# Real Time FTS Trader operational manual

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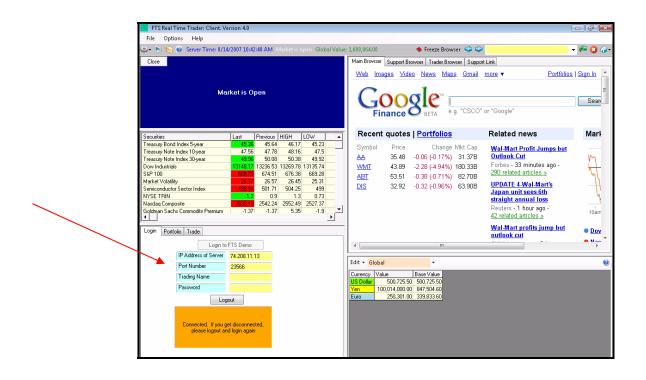
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The Real Time FTS Trader (RTFTS Trader) is a comprehensive system designed to allow you to learn how real world financial markets work through actual trading experience. This system offers you the power to manage a real world position consisting of stocks, bonds, currencies, futures and options using either real time or delayed price data. In addition, the RTFTS Trader gives you access to a variety of performance based reports, calculators, real time data and other support resources. The RTFTS Trader puts you in control of your position with a level of real time support that is found *only* in the highest end trading rooms of today.

This manual will guide you through the operational details associated with the RTFTS system - from logging in to the program, to placing your first trade. You will also learn about the different support features offered and how to use the RTFTS system at your own pace to meet your own specific trading needs.

Before you begin, please ensure that you have downloaded the Real Time FTS Trader onto your computer!





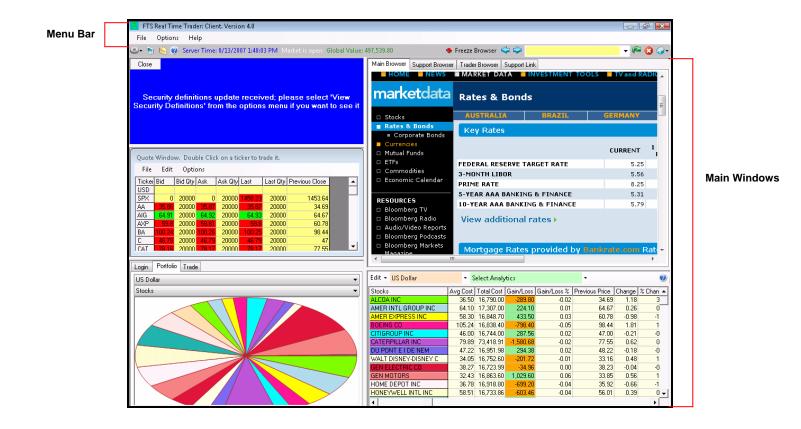
Step 2. Enter the following information into the Trading Screen:

IP Address of Server: Enter your IP Address or proxyPort Number: Leave this field as it is unless directed otherwiseTrading Name: Enter your assigned trading namePassword: Enter your assigned password

**Step 3.** Click **Login**. When you have successfully logged in proceed to *Features of the RTFTS Trader*, found on the following page.

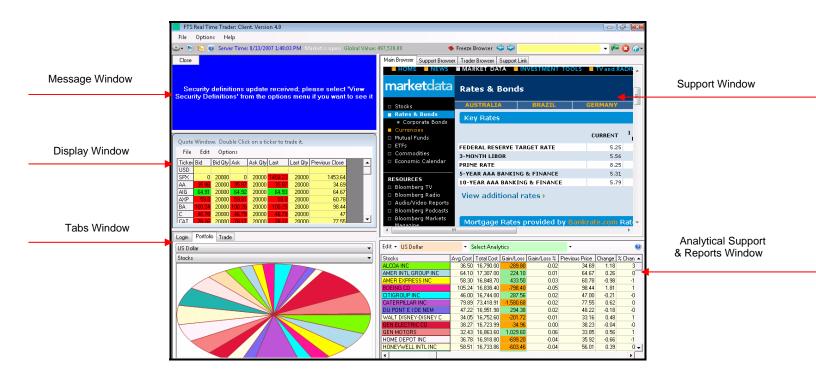
You will now be introduced to the RTFTS Trader Main Screen (*the screen that you are presented with upon initial login to the system*). This section of the manual is divided into two parts:

- RTFTS Trader Main Windows
- RTFTS Trader Menu Bar



# Main Windows

Notice there are six separate windows on the RTFTS main screen, including one floating window. Each window is described in further detail below.



- **Support Window:** The Support Window contains all of your support pages, including access to web information. See section, **Web Support**, for more information about the four tabs: Main Browser, Support Browser, Trade Browser and Support Link.
- Analytical Support & Reports Window: This window displays reports and analytical support both of which are controlled by the two drop down menus located at the top of the window (defaults US Dollar and Select Analytics).
- Tabs Window: This window contains the following four tabs:

Login: Displays login details

**Quotes**: Displays the same information as the Floating Quote Window, but is a fixed location.

**Portfolio**: Displays numerical and graphical reports and is controlled by the two drop down boxes at the top of its window (defaults - US Dollar and Summary).

**Trade**: This is the window that you will use to place your trades. The trade window can also be accessed by double clicking on the desired ticker name in the Floating Quote Window.

- **Display Window:** The Display Window contains general market information, but unlike the quote windows, it can, additionally, display securities that are not being traded.
- **Message Window:** The Message Window displays general announcements such as confirmation of trades, system updates and connection information.

# Menu Bar

The RTFTS Trader Menu Bar, found at the top of the RTFTS Trader Main Screen, offers three main menu items: **File**, **Options**, **Help**. Each menu item is described below.

\$	FTS Real Tim	e Trader: Client. Version 4.0			
F	ile Options	Help			
۳.	- 🔊 ら 🥑	Server Time: 8/14/2007 10:44:31 AM Market is open	Global Value: 1,688,064.00	4 🗭	👻 🍋 🕄 🥪

### File

The File option offers an Exit selection. Click on Exit to end the program at any time.

#### Options

In addition to the windows that are immediately visible upon opening the RTFTS Trader Main Screen, you can access other windows by clicking on **Options**. Each item listed on the Options menu is described below.

- **Toggle Display:** This feature allows you to alternate between the Display Mode and the Trading Mode in RTFTS Trader. In the upper part of the screen of the Display Mode there are tickers, prices, and prices from other markets listed.
- View Quote Window: This option will give you access to a floating window that displays Quotes.
- **Dock Quotes Window:** This option will dock or open the floating quotes window in a fixed location. When this option is selected, the quotes will appear in the Display window.

- **Duplicate Quote Window:** The Duplicate Quote Window will open a second Floating Quote window. This feature is useful if you would like to monitor different markets in real time.
- View Web Quote Window: This option will present a floating window that shows you quotes from the web. It is an additional option for gaining access to more quote information.



Web Quote Window

- **Dock Web Quote Window:** This option will dock or open the floating quotes window in a fixed location. When this option is selected, the quotes will appear in the Display window.
- View Security Definitions: This option will open the window shown *below*. This window provides detailed information about each security as specified by the class project or case with which you are working. The securities listed will vary according to the case.

