

# MIMIC Product News



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# Table of Contents

<b>Enhancements for MIMIC .....</b>	<b>1</b>
Introduction .....	1
Release 4.1.0 .....	1
Stepped Curves .....	1
Formula Warning Message .....	3
Release 4.0.1 .....	3
Charting .....	4
Connection Manager .....	7
Favorites .....	7
Tree View Refresh .....	8
Table Results .....	8
Releases 3.2.0.2 - 3.2.0.4 .....	8
Release 3.2.0.1 .....	8
Release 3.2.0.0 .....	9
Online Help & Context-Sensitive Help .....	9
Interface Updates and Navigation Improvements .....	9
Mouse Menu .....	11
Access to Charts and Tables from Browse Mode .....	11
Sorting Tables .....	11
Ability to Skip Weekend Data .....	11
Switch Off Table Summary Statistics .....	12
New Time Units Option - Avg Day Monthly .....	12
Improved Calendars .....	12
Search Selection Defaults .....	13
Adding Favorites from Browse Mode .....	13
New MIMICExcel Toolbar .....	13
Release 3.1.0.7 .....	14
Release 3.1.0.6 .....	15
Favorites Browser .....	15
XML Converter .....	15
Release 3.1.0.4 .....	16
Synchronize Columns .....	16
Synchronize Time Units .....	16
Fill Blank Option .....	17
Open and Rename a Saved Query in MIMICExcel .....	17
Release 3.1 .....	18
Look and Feel .....	18
Multiple Data Selections in Tree View .....	19
New Search Mode Option .....	19

View Chart Options .....	21
Seasonal Charts .....	22
Upload or Export Symbols and Columns from a .txt or .csv File .....	24
Release 3.0.2.2 .....	24
Updates for MIMICExcel .....	24
Update for MIMIC .....	26
Release 3.0.2 .....	27
New Interface Design .....	27
Add Contracts Enhancement .....	29
Find the Last Known Value using Fill End .....	30
Curve Matrix Tool only Allows OHLC Columns .....	31
New Save Obligation in MIMICExcel .....	33
Advanced Refresh Narrows Date Range in MIMICExcel .....	33
Fixing Invalid Targets in MIMICExcel .....	37
Release 3.0.1.6 .....	38
Weekly Seasonal Analysis in Tables .....	38
Release 3.0.1.5 .....	40
MIMICExcel - Sheets Dialog Enhancement .....	40
MIMICExcel - Date Formatting .....	41
Release 3.0 .....	41
MIM Screening System .....	41
Use MIMICExcel to post MIMIC Tables Results into Microsoft Excel® .....	44
Formula Expression Builder .....	47
Curve Matrix Tool .....	51
New Date Ranges .....	53
Reorganized User Preferences Dialog .....	54
Round Mode .....	55
Look and Feel .....	55
Release 2.1.3 .....	56
Print Options .....	56
Release 2.1.2 .....	56
Weekly and Quarterly Averages .....	56
Release 2.1.1 .....	58
New Graphical User Interface (GUI) .....	58
Creating a Formula .....	60
Pre-Calculated Continuation Series in MIMIC .....	64

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# Enhancements for MIMIC

## Introduction

MIMIC is a user-friendly research software program for creating graphs and tables of historical data.

This document illustrates the enhancements made to the MIMIC software for the latest releases. For details on bug fixes and a complete list of all changes, please see the [MIMIC Release Notes](#). For instructions on using the MIMIC software, see the tutorial [MIMIC Training Guide](#) and the [MIMIC User Guide](#).

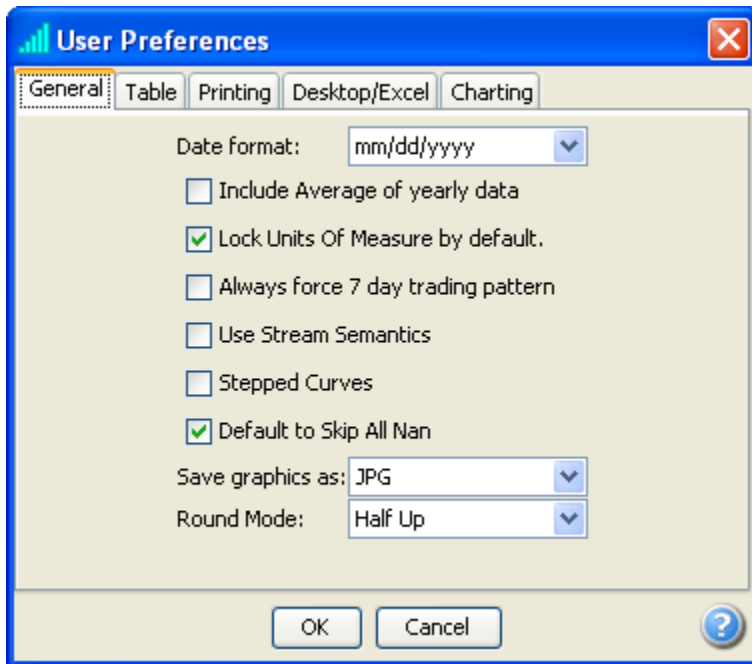
## Release 4.1.0

Please see the [MIMIC Release Notes](#) for information on bug fixes and minor software enhancements.

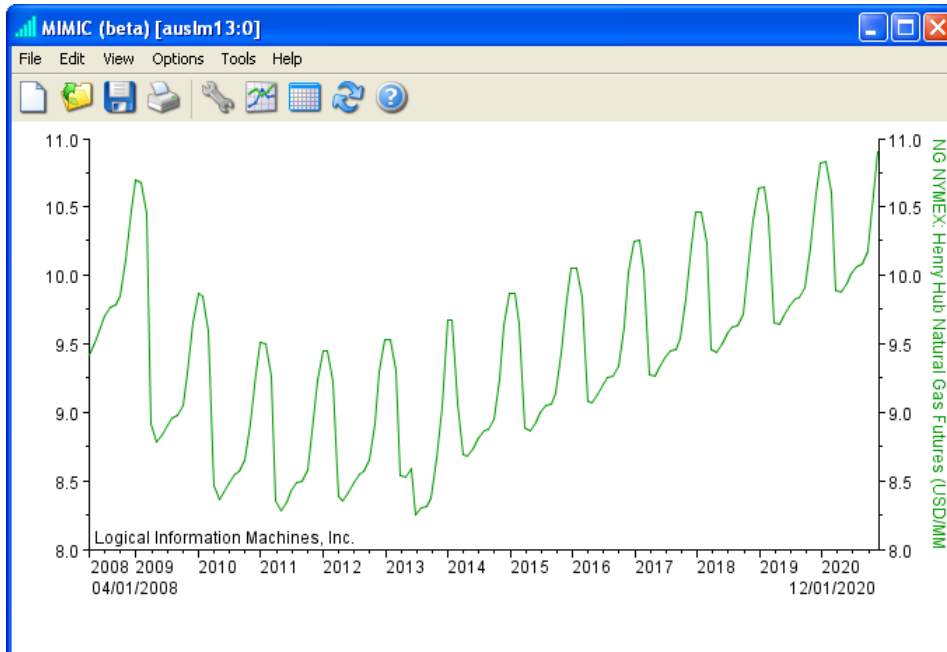
## Stepped Curves

When stepped curves are turned off, the contract price will be placed on the first business day of the delivery month which will represent a forward curve. If the stepped curves check box is selected, a value is placed on every day of the delivery month. The default setting is that stepped curves are turned off. Navigate to the User Preferences dialog box (**Options > User Preferences**) to control the stepped curves option.

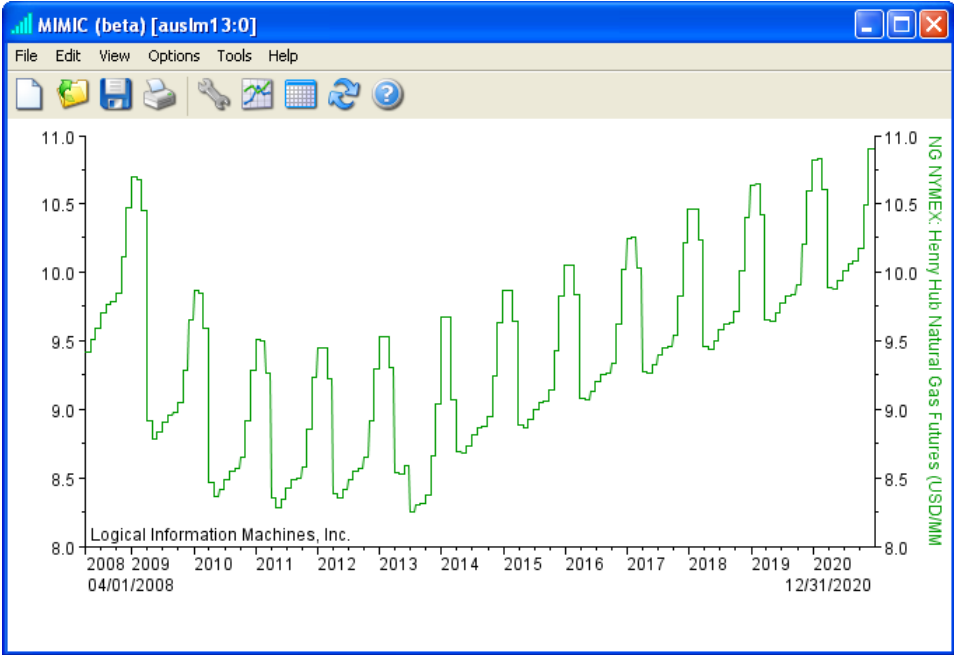
The following shows the User Preferences dialog box:



The following shows a chart when stepped curves are turned off:

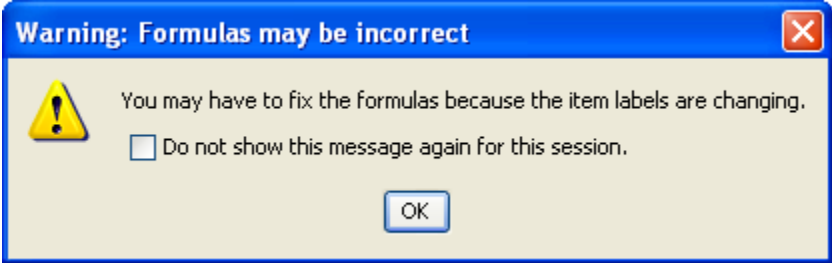


The following shows the same chart when stepped curves are turned on:



### Formula Warning Message

When deleting rows that affect formulas, the following warning message is displayed. If you do not want the warning message repeated during the current session, select the check box.



### Release 4.0.1


The following shows the enhancements for the 4.0.1 release of MIMIC.

## Charting

There are several charting enhancements in this release. Here's a synopsis of the changes:

1. Control the Y-axis in a chart
2. Add text notes to a chart
3. Define the line thickness in a chart
4. Specify the symbols to use in a chart
5. Use the arrow keys to move the Mouse Pick lines in a chart
6. In the Worksheet, right-click in the Chart Type column and make all the items the same chart type.

### Control Chart Y-axis

The user has control of the chart Y-axis. To change the Y-axis, select the **Axis Config**  button in the **Worksheet Options** pane. Select the **Scale** tab and change the mode from **Automatic** to **Manual**. In the Min field enter the amount you would like to scale the Y-axis.

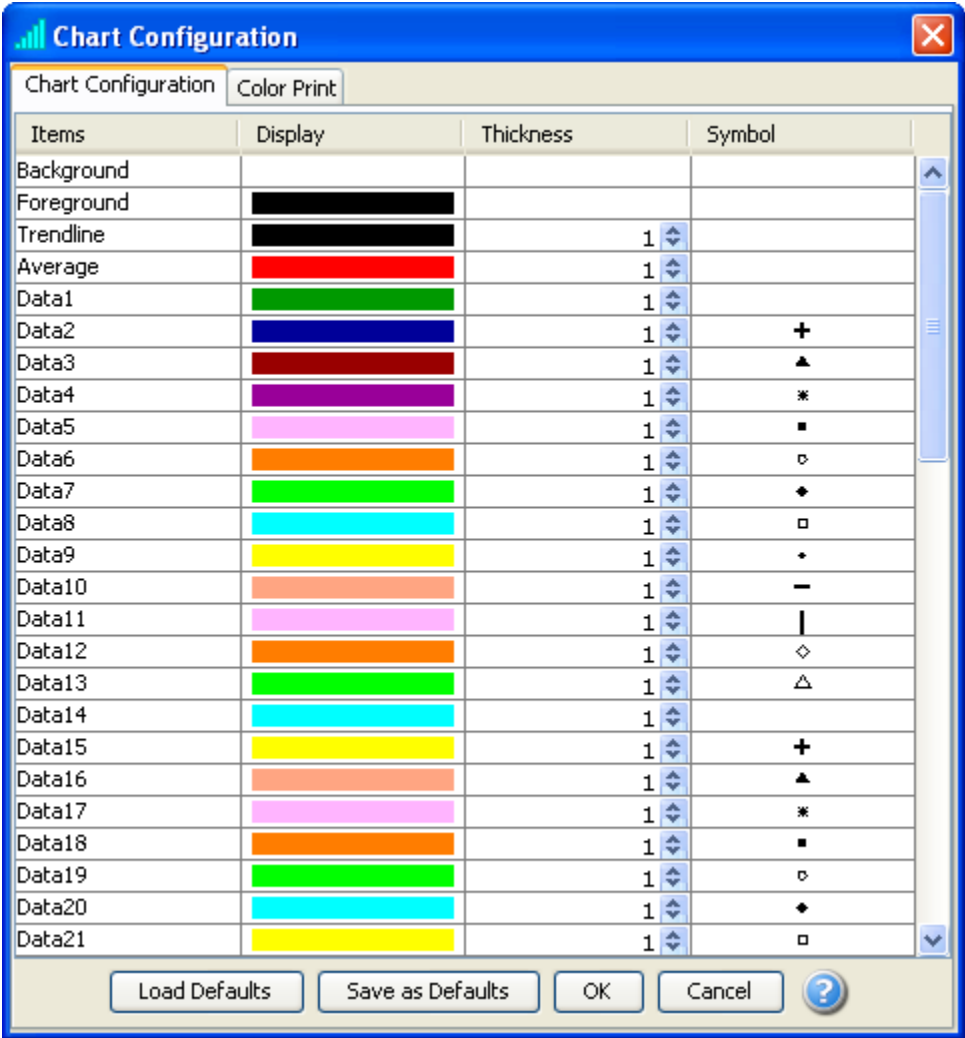
Axis	Mode	Min	Max
Axis1	Manual	50	100
Axis2	Automatic	0	100
Axis3	Automatic	0	100
Axis4	Automatic	0	100

### Chart Notes

You can now add text notes to a chart. To create a note, right click in a chart and select **Add Note**. Type your note information and select **OK**. You can click on the note and reposition the note anywhere on the chart. To edit a note, double-click on the note (or right click and select **Edit Note**). You can now edit the note text. To delete a note, right click the note and select **Delete Note** or select the note and click the **Delete** key.

### Chart Line Thickness and Symbol

From the **Options** menu select **Chart Configuration**. In the **Chart Configuration** window you can now define the line thickness and symbol for each data series on the chart.



**Positioning Mouse Pick Lines**

For greater control, move the **Mouse Pick** lines using the arrow keys on your keyboard.

To access the Mouse Pick feature select **View>Chart Options>Controls** from the menu bar to turn on the controls at the bottom of a chart. Next, execute a chart, then turn on the Mouse Pick feature by selecting the **Mouse Pick Off** button (will display as **Mouse Pick On** when activated). You can move the Mouse Pick lines with your mouse or use the arrow keys to move the lines one pixel at a time.



## Unify the Chart Type

You can unify the Chart Types. For example, let's unify the following Chart Type to LINE. To do this, select in the **Chart Type** field for the symbol CL, then right click and select **Set All Chart Types to Line**.

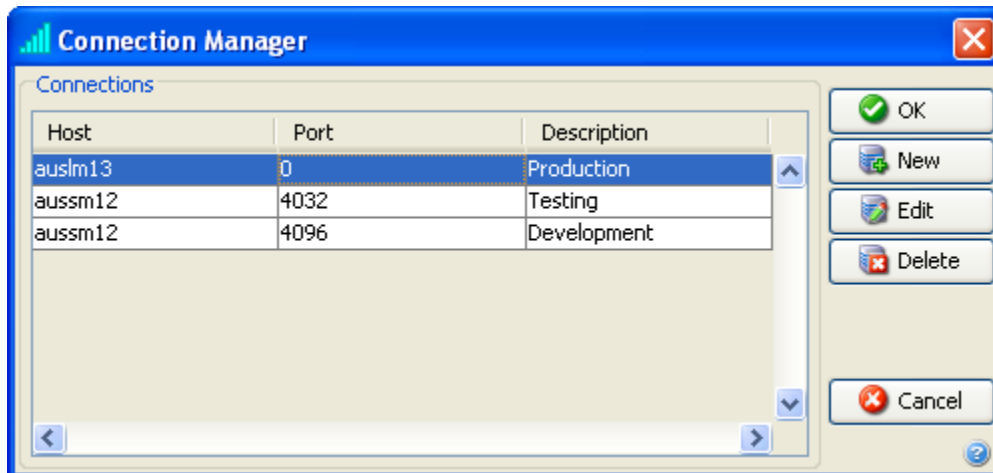
Label	Description	MIM Symbol	Column	Time Units	Units	Chart Type	Formula
A	NYMEX: Light, Sweet Crude Oil Future...	CL	Close	Daily	USD/BBL	LINE	
B	NYMEX: Heating Oil Futures (USC/GAL...	HO	Bar	Daily	USC/GAL	OHLC	
C	NYMEX: Henry Hub Natural Gas Future...	NG	Close	Daily	USD/MMBTU	LINE	





All the Chart Types are set to LINE:

Label	Description	MIM Symbol	Column	Time Units	Units	Chart Type
A	NYMEX: Light, Sweet Crude Oil Future...	CL	Close	Daily	USD/BBL	LINE
B	NYMEX: Heating Oil Futures (USC/GAL...	HO	Bar	Daily	USC/GAL	LINE
C	NYMEX: Henry Hub Natural Gas Future...	NG	Close	Daily	USD/MMBTU	LINE

## Connection Manager

The Connection Manager is used to make connections to your servers. You will need to enter the host, port number and description for each connection. You may define multiple connections. This allows for easy switching between servers. To access the Connection Manager, select **Options>Connection Manager** from the menu bar.




To establish a new connection, select the **New**  button and define the connection in the New Connection dialog box. Select the **OK**  button to use this connection. To edit a connection, select the **Edit**  button. To delete a connection, select the **Delete**  button.




A restart of the application is not necessary when changing server connections.


## Favorites

In the **Search Database** window select multiple symbols in the **Tree View** tab and drag them to the **Add to Favorites**  button to add them to the **Favorites** list. You can add multiple symbols by using the Shift and Ctrl keys on your keyboard.




Select the symbol(s) to highlight the symbol selection(s) then click on the highlighted group or single symbol and drag to the Favorites  button.

## Tree View Refresh

You can now refresh the **Tree View** listings in the **Search Database** window. The **Refresh**  button is located in the bottom right corner of the **Tree View** window.

## Table Results


### More than a 100 Results

When you execute a **Table**  and there are more than 100 results then the results may be limited by the server. There is now a message on the Table: "Found 100 Results".



The results may be limited to 100 by the server.

### Show Dates as Columns

In the **Table Options** pane, check the check box for **Show Dates As Columns** and select the **Execute Table**  button. The table results are landscaped and are formatted so that the columns="dates for the values" and the rows="values for a relation".



Usually the columns="values for a relation" and the rows="dates for the values".

## Releases 3.2.0.2 - 3.2.0.4

These releases contain bug fixes. For details, see the [MIMIC Release Notes](#).

## Release 3.2.0.1


Added LmpVal to the list of preferred columns. This allows LmpVal to be the default column if no other preferred column is found.

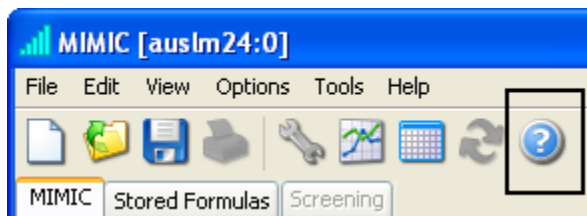
## Release 3.2.0.0


### Online Help & Context-Sensitive Help

MIMIC now offers online Help with a context-sensitive component. Within the online Help, you can find a topic using the **Search** feature or the **Index** feature. If you think you may want to access a topic again, you can add it to your favorites and easily access it again in the future through the **Favorites** menu. The MIMIC Online Help offers topics for both the MIMIC User Guide and the MIMIC Training Guide. Each top level of these guides contains a table of contents with hyperlinks, which you can use to navigate directly to a topic.

You can access the online Help by selecting **Help>MIMIC Help** from the menu bar.

The context-sensitive Help component allows you to find a Help topic for a specific area on the interface you select. You can access the context-sensitive Help by selecting the **Context-Sensitive Help**  button from the **MIMIC** toolbar:

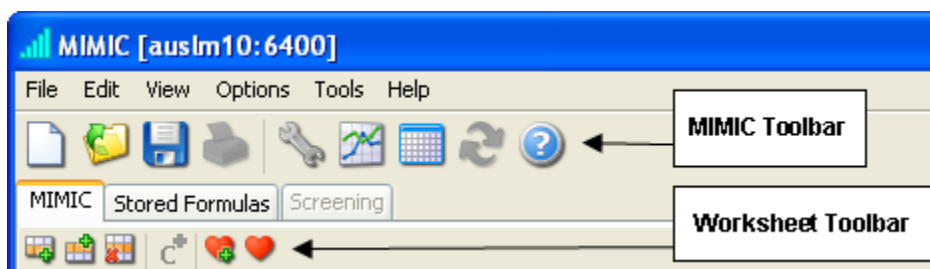




When you click on the **Context-Sensitive Help**  button, your cursor changes to a question mark. Then, you can click in the **Configuration** window where you have a particular question, and the MIMIC Help will open with information on that question. Context-sensitive Help is also available in secondary windows, including the **User Preferences** window (**Options>User Preferences**), and the **Seasonal Analysis Configuration** window.


