



MetaTrader 4 and MetaEditor

User Manual

Version 1.1

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Welcome to the MetaTrader and MetaEditor User Manual

In this user manual, you'll find instructions on how to use the features and tools in MetaTrader. If you're new to the program, you can walk step-by-step through this manual to learn how to login and access specific MetaTrader features. If you've been using automated trading systems for a while, we've included a detailed table of contents so you can quickly reference how to use a specific section or tool in the MetaTrader platform.

What are MetaTrader and MetaEditor?

MetaTrader is an online trading system that allows you to place trades, manage open positions and pending orders, and conduct technical analysis. You can also use MetaTrader with automatic trading and analysis tools. Once these tools are active in the chart window, MetaTrader automatically executes and manages orders based on market conditions and the settings you specified. This user manual provides a comprehensive look at all of the tools and features in MetaTrader.

This manual also provides an overview of MetaEditor, an application installed with MetaTrader that develops autotrading tools. With MetaEditor, traders can import, create and modify expert advisors, custom indicators, scripts and other MetaTrader autotrading tools.

Before You Use MetaTrader and MetaEditor

You should have a basic understanding of the forex market. If you are new to trading currency pairs, GFT offers a variety of free resources to help you learn about the market and how you can reach your personal trading goals. Visit GFT's website to find out more.

MetaEditor is a development tool. If you plan on creating and editing autotrading files, you should be familiar with the MQ4 programming language. You can learn more about this at: <http://www.mql4.com>.

Even if you aren't familiar with programming, you can use the application to download autotrading files.

Tips for Using This Manual

GFT uses the following notes to emphasize important information about MetaTrader.



Describes information on the action of a tool or feature in MetaTrader. When you see this symbol, it provides a larger context for information and procedures.



Provides hints, tricks and shortcuts that may help you as you place and monitor trades in MetaTrader.



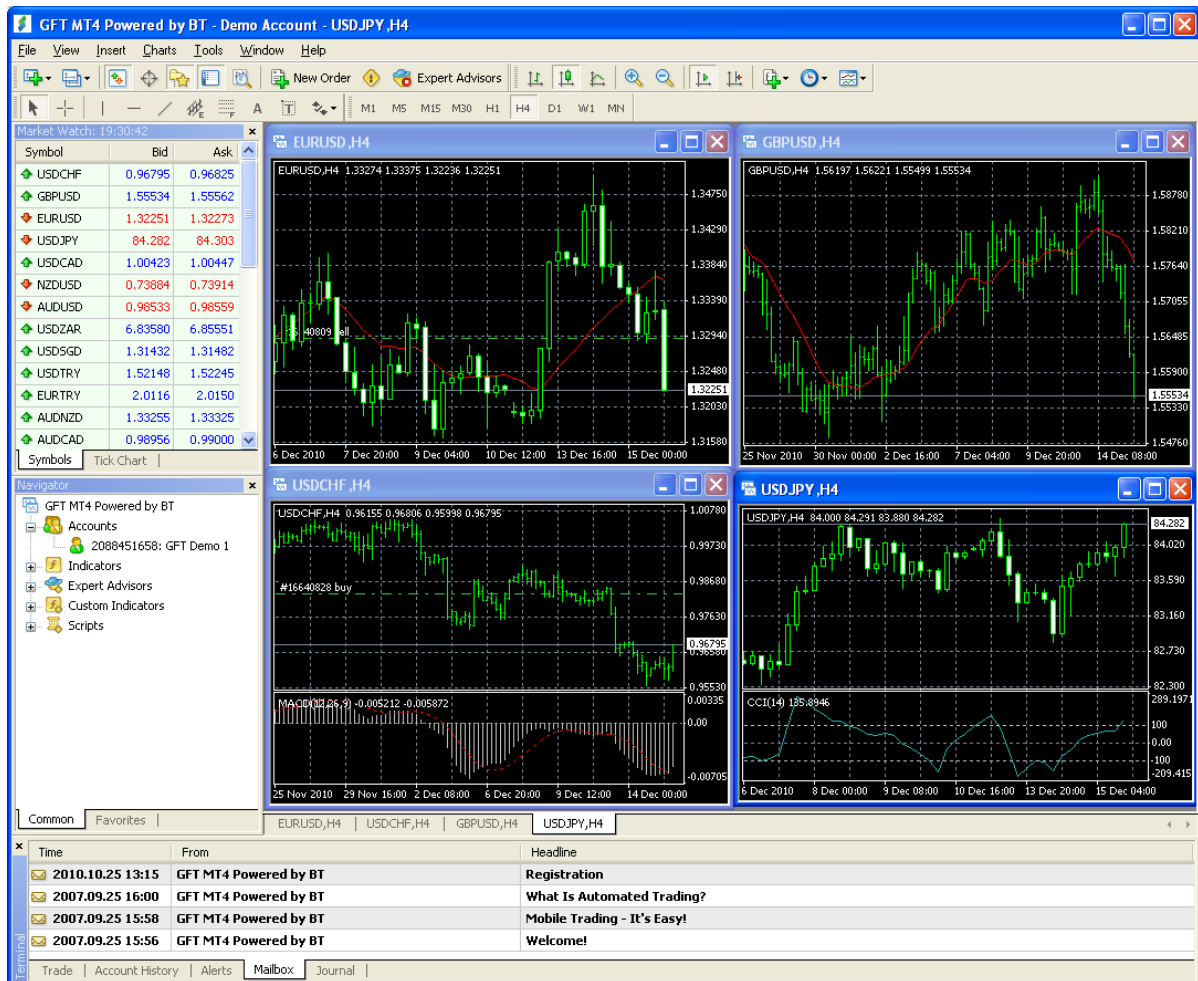
Alerts you of critical information that you need to know when you perform a particular procedure.

Section 1: Opening MetaTrader for the First Time

Before you start trading, you'll want to launch the MetaTrader platform and become familiar with its workspace. In this section, you'll receive an overview of the tools and features that you'll use while trading in MetaTrader.

Viewing the MetaTrader Workspace

The MetaTrader workspace contains all the features and charts you need to trade.



- Menu Bar
- Toolbar
- Market Watch
- Navigator
- Terminal
- Status Bar
- Chart window



MetaTrader has a customizable interface. You can open, move, arrange, resize and close windows as you see fit.

The Menu Bar

At the top of the workspace, you'll see the MetaTrader menu bar. You can use options in the seven menus that appear here to manage windows and other tools while you trade.



File – Displays menu options for opening and printing charts, managing chart profiles and displaying account information.

View – Contains menu options for displaying MetaTrader windows and toolbars. You can also manage your language preferences and access the Strategy Tester from this window.

Insert – Displays menu options for displaying indicators, drawing and analytic objects and text in the chart window.

Charts – Contains menu options for managing the appearance of the chart window. You can change the time frame and chart type as well as display grid features.

Tools – Contains tools for placing orders, displaying the History Center, accessing MetaEditor and customizing the interface.

Window – Displays menu options for arranging the windows in the MetaTrader workspace.

Help – Contains menu options for displaying MetaTrader online help, accessing the MQL4 (the MetaTrader programming language) community and viewing version information.



MetaEditor is an application installed with MetaTrader that enables traders to import, create and modify expert advisors, custom indicators, scripts and other autotrading tools. See ***Section 4: Opening MetaEditor for the First Time*** for more information.

MetaTrader Toolbars

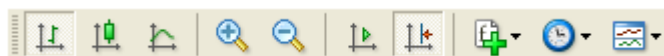
MetaTrader groups its most commonly used tools on four toolbars. You can access these by clicking the **View** menu, selecting **Toolbars** and then clicking on the menu option for the toolbar you want.



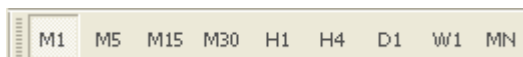
The Standard toolbar contains tools for displaying windows in the MetaTrader workspace.



The Charts toolbar displays tools for managing the appearance of the chart window.



The Line Studies toolbar contains tools for displaying drawing and analytic objects and text in the chart window.



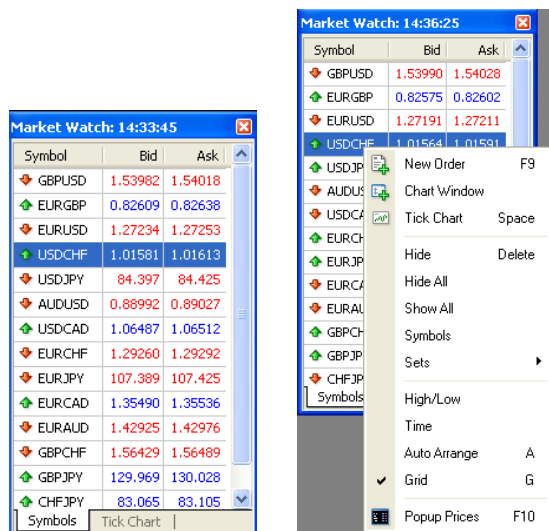
The Periodicity toolbar displays tools for managing time frames of the chart window.



You can customize all of the toolbars so that they contain only the tools that you use. For more information, see *Customizing the Toolbars* in ***Section 6: Customizing the Appearance and Settings in MetaTrader***.

The Market Watch Window

You can monitor the real-time bid and ask prices of the available instruments in the Market Watch window. These are displayed on two tabs.



The Symbols tab displays a list of instruments to trade and their prices.

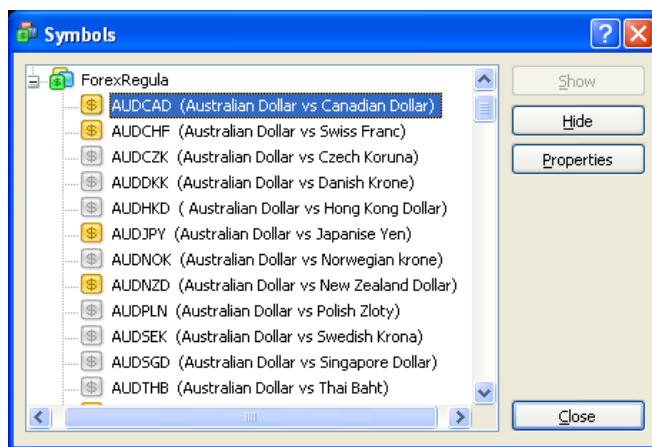
The arrow beside the instrument symbol shows if the price is rising or falling. The Bid and Ask prices will appear in a different colour. If the price is lower than the last reported one, the numbers appear in red. If the price is higher than the last reported one, the numbers appear in blue.

You can double-click on an instrument to view the Order window and place an order to trade. See *Placing Market Orders Manually from the Order Window* in **Section 2: Opening and Managing Your Trades** for more information.

If you right-click on an instrument when the Symbols tab is selected, you can access a drop-down menu with several options.

New Order displays the Order window. **Chart Window** opens a new chart window. **Tick Chart** changes the Symbols tab to the Tick Chart tab. We'll discuss each of these windows in upcoming sections of this guide.

You can customize the Market Watch window so that it hides instruments as long as there are no open positions or pending orders attached to it. **Hide** removes a single instrument symbol from the window. **Hide All** temporarily removes all instrument symbols in the window. **Show All** displays the list of all available instruments.



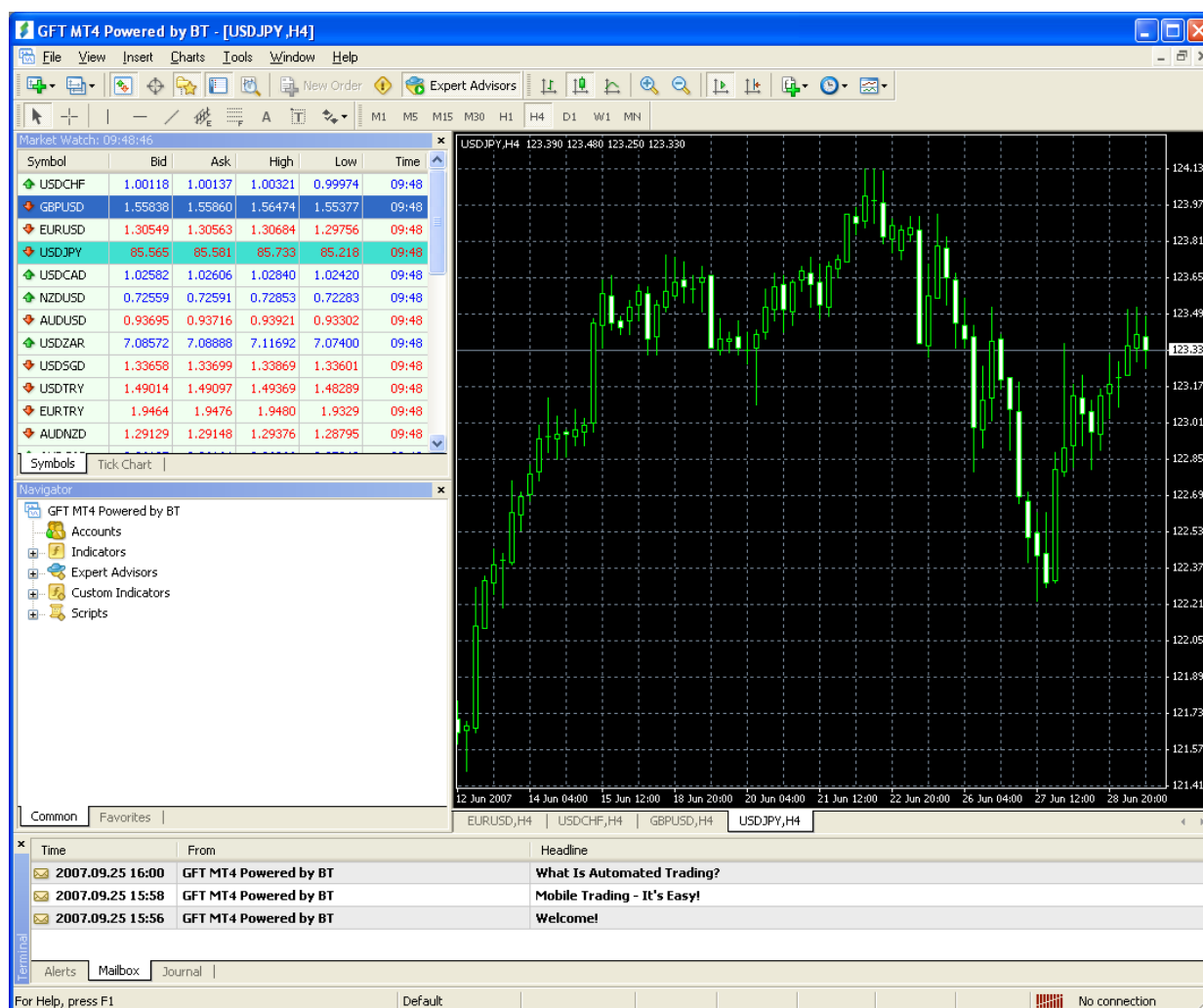
If you accidentally remove an instrument from the Symbols tab, you'll need to right-click in the window and select **Symbols**. This displays the Symbols window where you can select the instrument you want to appear in the Market Watch window by clicking **Show** or **Hide**. Hidden instruments will have a gray symbol next to their name.

You can view information, such as pricing and size, for each instrument by clicking **Properties**. See *Viewing Pricing and Contract Information* in **Section 2: Opening and Managing Your Trades** for more information.



When you hide an instrument in the Market Watch window, that instrument will also be hidden in other tools as well. For example, if you want to open a chart of the AUD/CAD, but the currency pair is hidden, it will not appear in the drop-down menu when you click the **File** menu and select **New Chart**.

Once you set up the Symbols tab so that it's only showing the instruments that you want, you can save the group of instruments as a set by right-clicking in the Market Watch window, selecting **Sets** and clicking **Save As...** If you change which instruments are displayed, you can always return to that set of instruments by right-clicking in the Market Watch window, selecting **Sets** and clicking on the name of the set.



While you can view the instrument symbol and the prices in the Symbols tab, you can also view more information by right-clicking in the window; you can show the time that the bid and ask prices were recorded by selecting **Time** and the daily highs and lows by selecting **High/Low**.

You can rearrange the instruments as desired by clicking on the symbol you want and dragging it to a new location. You can also change the appearance of the table by selecting **Auto Arrange**, which resizes the columns automatically if the Market Watch window size changes, or **Grid**, which displays lines between the rows and columns.

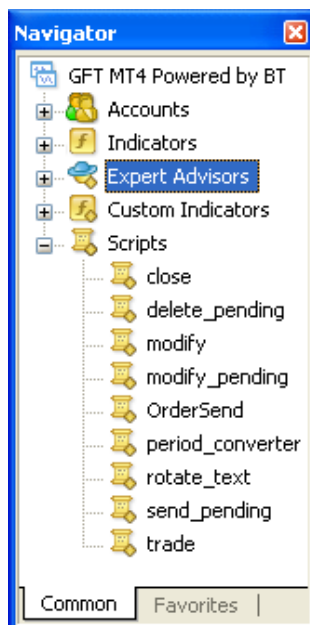


You can click on the Tick Chart tab to display a chart of the selected instrument with its price movements measured by the tick.

The Tick Chart captures the buy prices with a buy line (which appears in red when you first open MetaTrader). If you right-click in the tab, you can view the ask price movements by right-clicking in the window and selecting **Ask Line**. This appears on the chart as a blue line.

The Navigator Window

As you trade, you'll want to add indicators to chart windows as well as activate MetaTrader's autotrading tools, such as expert advisors, custom indicators and scripts. The Navigator Window is where you can view all of the available tools.



The Navigator window is divided into two tabs. On the Common tab, you can select menu options from a grouped list. To display the available menu options, click + next to the group name. To hide them, click – next to the group name.

Accounts displays the list of open accounts. If you have more than one account, you can use this menu to login to another account. If you right-click on an account, you can access a drop-down menu which includes options to login to an account, delete an account, or open a new practice account.

Indicators shows a list of up to 100 different technical indicators (depending on your account type) that you can add to the chart window. Many traders use technical indicators to forecast where the market may be going. You can right-click on the indicator you want and click **Attach to Chart** from the drop-down menu to display it in a chart window.

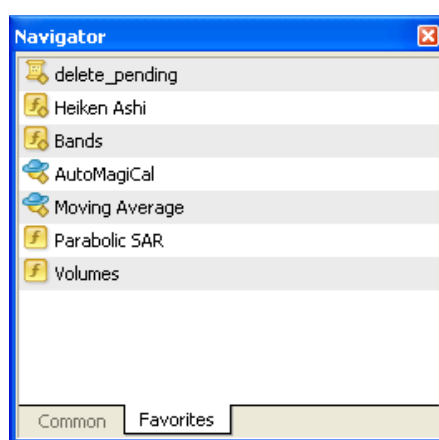
Expert Advisors contains a list of all available expert advisor strategies; these are programs that automatically analyse market conditions and place trades based on criteria you set.

Custom Indicators displays a list of trader-modified technical indicators.

Scripts contains a list of available scripts; these are programs that perform a single trading action once.



You can download expert advisors, custom indicators, scripts and libraries from other sources or create them in MetaEditor, an application installed with MetaTrader that develops autotrading tools. See **Section 4: Opening MetaEditor for the First Time** to learn more about MetaEditor and **Section 5: Using MetaTrader's Autotrading Tools** for more information on these tools.



If you right-click on a specific indicator, expert advisor, script or custom indicator, you can select **Add to Favorites** from the drop-down menu. You can then view these on the Favorites tab on the Navigator window.

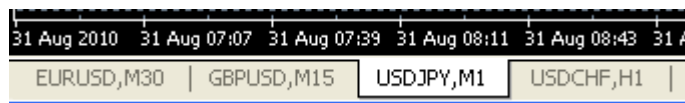
The Chart Window

The chart window plots the real-time prices of an instrument on a graph and provides a snapshot of market movements over a particular period of time.



Prices appear on the right side of the chart and the time and date appear along the bottom.

There are several ways to open the chart window. One of the most common is to right-click on an instrument in the Market Watch window and select **Chart Window**.



You can open more than one chart at a time (up to 99 can be displayed). When the Charts Bar is active, you can switch between them by clicking the instrument tab at the bottom of the window.

You can customize the chart window using the tools in the Chart toolbar. See *Displaying the Chart Toolbar* in **Section 3: Using the Chart Tools** for more information on the chart window.



If you do not see the tabs on the bottom of your chart, click the **View** menu and make sure **Charts Bar** is check marked.

The Terminal Window

You can monitor your trading activity, manage your expert advisors and perform other trading tasks in the Terminal window. This usually appears at the bottom of the MetaTrader workspace. These features are arranged in the window on several tabs.



If the Terminal window is not displayed, you can view it by clicking the **View** menu and selecting the **Terminal** menu option.

| Order | Time | Type | Size | Sym... | Price | S / L | T / P | Price | Com... | Taxes | Swap | Profit | Comment |
|--|------------------|------|------|--------|---------|---------|---------|---------|--------|-------|--------|----------|---------|
| 9235... | 2010.07.29 16:44 | buy | 2.00 | eurusd | 1.28507 | 0.00000 | 0.00000 | 1.30727 | 0.00 | 0.00 | 147.49 | 4 440.00 | |
| 9331... | 2010.08.31 20:53 | sell | 4.00 | eurjpy | 107.832 | 0.000 | 0.000 | 106.800 | 0.00 | 0.00 | 205.11 | 4 920.03 | |
| Balance: 46 814.01 Equity: 37 101.38 Margin: 3 843.60 Free margin: 33 257.78 Margin level: 965.28% | | | | | | | | | | | | 9 360.03 | |
| Trade Account History News Alerts Mailbox Journal | | | | | | | | | | | | | |

The Trade tab displays your open positions and pending orders. This is where you'll manage all of your trades.



While the Trade tab contains fields for balance, equity and margin data, you should not use these to moderate your account. When you sign up for MetaTrader 4, you will also receive access to DealBook WEB, which displays the most accurate trading activity on your account. At GFT, all transaction/order history information that appears in DealBook® WEB is considered the most accurate and legally-binding. Because of this, we recommend that you have both MetaTrader 4 and DealBook® WEB open when trading to compare equity values. If you have questions about this, contact GFT.

| Order | Time | Type | Size | Symbol | Price | S / L | T / P | Time | Price | Swap | Profit |
|---|------------------|-----------|------|--------|---------|---------|---------|------------------|---------|---------|-----------|
| 91131203 | 2010.07.13 12:37 | balance | | | | | | | | Deposit | 50 000.00 |
| 91788415 | 2010.07.15 15:42 | buy | 2.00 | usdchf | 1.04105 | 1.03999 | 1.04111 | 2010.07.29 18:34 | 1.04111 | -31.92 | 11.53 |
| 92191210 | 2010.07.19 14:09 | sell | 2.00 | nzdusd | 0.70616 | 0.00000 | 0.00000 | 2010.07.29 18:50 | 0.72565 | -139.47 | -3 898.00 |
| 92191216 | 2010.07.19 14:09 | sell | 2.00 | nzdusd | 0.70631 | 0.00000 | 0.00000 | 2010.07.29 18:55 | 0.72535 | -139.47 | -3 808.00 |
| 92354344 | 2010.07.29 16:49 | buy | 2.00 | usdcad | 1.03815 | 0.00000 | 0.00000 | 2010.08.27 19:54 | 1.05205 | -168.60 | 2 642.46 |
| 92354383 | 2010.07.29 16:59 | buy | 2.00 | eurusd | 1.30812 | 1.30885 | 0.00000 | 2010.07.29 19:40 | 1.30885 | 0.00 | 146.00 |
| 92354397 | 2010.07.29 16:58 | buy limit | 2.00 | chfjpy | 83.359 | 0.000 | 0.000 | 2010.07.29 19:32 | 83.485 | | |
| Trade Account History News Alerts Mailbox Experts Journal | | | | | | | | | | | |

The Account History tab compiles a list of all executed trades. You can also view your profit and loss, credits, deposits and withdrawal information.

| Time | Headline |
|------------------------|---|
| 2010-08-31 03:13:00 PM | DJ MARKET TALK: USD/CAD Hits 8-Week High, Recedes Slightly |
| 2010-08-31 03:12:00 PM | DJ MARKET TALK: Canada Back In Expansionary Territory |
| 2010-08-31 03:11:00 PM | DJ MARKET TALK: Polish Bonds Weaker Ahead Of Primary Tender |
| 2010-08-31 03:01:00 PM | DJ Sterling Index At 1500 GMT |
| 2010-08-31 03:01:00 PM | DJ Sterling Index At 1500 GMT |
| 2010-08-31 03:00:00 PM | DJ Late Spot Sterling Rates In London |
| 2010-08-31 02:54:00 PM | DJ MARKET TALK: EUR/CHF Hits Fresh All-Time Low |

The News tab displays all the latest streaming financial news.

| Symbol | Condition | Counter | Limit | Timeout | Event |
|--------|----------------|---------|-------|---------|-------|
| EURUSD | Bid > 1.27500 | 0 | 1000 | 10 sec | alert |
| GBPUSD | Bid > 1.55930 | 0 | 1000 | 10 sec | alert |
| GBPUSD | Bid < 83.50000 | 1 | 1000 | 10 sec | alert |

The Alerts tab shows a list of alerts. You can also use this tab to set alarms to notify you when an instrument has either reached a specific price or crossed an indicator trend line. See *Viewing and Setting Alerts* in **Section 2: Opening and Managing Your Trades** for more information.

| Time | From | Headline |
|------------------|-----------------------|-----------------------------|
| 2010.08.25 13:15 | GFT MT4 Powered by B! | Registration |
| 2007.09.25 16:00 | GFT MT4 Powered by B! | What is Automated Trading? |
| 2007.09.25 15:58 | GFT MT4 Powered by B! | Mobile trading - It's easy! |
| 2007.09.25 15:56 | GFT MT4 Powered by B! | Welcome! |

The Mailbox tab displays electronic messages sent to MetaTrader by GFT.

| Time | Message |
|---------------------|--|
| 2010.08.31 10:34:41 | MACD Sample EURUSD,M1: removed |
| 2010.08.31 10:34:41 | MACD Sample EURUSD,M1: uninit reason 1 |
| 2010.08.30 08:53:33 | MACD Sample EURUSD,M1 inputs: TakeProfit=50; Lots=0.1; TrailingStop=30; MACDOpenLevel=3; MACDCloseLevel=2; MATrendPeriod=26; |
| 2010.08.30 08:53:33 | MACD Sample EURUSD,M1: loaded successfully |

The Experts tab shows information about the expert advisors that are active in your account. You can also view positions the expert advisor opened or closed.

| Time | Message |
|---------------------|---------------------------------------|
| 2010.08.31 11:17:17 | Alert: bid < 83.50000 |
| 2010.08.31 11:17:07 | Alert: bid < 83.50000 |
| 2010.08.31 10:34:41 | Expert MACD Sample EURUSD,M1: removed |
| 2010.08.30 18:43:27 | 585 login |
| 2010.08.30 18:26:04 | 585 login |
| 2010.08.30 18:20:45 | 585 login |
| 2010.08.30 18:13:27 | 585 login |

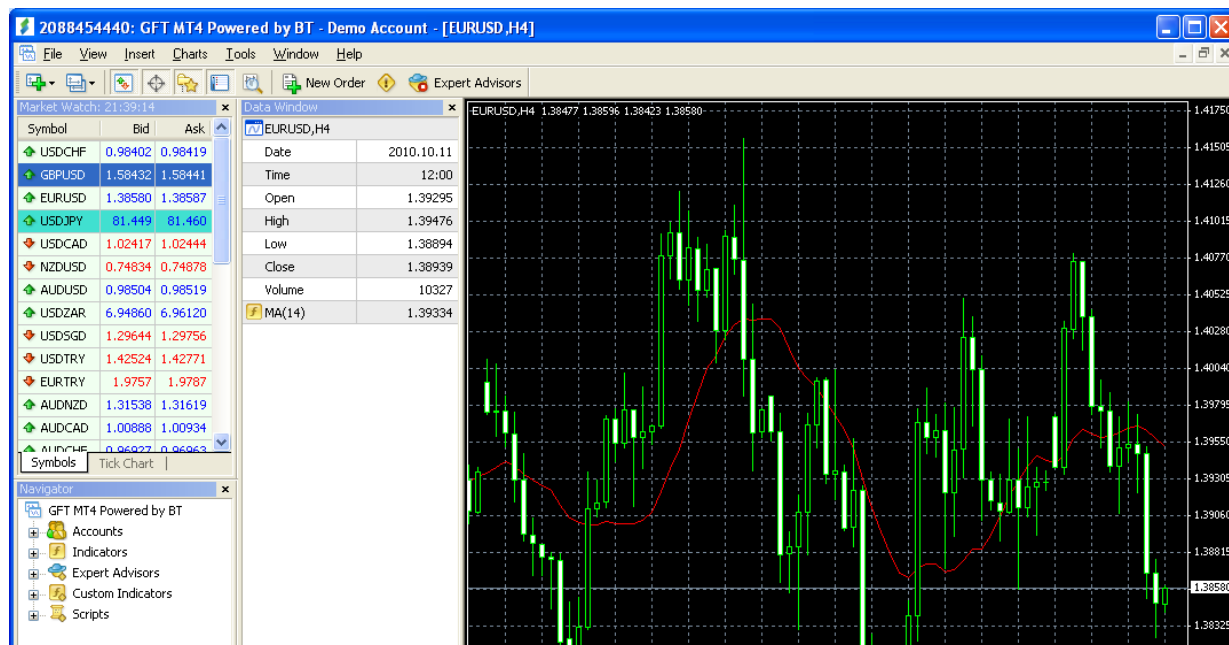
The Journal tab displays system messages about your account, such as login times, orders filled or edited and positions closed.



Not all tabs will appear when you first open the Terminal window. For example, the Experts tab does not appear when you first open MetaTrader. This tab remains hidden until you receive input from MetaEditor, an application installed with MetaTrader that enables traders to import, create and modify expert advisors, or another MQL4 program. See **Section 4: Opening MetaEditor for the First Time** for more information.

The Data Window

The Data Window displays price information for the instrument in the displayed chart. You can view the open, high, low and close as well as the date, time and volume. When an indicator or a custom indicator has been attached to a chart, you can view information about it in this window.



You can right-click in the Data Window to view the following menu options.

Copy allows you to copy information from the Data Window.

When checked, **Last Data** displays a column in the Data Window which contains the latest open, high, low and close.

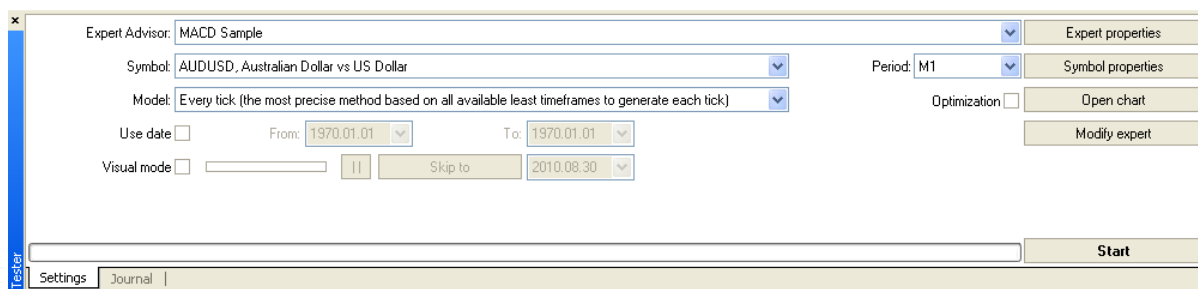
When checked, **Auto Arrange** automatically resizes the columns in the Data Window if the window size changes.

When checked, **Grid** displays a border around the rows and columns in the Data Window.

You can choose which information appears in the Data Window by selecting **Show** and then checking or unchecking the options in the drop-down menu.

The Strategy Tester

With MetaTrader, you can create expert advisors to help you analyse markets and make trades. The Strategy Tester window allows you to test expert advisor strategies against already saved market history data and modify expert advisors as needed.



The Settings tab is where you specify which expert advisor, the testing period, modelling and other information.

The Journal tab displays a list of system messages about the expert advisor's test, such as orders filled and positions closed.

| # | Time | Type | Order | Size | Price | S / L | T / P | Profit | Balance |
|----|------------------|--------|-------|------|---------|---------|---------|--------|---------|
| 1 | 2010.08.18 02:22 | sell | 1 | 0.10 | 0.90364 | | 0.90314 | | |
| 2 | 2010.08.18 02:34 | modify | 1 | 0.10 | 0.90364 | 0.90363 | 0.90314 | | |
| 3 | 2010.08.18 02:34 | modify | 1 | 0.10 | 0.90364 | 0.90362 | 0.90314 | | |
| 4 | 2010.08.18 02:34 | modify | 1 | 0.10 | 0.90364 | 0.90360 | 0.90314 | | |
| 5 | 2010.08.18 02:34 | modify | 1 | 0.10 | 0.90364 | 0.90359 | 0.90314 | | |
| 6 | 2010.08.18 02:34 | modify | 1 | 0.10 | 0.90364 | 0.90358 | 0.90314 | | |
| 7 | 2010.08.18 02:34 | modify | 1 | 0.10 | 0.90364 | 0.90356 | 0.90314 | | |
| 8 | 2010.08.18 02:35 | modify | 1 | 0.10 | 0.90364 | 0.90354 | 0.90314 | | |
| 9 | 2010.08.18 02:35 | modify | 1 | 0.10 | 0.90364 | 0.90352 | 0.90314 | | |
| 10 | 2010.08.18 02:35 | modify | 1 | 0.10 | 0.90364 | 0.90351 | 0.90314 | | |

The Results tab displays a table that contains information about all of the trades that were executed during the test.

The Graph tab shows the test results. After a test, you can view a graph which maps your balance (with a blue line) and the number of lots (with a green line). You can view this information in a legend that appears in the upper left corner.

The Report tab displays statistics about how the test was performed.

The Optimization Results tab displays a table that contains information about all of the trades that were executed during the optimization.

The Optimization Graph tab displays a graph which maps your profitable trades (in a green line) and your unprofitable trades (in a red line).



Not all tabs will appear when you first open the Strategy Tester window. For example, the Results tab, Graph tab and Report tab appear only after the expert advisor has been tested. The Optimization Results and Optimization Graph appear only when an expert advisor has been optimized. See *Testing an Expert Advisor* in **Section 5: Using MetaTrader's Autotrading Tools**.

Generating MetaTrader 4 Reports in DealBook® WEB

When you sign up for a GFT live account with MetaTrader 4, you will also receive access to a special version of DealBook® WEB, which you'll use to generate your reports and statements. You'll use your MetaTrader 4 login to access this.



If you have a practice account, you will not receive DealBook® WEB access.



STATEMENTS


Type of report: Detail Transaction report

From: 2011/2/28 To: 2011/2/28

Show report!

User account: 2256652 (USD)



Prior, Kate

kprior@gftforex.com

Account: 2256652

Date: Feb 28, 2011 9:11:49 PM

Period: Feb 25, 2011 8:00:00 PM

Feb 28, 2011 8:00:00 PM

MTD Settled PL 1,062.93 CR

YTD Settled PL 1,062.93 CR

MTD fee 0.00 CR

YTD fee 0.00 CR

All times are in GMT

Detail Transaction Report

Account Value and Margin Summary

Account Balance:

| | Account Balance | UnRealized P/L |
|-----------|-----------------|----------------|
| USD | 70,663.81 CR | 0.00 CR |
| Net, USD: | 70,663.81 CR | 0.00 CR |

Margin Requirement:

| |
|-------------|
| USD 0.00 CR |
|-------------|

Open P/L:

| |
|-------------|
| USD 0.00 CR |
|-------------|

Margin Excess:

| |
|------------------|
| USD 70,663.81 CR |
|------------------|

UnRealized P/L:

| |
|-------------|
| USD 0.00 CR |
|-------------|

Equity:

| |
|------------------|
| USD 70,663.81 CR |
|------------------|

Currency Conversion Rates:

| | Rate, USD |
|------------------------|-----------|
| UAE Dirham, AED | 0.2723 |
| Australian Dollar, AUD | 1.0168 |
| Bulgarian Lev, BGN | 0.9835 |
| Brazilian Real, BRL | 0.272 |

Period totals:

| | |
|--------------------|---------|
| Total Deposits: | 0.00 CR |
| Total Withdrawals: | 0.00 CR |
| P/L: | 0.00 CR |
| Misc Fees: | 0.00 CR |

While you won't be able to place trades from this version of DealBook®, it will show you the most accurate transaction and order history on your MetaTrader 4 account.

Generating reports in DealBook® WEB:

1. Open DealBook® WEB. This link is sent to you when you open an account.
2. Enter your username and password. Click >> to login.
3. Select the report you want from the **Type of Report** drop-down menu.
4. Enter the dates you want in the **From** and **To** dates. Depending on the report, you may also be able to choose other options.
5. Click **Show Report** to generate the report.



With live accounts, GFT recommends having both MetaTrader 4 and DealBook® WEB open when trading to compare equity values. Please remember that the equity value in DealBook® WEB is the most accurate and legally-binding. You should rely on this value when you are trading. If you have questions about the difference between the two platforms, contact GFT.

Section 2: Opening and Managing Your Trades

Now that you're familiar with some of the windows in MetaTrader, we'll look at the tools you'll use to place and monitor your trades. This section describes the various order types that are available in MetaTrader and the tools you can use to manually manage your orders in the market.

Trading with the Order Types in MetaTrader

When you trade with MetaTrader, there will be times when you need to manually place an order to open a position in the market. MetaTrader allows you to do this using several types of trading orders.



Orders in MetaTrader will be filled at the nearest market price. Sometimes, this may be worse than the price you requested. This is called slippage. Slippage is possible on all orders.

Market Order – Places a buy or sell order on an instrument at the current market price.

Pending Order – Enters your order when the market reaches a specific price.



There is a difference between orders and positions. All trades are placed as orders. When the price of the order meets the market price, it becomes an actively traded position. You can modify and cancel orders, but you can only close positions.

When you select pending order, you can choose one of four types of orders:

- **Buy Limit** - Places a buy order at a specific ask price. When you place a buy limit, the price should be below the current market price.
- **Sell Limit** - Places a sell order at a specific bid price. When you place a sell limit, the price should be above the current market price.
- **Buy Stop** – Places a buy order at a particular ask price. When you place a buy stop, the price should be above the current market price.
- **Sell Stop** – Places a sell order at a particular bid price. When you place a sell stop, the price should be below the current market price.

Take Profit – Places an order to exit an active position to capture profits you may have.

Stop Loss – Places an order to exit an active position to minimize any losses you may have.

Trailing Stop Orders – Places a stop order at a specific number of points away from the current market price. Once the market moves in your favour by that number, that stop loss order will then automatically update as long as the market moves your way so that it 'trails' the current price by the number of points you set. When the market moves against your position after the trailing stop loss has been set, the stop loss remains set at the last trailing price that it reached when the market was moving in your favour. You can use this to help protect profits without limiting any potential gains on your open positions.



In MetaTrader 4, trailing stops will run as long as you are logged into the platform.

If you set a trailing stop and then log out of MetaTrader *before* the market moves in your favour by the number of points that you entered, then the trailing stop loss order will not be placed.

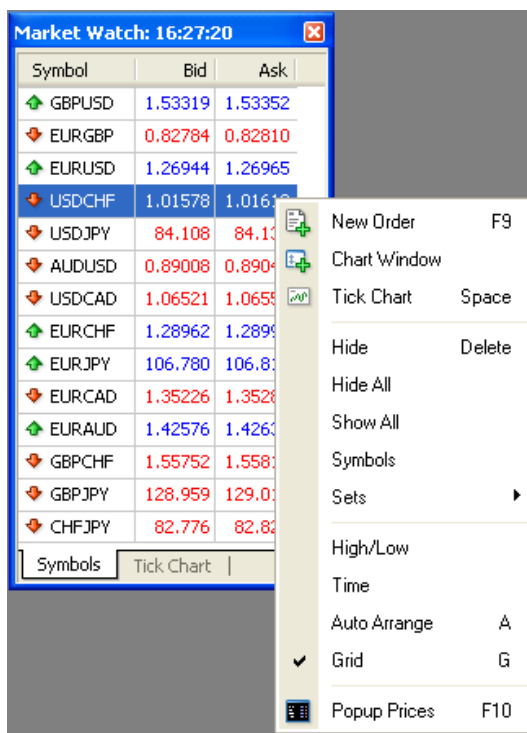
If you set a trailing stop and log out of MetaTrader *after* the market moves in your favour, triggering the trailing stop, the stop loss order will not trail the market. It will work as a hard stop at the last price that the stop loss was at when you logged off.

When you log back into MetaTrader 4, if the stop loss hasn't been triggered, it will resume trailing the current

market price by the number of points that you specified between the stop and the current price.

Viewing Pricing and Contract Information

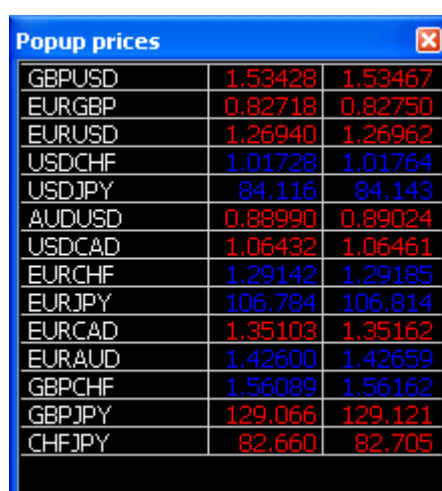
Before you place an order, you'll want to monitor the price and determine a good point to enter the market. You'll also want to pick points for your take profit or stop loss orders. You can monitor prices and view contract information in the Market Watch window.



| Symbol | Bid | Ask |
|--------|---------|---------|
| GBPUSD | 1.53319 | 1.53352 |
| EURGBP | 0.82784 | 0.82810 |
| EURUSD | 1.26944 | 1.26965 |
| USDCHF | 1.01578 | 1.01610 |
| USDJPY | 84.108 | 84.110 |
| AUDUSD | 0.89008 | 0.89040 |
| USDCAD | 1.06521 | 1.06550 |
| EURCHF | 1.28962 | 1.28990 |
| EURJPY | 106.780 | 106.810 |
| EURCAD | 1.35226 | 1.35260 |
| EURAUD | 1.42576 | 1.42600 |
| GBPCHE | 1.55752 | 1.55800 |
| GBPJPY | 128.959 | 129.000 |
| CHFJPY | 82.776 | 82.820 |

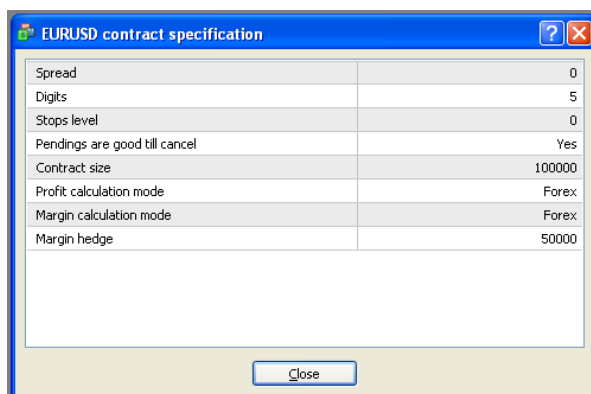
You can monitor the real-time bid and ask prices of the available instruments in the Market Watch window.