File Eo	dit Options					
Currencies	Name	Initial Long Position	Mark to Market Ticker	Credit Line	Borrowing Rate	Lenc
	US Dollar	500000	USD	25000	0.06	
Stocks	Name	Initial Long Position	Mark to Market Ticker	Short Sales Permitted	Short Sales Initial Margin	Shor
	S&P500		SPX	No	0	
	ALCOA INC		AA	Yes	0.5	
	AMER INTL GROUP INC		AIG	Yes	0.5	
	AMER EXPRESS INC		AXP	Yes	0.5	
	BOEING CO		BA	Yes	0.5	
	CITIGROUP INC		С	Yes	0.5	
	CATERPILLAR INC		CAT	Yes	0.5	
	DU PONT E LDE NEM		חח	Yes	0.5	

**Security Definitions Window** 

• View Ticker Definitions: The Ticker Definitions window lists all of the tickers relevant to a particular class project or case and provides information that defines each ticker (as shown below). The column titled, "Trade Allowed", indicates whether or not a specific security may be traded. This window also specifies the time and days when you are permitted to trade a security.

Ticker Definitions. Double Click a ticker to trade it										
File	Edit Options									
Ticker	Security Name	Currency Name	Trade Allowed	TradeD ays	Start Time	End Time	Contract Size	Max Trade I	ē 🔺	
USD	US Dollar	US Dollar	Yes	1234567	0	0	1			
SPX	S&P500	US Dollar	No	1234567	0	0	1			
AA	ALCOA INC	US Dollar	Yes	1234567	0	0	1			
AIG	AMER INTL GROUP INC	US Dollar	Yes	1234567	0	0	1			
AXP	AMER EXPRESS INC	US Dollar	Yes	1234567	0	0	1			
BA	BOEING CO	US Dollar	Yes	1234567	0	0	1			
С	CITIGROUP INC	US Dollar	Yes	1234567	0	0	1			
CAT	CATERPILLAR INC	US Dollar	Yes	1234567	0	0	1			
DD	DU PONT E I DE NEM	US Dollar	Yes	1234567	0	0	1			
DIS .	WALT DISNEY DISNEY C	US Dollar	Yer	1234567	0	0	1		Ľ	



• **View Session History:** By selecting View Session History, you will see a report detailing your activity from the current session. If your report is unpopulated, as shown in the sample window below, it simply means that you have not yet traded in this session.

Session History								
File Edit	Option	s						
Time		Activity	Price (					
4/23/2007 4:1	5:26 PM	Purchase of 10 of Nasdaq-100 ETF. You have 24 trades left today	45.48					
4/23/2007 4:1	5:54 PM	Purchase of 20 of SPDR S&P500 ETF. You have 23 trades left today	148.12					

**Session History Window** 

• Get Trading History: Get Trading History will provide you with a detailed report of your entire trading history for every session in which you have participated. This report also displays other information that has resulted in your current position. For example, if you click on USD (assuming you have traded in USD), you will see an additional pop-up window that provides a history of how your cash has changed. If you double click on one of the security names, found in column 4, then you will get a P&L report for that security (i.e. realized profit and unrealized profit from any current open position in the security).

Frading History Edit Options							_		
e Edit Options Trader	Date	Time	Security	Action	Price	Quantity	Quote	BuyWWAP	Sell/W
trader19	4/13/2007	1:25:52 AM	US Dollar	PayInterest	0	125.626305	0	0	0
trader19	4/14/2007	1:25:57 AM	US Dollar	PayInterest	0	125.642006	0	0	0
trader19	4/15/2007	1:26:02 AM	US Dollar	PayInterest	0	125.657707	0	0	0
trader19	4/16/2007	1:26:08 AM	US Dollar	PayInterest	0	125.673409	0	0	0
trader19	4/17/2007	1:26:13 AM	US Dollar	PayInterest	0	125.689125	0	0	0
trader19	4/18/2007	1:26:19 AM	US Dollar	PayInterest	0	125.704834	0	0	0
trader19	4/19/2007	1:26:24 AM	US Dollar	PayInterest	0	125.720543	0	0	0
trader19	4/20/2007	1:26:29 AM	US Dollar	PayInterest	0	125.736252	0	0	0
trader19	4/23/2007	4:13:35 PM		login	0	0	0	0	0
trader19	4/23/2007	4:15:27 PM	US Dollar	CashChangeBuy	45.48	-454.8	0	0	0
trader19	4/23/2007	4:15:27 PM	Nasdag-100 ETF	cashbuv	45.48	10	45.48	45.48	0

Trading History Window

• **Get Performance Report**: Get Performance Report will provide you with a report listing every trader's name and their market value (listed in the base currency).

Peri	ormance Rep
File	Edit Options
	US Dollar
Trader1	1,000,493.00
Trader2	1,000,695.00
Trader3	1,000,695.00
Trader4	1,000,695.00
Trader5	1,000,695.00
Trader6	1,000,695.00
Trader7	1,000,695.00
Trader8	1,000,695.00
Trader9	1,000,695.00
Trader10	1,000,695.00
Trader1	1,000,695.00
Trader12	2 1,000,695.00

Performance Report Window

### Help

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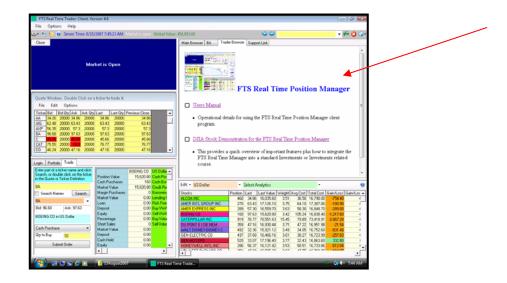
The **Help** option offers three submenu items: **Show Trades Left, Real Time Trader Help** and **About**.

File Option	Help						
ی 🔊 🖻 🗢 电	Show Trades Left	larket is open Global Valu	e: 456,083.60		4 🗭		- 🍋 😮 🥪
Close	Real Time Trader Help		Main Browser BA	Trader Browser	Support Link		
	About		http://finance.google	.com/finance?q=8	4&hl≠en		-
			Web Images	Video News	<u>Maps</u> <u>Gmail</u> <u>more</u> •	,	Portfolios   Sign In
	Market is Open		Goog	sle"	CSCO" or "Google"		Search Financ
Quote Window. D	ouble Click on a ticker to trade it		The Boeing		(Public, NYSE:BA)		Find more results for <u>BA</u>
	ptions			Open: 100.33	Mkt Cap: 76.51B 52Wk High: 107.83		Dividend: 0. Yield: 1.
	y Ask Ask Qty Last Last Qty	Previous Close	1 37.03	High: 100.72			

• Show Trades Left: This option will bring up a popup screen that displays the number of trades that you have left at any given time while trading.

Financial Tr Close	ading	g System			
		Trade	s left: '	100	

• **Real Time Trader Help**: Real Time Trader Help will display the contents of this training manual in the Support Window.



• About: Upon selecting this option a new window will appear with information regarding your version of the RTFTS Trader.



# **General Information**



**Global Value** is the total amount of your position. It is located on the top left portion of the RTFTS Trader Main Screen, as shown below.

**Note:** Regardless of the number of currencies that you are working with, your Global Value is marked to market in a primary currency, technically known as the *functional currency*. The functional currency is defined by your moderator in each session.

**Freeze Browser** allows you to freeze the browser rotation that is found in the Main Broswer tab in the Web Support window. Once you have frozen the automated web rotation, you may also enter new web addresses into the textbox found next to Freeze Browser.

#### Alternate Menu

There is a second group of menu options on the RTFTS Trader Main Screen. These items offer you the same choices as the main menu (located above this alternate menu), but are represented with small icons, rather than words.



In this section of the manual, you will learn how to both buy and sell a futures contract. Whether you are buying or selling future contracts in the RTFTS Trader, they are always traded on a margin. To locate the margin and other information relevant to a particular security, simply click on Options from the main menu on the RTFTS Main Screen, then select Security Definitions.