### Interface Updates and Navigation Improvements

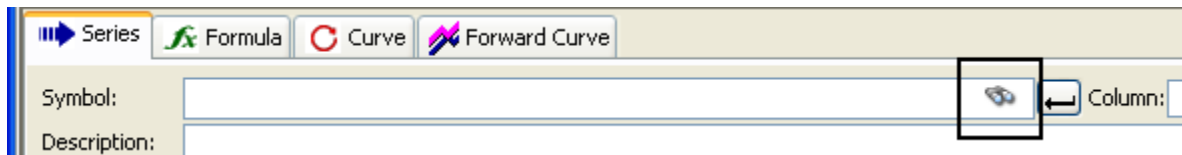
#### Interface Updates

MIMIC now includes an improved and enlarged **MIMIC** toolbar and an updated **Worksheet** toolbar:



The **Worksheet** toolbar contains a new button called the **Insert Row**  button. You can select this button to insert a row above your currently selected row. Note also the addition of the **Context-Sensitive Help**  button.

Other changes to the MIMIC interface include a new **Search Database**  button:

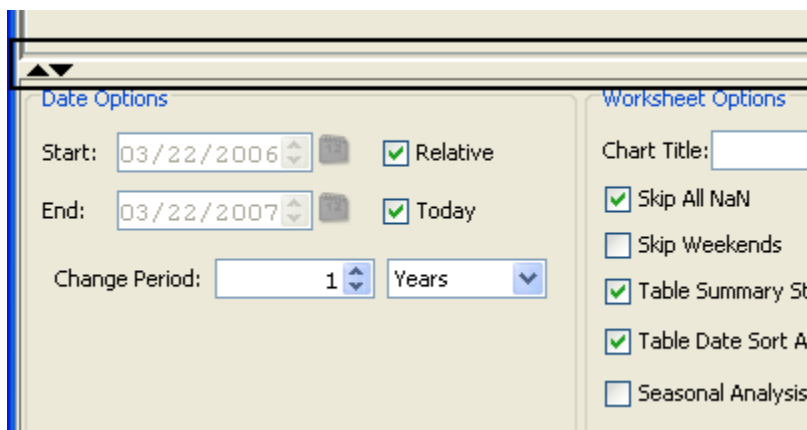




There is also a new look to the **Edit Chart Stats**  button, and beside **Custom Contract**, the **Edit Policy** button changed to the **Edit Rollover**  button.

Finally, in the **Worksheet Options** pane next to **Seasonal Analysis**, the **Seasonal Analysis**  button replaced the **Config** button, and the **Axis Config**  button changed.

## Navigation Improvements

MIMIC has added a double-arrow slider bar above the **Date Options** and **Worksheet Options** panes:

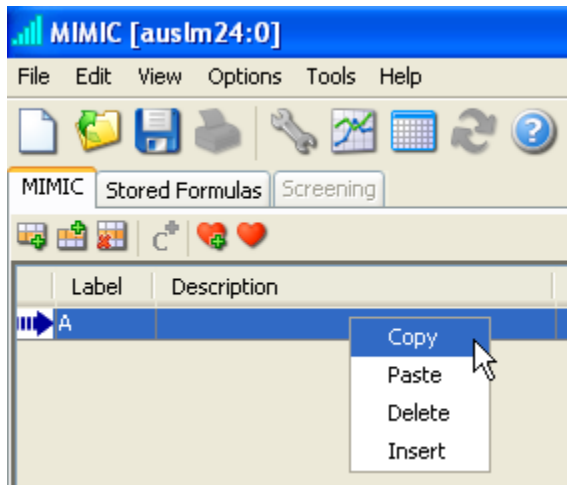


You can use the **Up Arrow**  button open a minimized pane, or to enlarge an opened pane to cover the entire interface. You can use the **Down Arrow**  button to return an opened pane that covers the entire interface to its original position, or to minimize or hide the pane completely.

When you hover over the slider bar with your mouse, your cursor changes to a double arrow. You can then click and drag the slider bar up or down to enlarge or reduce the size of a particular pane.




## Mouse Menu

In the Worksheet, MIMIC still allows you to select a row and press **Ctrl C** to copy the row and **Ctrl V** to paste the row, but you can now also select a row and right-click to open the mouse right-click menu:



With this new right-click menu, you can copy, paste, delete and insert a new row. An inserted row appears directly above your selected row.

## Access to Charts and Tables from Browse Mode

After selecting a symbol via the **Search Database** window, you can now chart or table your Worksheet data directly by selecting the **Chart**  button or the **Table**  button. You no longer need to select the **Configuration**  button and return to the **Configuration** window first.

## Sorting Tables

In this version, MIMIC allows you to sort any table column in ascending or descending order by clicking on the column heading. You can also now set the default sort order for all future tables to ascending or descending by selecting **Options>User Preferences** and then selecting the **Table** tab.

## Ability to Skip Weekend Data

You can now remove weekend data (data from Saturdays and Sundays) from your analysis by selecting the **Skip Weekends** option. You can only select this feature when using the following **Execution Units**: Days,

Hours, Minutes, Seconds and Milliseconds. For the current Worksheet data, select the **Skip Weekends** option in the **Worksheet Options** pane. For all future analysis, select **Options>User Preferences** and then select the **Table** tab.

## Switch Off Table Summary Statistics

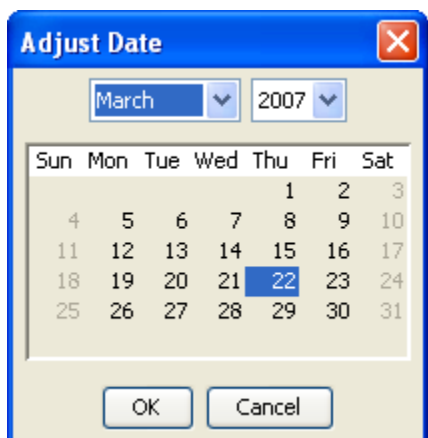
MIMIC now allows you to remove the table summary stats from your table. For the current or active Worksheet, you can uncheck **Table Summary Stats** in the **Worksheet Options** pane. If you want to disable this for all future tables, select **Options>User Preferences** and select the **Table** tab. Under this tab, uncheck **Show Summary Stats**.

## New Time Units Option - Avg Day Monthly


In the **Series** tab of the Data Builder, MIMIC users can now select the **Time Units** option "Avg Day Monthly". This time unit displays as "1 Calendar Month Average of 1 Day Average of the Minute" in the Worksheet. This new MIMIC feature is an averaging option, which you can apply to more than one row in the Worksheet. By selecting **Avg Day Monthly**, MIMIC transforms intraday data into daily data values, and then creates a monthly average from the daily data values. For example, a series can be transformed from its default **Time Units** of "Minutely" (an intraday value) into a single monthly average value.

## Improved Calendars


MIMIC includes updated calendars in the **Date Options** pane for selecting a specific **Start** or **End** date:






## Search Selection Defaults

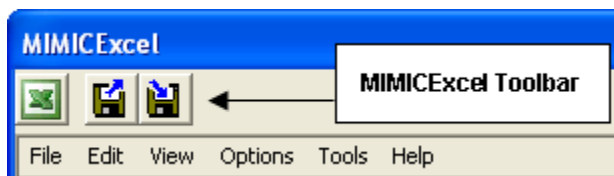
If you need to search for a symbol, you can select the **Search Database**  button, select the symbol information and either double-click or right-click and choose **Select** to add it to the Worksheet. If you return to the **Configuration** window and realize you need to perform another search, you can then enter the **Search Database** window again. In this latest version, MIMIC remembers the last search selection you made, so you can browse to a new symbol from there.

## Adding Favorites from Browse Mode


Within the **Search Database** window, you can add symbol information to your Worksheet. If you want to add this symbol to your **Favorites**, you can simply select the row and then select the **Add to Favorites**  button in the Worksheet Toolbar. You no longer have to return to the **Configuration** window first before adding the symbol information in a row to your **Favorites**.

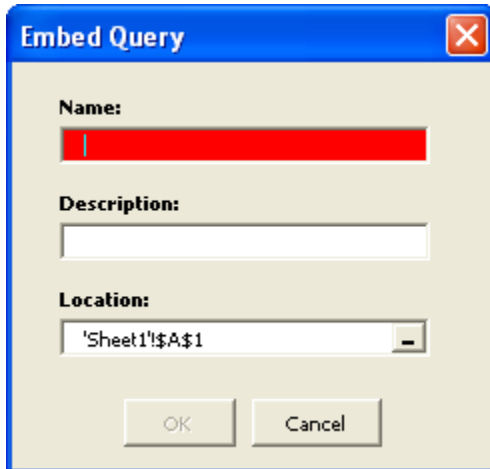
## New MIMICExcel Toolbar

MIMICExcel now includes a toolbar with three buttons. From left to right, there is the **Back to Excel**  button, which closes MIMICExcel and returns you to your Excel spreadsheet, the **Query Manager**  button, which allows you to manage previously saved MIMIC queries, and the **Embed Query**  button, which allows you to save or embed your current or active query.







LIM recommends that you use the **Back to Excel**  button to return to your Excel spreadsheet instead of using the **X** button in the top right of the window.

MIMIC queries are an important and popular feature. In this version, you save your query with greater ease. When you select the **Embed Query**  button, MIMICExcel opens the **Embed Query** window:



In **Embed Query** window, you can not only enter a name for your query, but now a description too. This window also allows you to set the starting location, or cell reference.

Now, for managing or embedding all queries in MIMICExcel, you can use the MIMICExcel toolbar (the **Query Manager**  button or the **Embed Query**  button). And, for opening or saving all LLC Worksheets (.llc files), you can use the standard MIMIC menu bar (**File>Load**, **File>Save** or **File>Save As**) or the standard MIMIC toolbar (the **Open**  button or the **Save**  button).

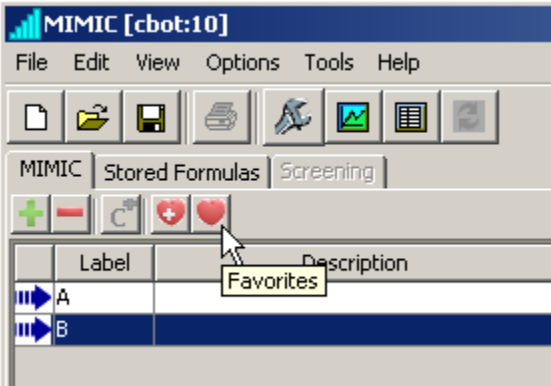
## Release 3.1.0.7

Please see the [MIMIC Release Notes](#) for information on bug fixes and minor software enhancements.

# Release 3.1.0.6

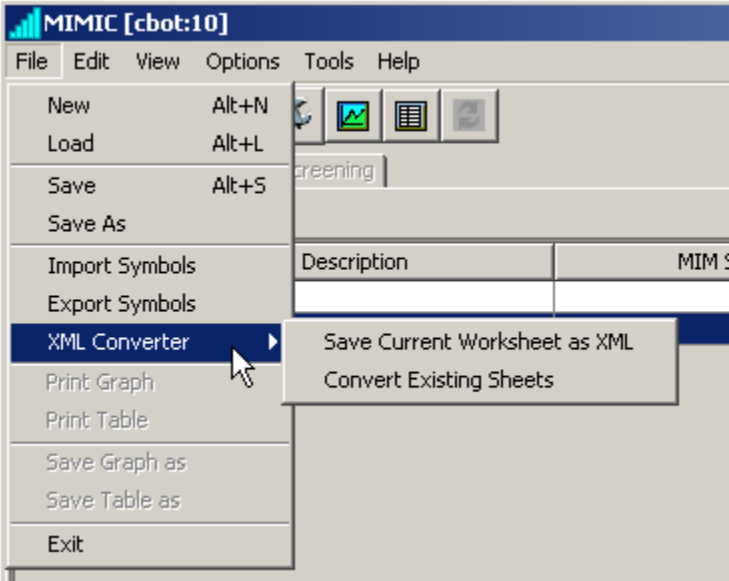
## Favorites Browser

For consistency, the Hotlist Browser is now called the Favorites Browser.



## XML Converter

MIMIC now features the ability to generate XML worksheet output directly from the File menu. Use this feature to save new (current) worksheets or convert existing worksheets (.llc file type) to XML (.xml) format.



## Release 3.1.0.4

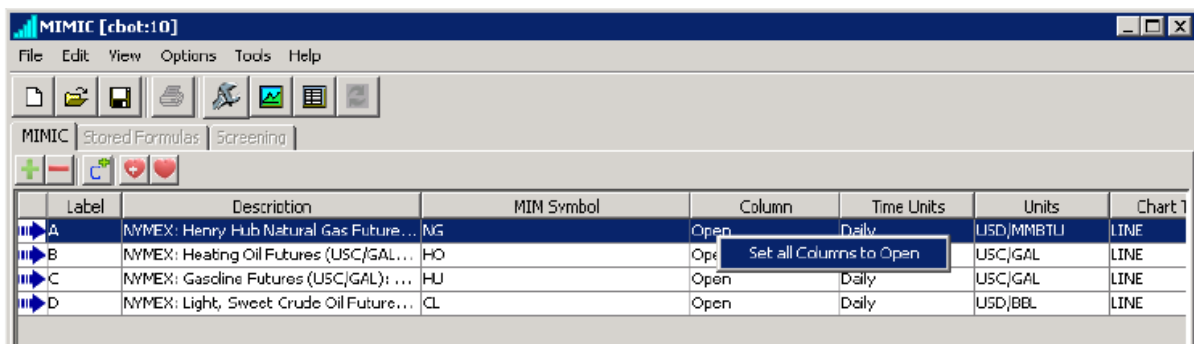
### Synchronize Columns

The latest enhancement allows the user to change all the Columns for all the type Series to a specified Column name.

The following instructions show how to synchronize columns:

1. Add a few series such as “NG”, “HO”, “CL” and “HU”.
2. Change “NG” column to “Open”.
3. Right click on “Open” in the Column field and select “Set All Columns to Open”.

All items of type Series that have the column selection of “Open” as a possibility will change to “Open”.



### Synchronize Time Units

Synchronize all the Time Units for the type Series. The following instructions highlight the steps:

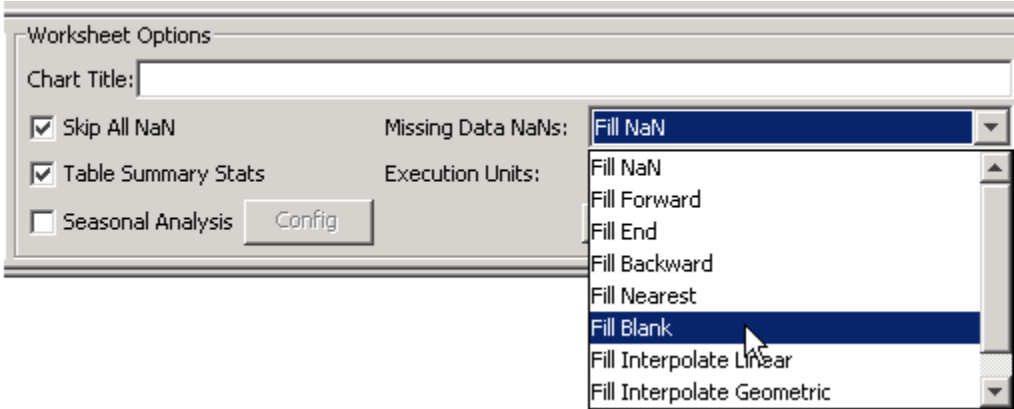
1. Add a few series such as “NG”, “HO”, “CL” and “HU”.
2. Change “NG” Time Units to “Weekly”.
3. Right click on “Weekly” in the Time Units field and select “Set All Time Units to Weekly”.

All items of type Series that have the Time Units selection of “Weekly” as a possibility will change to “Weekly”.

## Fill Blank Option

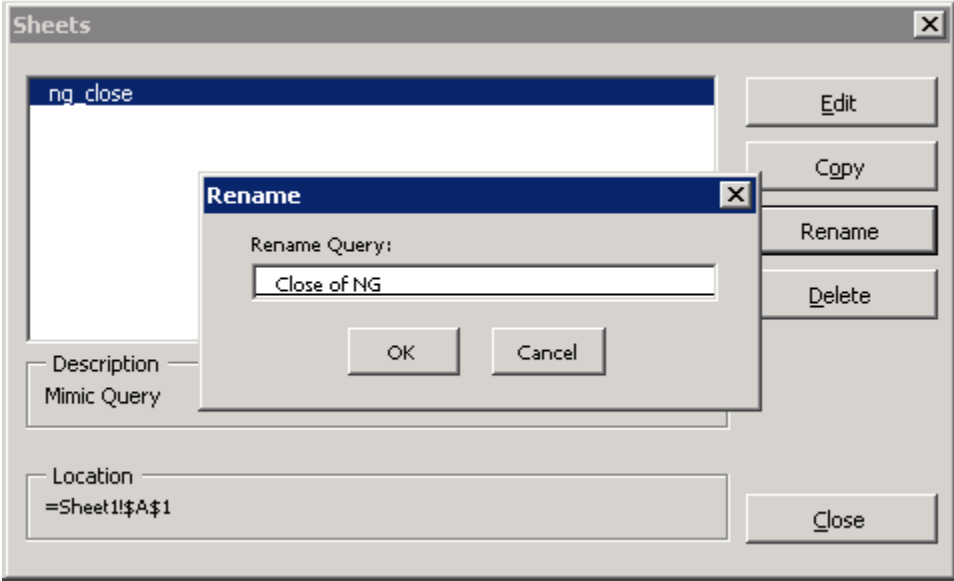
In the Missing NaNs field we added the option to “Fill Blank”. This option will fill all missing data with a blank. This is extremely useful in the Excel application when Excel formulas are calculating values based on the results from a query.

The following graphic shows the Missing NaN field located in the bottom right-hand portion of the MIMIC application.



## Open and Rename a Saved Query in MIMICExcel

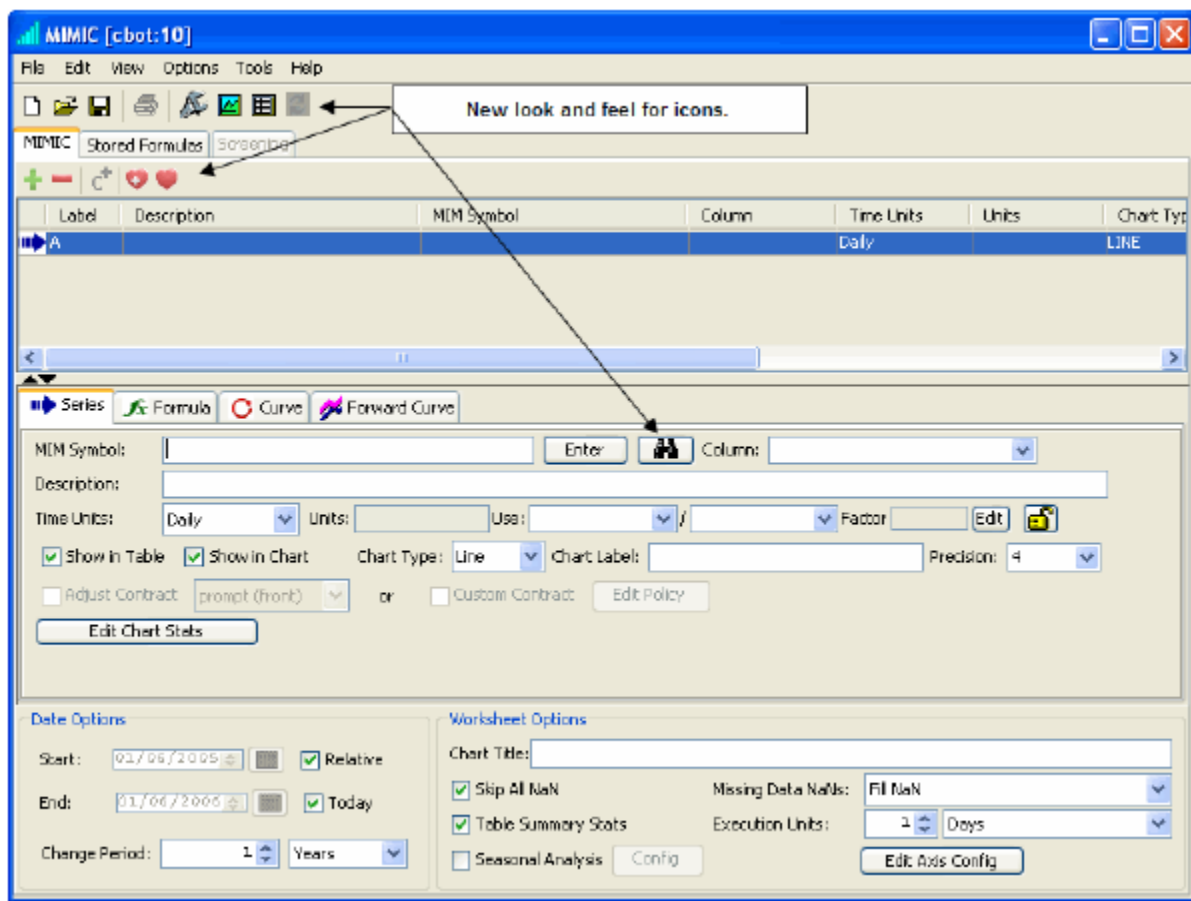
The dialog for opening and renaming a saved query in MIMICExcel is more intuitive. To open and make edits to a saved query select “Edit”. To change the name of the query select “Rename”. To copy the query select “Copy” and to delete the query select “Delete”.