In addition to the Market Watch window, you can also view the Popup Prices window. Like the Market Watch window, this displays a list of symbols and prices. You can view this by right-clicking in the Market Window and selecting **Popup Prices**.



| Symbol | Bid | Ask |
|--------|---------|---------|
| GBPUSD | 1.53428 | 1.53467 |
| EURGBP | 0.82718 | 0.82750 |
| EURUSD | 1.26940 | 1.26962 |
| USDCHF | 1.01728 | 1.01764 |
| USDJPY | 84.116 | 84.143 |
| AUDUSD | 0.88990 | 0.89024 |
| USDCAD | 1.06432 | 1.06461 |
| EURCHF | 1.29142 | 1.29185 |
| EURJPY | 106.784 | 106.814 |
| EURCAD | 1.35103 | 1.35162 |
| EURAUD | 1.42600 | 1.42659 |
| GBPCHE | 1.56089 | 1.56162 |
| GBPJPY | 129.066 | 129.121 |
| CHFJPY | 82.660 | 82.705 |

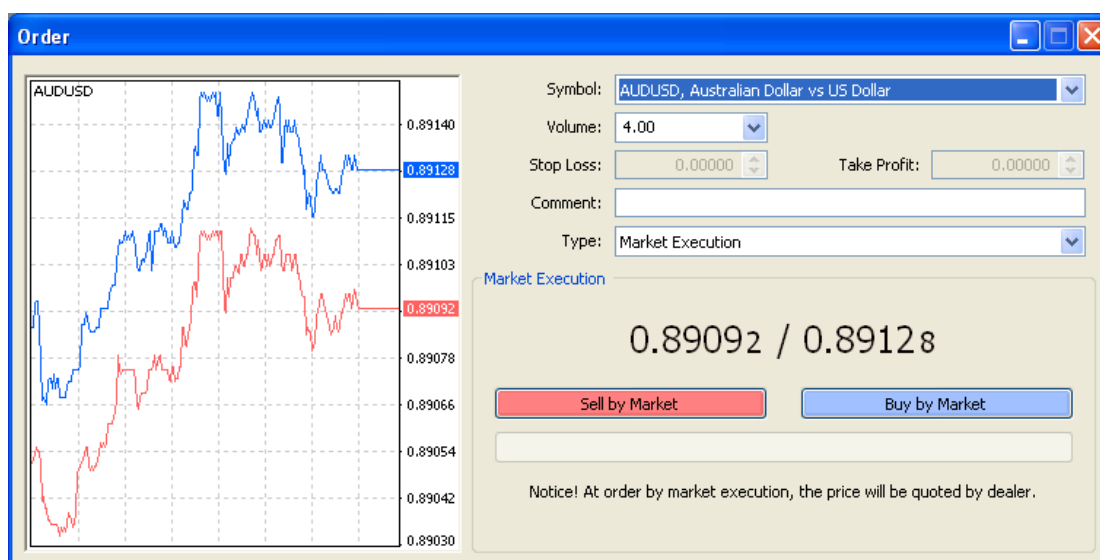
If you right-click on the Popup Prices window, you can choose how you want the window to appear on screen. **Always on Top** displays the Popup Prices window on top of other applications. **Full Screen** expands the window so it fits your entire computer monitor. When selected, a checkmark appears next to the menu option in the drop-down menu. You can deactivate the option by unchecking the menu option.




Before you trade, you may want to see the spread, margin, contract size and other details about the instrument you are interested in trading. You can view contract information by right-clicking in the Market Watch window and selecting **Symbols**. When the Symbols window appears, select the instrument you want and click **Properties**. This opens the Contract Specification window for the instrument you selected.

Viewing the Order Window

In MetaTrader, you'll place most of your manual orders using the Order window.



There are several ways to open the Order window:

- Select **New Order** from the **Tools** menu.
- Click  **New Order** in the Standard toolbar.
- Double-click on an instrument in the Market Watch window.
- Right-click on a position in the Terminal window and select **New Order** from the drop-down menu.

Once open, you can use the following features to specify your trade:

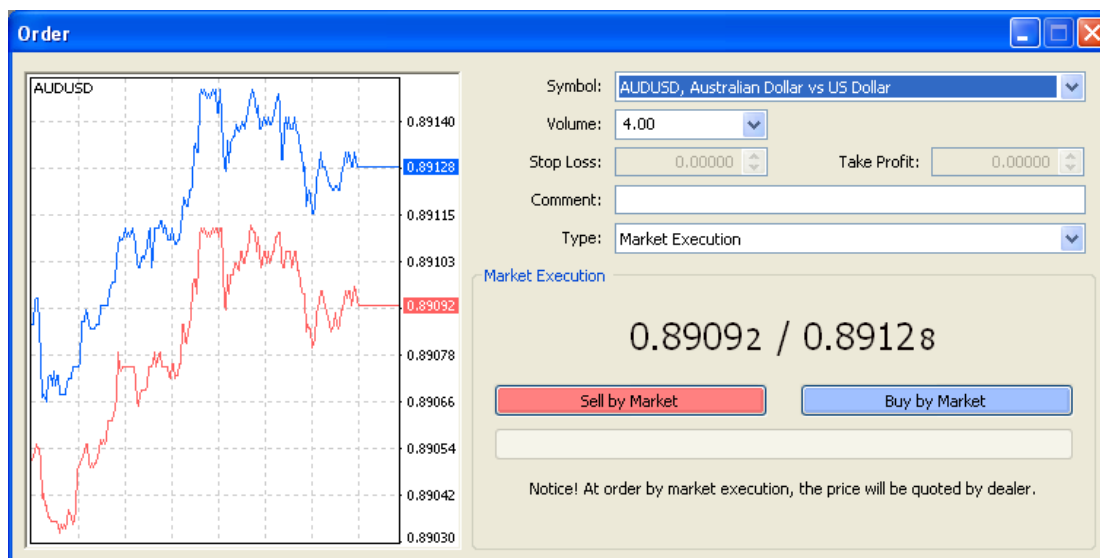
- **Chart** – View the current by-tick price movements of the instrument. The blue line represents the current ask price and the red shows the current bid price.
- **Symbol** – Select an instrument to trade.
- **Volume** – Specify the number of lots you want to trade.
- **Type** – Choose whether your order is a market order or a pending order.



In MetaTrader, 1.0 equals 100,000 units and .10 equals 10,000 units.

Placing Market Orders Manually from the Order Window

When you first open the New Order window, the **Type** menu is set to **Market Execution** so you can place market orders.



The Market Execution section displays the current price and options for placing your trade.

If the market is particularly volatile, it may take a few seconds for GFT to process your order. MetaTrader displays a pending message, a progress bar to show you how much further the trade has to process and a **Cancel Order** button, if you no longer want to place the order.

Once the order is processed, the Order Execution section appears in the Order window. This displays a confirmation message, informing you that your trade was successful. From this message, you can print out the order information by clicking **Print** or close the window by clicking **OK**.

Placing a Market Order:

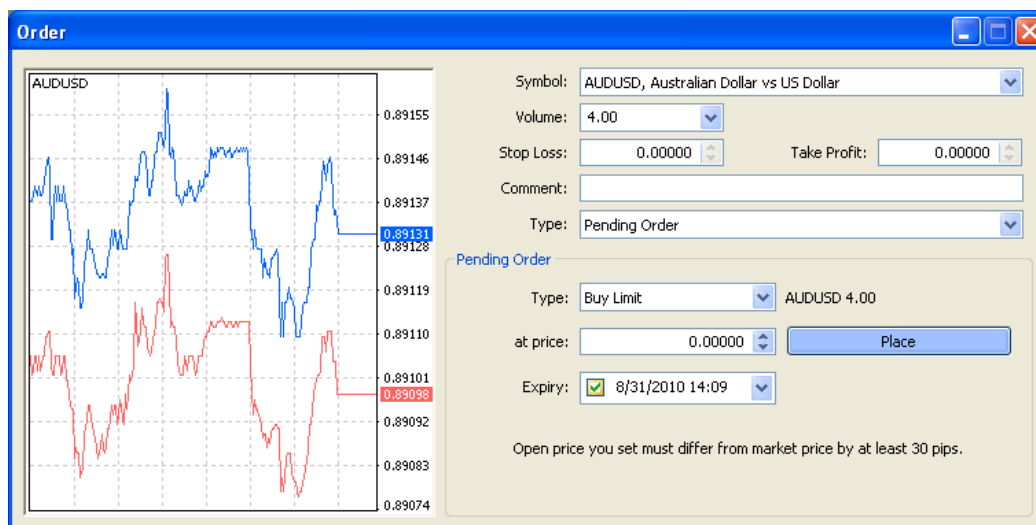
1. Double-click an instrument in the Market Watch window.
2. Make sure the instrument you want is selected. Click the **Symbol** drop-down menu to select an instrument, if not.
3. Click **Volume** drop-down menu to select the number of lots you want to trade.
4. Make sure **Market Execution** is selected in the **Type** drop-down menu.
5. If desired, enter text in the **Comment** text box.
6. Click either the **Sell by Market** or **Buy by Market** button.
7. Click **Print** to print the order information, if desired.
8. Click **OK** to close the window.



While you can open the Order window a number of different ways, our examples access the Order window by double-clicking in the Market Watch window.

Placing Pending Orders Manually from the Order Window

You can also place pending orders; these enter your order when the market reaches a specific price.



The Order window displays some of the same fields as it does when you enter a market order. When you select **Pending Order** from the **Type** menu, a new section, Pending Order, appears. You can select what kind of pending order you want, the price and the expiration date of the trade.

If you are using a pending order to enter the market, you can enter a specific price in the **At Price** text box.

You can specify how long you want your pending order to be available by using the **Expiry** checkbox. After you click the checkbox, you can select a specific expiration date and time.

Selecting **Pending Order** also opens the **Stop Loss** and **Take Profit** text boxes. If desired, you can set the prices you want for these orders.

If you place a stop loss or take profit order, the chart in the Order window displays a line representing these pending orders.

If you enter an inappropriate price for either the **Stop Loss** or **Take Profit** text boxes and click **Place** to enter your order, MetaTrader displays a notification message. If you are entering both types of pending orders, MetaTrader lets you know if the stop loss (SL) or take profit (TP) is wrong. Click **OK** and then adjust the price.

Placing a Pending Order:

1. Double-click an instrument in the Market Watch window.
2. Make sure the instrument you want is selected. Click the **Symbol** drop-down menu to select an instrument, if not.
3. Click **Volume** drop-down menu to select the number of lots you want to trade.
4. Click **Type** and select **Pending Order**.
5. In the Pending Order section, select one of the pending order types from the **Type** drop-down menu.
6. Enter the price.
7. Click the **Expiry** checkbox and select a date.
8. If desired, enter a price in the **Stop Loss** or **Take Profit** text boxes.
9. Click **Place**.
10. Click **Print** to print the order information, if desired.

11. Click **OK** to close the window.

Managing Your Orders

Once you place a trade, you'll want to view your open positions and pending orders as well as your closed trades. You can do so on two tabs in the Terminal window.

| Order | Time | Type | Size | Symbol | Price | S / L | T / P | Price | Comm... | Taxes | Swap | Profit | Comment |
|--|------------------|------|------|--------|---------|---------|---------|---------|---------|-------|--------|-----------|---------|
| 92354... | 2010.07.29 16:44 | buy | 2.00 | eurusd | 1.27143 | 0.00000 | 0.00000 | 1.30727 | 0.00 | 0.00 | 101.02 | 7 168.00 | |
| 92354... | 2010.07.29 16:48 | buy | 2.00 | gbpusd | 1.53700 | 0.00000 | 0.00000 | 1.55844 | 0.00 | 0.00 | 87.38 | 4 288.00 | |
| 92354... | 2010.07.29 16:49 | buy | 2.00 | eurgbp | 0.82701 | 0.00000 | 0.00000 | 0.83903 | 0.00 | 0.00 | 230.60 | 3 695.14 | |
| 93237... | 2010.08.26 16:00 | buy | 4.00 | eurusd | 1.27143 | 0.00000 | 0.00000 | 1.27205 | 0.00 | 0.00 | 21.34 | 248.00 | |
| 93268... | 2010.08.27 18:08 | buy | 4.00 | eurusd | 1.27143 | 0.00000 | 0.00000 | 1.27322 | 0.00 | 0.00 | 14.22 | 716.00 | |
| Balance: 44 614.53 Equity: 28 044.83 Margin: 9 263.46 Free margin: 18 781.38 Margin level: 302.75% | | | | | | | | | | | | 16 569.14 | |
| Trade Account History News Alerts Mailbox Experts Journal | | | | | | | | | | | | | |

You can manage all of your open positions and pending orders in the Trade tab of the Terminal window. You can also view your balance, equity and margin data in this tab.

When you right-click in a position row, you can select menu options to open an order, modify or delete an order or close an order.

You can also right-click in the tab and select menu options to add the **Commissions**, **Taxes** and **Comments** columns to the table. You can also choose to display the value in the **Profit** column in points, term currency or deposit currency.

Viewing Your Account History

You can view all of your executed trades on the Account History tab of the Terminal window. Here, you can also view your profit and loss, credits, deposits and withdrawal information.

| Order | Time | Type | Size | Symbol | Price | S / L | T / P | Time | Price | Swap | Profit |
|---|------------------|-----------|------|--------|---------|---------|---------|------------------|---------|---------|-----------|
| 91131203 | 2010.07.13 12:37 | balance | | | | | | | | Deposit | 50 000.00 |
| 91788415 | 2010.07.15 15:42 | buy | 2.00 | usdchf | 1.04105 | 1.03999 | 1.04111 | 2010.07.29 18:34 | 1.04111 | -31.92 | 11.53 |
| 92191210 | 2010.07.19 14:09 | sell | 2.00 | nzdusd | 0.70616 | 0.00000 | 0.00000 | 2010.07.29 18:50 | 0.72565 | -139.47 | -3 898.00 |
| 92191216 | 2010.07.19 14:09 | sell | 2.00 | nzdusd | 0.70631 | 0.00000 | 0.00000 | 2010.07.29 18:55 | 0.72535 | -139.47 | -3 808.00 |
| 92354344 | 2010.07.29 16:49 | buy | 2.00 | usdcad | 1.03815 | 0.00000 | 0.00000 | 2010.08.27 19:54 | 1.05205 | -168.60 | 2 642.46 |
| 92354383 | 2010.07.29 16:59 | buy | 2.00 | eurusd | 1.30812 | 1.30885 | 0.00000 | 2010.07.29 19:40 | 1.30885 | 0.00 | 146.00 |
| 92354397 | 2010.07.29 16:58 | buy limit | 2.00 | chfjpy | 83.359 | 0.000 | 0.000 | 2010.07.29 19:32 | 83.485 | | |
| Trade Account History News Alerts Mailbox Experts Journal | | | | | | | | | | | |

When you right-click in a position row, you can select menu options to filter and sort the orders that appear in the tab by the last three months, last month, or a custom period. If you sort the orders, you can also click **All History** to view all orders again.

When you select **Custom Period**, you can use the **From** and **To** drop-down menus to select specific dates.

On both tabs, you can also change the appearance of the table by selecting **Auto Arrange**, which resizes the columns automatically if the Terminal window size changes, or **Grid**, which displays the lines between the rows and columns.



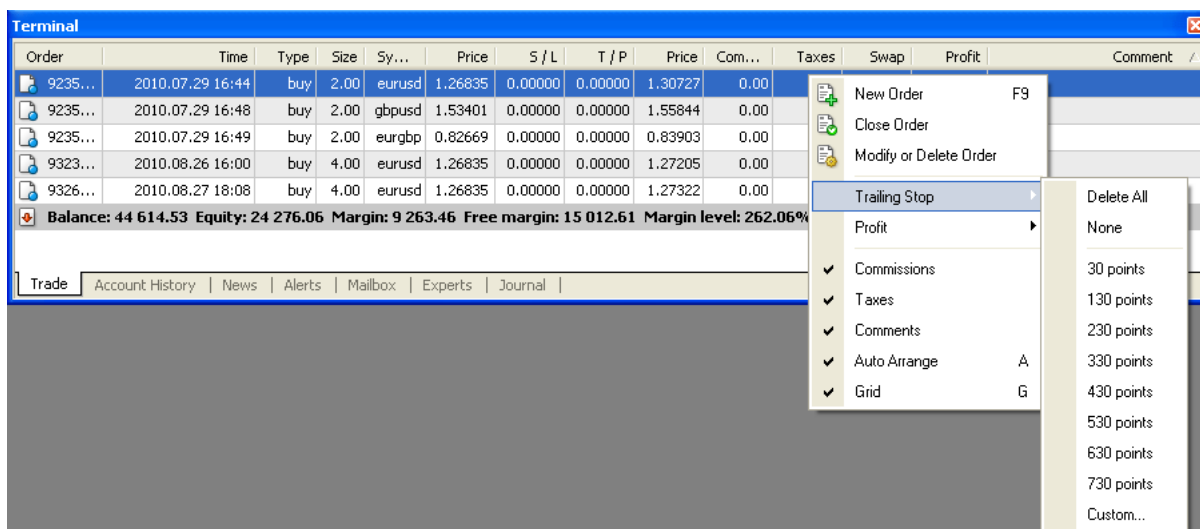
With live accounts, GFT recommends viewing your account history in both MetaTrader 4 and DealBook® WEB. The transactions and values you see in DealBook® WEB are the most accurate and legally-binding. You should rely on these values when you are trading. If you have questions about the difference between the two platforms, contact GFT.

Placing a Trailing Stop on an Order

On the Trade tab of the Terminal window, you can modify or close your pending orders by right-clicking on an order row and selecting the menu option you want. One way to modify your order or position is to add a trailing stop.



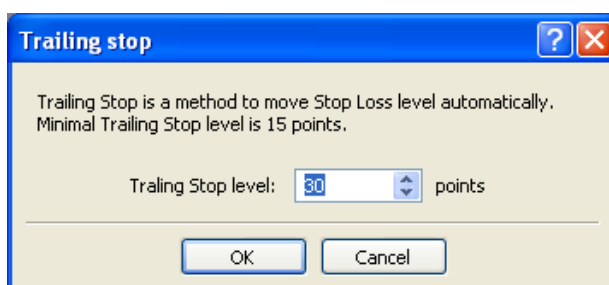
In MetaTrader 4, trailing stops will only run when you are logged into the platform. For more information on how trailing stops work, see *Trading with the Order Types in MetaTrader*.



To place a trailing stop quickly, right-click in a position row and select **Trailing Stop**. This displays a drop-down menu where you can select the number of pips you want (10 points = one pip).

Once active, the trailing stop appears in the S/L column of the Trade tab.

The **Trailing Stop** drop-down menu also contains the **Custom...** menu option. When you select this, you can enter a specific number of points in the Custom window.



If you place a trailing stop and eventually want to remove it, you can right-click on your order or position, select **Trailing Stop** and click **None**.

You can also remove all trailing stops from your open positions by selecting **Delete All** in the **Trailing Stop** drop-down menu.

Placing a Custom Trailing Stop:

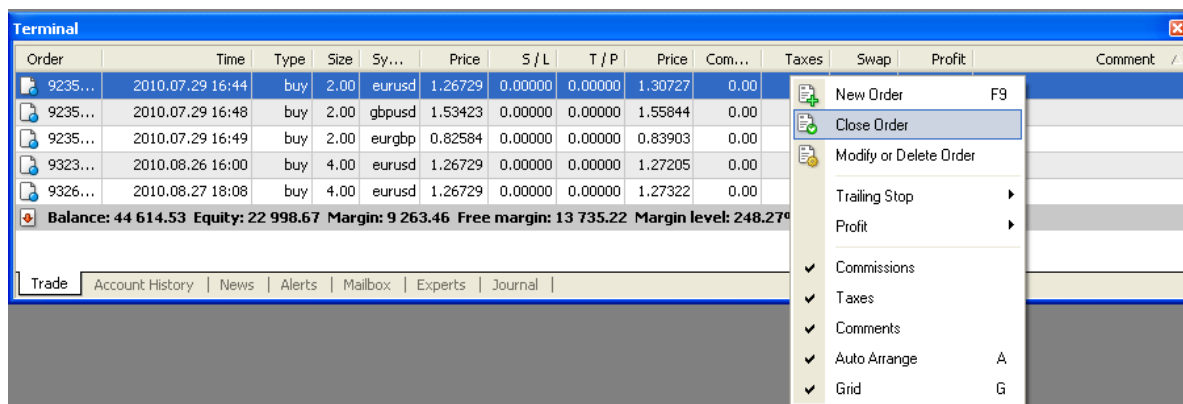
1. Right-click in a position row in the Trade tab of the Terminal window and select **Trailing Stop**.
2. In the drop-down menu that appears, select **Custom...**
3. Enter number of points you want.
4. Click **OK**.



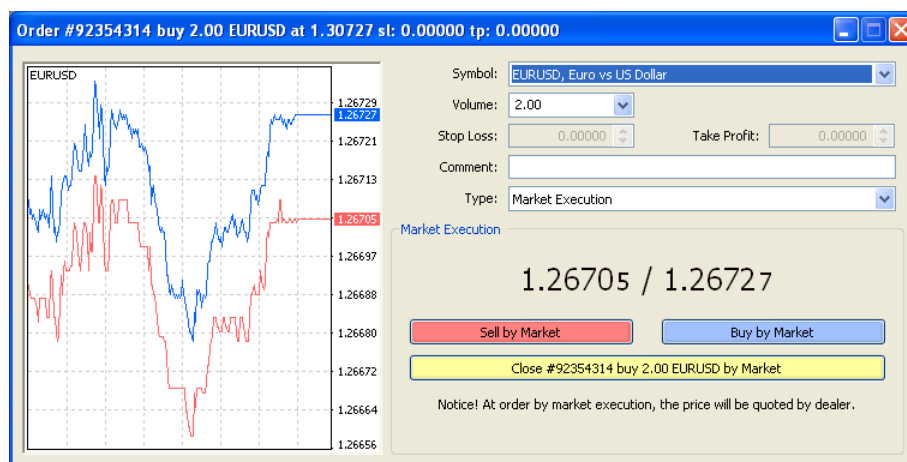
When you set a trailing stop, your stop needs to be more than 15 points away from the current price.

Closing a Position at the Current Market Price

When you need to close a position at the current market price quickly, you can right-click in a position row and select **Close Order** to open the Order window and close your order.



The Open window appears with a **Close...** button that displays the instrument, volume and order number.



Closing a Position at the Current Market Price:

1. Right-click in a position row in the Trade tab of the Terminal window and select **Close Order** to open the Order window.
2. When the Order window appears, click **Close... by Market**.
3. Click **Print** to print the order information, if desired.
4. Click **OK** to close the window.



You can also double-click on the position row you want to open the Order window.



You can also reverse your position by clicking the **Sell by Market** or **Buy by Market** buttons.

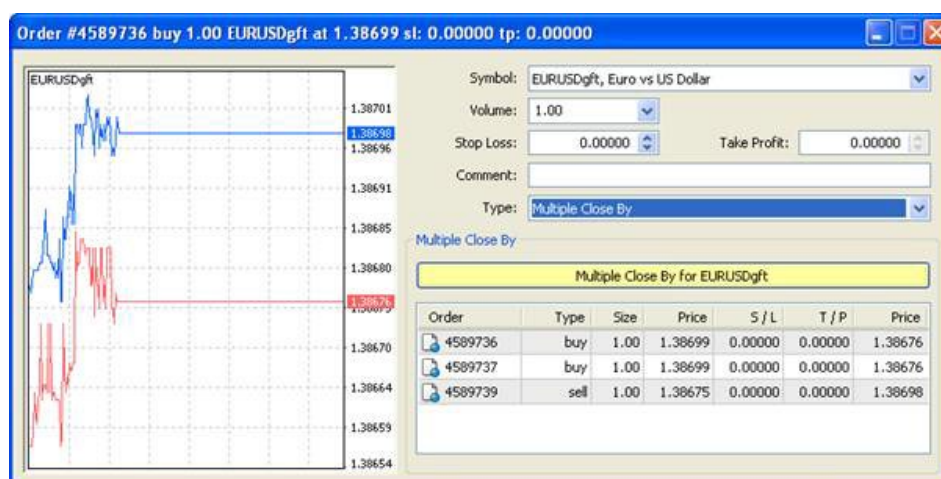
Closing Offsetting Positions

If you have two offset positions in the same currency pair in the same size, you can use the **Multiple Close By** menu option to close out opposing positions for the currency pair selected.

For example, let's say you have two long EUR/USD positions and one short EUR/USD position in MetaTrader 4.

| Order / | Time | Type | Size | Symbol | Price | S / L | T / P | Price | Commission | Swap | Profit |
|---|------------------|------|------|----------|---------|---------|---------|---------|------------|------|--------|
| 4589736 | 2011.03.02 21:50 | buy | 1.00 | eurusdgt | 1.38699 | 0.00000 | 0.00000 | 1.38683 | 0.00 | 0.00 | -11.54 |
| 4589737 | 2011.03.02 21:51 | buy | 1.00 | eurusdgt | 1.38699 | 0.00000 | 0.00000 | 1.38683 | 0.00 | 0.00 | -11.54 |
| 4589739 | 2011.03.02 21:51 | sell | 1.00 | eurusdgt | 1.38675 | 0.00000 | 0.00000 | 1.38700 | 0.00 | 0.00 | -18.02 |
| Balance: 499 917.74 Equity: 499 876.64 Margin: 1 000.00 Free margin: 498 876.64 Margin level: 49987.66% | | | | | | | | | | | -41.10 |

You can use **Multiple Close By** to close the offset positions.



Once this is executed, there will be one remaining long position open.

| Order / | Time | Type | Size | Symbol | Price | S / L | T / P | Price | Commission | Swap | Profit |
|---|------------------|------|------|----------|---------|---------|---------|---------|------------|------|--------|
| 4589737 | 2011.03.02 21:51 | buy | 1.00 | eurusdgt | 1.38699 | 0.00000 | 0.00000 | 1.38673 | 0.00 | 0.00 | -18.75 |
| Balance: 499 917.71 Equity: 499 898.96 Margin: 1 000.00 Free margin: 498 898.96 Margin level: 49989.90% | | | | | | | | | | | -18.75 |

Closing Offsetting Positions:

1. Right-click in a position row in the Trade tab of the Terminal window and select **Close Order** to open the Order window.
2. From the **Order Type** drop-down menu, select **Close by Market**.
3. When the Order window appears, click **Multiple Close by....**
4. Click **OK** to close the window.

Protecting a Position with Stop Loss and Take Profit Orders

Once your order becomes a position, you can view it on the Trade tab in the Terminal window. If you didn't specify a stop-loss or take-profit order when you first placed your order, you can add those orders by right-clicking in a position row and selecting **Modify or Delete Order** to open the Order window.



You can see if a position has a stop-loss or take-profit order associated with it by looking at the **Stop Loss (S/L)** or **Take Profit (T/P)** columns in the Trade tab of the Terminal window. In the Order window, the **Stop Loss** and **Take Profit** text boxes will display zeroes if no orders were placed when the original order for the positions was placed.

When you open the Order window from the Trade tab, it displays the **Modify Order** menu option in the **Type** drop-down menu and appears already set with details about the position's original order. You can specify information about your stop-loss or take-profit orders in the Modify Order section.

You can click the **Level** text box and enter in a new number. When you enter a number of points, you can view what the price would be in the **Copy As** buttons. If this price seems right, click **Copy As** to have the price appear in the **Stop Loss** or **Take Profit** text boxes.

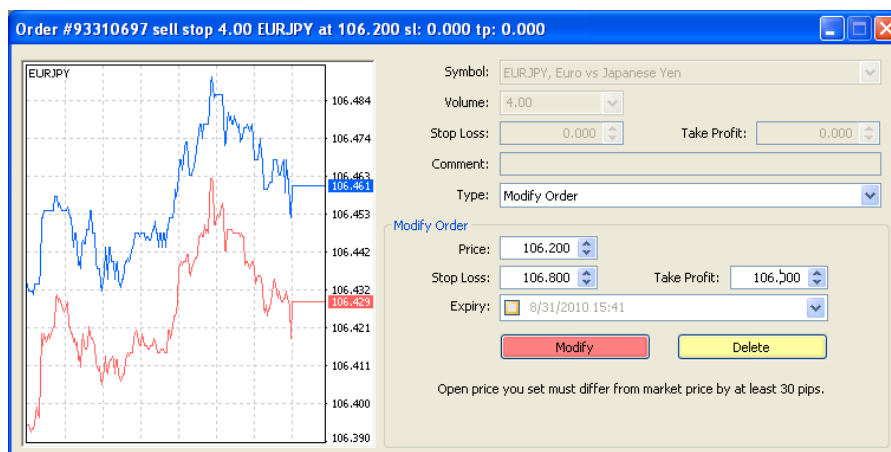
If you enter an inappropriate price for either the **Stop Loss** or **Take Profit** text boxes, MetaTrader disables the **Modify...** button in the window. You need to correct the prices to enable this.

Protecting a Position with Stop Loss and Take Profit Orders:

1. Right-click in a position row in the Trade tab of the Terminal window and select **Modify or Delete Order** to open the Order window.
2. Make sure **Modify Order** is selected in the **Type** drop-down menu.
3. In the Modify Order section, enter the number of points in the **Level** text boxes.
4. Click the **Copy As** button above the **Stop Loss** or **Take Profit** text box.
5. If you want to add both a stop loss and take profit order to the position, repeat steps 3 and 4 for the other order.
6. Click **Modify...**
7. Click **Print** to print the order information, if desired.
8. Click **OK** to close the window.

Modifying Pending Orders

If you've already placed a stop-loss and take-profit order or you have a pending order, you can manually modify these by right-clicking an order in the Trade tab of the Terminal window and selecting **Modify or Delete Orders**.



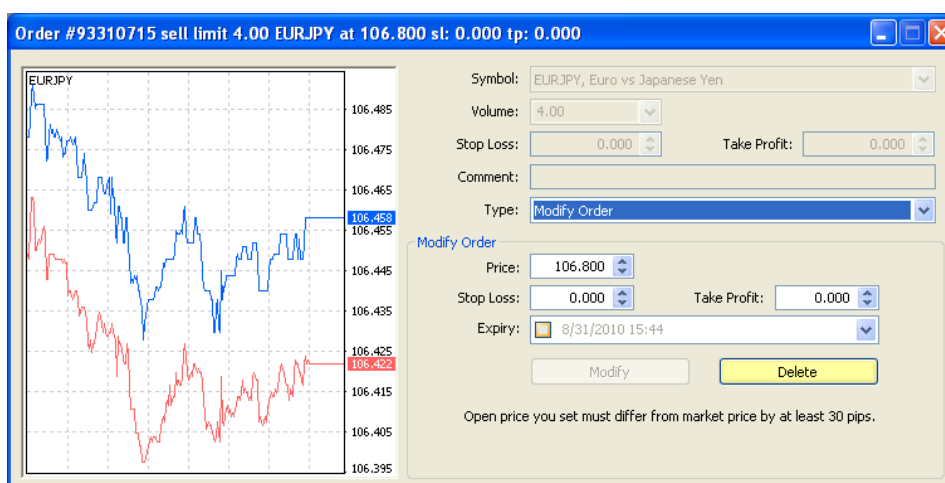
When you modify a pending order, the **Symbol**, **Volume** and other text boxes are greyed out. You cannot edit these.

Modifying Pending Orders:

1. Right-click in a position row and select **Modify or Delete Orders** to open the Order window.
2. From the **Type** drop-down menu, select **Modify Order**.
3. Change the price in the **Stop Loss** or **Take Profit** textboxes, if desired.
4. Click **Modify**...
5. Click **Print** to print the order information, if desired.
6. Click **OK** to close the window.

Deleting Pending Orders

If market conditions change and you don't want your pending orders to become positions, you can manually delete your order by clicking **Modify or Delete Orders**.



Deleting Pending Orders:


1. Right-click in a position row and select **Modify or Delete Orders** to open the Order window.
2. Click **Delete**.
3. Click **Print** to print the order information, if desired.
4. Click **OK** to close the window.

Viewing and Setting Alerts

As you trade, you can set alerts to notify you when an instrument has reached a specific price on the Alerts tab in the Terminal window.

| Symbol | Condition | Counter | Limit | Timeout | Event |
|--------|---------------|---------|-------|---------|-------|
| EURUSD | Bid>1.27500 | 0 | 1000 | 10 sec | alert |
| GBPUSD | Bid>1.55930 | 0 | 1000 | 10 sec | alert |
| GBPUSD | Bid <83.50000 | 2 | 1000 | 10 sec | alert |
| GBPUSD | Ask>1.60000 | 0 | 1000 | 10 sec | alert |

You can create or modify the alert settings in the Alert Editor. This is where you can set conditions and specify the sound to play for your alert.



To add a new or modify the existing alert please define all conditions and select the necessary action.

☒ Enable

Action: Sound

Symbol: GBPUSD Condition: Bid < Value: 0.000

Source: alert

Timeout: 10 sec Maximum iterations: 1000

OK Test Cancel


You can choose to be alerted when the instrument price is less than the bid price (**Bid >**), greater than the bid price (**Bid <**), less than the ask price (**Ask >**) or greater than the ask price (**Ask <**). You can also set the alert to occur at a certain time (**Time =**).

Action: Mail

Symbol:

Sound
File
Mail

MetaTrader will play a sound file if the application is open when the alert goes off. If you plan on closing the application, you can use the **Action** drop-down menu to select an alternate way to be notified: select **Mail** to receive an email, or **File** to receive a file.

If you choose **Sound** from the **Action** drop-down menu, you can select the sound file you want to play from a drop-down menu. If you have other sound files that you would like to use on your computer, you can click . This opens the Open window and you can navigate to the folder where your sound files are stored. When you find one, click on it and select **Open**.

To see what the alert would sound like, you can click **Test** in the Alarm Editor window.


If the alert is designed to hit a price and the market bounces around that price, your alert may go off more than once. You can use the **Timeout** drop-down menu to set a period of time between when the alert goes off and when it can go again.

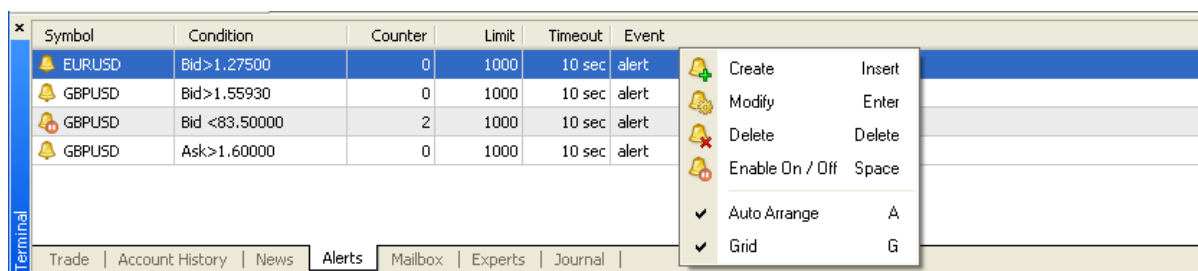
You can use the **Maximum Iterations** drop-down menu to choose to have the alert sound between one and 1000 times.



MetaTrader will send an alert to your email when your address is setup in the Email tab of the Options window. See *Entering Email and Server Settings* in **Section 6: Customizing the Appearance and Settings in MetaTrader** for more information.



Creating an Alarm:

1. Right-click on the Alerts tab in the Terminal window and select **Create**.
2. To begin entering information in the Alert Editor, click **Enable On/Off**.
3. Click the **Action** drop-down menu and select **Sound**, **File** or **Mail**.
4. Make sure the instrument you want is selected. Click the **Symbol** drop-down menu to select an instrument, if not.
5. Click the **Condition** drop-down menu and select **Bid >**, **Bid <**, **Ask >**, **Ask <** or **Time =** and enter a value.
6. Click the **Source** drop-down menu and select an alert. If you selected **Sound**, you can also click , select the file you want and click **Open**, if desired.
7. If desired, click the **Timeout** drop-down menu and select a time.
8. If desired, click the **Maximum Iteration** and select a number.
9. Click **OK**.



When an alert is set, it appears in the Alerts tab. You can see how many times the alert has sounded in the **Counter** column.

Once you've created an alert, you can right-click in the chart window and access other menu options.

- **Modify** reopens the alert in Alert Editor so you can edit it.
- **Delete** immediately removes the alert from the chart and the Terminal tab.
- **Enable On/Off** allows you to turn the alert on or off. When enabled, the alert will display this icon  in its row. When disabled, it will display this icon .

Section 3: Using the Chart Tools


As you trade, you'll discover that the chart window is essential for monitoring your trades, performing technical analysis and running expert advisors, custom indicators, scripts and other autotrading files. In this section, you'll learn more about the chart window and the features you can use in it.

Opening Charts

In Section 1, you learned that the chart window plots the real-time prices of an instrument on a graph and provides a snapshot of market movements over a particular period of time.



There are several ways to open the chart window.

- Right-click an instrument in the Market Watch window and select **Chart Window**.
- Click an instrument in the Market Watch window and drag it into the MetaTrader main window area.
- Click **New Chart** in the **File** menu and select the instrument you want.
- Click **New Window** in the **Window** menu and select the instrument you want.
- Click the **Chart Window** button in certain windows.
- Click  in the Chart toolbar.

You can open up to 99 charts at one time and switch between them by clicking on the instrument chart tab at the bottom of the chart window.

When you open a chart, MetaTrader displays the available price history for that chart. The amount of time shown depends on the time frame you selected and the settings in the Charts tab. See *Specifying Chart and History Data Properties* in **Section 6: Customizing the Appearance and Settings in MetaTrader** for more information.

Opening Charts Offline

Some traders prefer to open offline charts. These show you the available price history, but do not update to show the real-time prices of the instrument.



You can open an offline chart by clicking the **File** menu and selecting **Open Offline**. This opens the Open Offline Chart window, where you can view the available instruments and time frames as well as how many bars, candles or line ticks are available in the chart.

To open one, select the chart you want and click **Open**.

When the chart opens, you'll see (Offline) appear in the chart header.

Viewing the Chart Window

Once the chart window is open, you'll notice a few features.



The **Price** section displays the current market prices of the instrument.

The legend shows the instrument symbol and current price information.

The **Time Frame Interval** section displays times and/or dates, based on the selected time frame.

The **Ask Line** shows the current ask price.

When you open a chart window for the first time in MetaTrader, the chart displays the price movements of the selected instrument as a continuous line, measuring intervals by the minute.

The amount of time shown in the chart depends on the time frame you selected. For example, if you selected the five-minute time frame on a line chart, you can view the closing price of an instrument for the five-minute period.

You can scroll back and forth in the chart history by clicking in the chart window and dragging your cursor to the left or right.

You can also change the scale of the price moves in the chart by clicking the Price section and dragging up and down or clicking the Time Frame Interval section and dragging left or right.



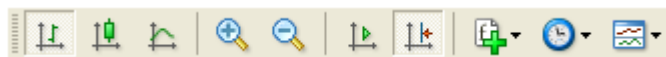
You can change colours, fonts and other settings in the chart. For more information, see *Customizing the Appearance of the Chart Window* in **Section 6: Customizing the Appearance and Settings in MetaTrader**.

Displaying the Chart Toolbar







When you first open MetaTrader, you'll notice the Chart toolbar appears at the top of the window. You can use these tools to change and manage the way the chart displays pricing information.







If you don't see the Chart toolbar, you can display it by selecting **View**, clicking **Toolbars** and selecting **Charts**.



MetaTrader groups the tools on the toolbar by type. The first three buttons on the toolbar specify the chart type. If you click one, it remains active until you click another chart type button.

-  **Bar Chart** displays the price moves of the selected instrument as a sequence of bars. Each bar displays the high, low, open and close of the instrument and represents the trading activity for the time frame selected in the chart.
-  **Candlestick Chart** tracks the price moves of the selected instrument as a sequence of blocks or candles. Each candle displays the high, low, open and close of the instrument and represents the trading activity for the chart time frame. With candlesticks, you can analyse the market, spot trends and forecast their direction.
-  **Line Chart** displays the price moves of the selected instrument as a continuous line. The line connects the close prices for the time frame selected in the chart.
-  **Zoom In** magnifies the most recent price moves and displays them on the chart.
-  **Zoom Out** decreases the magnification of the chart.
-  **AutoScroll** updates the chart so that it always scrolls to the right to show the latest price moves.



-  **Chart Shift** arranges the chart so the latest price moves appear at a certain point in the chart. When active, you can click the triangular marker at the top of the chart window and set it anywhere between the right side of the chart and the middle of the chart.
-  **Indicators** displays a drop-down menu with indicators. You can select between the most commonly used indicators or click the folder where the indicators are organized by type. When you select one, MetaTrader opens a window so you can specify settings for the indicator and then view it in or below the chart. For more information on indicators, see *Managing Indicators in the Chart Window* in this section.
-  **Period** displays the selected time frame for the chart. You can also use this to change the time frame of the chart from one minute (M1) to one hour (H1) to daily.
-  **Templates** displays a drop-down menu for loading and saving a chart template. With a chart template, you can save the chart type, time frame, indicators, expert advisors and other settings and apply it to any chart. For more information on templates, see *Managing Templates in the Chart Window* in this section.




You can set the chart to zoom in to a precise point by checking the **Scale Fix** option in the Charts Setup window. See *Customizing Viewing Settings on the Chart Window* in **Section 6: Customizing the Appearance and Settings in MetaTrader** for more information.



If you are scrolling through the chart and analysing chart history, make sure that **AutoScroll** and **Chart Shift** are deactivated.

Selecting a Chart Type and Time Frame

When you open the chart for the first time in MetaTrader, **Bar Chart** is selected in the Chart toolbar and **One Hour (H1)** selected in the **Period**  drop-down menu. You can change both of these at any time.