File Edit	Options						
Currencies	Name	Initial Long Position	Mark to Market Ticker	Credit Line	Borrowing Rate	Lending Rate	Risk Free Rate
quityFutures	Name	Initial Long Position	Mark to Market Ticker	Initial Margin	Maintenance Margin	Underlying Asset	Cash or Script Se
	E-Mini S&P500 June		ESM7	0.05	0.04	S&P500 Index	Yes
	E-Mini S&P500 September		ESU7	0.05	0.04	S&P500 Index	Yes
	E-Mini Russell 2000 June		EBM7	0.05	0.04	Russell 2000 Index	Yes
	E-Mini Russell 2000 September		ERU7	0.05	0.04	Russell 2000 Index	Yes
	E-Mini Nasdaq100 June		NQM7	0.05	0.04	Nasdaq-100 Index	Yes
	E-Mini Nasdaq100 September		NQU7	0.05	0.04	Nasdaq-100 Index	Yes
	S&P Fin SPCTR June		FNM7	0.05	0.04	Fin SPCTR Index	Yes
	E-Mini FTSE Xinhua China 25		FXNM7	0.05	0.04	FTSE Xinhua Index	Yes
	E-Mini MSCI EAFE		EFEM7	0.05	0.04	MSCI EAFE Index	Yes
	CME Nikkei 225		NKDM7	0.05	0.04	Nikkei Stock Average	Yes
	ETF SPY June		SPYM7	0.05	0.04	SPDR S&P500 ETF	Yes
	ETF SPY September		SPYU7	0.05	0.04	SPDR S&P500 ETF	Yes
	ETF IWM June		IWMM7	0.05	0.04	iShares Russell 2000 ETF	Yes
	ETF IWM September		IWMU7	0.05	0.04	iShares Russell 2000 ETF	Yes
	ETF QQQ June		QQQM7	0.05	0.04	Nasdaq-100 ETF	Yes
	ETF QQQ September		QQQU7	0.05	0.04	Nasdaq-100 ETF	Yes
DepositFutures	Name	Initial Long Position	Mark to Market Ticker	Initial Margin	Maintenance Margin	Stub Rate	Maturity
	ED Futures June 2007		EDM7	0.05	0.04	0.0528125	6/18/2007 12
	ED Futures September 2007		EDU7	0.05	0.04	0.0528125	9/17/2007 12
	ED Futures December 2007		EDZ7	0.05	0.04	0.0528125	12/17/2007 12
	ED Futures March 2008		EDH8	0.05	0.04	0.0528125	3/17/2008 12
	ED Futures June 2008		EDM8	0.05	0.04	0.0528125	6/16/2008 12
	ED Futures September 2008		EDU8	0.05	0.04	0.0528125	9/15/2008 12
	ED Futures December 2008		EDZ8	0.05	0.04	0.0528125	12/15/2008 12
	ED Futures March 2009		EDH9	0.05	0.04	0.0528125	3/16/2009 12
	ED Futures June 2009		EDM9	0.05	0.04	0.0528125	6/15/2009 12
	ED Futures September 2009		EDU9	0.05	0.04	0.0528125	9/14/2009 12
	ED Futures December 2009		EDZ9	0.05	0.04	0.0528125	12/14/2009 12
	ED Futures March 2010		EDHO	0.05	0.04	0.0528125	3/15/2010 12
	ED Futures June 2010		EDM0	0.05	0.04	0.0528125	6/14/2010 12
	ED Futures June 2011		EDM1	0.05	0.04	0.0528125	6/13/2011 12
	ED Futures June 2012		EDM2	0.05	0.04	0.0528125	6/18/2012 12
	ED Futures June 2013		EDM3	0.05	0.04	0.0528125	6/17/2013 12
	ED Futures June 2014		EDM4	0.05	0.04	0.0528125	6/16/2014 12
	ED Futures June 2015		EDM5	0.05		0.0528125	6/15/2015 12
	ED Futures June 2016		EDM6	0.05	0.04	0.0528125	6/13/2016 12:

Security Definitions

### How to Buy a Future

**Step 1.** From the **Floating Quote Window**, double click on a ticker name that you are permitted to trade. Once you have clicked on a ticker name, the **Trade Window** will appear, as shown below.

**Please Note:** The Trade Window can also be accessed by clicking on the Trade tab in the bottom left window. In order to trade a specific future, simply enter the ticker name into the first textbox on this window and click on Search.



RTFTS Trader Main Screen

**Step 2.** In the **Trade** window you will see a drop down box that lists Buy on Margin and Sell on Margin. Click on **Buy on Margin**.

**Please Note:** If this drop down box is blank, then you can not trade this security. This function is controlled by the central moderator who specifies the trading constraints.

Step 3. Enter a quantity in Qty to Buy.

**Step 4.** Click on **Submit Order.** You have now purchased your contracts. Your Trade Window will populate with data based on your purchase. We will further analyze the Trade Window results on the next page.

Login Quotes Portfolio Trade		
Enter part of a ticker name and click Search, or double click on the ticker in the	Position Value	11,521.50
Search, or double click on the ticker in the Quote window	Position	3
	Futures Obligation	-231,000.00
ER2H07	Margin Deposit	11,521.50
Search Names Search	Percentage	4.99
EB2H07	Gain/Loss	-30.00
ER2H07	Init. Margin Posted	11,551.50
Bid: 766.7 Ask: 766.9	Margin Calls	0.00
E-Mini Bussell 2000 March in US	Buy VWAP	77,010.00
Dollar	Sell VWAP	0.00
	Buy Volume	3.00
Buy on Margin 💉	Sell Volume	0.00
Qty to Buy 3		
Submit Order		

The Trade Window: Futures Purchase

Below is a breakdown of the information located on the right side of the Trade window. This data is based on the contract just purchased.

- Position Value = Current Margin Deposited\*
- Position = Number of contracts purchased or sold
- Futures Obligation = Liability created by entering into the futures position\*\*
- Margin Deposit = Current Margin Deposited
- Percentage = Current Margin % that lies between the Initial Margin and the Maintenance Margin (Initial Margin Posted)
- Gain/Loss = Results from the last time the position was marked to market
- Initial Margin Posted = Margin required when first trading a future (found in the security definition screen)
- Margin Calls = Results from having an insufficient margin deposit when the futures position is marked to market
- Buy VWAP = The Volume Weighted Average Price that you paid for your position
- Sell VWAP = The Volume Weighted Average Price with which you sold your position
- Buy Volume: = Number of contracts purchased
- Sell Volume = Number of contracts sold

#### \*Position Value:

In the case of purchasing a future, the future's price is not paid at the time of contracting. Instead a small initial margin (often about 5%) is posted with the clearinghouse. If the Margin Deposit grows greater than the % required by the Initial Margin Posted then the residual over the Initial Margin is automatically transferred out of the Margin Deposit account and into your cash account. Similarly, if it drops below the required Maintenance Margin % (defined in the security definition screen), then the Margin Call is automatically transferred from your cash account to the Margin Deposit Account.

#### \*\*Futures Obligation:

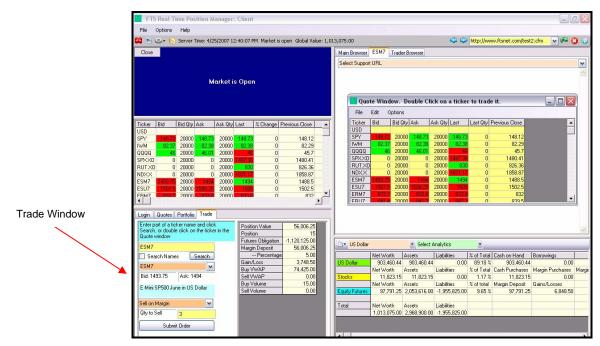
Suppose that you bought **3** contracts when the Ask in the above screen was **770**. The liability created then depends on the contract specification. For the E-mini Russell 2000 contract, the convention is:

#### \$100\*770\*3 = \$231,030.00

Please Note: The bid and ask numbers on your screen are in real time and will therefore continually change from your original bid/ask when markets are open.

