

FUND MANAGER 5.1 - Unregistered Version

Please see [Registration Information](#)

Fund Manager is a tool to help you visualize, with both graphical and numerical information, how well your mutual fund investments are performing. Fund Manager was designed specifically for mutual funds, but may also be used to track the performance of your stock and bond investments.

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Overview

Fund Manager will provide you with a wide variety of both graphical and numerical information to help you monitor your investments. The program can plot many different types of graphs over any time period specified. Fund Manager can also overlay markers on these plots showing where you invested and received distributions. These markers are useful to help you see at what price you made your investments. The graph styles of share price plus accumulated distributions are especially useful to visually see the true performance of your investments, since these graphs takes into account the lowering of share price when distributions are made.

Fund Manager can also calculate and display portfolio yield, distributed fund yield, and re-invested fund yield for your investments, also over any specified period of time. **All reported yields are average annualized.** The two 'fund' yields give information on how well the mutual fund performed, independent of when you invested. The 'portfolio' yield is a function of both 'fund' yield and when you made your investments. Portfolio yield gives you information for your specific investment, and lets you see numerically how well you timed the market, depending upon whether or not you outperformed the fund yields.

Fund Manager also allows the user to set up different portfolios to monitor. For example, you may have one portfolio named 'stocks', and another named 'mutuals'. Within Fund Manager (or from the command line) you can either open individual investments one at a time or open a portfolio. Portfolios allow the user to save a **user-defined work-space**. Upon opening a portfolio you will automatically have all the investments opened and all your desired options set, just like they were when you last saved that portfolio.

Fund Manager also provides a user-friendly interface to allow the user to update the required information for each investment. Fund Manager requires that the user enter investments, sales, dividends, capital gains, and share price updates. Fund Manager will only report numerical yields when it has enough share price information to report an accurate value. In other words, the more often the share prices are updated, the wider variety of yields that will be reported. If a numerical yield is reported to be "N.A." this means that there is not sufficient information for this yield to be calculated. See Yield Calculations for more information on how Fund Manager calculates yields.

Fund Manager can optionally import prices from a downloaded Prodigy file, America Online portfolio, or CompuServe file. This makes updating all of your fund prices painless.

Fund Manager can display 1, 4, or 9 investments simultaneously, side by side, to allow the user to easily compare performance between investments.

The maximum number of investments that can be simultaneously open under one instance of Fund Manager is 25.

Graphing Options

Fund Manager can display 8 different types of graphs. All graphs except the Portfolio Value Graph can be displayed over an specified time period. The graph types are:

<u>Portfolio Value Graph</u>	Sum value of all opened investments versus time
<u>Fund Value Graph</u>	Investment value versus time
<u>Share Price Graph</u>	Share price versus time
<u>Price plus acc. dist. Graph</u>	Sum of distributions and price versus time
<u>Moving Average Share Price</u>	A moving average of the share price versus time
<u>Moving Average Price plus acc. dist</u>	A moving average of the sum of distributions and price versus time
<u>Overlaid Share Price</u>	Both the share price and the moving average of the same versus time, overlaid on the same graph
<u>Overlaid Price plus acc. dist</u>	Both the sum of distributions and share price with the moving average of the same versus time, overlaid on the same graph

The number of weeks to average is adjustable by selecting Change weeks.

To change the range of dates being graphed see the menu command View/Dates.

Share Price Graph

With this graphing option selected the graphs will show how the Net Asset Value (NAV) of the mutual fund changed with time. The vertical axis represents the share price and is in units of dollars. The horizontal axis displays the date. The vertical axis automatically scales to cover from the minimum to the maximum share price achieved during the displayed period. The top vertical axis label will specify the maximum share price, and the bottom vertical axis label will specify the minimum share price achieved during the displayed period.

To change the range of dates being graphed see the menu command View/Dates.

Investment Value Graph

With this graphing option selected the graphs will show how the value of the mutual fund changed with time. The vertical axis represents this value and is in units of dollars. The horizontal axis displays the date. The vertical axis automatically scales to cover from the minimum to the maximum value achieved during the displayed period. The top vertical axis label will specify the maximum value, and the bottom vertical axis label will specify the minimum value achieved during the displayed period.

To change the range of dates being graphed see the menu command View/Dates.

Portfolio Value Graph

With this graphing option selected the graph will show how the sum value of all currently opened funds changed with time. When this menu command is selected, the number of displays will automatically be set to one, since there is only one unique graph of this type. The vertical axis represents this value and is in units of dollars. The horizontal axis displays the date. The vertical axis automatically scales to cover from the minimum to the maximum value achieved during the displayed period. The top vertical axis label will specify the maximum value, and the bottom vertical axis label will specify the minimum value achieved during the displayed period.

The date range for this graph is not adjustable. It is always from the earliest date of any open fund to the latest date of any open fund.

Share Price plus Accumulated Dividend/Capital Gains Graph

With this graphing option selected the graphs will show how the Net Asset Value **summed with** the fund's distributions since inception (NAV + DIV) changed with time. The vertical axis represents this sum and is in units of dollars. The horizontal axis displays the date. The vertical axis automatically scales to cover from the minimum to the maximum sum achieved during the displayed period. The top vertical axis label will specify the maximum sum, and the bottom vertical axis label will specify the minimum sum achieved during the displayed period. This graph also has additional vertical axis labels on the right vertical axis. These values are percent gain or loss since the beginning of the displayed period (the left-most side of the graph).

This graph attempts to display the true performance of the fund. By adding the distributions to the share price, this graph eliminates fluctuations seen in the share price graph due to distributions.

To change the range of dates being graphed see the menu command View/Dates.

Moving Average-Price Graph

This graph shows the moving average of the Share Price Graph.

The number of weeks to average is adjustable by selecting Change weeks. The higher the number of weeks the graph is averaged for, the longer it will take to calculate the averages, and draw the graph.

To change the range of dates being graphed see the menu command View/Dates.

Moving Average-Price plus Distributions Graph

This graph shows the moving average of the Price plus acc. dist. graph.

The number of weeks to average is adjustable by selecting Change weeks. The higher the number of weeks the graph is averaged for, the longer it will take to calculate the averages, and draw the graph.

To change the range of dates being graphed see the menu command View/Dates.