You can change the chart type by:

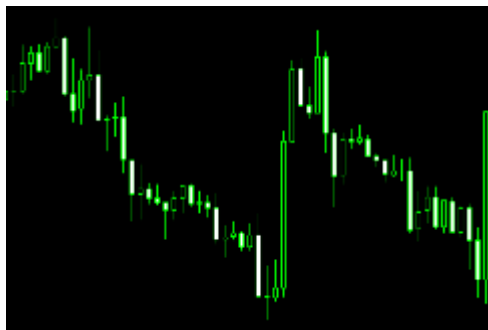
- Clicking one of the buttons in the Chart toolbar to switch between bar, candlestick or line chart.
- Clicking **Charts** in the menu bar and selecting the **Bar Chart**, **Candlesticks** or **Line Chart** menu options.

When you first open MetaTrader, the chart types would look like this:

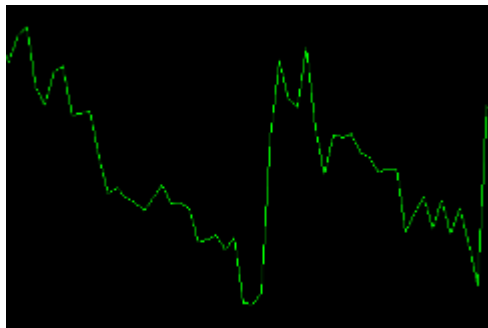
Bar




Candlestick

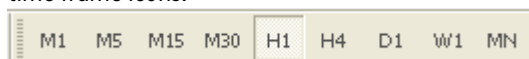


Line

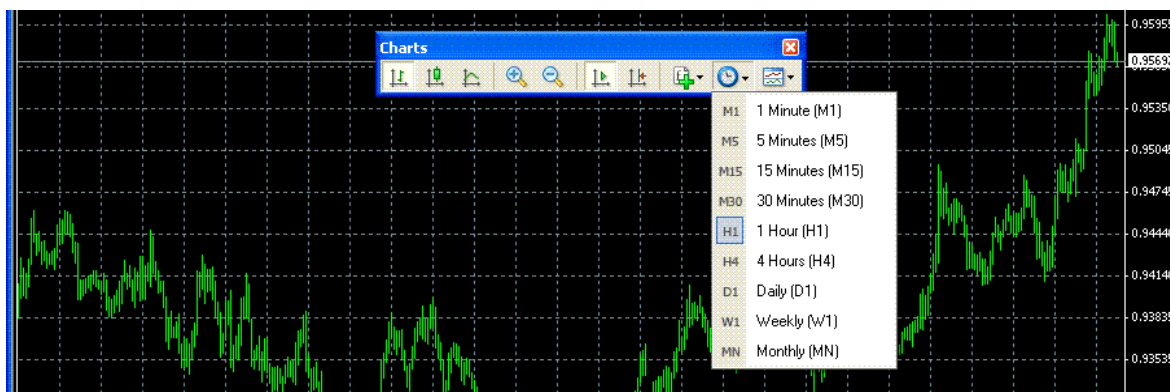


There are several ways to change the time frame in the chart.

- Click **Period**  and select a time frame menu option from the drop-down menu.
- Display the Periodicity menu bar by clicking **View**, selecting **Toolbars** and clicking **Periodicity**. You can then click the time frame icons.



- Click **Charts** in the menu bar and select **Periodicity**. You can then select the time frame you want.
- Right-click in the chart window, select **Periodicity** and then select the time frame.



No matter which method you use, you can select one of the following time frames:

- 1 Minute (M1)
- 5 Minutes (M5)
- 15 Minutes (M15)
- 30 Minutes (M30)
- 1 Hour (H1)
- 4 Hours (H4)
- Daily (D1)
- Weekly (W1)
- Monthly (MN)

Switching Between Chart Time Frames and Instruments with Fast Navigation

You can quickly switch between charts and time frames or scroll to a particular point in time on the chart using the **Fast Navigation** text box. You can display this field by double-clicking in the lower left corner of the chart.

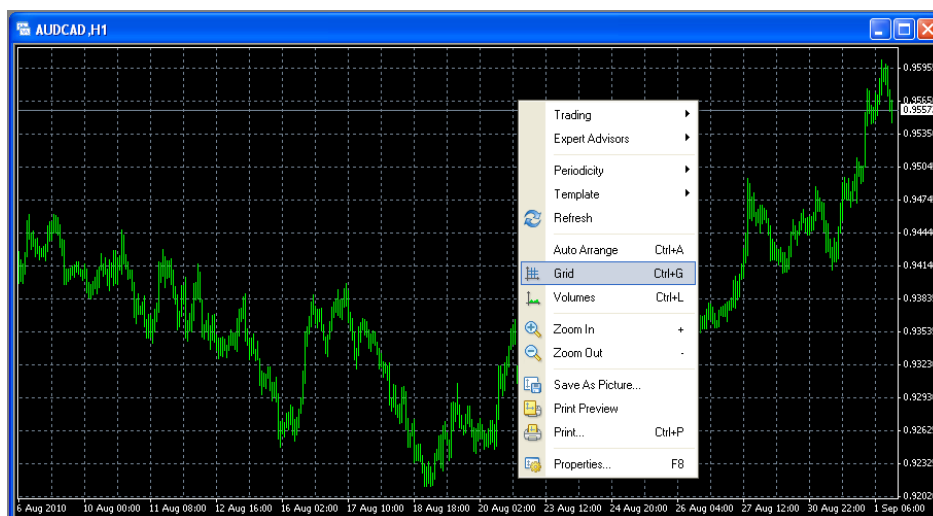


Once open, you can enter a specific time, date, symbol or all of these and press **Enter** on your keyboard. You can use the table below to see how to enter times and dates.

| | |
|--------------------------|---|
| [time (hours:minutes)] | example: 08:30; 8:30; |
| [date] | example: 2004.10.16; 16.10.2004; 16.10.04; |
| [date and time] | example: 2004.10.16 8:30; 16.10.2004 8:30; 16.10.04 8:30; |
| [symbol] | example: GBPUSD; EURUSD; |
| [chart period] | example: M1; M5; M15; M30; H1; H4; D1; W1; MN; |
| [symbol], [chart period] | example: GBPUSD, M30; EURUSD, D1; |

Displaying Other Tools in the Chart Window

After you specify a chart type and time frame, you can set the chart window to display other tools to help you trade.



Displaying a Grid

When you first open MetaTrader, the chart displays vertical and horizontal grid lines. You can right-click in the chart window and select **Grid** from the drop-down menu to activate or deactivate it.



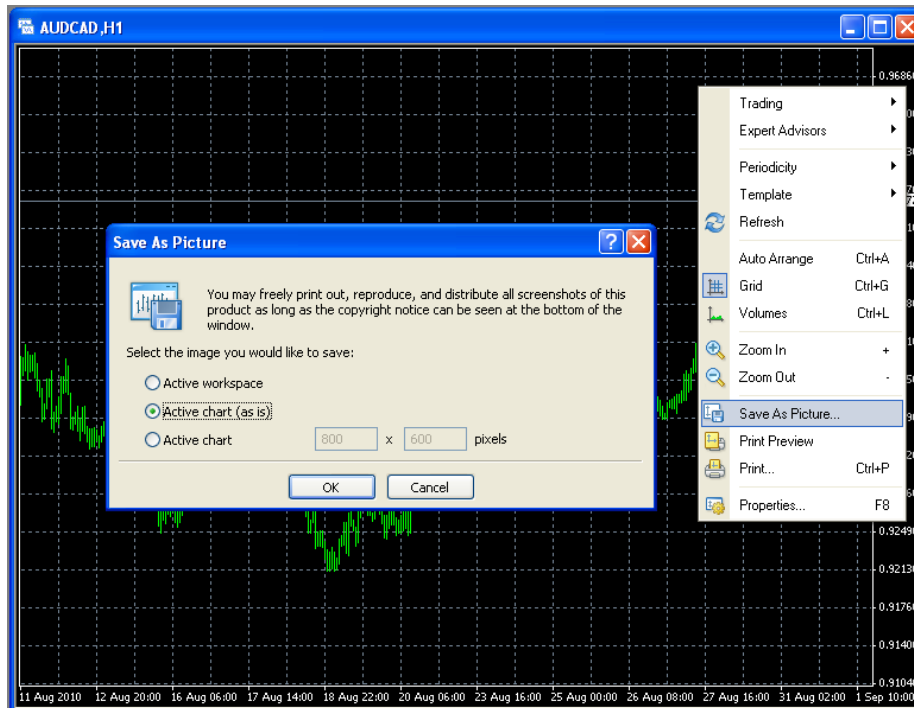
Displaying Trading Volume

You can display the current trading volume for the selected instrument by right-clicking in the chart window and selecting **Volumes** from the drop-down menu.



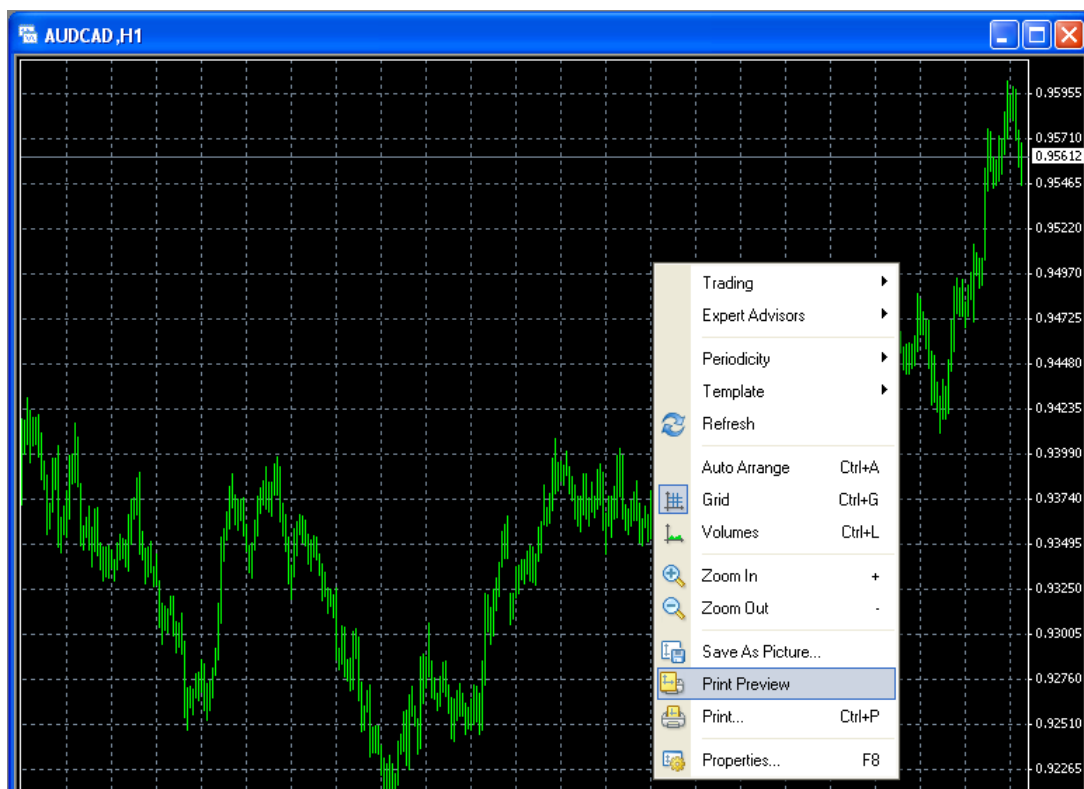
Refreshing the Chart

During volatility, you may need to update the chart window. You can do so by right-clicking in the chart window and selecting **Refresh**.



Saving as a Picture

You can save the active chart window or workspace as a .gif or .bmp file by right-clicking in the chart window and selecting **Save As Picture...** You can also choose the size the active chart to a specific pixel size.



Printing the Chart

You can print the active chart. To preview it before you print, right-click in the chart window and select **Print Preview**. When you're ready to print, right-click in the chart window and select **Print...**



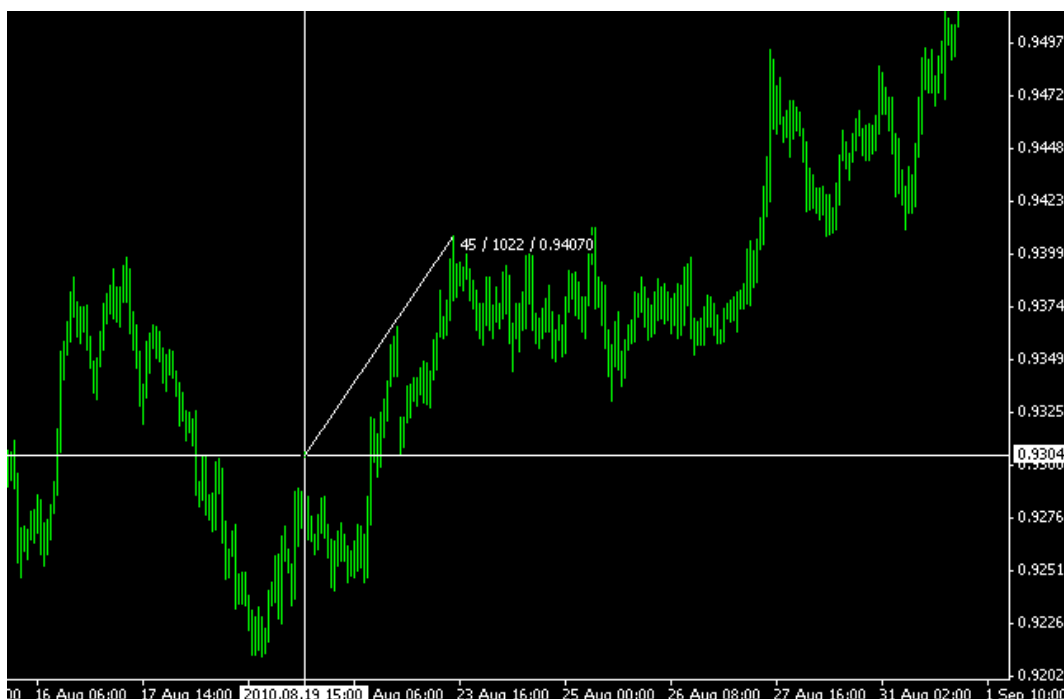
You can also access the tools listed here from the **Charts** or **File** menu in the menu bar.

Displaying the Line Studies Toolbar

If you are planning on drawing in the chart window, you may want to display the **Line Studies** toolbar. This contains a number of MetaTrader drawing tools.




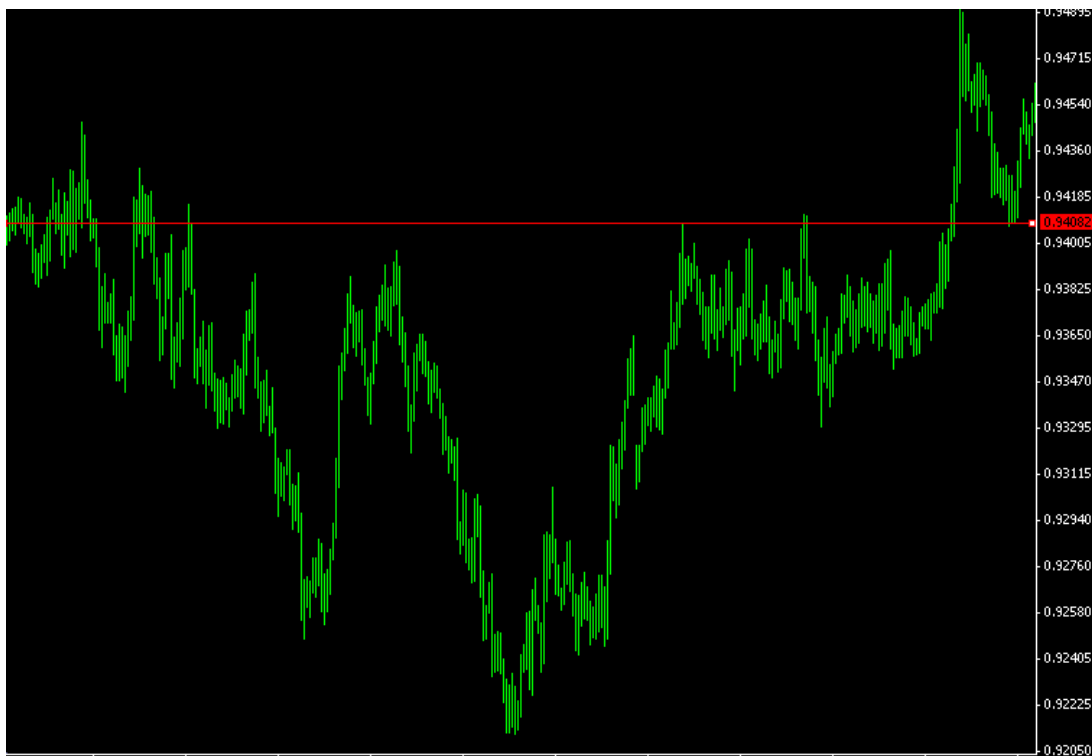
enables you to click on other drawing objects and drag them to new locations in the chart. This is active when you first open the chart window.



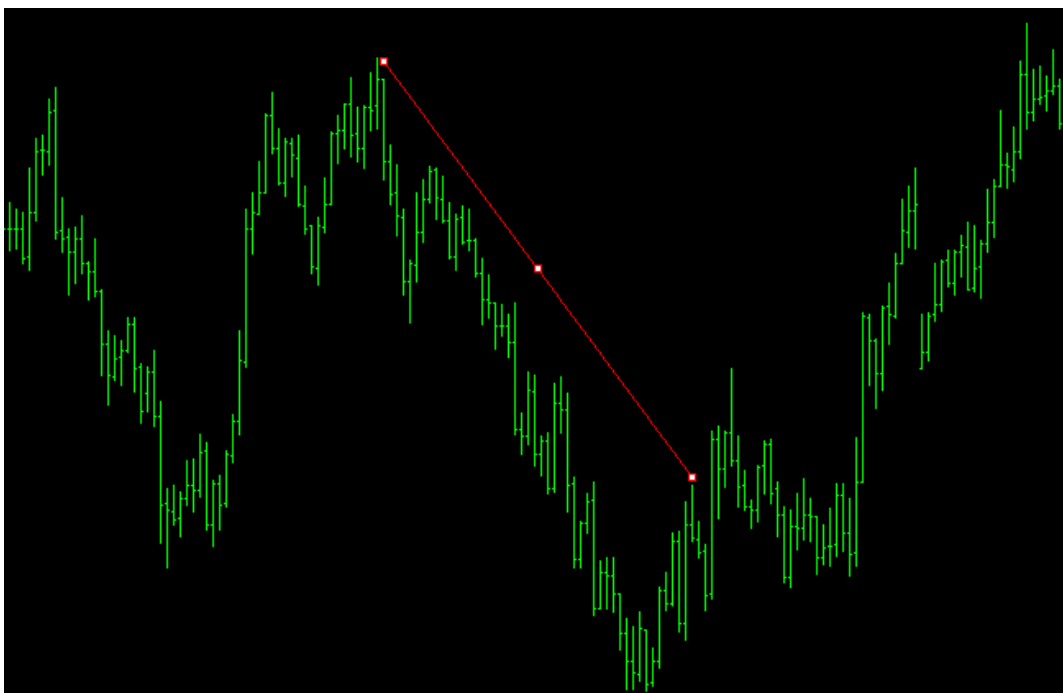
turns your cursor into a cross when you move around the chart window. When this is selected, you can find out the distance between the points and the current price value by clicking on a point in the line and dragging to another point.




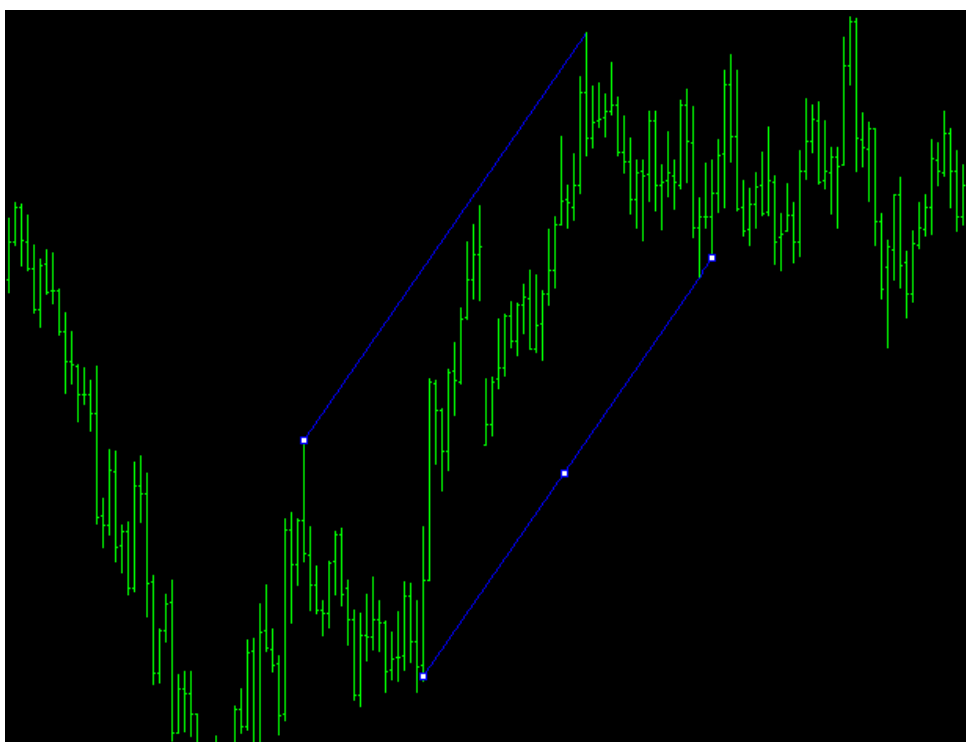
 adds a vertical line on the chart. These can be used to mark the beginning of a trend or specify a time when you entered the market. When this is selected, click in the chart to place the line.




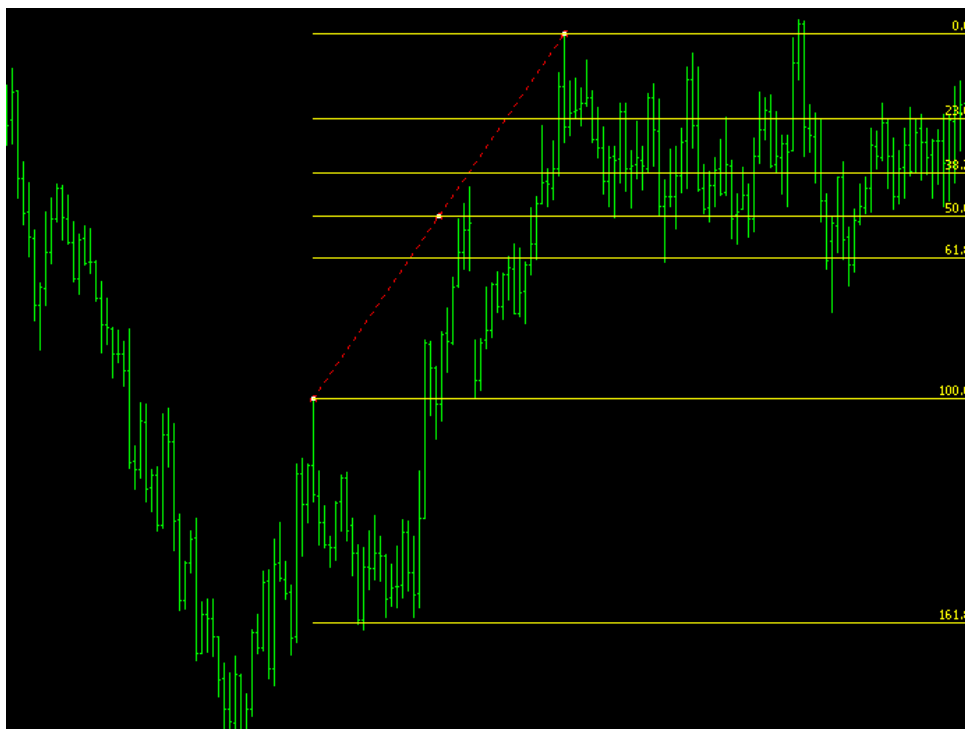
 adds a horizontal line on the chart. These can be used to plot a horizontal support or resistance level. When this is selected, click in the chart to place the line.



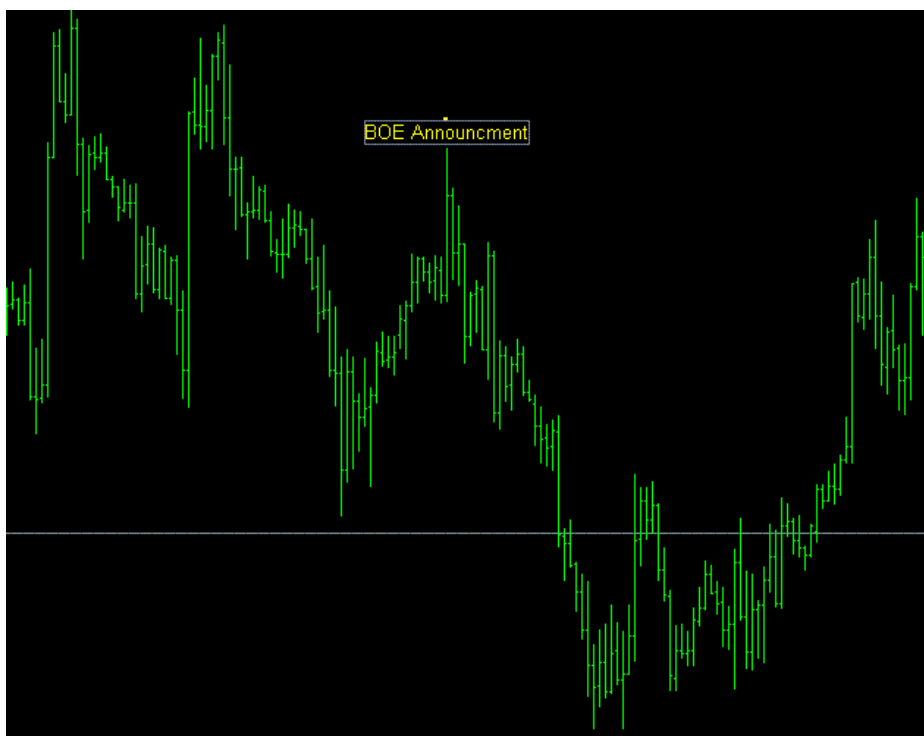
 plots a diagonal trendline drawn through a series of high or low price points in the chart window. When this is selected, click where you want your line to begin and drag your cursor to place the line. You can add multiple trendlines to the chart.



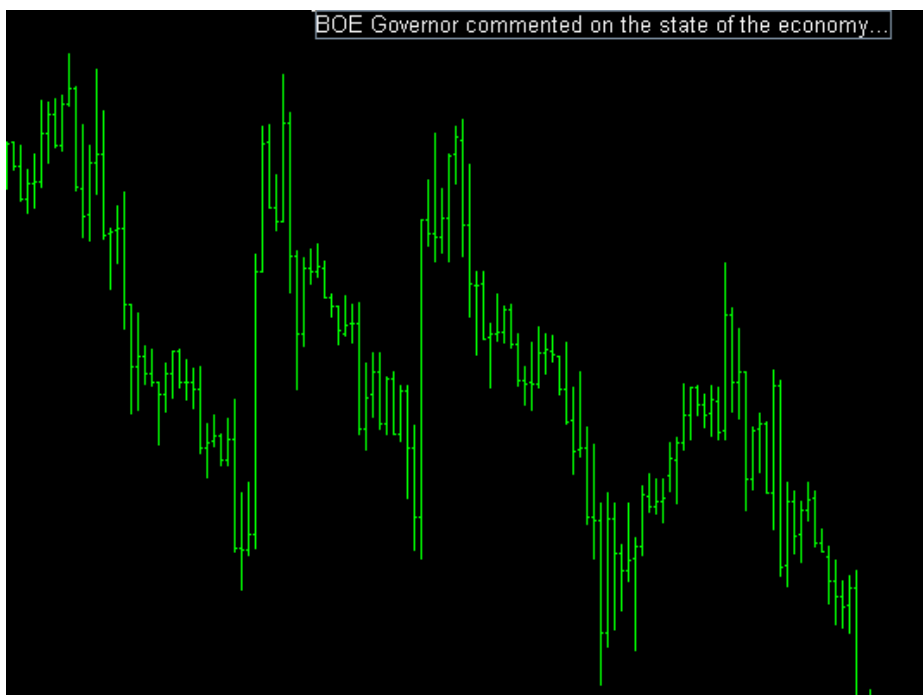
 plots two parallel lines that remain equidistant, no matter where you place them in the chart window. When this is selected, click where you want the channel to begin and drag your cursor to place it. You can then click on the secondary line and drag it in the chart.




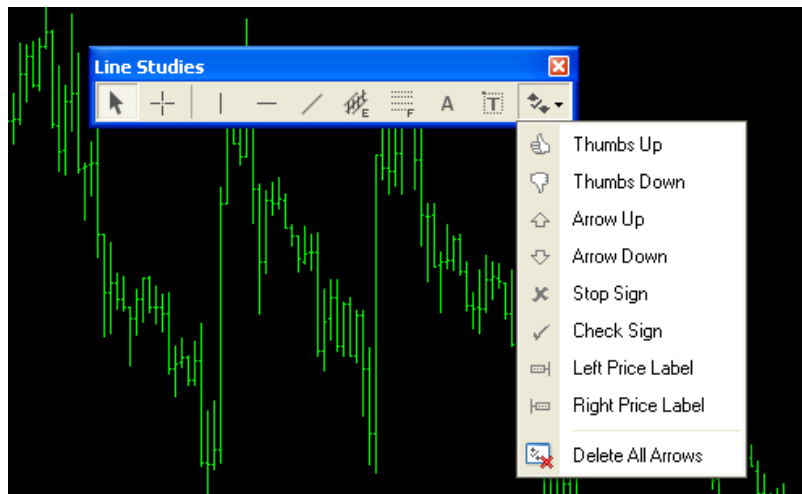
F draws six parallel lines at specific distances defined by the Fibonacci sequence (0.618, 1.000, 1.618, 2.618, 4.236). When it is selected, click where you want the channel to begin and drag your cursor to place it.





A adds a label to a particular part of the chart. When selected, you can click in the chart window where the label should be. This opens the Text window with the Common tab displayed. Here, you can enter a name for the label, add the text you want and change the colour, size or font. You can also specify where the label should anchor on the Parameters tab or select if the text label should appear on all chart time frames on the Visualization tab.



 adds a comment to the chart window. As you scroll, the comment remains displayed over the chart. When selected, you can click in the chart window where the comment text should be. This opens the Label window with the Common tab displayed. Here, you can enter a name for the comment, add the text you want and change the colour, size or font. You can also specify the time and the angle of the comment on the Parameters tab or select if the text label should appear on all chart time frames on the Visualization tab.

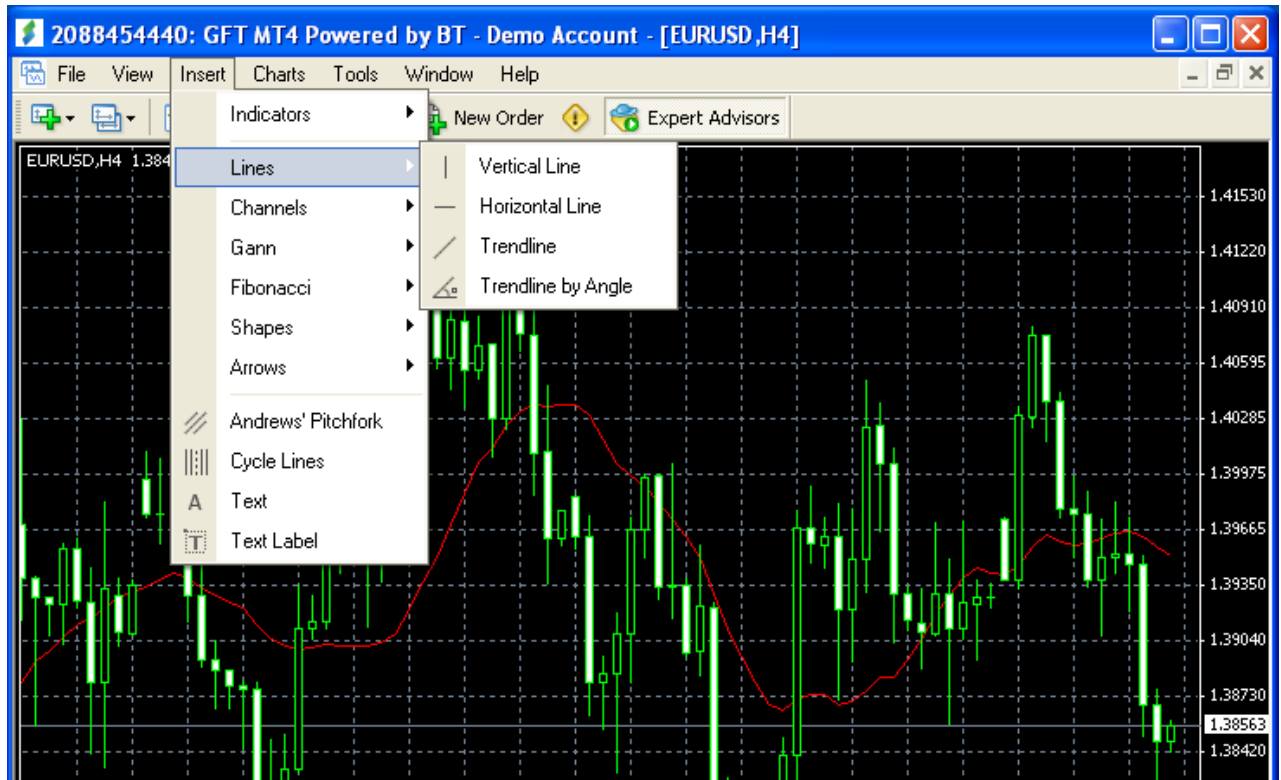


 displays a drop-down menu, so you can select from eight different types of icons to add to the chart window. If you add too many of these icons to the window, you select the **Delete All Arrows** menu option to remove all icons from the window.

 MetaTrader draws all trend lines on the charts as rays, lines which start at one point and continue in one direction toward infinity. You can change this using the **Objects List**. See *Configuring Drawings in the Chart* in this section for more information.

Drawing in the Chart

As you trade, you'll want to examine the chart, looking for possible patterns and trends in the price movements. MetaTrader offers a number of drawing tools so you can plot support and resistance levels, identify simple and complex patterns and create other notations on the chart.



You can select over 30 different tools by clicking on the **Insert** menu in the menu bar and selecting the tool you want from the drop-down menu or its related menu.

When you click **Lines**, you can select from one of four different types of lines to draw on the chart.

Vertical Line places a vertical line in the chart window. When selected, click where you want your line to be to place it.

Horizontal Line places a horizontal line in the chart window. When selected, click where you want your line to be to place it.

Trendline allows you to draw a diagonal line through a series of high or low price points in the chart window. When selected, click where you want your line to begin and drag your cursor to place it.



You can learn more about these three types of lines in the *Displaying the Line Studies Toolbar* in this section of the guide.



When **Trendlines by Angle** is selected, click where you want your line to begin and drag your cursor to place the line on a specific degree.

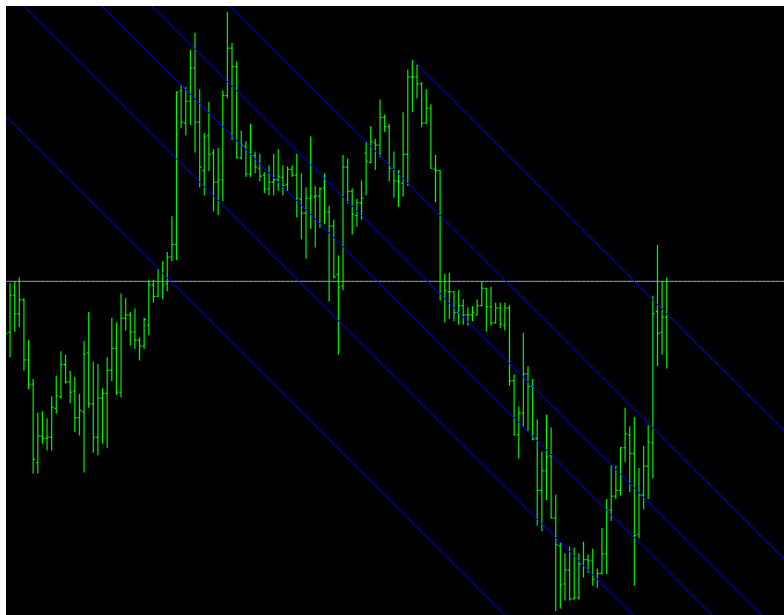


Remember, you can change MetaTrader settings so all your trendlines have a beginning and end point using the **Objects List**. See *Configuring Drawings in the Chart* in this section for more information.

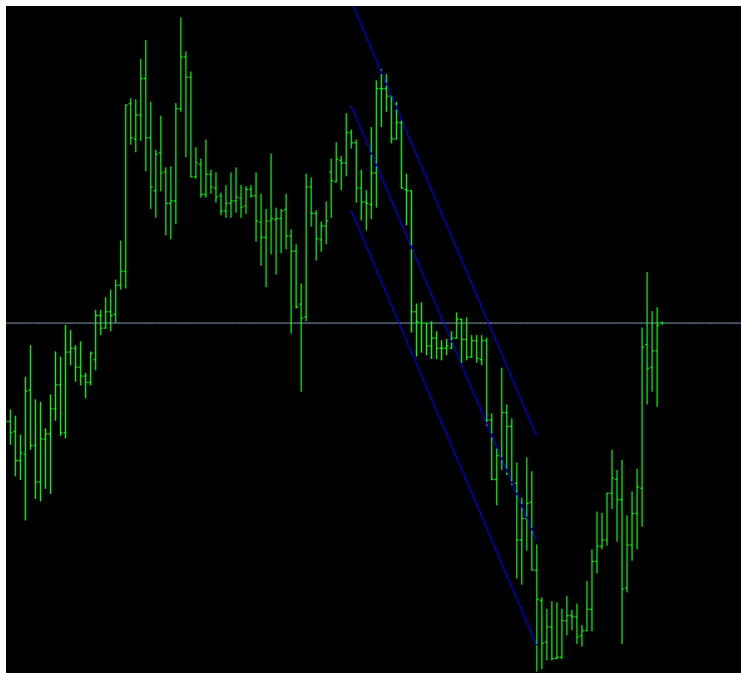
Drawing Channels on the Chart

When you click on the **Insert** menu and select **Channels**, you can select from one of four different types of channels to draw.

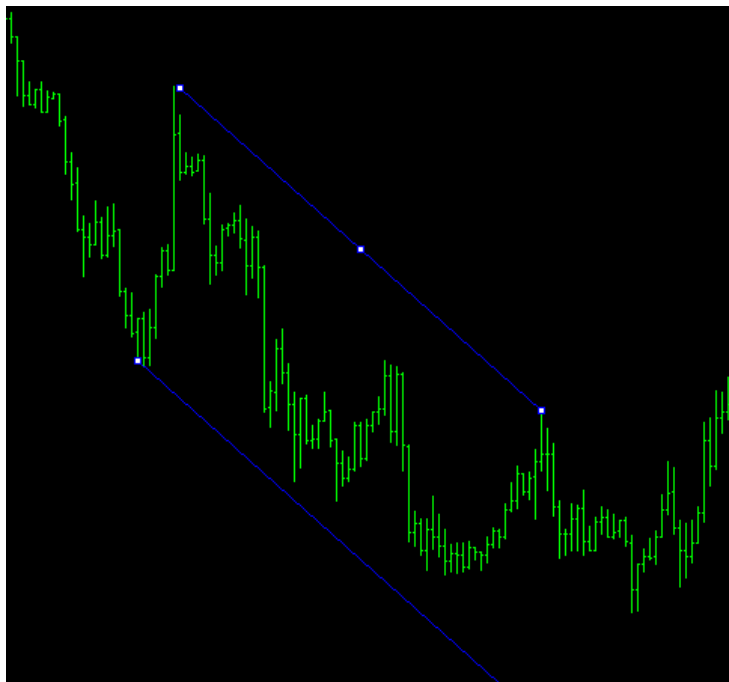
Fibonacci Channels draws six parallel lines at specific distances defined by the Fibonacci sequence (0.618, 1.000, 1.618, 2.618, 4.236). When it is selected, click where you want the channel to begin and drag your cursor to place it.



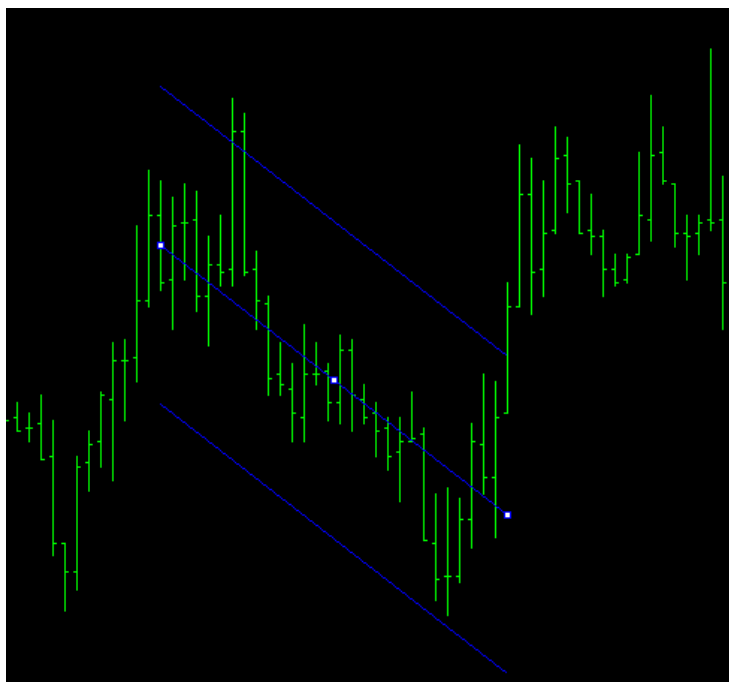
Linear Regression is a statistical analysis tool that is used for forecasting future values of an instrument. When it is selected, click where you want the channel to begin and drag your cursor to place it.



Equidistant draws two parallel lines that remain equidistant, no matter where you place them. When it is selected, click where you want the channel to begin and drag your cursor to place it. You can then click on the secondary line and drag it in the chart.



Standard Deviation draws three parallel lines that are separated by a set deviation. Once placed, you can click and drag the channel along the price moves and the channel distance will adjust based on those prices. When **Standard Deviation** is selected, click where you want the channel to begin and drag your cursor to place it.