# How to Sell a Future

**Step 1.** From the **Floating Quote Window**, double click on a ticker name that you are permitted to trade. Once you have clicked on a ticker name, the **Trade Window** will appear, as shown below.



**RTFTS Trader Main Screen** 

**Step 2.** In the **Trade** window you will see a drop down box that lists Buy on Margin and Sell on Margin. Click on **Sell on Margin**.

Step 3. Enter a quantity in Qty to Sell.

**Step 4.** Click on **Submit Order.** You have now sold your contracts. Your Trade Window will populate with data based on your sale. Take a minute to examine the impact of your sale on the trade window, as shown below.

Login Quotes Portfolio Trade		
Enter part of a ticker name and click Search, or double click on the ticker in the	Position Value Position	44,835.00 12
Quote window	Futures Obligation	-896,700.00
ESM7	Margin Deposit	44,835.00
Search Names Search	Percentage	5.00
ESM7	Gain/Loss	4,461.00
	Buy VWAP	74,425.00
Bid: 1494.25 Ask: 1494.5	Sell VWAP	74,712.50
E-Mini SP500 June in US Dollar	Buy Volume	15.00
E-Mini SE 500 June in US Dollar	Sell Volume	3.00
Buy on Margin 💌		
Qty to Buy 3		
Submit Order		

When trading a stock using the RTFTS system, you are given the following six buying and selling options for stocks:

- Cash Purchase
- Cash Sale
- Margin Purchase
- Margin Sell
- Short Sell
- Short Cover

This section begins with the following two working trading examples:

- 1. How to Complete a Margin Purchase
- 2. How to Complete a Short Sell

The remaining buying and selling options, listed above, are explained on the pages that follow. The trading steps for the two examples above are the same basic steps that should be applied regardless of the type of buy or sell that you are completing.

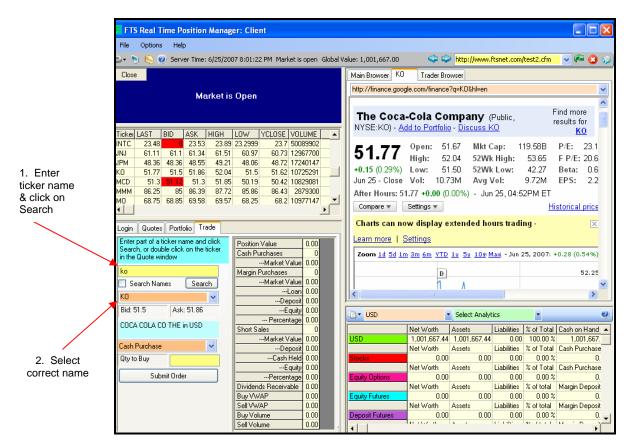
### How to Complete a Margin Purchase

#### What is a Margin Purchase?

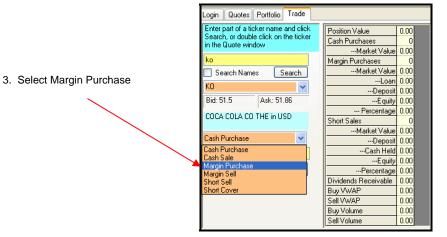
A Margin Purchase is when a trader borrows cash from a broker to buy stock. The portion of the purchase price that you deposit is known as the initial margin. For more information on a particular Margin Percentage, go to Options on the main menu and select Security Definitions.

**Step 1.** Enter the ticker name of the stock that you would like to buy in the Trade Window of the RTFTS Trader Main Screen, and then click on Search.

**Step 2.** Select the correct ticker name of your stock from the first drop-down menu on the Trade Window.



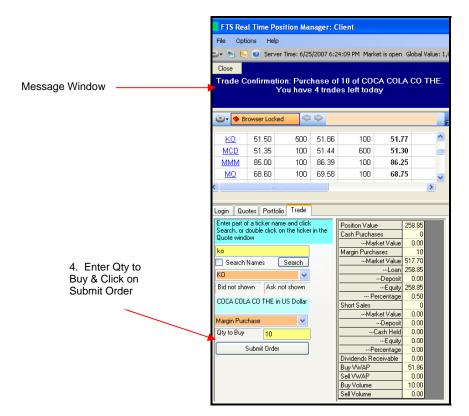
**RTFTS Trader Main Screen** 



Step 3. Select Margin Purchase from the second drop-down menu.

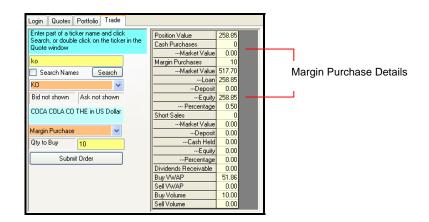
Trade Window

**Step 4.** Enter a quantity that you would like to trade (next to Qty to Buy) then click on Submit Order to buy the stock. Every time you submit an order, a Trade Confirmation message will appear in the Message Window.



Left Side of RTFTS Main Screen

### Margin Purchase Analysis



Trade Window

Margin Purchases: The number of shares purchased

Market Value: The total value of all shares purchased

Loan: The total amount loaned to the trader for the purchase of the shares (based on the margin)

Deposit: The total amount of cash that the trader pays from their cash account.

Equity: The cash value of the shares purchased that are owned by the trader

Percentage: The initial margin percentage

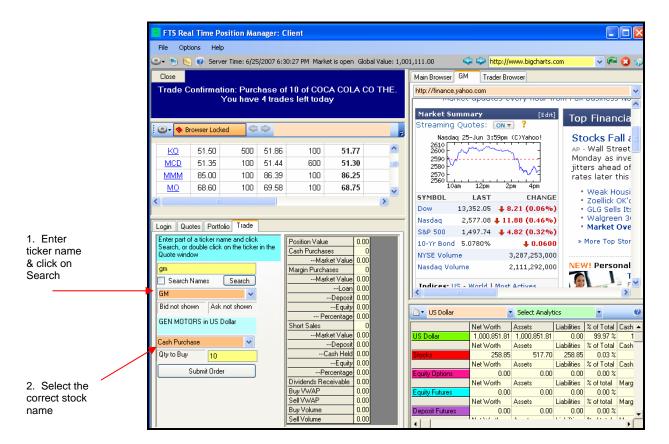
## How to Complete a Short Sell

#### What is a Short Sell?

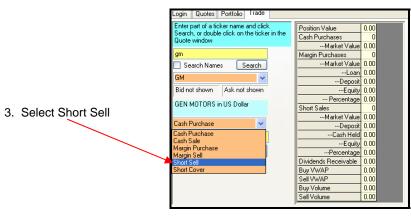
If a trader believes that a security is currently overpriced and predicts that it will soon decline in value, they may attempt to profit from short selling. A Short Sell is a method of trading that allows you to sell a security that you do not own, with the intention of eventually repurchasing it at a lower price to make a profit. This type of trading immediately creates an obligation whereby the trader has to buy back the security.

**Step 1.** In the Trade Window of the RTFTS Trader Main Screen, enter the ticker name for the stock that you would like to trade then click Search.