## Release 3.1

### Look and Feel

The MIMIC configuration window has a new look and feel for icons. Hover with the mouse over the icon to get a description of the icon.



1. Icons replace text buttons to add (+) or remove (-) worksheet rows.
2. Top menu items now have “standard” size windows icons with no embedded description. Hover over icon for description of function.
3. New Chart, Table and Configuration (looks like a wrench) icons replace buttons.
4. Configuration icon only appears in the top menu bar – not in the middle of the worksheet screen as well.
5. The Search for Symbols icon (binoculars) is no longer a text button. Hover over the icon for the icon description.

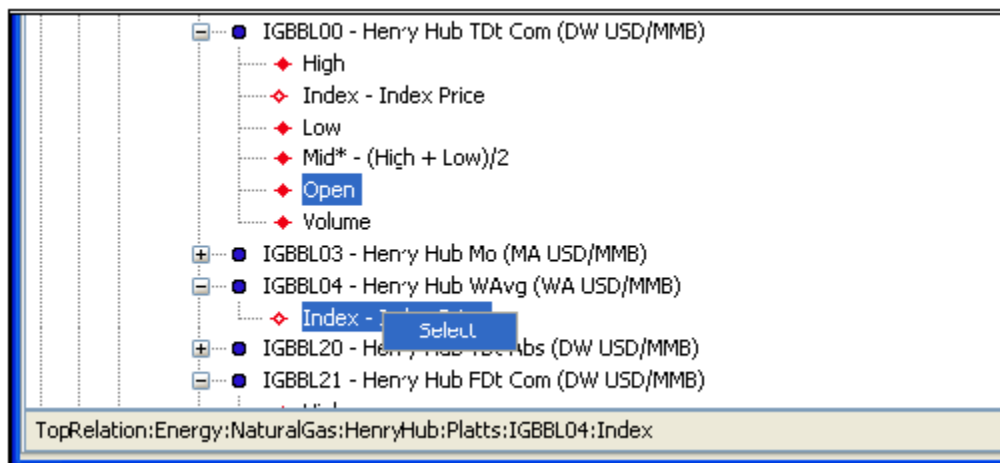
6. Heart shaped Hotlist Add and Hotlist Open icons have replaced the text buttons.

## Multiple Data Selections in Tree View

To demonstrate this feature, browse through the tree hierarchy as normal down to the symbol level (green dot = futures symbol, blue dot = normal symbol). At this point, a single click will highlight the symbol, and a double click will open up its columns. If you want to select the symbol without opening columns, right mouse click with the symbol highlighted and choose “Select” to add the symbol information to the worksheet.

While this may seem a little more long-winded for one selection, it permits you to use the Ctrl and Shift keys to highlight multiple symbols before you use right mouse button to select – allowing for multiple selections at once.

If you proceed down to the column detail, you can double click on a column to select or highlight multiple columns and right mouse click to select all items highlighted at once.



## New Search Mode Option

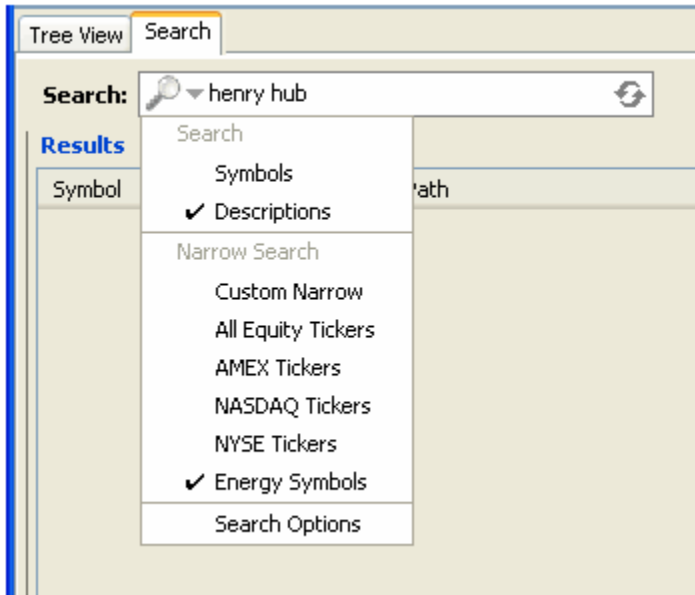
We are working hard to improve the experience for users searching for data in MIMIC.

There is currently a two pronged approach. Improve the search facility within MIMIC and create a first class search facility on the LIM Website (Data Catalog) powered by Google, which provides specific information about all the data LIM carries and has more familiar features of an Internet search.

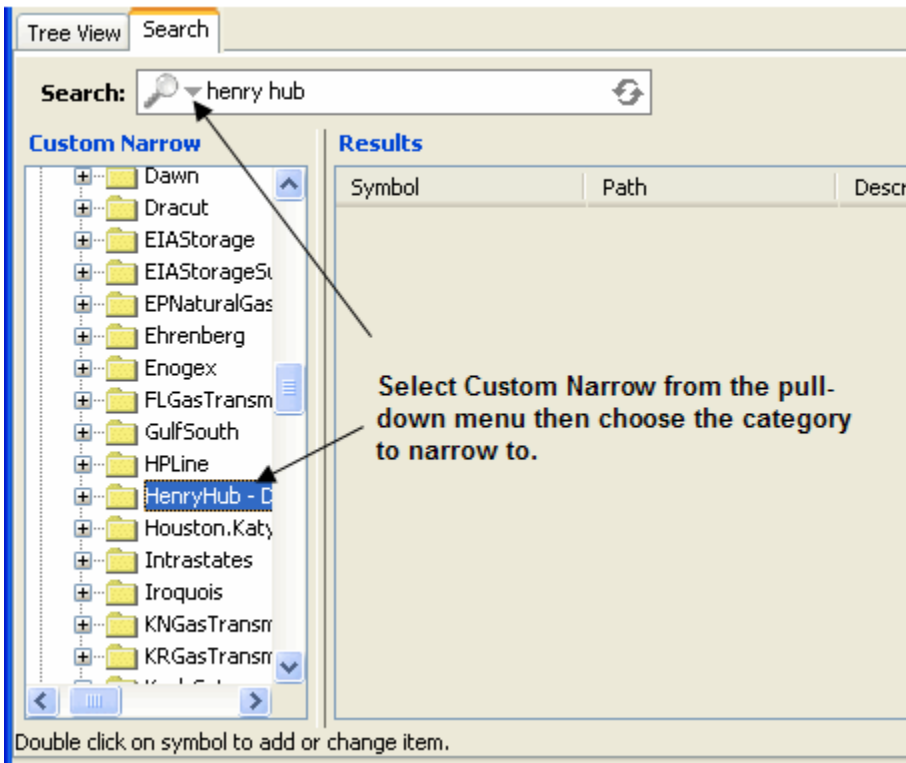
LIM is also working on developing a direct link between the Data Catalog facility and the MIMIC software – allowing users to dynamically leave MIMIC, make a catalog search and then choose catalog items and have them directly selected as worksheet rows in MIMIC if they are available in the local database.

For this release, we introduce a more sophisticated and speedy search feature to allow users to reduce the area of the hierarchy searched and quickly select database symbols and columns.

You may narrow a search by selecting the category to narrow to or you may narrow using one of the selections available from the pull-down list. The following graphic shows a search for “henry hub” that is narrowed to searching only the symbols in the “Energy” category.



To narrow to a category other than the ones listed in the pull-down menu, select “Custom Narrow,” then select the category you would like to narrow to from the hierarchy.

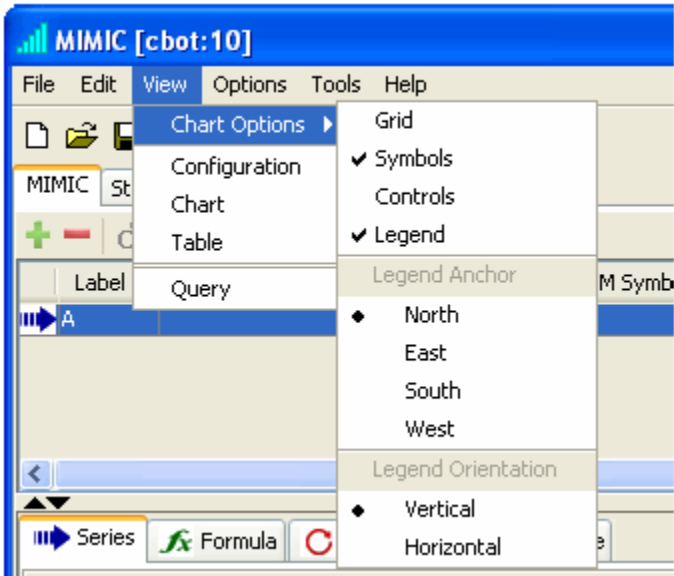


Double click on symbol to add or change item.

## View Chart Options

With a view to further development in 2006 to improve the MIMIC chart capability, we have opened up a couple of features that give users more control of the legend placement on the chart and re-organized the View Menu. The seasonal functionality has had a major reworking (see Seasonal Charts below).

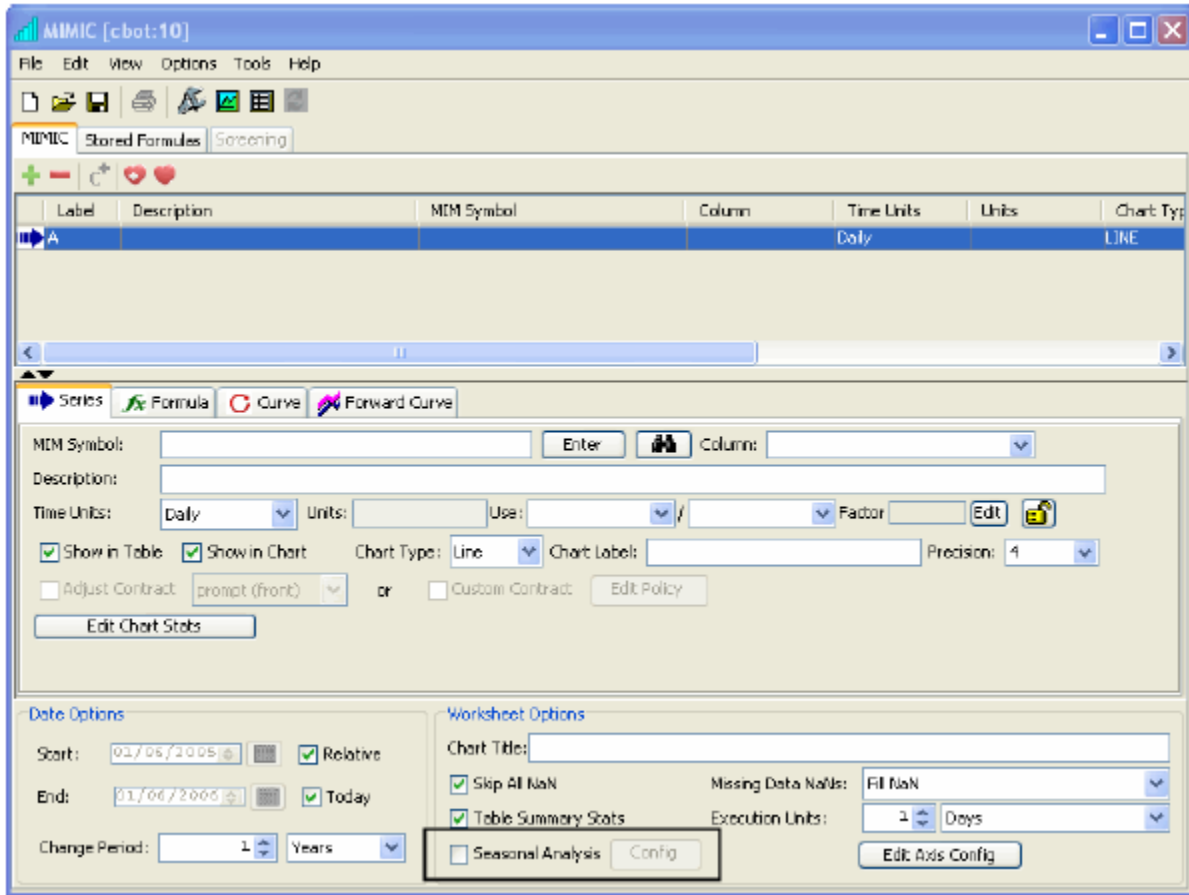
The View Menu now has two levels of selection. The first item, View Chart Options, controls access to chart grids, chart symbols, chart controls and chart legends as well as the orientation and anchor location of the chart legends.



Previous View Menu options: (configuration, chart, table, query) appear as before below View Chart Options.

## Seasonal Charts

See the new functionality accessible via the “Seasonal Analysis” check box on the Configuration window.

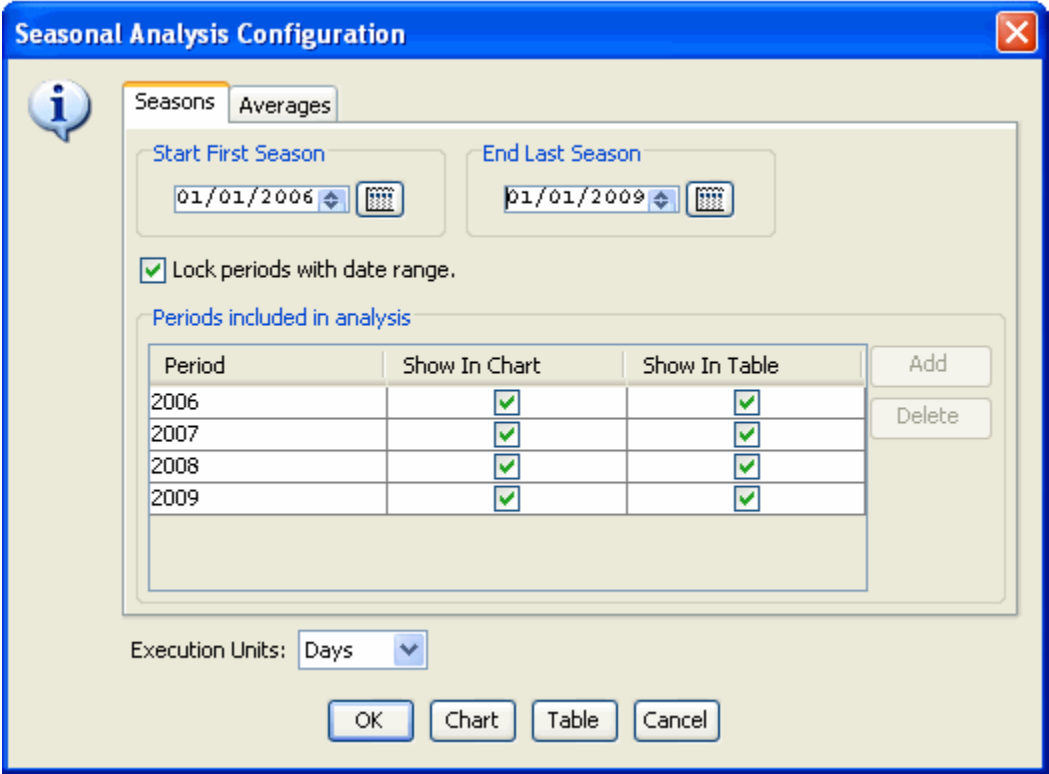


Selecting the Seasonal Analysis check box results in a dialog box being shown that guides the user through appropriate seasonal selections.

The date range for seasons is set so that you can easily select the period of the year and the number of seasons that you want to analyze – whether that be in a chart or in a table. The “Lock” feature automatically selects all seasons between the chosen start date and the end date, which you can then choose to display or not using the check boxes for table or chart.

Seasonal averages can be selected using the Average Tab in the seasonal dialog. The default is a seasonal average of all seasons to be analyzed. You can switch off the default average display in a chart or table and you can also create custom seasonal averages which do not include all years.

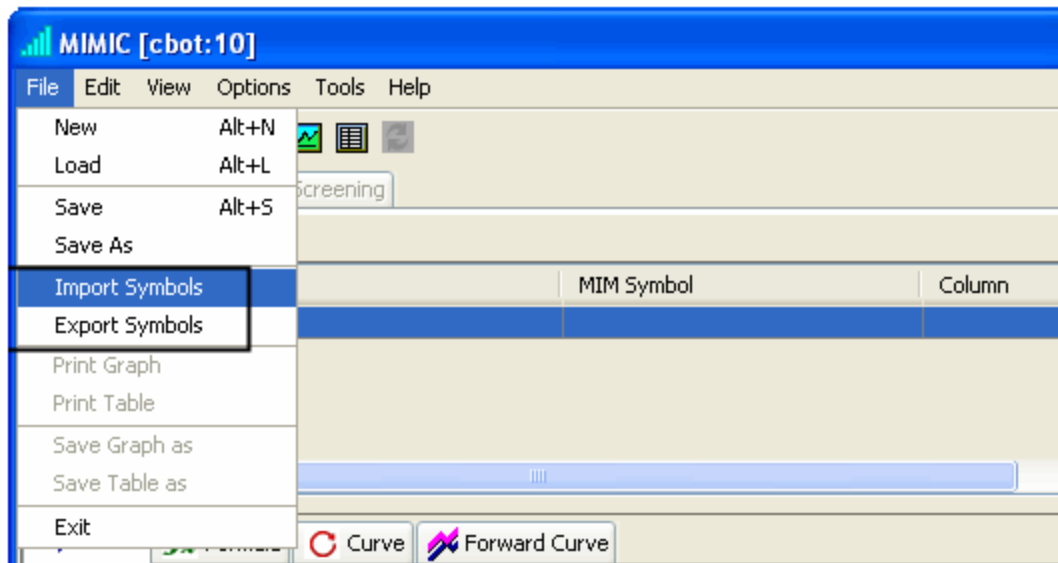
For the convenience of users, the chart and table buttons in the seasonal dialog allow direct access to the chart or table.



The new seasonal chart functions allow multiple seasonal averages to be displayed for multiple different items. Seasonal charts may now have multiple axes (controlled by the Edit Axis Config dialog). Averages are calculated for all visible worksheet rows.

## Upload or Export Symbols and Columns from a .txt or .csv File

This facility allows users to create a list of required MIM symbols and columns in a text file (may be created in Excel and saved as a .txt or .csv file). From the MIMIC menu select “File>Import Symbols”.



These items may then be loaded directly into MIMIC to create a worksheet. This helps an analyst that has a new list of symbols generated by (for example) an external system.

In the same way as you can import symbols and columns, it is also possible to “export” the relevant symbols and columns from a MIMIC worksheet out to a text file.

## Release 3.0.2.2

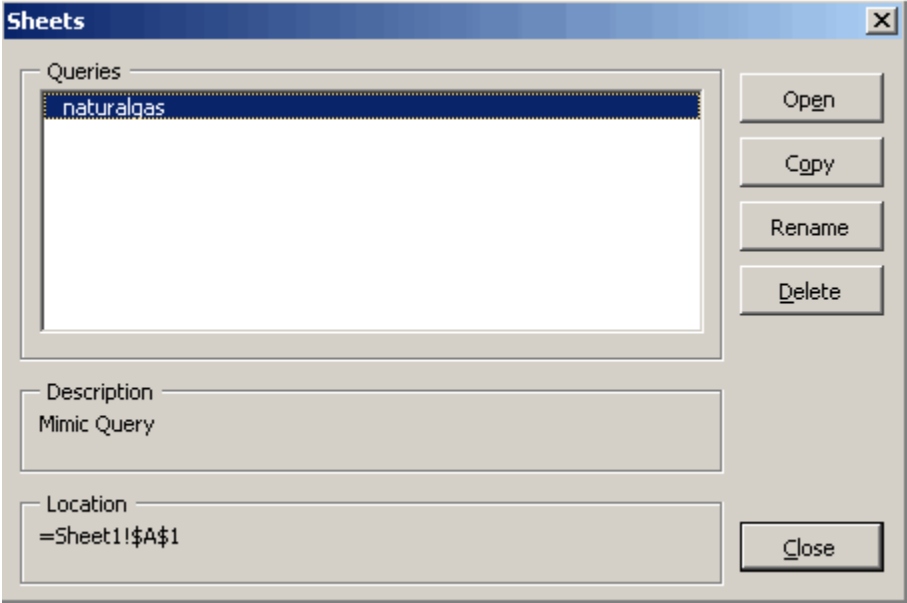
### Updates for MIMICExcel

The MIMICExcel Open dialog for copying, deleting and renaming files now performs these functions more optimally. (To access MIMICExcel, open Microsoft Excel and select the MIMICExcel icon). Select the “Open” icon from the toolbar.



You must have saved queries to view this feature.

The Open dialog has the following choices: “Open”, “Copy”, “Rename” and “Delete” (note: “naturalgas” is a saved query).