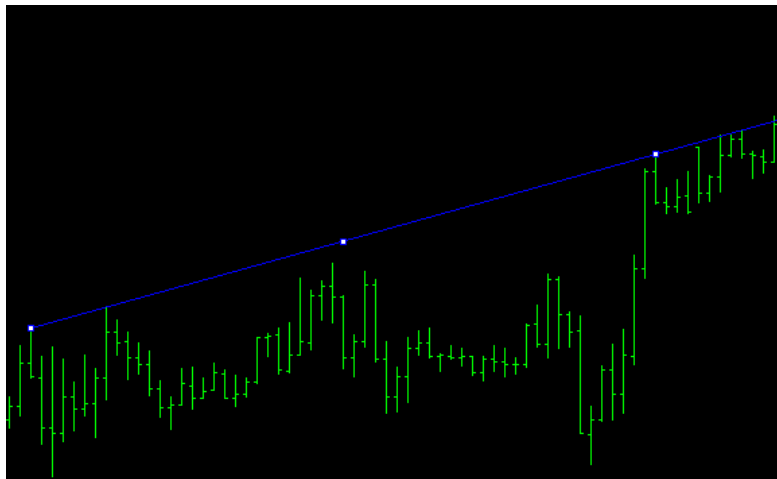
You can change the deviation in Standard Deviation lines by double-clicking on the line and then right-clicking to select **StdDev Properties**. On the Parameters tab, you can enter a new value in the **Deviations** text box.

Drawing with the Gann Tools on the Chart

W. D. Gann considered a 45-degree line to be significant when analysing market moves. Under certain market conditions, traders could draw a 45-degree line on a chart and forecast that moves above the line were bullish while those below that line were bearish. If price movements crossed the line, it indicated that the trend was changing.

When you click on the **Insert** menu and select **Gann**, you can select from one of three different types of Gann tools to add to the chart.

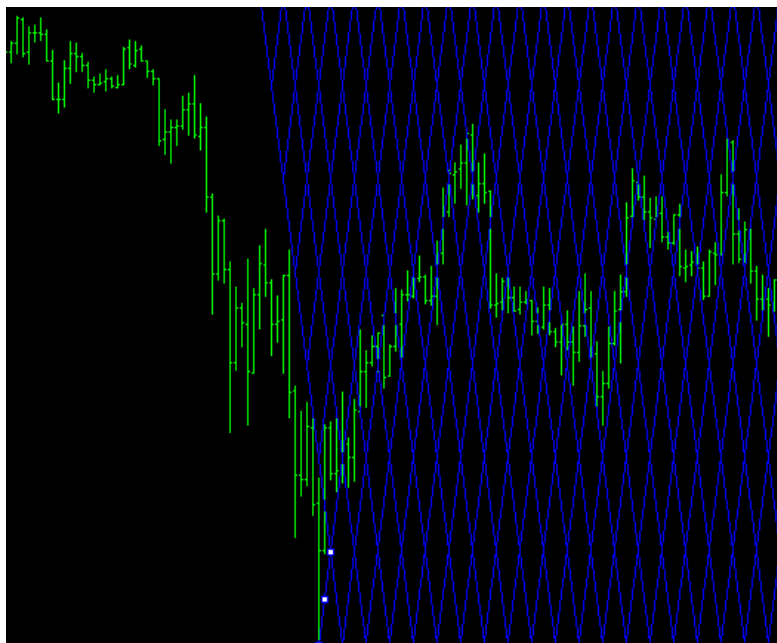
A Gann line is a trendline drawn at an angle of 45 degrees. When **Gann Line** is selected, click where you want the line to begin.



A Gann fan displays a set of trendlines drawn from one point at different angles. When **Gann Fan** is selected, click where you want to place the fan.



A Gann grid displays a series of intersecting 45-degree lines. When **Gann Grid** is selected, click where you want the grid to begin and drag your cursor to size the grid.



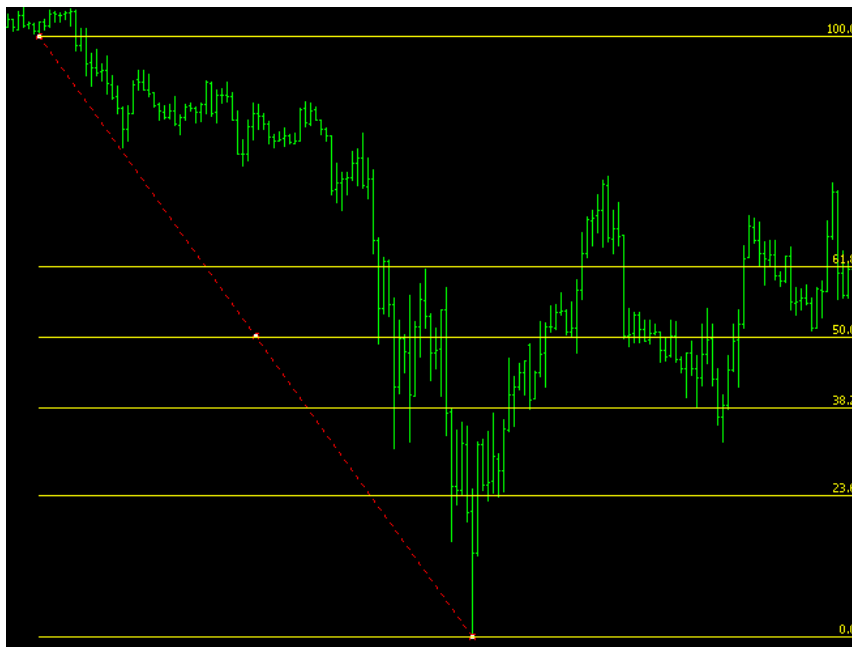
Drawing with the Fibonacci Tools on the Chart

Leonardo Fibonacci discovered a number sequence where each successive number represents a sum of two preceding ones: 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, etc. Many traders use these values to forecast points of support or resistance.

When you click on the **Insert** menu and select **Fibonacci**, you can select from one of five different types of Fibonacci tools to add to the chart.

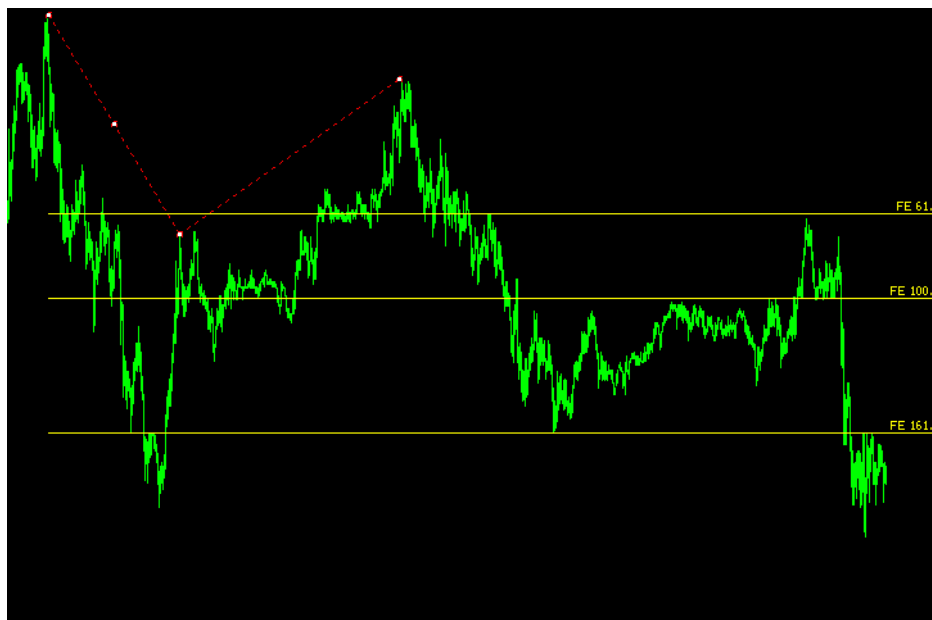
When a severe drop or rise occurs, you can use a Fibonacci retracement to forecast where stops or losses may be placed.

When **Retracement** is selected, click and drag a line between the highest and the lowest price points on the chart.

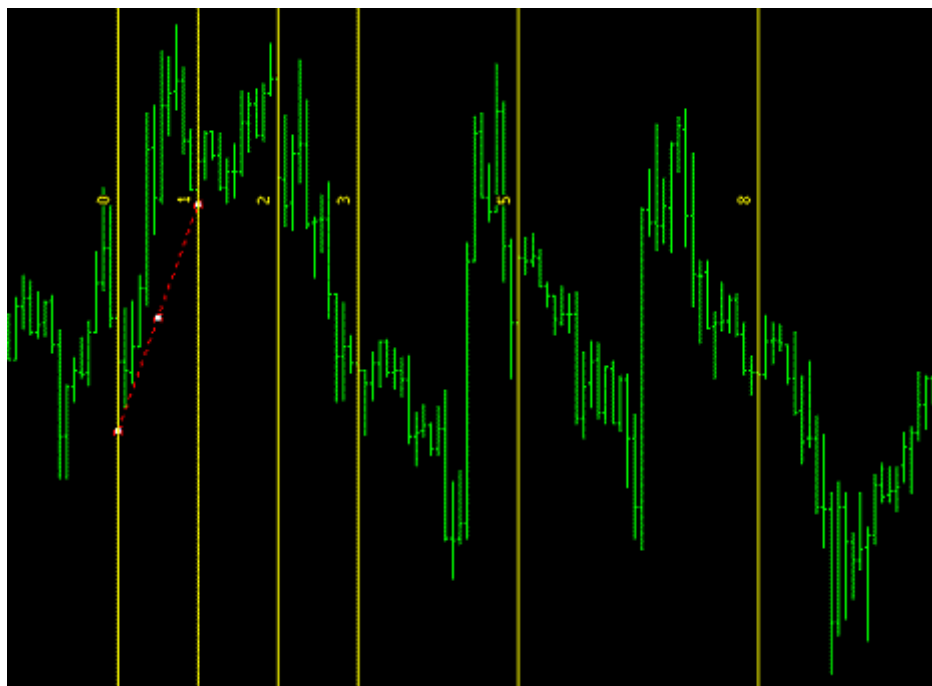


You can add a Fibonacci expansion to forecast where the third wave will end.

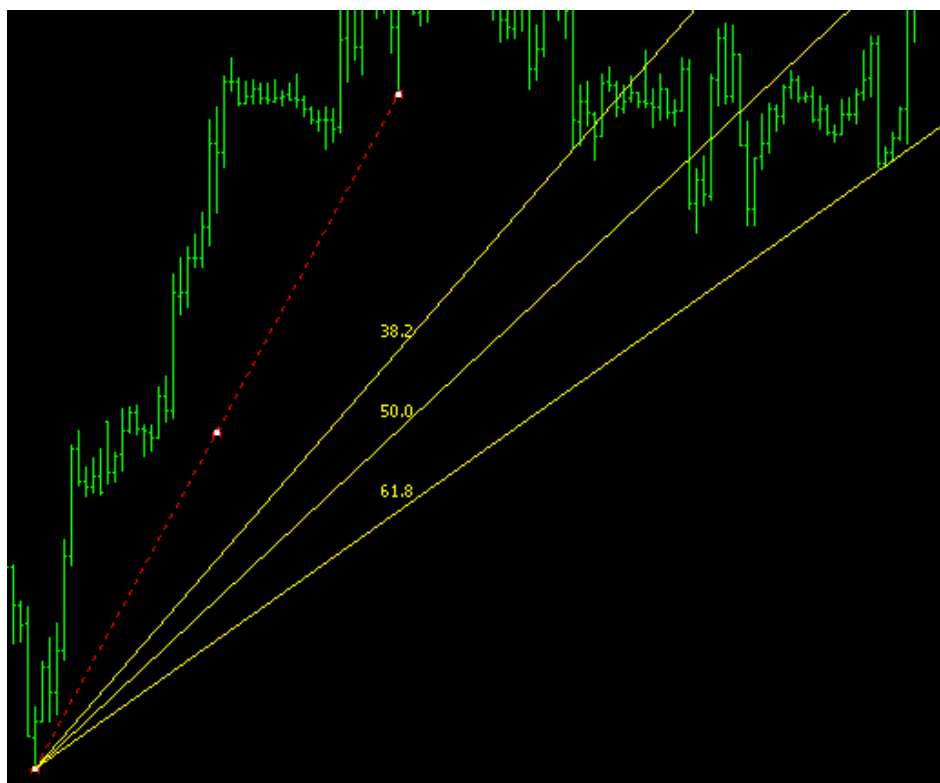
When **Expansion** is selected, click and drag to create a line between the highest and the lowest price points on the chart, just as you did for the retracement. When done, a second trend line will appear. You can double-click on the trend lines to adjust the expansion.



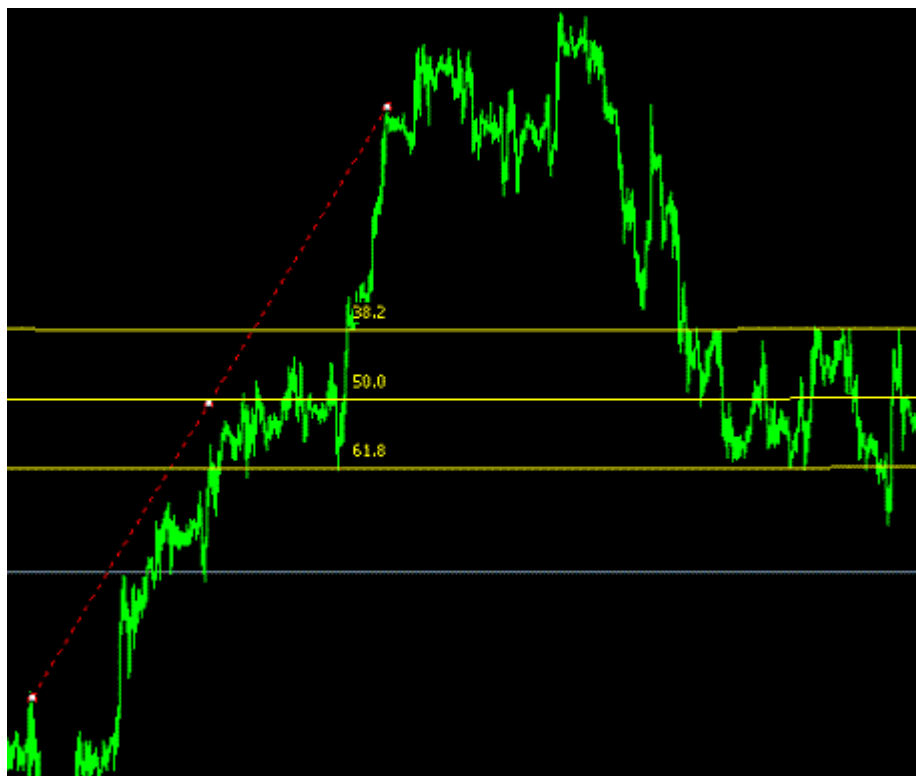
A Fibonacci time zone consists of a series of vertical lines placed at Fibonacci intervals from each other. You can use Fibonacci Time Zones to forecast possible times when the market may experience a significant price change. When **Time Zones** is selected, you can create this drawing object by clicking and dragging.



A Fibonacci fan displays a set of trendlines drawn from one point at different angles. You can use this to forecast support levels for a possible ascending or descending trend. When **Fan** is selected, click and drag to create a line between the high and the low.



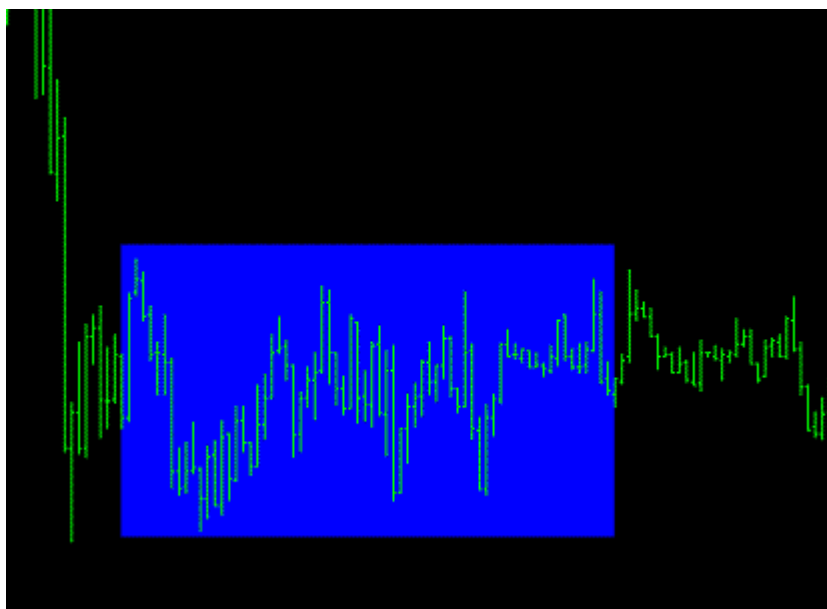
You can use Fibonacci arcs to forecast support and resistance levels. When **Arcs** is selected, click where you want the centre of your arc to be and drag to size the arc.



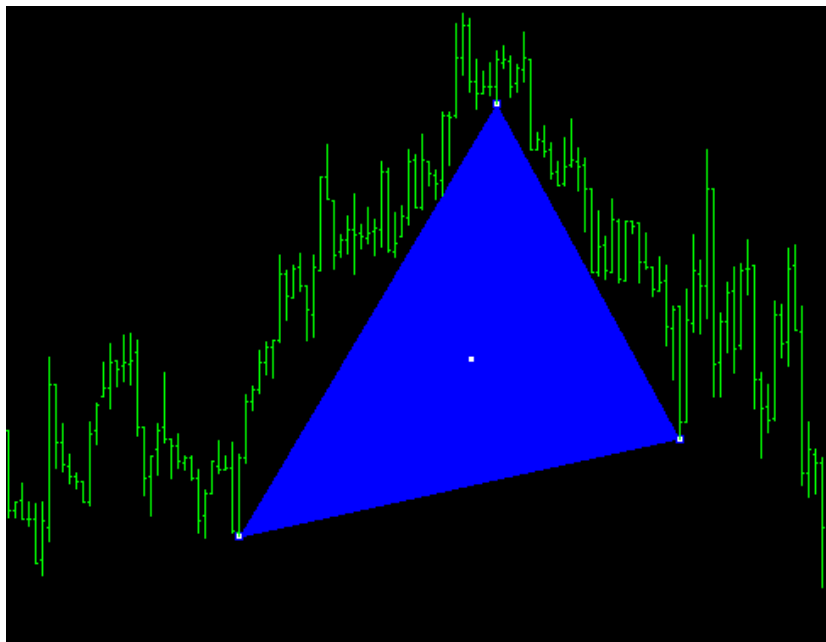
Adding Shapes to the Charts

When you click on the **Insert** menu and select **Shapes**, you can select from one of three different shapes to add to the chart.

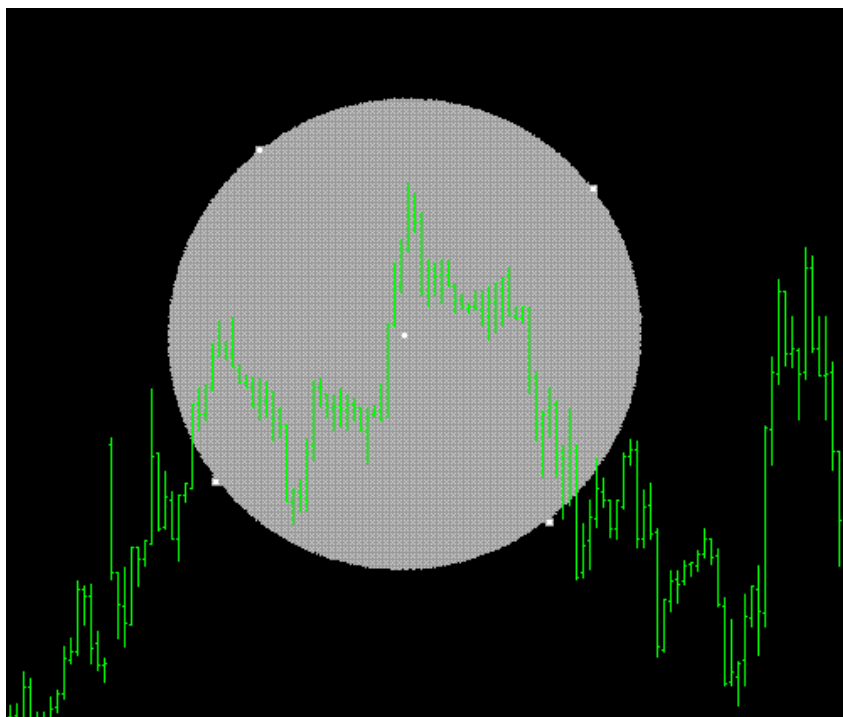
Rectangle draws a rectangle of any size on the chart. When this is selected, click where you want one of the corners of the rectangle to start and drag to size.



Triangle draws a rectangle of any size on the chart. When this is selected, click where you want the three corners to be. Once you place the third point, the triangle appears on the screen.





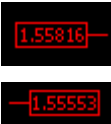


Ellipse draws an ellipse of any size on the chart. When this is selected, click where you want the edge of the ellipse to be.



You can change the colour, line style and other settings of the shapes you draw on the chart using the **Objects List**. See *Configuring Drawings in the Chart* in this section for more information.

When you click on the **Insert** menu and select **Arrows**, you can add eight different types of icons to the chart.

| | |
|------------------------|---|
| Thumbs Up/Thumbs Down |  |
| Up Arrow/Down Arrow |  |
| Stop Sign |  |
| Check Sign |  |
| Left/Right Price Label |  |



You can also place all of these icons using the drop-down menu in the Line Studies menu bar. This also contains an option for removing all icons from chart window. See *Displaying the Line Studies Toolbar* in this section for more information.

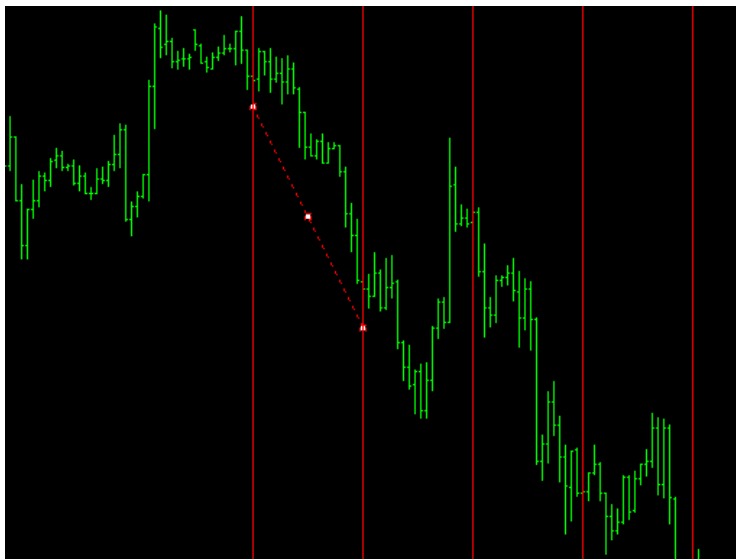
Using the Advanced Drawing Tools in the Charts

The **Insert** menu also includes four other menu options for adding technical analysis drawing or label objects to the chart.

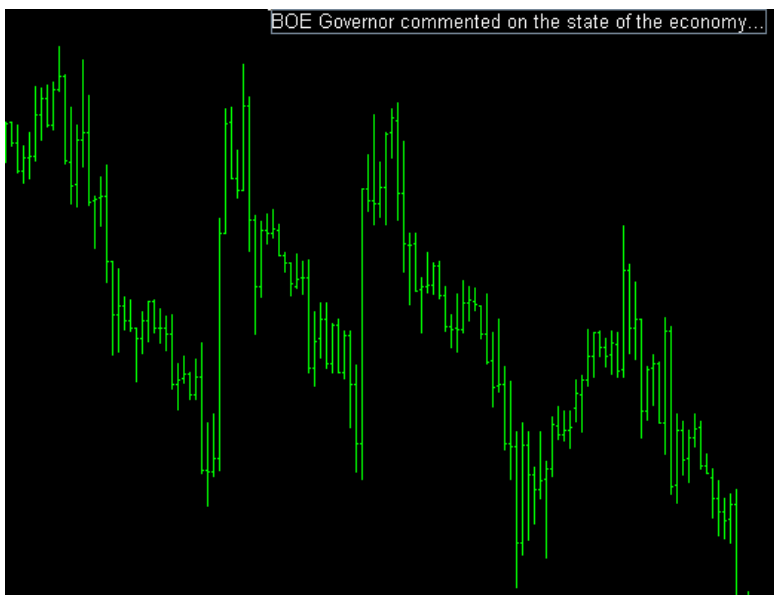
Andrew's Pitchfork is a set of three trendlines used to identify lines of support or resistance. If you suspect that a channel trend is forming around price movements in the chart, you can use this drawing object to verify your assumptions. When **Andrew's Pitchfork** is selected, you can click on a high or a low to specify the middle of the pitchfork and then click two significant peaks or troughs beside it to compose the prongs.



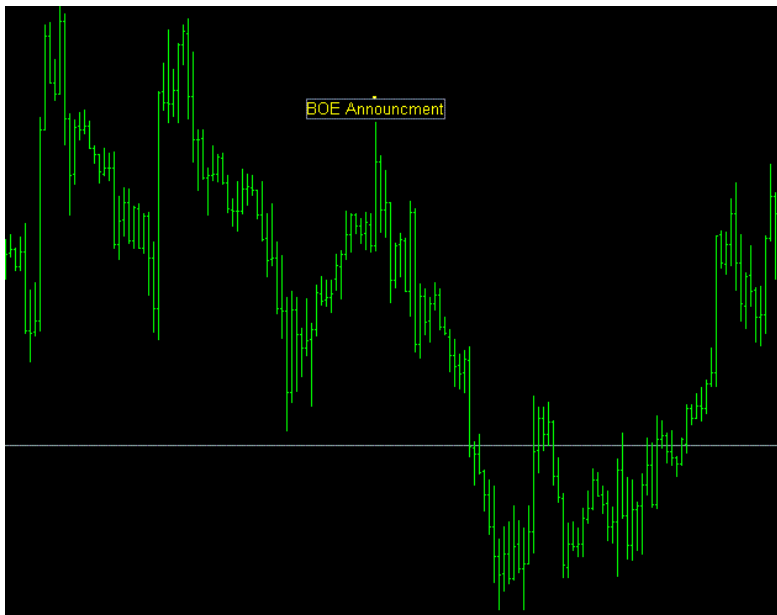
Cycle Lines are a row of vertical lines placed at equal intervals. Usually, one interval corresponds with one cycle. When **Cycle Lines** is selected, click a point in the chart window and drag to adjust the interval.



You can add a label to a particular part of the chart by clicking **Text Label**. As you scroll, the comment remains displayed over the chart. When selected, you can click in the chart window where the label should be. The Label window appears with the Common tab displayed. Here, you can enter a name for the label, add the text you want and change the colour, size or font. You can also specify where the label should anchor on the Parameters tab or select if the text label should appear on all chart time frames on the Visualization tab.

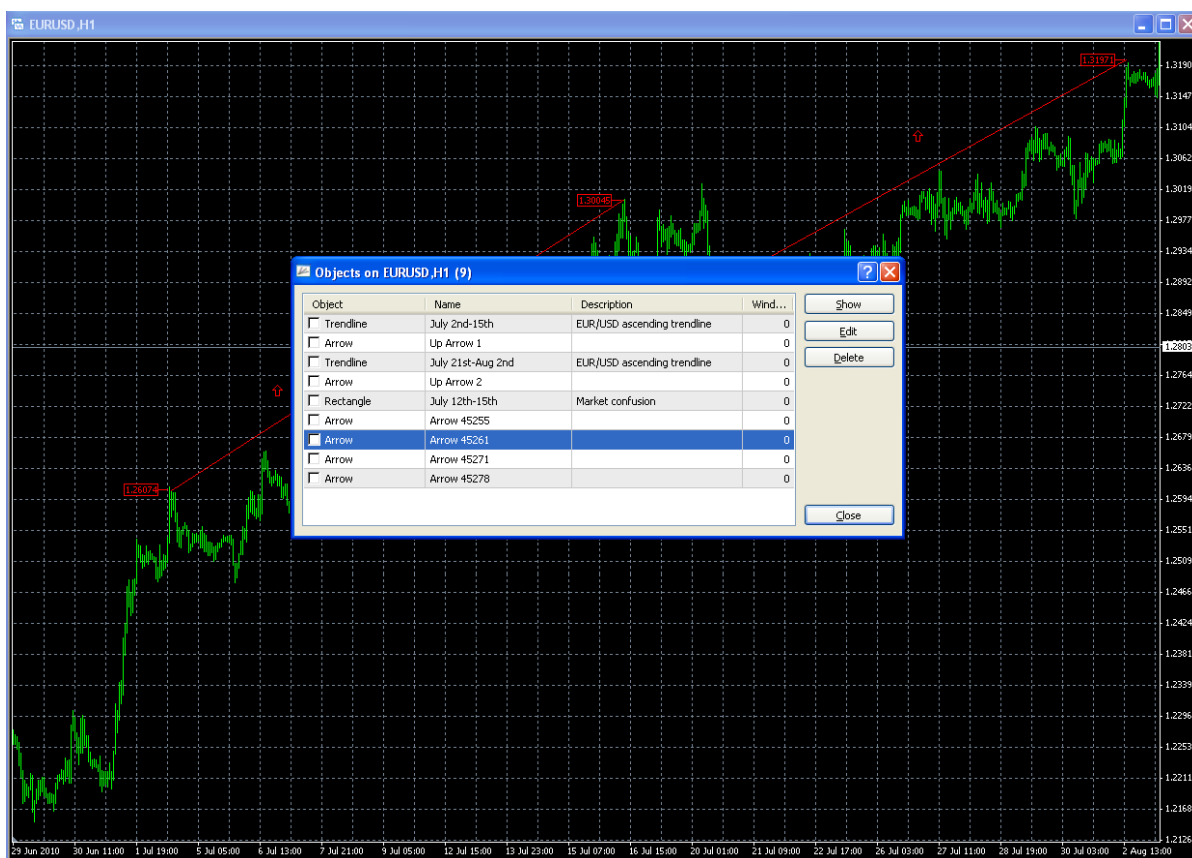


You can add a comment to the chart by clicking **Text**. When selected, you can click in the chart window where the comment text should be. The Text window appears with the Common tab displayed. Here, you can enter a name for the comment, add the text you want and change the colour, size or font. You can also specify the time and the angle of the comment on the Parameters tab or select if the text label should appear on all chart time frames on the Visualization tab.



Configuring Drawings in the Chart

After you add a drawing to the chart, you can change its appearance and properties as well as add a label to it by right-clicking in the chart window and selecting **Objects List**. This displays the Objects On... window.



The Objects On... window shows a list of all objects that are currently displayed in the chart window. It also contains four command buttons.

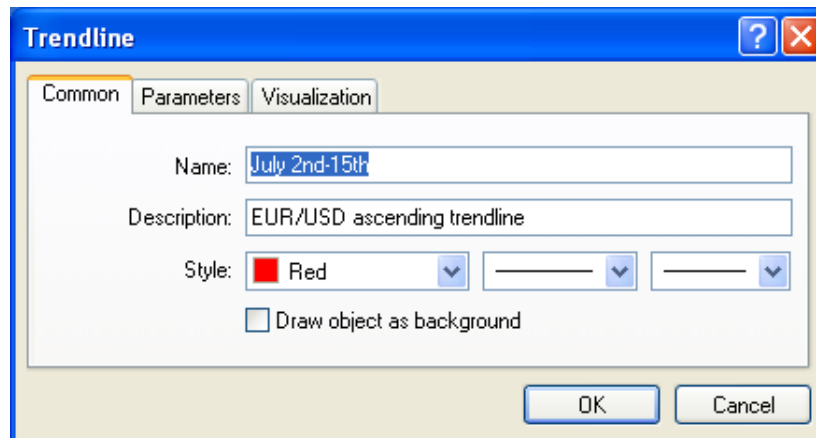
Objects that are checked are currently selected and can be edited.

Show changes the view of the chart window, so the currently selected object is prominently displayed.

Delete removes the object from the Objects On... window and the chart window.

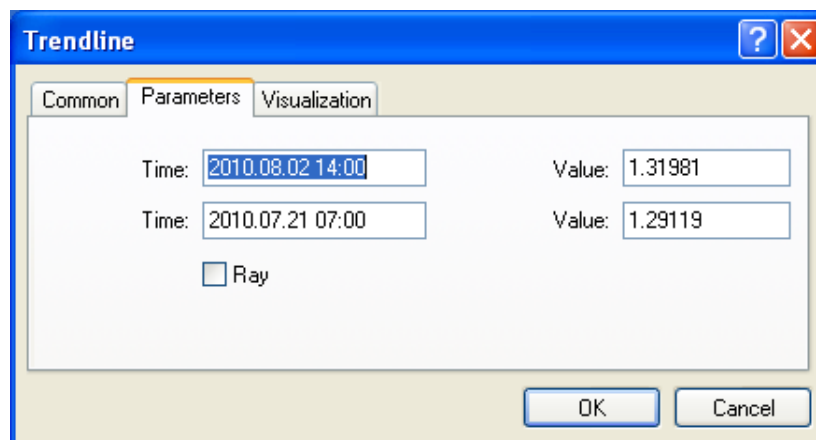
Close closes the Objects On... window.

Edit opens an edit window for the currently selected object. This window contains three tabs.



The Common tab contains settings for entering the name for the object, adding a description and changing the colour, line style or other appearance settings of the selected object.

Drawing objects like **Rectangle** and **Ellipse** appear filled. If you want to see just the outline of the shape, uncheck **Draw Object as Background**.



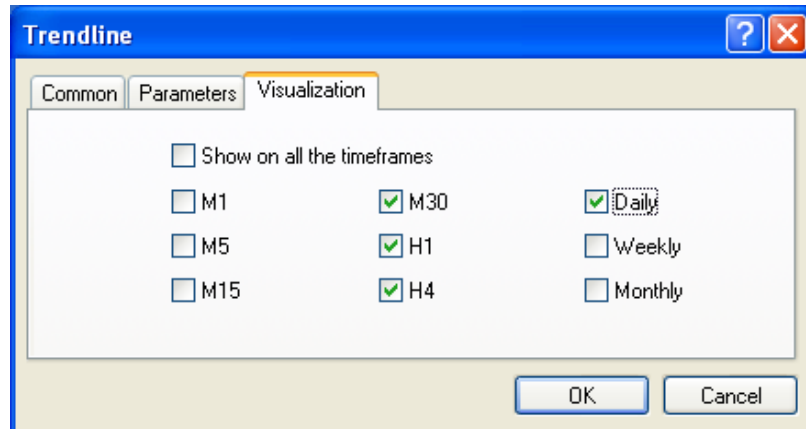
The Parameters tab is where you can enter specific data on where the object appears in the chart. The selections available here depend on what the selected object is.

The **Time** and **Value** fields enable you to specify where an object is placed on the chart.

You can use the **Angle in Degrees** field to set the angle of the text or the drawing object.

The **Arrow Code** field adds an object code when you add an arrow icon to the chart window.

When selected, the **Ray** checkbox draws all lines on the charts as lines that start at one point and continue in one direction toward infinity. This is selected when you first open MetaTrader.



The Visualization tab contains settings so you can specify in which time frames the object will appear on the chart. When you first draw the object, **Show on All Time frames** is automatically selected.

Editing Drawings in the Chart:

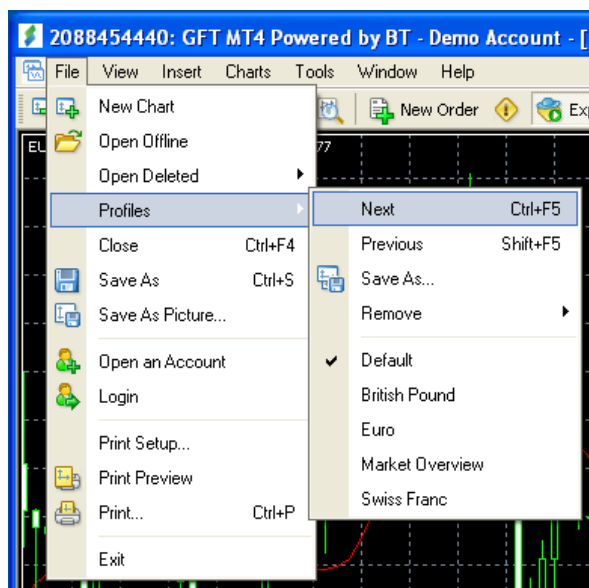
1. Right-click in the chart window with your drawing objects and select **Objects List**.
2. In the Objects On... window, select the object you want and click **Edit**.
3. In the Common tab, make sure the name is correct and enter a description, if desired.
4. Use the drop-down menus to specify the colour of the drawing object and the line style.
5. Click on the Parameters tab and make changes as necessary.
6. If you want to specify a time frame, click on the Visualization tab, uncheck **Show On All The Time frames** and check the time frames you want.
7. When done, click **OK**.
8. Select another object in the Objects On... window to edit, if desired.
9. When done, click **Close**.



If you don't want to configure all of the drawings at once, you can also double-click on a single drawing object in the chart window to select it. Right-click on it and select the **...Properties** menu option. This will open the edit window for the currently selected object.

Grouping Charts with Profiles

MetaTrader allows you to open multiple charts and save them in a profile. Many traders use this to compare their most commonly traded instruments. You can use the **Profiles** menu option in the **File** menu to save multiple groups of charts.



When you click the **File** menu and select **Profiles**, you can:

- Display one of the existing profiles by selecting its name from the drop-down menu that appears. When selected, a check appears beside it to show you that it is active.
- Return to the original profile by choosing **Default**.
- Move between profiles by clicking **Next** or **Previous**.
- Save several charts already displayed as a set by clicking **Save As...** Once saved, it appears in the **Profiles** drop-down menu with a check beside it to show you that it is active.
- Delete a profile by clicking **Remove** and selecting the profile you want from the drop-down menu.

When you open a profile, each chart window appears with its settings in the same location as it was when it saved.

Saving a Profile:

1. Click the **File** menu and select **Profiles**.
2. When the drop-down menu appears, select **Save As...**
3. In the Save Profile window, you can type in a new name or select an existing name from the drop-down menu to save over that profile.
4. Click **OK**.



If you make a change to the chart windows in a profile, you don't have to save it. These are automatically saved in the current profile.



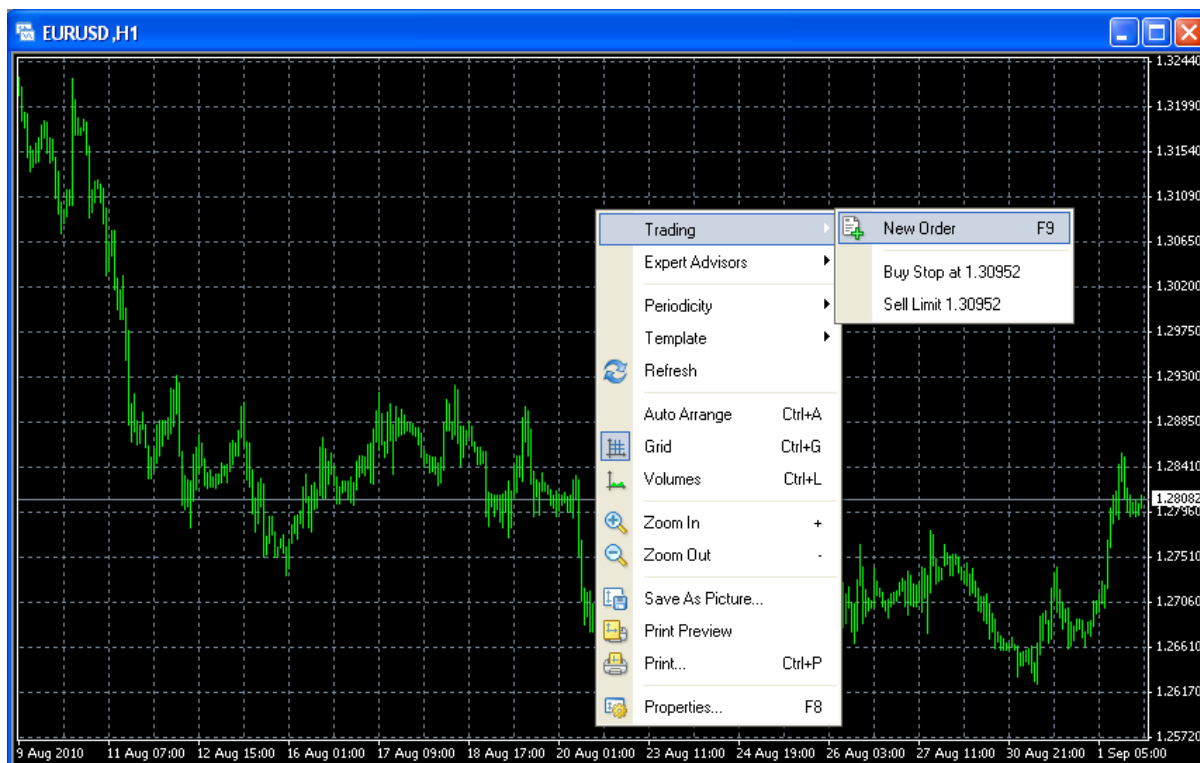
The profiles in the drop-down menu or the Profiles folder on your computer may vary from the graphic that you see here.



You can also use these commands by clicking  in the Standard toolbar. This displays a drop-down menu similar to the one that you see when you click the **File** menu and select **Profiles**.

Placing Trades from the Chart

You can place trades from the chart by right-clicking in the window, selecting **Trading** and then clicking a menu option from the drop-down menu that appears.



New Order

Opens a position in the market at the current price. The Order window opens with a **Market Execution** order type selected. You can change the **Type** drop-down menu and select **Pending Order** if you want to place a buy limit or a sell stop.

Buy Limit at.../Sell Stop at...

Places a buy limit or a sell stop at the listed price. The Order window opens with the **Pending Order** type selected.

Placing a Market Order from the Chart Window:

1. Right-click in the chart window of the instrument you want, select **Trading**.
2. From the drop-down menu, click **New Order**.
3. Click **Volume** drop-down menu to select the number of lots you want to trade.
4. If desired, enter text in the **Comment** text box.
5. Click either the **Sell by Market** or **Buy by Market** button.
6. Click **OK** to close the window.