Overlaid-Price Graph

This graph plots both the moving average of the share price and the share price itself on the same graph. The number of weeks to average is adjustable by selecting Change weeks. The higher the number of weeks the graph is averaged for, the longer it will take to calculate the averages, and draw the graph.

To change the range of dates being graphed see the menu command View/Dates.

Overlaid-Price Plus Distributions Graph

This graph plots both the share price plus the accumulated distributions and the moving average of the same on one graph.

The number of weeks to average is adjustable by selecting Change weeks. The higher the number of weeks the graph is averaged for, the longer it will take to calculate the averages, and draw the graph.

To change the range of dates being graphed see the menu command View/Dates.

Changing Weeks

This dialog box allows you to change the number of weeks the moving average graphs will be averaged over. Only positive values for weeks are acceptable. For large values of weeks to average, the time to refresh the screen will increase, due to the longer calculation times.

Menu Commands

File:

- New . . .
Creates a new mutual fund, stock, or bond investment
- Open . . .
Opens a mutual fund or stock that already exists
- Close top
Closes the top file
- Close bottom
Closes the bottom file
- Close all
Closes all open files
- Open portfolio . . .
Opens a pre-defined set of funds, with a saved set-up
- Close portfolio
Closes all open funds and the portfolio
- Save portfolio
Saves the portfolio under its current name
- Save portfolio as . . .
Saves the portfolio under a new name
- Printer Setup . . .
Allows the user to customize the printer settings
- Print
Prints the currently displayed screen to the printer
- Exit
Quits Fund Manager

Edit:

All operations apply to the top fund, which can be changed under the "Funds/Rearrange order" menu item, or by double clicking on the fund you want to move to the top

- Update price
 - Single fund . . .
Updates the price of the top fund for any date
 - Multiple funds . . .
Updates the price of as many open funds as you want
 - Multiple prices - Single fund . . .
Updates the price of the top fund for any date
 - Multiple prices - Multiple funds . . .
Updates the price of as many open funds as you want
 - Import from Prodigy file (*.csv) . . .
Imports prices from downloaded Prodigy file and updates all open files
 - Import from America Online portfolio . . .
Imports prices from a downloaded America Online portfolio and updates all open files
 - Import from CompuServe . . .
Imports prices from a downloaded CompuServe file and updates all open files
- Delete price
 - Single fund . . .
Deletes a price from top fund

All funds . . .

Deletes a price from all open funds

Buy/Sell . . .

Records an investment or the sale of shares for the top fund

Delete buy/sell . . .

Deletes an investment or sale for the top fund

Dividend/Cap. Gains . . .

Records either a distributed or reinvested dividend and/or capital gain transaction. (Capital gains and dividends are treated the same, so they are both recorded with this command. Capital gains may either be put together in one entry with dividends, or entered as a separate entry.)

Delete dividend/C.G. . . .

Deletes a dividend and/or capital gain transaction

Fund name/symbol . . .

Changes the name or symbol of the top fund

Selected colors . . .

Changes the color scheme used on the display for each graph style. This is memorized in the portfolio.

Selected fonts . . .

Changes the fonts used on the display and printer. This is memorized in the portfolio.

Screen options . . .

Allows the user to customize pen widths and marker sizes used for the screen.

Printer options . . .

Allows the user to customize pen widths and marker sizes used for the printer.

View:

Data . . .

Displays the recorded prices, investments, sales, and dividends for any open fund

Dates . . .

Change the range of dates for both the graphs and numerical yields. This information is recorded in the portfolio.

Graphs only

Displays graphs, turns off numerical yields.

Yields only

Displays yields and other numerical information, turns off graphs

Graphs & Yields

Displays both graphs and numerical yields along the top of each graph

Number of displays

Choose to display 1, 4, or 9 funds simultaneously. This information is recorded in the portfolio.

Auto Screen Redraw

When turned on the screen redraws whenever the users selects a change. If you turn this option off, "Repaint Screen" can be used when the user would like the screen to be updated. This is a useful feature if several changes are desired and the screen updates are slow on the users computer. This option is recorded in the portfolio.

Confirmation notices

When turned on the user will receive confirmation notices, or message boxes after each recorded entry. To speed up data entry the user may turn off this feature, thus bypassing the message boxes. This option is recorded in the portfolio.

Markers

settings are recorded in the portfolio

- Buy Turn on/off buy markers (circles) for all open funds
- Sell Turn on/off sell markers (triangles) for all open funds
- Dividend Turn on/off dividend(cap. gain) markers (crosses) for all open funds
- All Turn on all marker types for all open funds
- None Turn off all marker types for all open funds

Graph type:

Portfolio value

Graphs the cumulative dollar value of all open funds versus time.

Fund value

Graphs the dollar value of your funds versus time.

Share price

Plots the share value of each fund versus time.

Price & acc. dist.

Plots the share value plus all accumulated dividends since the beginning of the graph. The right axis displays this value as a percentage of the value at the beginning of the graph.

Moving average

Share price

moving average of price versus time

Price & acc. dist.

moving average of price plus distributions versus time

Overlaid

Share price

both share price and moving average of the same versus time

Price & acc. dist.

both price plus distributions and moving average of the same versus time

Change weeks . . .

change the number of weeks used for calculating the moving average plots

Yield type:

3 and 6 month, 1, 2, 3, 5, and 10 year, and yield since inception are all calculated up TO the latest date, or to any date specified under the "View/Dates" menu item.

Portfolio

Numerical yields are the portfolio yields

Fund

Distributed dividends:

Numerical yields are the distributed fund yields

Re-invested dividends:

Numerical yields are the re-invested fund yields.

Funds:

Rearrange order . . .

Rearrange the displayed order of the funds. (Many edit commands operate on the top fund.)

Help:

Contents . . .

Displays this help file

About . . .

Gives author and version information for Fund Manager

Repaint screen:

Updates the screen

Creating a New Fund

To create a new fund, fill in all fields of this dialog box:

- New Fund Name:** Enter the name of the new fund in this box. (Example: Financial Industrial Income)
- New Fund Symbol:** Enter the new fund's symbol in this box. (Example: FIIX)
- Opening date:** Enter the date of your initial investment in this fund. (Example: 11/25/1991)
- Opening share price:** Enter the price of each share on this date of your initial investment. (Example: 10.77)
- Opening shares:** Enter the number of shares purchased at this price on this date. (Example: 92.851)

When you have filled in all of the fields click on the 'OK' button. You will then be prompted for a path and filename to be used for saving this investment. Also see, [Saving a New Fund](#).

