The Market Analyzer for Windows Help

MAWIN

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Overview

The Market Analyzer for Windows (MAWIN) is a tool for creating and maintaining historical stock quote files, and viewing and analyzing the resulting historical data.   It is capable of tracking thousands of daily quotes with very reasonable daily download times.

Historical data is accumulated by daily downloads using customized files called quotelists (.qtl files).   The source of the downloaded quotes is the Internet (on free-access pages). The historical quotes are accumulated in text files (.day files) which are then read and displayed graphically to produce historical plots.   The plots can be viewed over easily selectable timescales, and can be analyzed using powerful built-in analytical tools including least-squares polynomial fits, fourier least-squares fits, and simple-moving average.

Although the intended source of historical data is daily downloads, there are archives of data available on the Internet which can be used to add to your historical data collection.   The MAWIN includes instructions and tools for reformatting and appending this data to your quote files.

For more information, select from the following topics.

Plotting Quotes   How to display your historical quotes in graphical format
Downloading Quotes How to add to your historical quote file data
Maintaining Quotes   To resolve problems or make additions
Mathematical Analysis   To aid in your analysis of trends
Electronic Registration   To get you beyond 90 days!

File Menu

The File menu includes commands that enable you to open and save files, establish a new workspace, and to print.

For more information, select the File menu command name.

Exit
New
Open
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Save
Save As

Glossary

[Quotelist](#)
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[Quotelist Configuration File](#)
[Download Command File](#)

Copying Text

Standard Windows copy paradigm may be used in MAWIN textual windows.

Deleting Text

Standard Windows delete paradigm may be used in MAWIN textual windows.

Exiting

Use **File/Exit**, or double click the top left of the MAWIN window.

This will save a list of open windows and location/size, and terminate the MAWIN program.

Plotting Historical Quotes

Historical Quotes are maintained in a subdirectory named quotes.day, and all have the extension .day.   From the Windows environment (external to MAWIN), these files can be dropped into the MAWIN icon, and a plot will be generated.   In order to have a drag & drop capability, you must create a MAWIN environment variable in your autoexec.bat, indicating the path to the MAWIN root directory, eg:

```
SET MAWIN=d:\stocks
```

However, within MAWIN, there is an easier way of categorizing, finding, and updating your quote files, and it is built around the quotelist.   A quotelist is a list of stocks of interest to you, and you can have as many as you can deal with, but probably 5 to 10 is about right.   A number of standard quotelists have been supplied with MAWIN, and preloaded with lists of company names and market symbols.

The quotelist is of the general format:

Symbol   File   Security Name   Date   High   Low   Close   Change   Volume Time   Comment

The Symbol name is the symbol used for that security at the site you are configured to download from.   To add new symbols, you may pull up the configured page on a Web Browser, and do a symbol search for the security of interest.

The File field specifies the .day file which will be used to store your downloaded data.   This field may be hidden or shown by clicking the show icon.

The Change value indicates the change since the last quote download.   If this is done daily, after market close, then the change will be the daily change from prior close.

To produce a historical stock quote plot within MAWIN, you must first open a Quote List.   To do this, simply use the standard Windows methods for file open, either using the file open command, or using the file open icon (easiest).

Once you have the Quote List open, double click on the security of interest, and a plot window will be produced.

For more information, select from the following topics.

file open command
file open icon
vertical plot scaling
horizontal plot scaling

Vertical Plot Scaling

Scaling in the vertical axis (the quote axis) is currently automatic only.   The scale is selected to present quotes on a scale which is 20% wider than the range of the quotes being plotted.

Horizontal Plot Scaling

Scaling in the horizontal axis (the date or time axis) will be set to the previously selected range.   The range may be changed using the right and left time range control buttons, and the date bar.   Move your mouse across the date bar (bottom of plot, below plot region), and across the left and right buttons.   Instructions for their use will appear on the bottom of your screen, on the message bar.

Clicking your left mouse button anywhere on the date bar will set the left boundary of your plot to the date clicked.

Clicking your right mouse button anywhere on the date bar will set the right boundary of your plot to the date clicked.