**Step 2.** Select the correct ticker name of the stock from the first drop-down menu on the Trade Window.



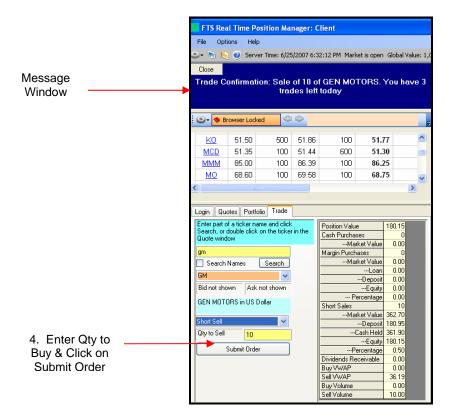
**RTFTS Trader Main Screen** 



### Step 3. Select Short Sell from the second drop-down menu.

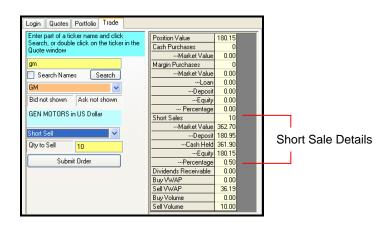


**Step 4.** Enter a quantity to buy, for example 10, then click on Submit Order to sell the stock. Every time you submit an order, a Trade Confirmation message will appear in the Message Window.



Left Side of RTFTS Main Window

### Short Sell Analysis



Short Sales: Displays the number of shares sold

Market Value: Displays the current total value of the shares

**Deposit**: Displays the amount of cash paid by the trader at the time of the trade. Under regulation T, the Federal Reserve Board, dictates that short sale accounts have 150% of the value of the short sale at the time that the sale took place. These strict margin requirements are used as collateral in case the trader defaults in the future.

Cash Held: The money made from a short sale

Equity: The trader's equity in the short position

**Percentage**: This field represents the margin percentage. If the percentage falls below the maintenance margin (typically 50%), then cash will automatically be transferred from the trader's money market account to bring the margin back to the initial margin.

### How to Trade a Future

### **Cash Purchases**

### What is a Cash Purchase?

A Cash Purchase occurs when a trader purchases stock directly for cash.

Login Quotes Portfolio Trade						
Enter part of a ticker name and click	Position Value	4,335.10				
Search, or double click on the ticker in the Quote window	Cash Purchases	110				
	Market Value	4,335.10				
AA	Margin Purchases	0				
Search Names Search	Market Value	0.00				
AA	Loan	0.00				
	Deposit	0.00				
Bid not shown Ask not shown	Equity	0.00				
ALCOA INC in US Dollar	Percentage	0.00				
ALCOA INC IN US DOIlai	Short Sales	0				
	Market Value	0.00				
Cash Purchase 💉	Deposit	0.00				
Qty to Buy 10	Cash Held	0.00				
	Equity	0.00				
Submit Order	Percentage	0.00				
	Dividends Receivable	0.00				
	Buy VWAP	40.98				
	Sell VWAP	0.00				
	Buy Volume	110.00				
	Sell Volume	0.00				

Position Value: The current market value of the position

Cash Purchases: The total number of shares that the trader owns

Market Value: The total value of the shares

Buy VWAP: The volume weighted average price that the trader paid for the shares

Buy Volume: The total number of shares that the trader owns

### How to Trade a Future

### **Cash Sales**

### What is a Cash Sale?

A Cash Sale is completed when a trader sells stock for cash.

Login Quotes Portfolio Trade					
Enter part of a ticker name and click	Position Value	3,546.90			
Search, or double click on the ticker in the Quote window	Cash Purchases	90			
	Market Value	3,546.90			
AA	Margin Purchases	0			
Search Names Search	Market Value	0.00			
AA	Loan	0.00			
	Deposit	0.00			
Bid not shown Ask not shown	Equity	0.00			
ALCOA INC in US Dollar	Percentage	0.00			
ALCOA INC II OS Dollar	Short Sales	0			
Cash Sale 🗸	Market Value				
	Deposit	0.00			
Qty to Sell 10	Cash Held	0.00			
	Equity	0.00			
Submit Order	Percentage	0.00			
	Dividends Receivable	0.00			
	Buy VWAP	40.98			
	Sell VWAP	39.17			
	Buy Volume	110.00			
	Sell Volume	20.00			

Position Value: The current market value of the position

Cash Purchases: The total number of shares in the position

Market Value: The total value of the shares sold

Sell VWAP: The volume weighted average price at which the trader sold the shares

Sell Volume: The number of shares the trader sold

### Margin Sell

### What is a Margin Sell?

A Margin Sell occurs when a trader wants to sell what they had previously purchased on a margin.

Login Quotes Portfolio Trade					
Enter part of a ticker name and click	Position Value	0.00			
Search, or double click on the ticker in the Quote window	Cash Purchases	0			
	Market Value	0.00			
BA	Margin Purchases	0			
Search Names Search	Market Value	0.00			
BA	Loan	0.00			
	Deposit	0.00			
Bid not shown Ask not shown	Equity	0.00			
BOEING CO in US Dollar	Percentage	0.00			
BOEING CO IN OS DOIIai	Short Sales	0			
	Market Value	0.00			
Margin Sell 💙	Deposit	0.00			
Qty to Sell 10	Cash Held	0.00			
	Equity	0.00			
Submit Order	Percentage	0.00			
	Dividends Receivable	0.00			
	Buy VWAP	95.77			
	Sell VWAP	95.57			
	Buy Volume	10.00			
	Sell Volume	10.00			

Buy VWAP: The volume weighted average price that the trader paid for the shares

Sell VWAP: The volume weighted average price at which the trader sold the shares

Buy Volume: The amount of shares originally purchased in a margin purchase

Sell Volume: The amount of shares originally sold in a margin sell

#### Note on Margin Accounts:

Once a trader has sold the shares that they obtained as a result of a margin purchase, the cash in their cash account associated with that margin purchase, will be transferred back to their money market account. This cash will then be available for general use.

### **Short Covers**

#### What is a Short Cover?

A Short Cover is when a trader buys the stock back that they sold in the Short Sell.

Login Quotes Portfolio Trade					
Enter part of a ticker name and click	Position Value	180.60			
Search, or double click on the ticker in the Quote window	Cash Purchases	0			
	Market Value	0.00			
GM	Margin Purchases	0			
Search Names Search	Market Value	0.00			
GM	Loan	0.00			
	Deposit	0.00			
Bid not shown Ask not shown	Equity	0.00			
GEN MOTORS in US Dollar	Percentage	0.00			
CEN MOTORS IN CO Dollar	Short Sales	10			
	Market Value	362.70			
Short Cover 🗠	Deposit				
Qty to Buy 10	Cash Held	362.20			
	Equity				
Submit Order	Percentage	0.50			
	Dividends Receivable	0.00			
	Buy VWAP	36.34			
	Sell VWAP	36.22			
	Buy Volume	10.00			
	Sell Volume	20.00			

Position Value: The total value of the position

Short Sales: The number of shares sold

Market Value: The total value of the shares sold

Deposit: The total amount paid, based on the margin percentage, by the trader

Cash Held: The proceeds of the short cover

Equity: The trader's equity in the short position

Percentage: The margin percentage

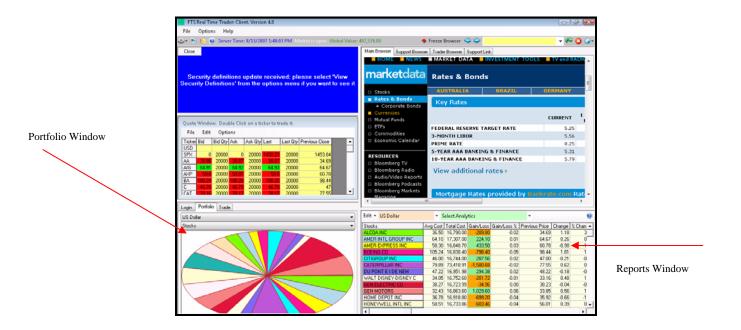
Buy VWAP: The volume weighted average price that the trader paid for the shares

Sell VWAP: The volume weighted average price at which the trader sold the shares

Buy Volume: The number of shares the trader owns

Sell Volume: The number of shares the trader sold

The reports produced by the RTFTS Trader can be found in the **Reports Window**. However, certain reports can also be created in conjunction with the **Portfolio Tab** (found in the Tabs Window) where the Portfolio Window displays a graphical image and the Report Window displays the supporting data. These reports are valuable for analyzing the status of your positions.