Placing a Pending Order from the Chart Window:

1. Right-click in the chart window of the instrument you want, select **Trading**.
2. From the drop-down menu, click **Buy-Limit at.../Sell Stop at...** order.
3. Click **Volume** drop-down menu to select the number of lots you want to trade.

4. If desired, click the **Expiry** checkbox and select a date.
5. If desired, enter a price in the **Stop Loss** or **Take Profit** text boxes.
6. Click **Place**.
7. Click **OK** to close the window.



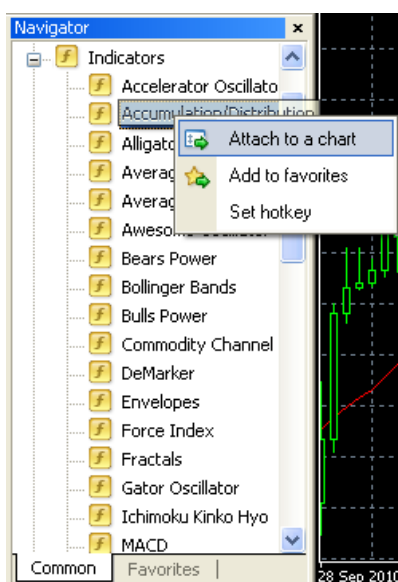
For more information, see *Placing Market Orders Manually from the Order Window* or *Placing Pending Orders Manually from the Order Window* in **Section 2: Opening and Managing Your Trades**.

Managing Technical Indicators in the Chart

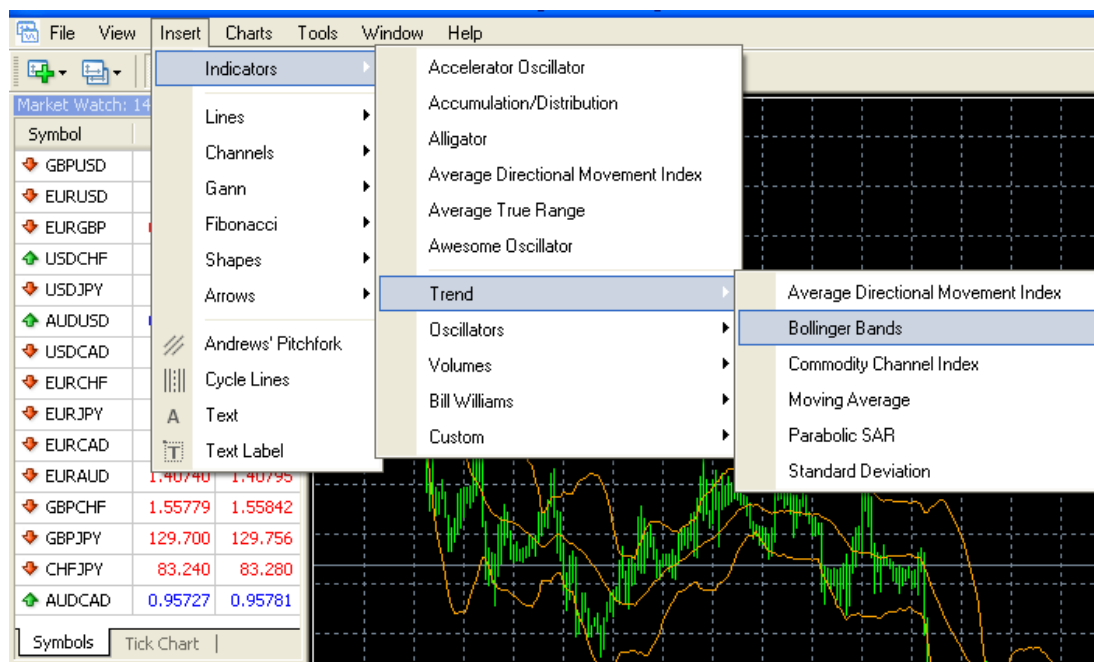
Many traders use technical indicators to forecast where the market may be going. In MetaTrader, you can select up to 30 different technical indicators to appear in the chart.


There are several ways to add an indicator to a chart.

- Click + next to Indicators in the Navigator window to display the list of indicators. Then click and drag the indicator to the chart window.
- Right-click on the indicator you want in the Navigator window and select **Attach to a Chart**.

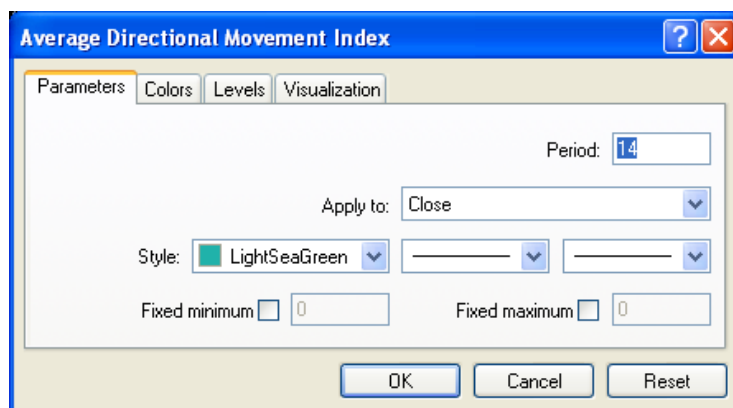


- Click the **Insert** menu and select **Indicators**. This displays a drop-down menu where the indicators are organized in folders by type (**Trend**, **Volumes**, **Oscillator**, etc.). You can select the folder and click on the indicator in it.



- Click  in the Charts toolbar. This displays a drop-down menu with a list of the most recently used indicators and then the indicator folders. You can select the indicator you want or click on the folder and select the indicator.

When you add an indicator to the chart, a settings window for that indicator appears. You can specify settings for the indicator over several tabs. The ones that you see depend on the indicator you selected.



The Parameters tab is where you can enter specific data on how the indicator appears in the chart. The selections available here depend on what the indicator is.

On the Colors tab, you can modify the line colours of the indicator by double-clicking on the colour and selecting a new one from the drop-down menu. Like the Parameters tab, the selections that you see depend on what the indicator is. You can also specify line width on a scale of one to five by double-clicking on the **Width** row and selecting a new one from the drop-down menu that appears. If you select a line width of one, you can also specify whether the line appears as solid or dotted by double-clicking on the **Style** row and selecting a new one from the drop-down menu that appears.

The Levels tab is where you can add level lines to the indicator. You can create a new level by clicking **Add**. You can then select the line and use the drop-down menus to change the colour, thickness and style of the level line. To remove lines, select the line and click **Delete**.

On the Visualization tab, you can select in which time frames the indicator can be used. When you first open MetaTrader, the **All Time Frames** checkbox is selected. When you uncheck it, you can select one or more time frames.

If you need to return to the original settings, click **Reset**.

Indicators will appear either in the chart or in an indicator window below the chart. The name of the indicator in the separate indicator window appears in the upper left corner of that window.



You can add as many indicators to the charts as you would like, but GFT advises traders to use no more than five at a time.

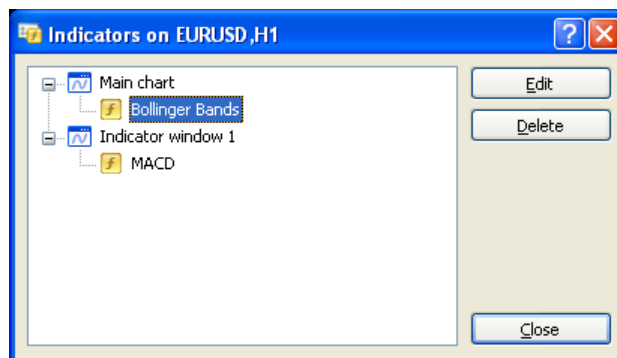
Attaching an Indicator to the Chart Window:

1. Right-click on the indicator you want in the Navigator window and select **Attach to a Chart**.
2. Select the options you want on the tabs that appear.
3. When done, click **OK**.



Indicators should not be confused with custom indicators. See *Section 5: Using MetaTrader's Autotrading Tools* for more information on custom indicators.

When an indicator is attached to the chart, you can right-click in the chart window and select **Indicators List**. This opens the **Indicators on...** window. You can use this to view the indicators already attached to the chart. When you select an indicator, you can click **Edit** to open the settings window for that indicator or click **Delete** to remove it from the chart.

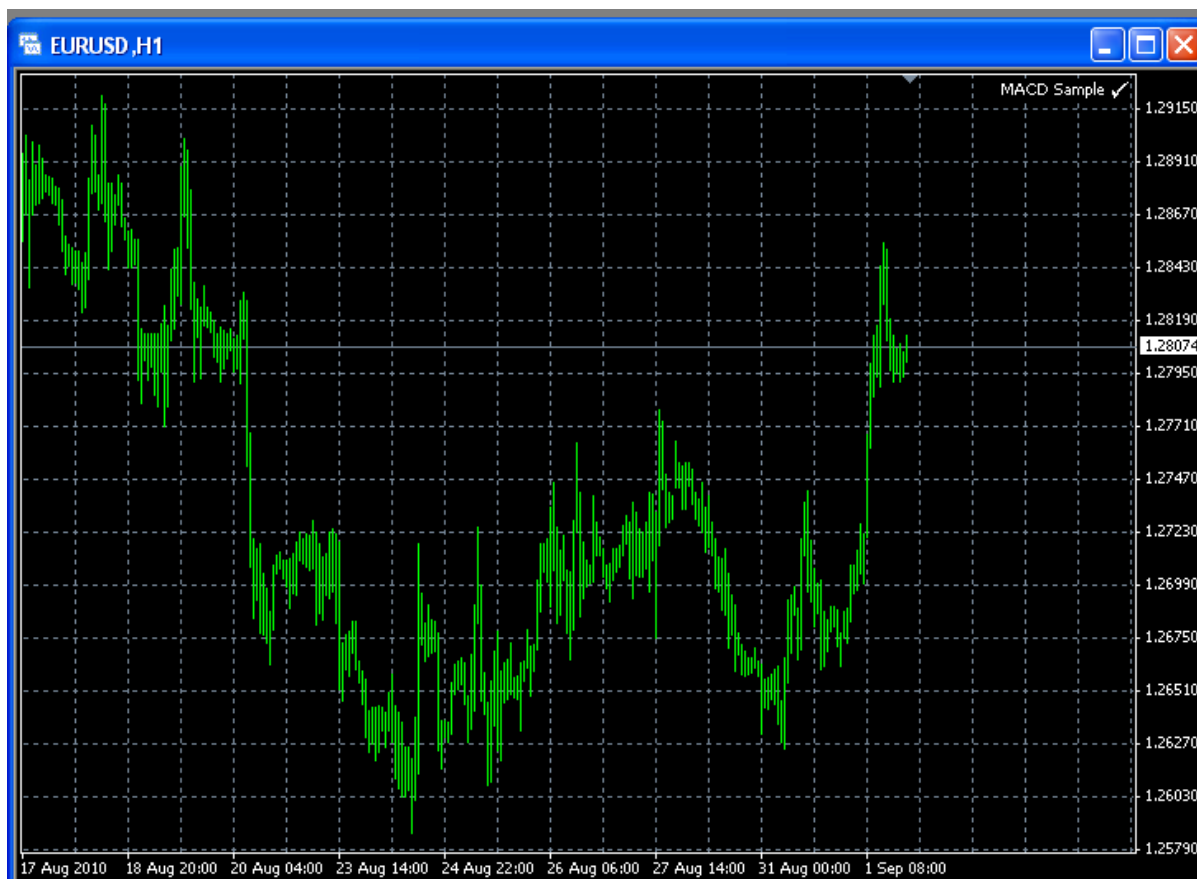




If you use a particular indicator regularly, you can save it to your Favorites tab by right-clicking on it and selecting **Add to Favorites**. You can also set a hot key shortcut so you can activate an indicator by pressing a key or two on your keyboard. See *Setting Keyboard Shortcuts for Autotrading Tools in the Navigator Window* in *Section 5: Using MetaTrader's Autotrading Tools* for more information.

Managing Expert Advisors

With MetaTrader, you can use automated trading strategies called expert advisors to perform prompt technical analysis of price data and manage trading activities based on current market conditions. When an expert advisor is attached to the chart, you can right-click in the chart window to modify, test and delete it.



The EUR/USD chart window with the expert advisor, MACD Sample, attached. To show you that it's attached, the name appears in the upper right corner of the chart window.



If you are using an EA and do not have a Virtual Private Server subscription, your EAs will stop running when you log out of MetaTrader.

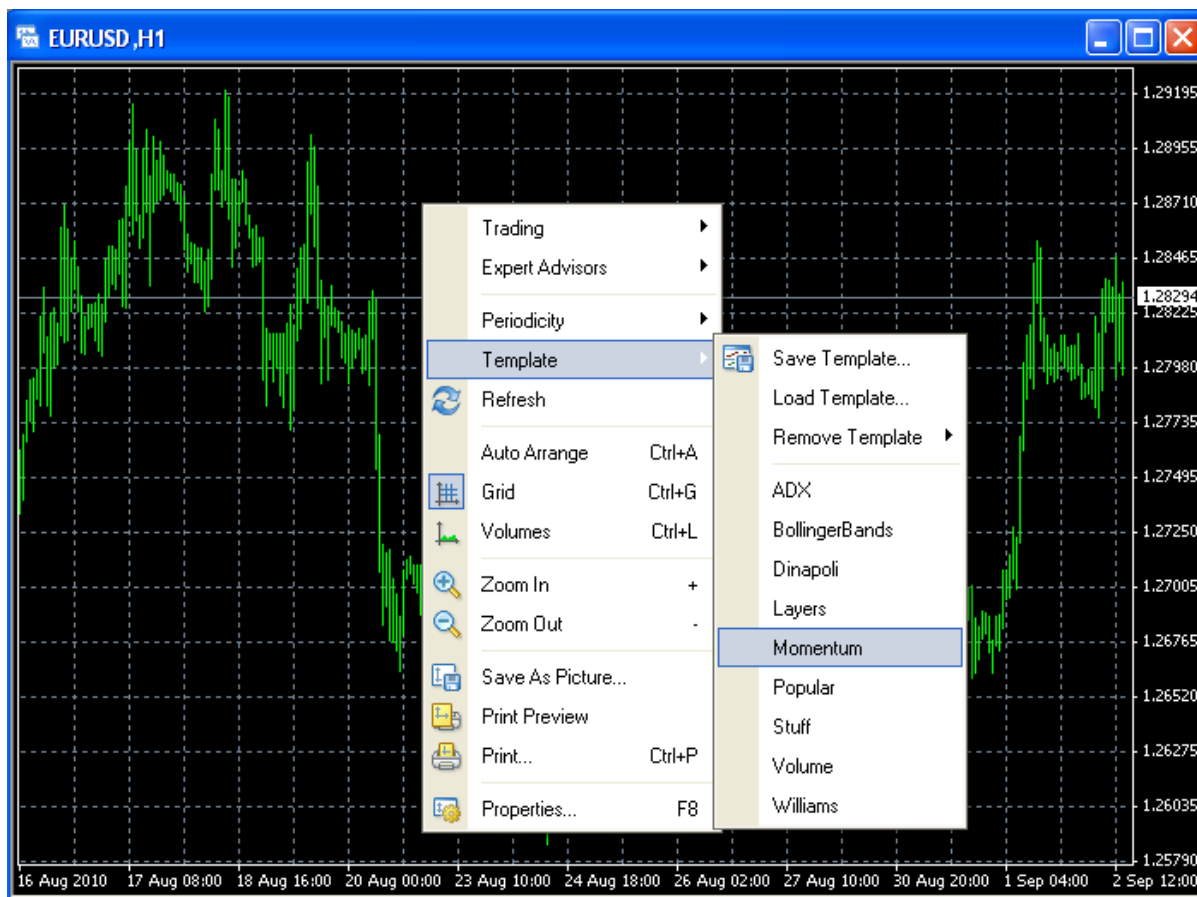
You can verify if the expert advisor is active or not by looking for one of three types of icons in the upper right corner of the chart. A ☺ means that the expert advisor was attached and is actively trading. A ☹ shows that the expert advisor was attached, but that live trading is disabled for it. A ✖ means that all expert advisors have been disabled.



For more information on expert advisors, see *Section 5: Using MetaTrader's Autotrading Tools*.

Managing Templates in the Chart Window

With a chart template, you can save the chart type, time frame, indicators, expert advisors and other settings and apply it to any chart.



MetaTrader includes a number of already existing templates which you can select by right-clicking in the chart window and selecting **Template**. From the drop-down menu, select one of the listed templates. The chart window updates immediately.

If you've used MetaTrader before and have template (.tpl) files, you can import these by placing them in the Templates folder on your computer. You can then import template files in MetaTrader using the **Load Template...** menu option.

You may notice the default.tpl in the Templates folder. This is a basic template that is created during the MetaTrader installation and applied automatically whenever the chart window is opened. While you can edit this file, you cannot save over it.

You can save the contents of the chart window as a template or save changes you've made to an existing template by using the **Save Template...** menu option. Once saved, the template appears by name in the list of templates.

Loading a Template in the Chart:

1. In the chart, right-click and select **Template**.
2. From the drop-down menu, click **Load Template**.
3. In the Open window, select the .tpl file you want and click **Open**.

Saving a Template in the Chart:

1. In the chart, right-click and select **Template**.

2. From the drop-down menu, click **Save Template**.
3. If you are saving a new template, enter the file name you want. If you want your changes to overwrite an existing template, click that template file.
4. When done, click **Save**.



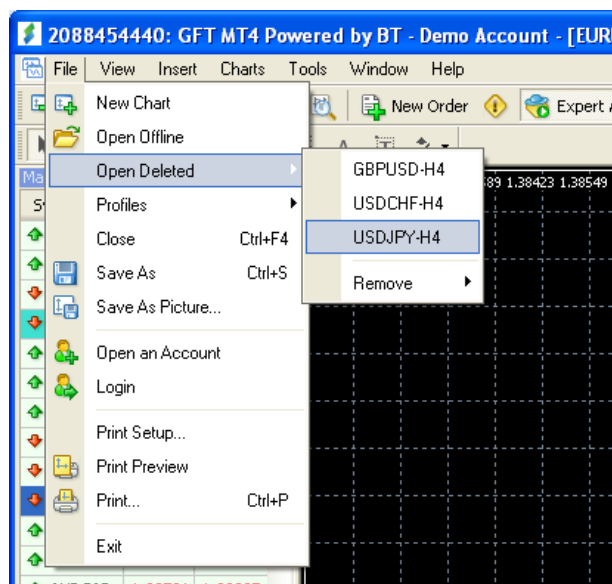
The templates in the drop-down menu or the Templates folder on your computer may vary from the graphic that you see here.



You can also use these commands by clicking  in the Charts toolbar. This displays the same drop-down menu that you see when you right-click in the chart window.

Closing Charts and Recovering Them

As you trade, you may find it necessary to close chart windows. If you need to look at a chart that was closed, you can reopen them using the **Open Deleted** menu option in the **File** menu.



You can reopen closed chart windows as long as the settings in the Charts tab in the Options window are set to do so. See *Specifying Chart and History Data Properties* in **Section 6: Customizing the Appearance and Settings in MetaTrader** for more information.

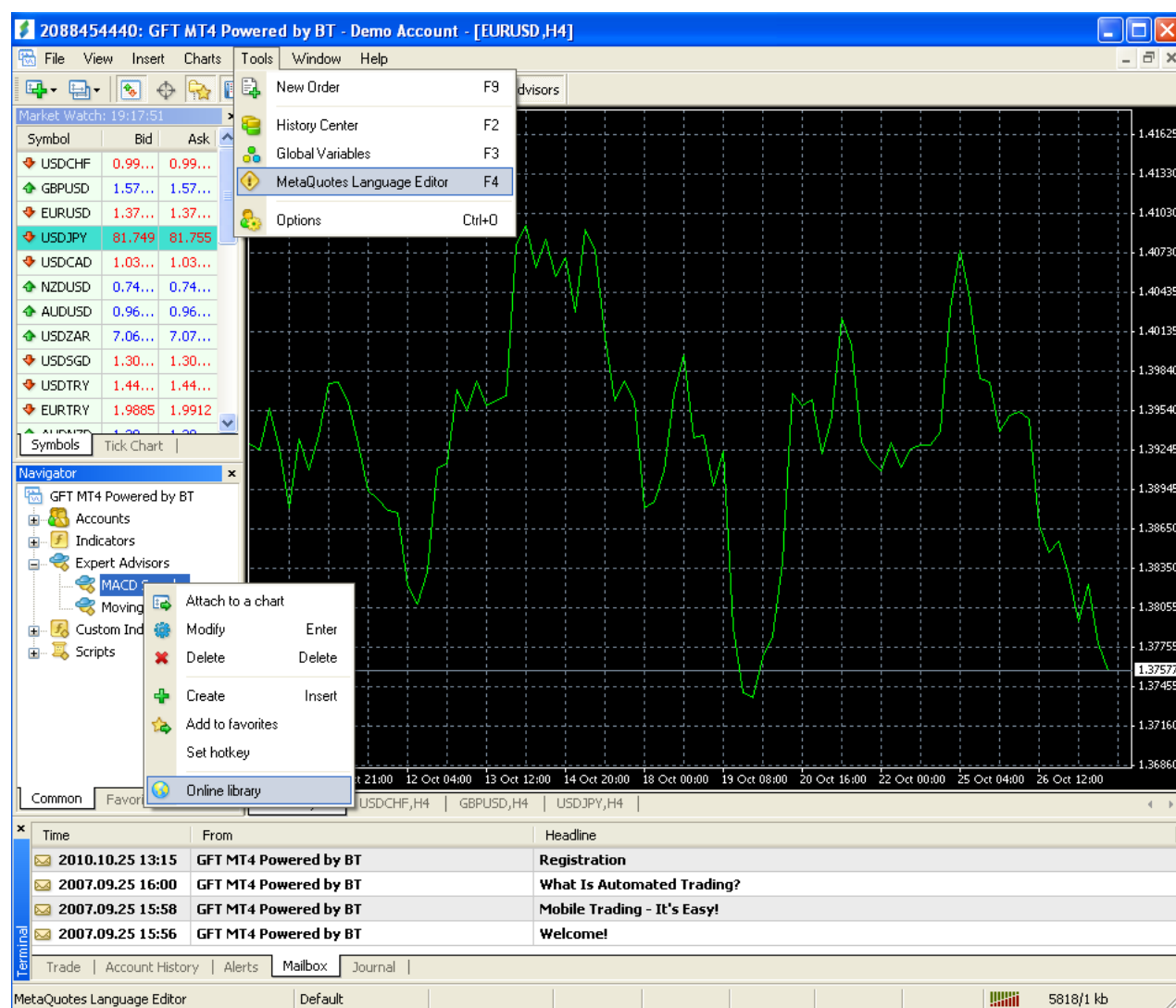
To reopen a closed chart, click the **File** menu and select **Open Deleted**. In the drop-down menu that appears, select the instrument and time frame that you want.


Section 4: Opening MetaEditor for the First Time

Before you use MetaTrader's automated trading tools, you'll want to learn a bit about MetaEditor, an application installed with MetaTrader that helps you develop autotrading tools. With MetaEditor, traders can import, create and modify expert advisors, custom indicators, scripts and other MetaTrader autotrading tools. Before you start downloading or coding autotrading files, you'll want to open MetaEditor and become familiar with its workspace. In this section, you'll receive an overview of the tools and features you'll use to create MetaTrader autotrading tools.

Opening MetaEditor

MetaEditor is automatically installed on your computer when you install MetaTrader. You can open it while working in MetaTrader using one of the following methods.

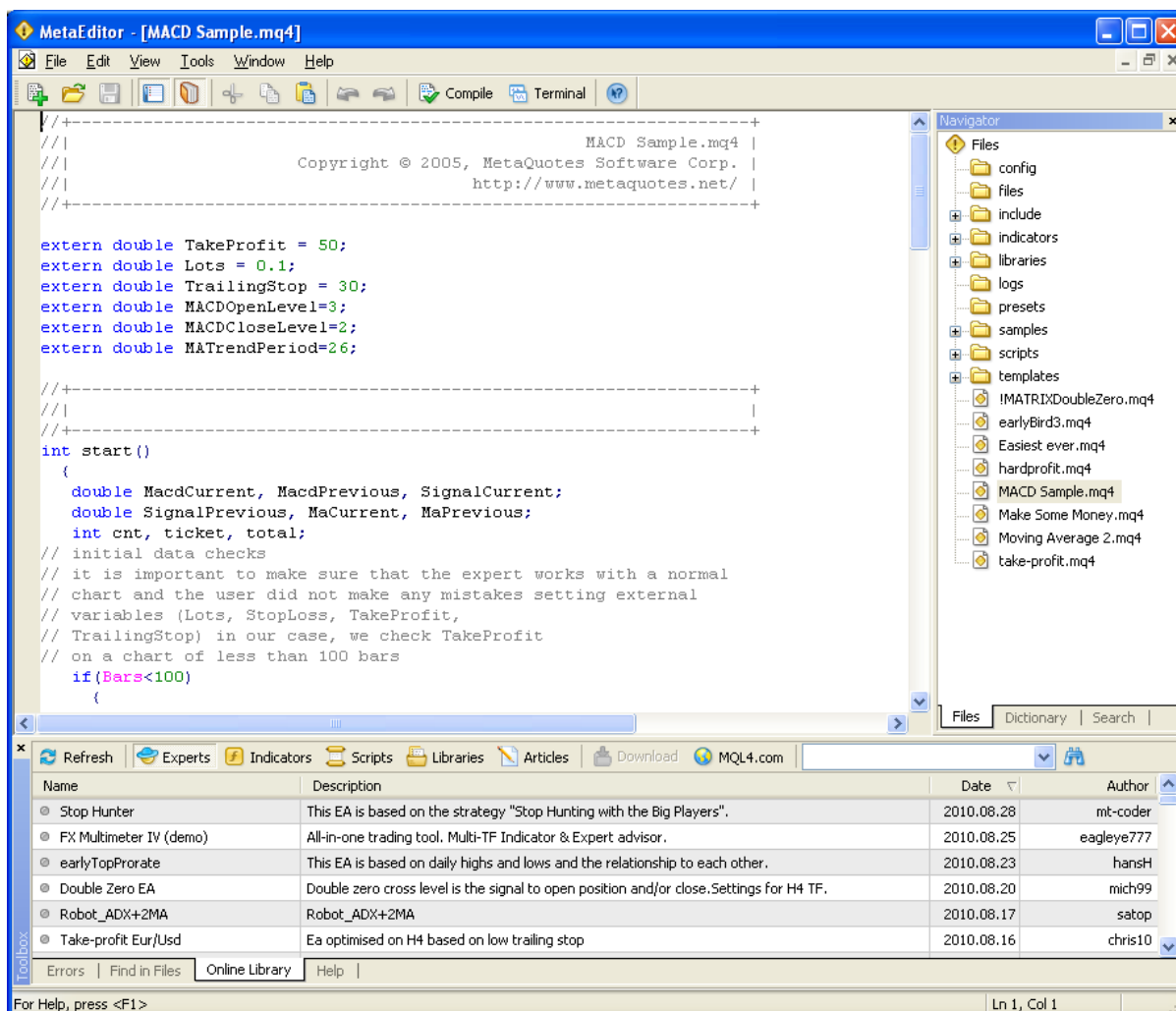


- Click the **MetaEditor**  button in the toolbar.
- Right-click on an indicator, expert advisor, custom indicator or script and select **Create**, **Modify** or **Online Library**.
- Click **Tools** and select **MetaQuotes Language Editor** from the drop-down menu.

If you do not have MetaTrader open, you can open MetaEditor by clicking the Start menu on your computer, clicking the MetaTrader folder and clicking **MetaEditor**. MetaEditor uses the same login as MetaTrader.

Viewing the MetaEditor Workspace

The MetaEditor workspace contains all the features you need to create MetaTrader autotrading tools, such as expert advisors, custom indicators, scripts and libraries.



- Menu bar
- Toolbar
- Navigator window
- Toolbox
- File window
- Status bar

The Menu Bar

At the top of the workspace, you'll see the MetaEditor menu bar. You can use the five menus that appear here to access that MetaEditor options that you'll use to create and edit autotrading tools.



File – Displays menu options for creating and opening autotrading tool files. You can also access recently opened files.

Edit – Contains the menu option for finding and replacing a text string in an autotrading tool file.

View – Displays menu options for displaying MetaEditor windows and toolbars. You can also manage your language preferences from this menu.


Tools – Contains tools for accessing MetaTrader and arranging the windows in the MetaEditor workspace.


Help – Contains menu options for displaying the MetaTrader online help, accessing the MQL.4 (the MetaTrader programming language) community and viewing version information.


The MetaEditor Toolbar

You can access the most commonly used tools on the MetaEditor toolbar. If this isn't displayed, click the **View** menu and select **Toolbar**.



 opens the Expert Advisor wizard. You can use this to immediately create an expert advisor, custom indicator, script, library or other autotrading tool.

 displays the Open window. If you've previously created a file, you can click this to navigate to the file location and select it.


 saves the code file of the autotrading tool you created. All MetaEditor files are saved as .mq4 files.

 opens or closes the Toolbox window.

 opens or closes the Navigator window.


 cuts a selected section of code in a .mq4 file.


 copies a selected section of code in a .mq4 file.

 pastes a selected section of code in a .mq4 file into another file.

 reverses the last action you just completed.

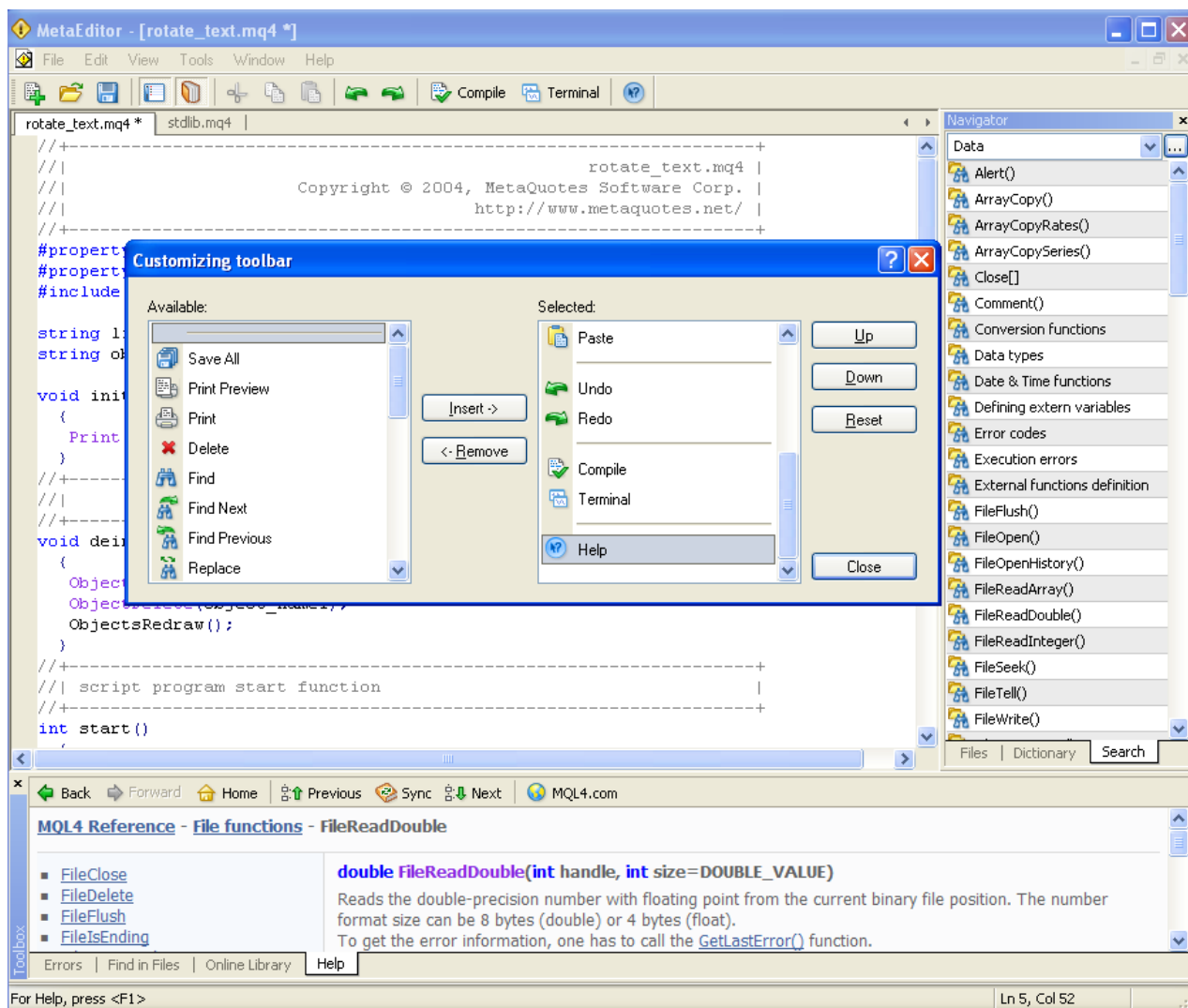
 repeats the last action you just completed.

 **Compile** verifies if the code in the open file works as programmed. The Errors tab opens automatically in the Toolbox window to show you if there are any errors or warnings. When the compilation is successful, MetaEditor saves the file.

 **Terminal** switches your computer to MetaTrader.

 displays help files based on what you click on. When active, the cursor appears with a question mark.

You can customize all of the toolbars so that they contain only the tools that you use by clicking **View** and selecting **Customize...** This opens the Customizing Toolbar window.



This window is where you can specify what appears in the selected toolbar. The Available section shows any menu options that are currently not in the toolbar and can be added. The Selected section displays all of the options that are currently displayed in the toolbar.

The tools that appear in the Available and Selected section depend on which toolbar you right-clicked on.

To place a tool on the toolbar, you can select it in the Available section and click **Insert**. Conversely, you can remove a tool from the toolbar by clicking it in the Selected section and then selecting **Remove**.

You can also reposition the order of the tools in the menu bar by selecting a tool and clicking **Up** or **Down**.


If you need to return to your original settings, click **Reset**.

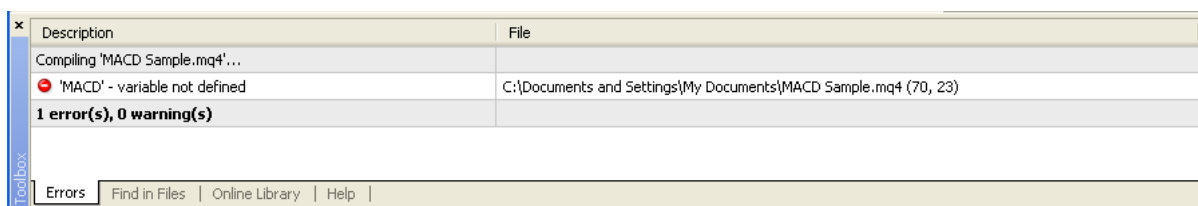
When you are done reordering the toolbars, click **Close**.

The Toolbox Window

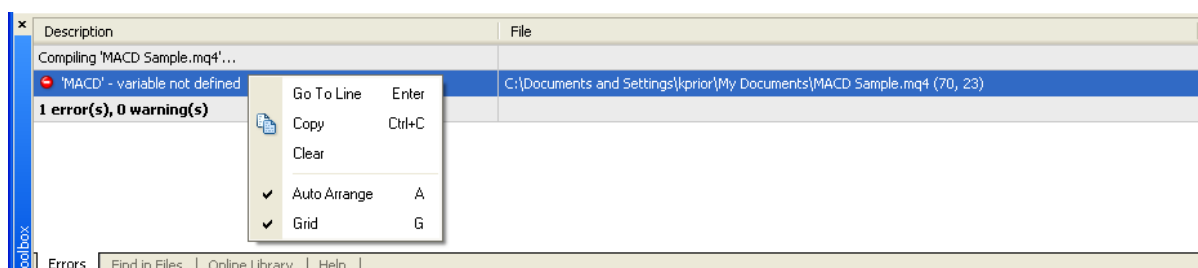
You'll use the Toolbox window to find and download user-community created autotrading files. You can also use this window to test recently downloaded or newly created files or search for specific code strings in the files. The Toolbox organizes these tools over four tabs.

If the Toolbox window isn't displayed, you can click in the **View** menu and select the **Toolbox** menu option. You can also click  in the toolbar.

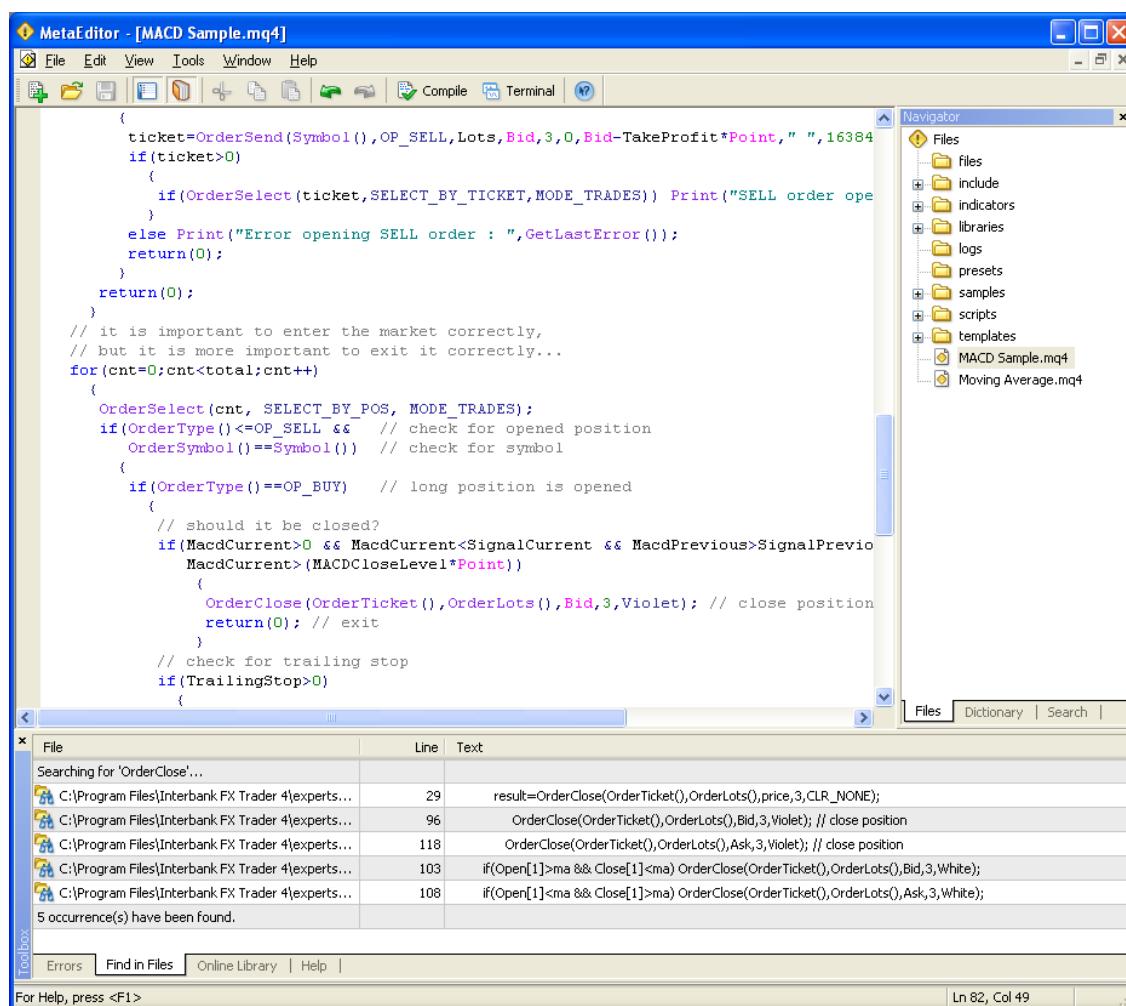
The Errors tab displays a list of any errors that MetaEditor finds in the code file of the expert advisor, custom indicator or other autotrading tool. After you save the file you're working on, you can click  **Compile**. The Errors tab then displays a list of any errors or warnings it found.



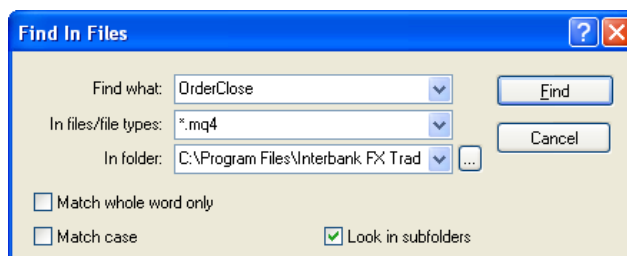
To go to the line with the error, you can right-click in the **Errors** tab and select **Go To Line** from the drop-down menu that appears.



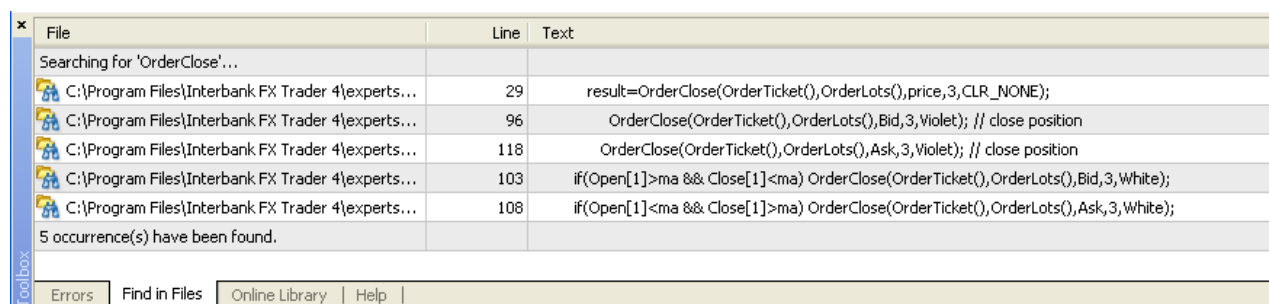
You can use the **Find in Files** tab to search for a specific word or line of code in one or more autotrading files in a folder.