Opening a Fund

This dialog box allows you to open an existing fund. Only files with the filename extension of 'dat' are shown, since this is the required filename extension for Fund Manager investment files. To open any fund simply change to the desired directory and either double click on the desired fund, or highlight the fund and select 'OK'.

Opening a Portfolio

This dialog box allows you to open an existing portfolio. Only files with the filename extension of 'mm4' are shown, since this is the required filename extension for Fund Manager portfolio files. To open any portfolio simply change to the desired directory and either double click on the desired portfolio, or highlight the portfolio and select 'OK'.

Saving a New Fund

The only time that you have to specify to save a fund is when it is first created and you are prompted for the pathname and filename for the fund to be saved. After a fund has been created the changes are always saved automatically, as soon as the fund is modified. When entering the pathname and filename for the newly created fund, you can change directories to the desired location by double clicking on the directory in the list box, or highlighting the directory and choosing 'OK'. Once you are at the desired directory location you can fill in the edit box with the desired base filename. **This filename should not have an extension!** Fund Manager will automatically add the appropriate extension (dat), you only need to enter the base filename.

Example: If given a base filename of "IBM", Fund Manager will add the ".dat" extension to generate a filename of "IBM.dat", which will be used to save your newly created fund.

Comment: If you would like to change the name of your investment after you have saved it, you must manually rename or move 3 files that are associated with each investment. All 3 files will have the same base name, but different extensions of "dat", "inv", and "div".

Saving a Portfolio

This dialog box allows the user to save a user-defined workspace for easy retrieval next time Fund Manager is used. This user defined workspace is called a portfolio. A user may define and save as many portfolios as desired. This dialog box is used to save a portfolio to a new filename. When entering the pathname and filename for the new portfolio to be saved, you can change directories to the desired location by double clicking on the directory in the list box, or highlighting the directory and choosing 'OK'. Once you are at the desired directory location you can fill in the edit box with the desired filename. **This filename should not have an extension!** Fund Manager will automatically add the appropriate extension (mm4), you only need to add the base filename.

Example: If given a base filename of "stocks", Fund Manager will add the ".mm4" extension to generate a filename of stocks.mm4, which will be used to save your newly created portfolio.

Updating a Single Price for One Fund

This dialog box allows price information to be updated for the topmost fund currently being displayed. Both edit boxes must be filled in:

Date: The date for which the price information is to be updated. (Example: 12/20/1992)

Price: The price of the fund on this date. (Example: 11.21)

Select the '**OK**' button to complete the update process.

Comment: You may use the shortcut keys of + or - to increment and decrement the date.

Updating a Single Price for Multiple Funds

This dialog box allows price information to be updated for multiple opened funds simultaneously. Enter the date the price information is to be updated for in the date edit box. Uncheck the check boxes associated with the funds you do not wish to update. Fill in the price information for the funds you do wish to update.

Select the '**OK**' button to complete the update process for all funds whose checkbox is checked.

Comment: You may use the shortcut keys of + or - to increment and decrement the date.

Updating Multiple Prices for One Fund

This dialog box allows rapid entry of multiple prices for a particular fund. Both edit boxes must be filled in:

Date: The date for which the price information is to be updated. (Example: 12/20/1992)

Price: The price of the fund on this date. (Example: 11.21)

Select the '**Update**' push button to update the current price information. After selecting this push button, the date will automatically be incremented by one day, and you may continue entering price information.

Select the '**Stop**' push button to quit updating prices.

Comment: You may use the shortcut keys of + or - to increment and decrement the date.

Updating Multiple Prices for Multiple Funds

This dialog box allows rapid entry of multiple prices for as many open funds as you choose. Enter the date the price information is to be updated for in the date edit box. Uncheck the check boxes associated with the funds you do not wish to update. Fill in the price information for the funds you do wish to update.

Select the **'Update'** push button to update the current price information for all funds whose checkbox is checked. After selecting this push button, the date will automatically be incremented by one day, and you may continue entering price information.

Select the **'Stop'** push button to quit updating prices.

Comment: You may use the shortcut keys of + or - to increment and decrement the date.

Importing Prices from Prodigy

Fund Manager can import prices from a Quote Track file in the *.csv format downloaded from Prodigy. You need to provide Fund Manager with the complete path and filename where the Quote Track has been saved.

To import prices from Prodigy into Fund Manager follow these steps (steps 2 and 3 only need to be done once if you haven't already done so):

(Red items are performed inside Prodigy, black items are performed from within Fund Manager.)

1. Sign on to Prodigy. Jump to "**Quote Track**".
2. If you don't already have a quote track set up, you will be put into Quote Track Maintenance, where you can add funds/stocks to your Quote Track using the "**Edit/Add Item . . .**" menu command.
3. Once you have a Quote Track set up, and you have jumped to "Quote Track", you need to specify how to save the Quote Track to your hard drive. You do this in Quote Track, by choosing the "**File/Report Setup . . .**" menu command. You will be presented with a dialog box where you should choose the following items:

Range: **Entire List**

Report Type: **Closing Prices**

Destination: **File**

Once you have chosen 'File' as your destination, you will also be prompted for additional options. You should choose:

Delimited (*.csv)

No Column Headings

You will then be asked for a filename for the Quote Track to be saved as. You may give it any name you wish (example: qtrack01.csv). The Quote Track will be saved under this filename in your prodigy directory in the next step when you tell it to save this Quote Track to your hard drive.

Once you have filled in all of the options, choose "**Save settings for All Prodigy Sessions**". This procedure only needs to be done once. Once it is set up, Prodigy will remember your settings for later sessions.

4. Choose the "**File/Print**" menu command from the Quote Track session. This will save the Quote Track to your hard drive with the filename you specified in step 3. This file will be in the *.csv file format.
5. Sign off of Prodigy.
6. Start Fund Manager
7. Open all funds that you would like to update the prices for (use a portfolio to open up to 25 funds automatically). The funds must have the correct symbols assigned to them. The symbol was assigned when the fund was created, and can be edited using the "**Edit/Fund name/symbol . . .**" menu command. The symbols in Fund Manager must be the same symbols in Prodigy. This is how Fund Manager determines which funds to update.
8. Choose the menu command "**Edit/Update price/Import from Prodigy file (*.csv) . . .**" (or use the keyboard accelerator CTRL + P). This will pop up a dialog box where you can enter the complete path and filename of your downloaded Quote Track from Prodigy. For example, if your prodigy directory is c:\prodigy, and you saved your Quote Track to the file qtrack01.csv, then you would enter: c:\prodigy\qtrack01.csv. Select the 'OK' button to update the prices.