Double clicking the left or right button will move that boundary to the maximum data available (ie: minimum date for the left button, and maximum date for the right button).

Single clicking the left mouse button on the left date button will increase the range in the left direction by 20%.   Single clicking the right mouse button on the left date button will set the left boundary to the default.

Single clicking the right mouse button on the right date button will increase the range in the right direction by 20%.   Single clicking the left mouse button on the right date button will set the right boundary to the default.

Downloading Quotes

Your Historical Quote files are accumulated through daily downloads of daily stock quotations from selectable/configurable Internet Sites.

A starter set of common historical quote files has been provided with MAWIN for you to build on.   The are located in a subdirectory of your MAWIN main directory, called …\quotes.day.   The quotefiles all have the extension .day.   You may want to be sure to add to these each day, so that you can collect and review a complete archive of data for each security of interest to you.

Contact with the Internet is accomplished through Winsock, just like your Web Browser, Email, News Browser, etc.

At this stage of development, and like some varieties of the above programs,   MAWIN does not have a built-in capability to dial into your Internet provider.   For that, we depend upon your Winsock dial-up program, such as the Windows 95 Dial-Up Networking.

So, to perform your stock quote downloads, you must first use your external (to MAWIN) dial-up program to log into you Internet Server/Provider.   (This may also be accomplished by loading Network Winsock software in a Network (non-dial-up) environment.)

(We plan to add Winsock dial-up functionality within MAWIN in a near-term release.)

With that accomplished, there are several ways to initiate downloads:

Daily Download Icon	Initiates daily quote download once, after 5:00 PM
Update Download Icon	Update download, obtaining quotes missed for date
Options/Download Daily Update (Normal)	Update download, obtaining quotes needed for date
Options/Download Daily Update (Forced)	Update download, obtaining quotes unconditionally

see also:

Configuring Stock Quote Downloads	How to add securities and specify Web Sites

Configuring Stock Quote Downloads

Although a sample of MAWIN's capabilities has been setup for you, the downloading and Quotelist organization of MAWIN is user configurable.

The tasks which may be configured are:

Adding a security to a Quotelist

Modifying Quotelist names or adding new Quotelists

Changing the Web Sites for Quotelist downloads

Adding a security to a Quotelist

The quotelist is of the general format:

Symbol   File   Security Name   Date   High   Low   Close   Change   Volume   Time   Comment

To add a security to the Quotelist, first bring up the Quotelist window (see <u>Plotting Quotes</u>).

Be sure the Quotelist window is active (click your mouse in it if it is not), and click to highlight the location where you would like to insert a symbol.   From the menu, select: **Edit/Add item**.

A window will appear, where you must supply the symbol, file, and Security Name.

The file may be any name you choose, but enter only the base file name.   An extension of .day will automatically be used.

The Security name is the name of the company, which is otherwise unimportant.

The symbol will be the symbol used by the web site being used for download by this Quotelist.   For most securities, this will be the standard symbol, as found in the paper, etc. However, for indices, there is often a difference between sites.

For example Disney is always symbol dis, but the Standard and Poors 500 Index is sometimes SPX, INX, $INX, etc.

For common stocks and funds, enter the standard symbol, and try a download.

For indices, you can try your luck, but if that fails, you must use your Web Browser to bring up the site used, where all have a symbol search by company name.   To determine the Web Site used, with the Quotelist Window active, select **Options/Edit Quotelist Configuration File**.

Several lines down, you will see a line like:

// Located at: http://www.quote.com/

You can select and copy the URL: **http://www.quote.com/** and bring up your Web Browser and paste the URL into the Location Window.

Striking return should take you to the Site, where you can lookup the symbol you need.

The other fields above do not need to be provided; they will be added automatically after each download.

Leave several spaces between fields; strike **OK** to enter the new symbol.

For larger editing jobs, any external text editor can be used.

Modifying Quotelist names or adding new Quotelists

You may copy, rename, create, or modify your own Quotelists, as long as you adhere to the format of the samples provided, and use the extension .qtl.   These new quotelists can be opened and viewed, and existing quotefiles referenced can be selected to display the historical stock quotes.

To add your new quotelist to the Download Command File, select **Options/Edit Download Command File**, and add its file name, in the order you prefer.