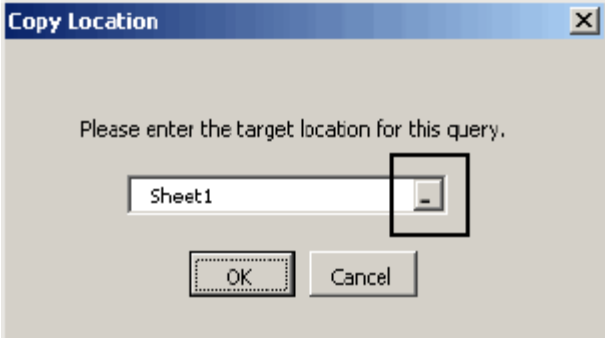


### Copy

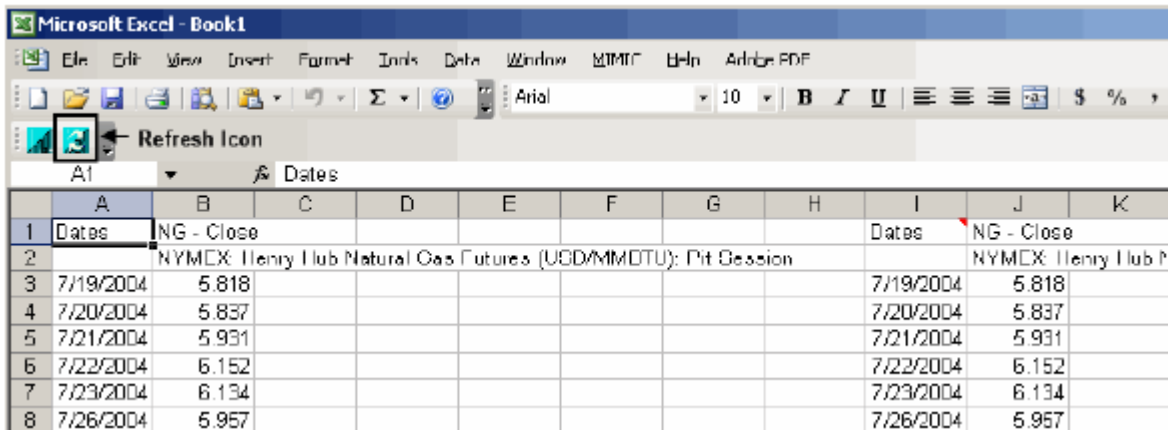
The copy function is now more user-friendly. (Note: for instructions on how to move data please the section below on “Moving Data within a Spreadsheet”.)

1. To copy data to a new location in the spreadsheet select the saved query from the list then select “Copy” from the Open dialog. Enter a new name for the query then select “OK”.
2. The Copy Location dialog displays. Select the icon noted in the graphic below to go to the Excel spreadsheet.

Once in the spreadsheet, select the cell where you would like the data to display then select the icon (noted below) to return to MIMICExcel. Select “OK” to confirm the location choice.



- In the spreadsheet select the MIMICExcel “Refresh” icon to display the copied data in the spreadsheet.



## Delete

This feature used to leave behind comment information (comment information is text that displays when the cursor is hovered over a spreadsheet cell). When a query is deleted from the list note that data already placed in a spreadsheet will not be removed. To remove data already placed in a spreadsheet, select the data then right click with the mouse and select “Clear Contents”.

## Rename

The “Rename” feature is now more user-friendly. A dialog window now displays for the user to enter a new query name.

## Moving Data within the Spreadsheet

To move the query data from within an Excel spreadsheet simply select, then cut and paste the data (use the keys Ctrl+X to cut and Ctrl+V to paste) to a new location in the spreadsheet. (Note: Use cut and paste—not copy and paste—to move the data. Copy and paste will not move the reference to the query.)

## Update for MIMIC

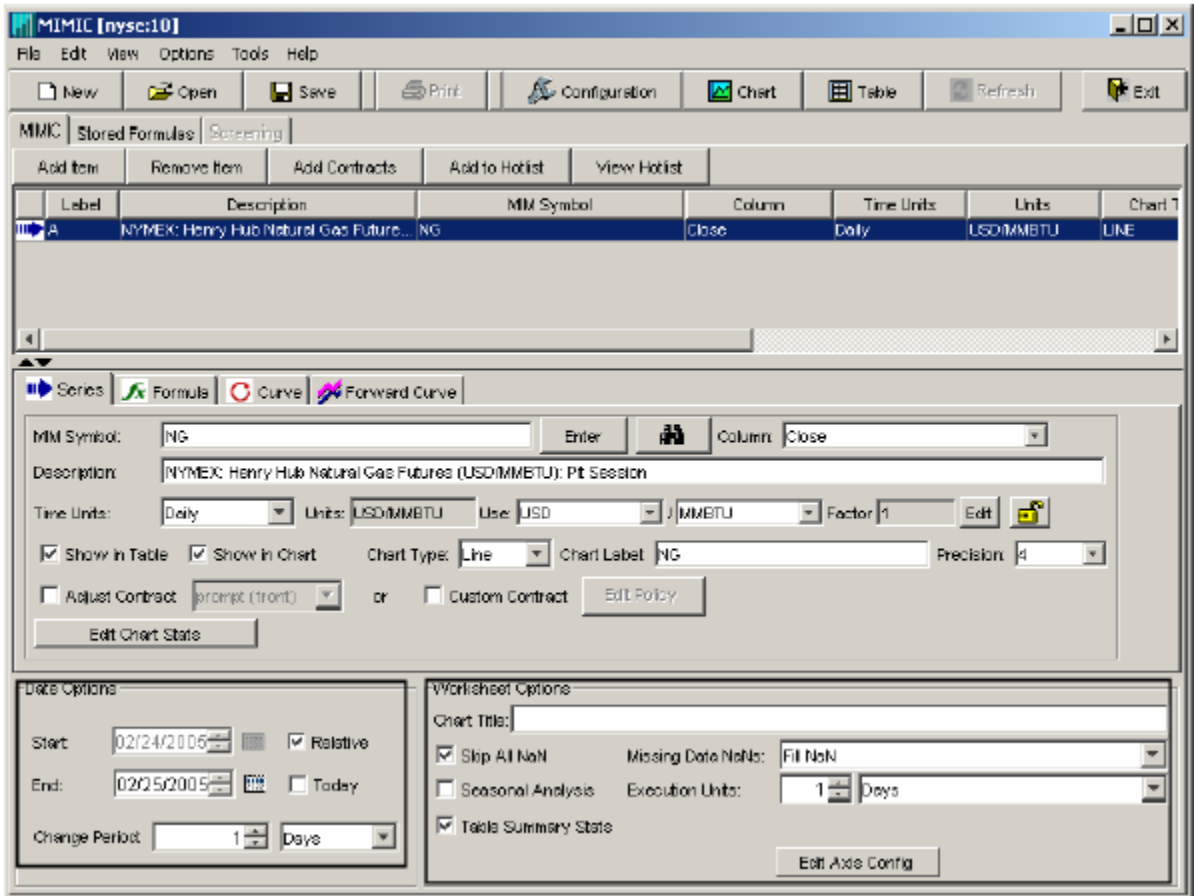
### Moving Rows with Ctrl + Arrow Keys

Previously, to move a row up or down in MIMIC you would click in the row (a highlight will appear around the cell) then use the arrow up or down keys to move the row up or down. Now, use the Ctrl+arrow keys to position the row. Remember, you can also copy and paste a row using the Ctrl+C and Ctrl+V keys as well.

# Release 3.0.2

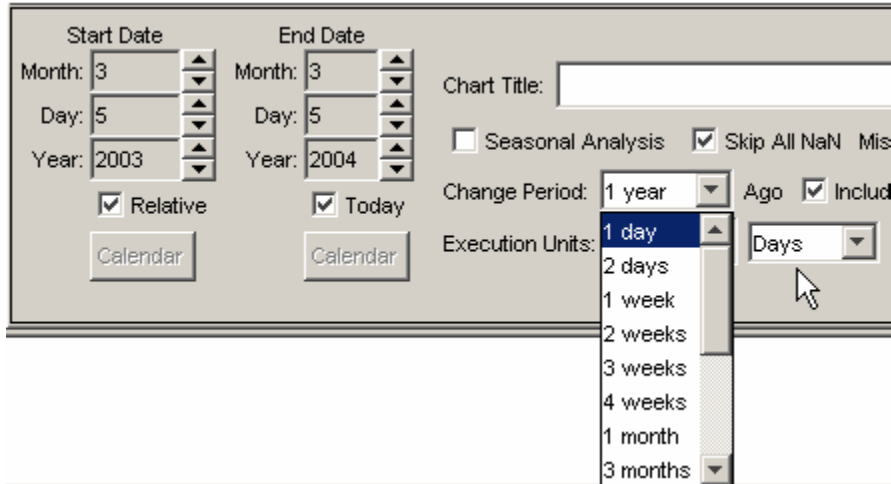
## New Interface Design

MIMIC has a new layout in the bottom portion of the interface. The Date Options are separated from the Worksheet Options for easier navigation.

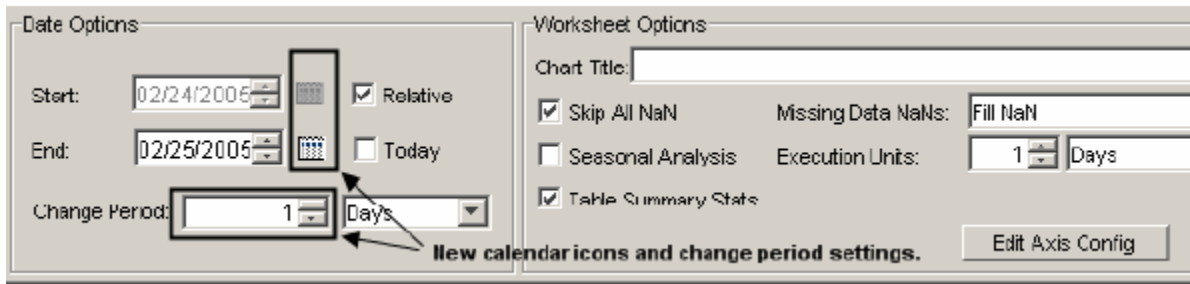


Prior to release 3.0.2, the MIMIC interface had specific Change Period numbers listed (i.e. 1 day, 2 days, 1 week, and 2 weeks). Now, the Change Period has an up and down toggle where you can specify any number of days/weeks/months/years.

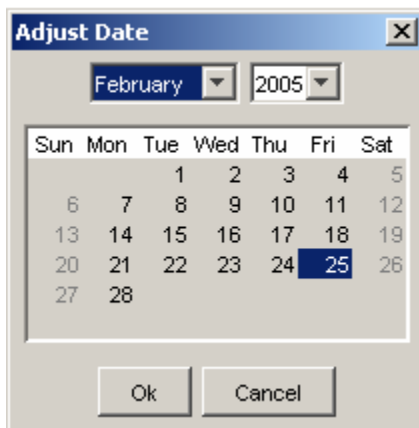
**Old Design:** (Bottom portion of the MIMIC interface.)



**New Design:** (Bottom portion of the MIMIC interface.)



In addition to the Change Period functionality, there are new calendar icons next to the Start and End Dates. Use these calendars to select the date entries if desired.



## Add Contracts Enhancement

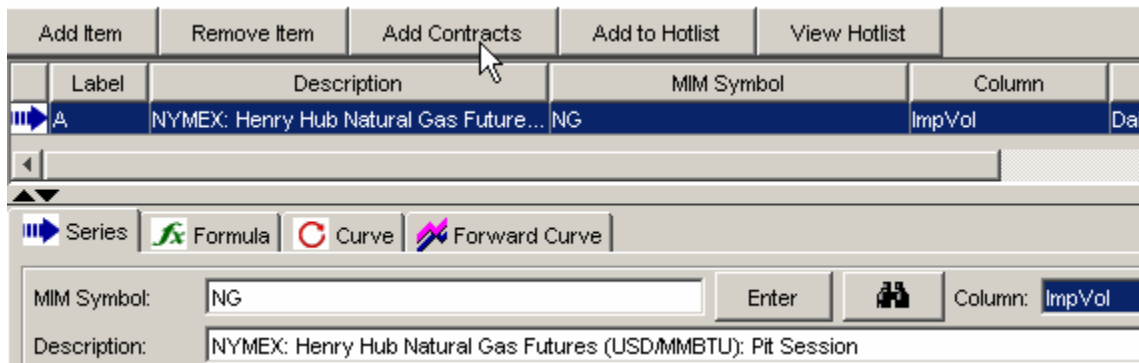
The Add Contracts feature has been enhanced so that the user is now alerted when a symbol does not contain any data for a specific column.

For example, in MIMIC releases prior to 3.0.2, if you selected “Add Contracts” on the symbol “NG” with the column “ImpVol” for the date range “January 2005” to “December 2007” the relevant contracts would list and there would not be any error message, even though ImpVol did not exist for some contracts. When these results were tabled, MIMIC would return the message “error no data returned”.

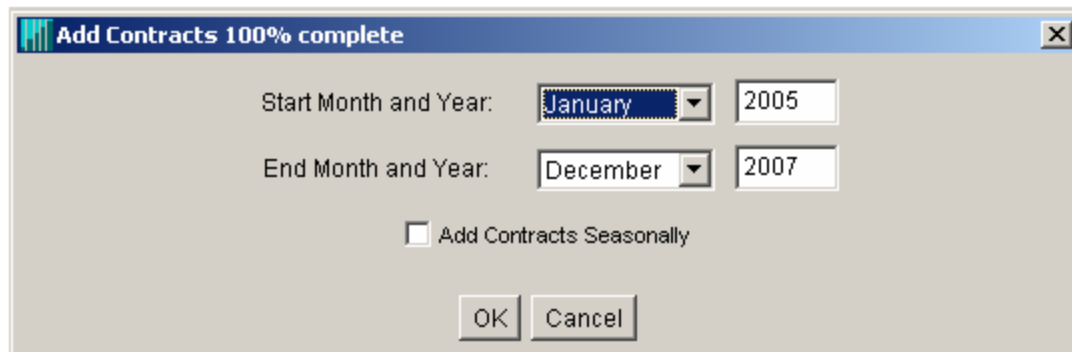
Now, MIMIC lists the contracts that do not contain any data for a specific column. When running the “Add Contracts” feature on the example above, the following message will now display if there are contracts with a column that does not contain any data:

Example:

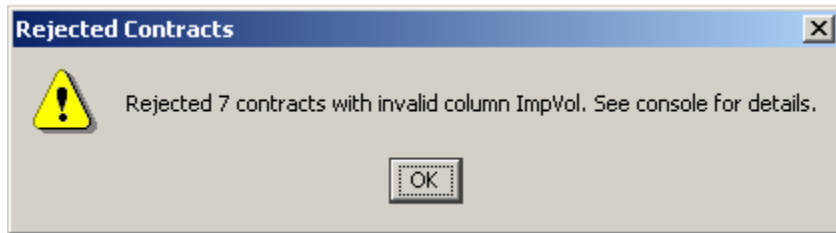
Step 1: Enter the symbol “NG” and select the column “ImpVol”. Choose “Add Contracts”.



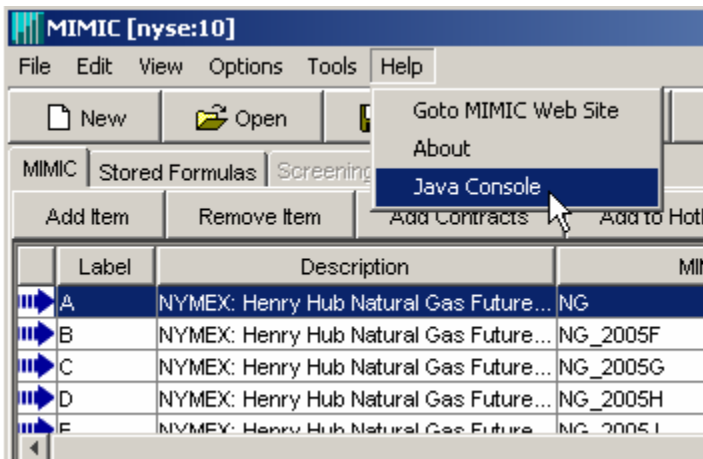
Step 2: Enter your dates “January 2005” to December 2007”. Then select “OK”.



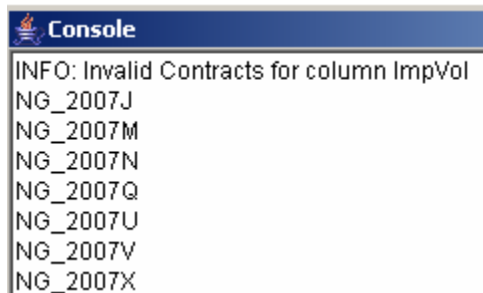
The following message will display:



Next, select the Java Console by selecting “Help>Java Console” from the MIMIC menu bar:



The Java Console will list all the rejected contracts that do not contain any data:



## Find the Last Known Value using Fill End

There is a new fill option in MIMIC that enables a user to retrieve the last known value(s) for a symbol for a specified date range. For instance, on a Monday morning, you might want the last known value for the Close of “CL”. MIMIC now has this functionality. Using Fill End with a few other settings, the value returned will be Friday’s closing unless Friday is a holiday and then the last known value will be returned.

The following graphic shows how to retrieve the last known value for the Close of “NG” for “February 25, 2005”. (Note: The graphic shows the bottom portion of the MIMIC interface.)

Select the End Date “02/25/2005, uncheck “Skip All NaN” and select “Fill End” for the Missing Data NaNs. The Change Period should be set to “0” “Days”.

If today is 02/25/2005 (before the market closes) then the value returned when the results are tabled is the value from the closing the day before on 02/24/2005.

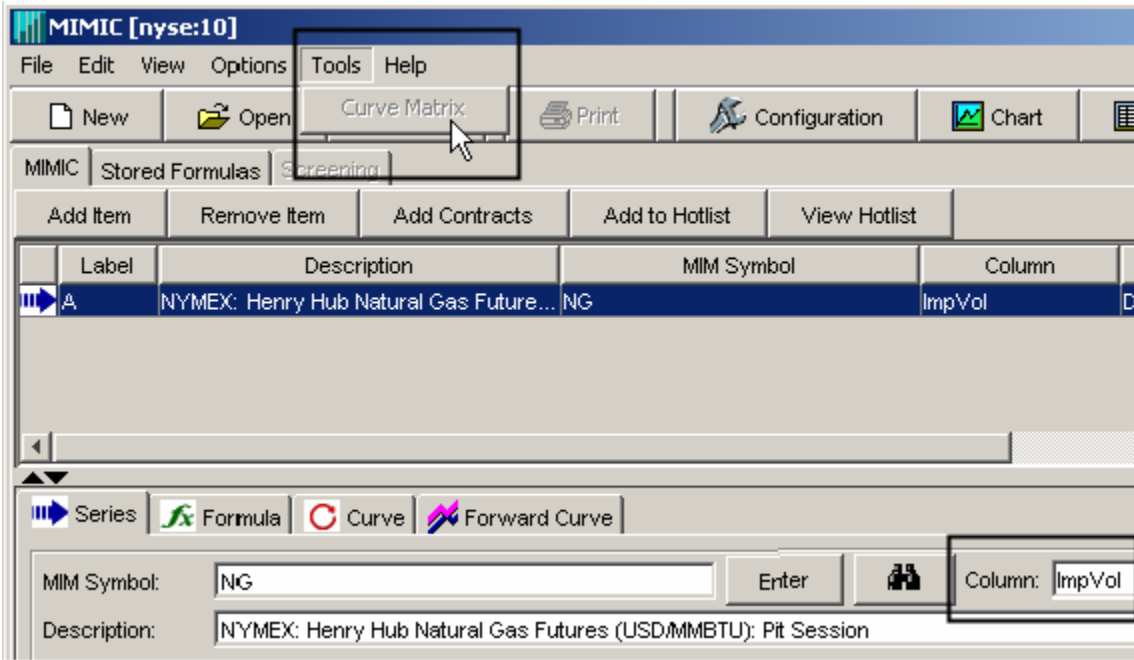
Dates	NG - Close
	NYMEX: Henry ...
02/25/2005	6.3040
Sum	6.3040
Average	6.3040
Average ...	6.3040

To find the last known value for a date range—for instance, the last known value for the last 3 days—enter “2” “Days” for the Change Period.

## Curve Matrix Tool only Allows OHLC Columns

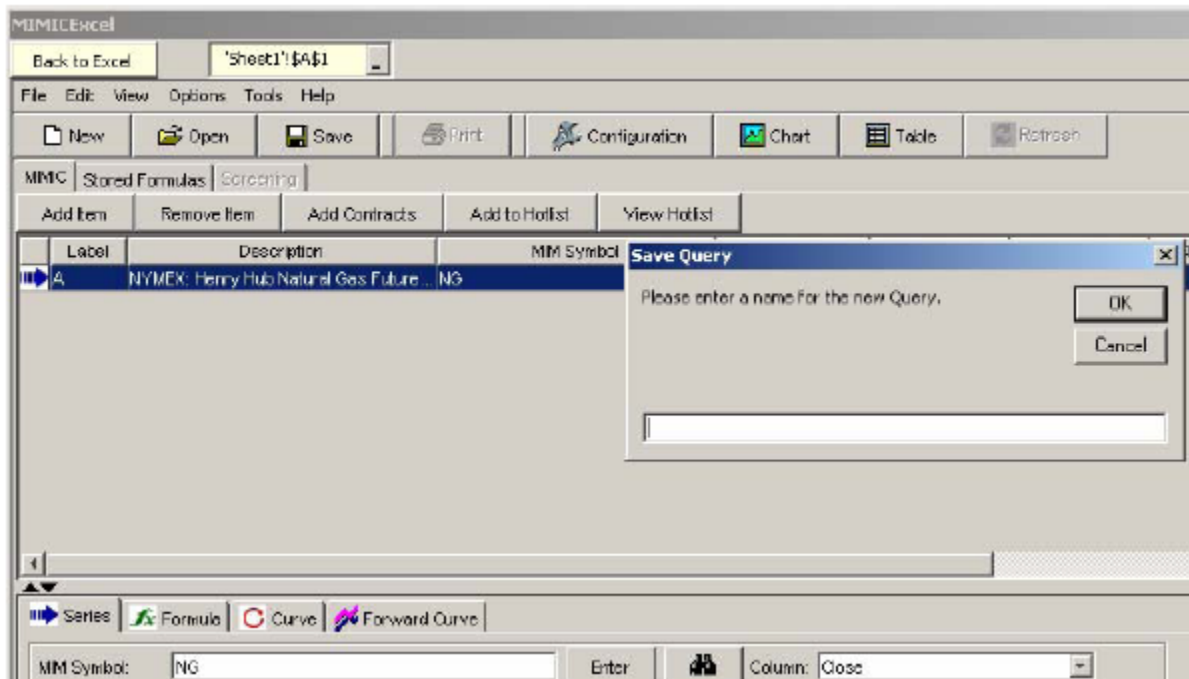
This is a bug fix for the Curve Matrix Tool. (Access the Curve Matrix Tool from the MIMIC menu bar: “Tools>Curve Matrix”.) The Curve Matrix Tool should only return values for the columns Open, High, Low, and Close (OHLC). Previously, if a column other than OHLC was selected (for example, the column “ImpVol”) then MIMIC would ignore the column selected and default to showing the values for “Close”.

