria Window is:

 Select a column from the Column Name List field. The column selected will be used on the left side of the comparison type field. For example, if you wanted to create the WHERE statement :

WHERE **USER_ID** = "JOHN"

USER_ID would be the column name you would select from the Column Name List.

- 2) Select a comparison type from the Comparison List field. This field lists various comparison operators such as Equals, Greater Than, and Less Than. In our above example, the comparison type would be **Equals**.
- 3) Enter a value in the Column Value field . It is the value to which the selected column will be compared. In our above example, the value entered would be **JOHN**.
- Select a value from the AND/OR Selection field if the WHERE Clause is going to consist of multiple statements. The following is an example of a multiple statement WHERE Clause:

WHERE USER ID = "JOHN" AND STATE = "GA"

- 5) Choose the <u>Add to WHERE Clause</u> toolbar/menu selection. This will add the WHERE Statement to the end of the WHERE Clause List.
- 6) Repeat steps 1-5 until all the WHERE Clause statements have been added to the WHERE Clause List field. Then select the Build SQL toolbar/menu selction to create the SQL SELECT query with the WHERE Clause appended to it.
- **Fields:** The following fields are located on the SQL Where Clause Criteria Window. Click on the field name to view information about the field.

And/Or Selection field

Column Name List field

Column Value field

Comparison List field

Where Clause List field

See Also:

Building SQL Queries

Creating Queries

Open Where Clause Window

Order/Group By Clause Window Using the Menu Using the Toolbar WHERE Clause Menu

Status Bar

The status bar is located underneath the toolbar and displays various information about the processing occurring within MDS PowerBase.

Click on a section of the status bar to view what information is displayed in it.

Connect To a Datasource	All Rows	01/13/1994	11:16 PM
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Store Datasource Passwords field

Purpose: The Store Datasource Passwords field is located on the <u>Preferences Window</u>. It is used when connecting to a <u>datasource</u> and controls whether the password used to connect to the datasource will be stored in the ODBC.INI file.

Storing the password with the datasource will reduce the amount of data entry required to connect to a datasource because the password field will already be filled in for you when you connect to the datasource. There is however a security issue with storing the password because now anyone who uses your computer will be able to connect to the datasource as you without having to enter your password.

When connecting to a datasource, the password used to connect to the datasource is determined by the following:

- 1) If the <u>Store Datasource Passwords field</u>. on the Preferences Window is turned on, the password used will be the last one used while connecting to that datasource.
- 2) If the Store Datasource Password field is turned off, or there was no previous connection to the datasource, the password used will be the Password used to connect to the previous datasource.
- 3) If there was no previous password entered, the password used will be the Password entered in the Password field on the Preferences Window.
- 4) If no password was entered in the Password field, the password will be left blank and required to be entered.
- **Using:** If box is checked: Passwords will be stored in the ODBC.INI file along with the datasource information.

If box is not checked: Passwords will not be stored in the ODBC.INI file along with the datasource information.

See Also:

Connecting To a Datasource

serial number

The MDS PowerBase serial number is a unique number identifying your copy of MDS PowerBase. You will use it to register the product. The serial number can be found in the window title of the **About MDS PowerBase Window** which is accessed from the <u>Help</u> <u>Menu</u> The serial number is also displayed on the MDS PowerBase Registration window.

See Also:

Registering MDS Powerbase

Table Columns List field

Purpose: The Table Columns List field is located on the <u>Table Details Window</u>. It lists information for all columns in the table displayed. The following information is displayed for each column:

Column Name

Column Type (CHAR, MONEY, etc.)

Column Size

Using: The Table Columns List field is an information only field. None of the values within it can be changed. To **view more detailed information about a column**, double-click on the row of a column. This will display the <u>Column</u> <u>Details Window</u> showing information about the column.

See Also:

Table Indexes List field

Table Details Window

Purpose: The Table Details Window is used to display the following information about a table:

Table Name

Number Of Rows In the Table

Information about the columns in the table including:

Column Name

Column Type (CHAR, MONEY, etc.)

Column Size

Can the column have NULL values:

Not Null : Column cannot have NULL values

Null : Column can have NULL values

Information about the indexes of the table including:

Index Name

Columns in the index

Whether the index is UNIQUE or NONUNIQUE

Whether the index is CLUSTERED or NONCLUSTERED

USED WITH SQL SERVER DATABASES ONLY:

SQL Server Triggers Associated with the table

Accessing: The Table Details Window can be accessed in the following ways using the Table List Field on the Datasources Window:

- 1) Double Click on a table name
- 2) Click on table name then select the **TABLE DETAILS** menu option on the Datasources Menu or the Pop Menu.
- **Using:** The Table Details Window is an information only window. None of the values displayed can be changed. However, the following processing is available on the window:

Viewing more detailed information about a column

To view further information about a column, doubleclick on the row of a Table Column List field. This will display the <u>Column Details Window</u> showing information about the column.