To be used in a download without error, your quotelist must have a corresponding Quotelist Configuration File.

Changing the Web Sites for Quotelist downloads

To specify or change the web site for download, you may edit the Quotelist Configuration File corresponding to your Quotelist of interest.

To edit the Quotelist Configuration File, with the Quotelist Window active, select **Options/Edit Quotelist Configuration File**.

The Quotelist Configuration File is commented to tutor you in entering all required information to specify Web Site and decoding format.

If you do not wish to create your own files (this is understandable), there are several samples provided in directory   \QuoteList Configuration Files\Samples (off the main MAWIN directory).

If you want to use one of these sites for a particular quotelist, like Watch.qtl for instance, just move the sample file to the \QuoteList Configuration Files directory with Explorer, and rename it to Watch.qcf.

More predefined QCF files will become available in the near future.

Options/Download Daily Update (Normal)

MAWIN will perform a download.   Built-in logic will prevent *.day files from appending more than one quote per day.   (ie: a file will not update if it has already been updated on the same date.)

Options/Download Daily Update (Forced)

MAWIN will perform a download.   All files will unconditionally be updated where quotes are available.

Maintaining Quotes

At times, you may encounter anomalies in your historical data files.

You may notice an errant data point (a quote whose value cannot be right).   This is occasionally caused by an error in the source of the quote, possibly by manual entry error.

You may have more than one quote per day, which will cause errors or biases in the mathematical analysis.   This is caused by use of the <u>Options/Download Daily Update (Forced)</u> download procedure.

Or, you may receive warnings from MAWIN of corrupted data (when loading data for plotting).   This may be caused by errors in the source of download data.   We have been adding features during development to help guard against this, by rejecting bad dates, checking for complete quotes, etc.

The most likely of these problems which you may encounter is the duplicate data, which only matters if you use mathematical analysis, or just if you are a purist about maintaining your data files in perfect order.

MAWIN includes tools to easily correct these glitches.

<u>FileFix.exe</u>   This Utility program is called from within MAWIN

You may also edit your quotefiles directly using any text editor.   From within MAWIN, from either a quotelist or plot window, select the **_Edit Quotefile_** icon to bring up Windows 95 Wordpad.exe.   (Currently, WordPad must be located in the default directory: C:\Program Files\Accessories \WORDPAD.EXE.   If you encounter problems, you can create this directory and move a copy of WordPad there.)

For making additions to your quotefiles, or for combining files containing different or overlapping data (overlapping dates), there are a series of three utilities accessible from your MAWIN folder:

<u>Quotefile File Drag & Drop Utilities</u>

FileFix.exe (Repairing Historical Quotefiles)

This utility will automatically examine and repair your quotefiles (*.day files), on an individual basis.

Move your mouse across the icons at the top of the MAWIN main window, and find the **Repair Historical Quotefile** icon , as indicated by the dropdown.   (Pause for a moment over each icon, and a dropdown description will appear.)

You may find the icon is inactive.   It will activate when you bring up a quote plot window (see Plotting Quotes).   Then, when you click the icon, the quote being plotted will be repaired.

The repair will: eliminate duplicate dates, by selecting the best quote for that date for retention; eliminate unusable data;   and prompt you for permission to discard data which changes by more than 100% from the smoothed value of previous data (we plan to make this percentage configurable in the near future).

A copy of your quotefile will be saved before these changes are made, and if you need to recover to the pre-FileFix version of your file, select Tools/Recover Pre-FileFix file.   This tool will be active from the QuoteList window.   Be sure to select the file you wish to recover by highlighting it in the QuoteList.   (This will be the default right after FileFix has been used.)

FileDrag.exe
Drop target file
for appends

To combine ASCII files containing historical quote data (like your *.day files), you will first drop the target file into **FileDrag.exe**, then drop additional files into **FileDrop.exe**, and when you are done, select **FileClos.exe** to close your target file to further additions.

This will all be done **from your MAWIN folder**, and using Windows 95 explorer or equivalent as a source for the files to drag.