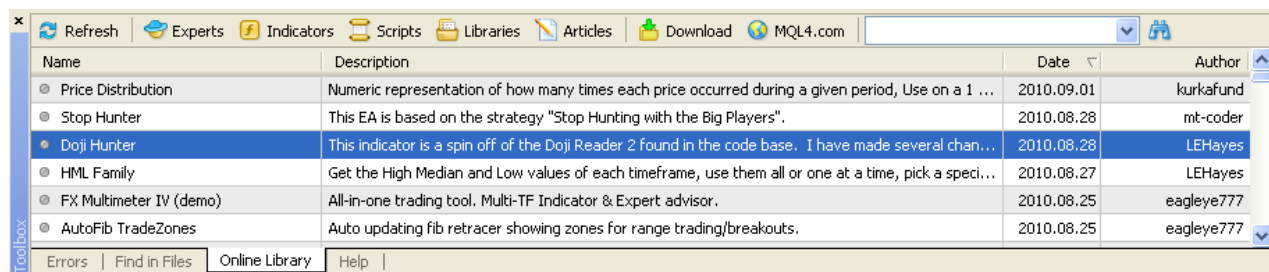
Click the **Find in Files** menu option in the **Edit** menu to open the search window. Type the word you want and use the drop-down menu to select the location you want. When done, click **Find**.



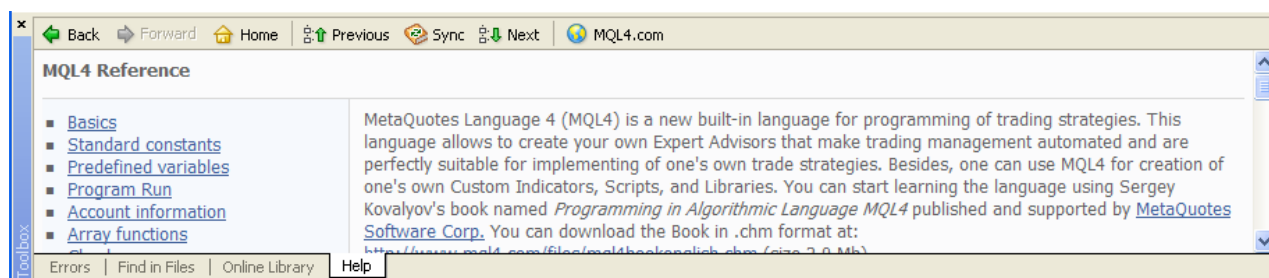
You can view the list of files and the line in the **Find in Files** tab. To go to the line, you can right-click in the **Find in Files** tab and select **Go To Line** from the drop-down menu that appears. You can also double-click one of the results. The corresponding file is displayed with the cursor on the found text and the line is marked with a green arrow in the margin field.



If you search for a line of code and then click the **Find in Files** menu option to start a new search, MetaEditor clears the **Find in Files** tab.

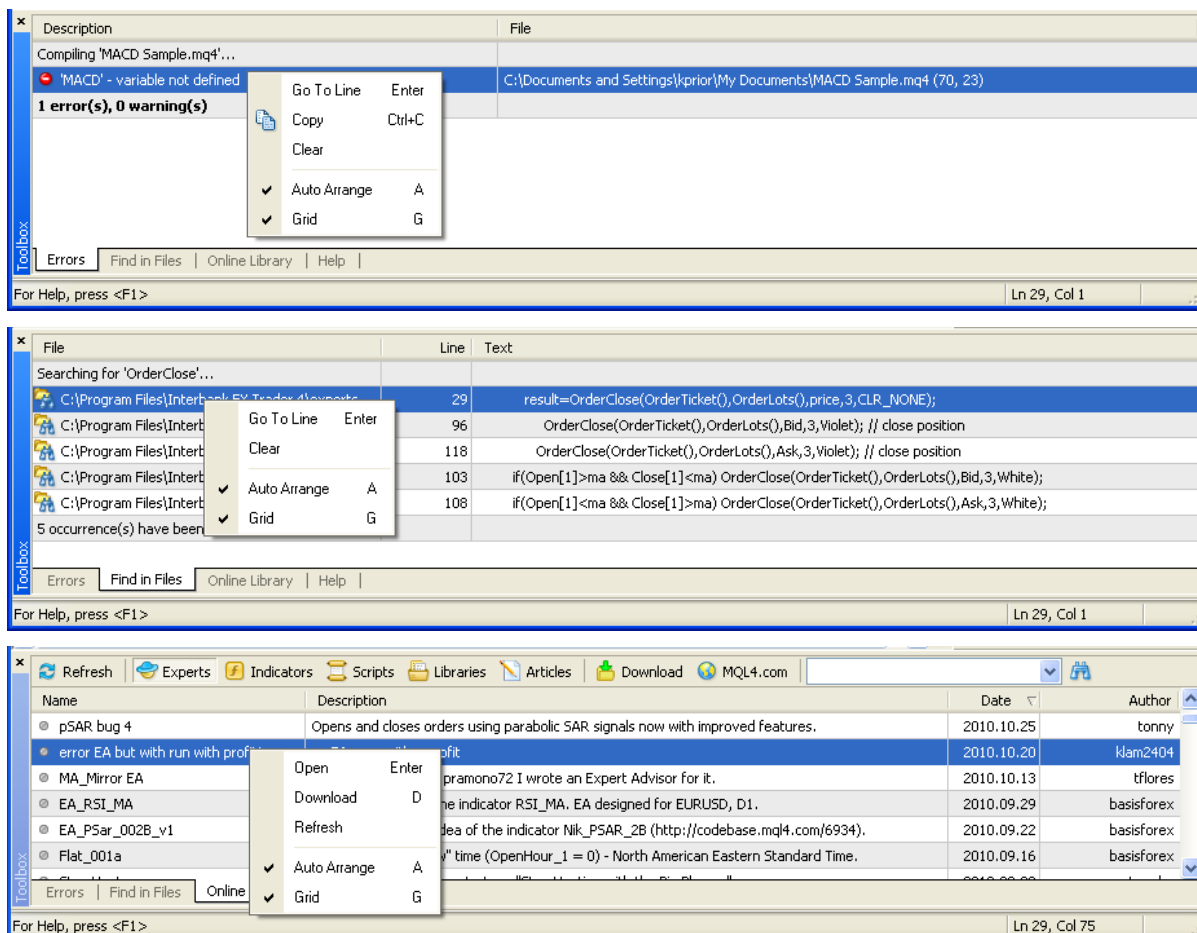


The Online Library tab displays a list of trader created autotrading files. You can use the toolbar along the top of this window to switch your search between expert advisors, custom indicators, scripts and other files. You can use the scroll bar to move through the list. You can also click **Refresh** to see if any new files have been added. When you find the item you want, select it and click **Download**. You can also right-click in the item row and select **Download** from the drop-down menu. This opens the source code file in the workspace.



The Help tab displays online help files for creating or editing the MetaTrader autotrading tools using the MetaQuotes Language 4 (MQL4). You can use the toolbar along the top of this window to navigate through the files to find the code you want. You can also use the Dictionary tab in the Navigator window to select specific topics to appear on the Help tab.

If you right-click an item in any of these tabs, you can view a drop-down menu. The options that appear in the menu depend on the tab you selected. Some of the menu options that you may see are:



Go to Line – This appears in the **Errors** tab and the **Find in Files** tab. **Go to Line** opens the corresponding file with the cursor on the found text and a green arrow in the margin field of the line.

Copy – This appears in the **Errors** tab. It adds the selected error to the clipboard.

Clear – This appears in the **Errors** tab and the **Find in Files** tab. **Clear** removes all of the displayed items from the tab.

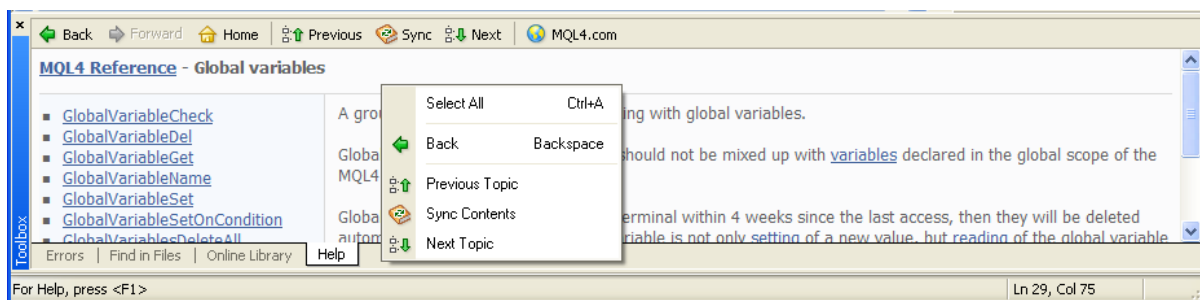
Open – This appears in the **Online Library** tab. It displays the selected item in the application.

Download – This appears in the **Online Library** tab. **Download** opens the source code file in the workspace.

Refresh – This appears in the **Online Library** tab. It updates the list to see if any new files have been added.

Auto Arrange – This appears in the **Errors** tab, the **Find in Files** tab and the **Online Library** tab. When checked, **Auto Arrange** resizes the columns automatically if the tab window size changes.

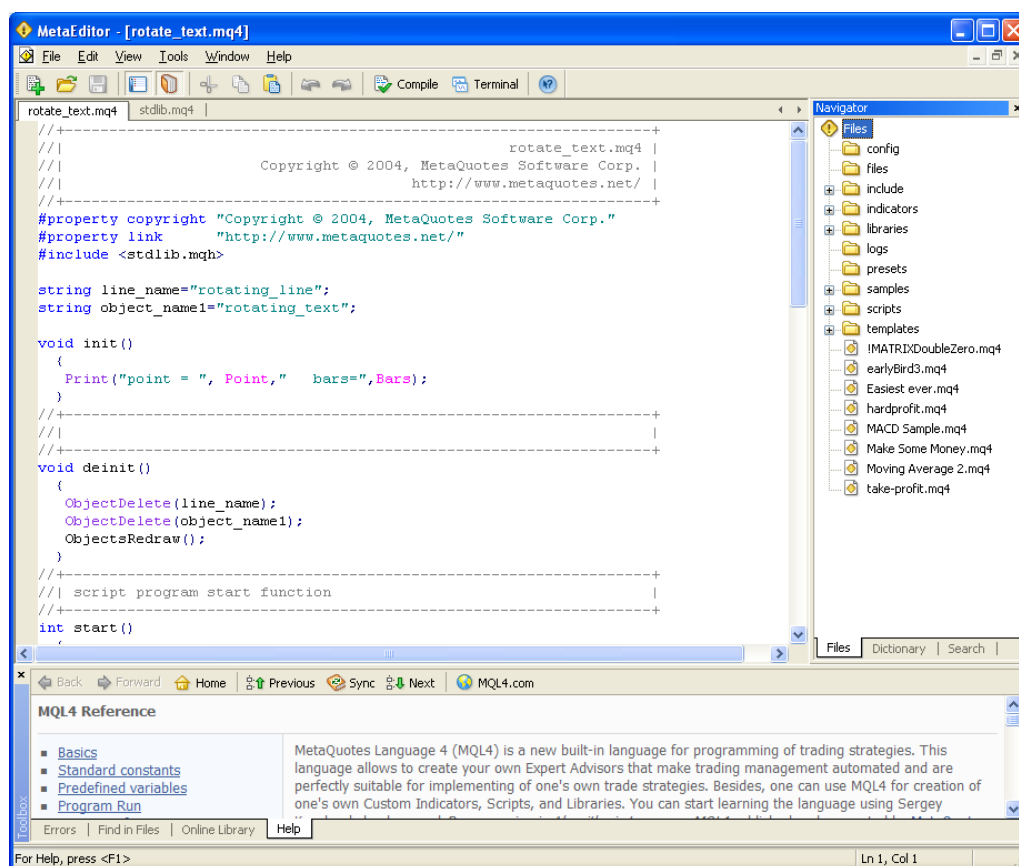
Grid – This appears in the **Errors** tab, the **Find in Files** tab and the **Online Library** tab. When checked, **Grid** displays lines between the rows and columns.



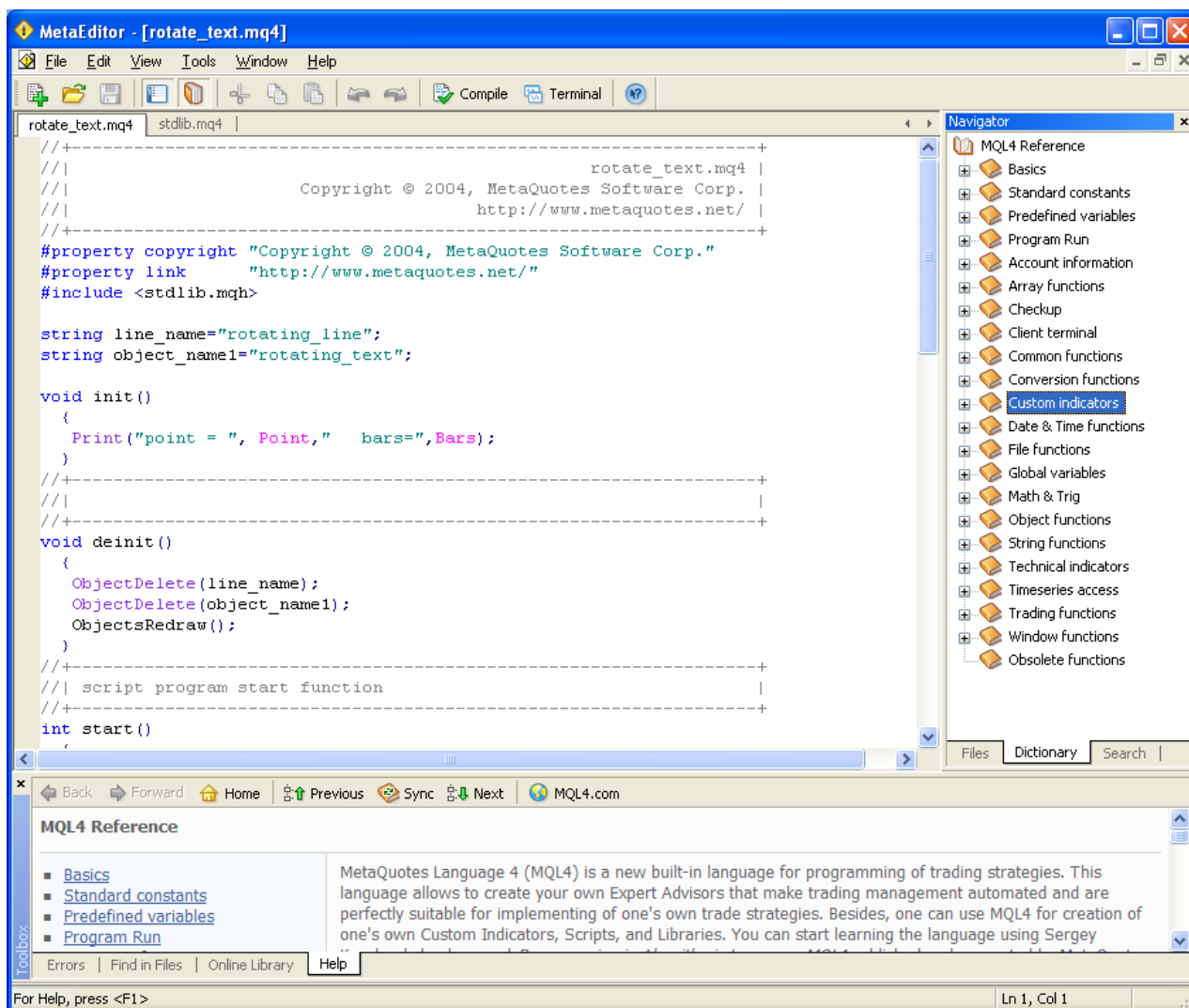
The Help tab menu contains the menu options that are in the toolbar on the tab.

The Navigator Window

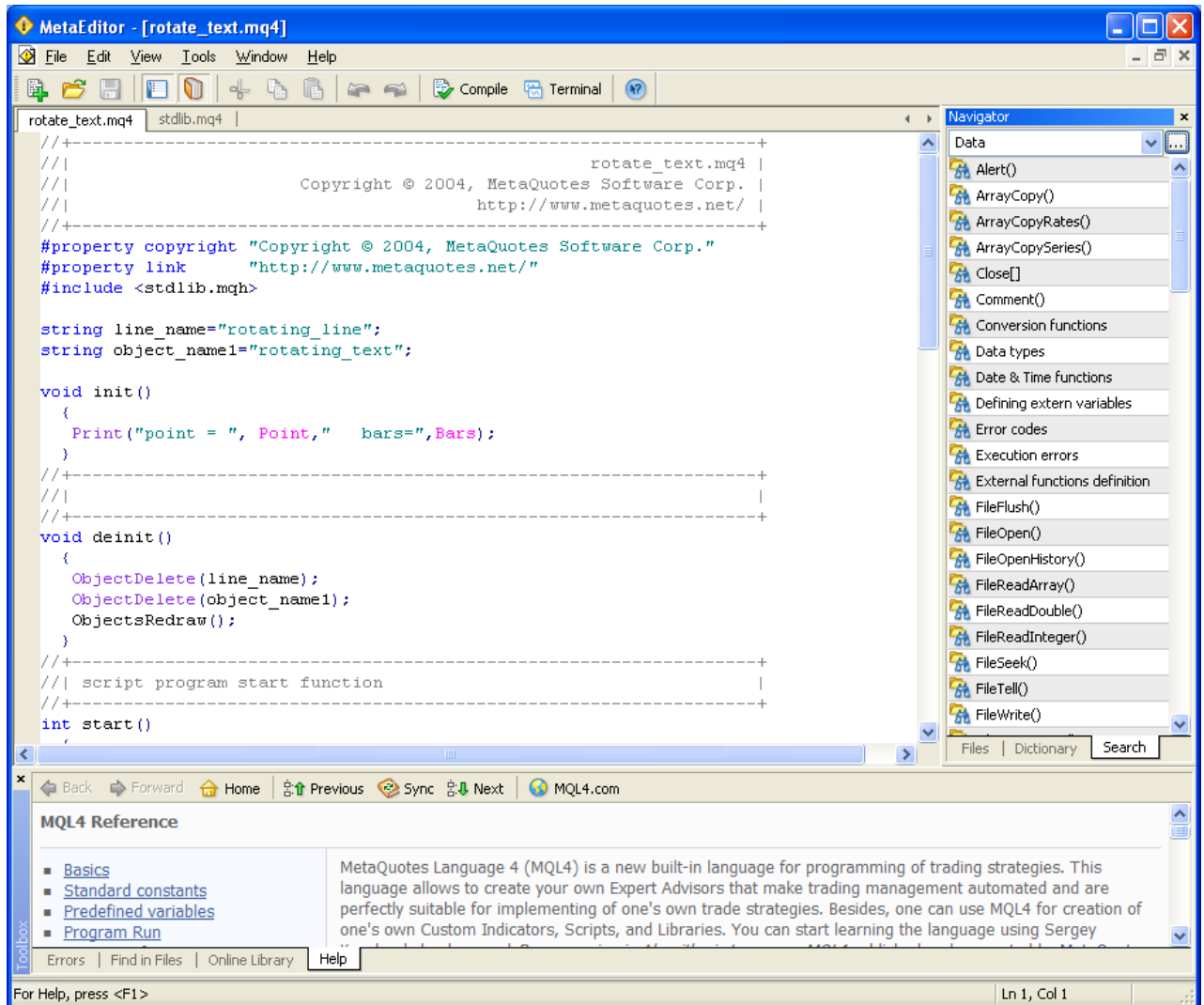
You'll use the Navigator window to view code files. You can use these to research how an autotrading tool works or to copy and paste existing code into a new autotrading tool. The Navigator window organizes these over three tabs.




The Files tab displays the folders and files that are in the Experts folder of your computer. You can open these files by clicking the + to expand the folder and then double-clicking on the file you want.



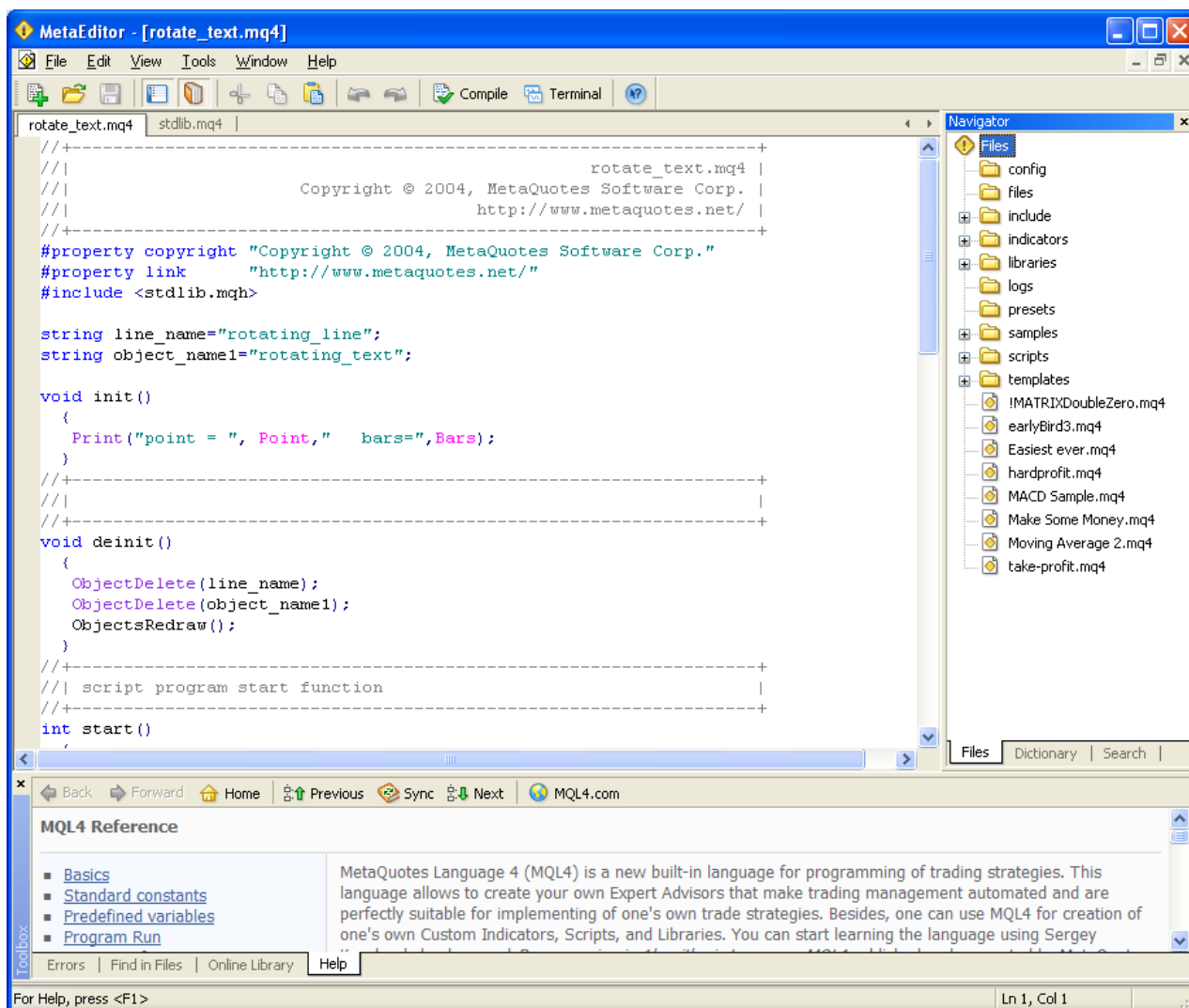
The Dictionary tab shows code examples of the MQL4 language organized in books and files. You can open these files by clicking the + to expand the book and then clicking on the file you want; the topic you want opens in the Help tab of the Toolbox window.



The Search tab allows you to search the dictionary for a specific programming topic. When you enter words in the field and click , MetaEditor lists the search results in the tab. To view a result, double-click on the search result you want. Like the Dictionary tab, the topic you want opens in the Help tab of the Toolbox window.

The Code Window

The Code window is where you can view the text file that contains the source code of your expert advisor, custom indicator, script or other MetaTrader autotrading tools.



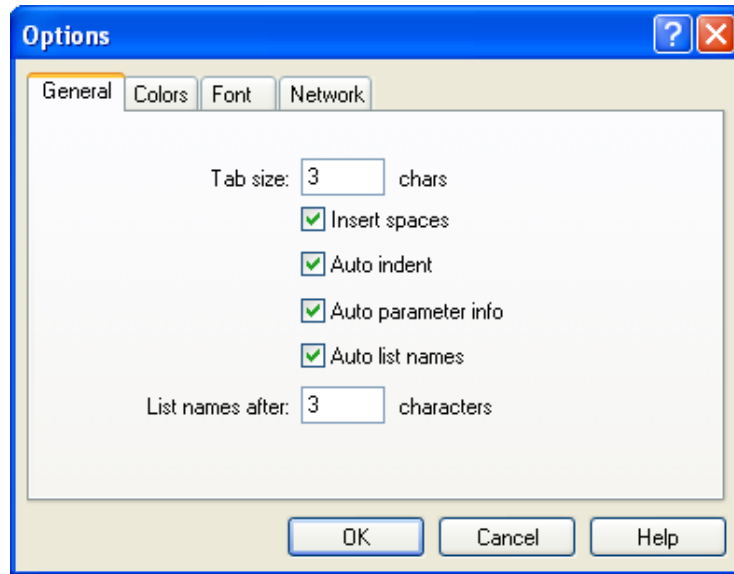
You can download existing autotrading tools using the Toolbox or create them using the Expert Advisors wizard. See **Section 5: Using MetaTrader's Autotrading Tools** for more information.

The source code is displayed in a basic text file. Once opened, you can copy and paste lines of code into the file or enter the code manually if you are familiar with MQL4.

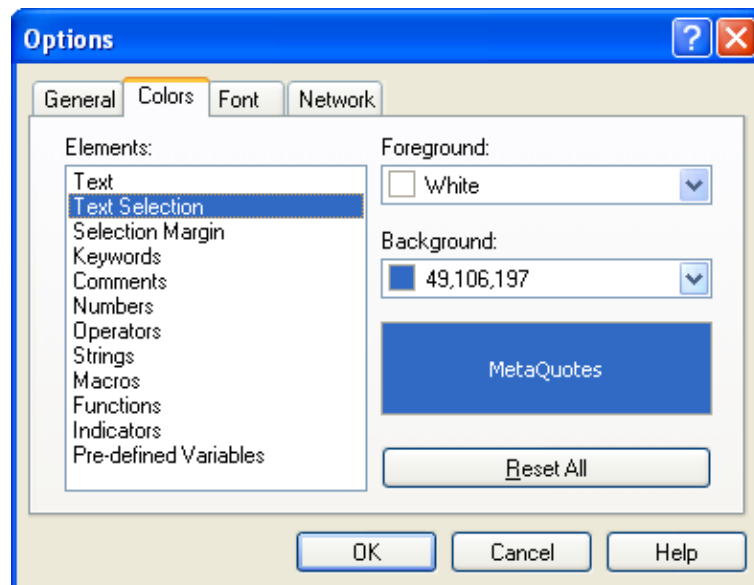
You can open more than one autotrading tool file at a time and switch between them by clicking the instrument tab at the top of the window.

The Options Window

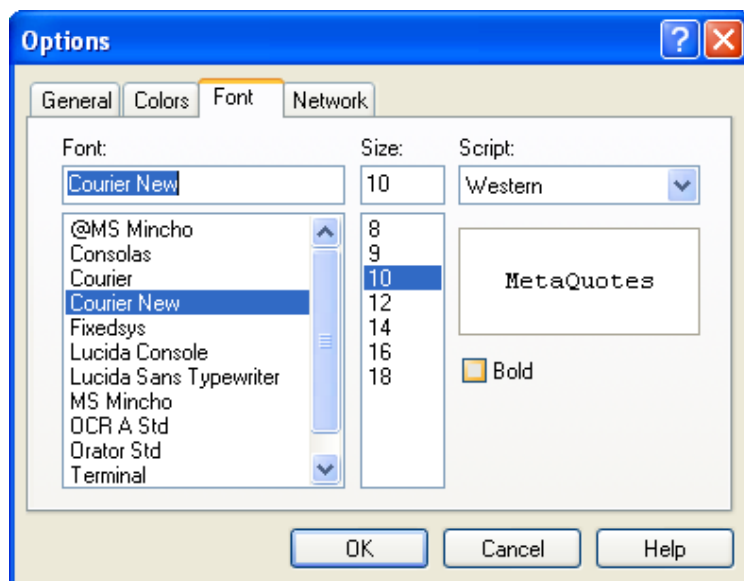
You can use the Options window to specify font and style settings in the source code of the autotrading tool. The Options window organizes these over four tabs.



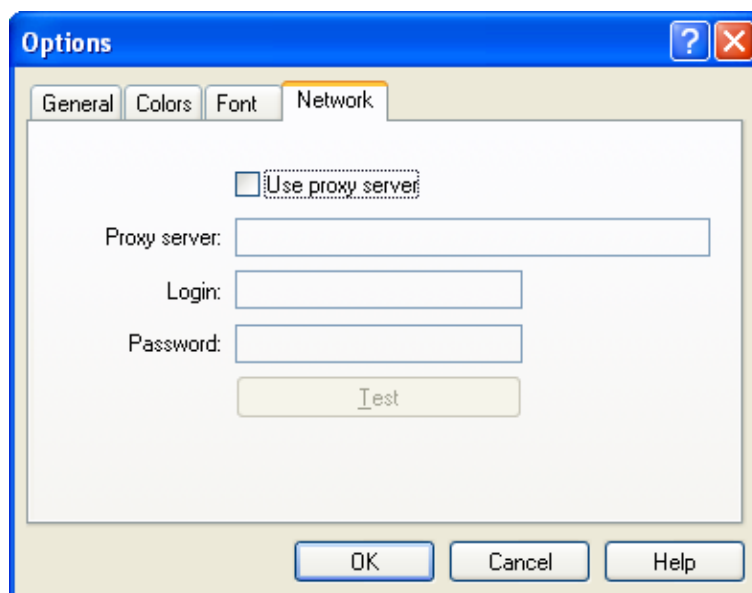
On the General tab, you can specify how text is formatted in the tab when more than one autotrading tool file appears in the Code window.



On the Colors tab, you can enter settings to specify text and highlight colour in the autotrading tool file. In the Elements section, select the code element you want and use the **Foreground** and **Background** drop-down menus to select colours from a chart. If you want to change the colours back to the way they were when you first installed MetaEditor, you can click **Reset All**.



On the Font tab, you can specify font type, size and script settings for the text that appears in the code of the autotrading tool file. You can view how the text will look in the Text Preview box.



On the Network tab, you can view proxy server settings, if they are entered.

Section 5: Using MetaTrader's Autotrading Tools

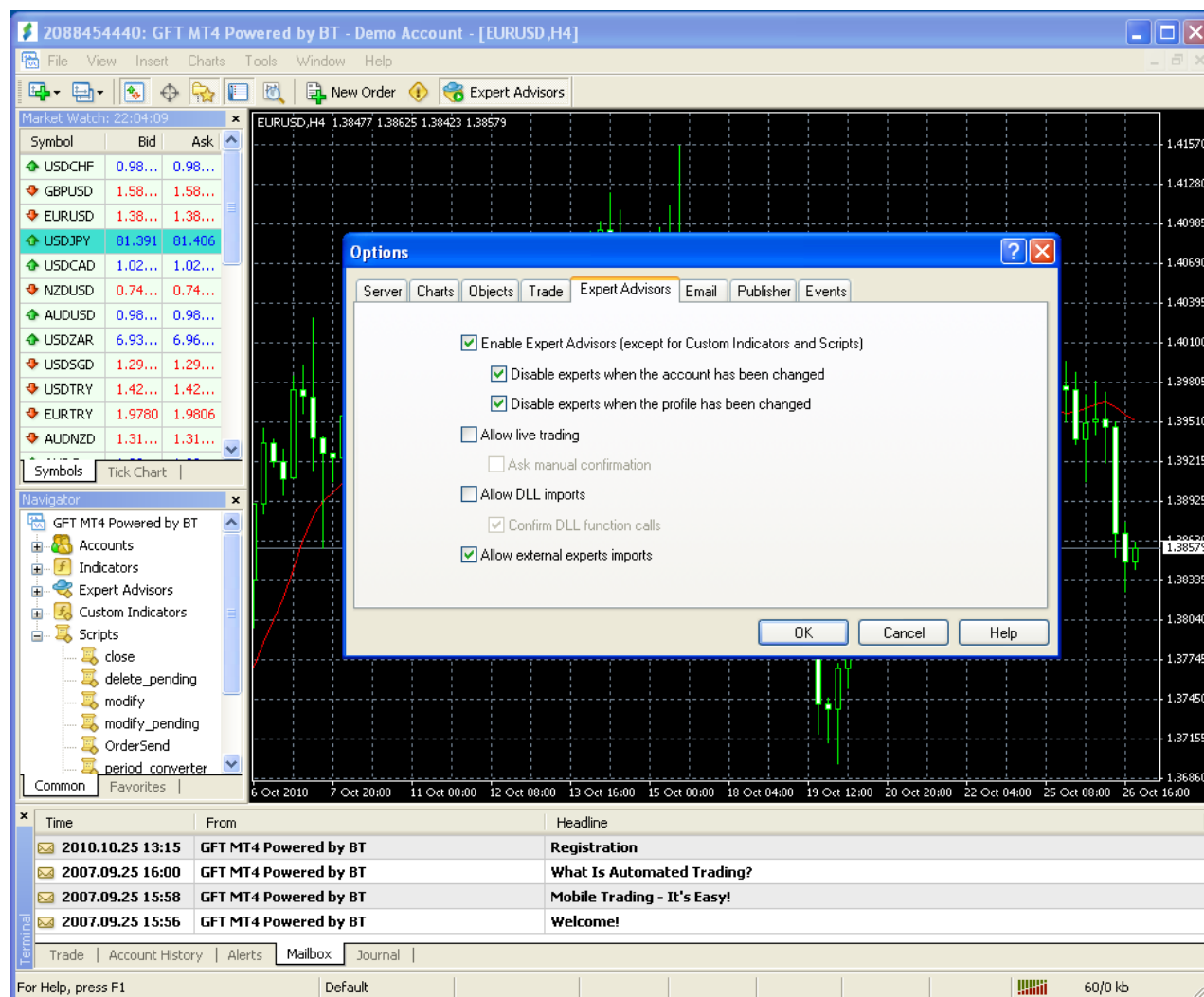
Most trading advisors recommend that traders follow a set trading strategy and stick to it. MetaTrader offers a variety of automated trading tools that may help you do just that:

- **Expert Advisors.** These automated trading strategies perform real-time technical analysis of price data and manage trading activities based on current market conditions.
- **Custom Indicators.** These modified technical indicators analyse the price moves of an instrument.
- **Scripts.** These perform an automated analytic or trading function on request. Unlike expert advisors, which continually work and execute orders based on market moves, a script only performs a function once.

In this section, we'll discuss how to use each of these three automated trading tools.

Enabling Autotrading Tools

Before you use an expert advisor, custom indicator or script, you need to enable them in MetaTrader. You can do this on the Expert Advisors tab of the Options window.



You can open the Options window by clicking on the **Tools** menu in the MetaTrader tool bar and selecting **Options**.

The **Enable Expert Advisors** checkbox activates all expert advisors in MetaTrader. When the checkbox is not checked, the expert advisors will not analyse chart price movements. The **Disable...** checkboxes beneath it allow MetaTrader to automatically deactivate all of your expert advisors if you change your account or your profile.


The **Allow Live Trading** checkbox enables you to place orders when an expert advisor or script is active. When this is checked, you can also choose to select the **Ask Manual Confirmation** checkbox below it. If your expert advisor or script is about to perform a trade and this checkbox is selected, a notification appears, asking you to confirm the trade.

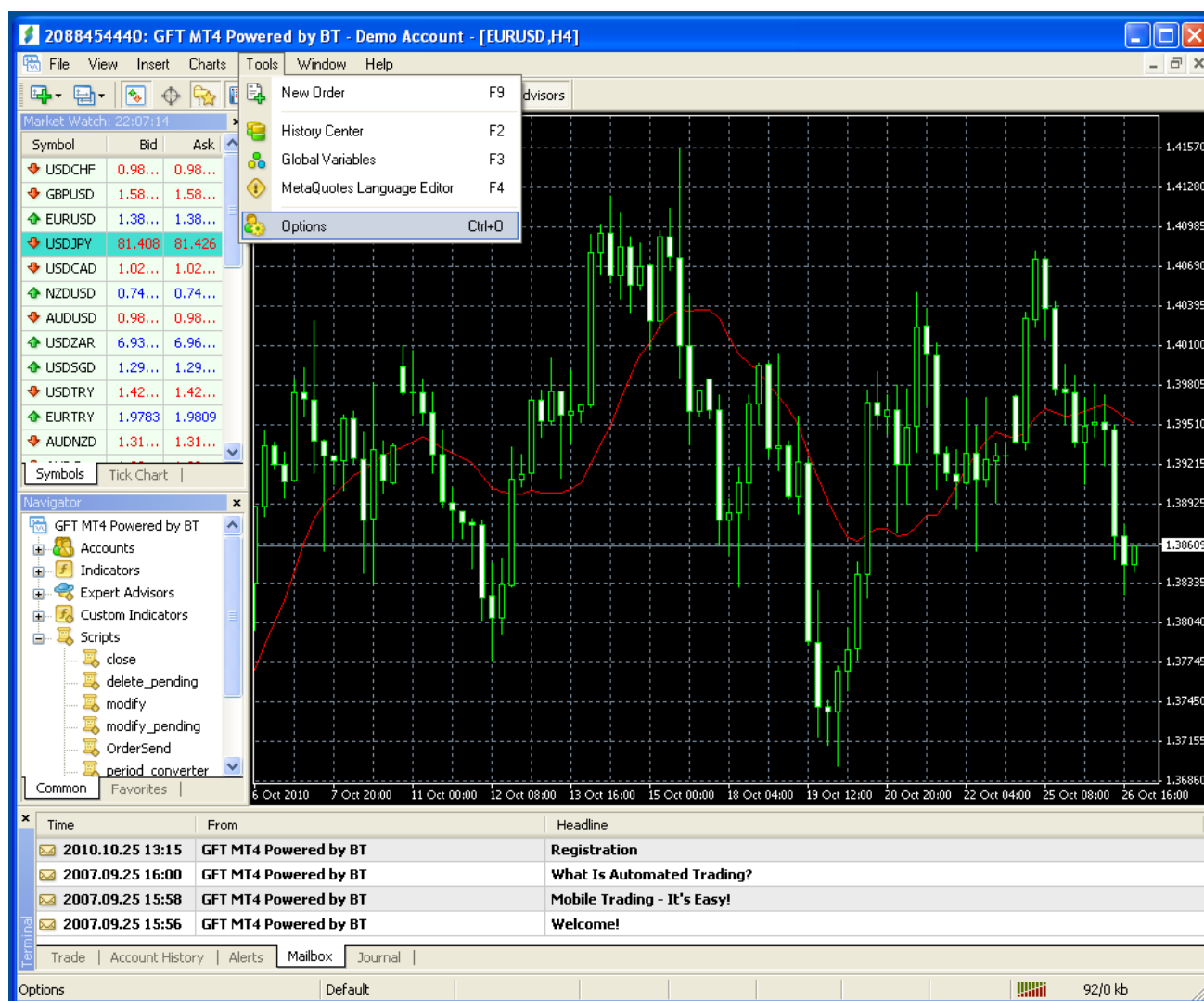
The **Allow DLL Imports** checkbox allows your expert advisors, custom indicators or scripts to automatically access the dynamic-link library (.dll) files associated with them. When this is checked, you can also choose to select the **Confirm DLL Function Calls** checkbox below it. If your expert advisor, custom indicator or script is about to access a set of .dll files and this checkbox is selected, a notification appears, asking you to confirm the request.

The **Allow External Experts Imports** checkbox enables your expert advisors, custom indicators or scripts to automatically import functions from other MQL4 files. This is a security option that protects you when you are working with expert advisors, custom indicators or scripts from an unknown source.



If you are only using expert advisors, you can click  in the Standard toolbar to activate

them. When active, the button changes to look like this: . This button does not activate custom indicators or scripts.



Enabling Expert Advisors, Custom Indicators, Scripts or Libraries in MetaTrader:

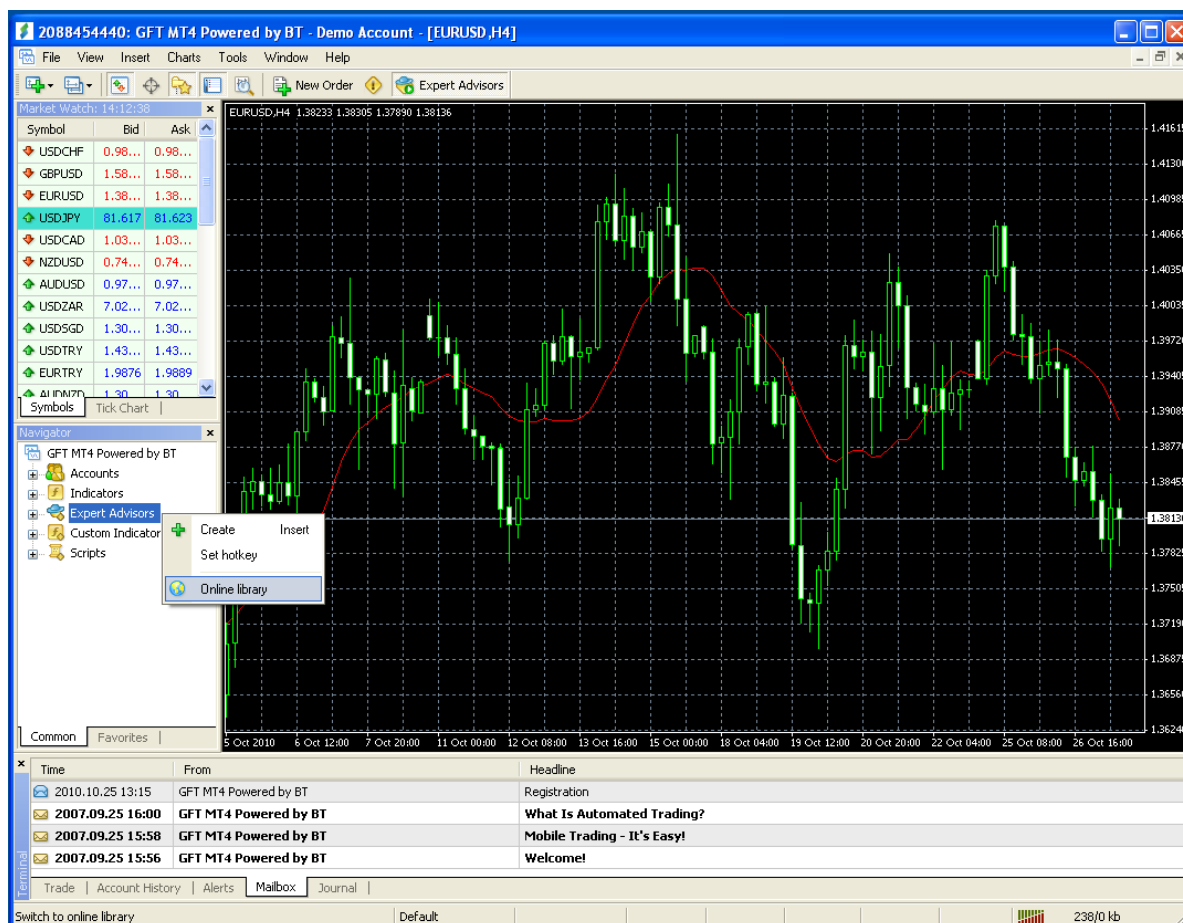
1. Click the **Tools** menu and select **Options**.
2. In the Options window, click on the Expert Advisors tab.
3. Make sure **Enable Expert Advisors** is selected.
4. If you are using expert advisors or scripts, check **Allow Live Trading**.
5. If you are using custom indicators or scripts, check **Allow DLL Imports** and **Allow External Experts Imports**.
6. Change the rest of the options to suit your trading style.
7. When done, click **OK**.