If you have the "confirmation notices" option turned on you will be informed how many funds had their prices updated successfully.

Importing Prices from America Online

Fund Manager can import prices from a portfolio file that has been downloaded from America Online. This is an AOL portfolio, not to be mistaken with a FM portfolio, they're completely different. Click here to see an AOL [sample portfolio file](#). You need to provide Fund Manager with the complete path and filename where the portfolio file has been saved. Since the portfolio, as downloaded from America Online, contains no date information, you will also need to enter the appropriate date, that being the date to apply these prices to.

To import prices from America Online into Fund Manager follow these steps (step 2 only needs to be done once if you haven't already done so):

(Red items are performed inside America Online, black items are performed from within Fund Manager.)

1. Sign on to America Online. Go to the keyword "**stocklink**" (use the keyboard accelerator CTRL + K or the menu item Go To/keyword).
2. If you don't already have a portfolio set up, you may do so from here. Simply enter the symbols of the funds/stocks that you are interested in tracking, and then once you have displayed the information for that fund/stock, select the "**Add to portfolio**" button. Repeat this procedure until you have added all the funds/stocks that you are interested in.
3. When you are ready, display your portfolio by selecting the "**Display Portfolio**" push button.
4. Next, save your portfolio to your hard disk. If you are not already displaying your portfolio, do so. You can use the keyword "**portfolio**" to display your portfolio from anywhere in America Online. Select the push button "**Save Portfolio**". This will present you with a dialog box allowing you to specify any path and filename for your portfolio that you choose.
5. Sign off of America Online.
6. If Fund Manager isn't already running, start it.
7. Open all the funds that you would like to update the prices for (use a FM [portfolio](#) to open up to 25 funds automatically). The funds must have the correct symbols assigned to them. The symbol was assigned when the fund was created, and can be edited using the "**Edit/Fund name/symbol . . .**" menu command. The symbols in Fund Manager must be the same symbols in your America Online portfolio. This is how Fund Manager determines which funds to update.
8. Choose the menu command "**Edit/Update price/Import from America Online portfolio . . .**" (or use the keyboard accelerator CTRL + R). This will pop up a dialog box where you can enter the date and complete path and filename of your downloaded America Online portfolio. For example, if you saved your portfolio in the path c:\waol, with the filename prices.txt, then you would enter: c:\waol\prices.txt. Enter the date to update the prices on. Select the 'OK' button to update the prices.

If you have the "confirmation notices" option turned on you will be informed how many funds had their prices updated successfully.

Importing Prices from CompuServe

Fund Manager can import prices from a file that has been downloaded from CompuServe. Click here to see a [sample CompuServe file](#). You need to provide Fund Manager with the complete path and filename where the file has been saved. Since the file, as downloaded from CompuServe, contains no date information, you will also need to enter the appropriate date, that being the date to apply these prices to.

To import prices from CompuServe into Fund Manager follow these steps (step 2 only needs to be done once if you haven't already done so):

(Red items are performed inside CompuServe, black items are performed from within Fund Manager.)

1. **Start CompuServe.** From the **Services** menu, choose "**Quotes**" or select the "**Stock Quotes**" icon.
2. If you don't already have your portfolio set up, you may do so from here. Simply enter the symbols of the funds/stocks that you are interested in tracking, selecting the push button "**Add**" after each symbol.
3. Display the current prices for your portfolio by selecting the "**Get All**" push button.
4. Next, save your portfolio to your hard disk. Select the **File/Save As** menu command. This will present you with a dialog box allowing you to specify any path and filename for your portfolio that you choose.
4. **Quit CompuServe.**
6. If Fund Manager isn't already running, start it.
7. Open all the funds that you would like to update the prices for (use a FM [portfolio](#) to open up to 25 funds automatically). The funds must have the correct symbols assigned to them. The symbol was assigned when the fund was created, and can be edited using the "**Edit/Fund name/symbol . . .**" menu command. The symbols in Fund Manager must be the same symbols in your CompuServe file. This is how Fund Manager determines which funds to update.
8. Choose the menu command "**Edit/Update price/Import from CompuServe . . .**" (or use the keyboard accelerator CTRL + C). This will pop up a dialog box where you can enter the date and complete path and filename of your downloaded CompuServe file. For example, if you saved your file in the path c:\cserve, with the filename prices.txt, then you would enter: c:\cserve\prices.txt. Enter the date to update the prices on. Select the 'OK' button to update the prices.

If you have the "confirmation notices" option turned on you will be informed how many funds had their prices updated successfully.

Deleting a Single Price

This dialog box allows price information to be deleted for the topmost fund currently being displayed. There is only one edit box that needs to be filled in:

Date: The date for which the price information is to be deleted. (Example: 12/20/1992)

Select the 'OK' button to complete the deletion process.

Comment: You may use the shortcut keys of + or - to increment and decrement the date.

Deleting Prices from All Open Funds

This dialog box allows price information to be deleted for all currently opened funds for any date. There is only one edit box that needs to be filled in:

Date: The date for which the price information is to be deleted. (Example: 12/20/1992)

Select the 'OK' button to complete the deletion process.

Comment: You may use the shortcut keys of + or - to increment and decrement the date.

Recording a Buy or Sell Transaction

This dialog box records buy or sell transactions. There are four edit boxes which must all be filled in:

- Date:** The date of the purchase or sale. (Example: 12/20/1992)
Price: The share price of the fund on this date for your purchase or sale. (Example: 11.21)
Number of shares: The number of shares purchased or sold. (Example: 89.2061)
Dollars: The dollar value of your purchase or sale. (Example: 1000.00)

Select the appropriate radio button to choose either a **buy** or a **sell** transaction.

Select the '**OK**' button to record the transaction.

Comments: Fund Manager records the share price and number of shares to four significant digits. When recording a buy or sell transaction, Fund Manager updates the price information on that date. When one of the edit boxes has not been filled in, and Fund Manager has enough information to fill it in for you, it will do so as you tab to different controls in the dialog box. You may use the shortcut keys of + or - to increment and decrement the date.