FileDrag.exe is identified as:
Drop target file
for appends

FileDrop.exe is identified as:
Drop file to
append

FileClos.exe is identified as: :
Close target
file to
appends

Your target file is the file you wish to update.   For instance, to make additions to the Dow Jones Industrial Averages, drop \quotes.day\$indu.day into the icon **Drop Target File for Appends.**
FileFix.exe will save a copy of   \quotes.day\$indu.day in \quotes.day\$indu.rec   If you want to restore the original at anytime, just copy or rename, or use FileRec.exe from within MAWIN as follows.   In a quotelist window, and with $indu selected, select Tools/Recover Pre-FileFix file.

You can use this set of utilities to merge data from any source of data, but the data must be loosely formatted like *.day files.   If you are merging data for a different format, examine a *.day file, and convert your file to that format.   You do not need the headers, etc., but you must have the **date, high, low, close, volume, and timestamp** in the correct order (this order).   If necessary, you may find a spreadsheet program very useful in reformatting.   You can import your ASCII (text) file, easily move or duplicate columns, and save the results in text form.

The minimum data is: **date**; **high**, **low**, **close**.   **Volume**, and **timestamp** are optional.   If you only have close data, duplicate the close in the high and low.   Other data is not usable at this time, but hang onto it, it may be added in the near future, and you will be able to merge it in.

Mathematical Analysis

There are currently two types of mathematical analysis available:

Least Squares Fits (LSF)   Includes Polynomial or Fourier or both LSF

Simple Moving Average (SMA)   An averaging or smoothing algorithm, which may help you see trends

Least Squares Fits (LSF)

Least Squares is a mathematical method for arriving at a formula which fits the behavior of a function, with coefficients which are those which produce the Lowest (or least) of the Sum or the Squares of the error from the actual data (the lowest RMS error).   We'll say no more about that, and we'll all be glad.

There are two types of fits which may be selected and combined, which both use a LSF technique, and they are a Polynomial Fit and a Fourier Fit.

Both types of fits will produce mathematical representations of stock quote fluctuations which are very close to the actual data *within the bounds of the fit*.   The fit will be calculated for the range of data displayed in the stock plot window at the time the fit is calculated.   You can, for instance, select a range of data for display which excludes the most recent 3 months; calculate a fit; and then display all the data.   The fit will show the calculated performance for the security for what it thinks is the future.   When you find a setup which does well, you could then use the same setup to compute performance over all the data, and then rake in the cash!

Not so fast.   Predicting the future mathematically is not all that easy.   It is a characteristic of a mathematical Least Squares Fit that it produces a formula which is highly optimized for in-bounds data, and it is not necessarily valid for out-of-bounds data (the future or the past… ie: data outside of the range of the screen shown when the fit was calculated).   However, if there are trends in the performance of the security, the curve fit may be useful in identifying those trends.

The Fourier Fit is particularly intriguing.   It fits a series of sinusoids (waveforms) of increasing frequency to the data, and can easily follow the rhythmic up and down motion of the market.

Proceed with caution.   If I could promise that these techniques will predict the market, I wouldn't be selling this program.   But then, I haven't spent much time testing, so have fun trying, and let me know if you find an approach which works.

Polynomial Least Squares Fits (LSF)

A polynomial is a formula which includes an offset or DC term, a linear or 1st order term, and successively higher order terms. Such as:

f(t) = a0 + a1 . t1 + a2 . t2+ a3 . t3+ a4 . t4+ a5 . t5+ .....

(t is scaled time, or date, and f(t) is the predicted value of the security)

The order of the polynomial is the small number shown on the last (and highest order) term used.

A 1st order polynomial fit is also referred to as a linear regression, because it only includes a bias and a linear term, and is arrived at by regressing the sum of the squares of the error from the data.

Ho-humm...the point is, you can select the order of the polynomial from the **Mathematical Analysis Setup Box**, which is invoked by selecting the **Mathematical Analysis** icon .

From the setup box, you can also select either **PolyFit Ena**,   or **FourFit Ena**, or both.

I like to use a 1st or 2nd order polynomial fit to track linear trends, and superimpose (use also) a fourier fit of order 8 or higher to track the highs and lows.