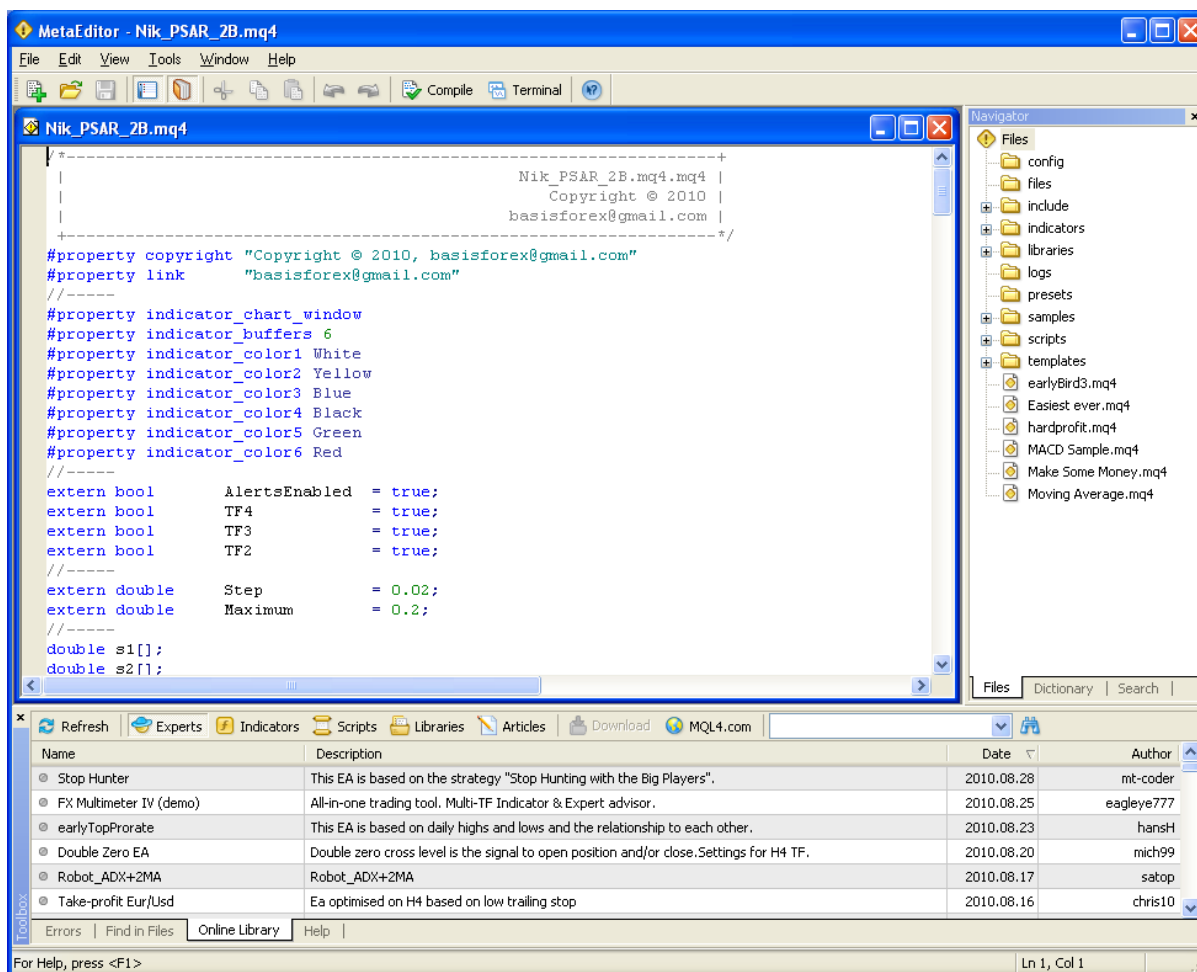


You cannot use expert advisors, custom indicators, scripts and related files on practice accounts.

Finding Autotrading Tools in the Online Library

When you first open MetaTrader, you can access a few expert advisors, custom indicators and other autotrading tools from the Navigator window. You can also download additional autotrading tools using the Online Library in MetaEditor; this is a MetaTrader developer application that helps you import, create and modify expert advisors.

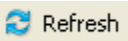


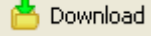


You can access the Online Library by right-clicking on the Expert Advisor, Custom Indicator or Script menu in the Navigator window and select **Online Library**. This opens MetaEditor. For an overview of this application, see *Section 4: Opening MetaEditor for the First Time*.


The Online Library opens in the Toolbox window of Meta Editor. You can use the toolbar along the top of this window to switch your search between expert advisors, custom indicators, scripts and libraries. When you're searching for expert advisors, make sure **Experts** is selected.

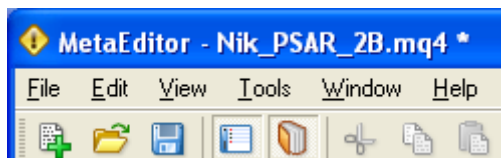



You can use the scroll bar to move through the list. You can also click  **Refresh** to see if any new expert advisors have been added.

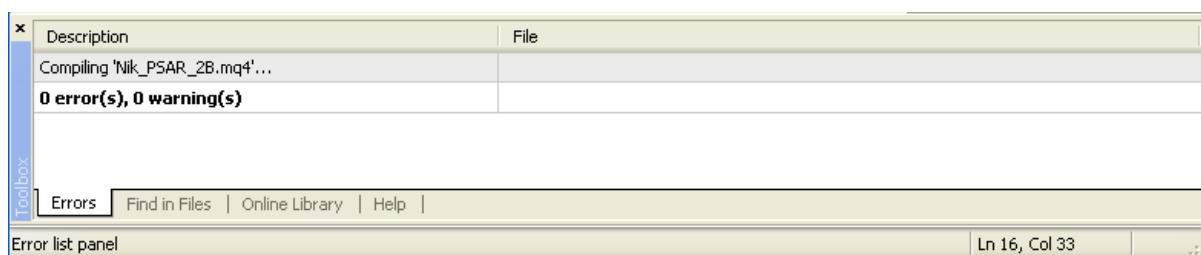
When you find the expert advisor, custom indicator or script you want, select it and click  **Download**. You can also right-click in the expert advisor row and select **Download** from the drop-down menu. This opens the source code of the autotrading tool in the MetaEditor workspace.

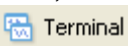
If you know MQL4 (the MetaTrader programming language), you can edit the code manually or add additional code components from the tools in the Navigator window. You can also open other source code files and copy and paste sections of code into the downloaded file.

A star appears in the header of the source code file after you've edited it. You can click  **Save** to save your changes and continue working.


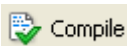


If you have no changes to the downloaded file, click  **Compile**. This verifies if the code works as programmed. The Errors tab opens automatically in the Toolbox window to show you if there are any errors or warnings. When the compilation is successful, MetaEditor saves the file.



Once compiled, you can view the expert advisor, custom indicator or script you want in the Navigator window of MetaTrader. To return to MetaTrader, click  **Terminal**.

Finding Autotrading Tools in the Online Library:

1. Right-click on the Expert Advisor, Custom Indicator or Script menu in the Navigator window and select **Online Library**.
2. In the Online Library tab of the Toolbox, make sure the type of autotrading tool you want is selected.
3. Scroll through the list of available autotrading tools.
4. When you find one, select it and click  **Download**.
5. If desired, make any changes to the code.
6. Click  **Compile**.



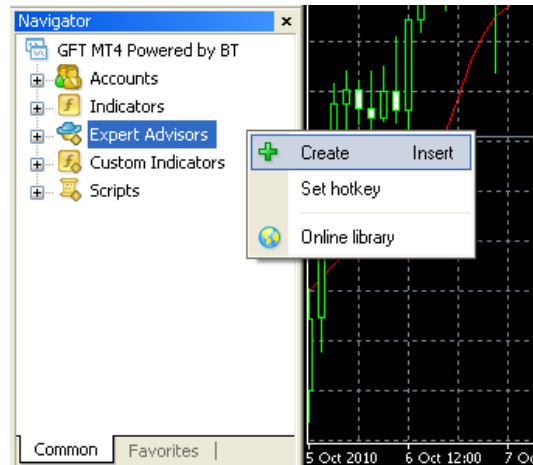
Because EAs are created by separate and independent third parties, GFT is not responsible for their completeness, reliability or accuracy. In other words, you use them at your own risk. If you have questions on how an EA works, you will need to contact the EA provider. But, if you need help managing EAs in MetaTrader 4, contact GFT.



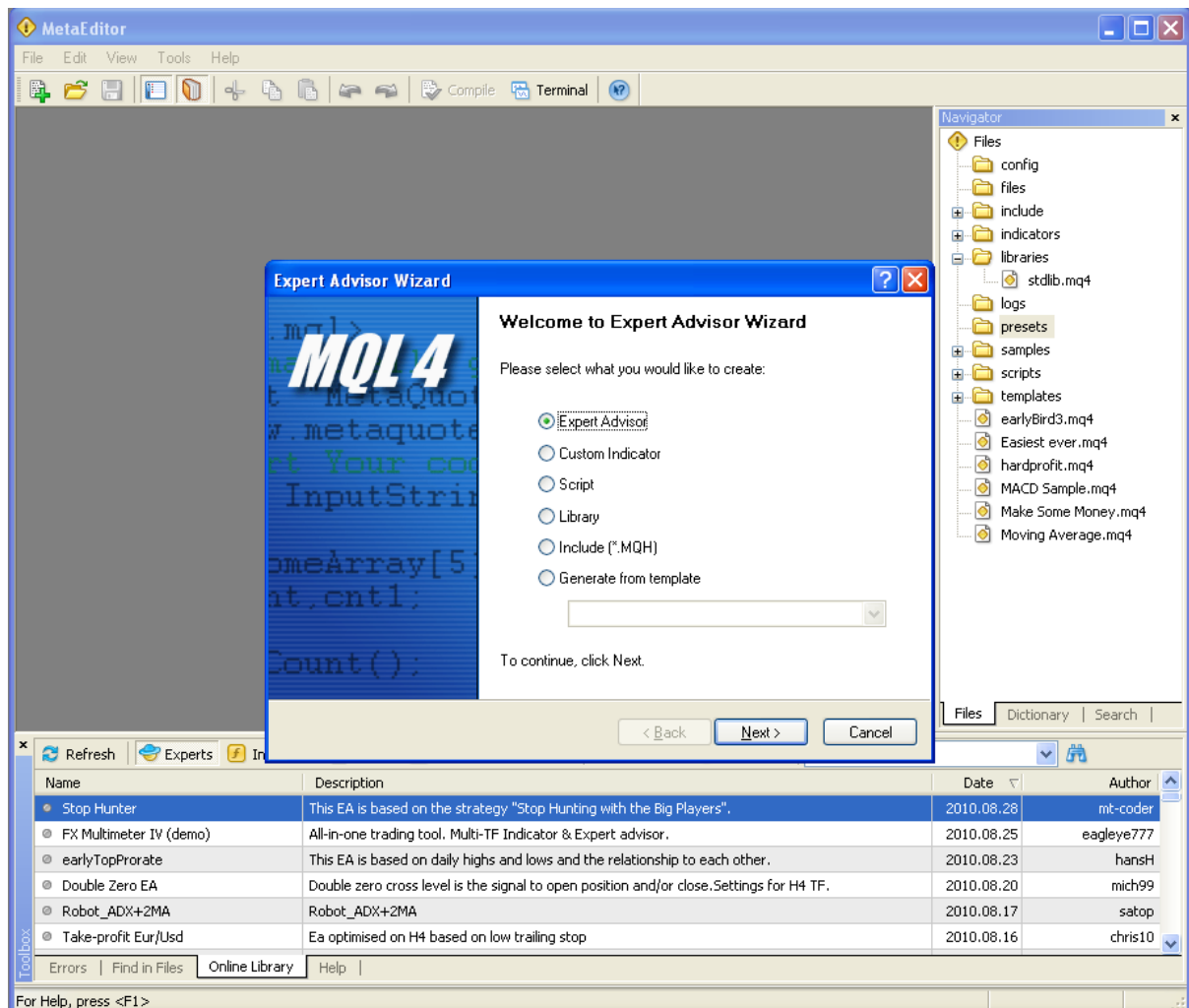
If you edited an expert advisor and if, after you compiled it, the icon is gray in the Navigator window, there is an error and you cannot use the expert advisor. You'll need to review and edit your code and then compile the code again.

Creating an Expert Advisor

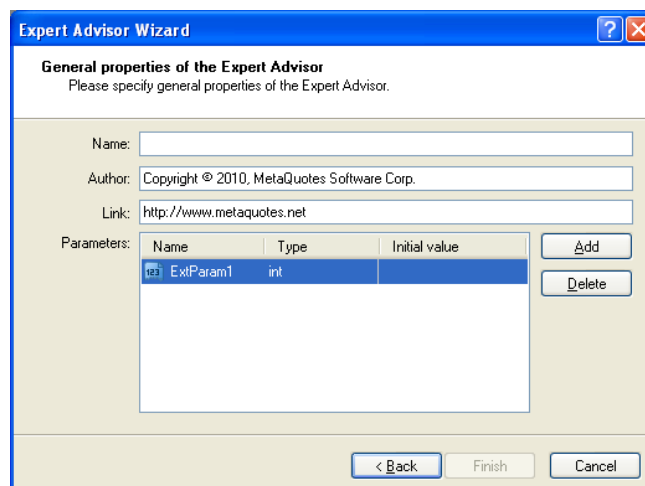
If you know MQL4 (the MetaTrader programming language), you can create a new expert advisor by right-clicking on the Expert Advisors menu in the Navigator window and selecting **Create**.



This opens MetaEditor, an application installed with MetaTrader that helps you create expert advisors, and displays the Expert Advisor wizard.



The Expert Advisor wizard helps you specify which type of expert advisor you want and name the file.




Once you click Next, the wizard opens the General Properties window. Here, you can add parameters to the file in the wizard by clicking Add. Once added, you can change what kind of parameter the expert advisor uses by right-clicking on it and selecting Change Type. This displays a drop-down menu of several strings. You can also change the initial value for the parameter by right-clicking on it and selecting Edit Value. If you want to change the name of the parameter, right-click on it and select Rename. You can also remove a parameter by selecting it and clicking Delete.

When you click Finish, the wizard closes and opens a text file with the code for the parameters in it. You can continue to add code for the expert advisor. The source file (*.MQ4) is saved in the Experts folder.

The expert advisor appears as a selection in the Navigator window of MetaEditor, under the Templates folder on your computer.

Creating an Expert Advisor:

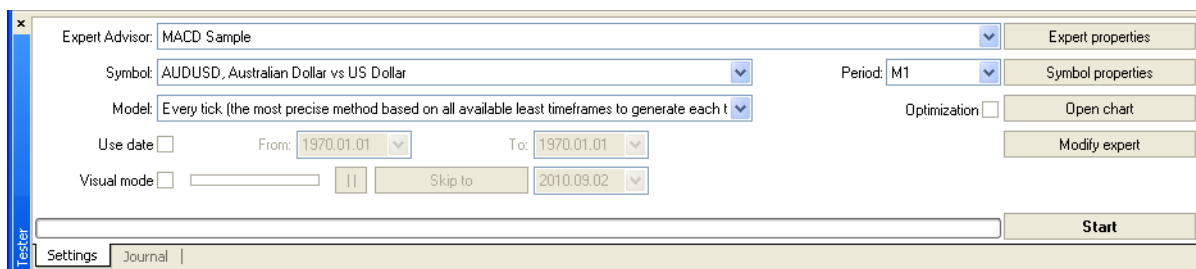
1. In MetaTrader, right-click on the Expert Advisors menu in the Navigator window and select **Create**.
2. When the Expert Advisor Wizard opens in MetaEditor, make sure **Expert Advisor** is selected and click **Next**.
3. Enter the expert advisor name, the developer's name and the developer's website.
4. If desired, click **Add** to add a parameter to the expert advisor. If you need to customize it, right-click on the parameter and select **Change Type**, **Edit Value** or **Rename**, as desired.
5. Click **Finish**.
6. Make the changes you want to the code file, as desired.
7. Click  **Compile**.



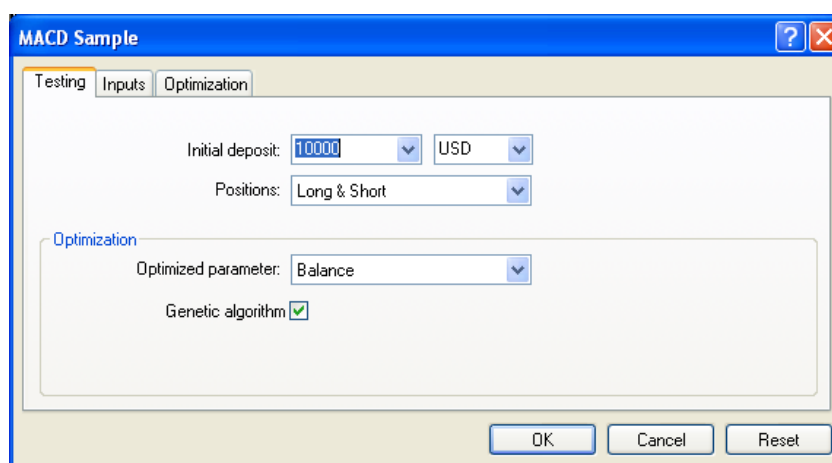
You can switch back to MetaTrader without closing MetaEditor by clicking  **Terminal** in the toolbar.

Testing an Expert Advisor

Once you create an expert advisor, you can test your own expert advisors before you attach them to a chart. You can also specify settings so MetaTrader can automatically optimize the expert advisor. The Strategy Tester shows you how an expert advisor would work on a particular instrument under one or more market conditions. You can access the Strategy Tester by clicking **View** and selecting **Strategy Tester**.



You can select the expert advisor you want to test using the Expert Advisor drop-down menu, which contains a list of all available expert advisors. If you want to see or modify the settings of the expert advisor before you run it, you can click the **Expert Properties** button. This displays a window with information about the expert advisor on three tabs.

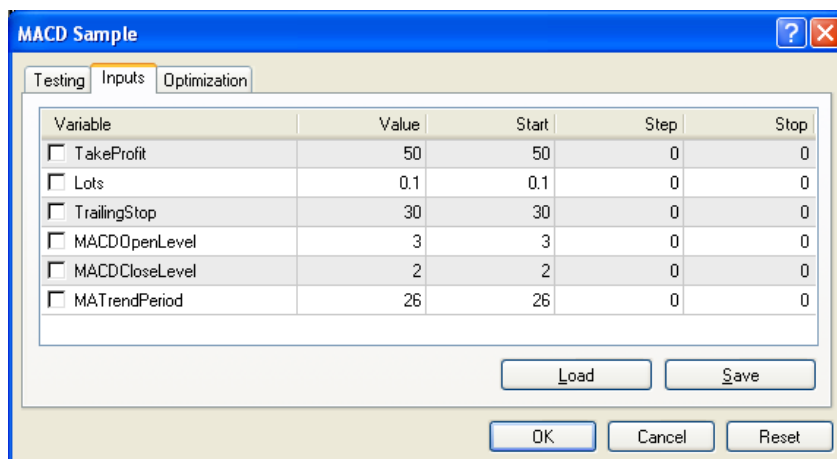


On the Testing tab, you can test how the expert advisor would work with your initial deposit and in the base currency you want. The Positions drop-down menu allows you to select if the expert advisor opens both long (buy) and short (sell) positions or only long or short positions.

You can run an expert advisor through multiple tests that mimic different market conditions. This is called optimization. On the Testing tab, you can choose one of five models for optimization using the Optimized Parameter drop-down menu.

- **Balance** reports the smallest balance value in the deposit currency.
- **Profit Factor** determines the gross profit and gross loss of one trade.
- **Expected Payoff** looks at the average profit/loss factor of one trade. You can use this to determine whether the trade was profitable or unprofitable.
- **Maximal Drawdown** calculates the largest loss of one trade.
- **Drawdown Percent** determines the maximal drawdown of your initial deposit.

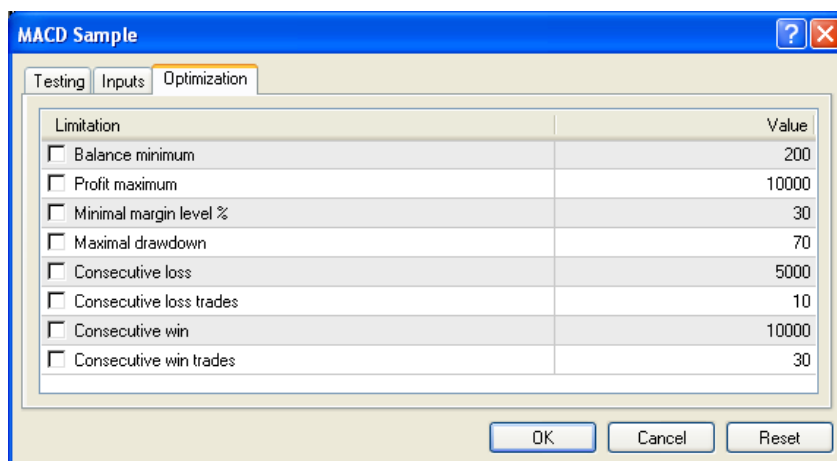
MetaTrader will run the expert advisor through every possible combination of the parameter. If you want MetaTrader to test the expert advisor using random, selective combinations, you can check the **Genetic Algorithm** checkbox.



The MACD Sample dialog box is shown with the 'Inputs' tab selected. It contains a table with columns: Variable, Value, Start, Step, and Stop. Below the table are 'Load' and 'Save' buttons. At the bottom are 'OK', 'Cancel', and 'Reset' buttons.

| Variable | Value | Start | Step | Stop |
|---|-------|-------|------|------|
| <input type="checkbox"/> TakeProfit | 50 | 50 | 0 | 0 |
| <input type="checkbox"/> Lots | 0.1 | 0.1 | 0 | 0 |
| <input type="checkbox"/> TrailingStop | 30 | 30 | 0 | 0 |
| <input type="checkbox"/> MACDOpenLevel | 3 | 3 | 0 | 0 |
| <input type="checkbox"/> MACDCloseLevel | 2 | 2 | 0 | 0 |
| <input type="checkbox"/> MATrendPeriod | 26 | 26 | 0 | 0 |

On the Inputs tab, you can select variables that affect how the expert advisor works. The inputs that you see in this tab depend on the expert advisor you selected; you can use the checkboxes to select the lot size, trailing stop levels, or other information and double-click in the Value, Start, Step or Stop column to change the values. You can also click **Load** to add inputs to the expert advisor or **Save** to save the variables as a set.



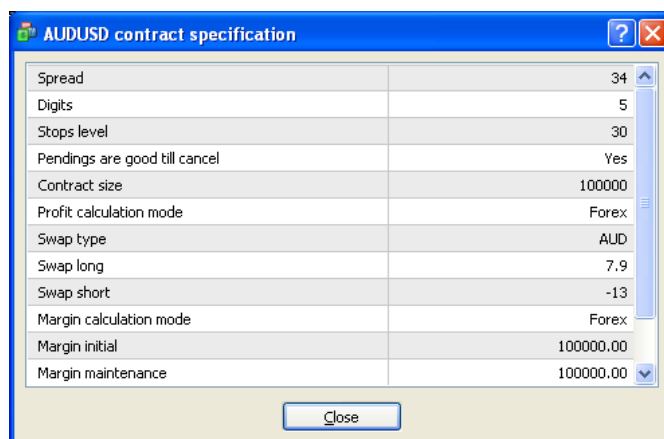
The MACD Sample dialog box is shown with the 'Optimization' tab selected. It contains a table with columns: Limitation and Value. Below the table are 'OK', 'Cancel', and 'Reset' buttons.

| Limitation | Value |
|--|-------|
| <input type="checkbox"/> Balance minimum | 200 |
| <input type="checkbox"/> Profit maximum | 10000 |
| <input type="checkbox"/> Minimal margin level % | 30 |
| <input type="checkbox"/> Maximal drawdown | 70 |
| <input type="checkbox"/> Consecutive loss | 5000 |
| <input type="checkbox"/> Consecutive loss trades | 10 |
| <input type="checkbox"/> Consecutive win | 10000 |
| <input type="checkbox"/> Consecutive win trades | 30 |

On the Optimization tab, you can select limiting parameters for optimization. As MetaTrader runs the expert advisor through subsequent tests, it stops the test when one of the parameters is met. The parameters that you see in this tab depend on the expert advisor you selected; you can use the checkboxes to select parameters and double-click in the Value column to change its value.



You need to check the **Optimization** checkbox on the Settings tab of the Strategy Tester for these settings to apply to the optimization.



The AUDUSD contract specification dialog box is shown. It contains a table with contract specifications. At the bottom is a 'Close' button.

| | |
|-------------------------------|-----------|
| Spread | 34 |
| Digits | 5 |
| Stops level | 30 |
| Pendings are good till cancel | Yes |
| Contract size | 100000 |
| Profit calculation mode | Forex |
| Swap type | AUD |
| Swap long | 7.9 |
| Swap short | -13 |
| Margin calculation mode | Forex |
| Margin initial | 100000.00 |
| Margin maintenance | 100000.00 |

You can determine how well an expert advisor would do with a particular instrument by selecting it from the **Symbol** drop-down menu. You can view information about the spread, contract size and other details about the selected instrument by clicking **Symbol Properties**.

You can also select a time frame, from one minute (M1) to one hour (H1) to Daily, using the **Period** drop-down menu.

If you want to view this instrument with this time frame on the chart, click **Open Chart**.

MetaTrader stores historical data for all symbols and time frames so you can research the price moves of an instrument over time or test how an expert advisor strategy would perform during a particular market event. With historical data, you can use the Model drop-down menu to select three modelling types for testing.

- **Every Tick** tests a strategy based on the smallest available timeframe.
- **Control Points** uses the last 12 bars of the current timeframe and then calculates the next possible price moves using fractal interpolation.
- **Open Prices Only** looks at the current open, high, low and close of data on the chart. This is the fastest method to analyse price moves on the chart.

When you want the expert advisor to go through optimization, you can click the **Optimization** checkbox.

If you want to modify the expert advisor before you test it, you can click **Modify Expert** to open Meta Editor and made the changes you want. Once the expert advisor is compiled, you can return to MetaTrader and continue your test.

If you think the market will behave like it did at some point in the past, you can click the **Use Date** checkbox and use the drop-down menus to specify a date. You can select any date back to January 1, 1999.

You can watch a visualization of the expert advisor being tested or optimized by checking **Visual Mode**. When this is checked, MetaTrader displays a chart with the expert advisor and performs the test or optimization. You can use the playback scrollbar to adjust the playback speed or stop the playback temporarily by clicking **Pause**. If you checked the **Use Date** checkbox, you can click **Skip Ahead** and select the date you want to see.

When you are ready to run the test, click **Start**. MetaTrader shows a progress bar so you can monitor the amount of time it takes to run the test. At any time during the test, you can click **Stop** to close the test.



The amount of information that appears in the chart window may be different than the amount you receive from the History Center. For more information, see *Specifying Chart and History Data Properties* in **Section 6: Customizing the Appearance and Settings in MetaTrader**.



When you click **Skip Ahead**, MetaTrader stops the visualization and continues it after the selected date.



Once opened, the Strategy Tester appears below the Terminal window. You may need to adjust the size of the Strategy Tester window to see all of the windows you have open.



If you want to optimize an expert advisor, you should select **Control Points**.

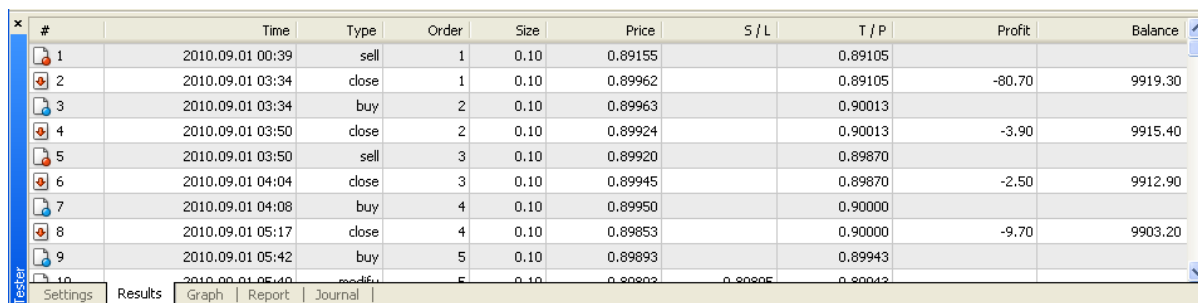
Testing or Optimizing an Expert Advisor:

1. Click **View** and select **Strategy Tester**.
2. Select the expert advisor you want from the **Expert Advisor** drop-down menu.
3. Click **Expert Properties** and specify the settings you want on the three tabs. Click **OK** when done.
4. If desired, click **Modify Expert** and modify the expert advisor.
5. Select an instrument from the **Symbol** drop-down menu.
6. Select the time frame you want from the **Period** drop-down menu.

7. Select **Every Tick**, **Control Point**, or **Open Prices Only** from the **Model** drop-down menu.
8. If you are optimizing, check **Optimization**.
9. If desired, check **Visual Mode** or check **Use Date** and select a date range.
10. Click **Start**.

Viewing the Results of the Expert Advisor Test

After the test has been completed, you can see the results of the test in Results, Graph, Report and Journal tabs of the Strategy Tester window.



| # | Time | Type | Order | Size | Price | S / L | T / P | Profit | Balance |
|---|------------------|-------|-------|------|---------|-------|---------|--------|---------|
| 1 | 2010.09.01 00:39 | sell | 1 | 0.10 | 0.89155 | | 0.89105 | | |
| 2 | 2010.09.01 03:34 | close | 1 | 0.10 | 0.89962 | | 0.89105 | -80.70 | 9919.30 |
| 3 | 2010.09.01 03:34 | buy | 2 | 0.10 | 0.89963 | | 0.90013 | | |
| 4 | 2010.09.01 03:50 | close | 2 | 0.10 | 0.89924 | | 0.90013 | -3.90 | 9915.40 |
| 5 | 2010.09.01 03:50 | sell | 3 | 0.10 | 0.89920 | | 0.89870 | | |
| 6 | 2010.09.01 04:04 | close | 3 | 0.10 | 0.89945 | | 0.89870 | -2.50 | 9912.90 |
| 7 | 2010.09.01 04:08 | buy | 4 | 0.10 | 0.89950 | | 0.90000 | | |
| 8 | 2010.09.01 05:17 | close | 4 | 0.10 | 0.89853 | | 0.90000 | -9.70 | 9903.20 |
| 9 | 2010.09.01 05:42 | buy | 5 | 0.10 | 0.89893 | | 0.89943 | | |

The Results tab displays a table that contains information about all of the trades that were executed during the test. You can view information across several columns.

Type displays what kind of trade was placed (a sell, buy, etc.).

Order shows the ticket number of trade position or pending order.

Lots displays the number of lots that were traded.

Price shows the price at which the instrument was bought or sold.

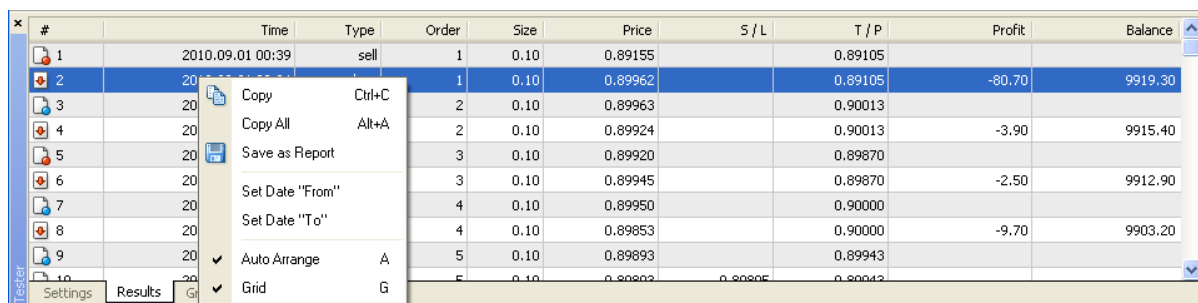
S/L displays the price at which the Stop Loss order was executed. If this field is blank, it means that no stop-loss order was placed.

T/P shows the price at which the Take Profit order was executed. If this field is blank, it means that no take profit order was placed.

Profit displays what your profit or loss was on the transaction. This value only appears for closed positions.

Balance shows how the trades placed would affect your account balance. The balance value is recorded only at closing of positions.

You can click in the column header to sort the entries in ascending or descending order.



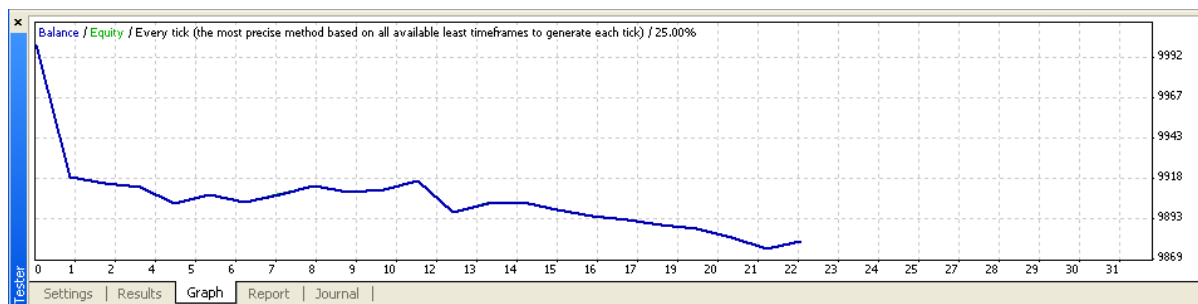
| # | Time | Type | Order | Size | Price | S / L | T / P | Profit | Balance |
|---|------------------|------|-------|------|---------|-------|---------|--------|---------|
| 1 | 2010.09.01 00:39 | sell | 1 | 0.10 | 0.89155 | | 0.89105 | | |
| 2 | 20 | | 1 | 0.10 | 0.89962 | | 0.89105 | -80.70 | 9919.30 |
| 3 | 20 | | 2 | 0.10 | 0.89963 | | 0.90013 | | |
| 4 | 20 | | 2 | 0.10 | 0.89924 | | 0.90013 | -3.90 | 9915.40 |
| 5 | 20 | | 3 | 0.10 | 0.89920 | | 0.89870 | | |
| 6 | 20 | | 3 | 0.10 | 0.89945 | | 0.89870 | -2.50 | 9912.90 |
| 7 | 20 | | 4 | 0.10 | 0.89950 | | 0.90000 | | |
| 8 | 20 | | 4 | 0.10 | 0.89853 | | 0.90000 | -9.70 | 9903.20 |
| 9 | 20 | | 5 | 0.10 | 0.89893 | | 0.89943 | | |

If you right-click in the Results tab, you can view a drop-down menu with other menu options.

You can use **Copy** to copy select lines in the table. You can also click **Copy All** to select the entire table.

You can also save the table as an .htm file by clicking **Save as Report** and entering the name of the report.

You can use **Set Date From** and **Set Date To** fields to change the timeframe.



The Graph tab displays a graph which maps your balance (with a blue line) and the number of lots (with a green line). You can view this information in a legend that appears in the upper left corner.

You can double-click anywhere in the Graph tab to return to the Results tab.

If you right-click in the Graph tab, you can view a drop-down menu with other menu options.

You can use **Copy** to copy the entire graph so you can paste it in another file. You can also save the graph as a .gif file by clicking **Save as Picture** and entering the name of the file.

| | | | | | |
|--------------------------|----------|------------------------------------|----------------|------------------------------------|----------------|
| Bars in test | 2433 | Ticks modelled | 65920 | Modelling quality | 25.00% |
| Mismatched charts errors | 0 | | | | |
| Initial deposit | 10000.00 | | | | |
| Total net profit | 120.00 | Gross profit | 32.50 | Gross loss | -152.50 |
| Profit factor | 0.21 | Expected payoff | 5.45 | | |
| Absolute drawdown | 129.70 | Maximal drawdown | 129.70 (1.30%) | Relative drawdown | 1.30% (129.70) |
| Total trades | 22 | Short positions (won %) | 10 (10.00%) | Long positions (won %) | 12 (58.33%) |
| | | Profit trades (% of total) | 8 (36.36%) | Loss trades (% of total) | 14 (63.64%) |
| | Largest | profit trade | 5.00 | loss trade | -80.70 |
| | Average | profit trade | 4.06 | loss trade | -10.89 |
| | Maximum | consecutive wins (profit in money) | 2 (10.00) | consecutive losses (loss in money) | 7 (-28.50) |
| | Maximal | consecutive profit (count of wins) | 10.00 (2) | consecutive loss (count of losses) | -96.80 (4) |
| | Average | consecutive wins | 2 | consecutive losses | 3 |

The Report tab displays statistics about how the test was performed.

Bars in Test displays the number of bars that appeared in the history data.

Ticks Modeled shows the number of ticks that were used in the test.

Modeling Quality displays the quality of ticks modelled during testing with a percentage and a colour band. A gray band shows if a date range was specified in the testing settings. A red band shows that modelling was not performed on a portion of the time frame. During that part of the test, only data of the time frame selected in the testing settings were used. A green band shows that modelling was performed. The shade of green becomes brighter as the modelling quality gets higher.

Initial Deposit shows the amount of your initial deposit.

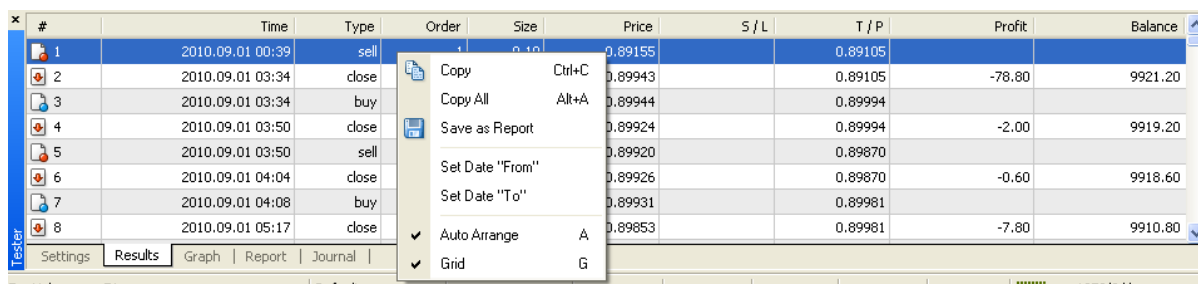
Total Net Profit displays the result of all trades. In this row, you can also view the **Gross Profit**, or the sum of all profitable trades and the **Gross Loss**, or the sum of all unprofitable trades. **Profit Factor** displays a comparison of the gross profit and the gross loss.

Expected Payoff looks at the average profit/loss factor of one trade. You can use this to determine whether the trade was profitable or unprofitable.

Maximal Drawdown calculates the largest loss of one trade.

Absolute Drawdown shows the largest loss is below initial deposit value.

The **Total Trades** section of the report breaks down the number of trades, long or short positions and what were your largest consecutive profits and losses.



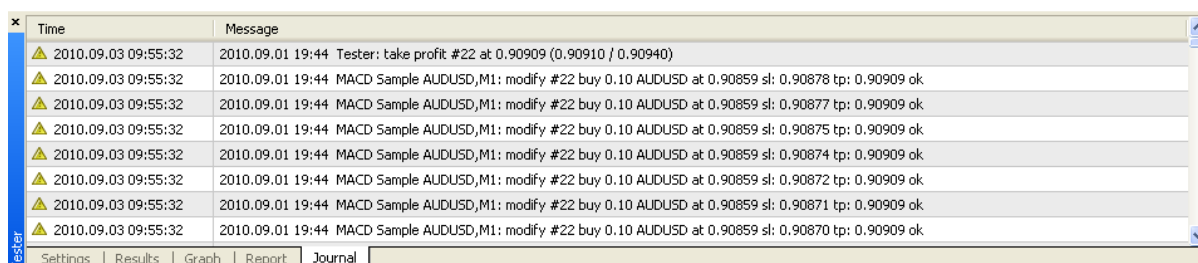
| # | Time | Type | Order | Size | Price | S / L | T / P | Profit | Balance |
|---|------------------|-------|-------|------|---------|-------|---------|--------|---------|
| 1 | 2010.09.01 00:39 | sell | | 0.10 | 0.89155 | | 0.89105 | | |
| 2 | 2010.09.01 03:34 | close | | | 0.89943 | | 0.89105 | -78.80 | 9921.20 |
| 3 | 2010.09.01 03:34 | buy | | 0.10 | 0.89944 | | 0.89994 | | |
| 4 | 2010.09.01 03:50 | close | | | 0.89924 | | 0.89994 | -2.00 | 9919.20 |
| 5 | 2010.09.01 03:50 | sell | | 0.10 | 0.89920 | | 0.89870 | | |
| 6 | 2010.09.01 04:04 | close | | | 0.89926 | | 0.89870 | -0.60 | 9918.60 |
| 7 | 2010.09.01 04:08 | buy | | 0.10 | 0.89931 | | 0.89981 | | |
| 8 | 2010.09.01 05:17 | close | | | 0.89853 | | 0.89981 | -7.80 | 9910.80 |

If you right-click in the Report tab, you can view a drop-down menu with other menu options. You can use **Copy** to copy the entire report. You can also save the report as an .htm file by clicking **Save as Report** and entering the name of the report.