Now, when a column other than OHLC is selected, the “Curve Matrix” menu selection is not accessible from the menu bar. The following graphic shows an example:



## New Save Obligation in MIMICExcel

When working in MIMICExcel, a “Save Query” dialog will display when the “Table” icon is selected to table the results of a query.



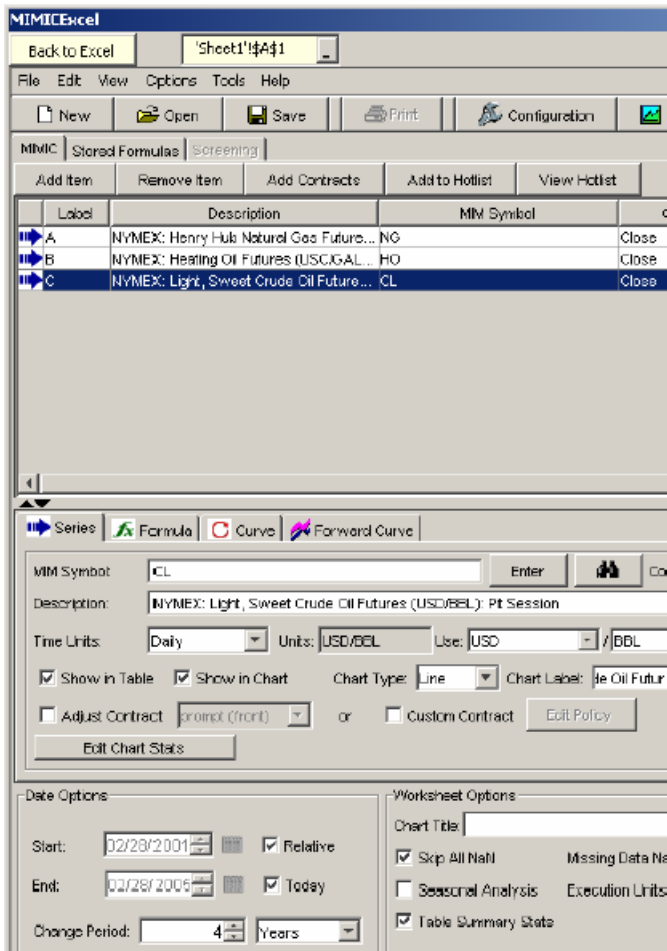
This new feature prevents users from accidentally losing data when their MIMIC queries have not been saved and Excel is closed.

## Advanced Refresh Narrows Date Range in MIMICExcel

This enhancement allows a user in MIMICExcel to modify a date range for a given MIMICExcel query. This prevents a user from having to open and modify the date range for each item in a MIMICExcel query.

The following example demonstrates how it works:

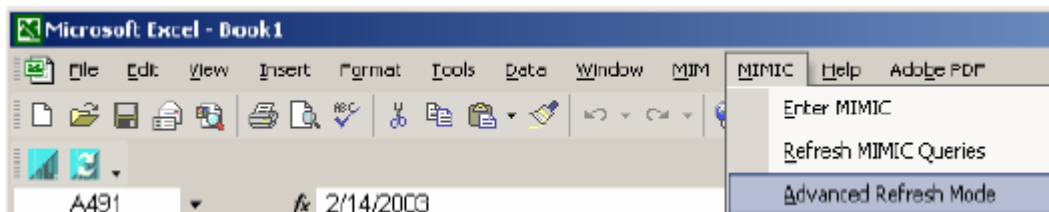
1. Open Excel, then create a query with date ranges of February 28, 2001-February 28, 2005 for each item added. (The graphic below shows a portion of the MIMICExcel window.)



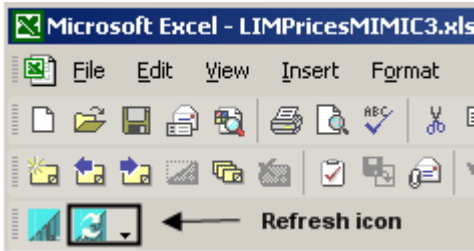
2. Select "Table" to put the results of the query into an Excel spreadsheet. (The graphic below shows a portion of the spreadsheet.)

	A	B	C	D
1	Dates	NG - Close	HO - Close	CL - Close
2		NYMEX: Hen	NYMEX: Heatin	NYMEX: Light, Sv
3	2/28/2001	5.236	73.34	27.39
4	3/1/2001	5.186	71.61	27.62
5	3/2/2001	5.27	72.52	27.84
6	3/5/2001	5.336	74.08	28.6
7	3/6/2001	5.315	73.06	28.32
8	3/7/2001	5.35	74.14	29
9	3/8/2001	5.285	73.3	28.39
10	3/9/2001	5.072	72.91	28.01
11	3/12/2001	5.159	73.16	28
12	3/13/2001	5.006	72.9	27.59
13	3/14/2001	4.911	70.39	26.41
14	3/15/2001	4.927	70.65	26.55
15	3/16/2001	5.035	70.38	26.74
16	3/19/2001	5.063	67.82	26.15
17	3/20/2001	5.287	68.49	25.96
18	3/21/2001	5.041	71.61	26.8

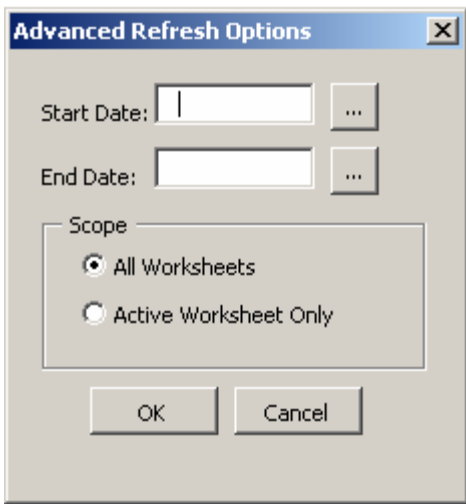
- Now to demonstrate how to narrow the dates without modifying the date range for each item in the query. First, clear the data from the spreadsheet by highlighting the data, then right-click and select “Clear Contents”.
- Select the cell where you want the data to begin populating. For this example, select cell “A:2”.
- To narrow the date range, turn on the Advanced Refresh Mode by selecting “MIMIC>Advanced Refresh Mode” from the menu bar.




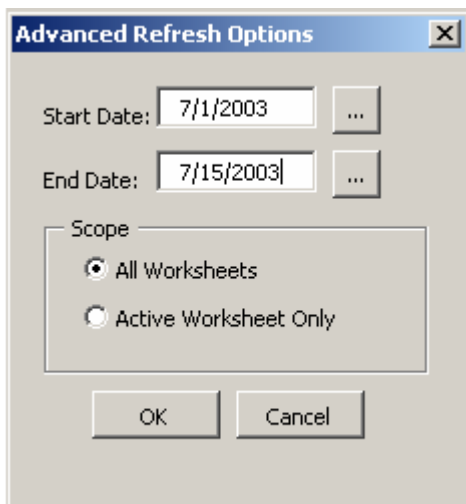
- Select the Refresh icon from the MIM Excel Add-in tool bar.



The following dialog displays:



7. Enter a Start and End Date. Select the  icon to use the calendar to choose the dates if desired. For this example, let's narrow the dates to July 1, 2003 - July 15, 2003. Keep "All Worksheets" selected then choose "OK" to continue.





“All Worksheets” – updates all queries on all worksheets found in Excel whereas “Active Worksheet Only” will only update queries on the worksheet that is currently in use.

The spreadsheet will populate narrowed to the requested date range:

	A	B	C	D
1	Dates	NG - Close	HO - Close	CL - Close
2		NYMEX: Hen	NYMEX: Heating	NYMEX: Light, Sw
3	7/1/2003	5.317	79.02	30.4
4	7/2/2003	5.199	78.33	30.15
5	7/3/2003	5.226	78.08	30.42
6	7/7/2003	5.381	77.48	30.13
7	7/8/2003	5.503	77.91	30.22
8	7/9/2003	5.52	80.47	30.88
9	7/10/2003	5.258	80.46	31.06
10	7/11/2003	5.154	80.65	31.28
11	7/14/2003	5.102	80.62	31.27
12	7/15/2003	5.02	81.33	31.62

## Fixing Invalid Targets in MIMICExcel

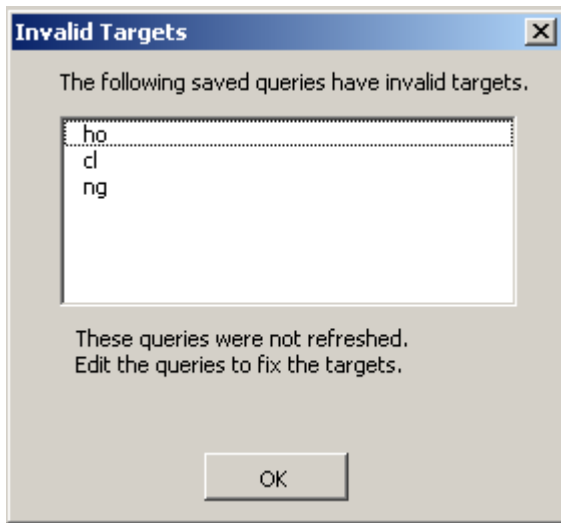
The following graphic in Excel denotes that a cell contains a reference to a MIMIC query:

	A
1	

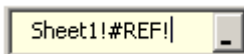
If this cell containing the query reference gets deleted then the results cannot be posted into Excel and an “Invalid Target” message displays. In version 3.0.2, the “Invalid Target” dialog is enhanced to display all the invalid query messages in one dialog window. Previously, a separate dialog window displayed for each missing query target.

### Example - How to Fix an Invalid Target

1. Create three separate queries in MIMICExcel and table the results into an Excel spreadsheet. Name the queries “ng”, “cl” and “ho”.
2. In the spreadsheet, highlight the row(s) containing the query references. Right-click and select “Delete” to remove the query references.
3. Refresh MIMICExcel by selecting the Refresh icon or select “MIMIC>Refresh MIMIC Queries” from the Excel menu bar. The following dialog displays.



4. Here's how to re-establish the missing targets. Enter MIMICExcel by selecting the MIMICExcel icon or "MIMIC>Enter MIMIC" from the Excel menu bar.
5. Select the "Open" icon. When the "Invalid Targets" message displays, select "OK".
6. Select one of the queries listed in the "Invalid Targets" dialog then select "Edit. Use the following icon to choose where to store the results of the query:



7. After selecting a valid cell, return to the MIMICExcel window and select "Save". Repeat steps 4-7 for each query that needs to be restored in the spreadsheet. Now when the MIMIC Refresh icon is selected the query results will post in the spreadsheet.

## Release 3.0.1.6

### Weekly Seasonal Analysis in Tables

The table formatting for displaying the results of a seasonal analysis with weekly execution units selected has been enhanced. Instead of displaying the dates for each Friday occurrence the year is broken into 52 weeks and the date is displayed as "Wk #1", "Wk #2", etc.

The following graphic demonstrates the old method for displaying the dates. (The date displayed is the Friday for each week.)

Dates	EIA.TOTAL.US - 2001	EIA.TOTAL.US - 2002	EIA.TOTAL.US - 2003	EIA.TOTAL.US - 2004	Average
	Gas Levels (BCF) in ...	Gas Levels (BCF) in ...	Gas Levels (BCF) in ...	Gas Levels (BCF) in ...	
01/05	1765.0000	2989.0000	2331.0000	2567.0000	2413.0000
01/12	1611.0000	2790.0000	2195.0000	2414.0000	2252.5000
01/19	1525.0000	2648.0000	1976.0000	2258.0000	2101.7500
01/26	1452.0000	2522.0000	1729.0000	2063.0000	1941.5000
02/02	1333.0000	2410.0000	1521.0000	1827.0000	1772.7500
02/09	1238.0000	2332.0000	1371.0000	1603.0000	1636.0000
02/16	1151.0000	2160.0000	1168.0000	1431.0000	1477.5000
02/23	1075.0000	2036.0000	1014.0000	1267.0000	1348.0000

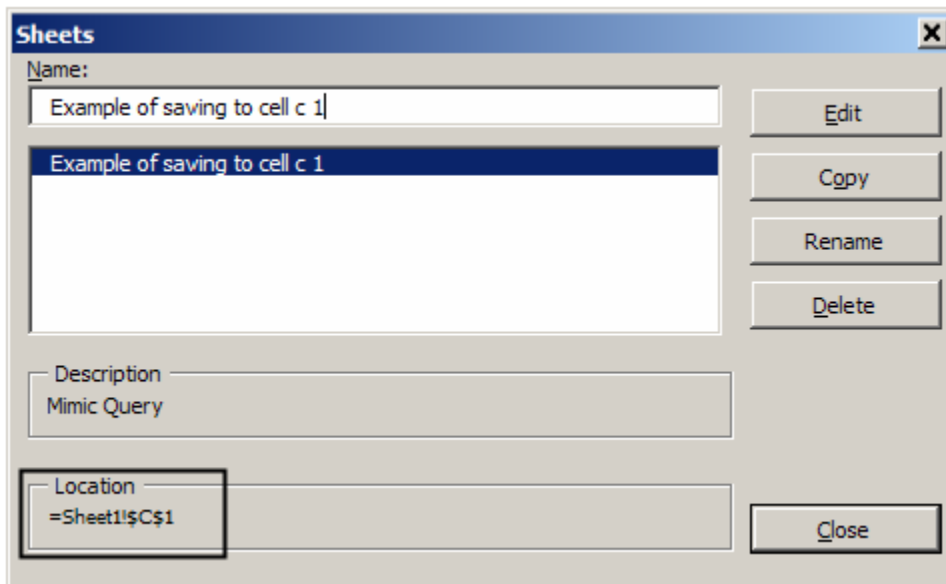
The new formatting uses the dates labeled per week:

Dates	EIA.TOTAL.US - 2001	EIA.TOTAL.US - 2002	EIA.TOTAL.US - 2003	EIA.TOTAL.US - 2004	Average
	Gas Levels (BCF) in U...	Gas Levels (BCF) in ...	Gas Levels (BCF) in ...	Gas Levels (BCF) in ...	
Wk #1	1765.0000	2989.0000	2417.0000	2619.0000	2447.5000
Wk #2	1611.0000	2790.0000	2331.0000	2567.0000	2324.7500
Wk #3	1525.0000	2648.0000	2195.0000	2414.0000	2195.5000
Wk #4	1452.0000	2522.0000	1976.0000	2258.0000	2052.0000
Wk #5	1333.0000	2410.0000	1729.0000	2063.0000	1883.7500
Wk #6	1238.0000	2332.0000	1521.0000	1827.0000	1729.5000
Wk #7	1151.0000	2160.0000	1371.0000	1603.0000	1571.2500
Wk #8	1075.0000	2036.0000	1168.0000	1431.0000	1427.5000
Wk #9	966.0000	1962.0000	1014.0000	1267.0000	1302.2500
Wk #10	NaN	NaN	NaN	1171.0000	1171.0000

## Release 3.0.1.5

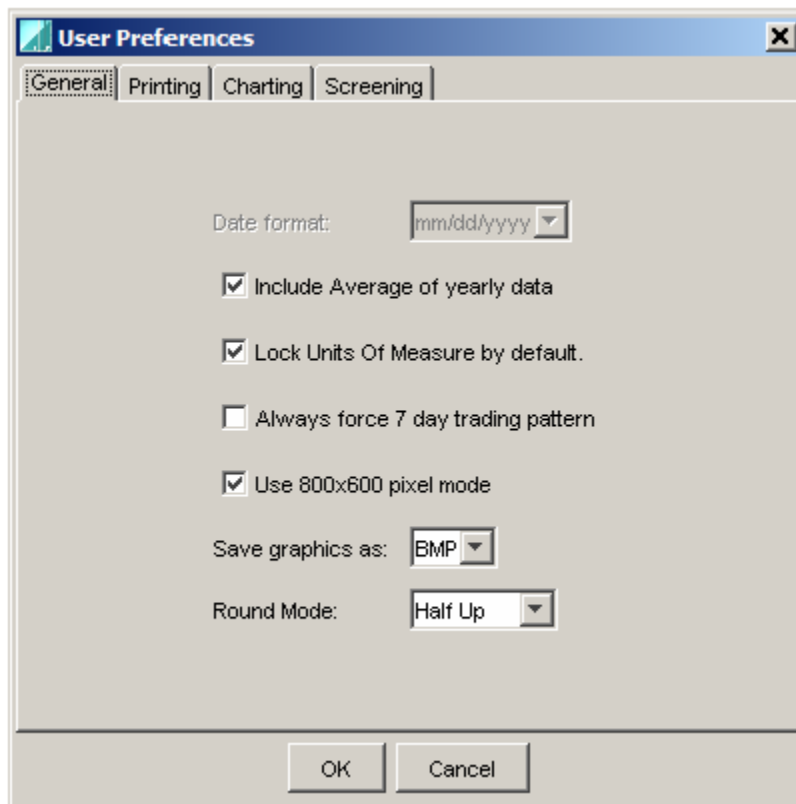
### MIMICExcel - Sheets Dialog Enhancement

MIMIC can be used through the Excel interface; this LIM product is referred to as MIMICExcel. When opening saved table results from MIMICExcel, the interface now shows the exact spreadsheet cell location where the results were saved to:



## MIMICExcel - Date Formatting

In MIMIC, the date format may be changed in the Users Preferences dialog (select “Options>Users Preferences”, “General” tab). In MIMICExcel the Data Format field is now grayed out or disabled as all date formatting should be done through Excel.



## Release 3.0

### MIM Screening System

Finding quality stocks just got easier. Use LIM's Screening System to screen for: Cash Flow, Earnings Per Share, PE, Market Value, Net Profit Margin, Price, Ratios, Return, Sales Per Share and much, much more. With the LIM Screening System you can quickly search over 12,000 stocks from the COMPUSTAT<sup>®</sup> Quarterly data set (universe). Pick the specific exchange(s) you would like to search over. Then, using Actual/Percentile, Minimum/Maximum, Time Period and Rank settings, narrow the playing field even further to find the stocks matching your criteria.

Once you have your results you can use MIMIC to chart or perform further technical analysis on your fundamental stock results. Everything you need to fine tune your stock picking and trading/investing is in one package, ready to go.

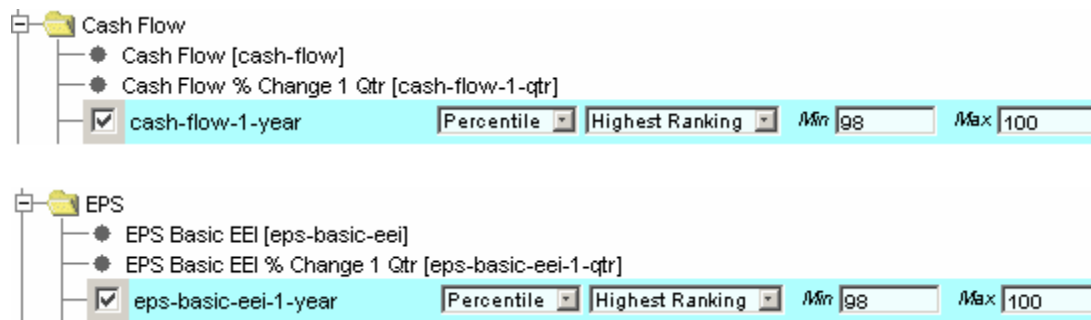
To get started using the Screening Tool just open the MIMIC application and select the “Screening Tab”. Make your criteria selections (organized by folders), enter the screening values (Actual/Percentile, Min/Max, and Rank), mark the checkbox and select the “Run” button.

The results, displaying in the “Answers” portion of the window are organized to always show the % Return per Quarter, the % Compounded Quarterly Growth, the results of a \$10K investment and the results of a \$10K investment compounded quarterly.

With the MIM Screening Tool you can quickly find the high volume stocks, the stocks with the greatest sales revenue or largest market cap, find stocks with the strongest forecasted growth, or search out the stocks that are not doing well in the market. These are just a few examples of the types of screens that you can do.

To demonstrate the Screening Tool, let’s look for companies listed on the New York Stock Exchange that fit our criteria for being well-managed companies. We want to search for companies over the last four quarters that are effective at cost control, that are not highly leveraged, and that are effective at generating profit with existing shareholder resources. To perform this study, enter the following screening criteria:

For Cash Flow and Earning per Share, choose to look for companies in the top 2 percentile of all stocks in the stock universe and rank them from highest to lowest.



For the Debt-to-Equity Ratio, we want to see just those stocks with an actual D/E between 0.01 and 4 and rank the results from lowest to highest.



Finally, to eliminate penny stocks from the results, choose actual prices higher than \$5.00 without any rank necessary for this analysis purpose. Select from the last month quarterly close price.



Next, set the time period to “4” to screen over the last 4 quarters.