The order and the **PolyFit Ena** with **FourFit Ena** unchecked are the only setup required for a Polynomial fit.   Note that low order fits will not follow the data well, and too high an order will be noisy, and could take a while to compute.

When you select OK the LSF will be computed (which may take a number of seconds).

To see the results, you must have **LSF Curve Fit** checked in the Analysis Options Setup Box, invoked by the **Analysis Display Options** icon on the control bar.

Fourier Least Squares Fits (LSF)

A fourier series is a formula which includes an offset or DC term, a series of sine and cosine terms of successively higher frequency.   Such as:

f(t) = a0 + a1 . cos(w.t) + b1 . sin(w.t) + a2 . cos(2.w.t) + b2 . sin(2..t) + a3 . cos(3.w.t) + b2 . sin(3..t) + etc.

A fourier series can duplicate *any* waveform.   As you include higher terms in the series, the fit will become closer to the waveform being fit (in our application, closer to the stock quote history).

The order of the series is the small number shown on the last (and highest order) term used.

You can select the order of the fourier fit from the **Mathematical Analysis Setup Box**, which is invoked by selecting the **Mathematical Analysis** icon .

From the setup box, you can also select either **PolyFit Ena**,   or **FourFit Ena**, or both.

I like to use a 1st or 2nd order polynomial fit to track linear trends, and superimpose (use also) a fourier fit of order 8 or higher to track the highs and lows.

Simple Moving Average (SMA)

The SMA is a moving average of the quotes data, or a data smoothing process.

To enable the SMA, check **Simple Moving Average** the Analysis Options Setup Box, invoked by the **Analysis Display Options** icon on the control bar.

The period of the averaging is also selectable from this box.

Some believe that if you smooth the data in this manner with a standard period of about 21 days, when the quote crosses the SMA, a trend is indicated.

For example, if the stock is rising, the SMA will lag the rising trend, and if the stock rolls over and begins a downward trend, it will cross the SMA at a certain point.   This crossover *may* signal a strong new trend.

You can try SMA's with different periods, and observe the effectiveness of this technique using your historical data.   Use of the DJIA since 1901 might be interesting (file $indu.day).

Electronic Registration

For this version, you must log into your Internet Server with an external Dial-Up Adapter or other suitable software to establish a Winsock connection prior to initiating electronic registration.

This product is offered for a 45 day trial period.   You may register by E-Mail at any time during or after that period, but the program will stop all but registration activities after 45 days.   Electronic registration is built-in.

Unfortunately, you must send in your registration fee by mail.   Be sure to send a copy of your registration screen (which will print on your printer).

You may initiate electronic registration the 1st time you run MAWIN (by answering **Yes** to the prompts), or by selecting **Options/Registration Window**.   Carefully fill in all the information, including your E-Mail address.   When all fields are correct, and **OK** is selected, a last chance prompt will appear for electronic registration.   If you are logged into your Internet Server at this time, initiate electronic registration.

Notice there is a **Registration Code** which is unique to your installation.   When your payment and your electronic registration request are both received, an **Authorization Code** will be E-Mailed to you.   Enter it in the Registration Information Box (**Options/Registration Window**), and select the **Auth** button.   When Registration Status changes to **Authorized**, you are all set.   Select **OK**.   Then, we recommend you exit the MAWIN program, and backup the MAWIN installation.

We are only asking $25 US for single user home use of this version.   For companies, $100 per single user.   Your Authorization Code will be sent by E-Mail when your payment is confirmed.   No credit cards yet.   REGISTER NOW, and your Authorization Code will work on all version 1.X releases.   This fee will be considered a handling fee, and non-refundable. For this low price, Tech Support cannot be included (but may be granted initially), and hopefully none should be required.

See the License Agreement for further details.   It will appear the first time you run MAWIN, and can be recalled from **Options/Show License Agreement.**

Daily Download Icon

Daily
Download

From your MAWIN folder, you may select the *Daily Download* icon, which will load MAWIN, and initiate a daily download, if required.   If you examine the properties of this icon, you will see the /download /wait 20 parameters.

/download causes MAWIN to open in download mode, where the program will terminate if the time is earlier than 5:00 PM, or if a download has already been accomplished that day.