Viewing the SQL CREATE statement used to build an index

To view the SQL CREATE statement used to build an index, doubleclick on the row of an index in the Table Index List field. This will display the <u>Index Definition</u> <u>Window</u> showing the SQL CREATE statement used to build the index selected.

Drag and Drop: The following Drag and Drop operations may be performed from this window:

Any of the SQL Server Triggers may be dragged and dropped onto a Query Window. The source for the trigger is then retrieved and displayed within the Query Window.

Fields: The following fields are located on the Table Details Window. Click on the field name to view information about the field.

Table Columns List field

Table Indexes List field

See Also:

Datasources Menu Drag and Drop Pop Up Menu

Table Indexes List field

Purpose: The Table Indexes List field is located on the <u>Table Details Window</u>. It lists all of the indexes for the table displayed. The following information is displayed for each index:

Index Name

Columns in the index

Whether the index is UNIQUE or NONUNIQUE

Whether the index is CLUSTERED or NONCLUSTERED

Using: The Table Indexes List field is an information only field. None of the values within it can be changed. To **view the SQL CREATE statement that built an index**, doubleclick on the row of an index. This will display the <u>Index Definition</u> <u>Window</u> showing the SQL CREATE statement used to build the index selected.

See Also:

Table Columns List field

Table List Field

Purpose: The Table List field displays the tables and views within the

<u>datasource</u>/database connected to. If the <u>Show System Tables field</u> on the <u>Preferences Window</u> is selected, the table list will contain the system tables within the datasource. During the rest of this discussion, the term TABLE will be used to refer to both a Table and a View within the Table List Field.

Using: The table list field is primarily used to list the columns of a table within the Columns List field. These columns are then used to build SQL SELECT Queries. For further information about building SQL SELECT Queries refer to <u>Creating</u> <u>Queries</u>.

Selecting/Deselecting a Table

To **select a table**, click on the table name. The table should now be selected (hilighted). To **deselect a table** click on the hilighted table. The table will no longer be hilighted.

Deselecting All Tables in the list

To quickly deselect all tables in the table list doubleclick on the

Tables/Views button	Tables/Views	above the
table list field.		

Viewing Table Information

To **view information about a table**, doubleclick on a table name. This will display the <u>Table Details Window</u>.

Pop Menu: The following selections are on the **Pop Up Menu** for this field:

Table Details - Displays Table Details for the last selected table. These include the columns within the table, triggers for the table, and indexes for the table.

Print - Prints the information displayed in the Tables Detail Window for the each of the tables selected in the Table List.

Drag and Drop: There is only one Drag and Drop feature available from this field. It is:

 Drag and Drop the table name from the Table List onto a Query Window. Doing this will create a SQL SELECT query selecting all columns in the table dropped. If you want the SELECT statement to be built as a DISTINCT query, select DISTINCT from the Query Menu prior to dragging and dropping the table.

See Also:

Datasources Window DISTINCT Parameter

Drag And Drop

Text Editor field

Purpose: The Text Editor field is located on the <u>Preferences Window</u>. It is used define a text editor that can be used to load query results into. The text editor is also used to load and edit SQL scripts. The text editor can also be launched using

the Text Editor toolbar button or menu selection.

The text editor field is used in conjunction with the <u>Display Query Results In field</u>. If this field is set to TEXT EDITOR, query results will be loaded into the text editor defined in this field.

The default editor specified at installation time is the Windows Notepad. If no text editor is entered in this field, all of the above uses of the text editor will result in an error occurring.

Using: Enter the full path of the text editor you want to use in this field. For example, if your text editor is located in the C:\WINDOWS directory and is named MYEDIT.EXE, the value **C:\WINDOWS\MYEDIT.EXE** should be entered in the text editor field.

See Also:

<u>File Menu</u>

Using the Toolbar

Use Separate Query Result Windows field

Purpose: The Use Separate Query Result Windows field is located on the <u>Preferences</u> <u>Window</u>. It is used in conjunction with the <u>Display Query Results In field</u> to display query results within an MDS PowerBase Query Result Window. If this field is selected, up to 10 concurrent Query Result Windows will be used to store the results of queries run. This enables you to compare the results of multiple queries.