MIMIC Formula Screening

Number of Periods: 4 Run Hide Precision: 2

Criteria

- Earnings Per Share [Q011\_EPS\_IEI\_Basic]
- Price - Close -1st Month of Quarter [Q012\_Close1]
- Price - Close -2nd Month of Quarter [Q013\_Close2]
- ✓ **Price - Close -3rd Month of Quarter [Q014\_Close3] Actual none 5 - 5000**
- Common Shares Used to Calculate Earnings per Share [Q015\_Shares\_Common\_Basic]
- Dividends Per Share by Ex-Date [Q016\_DPS\_ExDate]

The Screening Tool returns three stocks out of the universe that show effective management potential: “BDY”, “MXO” and “EVG”.

Answers					
Relations	Columns	03/31/2004	12/31/2003	09/30/2003	06/30/2003
SPQ.BDY.NYSE	% Return per Quarter	-0.98	-6.68	65.15	450.00
	% Compound Quarterly Gro...	70.21	103.90	201.39	450.00
	\$10K Becomes	9901.69	9332.11	16515.15	55000.00
	\$10K Compound Becomes	83933.33	64766.67	90633.33	55000.00
	Close3	25.18	25.43	27.25	16.50
	cash-flow-1-year	100.00	100.00	100.00	99.94
	pct-return-qtr	-0.98	-6.68	65.15	450.00
	debt-equity-ratio	0.23	0.24	0.72	0.55
	eps-basic-cci-1-year	99.61	99.89	99.85	99.81
Ranking	91.29	90.97	80.95	83.84	
SPQ.MXO.NYSE	% Return per Quarter	-26.58	-8.79	62.05	33.39
	% Compound Quarterly Gro...	9.69	25.39	47.02	33.39
	\$10K Becomes	7342.34	9120.79	16205.06	13339.25
	\$10K Compound Becomes	14476.02	19715.81	21616.34	13339.25
	Close3	NA	11.10	NA	NA
	cash-flow-1-year	NA	99.33	NA	NA
	pct-return-qtr	NA	-8.79	NA	NA
	debt-equity-ratio	NA	0.49	NA	NA
	eps-basic-cci-1-year	NA	90.80	NA	NA
Ranking	NA	84.28	NA	NA	
SPQ.EVG.NYSE	% Return per Quarter	5.66	20.41	-50.29	9.93
	% Compound Quarterly Gro...	-8.68	-13.02	-26.07	9.93
	\$10K Becomes	10565.98	12040.74	4971.46	10993.16
	\$10K Compound Becomes	6952.95	6580.51	5455.20	10993.16
	Close3	NA	32.51	NA	NA
	cash-flow-1-year	NA	98.27	NA	NA
	pct-return-qtr	NA	20.41	NA	NA
	debt-equity-ratio	NA	0.52	NA	NA
	eps-basic-cci-1-year	NA	99.02	NA	NA
Ranking	NA	83.33	NA	NA	

For each quarter that the user’s criteria is met, the results display the following four shaded rows for each symbol returned: “% Return per Quarter”, “% Compound Quarterly”, “\$10K Becomes”, and “10K Compound Becomes”.

- % Return per Quarter: The simple percentage return for each quarter.
- % Compound Quarterly: The Compound Quarterly Growth Rate – Cumulative: The compound quarterly rate calculates the compound quarterly return from the beginning of the chosen period to the last.
- \$10K Becomes: The simple return of \$10,000 for each quarter.
- \$10K Compound Becomes: The compound return of an initial \$10,000 investment at the beginning of the study.

The remaining results are discussed below and have the following implications:

- Close3: The Close price of the stock for the 3<sup>rd</sup> month of a quarter.
- cash-flow-1-year: We wanted to find companies in the top 2 percent of all companies. BDY is in the 100 percentile for the last 3 quarters.
- pct-return-qtr (Return Per Quarter): Displays the 1 quarter percent move of the stock.
- debt-equity-ratio: We screened for stocks that have a low D/E ratio (between 0.1 and 4.0). BDY shows a D/E of less than 1 for the last 4 quarters.
- eps-basic-eqi-1-year: The screener returned our eps criteria. We chose companies in the top 2 percentile. BDY is in the top 99 percentile for the last 4 quarters.
- Ranking: Based on a pre-determined formula, the ranking calculation orders the results matching all of our screener variables from best to last. Notice that BDY best matches our criteria in each category. Therefore, it ranks much higher than MXO and EVG. In fact, BDY matches our criteria in each of the last 4 quarters. MXO and EVG only match our criteria in just one of the last four quarters.

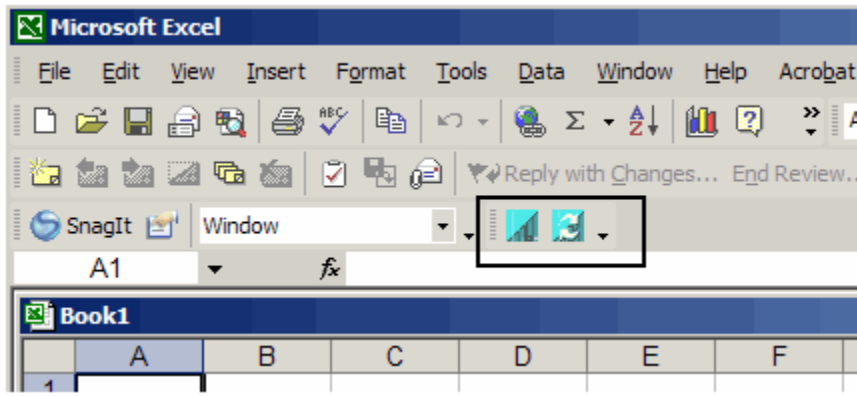
By screening only over the COMPUSTAT Quarterly universe, the time it takes to find your stock fundamentals is tremendously reduced. This universe may be customized for your specific usage. For more information, see the document “*MIM Screening System, System Administrator’s Guide*” or contact a LIM Sales Representative at [sales@lim.com](mailto:sales@lim.com).

## Use MIMICExcel to post MIMIC Tables Results into Microsoft Excel®

The full functionality of MIMIC is now at your fingertips while working in Excel.

To obtain this functionality, make sure you have MIMIC version 3.0 or higher installed on your system. For details on installing the MIMIC software, see the “[Client Application Installation Guide](#)”. This document covers the highlights of the new tool. For functionality details and working examples, see the “[MIMIC Training Guide](#)”.

After installing MIMIC 3.0 or higher, start the Microsoft Excel program and note that there are two new icons on the toolbar:



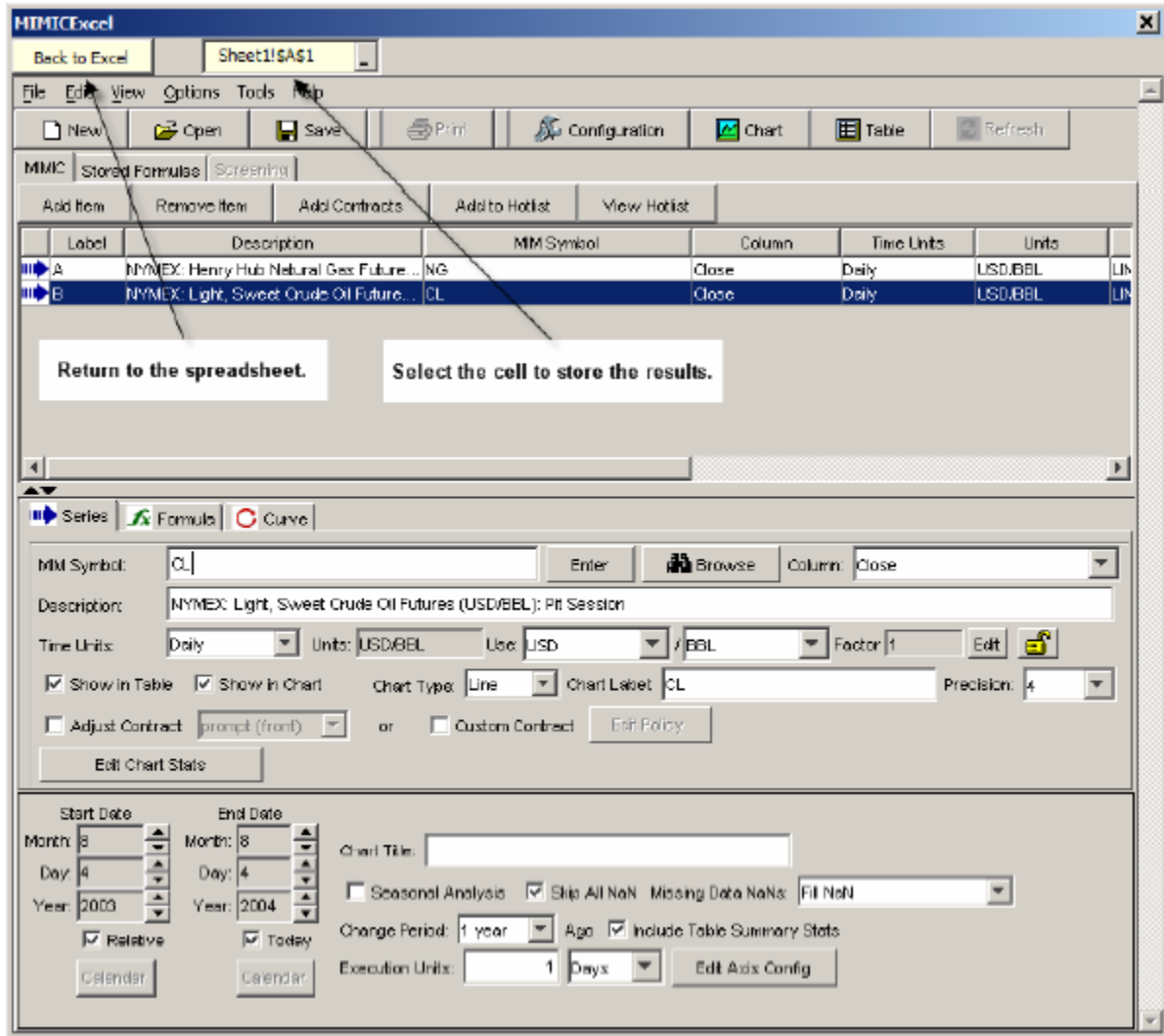
Select this icon:  to open the MIMIC window.



Another Option is to select **MIMIC>Enter MIMIC** from the Excel menu bar.

The MIMICExcel window contains the full functionality of MIMIC in addition to the following: 1) there is a button for designating which cell in the Excel spreadsheet to store the results of your table. 2) there is a “Back to Excel” button for returning back to the Excel spreadsheet.

The graphic below shows the MIMICExcel window with a query entered.



To table the results of the query and have the results display starting in cell A:1 of the spreadsheet, select the table icon in the toolbar.

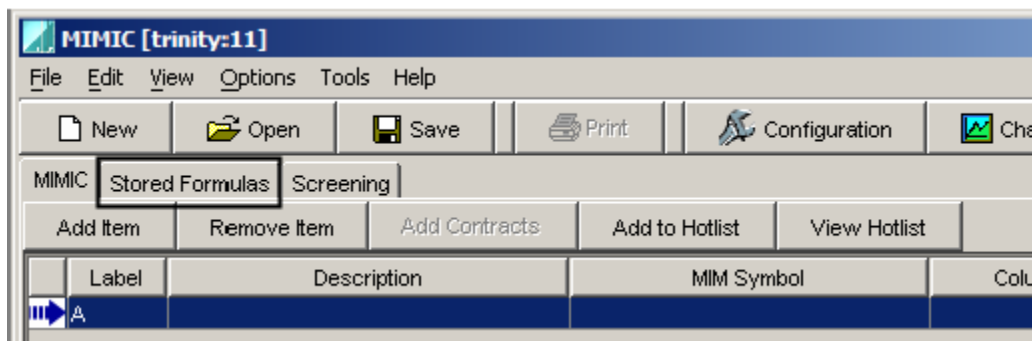
The results display in the Excel spreadsheet (see the graphic below).

Book1			
	A	B	C
1	Dates	NG - Close	CL - Close
2		Natural Gas Futures (USD/BBL)	Crude Oil, Light Sweet Futures (USD/BBL)
3	2/20/2003	35.7396	36.79
4	2/21/2003	38.3148	35.58
5	2/24/2003	52.9946	36.48
6	2/25/2003	55.5466	36.06
7	2/26/2003	52.9714	37.7
8	2/27/2003	43.413	37.2
9	2/28/2003	46.9858	36.6
10	3/3/2003	41.5396	35.88

## Formula Expression Builder

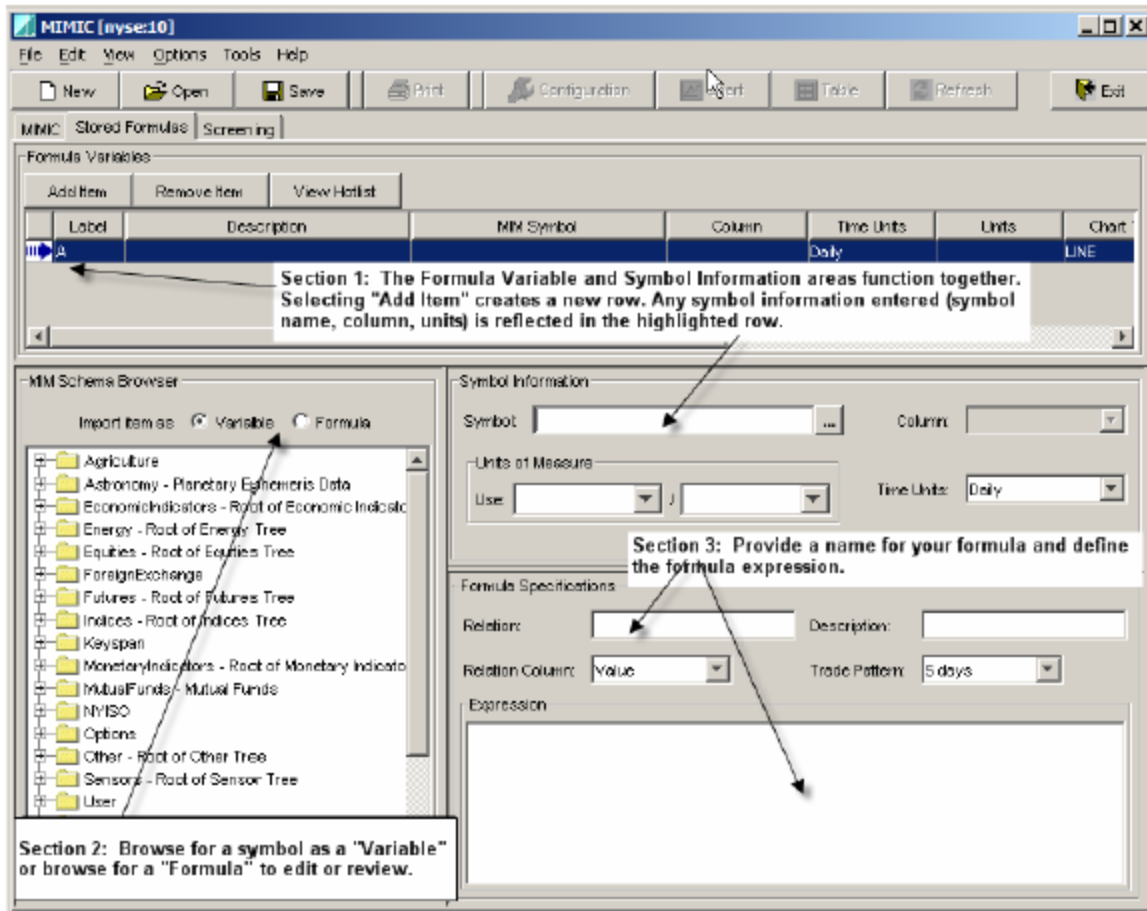
LIM brings an exciting new capability to MIMIC users: a custom formula expression builder that allows formulas to be saved as relation names in the database for reuse in MIMIC queries. On the MIMIC interface there is a “Stored Formulas” tab. When activated, a user can create formulas using LIM’s proprietary near-English query language. Formulas are easily created and shared by users. Since a formula is stored as a relation, the formula can be used in MIMIC just like any other relation providing a huge savings in time management. For information on installing the Formula Expression Builder, see the “[Client Application Installation Guide](#)” located on the LIM website. For more details on using the Formula Expression Builder, see the chapter on “*Creating Custom Formulas*” in the [MIMIC Training Guide](#).

The graphic below shows how to get started creating custom formulas. Select the “Stored Formulas” tab to enter the custom formula building area.



## The Formula Window

The formula building window is divided into three areas.




Section 1 – Formula Variables and Symbol Information Areas:

At the top, users select their formula variables in the same way that they select new rows for a regular MIMIC sheet. The section underneath “Symbol Information” displays the details of the selected rows (relation name, units and column information).

Section 2 – MIM Schema Browser:

At the bottom left is the MIM Schema Browser area where you can select your variables by browsing for a “Variable” and can review or edit your formula by browsing for a “Formula”.

When the “Import as: Variable” radial is selected, variables selected can be used to build the formula expression. Alternately, the “Import as: Formula” radial selection allows the user to open a formula for editing. A formula is selected by opening the formula folder and double clicking the “Value-Value (sparse)” entry. The formulas are saved in a special area on the database, under the “Users>username>Formulas” directory.

The refresh icon,  located in the bottom right-hand corner of the MIM Schema Browser is useful when you want to quickly close all the folders in the browser window and locate a new relation item or formula.

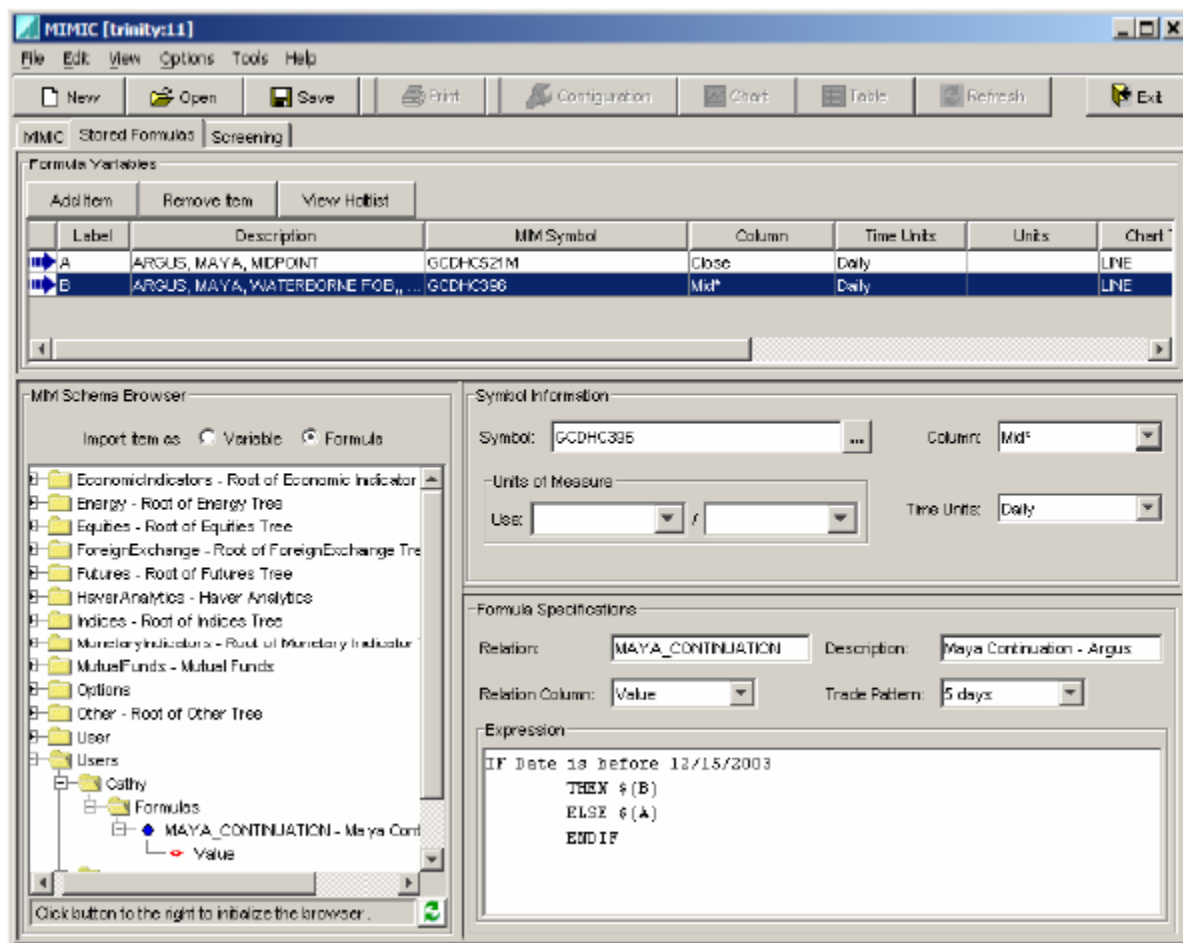
### Section 3 – Formula Specifications:

The section under “Formula Specifications” is the formula expression definition area where you provide a name and description for your formula and then define the formula expression.

Formulas are easily shared with other users to reuse and build upon as needed. Just find the formula you would like to use, and save it with a new relation name. The formula is then added to your own directory and may be revised and reused as desired.

## Building a Formula

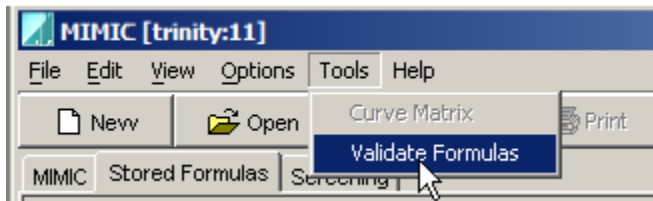
It's easy to build and save a formula expression. This is how a formula will appear when completed:



To see detailed instructions for building a formula, see the chapter on “*Creating Custom Formulas*” in the [MIMIC Training Guide](#).