Deleting a Buy or Sell Transaction

This dialog box allows a buy or sell transaction previously entered to be deleted. This dialog box affects the topmost fund currently being displayed. There is only one edit box that needs to be filled in:

Date: The date for which the transaction is to be deleted. (Example: 12/20/1992)

Select the '**OK**' button to complete the deletion process.

Comments: When deleting a buy or sell transaction, Fund Manager does not delete the **price** information on this date, only the buy or sell information is deleted. Since Fund Manager updates the price information when you **record** a buy or sell transaction, you may need to edit or delete the price information on this date. Fund Manager purposely does not delete the price information since deleting a buy or sell transaction does not automatically dictate that the price information is incorrect. You will be notified of this situation after the transaction has been deleted if you have price information recorded for this date. If you have multiple buy or sell transactions recorded on the same date, Fund Manager will delete the first listed transaction. You may use the shortcut keys of + or - to increment and decrement the date.

Recording a Dividend or Capital Gains Transaction

This dialog box records any dividend or capital gain transaction. Fund Manager does not differentiate between dividends and capital gains, it treats them identically. Check the **'Reinvested'** check box if the distributions were reinvested into the fund. When the distributions are reinvested, there are four edit boxes which must all be filled in. If the distributions were not reinvested only the **'date'** and **'dollar'** edit boxes are required.

- Date:** The date of the distributions. (Example: 12/20/1992)
- Price:** The share price of the fund on this date, the price at which shares were purchased with the distributions. (Example: 11.21)
- Number of shares:** The number of shares purchased with the distributions. (Example: 3.5682)
- Dollars:** The dollar value of the distributions.. (Example: 40.00)

Select the **'OK'** button to record the transaction.

Comments: Fund Manager records the share price and number of shares to four significant digits. When recording a reinvested distribution, Fund Manager updates the price information on that date. When one of the edit boxes has not been filled in, and Fund Manager has enough information to fill it in for you, it will do so as you tab to different controls in the dialog box. You may use the shortcut keys of + or - to increment and decrement the date.

Deleting a Dividend or Capital Gains Transaction

This dialog box allows a dividend/capital gain transaction previously entered to be deleted. This dialog box affects the topmost fund currently being displayed. There is only one edit box that needs to be filled in:

Date: The date for which the transaction is to be deleted. (Example: 12/20/1992)

Select the '**OK**' button to complete the deletion process.

Comments: When deleting a **reinvested** distribution, Fund Manager does not delete the **price** information on this date, only the distribution and associated re-investment. Since Fund Manager updates the price information when you **record** a reinvested distribution, you may need to edit or delete the price information on this date. Fund Manager purposely does not delete the price information since deleting a reinvested distribution does not automatically dictate that the price information is incorrect. You will be notified of this situation after the transaction has been deleted if you have price information recorded for this date. If you have multiple distribution transactions recorded on the same date, Fund Manager will delete the first listed transaction. If you are deleting a reinvested distribution, Fund Manager will delete both the distribution and the associated investment. You may use the shortcut keys of + or - to increment and decrement the date.

Changing a Fund Name or Symbol

This dialog box allows the user to edit the fund name and symbol for the topmost fund currently being displayed. The contents of both edit boxes will be updated:

Fund name: Enter the desired name of the fund in this box. (Example: Financial Industrial Income)

Fund symbol: Enter the fund's symbol in this box. (Example: FIIIX)

Comments: It is important for the correct symbol to be entered when importing prices. Fund Manager compares the symbols recorded in Fund Manager with the symbols in the import file to match the correct fund with the correct price information.

Selecting Colors for the Display

This dialog box allows you to customize the look of each different graph type. These color selections will be saved in your portfolio. Choose the item you would like to edit the color for from the drop-down combination box. The sample graph shows your current settings, and is changed to reflect any changes you make. For each graph type you can edit the following items:

background	background color for graph
frame	line color used for drawing the border of the graph
line	color used for drawing data line, tic marks, and on-graph text
buy marker	line color used for drawing buy markers
sell marker	line color used for drawing sell markers
dividend marker	line color used for drawing dividend markers

For the price (NAV) and price plus distribution (NAV + DIST.) style graphs you can also edit the color of the moving average line used in the overlaid style graphs:

overlaid line	line color used for drawing the moving average line in the overlaid style graphs
----------------------	--

To make the changes take effect for the currently selected item, select the '**Change**' push button. To restore any particular item to its default value, select the '**Default**' push button. To restore all items to their default values, select the '**All defaults**' push button. When finished making changes, select the '**Done**' push button. Select the '**Help**' push button to get this help topic.

Selecting a Font for the Display and Printer

This dialog box allows the user to customize the fonts used for displaying text. Fund Manager can remember up to 6 different fonts. There are 3 fonts for each the screen and printer, one for each different number of displays. This will allow the user to make smaller fonts when the number of displays is higher, and larger fonts for easier viewing, when the number of displays is smaller. The currently selected font for the particular device (screen or printer) and number of displays (1, 4, or 9) is displayed in the top left corner. All operations in this dialog box are applied to the font for the currently selected device and number of displays.

To change the font for any number of displays or device, select the appropriate radio buttons. For the currently selected device and number of displays the available font faces are shown in the list box on the left in the "Available fonts" group. The list box in the center of the same group will be filled with the available font sizes for the highlighted face. If the highlighted face is scalable you may enter any desired point size in the edit box located in the same group. These sizes are in units of points (1/72 of an inch). A sample of the currently highlighted font face and size is displayed below the list boxes in this same group. When a new face is highlighted, or when you change the size this sample will be updated to reflect the change. If entering a new size in the edit box, to update the sample, the input focus must be moved to any other control before the sample will be updated.

The following push buttons are available on this dialog box:

- | | |
|-----------------|--|
| Done: | When finished making changes, select this button to end the dialog box |
| Change: | To apply any changes made to the font for the currently selected number of displays and device |
| Default: | To revert the font for the currently selected number of displays and device to its default. This only changes the current selection to its default, not all fonts. |
| Help: | To get this help topic |

Selecting Screen and Printer Options

This dialog box allows the user to change the following display options for the screen or printer:

Pen thickness (graphs):	The line thickness to be used for plotting data and tic marks.
Pen thickness (markers):	The line thickness to be used for drawing markers.
Div./C.G. marker size:	The size of the dividend and capital gains markers.
Buy/Sell marker size:	The size of the buy and sell markers.