If the Display Query Results In field is set to TEXT EDITOR, this field will be disabled and has no effect on the displaying of query results.

Using: If box is checked: The results of each query run will be stored in a separate Query Result Window. Up to 10 separate query result windows will be used. If there are 10 Query Result Windows open at one time, the first Query Result Window will be re-used.

If box is not checked: Query Results will be displayed within a single query result window. Each query that is run will overlay the results of the previously run query.

See Also:

Query Result Window

Running a Query
User ID field

- **Purpose:** The User ID field is located on the <u>Preferences Window</u>. It is used along with the Password field as a default value when connecting to a <u>datasource</u>.
 - **Using:** The User ID is used to save time when connecting to a datasource by defalting in the User ID if no previous User ID has been entered. When connecting to a datasource, the User ID used to connect to the datasource is determined by the following:
 - 1) The User ID used will be the last one used while connecting to the datasource.
 - 2) If there was no previous connection to the datasource, the User ID used will be the User ID used to connect to the previous datasource.
 - 3) If there was no previous User ID entered, the User ID used will be the User ID entered in the User ID field on the Preferences Window.
 - 4) If no User ID was entered in the User ID field on the Preferences Window, the User ID will be left blank and required to be entered.

See Also:

Connecting To a Datasource

Using the Menu

There are various ways within MDS PowerBase to Access it's features and functions. One of those ways is by using **Menus**. There are two types of Menus available in MDS PowerBase. The Main Menu and Pop-Up Menus.

<u>The Main Menu</u>

The Main Menu is located above the toolbar. It has various selections some of which are dynamic. That is, some of the selections are not always available. For example, the Menu Selection BUILD SQL is only available to be used when the system determines that it has the ability to actually build a SQL statement.

All of the selections on the Main Menu are menus themselves. This means that selecting one of the Main Menu selections will display another menu from which you will make another selection.

The following selections (Menus) are displayed on the Main Menu. Click on the Menu Item to view information about the Menu and it's selections:

<u>File Menu</u> <u>Edit Menu</u> <u>Datasources Menu</u> <u>Query Menu</u> <u>WHERE Clause Menu</u> <u>Order/Group By Menu</u> <u>SQL Server Menu</u> <u>Windows Menu</u> <u>Help Menu</u>

Pop-Up Menus

Pop-Up menus are associated with fields and contain menu selections that are applicable to the field. For example, the Pop-Menu for the Table List Field contains the selections TABLE DETAILS, and PRINT. The TABLE DETAILS selection displays detailed information about tables. The PRINT selection prints detailed information about tables. So these two menu selections are applicable to the Table List Field.

Pop-Up Menus are accessed by clicking the right mouse button over a field or by pressing the <ALT-M> key combination while the cursor is in a given field. In either case, if the field has a Pop-Up menu it will be displayed. Refer to the Help Topic on a specific field to determine if that field has a Pop-Up Menu.

See Also:

Pop Up Menu

Using the Toolbar

There are various ways within MDS PowerBase to Access it's features and functions. One of those ways is by using the **toolbar**. The toolbar is located at the top of the screen and is accessed by clicking on one of it's buttons. You can also use the TAB key to TAB to the appropriate button then press the enter key.

Click on a toolbar button to view what it's function is.

Main Toolbar (Displayed when the application is first entered)

-	GUERY	CLEAR	SAVE	Sal	UHERE	ORDER	₿
PROCS	SCRIPT	C:>	2	Ð	12	Exit	

The following button is only displayed when the SQL WHERE Clause Criteria Window is being used)



The following button is only displayed when the SQL Script Facility Window is being used)



Using the Menu

Where Clause List field

Purpose: The Where Clause List Field is located on the <u>SQL Where Clause Criteria</u> <u>Window</u>. It lists all of the statements that will be used to build the WHERE clause of a SQL SELECT statement built using the <u>Build SQL</u> button/menu option. This field has <u>Extended Selection</u> capabilities.

Using: Adding A WHERE Statement To The List

The following steps are taken to add a WHERE statement to the WHERE Clause List.

 Select a column from the <u>Column Name List field</u>. The column selected will be used on the left side of the comparison type field. For example, if you wanted to create the WHERE statement :

WHERE USER_ID = "JOHN"

USER_ID would be the column name you would select from the Column Name List.