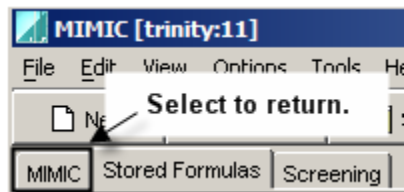
## Validating a Formula


After building a formula, it may be validated to ensure that it will run without problems. While in the Formula area, from the menu bar, select “Tools>Validate Formulas”.

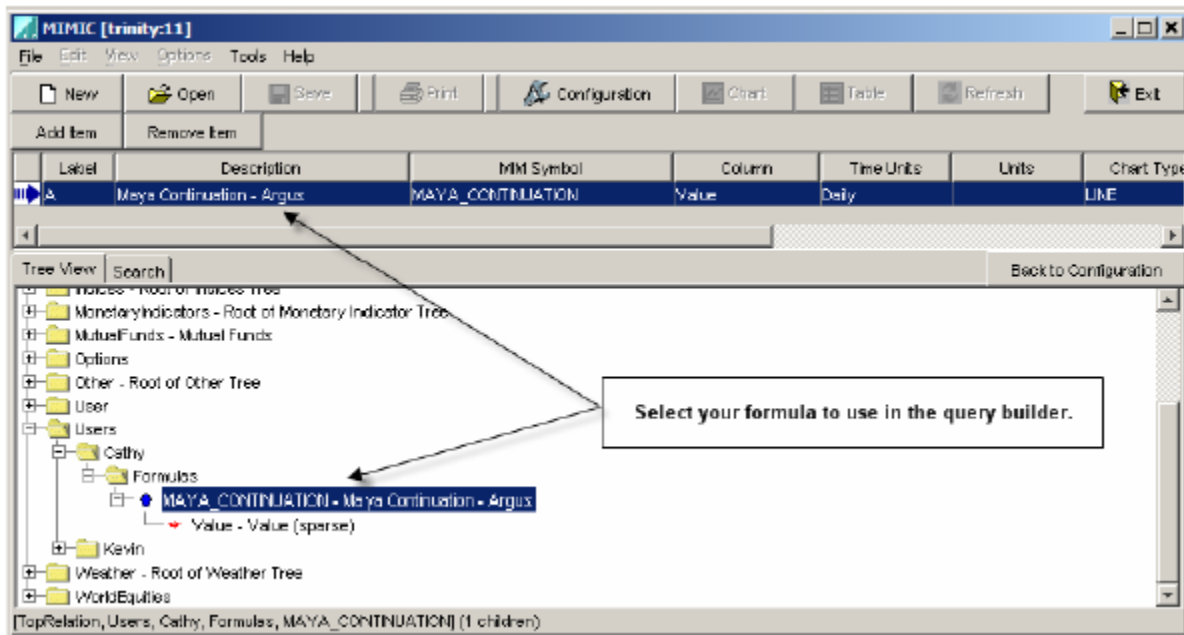


## Using a Formula in a Query

The formula is now ready to use in a query. Select the MIMIC tab to leave the formula area.



Make sure the Series icon  is selected, then click on the Browse button, open your Formula folder (Users>username>Formulas) and select the formula named “MAYA\_CONTINUATION”.



The formula populates the query builder in Row A. This expression can be used easily on the fly and is available to any user.

## Curve Matrix Tool

The Curve Matrix tool generates a specific type of request to the MIM database from within MIMIC. The tool only works with the parent symbols of futures commodities. Row A of the MIMIC worksheet must contain a futures parent symbol, such as NG (NYMEX Natural Gas Futures). After entering a futures symbol in Row A of the worksheet, the Curve Matrix is accessible from the “Tool” menu on the MIMIC menu bar.

The Curve Matrix tool allows users to define a range of history (default is all history), over which daily forward curves of the specified futures commodity will be generated in a table form as a .csv file (which can be easily imported into Excel). The forward curves data structure that the Curve Matrix tool generates is an absolute pattern of quotations. In other words, forward month quotes for any date in the range are returned as an array of values, the positions of which are always fixed relative to the quote date out along the array in monthly increments. If there are no quotes for a particular contract month out along the curve, that position contains a blank entry, so that all adjacent entries are equidistant in delivery month from the left of the data.

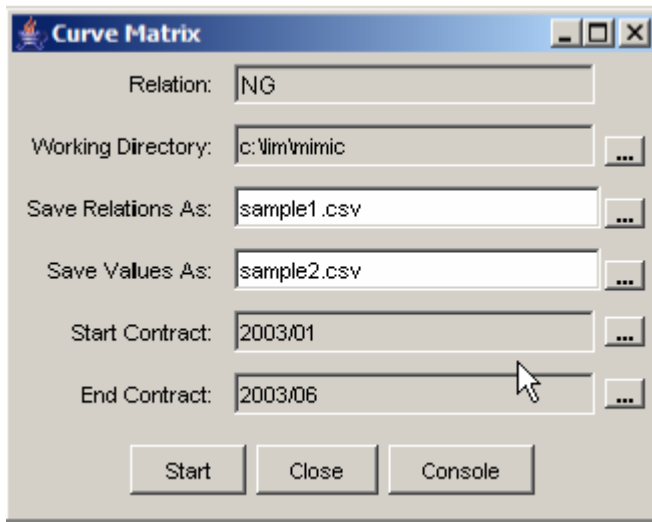
This kind of curve matrix is particularly useful in risk management calculations for Value at Risk (VAR) type models.

## Create the Curve Matrix

1. Enter the MIM symbol NG and select “Enter”.

- From the MIMIC menu bar select **Tools>Curve Matrix**. The following window shows the Curve Matrix tool with date and file entries:

Enter the following information into the fields so that your entries match the graphic below. For a detailed description of the fields, please see the chapter on the “*Curve Matrix Tool*” in the [MIMIC Training Guide](#).



- Selecting the “Start” button initiates a procedure to create the files directly from the MIM database. If the user has selected a long date range or all data for a particular contract, the server may take some time to generate the files. The line “Curve Matrix Complete” in the progress console tells you that the procedure has finished.
- To view the results, go to the working directory (c:\lim\mimic) and open the two files “sample1.csv” and “sample2.csv” (these files can be opened in Excel). The following graphics show portions of the files:

Sample1.csv (Shows the NG contract names)

sample1.csv												
	A	B	C	D	E	F	G	H	I	J	K	L
1	1-Jan-03	NG_2003G	NG_2003H	NG_2003J	NG_2003K	NG_2003M	NG_2003N	NG_2003Q	NG_2003U	NG_2003V	NG_2003X	NG_2003Z
2	2-Jan-03	NG_2003G	NG_2003H	NG_2003J	NG_2003K	NG_2003M	NG_2003N	NG_2003Q	NG_2003U	NG_2003V	NG_2003X	NG_2003Z
3	3-Jan-03	NG_2003G	NG_2003H	NG_2003J	NG_2003K	NG_2003M	NG_2003N	NG_2003Q	NG_2003U	NG_2003V	NG_2003X	NG_2003Z
4	6-Jan-03	NG_2003G	NG_2003H	NG_2003J	NG_2003K	NG_2003M	NG_2003N	NG_2003Q	NG_2003U	NG_2003V	NG_2003X	NG_2003Z
5	7-Jan-03	NG_2003G	NG_2003H	NG_2003J	NG_2003K	NG_2003M	NG_2003N	NG_2003Q	NG_2003U	NG_2003V	NG_2003X	NG_2003Z
6	8-Jan-03	NG_2003G	NG_2003H	NG_2003J	NG_2003K	NG_2003M	NG_2003N	NG_2003Q	NG_2003U	NG_2003V	NG_2003X	NG_2003Z
7	9-Jan-03	NG_2003G	NG_2003H	NG_2003J	NG_2003K	NG_2003M	NG_2003N	NG_2003Q	NG_2003U	NG_2003V	NG_2003X	NG_2003Z
8	10-Jan-03	NG_2003G	NG_2003H	NG_2003J	NG_2003K	NG_2003M	NG_2003N	NG_2003Q	NG_2003U	NG_2003V	NG_2003X	NG_2003Z
9	13-Jan-03	NG_2003G	NG_2003H	NG_2003J	NG_2003K	NG_2003M	NG_2003N	NG_2003Q	NG_2003U	NG_2003V	NG_2003X	NG_2003Z
10	14-Jan-03	NG_2003G	NG_2003H	NG_2003J	NG_2003K	NG_2003M	NG_2003N	NG_2003Q	NG_2003U	NG_2003V	NG_2003X	NG_2003Z
11	15-Jan-03	NG_2003G	NG_2003H	NG_2003J	NG_2003K	NG_2003M	NG_2003N	NG_2003Q	NG_2003U	NG_2003V	NG_2003X	NG_2003Z
12	16-Jan-03	NG_2003G	NG_2003H	NG_2003J	NG_2003K	NG_2003M	NG_2003N	NG_2003Q	NG_2003U	NG_2003V	NG_2003X	NG_2003Z
13	17-Jan-03	NG_2003G	NG_2003H	NG_2003J	NG_2003K	NG_2003M	NG_2003N	NG_2003Q	NG_2003U	NG_2003V	NG_2003X	NG_2003Z
14	20-Jan-03	NG_2003G	NG_2003H	NG_2003J	NG_2003K	NG_2003M	NG_2003N	NG_2003Q	NG_2003U	NG_2003V	NG_2003X	NG_2003Z
15	21-Jan-03	NG_2003G	NG_2003H	NG_2003J	NG_2003K	NG_2003M	NG_2003N	NG_2003Q	NG_2003U	NG_2003V	NG_2003X	NG_2003Z
16	22-Jan-03	NG_2003G	NG_2003H	NG_2003J	NG_2003K	NG_2003M	NG_2003N	NG_2003Q	NG_2003U	NG_2003V	NG_2003X	NG_2003Z
17	23-Jan-03	NG_2003G	NG_2003H	NG_2003J	NG_2003K	NG_2003M	NG_2003N	NG_2003Q	NG_2003U	NG_2003V	NG_2003X	NG_2003Z
18	24-Jan-03	NG_2003G	NG_2003H	NG_2003J	NG_2003K	NG_2003M	NG_2003N	NG_2003Q	NG_2003U	NG_2003V	NG_2003X	NG_2003Z
19	27-Jan-03	NG_2003G	NG_2003H	NG_2003J	NG_2003K	NG_2003M	NG_2003N	NG_2003Q	NG_2003U	NG_2003V	NG_2003X	NG_2003Z
20	28-Jan-03	NG_2003G	NG_2003H	NG_2003J	NG_2003K	NG_2003M	NG_2003N	NG_2003Q	NG_2003U	NG_2003V	NG_2003X	NG_2003Z
21	29-Jan-03	NG_2003G	NG_2003H	NG_2003J	NG_2003K	NG_2003M	NG_2003N	NG_2003Q	NG_2003U	NG_2003V	NG_2003X	NG_2003Z

Sample2.csv (Shows the values of the NG futures contracts)

sample2.csv												
	A	B	C	D	E	F	G	H	I	J	K	L
1	1-Jan-03	?	?	?	?	?	?	?	?	?	?	?
2	2-Jan-03	5.251	5.131	4.821	4.691	4.666	4.681	4.686	4.651	4.646	4.781	4.921
3	3-Jan-03	5.344	5.22	4.945	4.795	4.755	4.765	4.765	4.728	4.723	4.858	4.993
4	6-Jan-03	4.935	4.87	4.731	4.633	4.608	4.623	4.628	4.608	4.613	4.753	4.893
5	7-Jan-03	5.127	5.047	4.875	4.755	4.72	4.735	4.74	4.715	4.715	4.855	4.995
6	8-Jan-03	5.161	5.111	4.933	4.813	4.768	4.778	4.78	4.75	4.745	4.875	5.008
7	9-Jan-03	5.304	5.229	5.029	4.904	4.854	4.856	4.856	4.816	4.811	4.941	5.071
8	10-Jan-03	5.143	5.068	4.873	4.753	4.711	4.719	4.729	4.694	4.689	4.824	4.959
9	13-Jan-03	5.251	5.172	4.93	4.802	4.752	4.758	4.768	4.729	4.723	4.846	4.953
10	14-Jan-03	5.107	5.055	4.858	4.756	4.718	4.724	4.734	4.699	4.699	4.827	4.942
11	15-Jan-03	5.43	5.355	5.067	4.912	4.862	4.862	4.862	4.822	4.812	4.935	5.045
12	16-Jan-03	5.645	5.603	5.223	5.018	4.955	4.955	4.955	4.9	4.89	5	5.1
13	17-Jan-03	5.536	5.503	5.148	4.958	4.903	4.903	4.903	4.853	4.848	4.973	5.083
14	20-Jan-03	?	?	?	?	?	?	?	?	?	?	?
15	21-Jan-03	5.433	5.432	5.127	4.945	4.892	4.897	4.898	4.848	4.843	4.953	5.063
16	22-Jan-03	5.673	5.608	5.233	5.018	4.953	4.955	4.953	4.905	4.895	5.01	5.115
17	23-Jan-03	5.458	5.425	5.125	4.929	4.871	4.874	4.875	4.835	4.83	4.952	5.062
18	24-Jan-03	5.524	5.465	5.103	4.89	4.825	4.825	4.825	4.788	4.785	4.905	5.015
19	27-Jan-03	5.396	5.291	4.965	4.79	4.735	4.738	4.74	4.705	4.705	4.83	4.945
20	28-Jan-03	5.444	5.359	5	4.81	4.746	4.749	4.744	4.707	4.707	4.832	4.955
21	29-Jan-03	5.66	5.629	5.234	4.969	4.879	4.876	4.864	4.819	4.814	4.929	5.034

Note that the question marks indicate a holiday where no trading takes place.

## New Date Ranges

You can now choose “1 Day”, “2 Days” or “1 Week” from the Changer Period pull-down menu from MIMIC. Please see the graphic below:

The screenshot shows a dialog box for selecting a date range. It has two columns for 'Start Date' and 'End Date'. Each column has dropdowns for Month, Day, and Year. The Start Date is set to Month: 3, Day: 5, Year: 2003. The End Date is set to Month: 3, Day: 5, Year: 2004. Below these are checkboxes for 'Relative' and 'Today', and 'Calendar' buttons. To the right is a 'Chart Title' field, a 'Seasonal Analysis' checkbox, a 'Skip All NaN' checkbox, and a 'Mis' checkbox. Below that is a 'Change Period' dropdown set to '1 year', an 'Ago' checkbox, and an 'Include' checkbox. At the bottom is an 'Execution Units' dropdown menu with options: 1 day, 2 days, 1 week, 2 weeks, 3 weeks, 4 weeks, 1 month, and 3 months. A 'Days' dropdown is also visible to the right of the Execution Units menu.

## Reorganized User Preferences Dialog

The User Preferences now has a new format for the dialog window. Select the User Preferences from the Options menu on the MIMIC menu bar. The graphic below shows the new dialog:

The screenshot shows the 'Options' dialog box with a 'General' tab selected. The dialog has a title bar with 'Options' and a close button. Below the title bar are several tabs: 'General', 'Check/Clean Table Data', 'Print Options', 'Desktop/Excel', and 'Chart'. The 'General' tab contains the following settings:
 

- Date format: mm/dd/yyyy
- Include Average of yearly data
- Lock Units Of Measure by default.
- Always force 7 day trading pattern
- Use 800x600 pixel mode
- Save graphics as: BMP
- Round Mode: Half Up

 At the bottom are 'OK' and 'Cancel' buttons.

## Round Mode

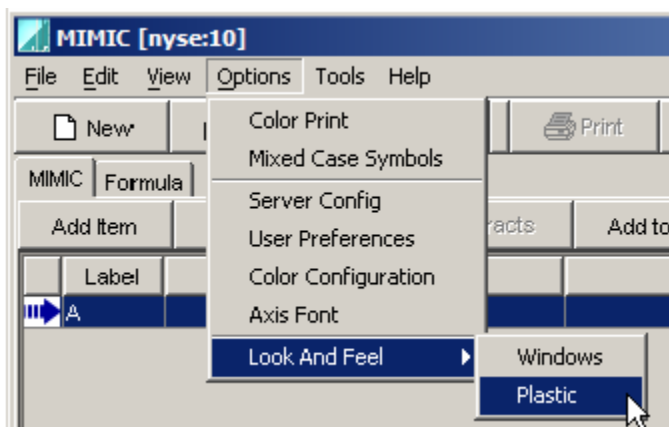
In the User Preferences dialog (from the MIMIC menu bar select Options>User Preferences), under the General tab, there is a new feature called “Round Mode”. The round mode determines how MIMIC will treat rounding when the user selects a precision for the series that is less than the number of decimals in the value returned (i.e. precision selected is 2 decimals, the number is 3 or more decimals).

In such cases, the user can now specify the rounding technique used by choosing between 3 alternatives:

1. Round “half even” (the default) will round any trailing 5 up or down to the nearest even number (i.e. if the decimal precision is two decimals and the number to be rounded is 2.345, the calculation rounds down to the nearest even value at 2.34, whereas if the number to be rounded is 2.355, the calculation rounds up to the nearest even value at 2.36.)
2. Round “half up” will always round the trailing 5 up.
3. Round “half down” will always round the trailing 5 down.

## Look and Feel

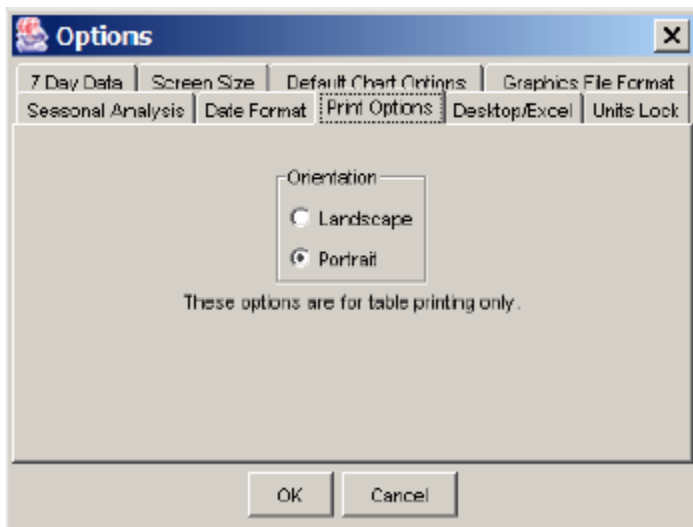
Change the look of your window display by choosing a listing in the “Look and Feel” submenu.



## Release 2.1.3

### Print Options

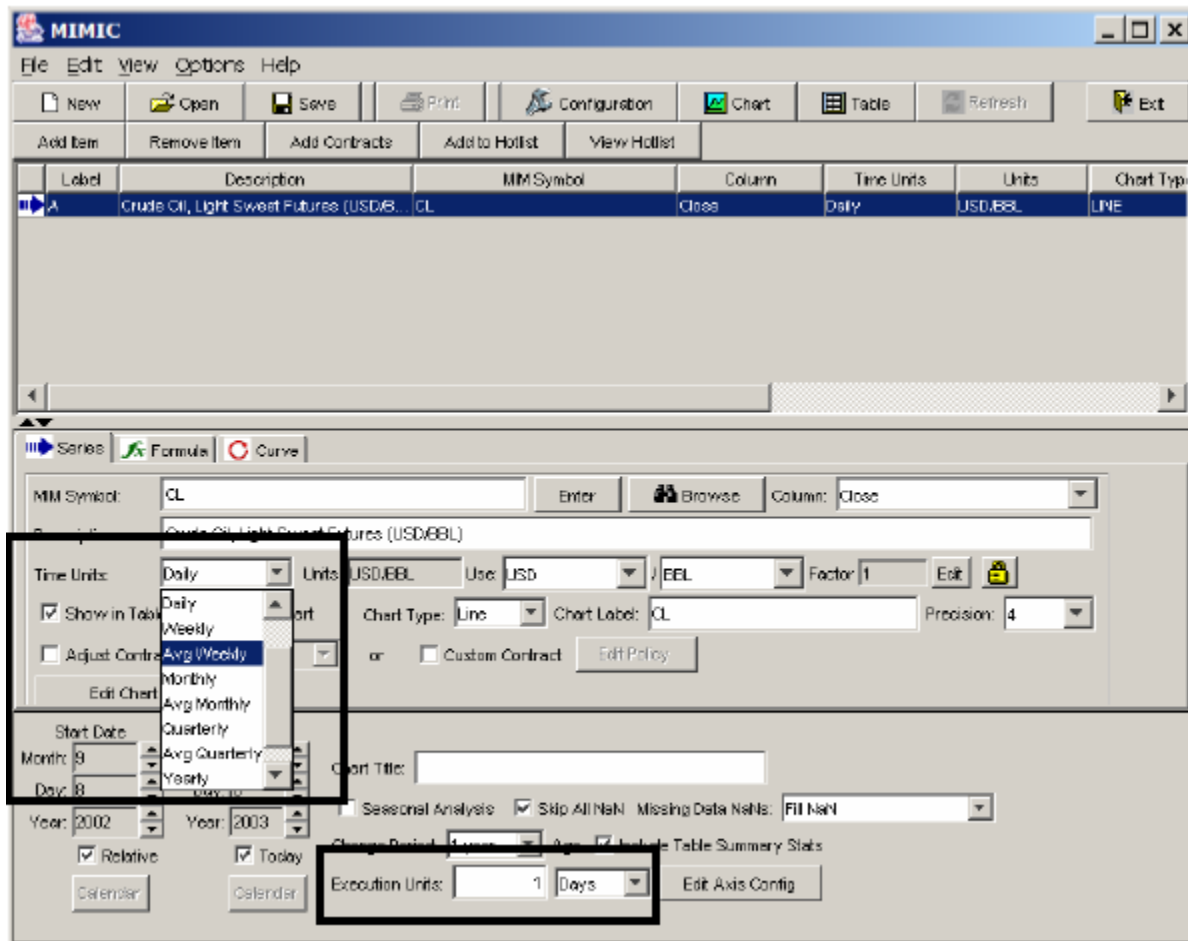
The Options menu has a new tab: “Print Options”. To access the Options menu, select “Options” from the MIMIC menu bar. Select the “Print Options” tab to set a table to print in either landscape or portrait orientation.