All sizes are specified in units per logical inch. The number of units per logical inch for the given device (screen or printer) is displayed.

To accept any changes, click on the '**OK**' button.

To retrieve the default values, click on the '**Defaults**' button.

To quit this dialog box without making any changes click on the '**Cancel**' button.

All of these settings are stored in the portfolio.

Price/Transaction Data

This is a modeless dialog box which can remain open while performing other operations inside Fund Manager. This dialog box provides information on the share price, fund value, buy and sell transactions, and the distribution of dividends or capital gains. By choosing a fund in the bottom right list box, you can view data for each open fund. When viewing **value** data the following fields are displayed for each date that price information is available:

Date: Date of associated price
Share price (nav): The share price for this date
Shares owned: The number of shares owned on this date
Value: The value of the fund on this date

When viewing **dividend** data the following fields are displayed for each recorded distribution:

Date: Date of associated distribution
Dividend/share: The per share distribution

When viewing **investment** data the following fields are displayed for each recorded buy or sell transaction:

Date: Date of associated transaction
Price: The share price for this transaction
Shares: The number of shares bought or sold (negative indicates a sell)
Value: The dollar value of this transaction

You may use a mouse shortcut to quickly view data of interest for any displayed fund with this dialog box. By holding down the CTRL key and double clicking on any graph, the dialog box will open with the associated fund selected.

View Yields Only

When this display option is set, only numerical data is displayed. No graphs will be displayed. For each opened fund the following information will be displayed

Yields:	Pre-defined ranges of average annualized <u>yields</u>
Fund name:	Name of the fund
Yield from:	Date for beginning of yield calculations
Yield to:	Date for end of yield calculations
Inception date:	Date of first investment
Latest date:	Date of most recent share price information
Latest price:	Most recent share price
Latest value:	Most recent value

Displayed across the bottom of the screen will be sum of the latest values for all opened funds. This is labeled as the '**Portfolio value**'.

Displaying Investment Statistics/Summary

This dialog box will display the following for any highlighted fund:

Date (mm/dd/yy):	Date of buy or sell for currently highlighted fund
invested:	dollar amount of current purchase or sale, positive for purchases, negative for sales
cum. in:	sum of all purchases to this date
cum. out:	sum of all sales to this date
cum. total:	sum of all purchases minus sum of all sales to this date
value:	current value of the fund on this date
% gain:	$100 * (\text{value} - \text{cum. total}) / \text{cum. total}$

Displaying Tax Basis

This dialog box will display your cost basis for all sell transactions. Fund Manager will calculate your cost basis with either of two methods, **first in first out (FIFO)** or the **average cost** method. By selecting a fund in the bottom right list box you can display the following for each sell transaction for that fund:

Date:	Date of sell transaction
Sold:	Dollar amount of sell transaction
Basis:	Cost basis calculated with selected method
Gain:	Dollar gain

Changing Date Range for Graphs and Yields

This dialog box allows the user to change the range of dates being graphed. The displayed yields will also be updated to reflect the changed dates. With this dialog box you can adjust the date range and examine the 'inception' yield to calculate the yield for any desired time period. (The inception yield is the yield from the left axis to the right axis currently being displayed.) To change the dates being displayed enter the desired dates for the left axis in the 'FROM' edit control and the right axis in the 'TO' edit control. The 'FROM' date cannot be before the starting date of the investment. The 'TO' date can be any time after the 'FROM' date, including dates after the last data point you have entered. If the 'TO' date is later than the last data point Fund Manager will extrapolate the latest price information to the new 'TO' date. The starting date and the ending date (of most recent data point) for the topmost fund are displayed.

The changes in the 'FROM' and 'TO' dates can be applied to all open funds by selecting the appropriate radio button.

Either the topmost fund, or all funds may be set back to their full history by checking the appropriate radio button. Reverting to full history changes the date range from the fund inception to the most recent data point.

Markers

Markers are optional symbols that can be overlaid on any graph to display where you bought, sold, or received distributions. Each marker type is represented by a different color and shape. Marker size, color, and the pen widths used to draw them are all user definable. Markers preferences are also recorded in the portfolio.

Buy:	circles
Sell:	triangles
Dividend/Capital Gain:	cross

Rearranging Order of Displayed Funds

This dialog box allows the user to rearrange the order of the investments currently opened. The top fund will be displayed in the upper left corner when four or nine displays are being shown, and it will be the only fund displayed when one display is being shown. To move an investment to a different position in the stack, highlight the desired fund, and then click on one of the following buttons:

Top:	Moves the highlighted fund to the top of the stack
Bottom:	Moves the highlighted fund to the bottom of the stack
Move Up:	Moves the highlighted fund up one position in the stack
Move Down:	Moves the highlighted fund down one position in the stack

To accept any changes click on the '**OK**' button.
To cancel any changes click on the '**Cancel**' button.

Shortcut: By double left clicking on any graph you can move that graph to the top of the stack without using this dialog box.

Keyboard Shortcuts

Many menu commands are available by using keyboard accelerators. These accelerators are shown next to each menu item that has an accelerator available.

Other keyboard accelerators not shown on the main menu are:

- | | |
|--------------------------|--|
| 1 (The one key) | Changes the number of displays to 1 |
| 4 | Changes the number of displays to 4 |
| 9 | Changes the number of displays to 9 |
| + (The plus key) | In a date edit box that has the input focus the date will be incremented by one day. In the main window the number of displays will rotate up (1 - 4 - 9 - 1) |
| - (The minus key) | In a date edit box that has the input focus the date will be decremented by one day. In the main window the number of displays will rotate down (1 - 9 - 4 - 1) |

Mouse Commands

By double clicking and certain key combinations you can manipulate through Fund Manager more quickly. All functions can also be accomplished through menu commands. Here is a summary of the mouse commands:

- Double left:** Moves the chosen fund to the top of the order and sets the number of displays to 1.
- Shift - Double left:** Rotates the number of displayed investments downward. (1 - 9 - 4 - 1 displays)
- Shift - Double right:** Rotates the number of displayed investments upward. (1 - 4 - 9 - 1 displays)
- Ctrl - Double left:** Displays price/transaction dialog box with chosen fund highlighted.