- Select a comparison type from the <u>Comparison List field</u>. This field lists various comparison operators such as Equals, Greater Than, and Less Than. In our above example, the comparison type would be Equals.
- 3) Enter a value in the <u>Column Value field</u>. It is the value to which the selected column will be compared. In our above example, the value entered would be **JOHN**.
- Select a value from the <u>And/Or Selection field</u> if the WHERE Clause is going to consist of multiple statements. The following is an example of a multiple statement WHERE Clause:

WHERE USER_ID = "JOHN" AND STATE = "GA"

5) Choose the Add To Where Clause Menu selection from the <u>WHERE</u> <u>Clause Menu</u> or the Pop-Up menu of the Column Name field. This will add the WHERE Statement to the end of the WHERE Clause List.

Note: The WHERE Clause does not get built until the BUILD SQL toolbar/menu selection is used.

Removing A WHERE Statement From The List

There are two ways to remove one or more WHERE statements from the WHERE Clause List Field. They are:

- 1) Select (click on) one or more statements in the list. Press the DELETE key on your PC.
- Select (click on) one or more statements in the list. Select the **Remove From WHERE Clause** menu option from the WHERE Clause Menu or the WHERE Clause List field Pop-Up Menu.

Clearing (Removing All Column Names) The List

There are two ways to remove all the remove all the statements from the WHERE Clause Field. They are:

- 1) Select the **Clear WHERE Clause** menu option from the WHERE Clause Menu or the WHERE Clause List field Pop-Up Menu.
- 2) Click on any item in the WHERE Clause List field, then use the Clear toolbar/menu option.

Pop Menu: The following selections are on the **Pop Up Menu** for this field:

Remove From WHERE Clause - Removes the WHERE statements selected in the WHERE Clause List field from the list.

Clear WHERE Clause - Removes all the WHERE statements in the WHERE Clause List field from the list.

See Also:

Add WHERE Clause

Creating Queries

Using the Menu

Using the Toolbar

WHERE Clause Menu

The WHERE Clause Menu contains selections used to create SQL WHERE statements. It is visible only while working on the <u>SQL Where Clause Criteria Window</u> The following selections are available from the menu:

Add To WHERE Clause

This selection adds the WHERE statement built to the WHERE Clause List field.

Remove From WHERE Clause

This selection removes the WHERE statements selected in the WHERE Clause List field from the list.

Clear WHERE Clause

This selection removes all the WHERE statements in the WHERE Clause List field from the list.

Build SQL Statement

Builds a SQL SELECT statement using the following SQL SELECT information:

- * Selected columns from the Column List Field on the Datasources Window
- * WHERE Clause, if entered
- * ORDER BY Clause, if entered
- * GROUP BY Clause, if entered
- * DISTINCT if selected on the Query Menu

See Also:

<u>Creating Queries</u> <u>Using the Menu</u> <u>Using the Toolbar</u>

Windows Menu

The Windows Menu contains selections for managing and navigating through open windows within MDS PowerBase. The following selections are available from the menu:

<u>Tile</u>

This selection will arrange and display all non-minimized MDS PowerBase windows in a tiled format.

<u>Cascade</u>

This selection will arrange and display all non-minimized MDS PowerBase windows in a cascaded format. That is, one overlapping the other.

Arrange Icons

This selection will arrange all of the icons for the minimized MDS PowerBase windows at the bottom of the MDS PowerBase application frame.

Close All Windows

This selection will close all windows (minimized and non-minimized) within the MDS PowerBase application. The only window which does not get closed is the Datasources Window.

Datasources

This selection displays the Datasources window. It is used to quickly locate the Datasources Window among all the other open windows.

Results

This selection displays the most recently used Query Results Window. It is used to quickly locate the Query Results Window among all the other open windows.

Query

This selection displays the most recently used Query Window. It is used to quickly locate the Query Window among all the other open windows.

Open Window List

This selection contains a list of all open windows within MDS PowerBase. Selecting a window from the list will display that window. The list is used to quickly locate a given window among all the other open windows.

See Also:

Using the Menu

Time of Day

This section of the status bar displays the current time of day.

Number Of Rows To Retreive

This section of the status bar displays the number of rows that will be returned in the result set of a query. If the value **ALL ROWS** is displayed, all rows will be returned in a result set. If a number is displayed, the number of rows returned will be the number displayed. See the help text on the **ROWCOUNT** parameter for further information on limiting the number of rows returned in a result set.

Comments

This section of the status bar is used to display the progress of processing. It is also used to identify what each field on a window is used for. For example, while running a query, this section will contain information such as the number of rows being returned by the query. This section might also contain the text "Enter a default password to connect to a datasource" while you are working in the Password field on the Preferences Window.

Date

This section of the status bar displays the current date.