## Release 2.1.2

### Weekly and Quarterly Averages

In addition to monthly averages, MIMIC is now able to chart weekly and quarterly averages. Just make your selection from the Time Units pull-down window.



The weekly average gives you a weekly average of values in the date range. For 5 day trade pattern data, the weekly average values are returned every day of the week if you select “daily” execution units or once a week on Fridays if you select “weekly” execution units. The weekly average is a 5 day average – Monday through Friday.

For a seven day trade pattern series, a seven day average from Monday to Sunday is returned every day of the week if you select “daily” execution units or once a week on Saturdays if you select “weekly” execution units.

The default weekly average calculation can be changed using the missing data NaNs option to address any missing data. If you prefer to return weekly average results on a weekly basis on a different day of the week (other than Friday) or if you want to calculate the average differently at weekends rather than during the week or over a different start and end day than Monday to Friday (or Monday to Sunday), please ask for advice from the LIM customer support team.

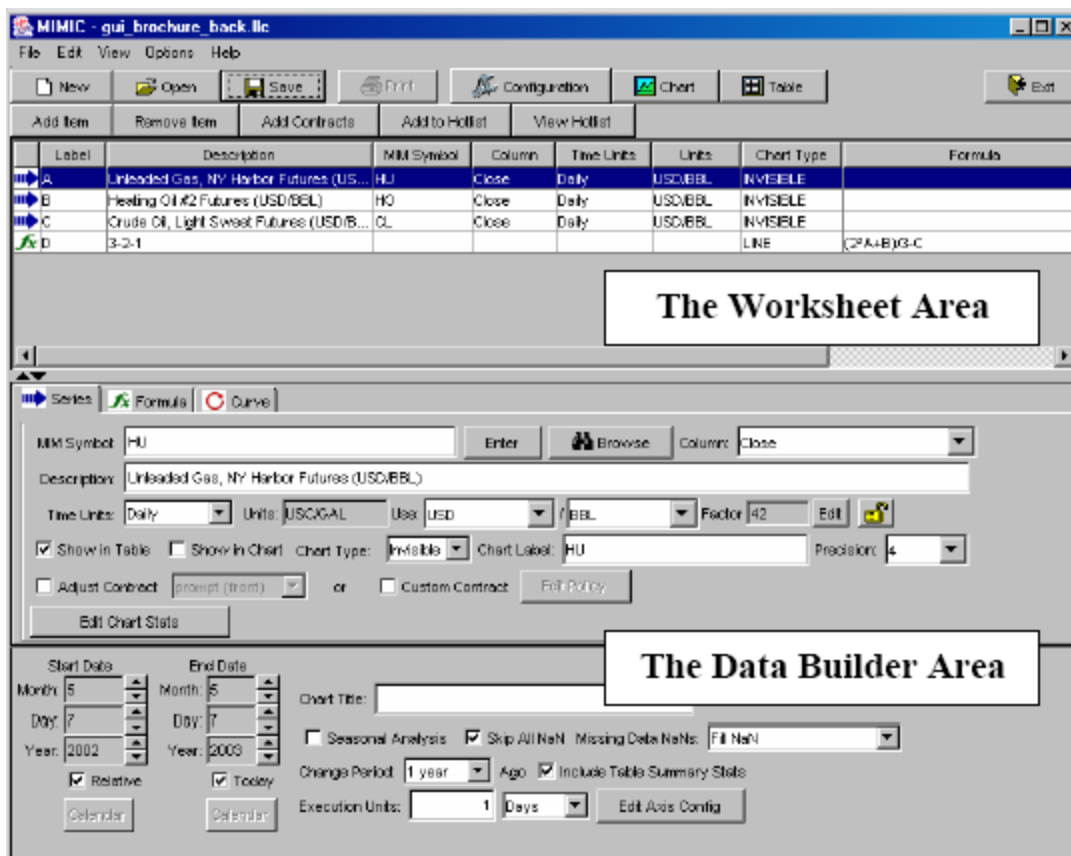
The quarterly average shows the average of values during the current quarter returned on a daily basis if the execution units are set to “daily”. The results will show once a quarter on the last day of the quarter if you choose “quarterly” execution units.

## Release 2.1.1

### New Graphical User Interface (GUI)

The new interface design is more consolidated and easier to read because the main data types (series, formula, curve) each have their own tab and some details are now accessed via a button instead of displaying on the main screen (e.g. “Edit Chart Stats” – the statistic choices). Also note that the description field is wider allowing more room for editing and better utilization of the space.

Upon opening MIMIC, the display or Configuration Window will appear as illustrated in the graphic below:



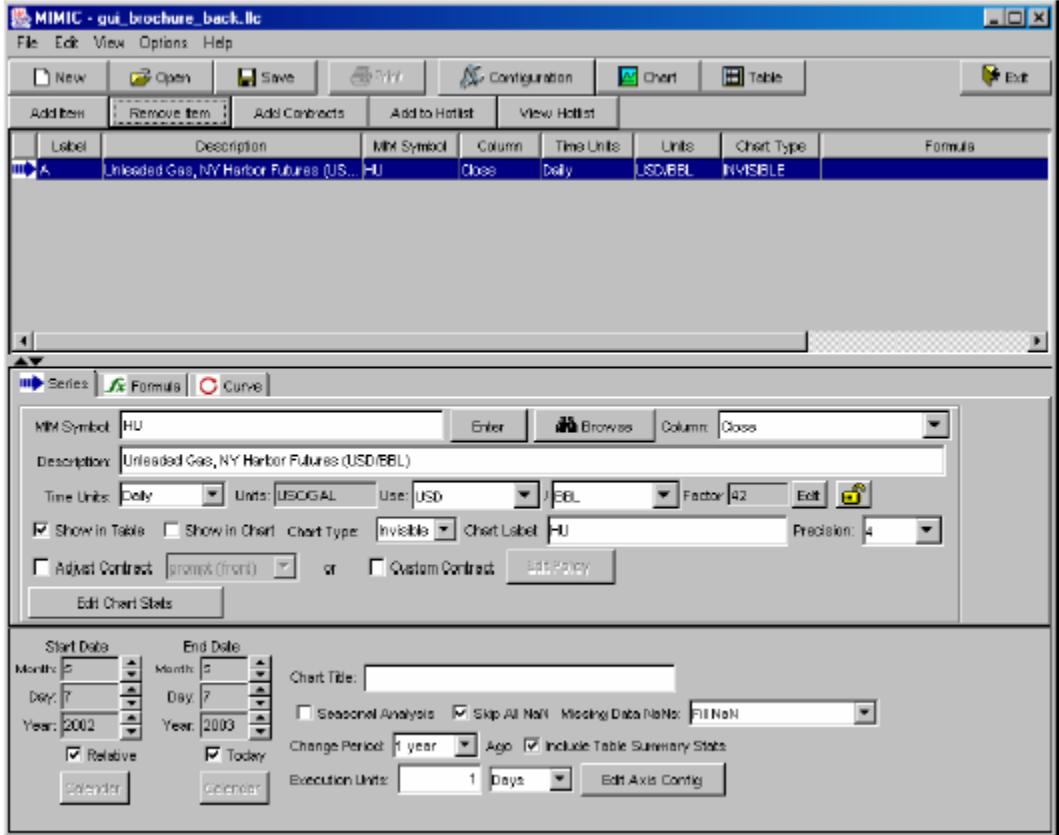
The Configuration Window is divided into two main areas: the Worksheet area and the Data Builder area.

By selecting the icons for Series, Formula or Curve the Data Builder area of the Configuration Window now changes to show only the information pertinent to building the selected format.

For example, the following graphics show the display when the Series, Formula and Curve icons are selected.

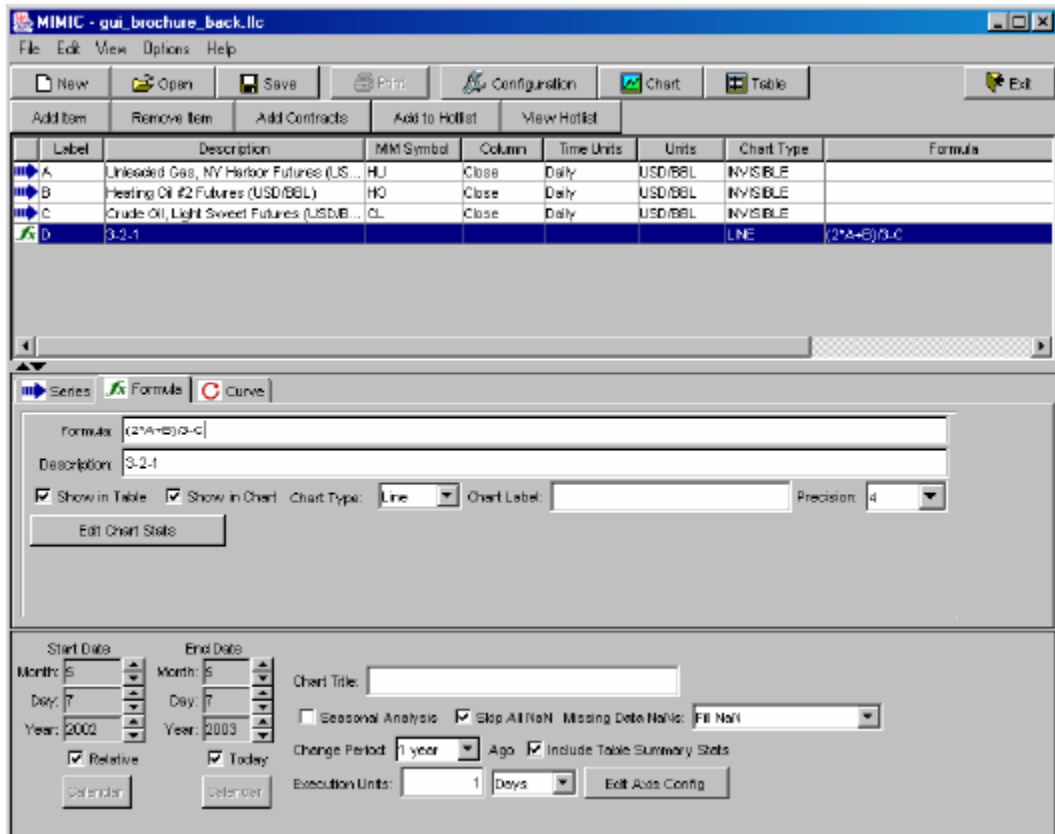
## Creating a Series

The following example shows the display when the Series icon is selected.



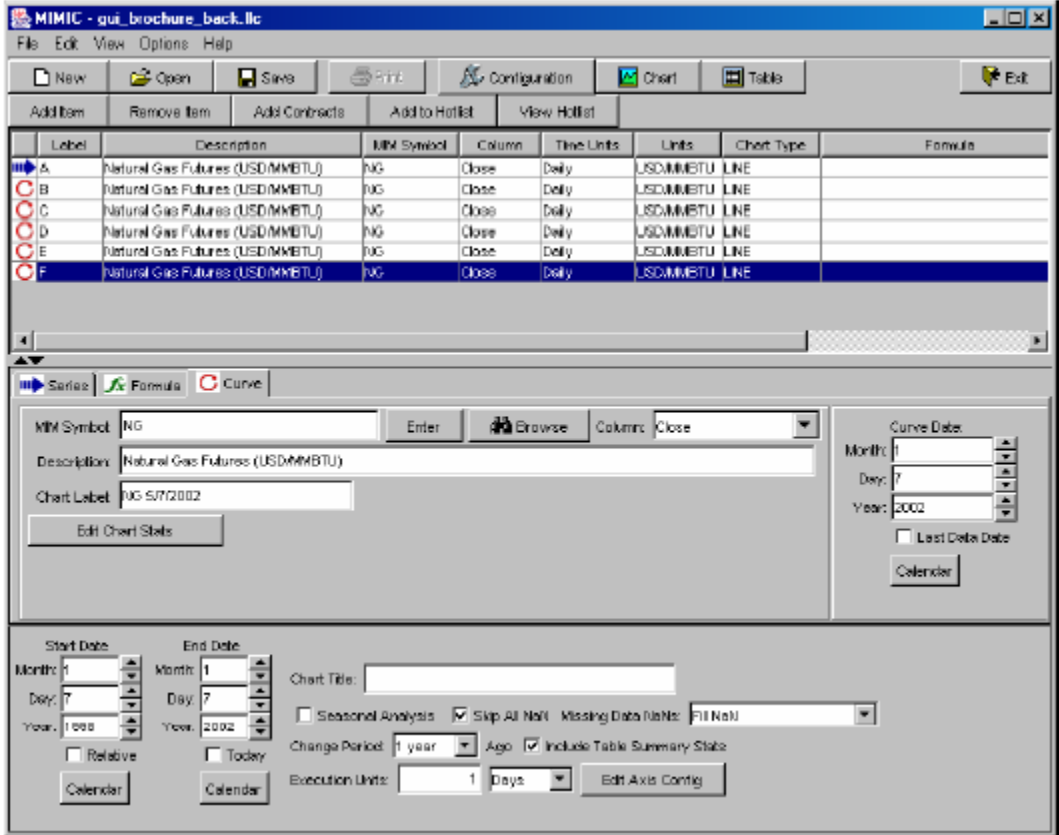
## Creating a Formula

When the Formula icon is selected only the formula information displays in the Data Builder.



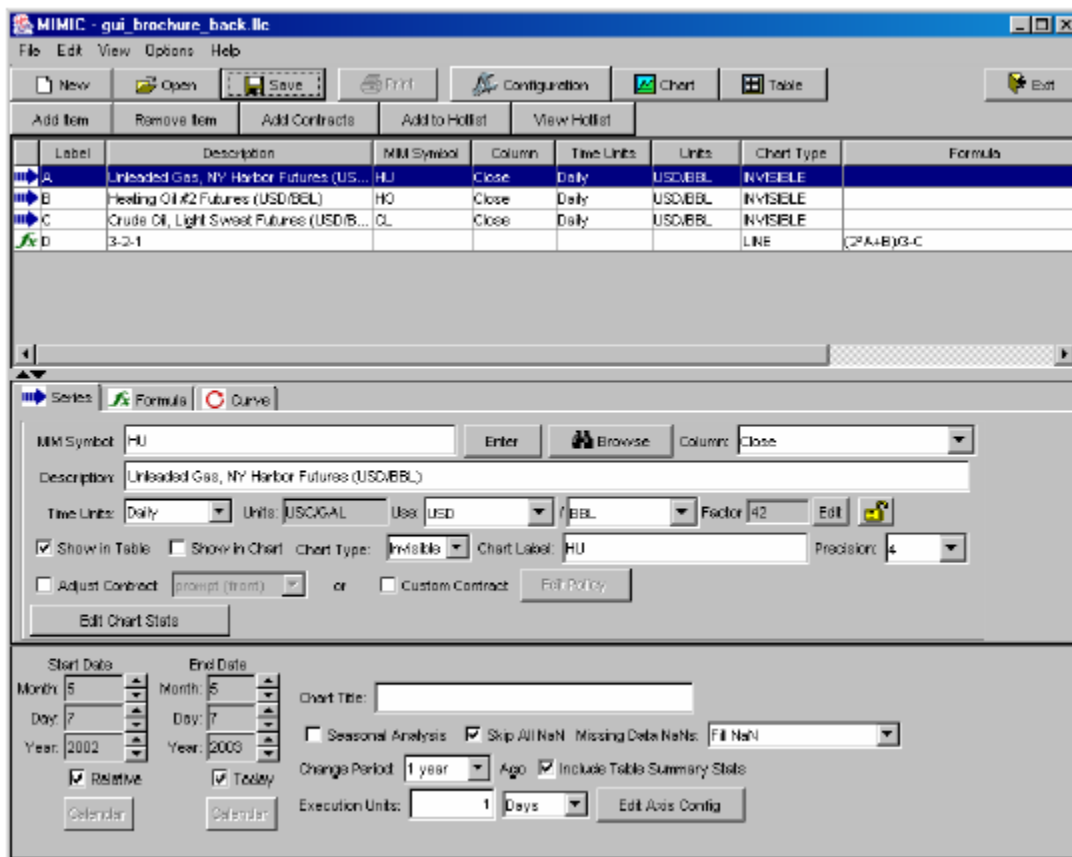
## Creating a Curve

The following example demonstrates the Data Builder display when the Curve icon is selected.

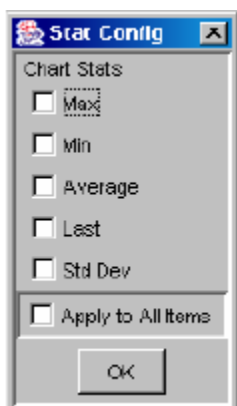


## Edit Chart Stats - Statistic Choices

The statistic choices are now available from the “Edit Chart Stats” button. (Previously the statistic choices were available directly from the Data Builder display area.) This allows for better usage of the Data Builder display area.



When the “Edit Chart Stats” button is selected the user sees the following statistic choices: “Max”, “Min”, “Average”, “Last”, “Std Dev” and “Apply to All Items”.





The “Apply to All Items” selection allows the user to apply the settings to other rows in the Worksheet.

## Hot Keys

The following hot keys are now available from the top menu bar in MIMIC:

<b>ALT+F</b>	File
<b>ALT+E</b>	Edit
<b>ALT+V</b>	View
<b>ALT+O</b>	Option

Under the File menu are the following hot keys:

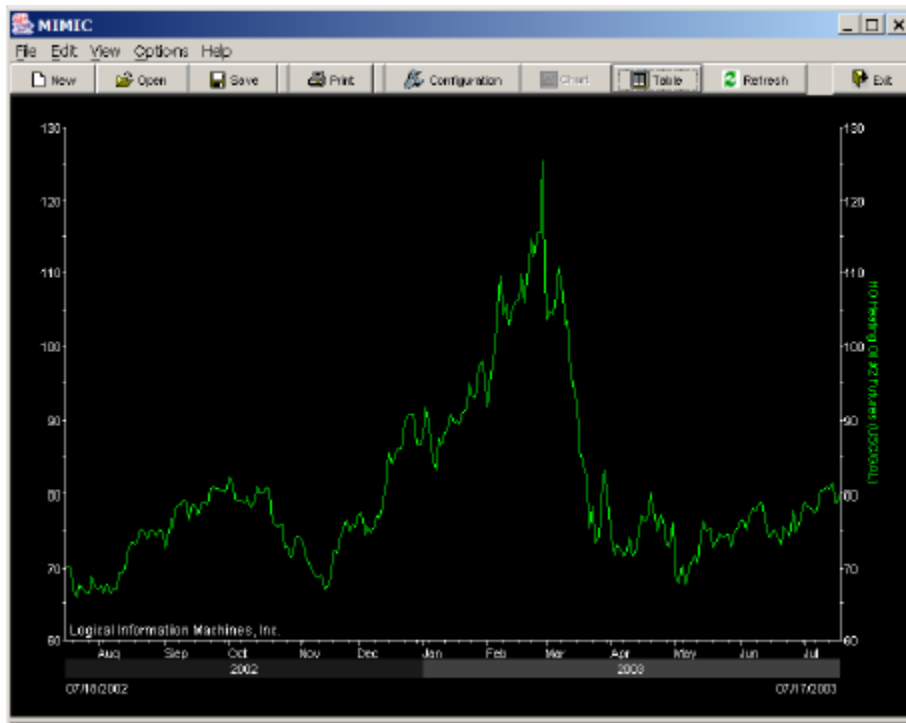
<b>ALT+N</b>	New Worksheet
<b>ALT+L</b>	Load Worksheet
<b>ALT+S</b>	Save Worksheet

Under the Edit menu are the following hot keys:

<b>ALT+R</b>	Remove Item
<b>ALT+A</b>	Add New Item
<b>ALT+I</b>	Insert New Item

## Refresh Button

Use the “Refresh Button” in the Chart and Table areas to update the data being viewed. This is useful when working with intra-day type data where the MIM database is being updated frequently and the chart or table is not dynamic to this new data.



## Pre-Calculated Continuation Series in MIMIC

We have now distributed pre-calculated continuations for the energy futures data to MIMs. The data resides in the “Continuous” folders under each of the following contracts:

- CL – 24 month series
- NG - 24 month series
- HU - 12 month series
- HO - 18 month series
- FB - 12 month series
- FP – 12 month series

There are two types of continuous data available:

## 1. “N” Month Out Continuation Series

The folder contains relations such as CL\_02, CL\_03 out to CL\_24 which represent the 2<sup>nd</sup> through the 24<sup>th</sup> month out continuation series with rollover set at “expiration date”.

These series are provided as pre-calculated MIM relations (although they can be custom built using the MIMIC “Adjust Contract” feature that allows you complete control over rollover data and rollover policy).

The advantage of having the series set up as relations is that they can be more easily referenced by the API's or in a spreadsheet without using an expression. Also, because the series is pre-calculated, it will be returned to an application more quickly.

## 2. Continuous Calendar Month Series

Continuous folders also contain "Monthly" Continuation series that are pre-calculated. These use futures contract month letters to identify the month, so that:

CL\_F = January Crude  
CL\_G = February  
CL\_H = March  
CL\_J = April  
CL\_K = May  
CL\_M = June  
CL\_N = July  
CL\_Q = August  
CL\_U = September  
CL\_V = October  
CL\_X = November  
CL\_Z = December

For each month, the series represents a continuous nearby contract for that delivery month. CL\_F is January Crude nearby – a series that always looks for the nearest January crude contract etc.