/download will also terminate without further action on weekends.

(We plan to make the actions of the /download option configurable soon, for time, and holidays, but it is fixed now.)

The /wait parameter provides a wait before downloading begins, of a setable time (20 seconds).   This provides time for your automatic server login to complete in your dial-up adapter.   If the MAWIN download commences before you are logged in, you may receive Winsock errors.   You may want to cure this by increasing the delay.

Update Download Icon

Update
Download

From your MAWIN folder, you may select the *Daily Update* icon, which will load MAWIN, and initiate a daily update, as required.   If you examine the properties of this icon, you will see the /update /wait 20 parameters.

/update causes MAWIN to open in download update mode, where the program will unconditionally perform a download.   However, built-in logic will prevent *.day files from appending more than one quote per day.

This feature is useful to check for and obtain quotes which were missed in an earlier daily download, without appending redundant data to already updated files.   For example, obtaining fund quotes later in the evening.

The /wait parameter provides a wait before downloading begins, of a setable time (20 seconds).   This provides time for your automatic server login to complete in your dial-up adapter.   If the MAWIN download commences before you are logged in, you may receive Winsock errors.   You may want to cure this by increasing the delay.

File Open Command

To select a file for opening, single click the left mouse key on file open icon.   The file open dialog box appears with a default of *.qtl files.   A list of quotefiles (.qtl) files appears. Double click on the quotefile you wish to open.

File Open Icon

To select a file for opening, single click the left mouse key on file (top left), then single click open.   The file open dialog box appears with a default of *.qtl files.   A list of quotefiles (.qtl) files appears.   Double click on the quotefile you wish to open.

Edit Copy Command

Standard Windows copy paradigm may be used in MAWIN textual windows.

Edit Cut Command

Standard Windows Cut & Paset commands may be used to edit MAWIN text windows where appropriate.

Edit Paste Command

Standard Windows Cut & Paset commands may be used to edit MAWIN text windows where appropriate.

File Exit Command

This will save a list of open windows and location/size, and terminate the MAWIN program.

File Open Command

Standard Windows dialog which may be used to open *.qtl, *.day, and other MAWIN files.

File Print Command

You may use this command to print copies of your plots.   File Print Setup will provide Portrait or Landscape orientation selection.

File Save Command

When enabled, this command will save MAWIN textual window changes.

File Save As Command

When enabled, this command will save a copy of MAWIN textual windows.

Windows Keys

Choose from the following list to review the keys used in Windows:

[Cursor Movement Keys](#)
[Dialog Box Keys](#)
[Editing Keys](#)
[Help Keys](#)
[Menu Keys](#)
[System Keys](#)
[Text Selection Keys](#)
[Window Keys](#)

Cursor Movement Keys

Key(s)	Function
DIRECTION key	Moves the cursor left, right, up, or down in a field.
End or Ctrl+Right Arrow	Moves to the end of a field.
Home or CTRL+Left Arrow	Moves to the beginning of a field.
PAGE UP or PAGE DOWN	Moves up or down in a field, one screen at a time.

Dialog Box Keys

Key(s)	Function
TAB	Moves from field to field (left to right and top to bottom).
SHIFT+TAB	Moves from field to field in reverse order.
ALT+letter	Moves to the option or group whose underlined letter matches the one you type.
DIRECTION key	Moves from option to option within a group of options.
ENTER	Executes a command button.
	Or, chooses the selected item in a list box and executes the command.
ESC	Closes a dialog box without completing the command. (Same as Cancel)
ALT+DOWN ARROW	Opens a drop-down list box.
ALT+UP or DOWN ARROW	Selects item in a drop-down list box.
SPACEBAR	Cancels a selection in a list box.
	Selects or clears a check box.
CTRL+SLASH	Selects all the items in a list box.
CTRL+BACKSLASH	Cancels all selections except the current selection.
SHIFT+ DIRECTION key	Extends selection in a text box.
SHIFT+ HOME	Extends selection to first character in a text box.
SHIFT+ END	Extends selection to last character in a text box

Editing Keys

Key(s)	Function
Backspace	Deletes the character to the left of the cursor.
	Or, deletes selected text.
Delete	Deletes the character to the right of the cursor.
	Or, deletes selected text.