Command Line Arguments

Fund Manager stores portfolios in files with the extension of 'mm4'. Fund Manager stores investments in files with the extension 'dat'. When starting Fund Manager you may provide a command line argument specifying either a portfolio (*.mm4) filename or investment (*.dat) filename to load with Fund Manager.

For example, to start Fund Manager with the portfolio "stocks.mm4" you would enter the run command:

```
c:\finance\fm.exe c:\finance\my_data\stocks.mm4
```

To start Fund Manager and have it open the investment "vent.dat" you would enter the run command:

```
c:\finance\fm.exe c:\finance\my_data\vent.dat
```

Fund Manager does not require any command line arguments. Any command line arguments are optional, and all operations can be performed from within Fund Manager.

Fund Manager supports drag and drop operations with *.dat or *.mm4 files. Also, Fund Manager supports associations with either *.dat or *.mm4 files.

Other Details

Fund Manager creates three ASCII text data files for each investment. The filenames will consist of the first four letters of the name of the fund. There will be a *.dat, *.inv, and a *.div file for each fund. These files may be manually edited, but it is intended to let Fund Manager do this for you to prevent any incorrect entries. There are also inter-dependencies between the funds that can make manual editing dangerous. The format of each file will be described:

The *.dat file:

The first line of the *.dat file is the fund's name. The second line is the fund's symbol. Every line after the second line has five fields in it. The fields are **month**, **day**, **year**, **share price**, and **total shares owned**, respectively. The share price is the value of an individual share, and the total shares owned are the number of shares owned on this date.

The *.inv file:

Every line in the *.inv file should also have five fields: **month**, **day**, **year**, **share price**, **shares bought or sold**, respectively. If the transaction was an investment the shares bought will be a positive number, if there were shares sold, this will be a negative number. The share price is the purchase/redemption price of the shares.

The *.div file:

Every line in the *.div file will also have five fields: **month**, **day**, **year**, **dividend per share**, and **shares re-invested**. The dividends per share is the dollar value of dividends paid for each share owned, whether they were reinvested or distributed. The shares re-invested in the fifth field is the number of shares purchased on this date with these dividends, and may be zero if these dividends were distributed instead of re-invested. The *.div file may have no entries in it, but must exist.

File inter-dependencies

Fund Manager will automatically take care of all inter-dependencies in the different files if you use Fund Manager to update your files. If you choose for some reason to manually edit your data files, you may wish to understand the inter-dependencies. Any time an investment is made, the *.dat file, as well as the *.inv file, is always updated, including the new price and share information. Also, in the *.dat file every entry past the date of the investment is updated to correctly represent the new number of shares owned. For example, if an investment of 25 shares at \$10/share was made on 2/1/1993 an entry would be added to the *.inv file for this date, share price, and shares purchased. The *.dat file would also get an additional entry for this date to indicate the share price and new number of shares owned on this date. All subsequent lines in the *.dat file would be updated to indicate the new number of shares owned after this date.

When a dividend is reinvested there will be three transactions recorded. It is recorded in the *.div file to represent the dividend, it is also recorded in the *.inv file to represent the re-investment of the dividend, and it is also recorded in the *.dat file to reflect the new price and number of shares owned.

When any entry is made that affects the number of shares owned at a later date, Fund Manager automatically updates all these fields for you. For example, if you delete a re-invested dividend, Fund Manager will delete the dividend from the *.div file, delete the corresponding investment from the *.inv file, and update the *.dat file to show the new number of shares owned on all dates. Fund Manager would also update all entries in the *.div file to correctly show the dividend/share value, since the number of shares owned when that transaction was originally recorded has changed. As you can see, there are many inter-dependencies between these three files, and it is highly recommended that you use Fund Manager to update these files unless you feel confident that you may do so correctly.

Yield Calculations

Fund Manager can calculate three different types of yields over any specified time period. The types of yields are:

Portfolio Yield

Distributed Fund Yield

Re-invested Fund Yield

All yields calculated by Fund Manager are average annualized yields. When Fund Manager calculates yields it looks for the exact dates to find the appropriate share prices. For example, when Fund Manager calculates the 1 year yield from 3/25/1993, it requires that there be a share price recorded on both 3/25/1993, and on 3/25/1992. Fund Manager automatically fills in all gaps between prices of 2 days or less, to cover weekends. Therefore, if you have a price recorded on 3/25/1993 and 3/23/1992 and 3/26/1992, Fund Manager will interpolate that the value of the fund on 3/25/1992 was the same as the value on 3/23/1992 and report a yield. Fund Manager will not extrapolate the beginning price from any more than these two days to cover weekends in order to avoid reporting inaccurate results. If Fund Manager is not provided with sufficient information for a beginning price it will report "N.A." for a yield.

Fund Manager calculates a default set of yields (3 month, 6 month, 1 year . . .) for each number of displays. If a user wishes to calculate a yield for a range not in the default, the 'inception' (inc) range may be used. This yield displays the yield from the right most date of the graph to the left most date of the graph. The date range may be changed using the menu command View/Dates.

Fund Manager uses a bisection algorithm to iteratively solve for all yields.

Compatibility With Previous Versions

Fund Manager 5.1 is completely compatible with Fund Manager 4.x, and to a large extent, completely compatible with Fund Manager 3.x. Fund Manager 5.1 has the same format for investment files as all previous versions (*.dat, *.inv, and *.div files). Fund Manager 5.1 can also still read Fund Manager 4.x portfolios (*.mm4), but is not compatible with Fund Manager 3.x portfolios (*.mm3). Portfolios for Fund Manager 5.1 have the filename extension 'mm4' in order to be backward compatible. The information in portfolios can be recreated very quickly, and portfolios in version 5.1 are more powerful than in previous versions.