There are two primary categories of reports provided in the Reports Window: **Global Report** and **Currency Report**. The RTFTS Trader is a mixed currency portfolio manager. Therefore, the Reports Window allows you to create reports based on either several currencies or just one currency.

**Global Report:** This report displays aggregate trade data for every currency that you have traded

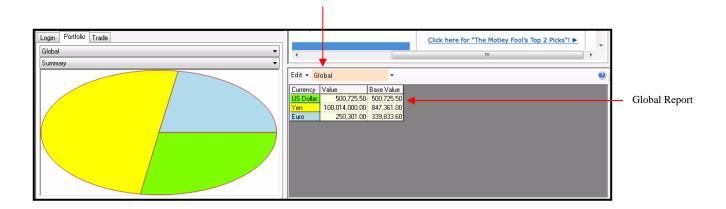
**Currency Report:** This report displays detailed trade data based on one of the currencies that you have traded (the currency is selected by you when you setup the report)

The next few pages will assist you in creating both a global and currency report.

# **Global Report**

**Step 1.** Select the option for **Global** from the top drop down menu in the **Reports Window**.

Once selected, a report will be generated that displays an aggregate view of each currency that you have traded during this session. The Global Report summarizes the currencies that have been traded in the session, the value of each security traded based on its original currency and the base value of each security traded based on the global currency assigned for the trading session.



The pie chart located in the **Portfolio Tab**, to the left, graphically represents the Global Report. The colors used in the pie chart correspond to those seen in the data report. In our example below, you will notice that USD is the only currency that we have traded in at this time, therefore it is the only color represented on the pie chart. The Global Report can also be generated from the Portfolio Tab, by selecting Global from the first drop-down menu and Summary from the second drop-down menu.

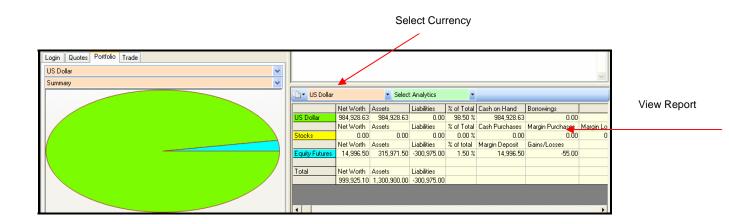
Currency: The name of the currencies that have been traded during this session.

Value: The value is the worth of the security being traded in its original currency.

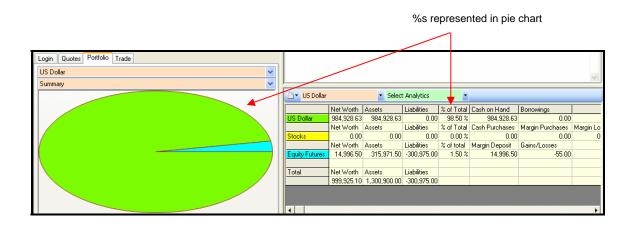
**Base Value:** The base value is the worth of the security being traded in the global currency being used for the trading session (defined in the functional currency).

# **Currency Report**

Step 1. Select a currency from the drop down menu located on the left in the Reports Window. Once this option is selected, a Currency Report is generated that will provide a broad breakdown of allowable asset classes denominated in your currency of choice. The same report can also be accessed using the Portfolio Tab by selecting currency and Summary from the drop-down menus.



In the example below, we have selected USD as our currency. The asset classes represented, in the report, include US Dollar, Stocks, and Equity Futures. These asset classes are also graphically represented in the pie chart to the left of the report. The colors on the pie chart correspond to those on the data report and the percentages used to create the chart are found under % of Total in the Currency Report.



# **Currency Report Elements**

**Net Worth:** The Net Worth represents the aggregate value that you have of each asset class. This field equals assets minus liabilities.

**Assets:** The total security value of long positions that you own in a specific currency (e.g. long positions in stocks, bonds, futures, options, etc.).

**Liabilities:** The total that the trader owes, in a specific currency. Liability represents a variable number. If, for example, a trader's shares were to increase in price and the trader was short that stock, then their liability will increase.

**% of Total:** The % of Total shows the percent that each of the trader's asset classes contribute to their total worth. This percentage is calculated by dividing the Net Worth of each asset class by the Total Net Worth.

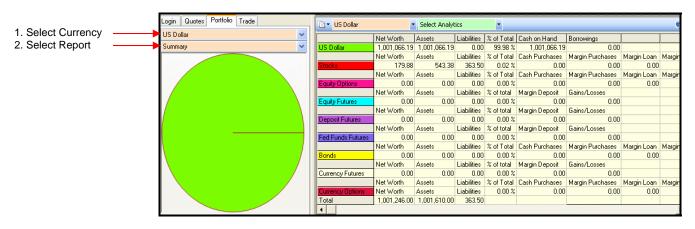
Cash on Hand: The amount of cash that that the trader has.

Borrowings: The initial value of securities that the trader has borrowed.

# Portfolio Reports

As stated at the beginning of this section, the Reporting Support Window can also work in conjunction with the Portfolio tab (found in the Tabs Window) where the data is presented in the Reporting Support Window and the graphical display appears in the Tabs Window. When selecting a report from the Portfolio side of the screen, simply select the currency type then select the report type, as shown on the screen below. The following is a list of types of reports that can be generated from the Portfolio tab:

- Summary
- All
- Cash
- Stocks
- Equity Futures
- Equity Options
- Deposit Futures
- Fed Fund Futures
- Bonds



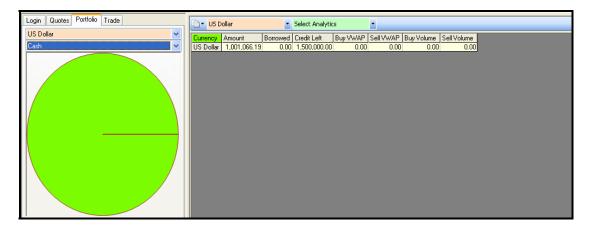
**Summary Report** 

**Summary:** The Summary Report is the default report found on the RTFTS Trader Main Screen when you first enter the system. This report displays the same information as both the Currency Report and the Global Report, depending on which option is selected from the drop-down menu. **All:** This report displays specific information above all of the securities that you have traded. It also shows information regarding your position in general. You must select a specific currency in order to generate this report, as it does not work with the global option.