Help Keys

Key(s)	Function
F1	Gets Help and displays the Help Index for the application. If the Help window is already open, pressing F1 displays the "Using Windows Help" topics.
	In some Windows applications, pressing F1 displays a Help topic on the selected command, dialog box option, or system message.
SHIFT+F1	Changes the pointer to so you can get Help on a specific command, screen region, or key. You can then choose a command, click the screen region, or press a key or key combination you want to know more about.
	(This feature is not available in all Windows applications.)

Menu Keys

Key(s)	Function
Alt	Selects the first menu on the menu bar.
Letter key	Chooses the menu, or menu item, whose underlined letter matches the one you type.
Alt+letter key	Pulls down the menu whose underlined letter matches the one you type.
LEFT or RIGHT ARROW	Moves among menus.
UP or DOWN ARROW	Moves among menu items.
Enter	Chooses the selected menu item.

System Keys

The following keys can be used from any window, regardless of the application you are using.

Key(s)	Function
Ctrl+Esc	Switches to the Task List.
Alt+Esc	Switches to the next application window or minimized icon, including full-screen programs.
Alt+TAB	Switches to the next application window, restoring applications that are running as icons.
Alt+PrtSc	Copies the entire screen to Clipboard.
Ctrl+F4	Closes the active window.
F1	Gets Help and displays the Help Index for the application. (See <u>Help Keys</u>)

Text Selection Keys

Key(s)	Function
SHIFT+LEFT or RIGHT ARROW	Selects text one character at a time to the left or right.
SHIFT+DOWN or UP	Selects one line of text up or down.
SHIFT+END	Selects text to the end of the line.
SHIFT+HOME	Selects text to the beginning of the line.
SHIFT+PAGE DOWN	Selects text down one window.
	Or, cancels the selection if the next window is already selected.
SHIFT+PAGE UP	Selects text up one window.
	Or, cancels the selection if the previous window is already selected.
CTRL+SHIFT+LEFT or RIGHT ARROW	Selects text to the next or previous word.
CTRL+SHIFT+UP or DOWN ARROW	Selects text to the beginning (UP ARROW) or end (DOWN ARROW) of the paragraph.
CTRL+SHIFT+END	Selects text to the end of the document.
CTRL+SHIFT+HOME	Selects text to the beginning of the document.

Window Keys

Key(s)	Function
ALT+SPACEBAR	Opens the Control menu for an application window.
ALT+Hyphen	Opens the Control menu for a document window.
Alt+F4	Closes a window.
Alt+Esc	Switches to the next application window or minimized icon, including full-screen programs.
Alt+TAB	Switches to the next application window, restoring applications that are running as icons.
Alt+ENTER	Switches a non-Windows application between running in a window and running full screen.
DIRECTION key	Moves a window when you have chosen Move from the Control menu.
	Or, changes the size of a window when you have chosen Size from the Control menu.

Quotelist

Quotelists are files containing a list of stocks of interest.   They are used for a variety of purposes, including downloading stock or security quotes conatined in the quotelist, or just selecting a security from the quotelist for historical plotting.

Quotelists are named by the convention *.qtl.   The star is may be given a functional name, such as "Watch.qtl", which would contain a list of stocks of primary interest, or Funds.qtl, or just Stocks.qtl.

There are several preloaded .qtl files provided with MAWIN.   You may modify them by adding or deleting securities, or you may create your own.

You may open *.qtl files using the file open dialog within MAWIN, and select historical quotefiles for viewing.

Quotefile

Quotefiles are ascii files containing historical stock quotes.   They usually have a name composed of the symbol with the required .day extension.   Such as: dis.day

Quotelist Configuration File

This file controls the behavior of downloads for the named quotelist.

The Configuration file must have the same root name as the Quotlist file.

For example, Watch.qtl is the quotelist file, and Watch.qcf is the quotelist configuration file.

All .qcf files must be located in the subdirectory \QuoteList Configuration Files (off the main MAWIN directory).

Download Command File

There is one Download Command File, which controls which quotelist files will be used in the download, and in what order.