Registration Information

Fund Manager is a "Shareware" program. You are encouraged to try it for free. You are also encouraged to pass it along, unaltered, to anyone else you feel may be interested. If, after a reasonable time you decide to continue using it please register it by sending \$15 to the author, at the address listed below. Please specify your name, return address, and the type of floppy diskette you prefer when you send in your registration. You will be mailed a registered version of Fund Manager. Your registration will also entitle you to 100 days of free technical support from the author. You will also be notified of, and be eligible for a discount on, any possible future versions of Fund Manager. More information about shareware and liability is available in the '**readme.txt**' file on the disk Fund Manager came on. The file '**register.txt**' may be printed out and used for registering, or you can print out the [registration form](#) in this help file to fill out and return. The author may be reached at:

Mark Beiley
P.O. Box 3311
Burlington, VT 05401

(802)864-7463 (Weekends or evenings before 10:00 p.m. EST only please)

Prodigy: CVPH92A
Internet: beiley@aol.com
America Online: beiley

Registration Form (use File/Print Topic)

Fund Manager 5.1

Name: _____

Address: _____

City: _____ State: ____

Zip Code: _____

Telephone: (optional) _____

Preferred disk size: (3.5") __ or (5.25") __

Any electronic mail addresses that you may be reached at:
(Internet, Prodigy, AOL, CompuServe, MCI, etc.)

How did you obtain Fund Manager? (optional)

Any new features, or things you'd like to see improved in Fund Manager? (optional)

Please support the shareware concept by sending a check for \$15 to:

Mark Beiley
P.O. Box 3311
Burlington, VT 05401
USA

You will be mailed a registered version of Fund Manager, be entitled to 100 days of free technical support, have the author's gratitude, be notified of, and be eligible for discounts on, any possible future versions. Thanks for supporting the shareware concept!

Portfolio Yield

The yield that **you** have earned. This yield depends on when you made your investments. The formula for portfolio yield, where the yield is 'i' is:

$$\begin{aligned} & \text{Latest value} + \text{Div1}(1+i)^{\text{termd1}} + \text{Div2}(1+i)^{\text{termd2}} + \dots \\ = & \text{Original investment}(1+i)^{\text{term}} + \text{Inv1}(1+i)^{\text{termi1}} + \text{Inv2}(1+i)^{\text{termi2}} + \dots \end{aligned}$$

where each term is between the current date (or the date the yield is being calculated 'to') and the date of the particular transaction. **Inv1** and **Div1** represent investments and dividends, respectively. A redemption is simply a negative investment. A re-invested dividend is both a dividend and an investment.

Distributed Fund Yield

The yield that the **fund** has achieved if all dividends and distributed capital gains were taken in cash, and not re-invested back into the fund. This yield is independent of when you invested. The formula for calculating the distributed fund yield, where the yield is 'i' is:

$$\begin{aligned} & \text{Latest share price} + \text{Div1}(1+i)^{\text{termd1}} + \text{Div2}(1+i)^{\text{termd2}} + \dots \\ & = \text{Original share price}(1+i)^{\text{term}} \end{aligned}$$

Re-invested Fund Yield

The yield that the **fund** has achieved if all dividends and distributed capital gains were re-invested. This yield is independent of when you invested. The formula for calculating the re-invested fund yield, where the yield is 'i' is:

Latest share price * (1 + number of shares purchased with re-invested dividends)

= Original share price(1+i)^term

Updating Prices from a *.CSV File

Prodigy can download a quote track to an ASCII text file on your hard drive. This file has the filename extension of ".csv". Fund Manager can read the information in this file and automatically update the price of all your open funds. When downloading the *.csv file you should specify that you do not want headings and you would like closing prices. Here is what a sample *.csv file looks like:

```
"JANSX",19.2,"05/19/93"," "  
"JAVLX",24.11,"05/19/93"," "  
"JAVTX",51.18,"05/19/93"," "  
"JAWWX",20.95,"05/19/93"," "
```

The first field of each line is the stock symbol, which must match the symbol you have in Fund Manager. The second field of each line is the price. The third field is the date, and the fourth field is for footnotes, which Fund Manager does not use.

Updating Prices from an America Online Portfolio

America Online can download a portfolio to an ASCII text file on your hard drive. Fund Manager can read the information in this file and automatically update the price of all your open funds. Here is what a sample America Online downloaded portfolio file looks like:

Symbol	Qty.	Curr. Price	Change	Purch. Price	Gain/ Loss	Value
ADI	---	20 3/4	+1/2			
CY	---	13 5/8	+3/8			
FHLSX	---	31.51	-0.22			
FIIIX	---	11.93	-0.0			
FRAM	---	7	+1/4			
IBM	---	53 1/4	+1/2			
ISP	---	7 1/8	-1/8			
JANSX	---	19.48	----			
JAVLX	---	24.55	-0.0			
JAVTX	---	51.94	+0.0			
JAWWX	---	21.24	+0.0			
SCSTX	---	12.0	+0.0			
TWCUX	---	19.64	-0.10			
Total					----	0.00

In this example not all of the fields are filled in, and are not required by Fund Manager. The other fields may be filled in if you wish, but Fund Manager only requires the symbol and current price fields. The symbol must match the symbol for your investments in Fund Manager. Since there is no date information in this file you are also prompted for the date to apply these prices to when importing.

Updating Prices from a CompuServe File

CompuServe can download a quotes to an ASCII text file on your hard drive. Fund Manager can read the information in this file and automatically update the price of all your open funds. Here is what a sample downloaded file looks like:

Ticker	Volume	High	Low	Last	Change	Update
JANSX	0	20.820	20.820	20.820	+ 0.050	5:45
JAVLX	0	26.510	26.510	26.510	+ 0.150	5:45
JAVTX	0	53.220	53.220	53.220	+ 0.070	5:45
JAWWX	0	23.920	23.920	23.920	+ 0.200	5:45

The first field of each line is the stock symbol, which must match the symbol you have in Fund Manager.

Portfolio

Fund Manager lets you save a compilation of investments and preferred options in a portfolio. A portfolio consists of a maximum of 25 investments, which is the same as the maximum number of investments that may be opened in Fund Manager at any one time. A portfolio saves the following information:

- Opened investments, and their order
- Date range to be displayed for each investment
- Type and number of graphs
- Type of yield to calculate
- Whether graphs and/or yields are to be displayed
- Whether auto redraw is on/off
- Whether each type of marker is on/off
- Whether confirmation notices are on/off
- Fonts for the screen and printer
- Pen thicknesses and marker sizes for the screen and printer
- All user definable colors

Moving Average

A moving average is calculated by adding up the value for the previous (*weeks* * 7) days, starting from and including the current day, and dividing by (*weeks* * 7) where *weeks* is the number of weeks being averaged. If there is no price information available on a particular day, Fund Manager will extrapolate from the most recent data point **before** the date of interest, or the first data point if there is no price information before the date of interest.