Login Quotes Portfolio Trade	US Dollar		<ul> <li>Select</li> </ul>	t Analytics	·					Q
US Dollar 🗸 🗸										
All 🔽	Currency	Amount	Borrowed	Credit Left	Buy VWAP	Sell VWAP	Buy Volume	Sell Volume		
	US Dollar	1,001,066.19	0.00	1,500,000.00	0.00	0.00	0.00	0.00		
		Position								Previous Price
	GEN MOTORS	-10	N/A	-363.50		36.10	-361.00	-2.50	0.01	36.27
	•									<u>•</u>

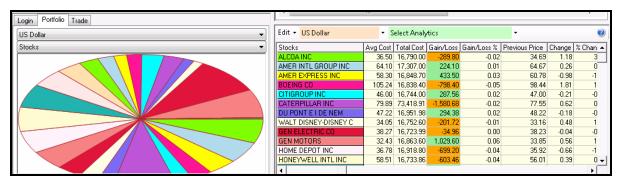
All Report

**Cash:** The Cash report features information regarding your cash account. You must select a specific currency in order to generate this report, as it does not work with the global option.



**Cash Report** 

**Stocks:** The Stock Report displays all information regarding the shares that you have purchased. You must select a specific currency in order to generate this report, as it does not work with the global option.



**Stock Report** 

**Equity Futures:** The Equity Futures Report displays all information regarding the futures that you have purchased. You must select a specific currency in order to generate this report, as it does not work with the global option.

**Equity Options:** The Equity Options Report displays all information regarding the options that you have purchased. You must select a specific currency in order to generate this report, as it does not work with the global option.

**Deposit Futures:** The Deposit Futures Report displays all information regarding the futures that you have purchased. You must select a specific currency in order to generate this report, as it does not work with the global option.

**Fed Fund Futures:** The Fed Fund Futures Report displays all information regarding the futures that you have purchased. You must select a specific currency in order to generate this report, as it does not work with the global option.

**Bonds:** The Bond Report displays all information regarding the bonds that you have purchased. You must select a specific currency in order to generate this report, as it does not work with the global option.

Another valuable feature of the RTFTS Trader is its **Web Support**. A public web display will automatically load upon launching the RTFTS Trader and appear in the upper right side of the main interface. The web information provided gives facts about individual tickers as well as market information and is imported from sources such as Yahoo, MSN and CNN Money.

There are four tabs in the Web Support Window: Main Browser, Support Browser, Trade Browser and Support Link. The Main Browser and Trade Browser can be used to view financial websites. The Support Browser has the power to pull up websites with information directly related to a specified ticker name. Finally, the Support Link is a powerful feature that allows you to program data for automatic trading.

### The Main Browser and Trader Browser

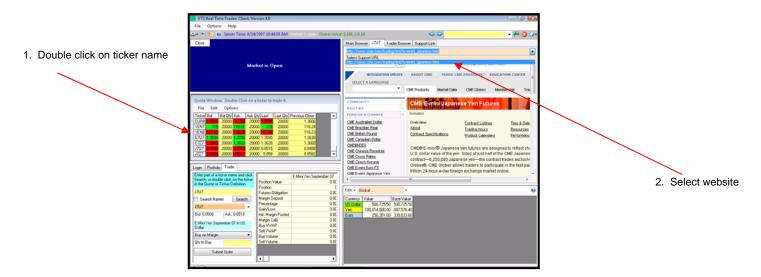
The Main Browser will have websites automatically rotating when you open the RTFTS Trader. In order to break the rotation, you have the option to click on the Freeze Browser button, which will allow you to look at the website being displayed in greater detail or enter a new web address into textbox shown below. The Trade Browser tab is an additional window for you to view websites that you would like to have open.

Freeze Browser —	1,688,064.00 🔷 Freeze Browser 🗘 🏟	👻 🍋 🙆 🎲+	
	Main Browser Support Browser Trader Browser Support Link		
	Web Images Video News Maps Gmail more •	Portfolios   Sign In	Enter a Web Address
	Google	Sean	Enter a web Address
	Finance O BETA e.g. "CSCO" or "Google"		

Web Support Window

#### The Support Browser

**Step 1.** Double click on a ticker name from either the Quotes Window or one of the floating quotes window.

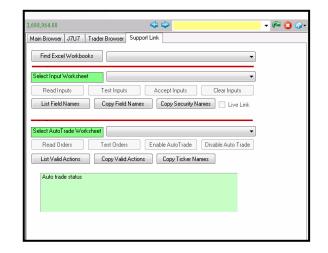


RTFTS Trader Main Window

**Step 2.** In the Support window, the name of the ticker that you selected will appear in one of the tabs. Click on the tab listing the name of your selected ticker.

**Step 3.** Click on the drop down menu that states "Select Support URL". You can then select one of the sites listed to access information about your chosen ticker. The website related to your ticker will appear in the Support window. To select a new website, simply go to the same dropdown menu and select another option.

## The Support Link



In the Web Support window there is a tab named, Support Link. The Support Link window is designed to allow you to do the following:

- 1. Input your own estimates into the analytical support in order to override the estimates established in the central case
- 3. Automate trading strategies directly from Excel without requiring any programming experience (for example, you can submit different order types such as limit orders and stop loss orders or construct complex technical based or fundamental based trading strategies in Excel)

### The Input Spreadsheet

Begin by creating a new Excel workbook. Label the first spreadsheet tab, Support, then title the first three columns as follows: Security Name, Field Name and Value, as shown below. You will use these columns to specify the values that you would like to change.

I	( ک	Microsoft Excel - client_supp	ort[1].xls [Read	i-Only]							
1	8	∣ <u>E</u> ile <u>E</u> dit <u>V</u> iew <u>I</u> nsert F <u>o</u> r	mat <u>T</u> ools <u>D</u> a	ata <u>W</u> indow	Help				Type a quest	tion for help 🔹 🖣	- @ ×
I			Ari	ial		<b>•</b> 10	• B Z	⊻ ≡ ≡ ≡ ₽	≣ \$ % , <sup>*</sup> .₀ .₀	) († († 🗐 🗉 • 🤌	• <u>A</u> • .
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		A5 <del>- fx</del>									
ſ		A	В	С	D	E	F	G	Н	1	J_
		Security Name	Field Name	Value				Valid Fields	Apply to	Apply to	Apply
	2	International Business Machines	Beta	0.050				Beta	Stocks		
	3	SPY DEC 132C	Volatility	0.27				Volatility	Stocks	Options	
	4	International Business Machines	OverridelVExpRet					RiskFreeRate	Stocks	Options	Futuri
	5							ExpectedReturn	Stocks		

#### Input Spreadsheet

**Security Name:** In column 1, you will need to specify the Security Name that you would like to change e.g., International Business Machines, Microsoft and Intel Corporation. Security names are used as the unique identifier because a single name may have multiple tickers (trading on different exchanges).

**Field Name:** In column 2, the field name describes the type of analytical support that you would like to change, for example "Beta".

Value: In column 3 you will enter the values for each security, for example 0.050.

The acceptable field names and what support they apply to are provided in the columns G-J as shown below.

A A DALIES - DAL	Annalisation	A secolar ter	A succession of the
Valid Fields	Apply to	Apply to	Apply to
Beta	Stocks		
Volatility	Stocks	Options	
RiskFreeRate	Stocks	Options	Futures
ExpectedReturn	Stocks		
FCFGrowth1	Stocks		
FCFGrowth2	Stocks		
FCFDisc1	Stocks		
FCFDisc2	Stocks		
FCFYears1	Stocks		
FCF	Stocks		
FCFShares	Stocks		
DivYield	Stocks	Options	Futures
ForeignRate	Currency Futures		
StubRate	Deposit Futures	Fed Fund Futures	
StorageCost	Commoditiy Futures	Commodity Options	
ConvYield	Commoditiy Futures	Commodity Options	
OverridelVExpRet	Stocks		

Input Spreadsheet Columns G-J

### The AutoTrade Spreadsheet

Using the same Excel workbook as with the Input spreadsheet, title the second tab in the workbook AutoTrade. The AutoTrade spreadsheet contains the rules for the programmed trading. For this spreadsheet, you will need to create the following six columns: Ticker Name, Order, Rule, Quote, Quantity and Status. Each field is described in detail below.

	A	В	С	D	E	F
1	Security Name	Order	Rule	Quote	Quantity	Status
2	MSFT	cashbuy	<=	50	50	executed
3	MSFT	cashsell	>=	75	50	
4	MSFT	marginbuy	<=	55	50	executed
5	MSFT	marginsell	>=	65	50	
6	MSFT	shortsale	>=	80	25	
7	MSFT	shortcover	<=	60	15	
8						

#### AutoTrade Spreadsheet

**Ticker Name:** In column 1 the Ticker (note: in the AutoTrade spreadsheet it has to be ticker not security name because multiple tickers can be associated with a security name if they are trading on different exchanges).

**Order:** In column 2 the following order types are supported: cashbuy, cashsell, marginbuy, marginsell, shortsale and shortcover.

**Rule:** In column 4, for each type of order you can enter either: >= or <=. The entries in the rule column work with the entries in the Quote and Quantity columns. For example, if you enter Ticker: MSFT, Rule: <=, Quote: 50, Quantity: 50, then you are requesting to buy 50 shares of MSFT at any price below \$50.

Quote: Column 5 displays the value of the quote to which the rule is referring.

Quantity: Column 6 displays the quantity to which the rule is referring.

**Status:** Column 7 tells you whether or not an order has been executed. If the field remains blank, then it means the order remains open.

Users can put in up to 200 orders at a time (from row 2 - 201). Once the orders have been executed, it is up to you to clear out the spreadsheet and re-enter values or if you would like the orders to be re-executed, you may simply clear the Status field.

# Analytical Support

A very powerful feature of the RTFTS Trader is that it provides real-time analytical support for each security type. This support allows you to immediately apply important concepts taught in the classroom to help you manage your real world position. The Analytical Report provides *real time analytical support* for each security type. The Analytics Report is used in conjunction with the Portfolio Window (found among the tabs in the bottom left side of the main screen).

There are eight different types of Analytical Reports available through the RTFTS Trader:

- Stock Analytics
- Equity Futures Analytics
- Equity Options Analytics
- Deposit Futures Analytics
- Fed Fund Futures Analytics
- Bond Analytics
- Currency Futures Analytics
- Currency Options Analytics

## **Generating Analytical Reports**

#### **Step 1.** Click on the **Select Analytics** from the **Analytical Support and Reports Window** and select an Analytical Report of interest. The sample report below shows Stock Analytics.



## **Stock Analytics Report Elements**

Name: The name of the stock being analyzed.

**Benchmark:** This number represents the index that you want to compare performance against.

Value: The current market value of stock in your portfolio.

Beta: The sensitivity of the stock with respect to the benchmark.

Volatility: The annualized standard deviation of security returns.

**Expected Return:** The predicted return from each stock that is in your position. This is setup by the moderator and typically will be calculated from CAPM.

Expected Return from Stock = Risk Free Rate + Beta \* (Expected Return from the Index Risk Free Rate)

**Weight:** The portfolio weight equals the market value of the security divided by the total portfolio value.

The following portfolio weights are the optimal portfolio weights computed relative to the single index model (with and without short selling permitted). The optimal portfolio weights are the portfolio weights associated with the point of tangency between the minimum variance frontier and the capital market line computed relative to the risk free rate. This point will have the predicted maximum. Sharpe ratio and the following support provide the Sharpe Ratio for the current stock position, the optimal portfolio with short sales and without short sales.

Weight \*(SS): The optimal portfolio with Short Sales permitted.

Weight\*(no SS): The optimal portfolio without Short Sales permitted.

## How to Login to Yahoo! Finance

**Step 1.** When you first click on View Web Quote Window, you will be presented with the main Yahoo Finance page. Before gaining access to the appropriate market information, you will need to sign in to your account. Scroll to the top right portion of the main Yahoo Finance screen and click on sign in.

🔜 Yahoo Quote Window		
💭 🔹 🐟 Browser Unlocked 🛛 🗘	🖉 💭 💭	
	New User? Sign Up <u>Sign In</u> He	Yahoo Sig
	Search: Web Search	≡
Friday, June 22, 200 PERSONAL FINANCE MY PORTFOLIOS	7, 9:45AM ET - U.S. Markets close in 6 hours and 15 minutes.	
up »Finance Search		
ew Yahoo! Personal Finance. Check it out.	ADVERTISEMENT	
ial News		
k In Early Trading Il in early trading Friday as bond yields rated and stocks fell overseas. The pullbac zable gains was characteristic of the type Wall Street has seen lately as it has deall	of	

Floating Quotes Window

**Step 2.** Once you have signed in, click on the My Portfolios tab and select the relevant market for the case with which you are working (for example, DJIA).

🗏 Yahoo Quote Window				Select relevant market
🕥 🔹 🚸 Browser Unlocked 🛛 <	) 🖓 😂 🛤	)	/	Celeberrelevant market
r				
ANCE	Searc	:h:		
	Friday, June 22, 2007, 9,464	AM ET - U.S. Markets clo		
NEWS & OPINION PERSONAL FINANCE	MY PORTFOLIOS			
ET QUOTES » Symbol Lookup » Finance Search	DJIA New Portfolio 🛛 🖻 MarketTrack	Edit er		
		ADVE		
hour from Fox Business Now and Yahoo! Final	nce. Click to watch.	Г		
[Edit] Top Financial News		AARP Mon		
Stocks Sink In Early Tradir		has or		
AP - Stocks fell in early trading Frid remained elevated and stocks fell		highe		
<ul> <li>a day after sizable gains was char erratic weeks Wall Street has seen</li> </ul>	acteristic of the type of	in the m		
<		>		

**Floating Quotes Window** 

**Step 3.** In order to be able to use the data to trade in the RTFTS system, you <u>must</u> lock the browser. Click on Browser Unlocked to lock the browser on your screen.

<u>Note!</u> The Browser Unlocked button changes text to Browser Locked once you have clicked on it.

💊 Browser Locked 🤤 🗘								
Symbol	Bid	Bid Size	Ask	Ask Size	Trade	Last Trade Size	Prev Cls	
<u>^DJI</u>	N/A	N/A	N/A	N/A	13,545.84	0	13,489.42	
<u>AIXIC</u>	N/A	N/A	N/A	N/A	2,616.96	0	2,616.96	
AGSPC	N/A	N/A	N/A	N/A	1,522.19	0	1,522.19	
<u>^OEX</u>	N/A	N/A	N/A	N/A	700.78	0	700.78	
<u>^TYX</u>	N/A	N/A	N/A	N/A	5.3090	0	5.284	
<u>^N225</u>	N/A	-	N/A	-	18,188.63	0	18,240.30	
<u>^FTSE</u>	N/A	-	N/A	-	6,584.30	0	6,596.00	
<u>^HSI</u>	N/A	-	N/A	-	21,999.91	0	21,954.67	
<u>^DJI</u>	N/A	N/A	N/A	N/A	13,545.84	0	13,489.42	
AA	40.05	1000	40.34	100	40.34	0	40.34	
AIG	72.02	100	72.48	1000	72.05	0	72.05	
<u>AXP</u>	62.24	100	63.37	200	62.66	0	62.66	
BA	96.80	100	97.05	900	97.20	0	97.20	
<u>C</u>	53.40	100	53.55	800	53.66	0	53.66	

**Floating Quote Window**