You can also change the appearance of the table by right-clicking in the Report tab and selecting **Auto Arrange**, which resizes the columns automatically if the Strategy Tester window size changes or **Grid**, which displays the lines between the rows and columns.



If you selected **Open Prices Only** from the **Model Type** drop-down menu in the Settings tab, the **Modeling Quality** field will display an 'n/a' and a red band.

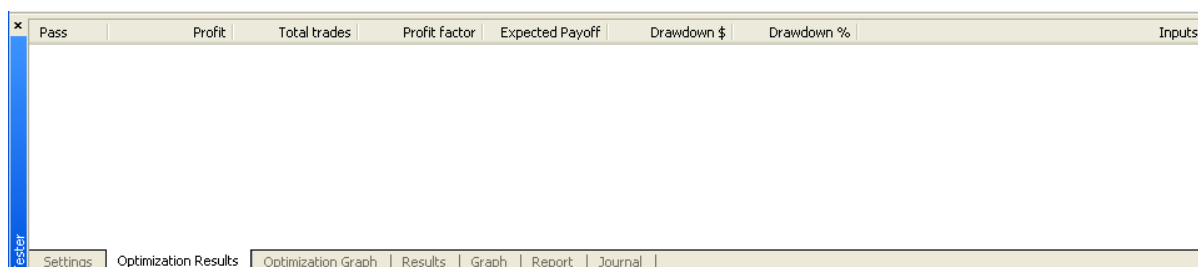


| Time | Message |
|---------------------|---|
| 2010.09.03 09:55:32 | 2010.09.01 19:44 Tester: take profit #22 at 0.90909 (0.90910 / 0.90940) |
| 2010.09.03 09:55:32 | 2010.09.01 19:44 MACD Sample AUDUSD, M1: modify #22 buy 0.10 AUDUSD at 0.90859 sl: 0.90878 tp: 0.90909 ok |
| 2010.09.03 09:55:32 | 2010.09.01 19:44 MACD Sample AUDUSD, M1: modify #22 buy 0.10 AUDUSD at 0.90859 sl: 0.90877 tp: 0.90909 ok |
| 2010.09.03 09:55:32 | 2010.09.01 19:44 MACD Sample AUDUSD, M1: modify #22 buy 0.10 AUDUSD at 0.90859 sl: 0.90875 tp: 0.90909 ok |
| 2010.09.03 09:55:32 | 2010.09.01 19:44 MACD Sample AUDUSD, M1: modify #22 buy 0.10 AUDUSD at 0.90859 sl: 0.90874 tp: 0.90909 ok |
| 2010.09.03 09:55:32 | 2010.09.01 19:44 MACD Sample AUDUSD, M1: modify #22 buy 0.10 AUDUSD at 0.90859 sl: 0.90872 tp: 0.90909 ok |
| 2010.09.03 09:55:32 | 2010.09.01 19:44 MACD Sample AUDUSD, M1: modify #22 buy 0.10 AUDUSD at 0.90859 sl: 0.90871 tp: 0.90909 ok |
| 2010.09.03 09:55:32 | 2010.09.01 19:44 MACD Sample AUDUSD, M1: modify #22 buy 0.10 AUDUSD at 0.90859 sl: 0.90870 tp: 0.90909 ok |

The Journal tab displays a list of system messages about the expert advisor's test, such as orders filled and positions closed.

Whenever you test an expert advisor, MetaTrader saves the entries that appear on the Journal tab as a .log file. You can view this by right-clicking in the Journal tab and selecting **Open** from the drop-down menu. You can also select **Copy** to copy all journal entries. If you want to remove these entries, you can select **Clear All Journals**.

You can also change the appearance of the journal table by right-clicking in the Journal tab and selecting **Auto Arrange**. This resizes the columns automatically if the Strategy Tester window size changes or **Grid**, which displays the lines between the rows and columns.



| Pass | Profit | Total trades | Profit factor | Expected Payoff | Drawdown \$ | Drawdown % | Inputs |
|------|--------|--------------|---------------|-----------------|-------------|------------|--------|
| | | | | | | | |

If you clicked **Optimization** in the Settings tab, two additional tabs appear in the Tester window: the Optimization Results tab and the Optimization Graph tab.

The Optimization Results tab displays a table that contains information about all of the trades that were executed during the optimization.

Pass shows the pass number.

Profit displays the gross profit minus the gross loss.

Total Trades shows the total number of open positions.

Profit Factor displays the ratio between gross profit and gross loss in a percent. If a one appears in this row, it means that these values are equal.

Expected Payoff shows the average profit/loss of one trade.

Drawdown \$ displays the largest drawdown related to the initial deposit.

Drawdown % shows the largest drawdown related to the initial deposit in a percentage.

Inputs displays the changeable values of inputs at each pass.

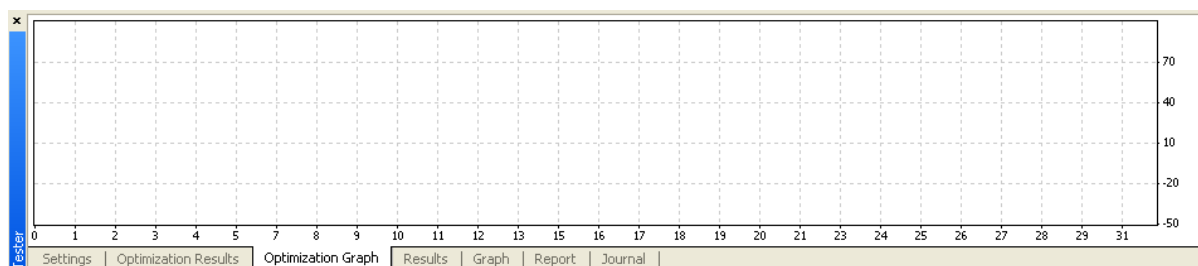
You can click in the column header to sort the entries in ascending or descending order.

If you right-click in the Optimization Results tab, you can view a drop-down menu with other menu options. You can use **Copy** to copy select lines in the table. You can also click **Copy All** to select the entire table. You can also save the table as an .htm file by clicking **Save as Report** and entering the name of the report.

If you want to rerun the results of the test again, click **Set Input Parameters** to return to the Settings tab.

If you only want to view the results of profitable passes, you can check **Skip Useless Results**. You can also display or hide the Inputs column by checking (or unchecking) **Show Input Parameters**.

You can also change the appearance of the journal table by right-clicking in the Optimization Results tab and selecting **Auto Arrange**, which resizes the columns automatically if the Strategy Tester window size changes or **Grid**, which displays the lines between the rows and columns.



The Optimization Graph tab displays a graph which maps your profitable trades (in a green line) and your unprofitable trades (in a red line).

You can double-click anywhere in the Optimization Graph tab to return to the Optimization Results tab.

If you right-click in the Optimization Graph tab, you can view a drop-down menu with other menu options.

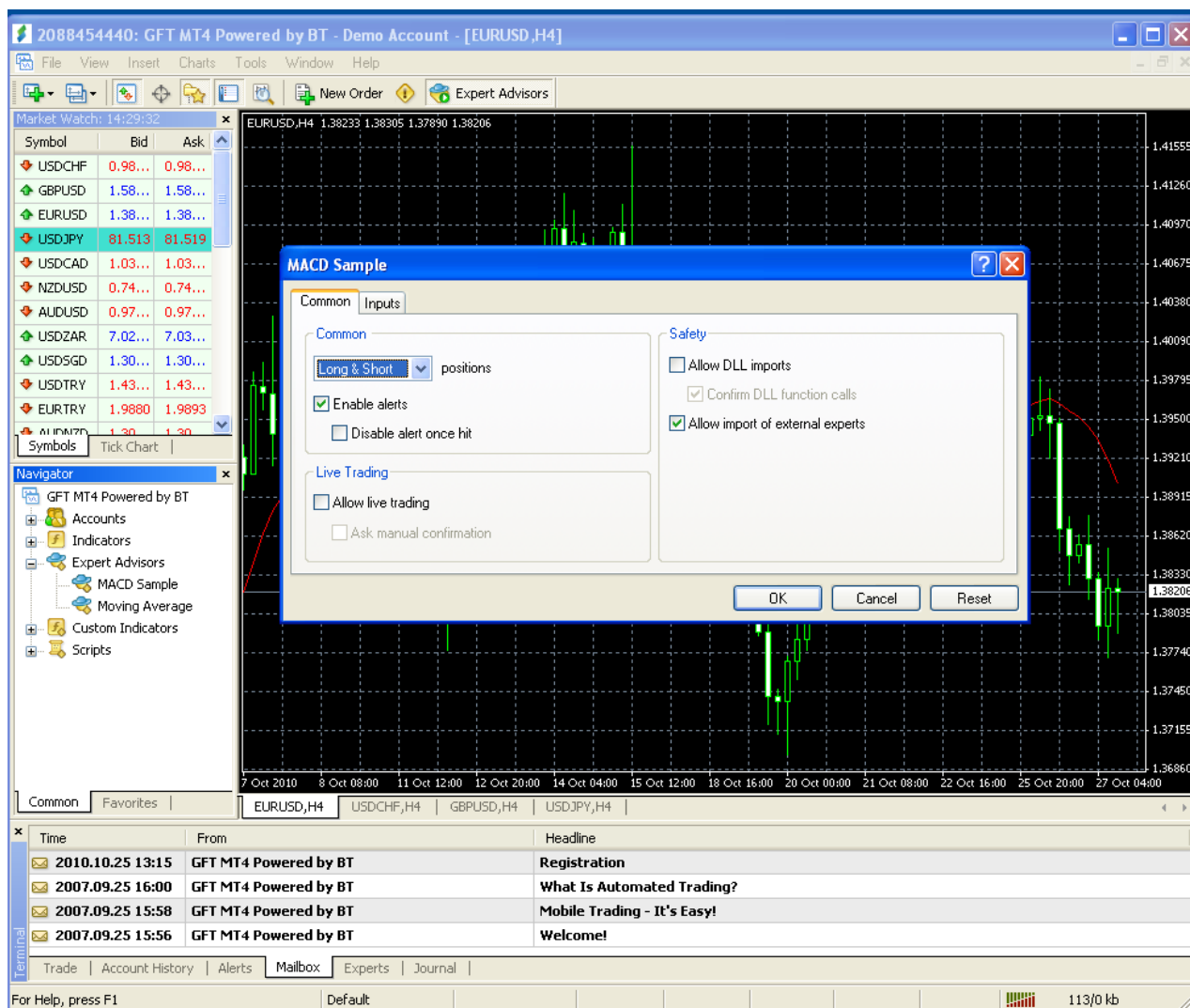
You can use **Copy** to copy the entire graph. You can also save the graph as a .gif file by clicking **Save as Picture** and entering the name of the file.

Attaching an Expert Advisor to a Chart

Once you have the expert advisor as you want, you display it in the chart window by clicking and dragging it from the Navigator window. This opens a window so you can specify settings for the expert advisor.



If you are using an EA and do not have a Virtual Private Server subscription, your EAs will stop running when you log out of MetaTrader.



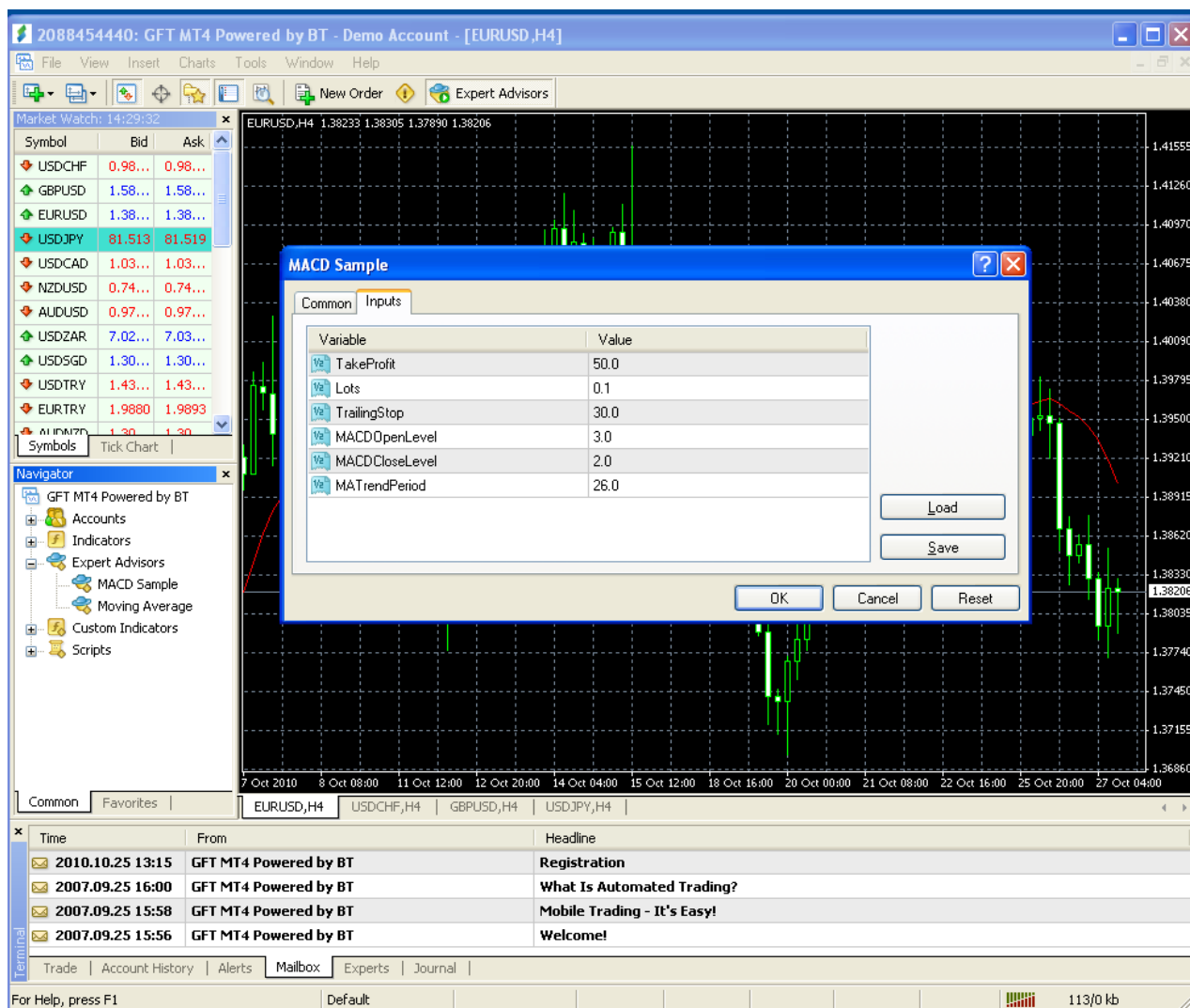
On the Common tab, you can specify how you want the expert advisor to perform. The **Positions** drop-down menu allows you to select if the expert advisor opens both long (buy) and short (sell) positions or only long or short positions.

You can click the **Enable Alerts** checkbox so that MetaTrader sends you a message when the expert advisor has placed a trade. You can also click **Disable Alerts Once Hit** so MetaTrader only sends a notification once.

In the Live Trading section, you can click **Allow Live Trading** to enable or disable the expert advisor in live trading. You can also click **Ask Manual Confirmation** to have MetaTrader send you a notification when the expert advisor opens a position.

The Safety section contains options for specifying how to handle dynamic-link library (.dll) files. While you may have already specified how MetaTrader handles these for all expert advisors, custom indicators and scripts in the Options window, you can specify individual settings for the selected expert advisor here. When checked, the **Allow DLL Imports** checkbox allows your expert advisor to automatically access dynamic-link library (.dll) files associated with them. When this is checked, you can also choose to select the **Confirm DLL Function Calls** checkbox below it. If your expert advisor is about to access a set of .dll files and this checkbox is selected, a notification appears, asking you to confirm the request.

The **Allow External Experts Imports** checkbox enables your expert advisor to automatically import functions from other MQL4 files. This is a security option that protects you when you are working with an expert advisor from an unknown source.



On the Inputs tab, you can view the variables used to calculate the expert advisor. The variables are specific to the expert advisor you selected. You can change the variable values by double-clicking in the variable row. You can also click **Load** to add inputs to the expert advisor or **Save** to save the variables as a set.

If you need to return to the original settings, click **Reset**.

You can verify if the expert advisor has been attached to the chart by looking for one of three types of icons in the upper right corner of the chart. A ☺ means that the expert advisor was attached and is actively trading. A ☹ shows that the expert advisor was attached, but that live trading is disabled for it. A ✖ means that all expert advisors have been disabled.



Remember, the **Expert Advisors** button in the Standard toolbar must be active in order for your expert advisor to work.

Attaching an Expert Advisor to a Chart:

1. Right-click on the Expert Advisors you want in the Navigator window and select **Attach to a Chart**.
2. Select the options you want on the Common tab.
3. If desired, click on the Inputs tab. Click **Load**. Navigate to the external set you want and click **Open**.
4. Click **OK**.



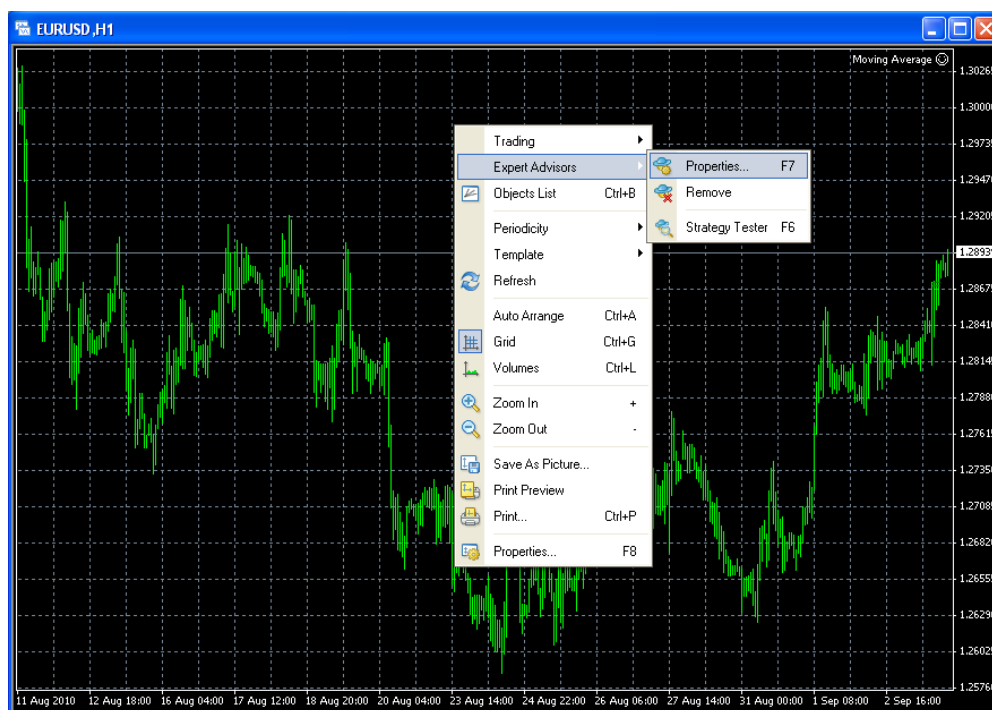
You can only click and drag tested expert advisors in the chart window.



Only one expert can be attached to a chart. If you attach an expert advisor to a chart that already has one, the new expert advisor will be added and the old one removed from the chart.

Modifying an Expert Advisor Attached to a Chart

If you want to make a change to an expert advisor once it's already attached to a chart, you can right-click in the chart, select **Expert Advisors** and click **Properties** in the drop-down menu. This opens a window so you can specify settings for the expert advisor.

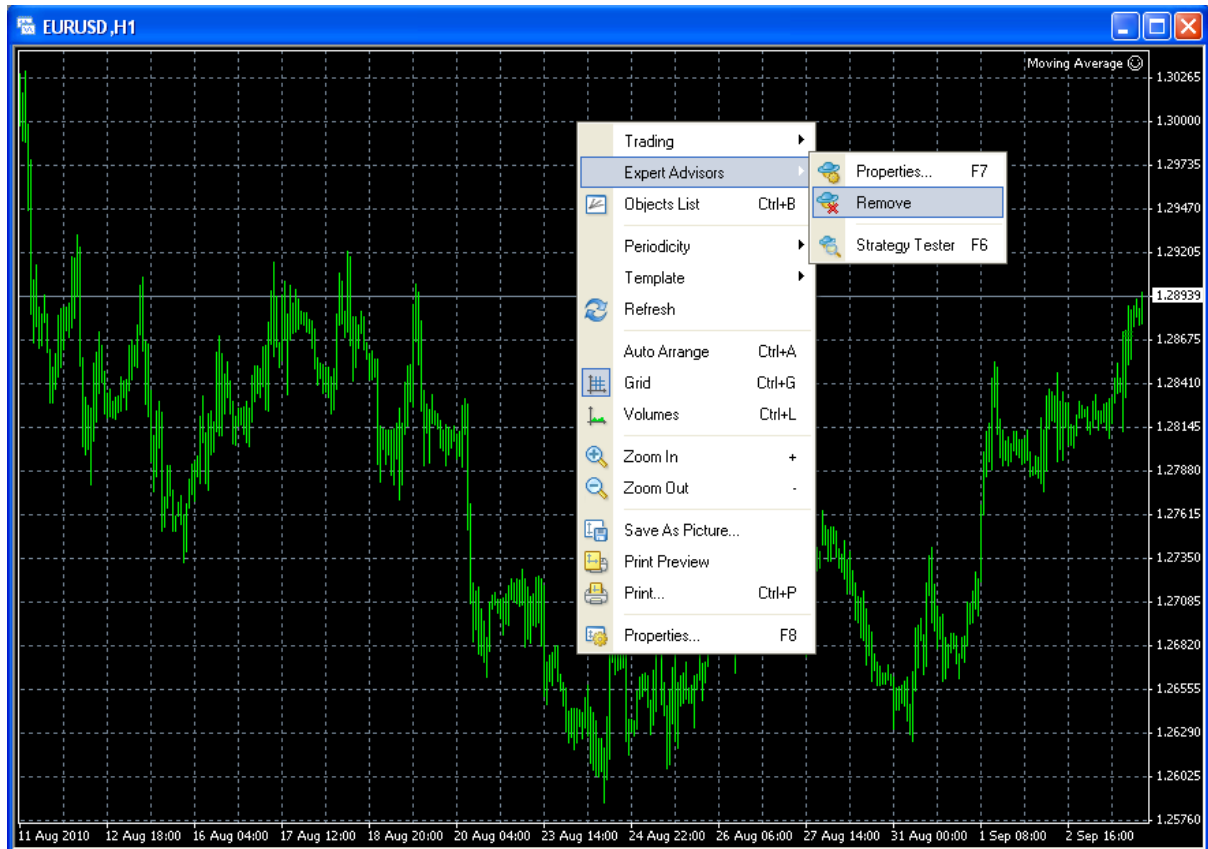


Modifying an Expert Advisor Attached to a Chart:

1. In the chart, right-click and select **Expert Advisors**.
2. From the drop-down menu, click **Properties**.
3. Make your changes as desired.
4. Click **OK**.

Removing an Expert Advisor from the Chart

You can remove expert advisors from the chart using several methods. An expert advisor stops working when you close the chart attached to it or close the MetaTrader application. You can also right-click in the chart and select **Remove** from the drop-down menu.



Removing an Expert Advisor from the Chart:

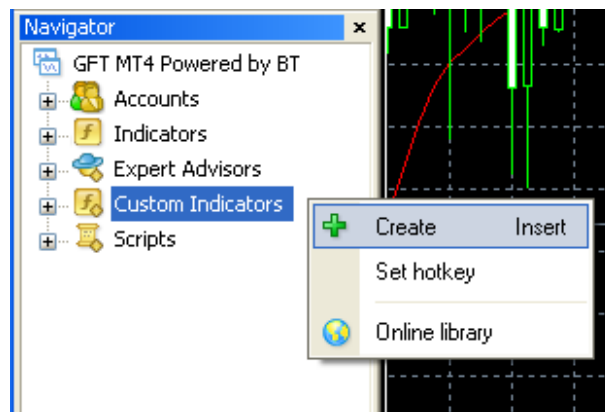
1. In the chart, right-click and select **Expert Advisors**.
2. From the drop-down menu, click **Remove**.



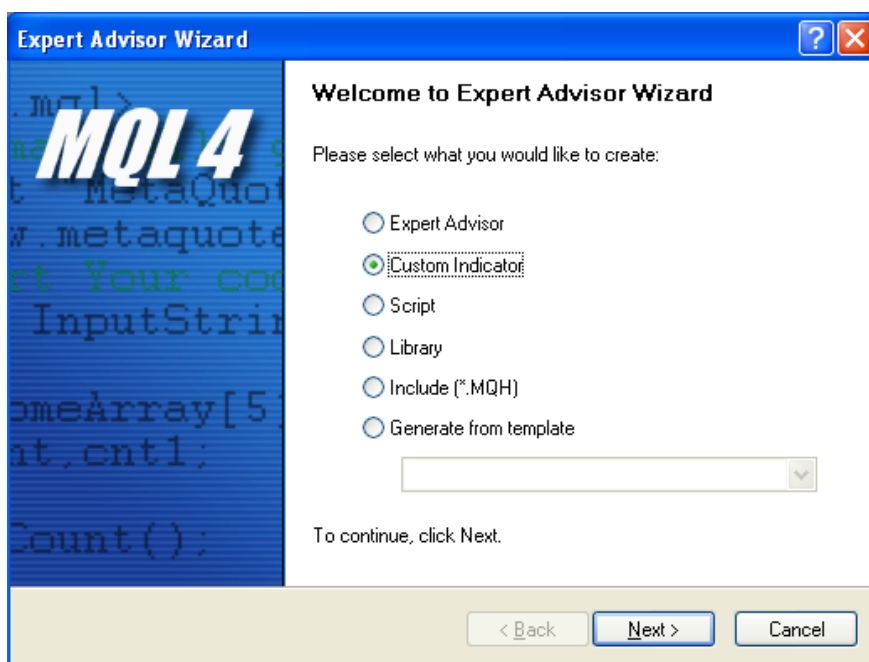
No confirmation appears when you remove an expert advisor from the window.

Creating a Custom Indicator

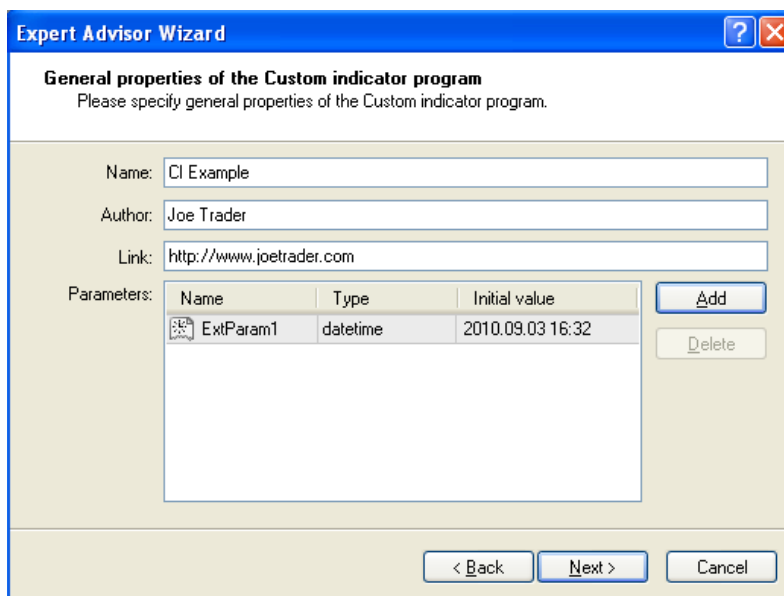
You can create a new custom indicator by right-clicking on the Custom Indicators menu in the Navigator window and selecting **Create**.



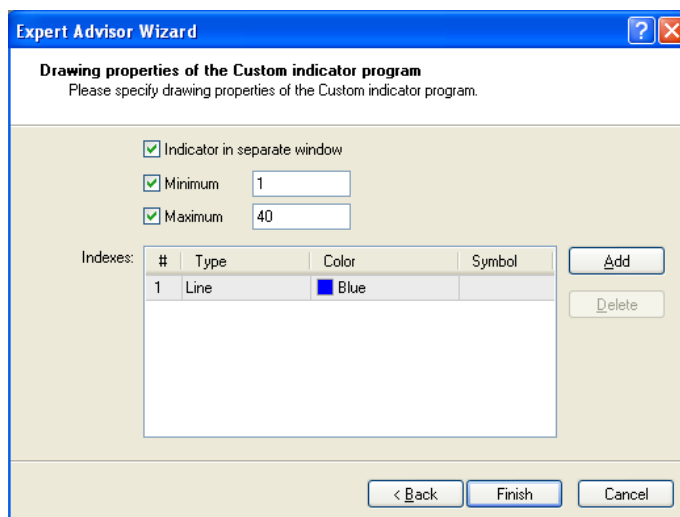
This opens MetaEditor, an application installed with MetaTrader that develops autotrading tools, and displays the Expert Advisor wizard.



The wizard helps you specify which type of custom indicator you want and name the file.



Once you click **Next**, the wizard opens the General Properties window. Here, you can add parameters to the file in the wizard by clicking **Add**. Once added, you can change what kind of parameter the custom indicator uses by right-clicking on it and selecting **Change Type**. This displays a drop-down menu of several strings. You can also change the initial value for the parameter by right-clicking on it and selecting **Edit Value**. If you want to change the name of the parameter, right-click on it and select **Rename**. You can also remove a parameter by selecting it and clicking **Delete**.




When you click **Next** again, you can view the Drawing Properties window. Here, you can use the wizard to specify where the custom indicator appears. Your custom indicator will automatically appear in the chart unless you check **Indicator in Separate Window**, which displays the custom indicator in a window below the chart. You can then specify the range it will have by checking **Minimum** and **Maximum** and entering in a value.


You can specify how you want the indicator to look in the chart by clicking **Add** in the Indexes section. You can right-click the **Type** field and select **Change Type** to specify if the indicator appears as a line, section, histogram or arrow. You can also right-click the **Color** field and select **Change Color** to specify what colour you want the indicator to be. If you make a mistake, you can also remove an index by selecting it and clicking **Delete**.

When you click **Finish**, the wizard closes and opens a text file with the code for the parameters in it. You can continue to add code for the custom indicator. The source file (*.MQ4) is saved in the Indicators folder in the Navigator window of MetaEditor.

Creating a Custom Indicator:

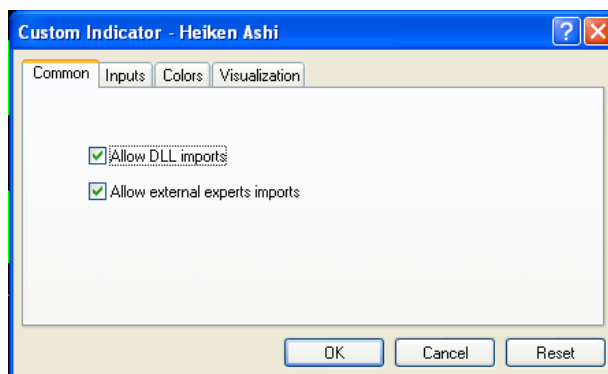
1. In MetaTrader, right-click on the **Custom Indicators** menu in the Navigator window and select **Create**.
2. When the Expert Advisor Wizard opens in MetaEditor, make sure **Custom Indicator** is selected and click **Next**.
3. Enter the custom indicator name, the developer's name and the developer's website.
4. If desired, click **Add** to add a parameter to the custom indicator. If you need to customize it, right-click on the parameter and select **Change Type**, **Edit Value** or **Rename**, as desired.
5. Click **Next**.
6. If desired, check **Indicator in Separate Window**. Then, check **Minimum** and **Maximum** and enter in a value.
7. If desired, click **Add** in the Indexes section. Then right-click the **Type** field and select **Change Type** to choose the type you want from a drop-down menu. You can also right-click the **Color** field and select **Change Color** to select a colour.
8. Click **Finish**.
9. Make the changes you want to the code file, as desired.
10. Click  **Compile**.



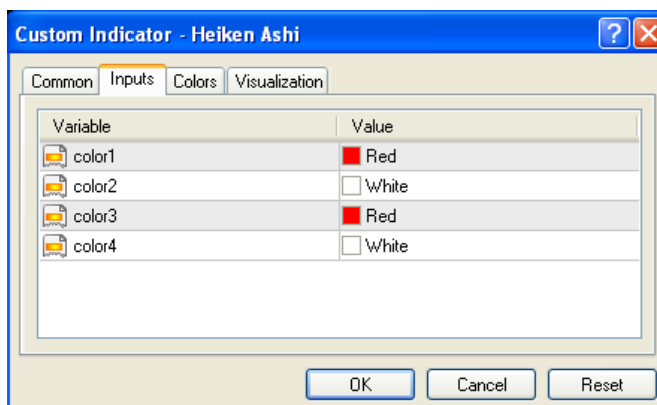
Once compiled, you can view the custom indicator in the Custom Indicators list in the Navigator window of MetaTrader. You can switch back to MetaTrader by clicking  **Terminal** in the MetaEditor toolbar.

Adding a Custom Indicator to the Chart

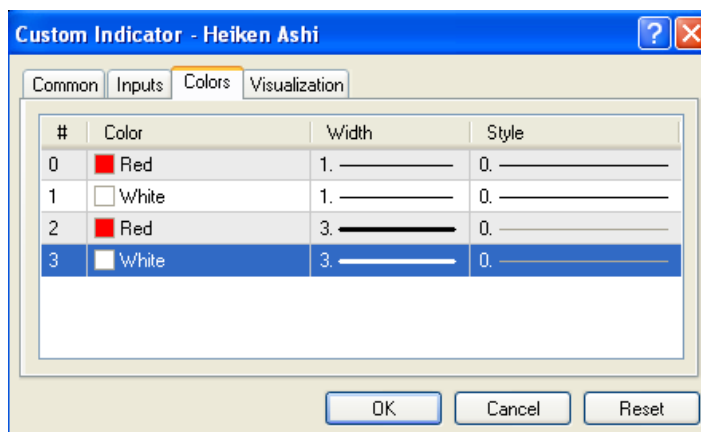
Once you've imported, created or modified the custom indicator as you want, you can display it in the chart window by clicking and dragging it from the Navigator window. This opens a window so you can specify settings for the custom indicator.



On the Common tab, you can specify how this custom indicator will handle dynamic-link library (.dll) files. While you may have already specified how MetaTrader handles these for all expert advisors, custom indicators and scripts, you can specify individual settings for the selected custom indicator here. When checked, the **Allow DLL Imports** checkbox allows your custom indicator to automatically access dynamic-link library (.dll) files associated with them. The **Allow Import of External Experts** checkbox enables your custom indicator to automatically import functions from other MQL4 files. This is a security option that protects you when you are working with a custom indicator from an unknown source.

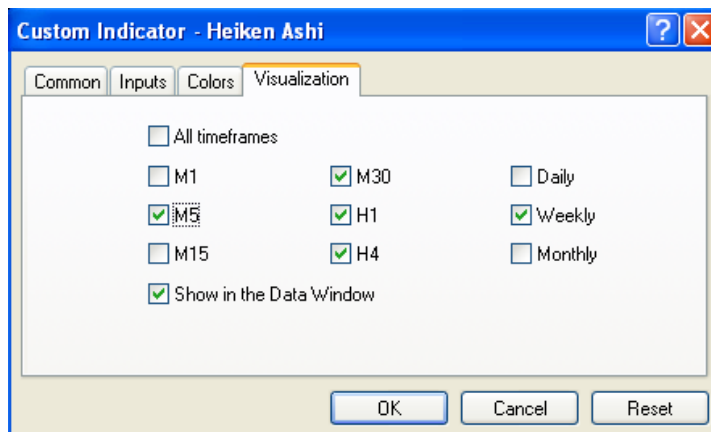


On the Inputs tab, you can view the variables used to calculate the custom indicator. The variables are specific to the custom indicator you selected. You can change the variable values by double-clicking in the variable row.



On the Colors tab, you can modify the line colour of the custom indicator by double-clicking on the colour and selecting a new one from the drop-down menu. You can also specify line width on a scale of one to five by double-clicking on the **Width** row and selecting a new one from the drop-down menu that appears. If you select a line width of one, you can also specify whether the line appears as solid or dotted by double-clicking on the **Style** row and selecting a new one from the drop-down menu that appears.

If your custom indicator appears outside of the chart, you will see a Levels tab. You can use this to add a horizontal line at a particular level in the indicator. Click **Add** to add a horizontal line and use the **Style** drop-down menus to specify a colour, line style and line thickness. You can add one or more lines to the indicator window. To remove lines, select a line and click **Delete**.



On the Visualization tab, you can select in which time frames the custom indicator can be used. When you first open MetaTrader, the **All Time frames** checkbox is selected. When you uncheck it, you can select one or more time frames.

If you need to return to the original settings, click **Reset**.

Adding a Custom Indicator to a Chart:

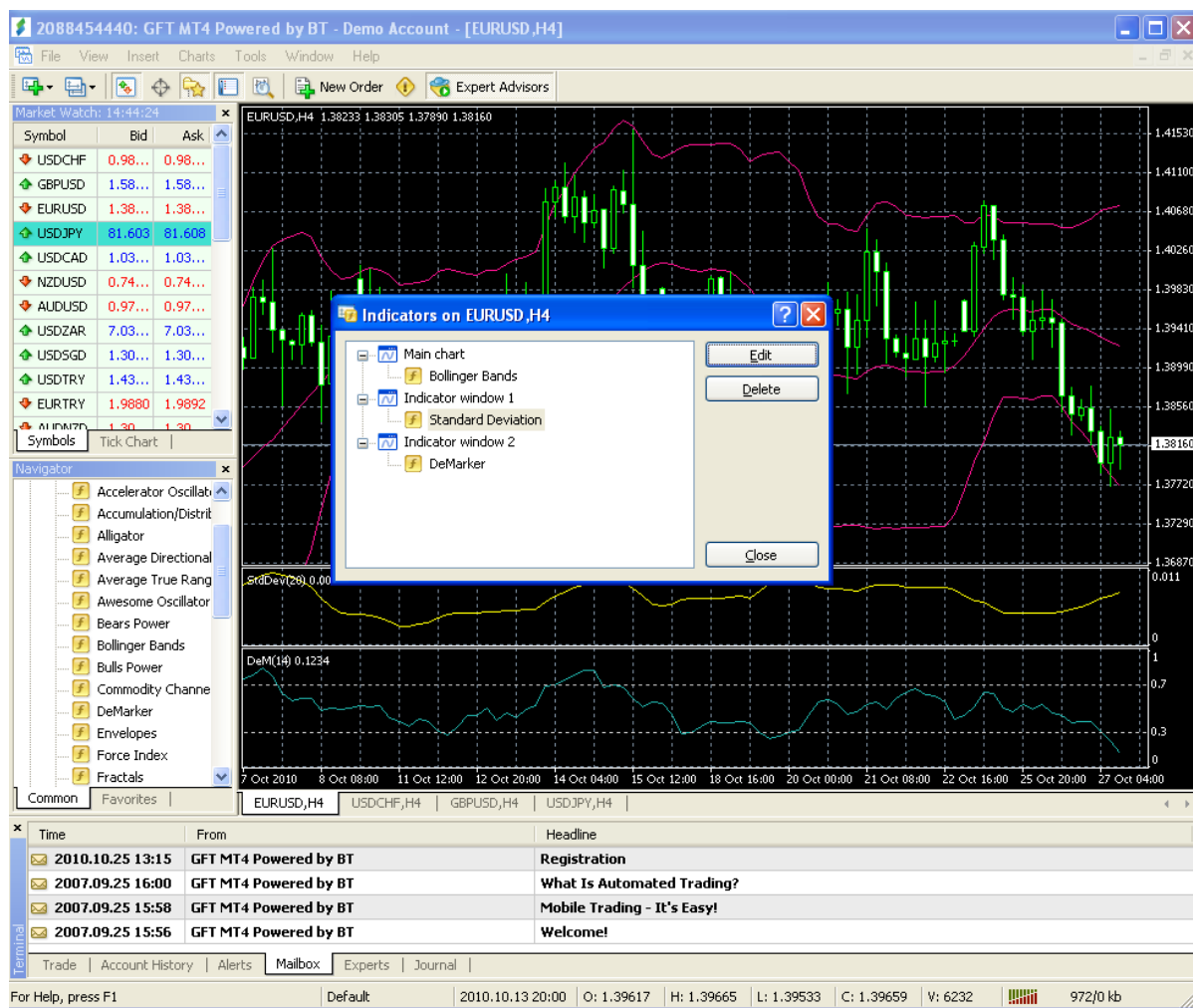
1. Right-click on the custom indicator you want in the Navigator window and select **Attach to a Chart**.
2. Select the options you want on the Common tab.
3. If desired, click on the Inputs tab. Click **Load**. Navigate to the external set you want and click **Open**.
4. Adjust the settings as desired in the other tabs.
5. When done, click **OK**.



You can duplicate custom indicators and use the settings on the Visualization tab to specify different time frames for each one. You can then place these in the same chart and compare how the indicator for the instrument would behave over multiple time frames.

Modifying a Custom Indicator Attached to a Chart

Once a custom indicator is attached to a chart, you can modify it using the Indicators List. This displays a list of all indicators in the chart window.



Modifying a Custom Indicator Attached to a Chart:

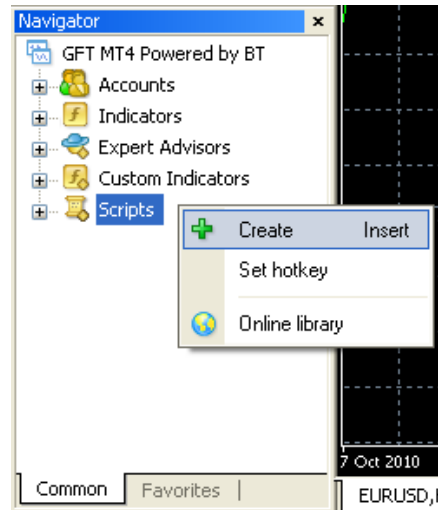
1. In the chart, right-click and select **Indicators List**.
2. Make sure the custom indicator you want is selected and click **Edit**.
3. Make your changes as desired.
4. Click **OK**.
5. If you need to edit another custom indicator, select it, click **Edit**, and repeat the steps above.
6. When done, click **Close**.



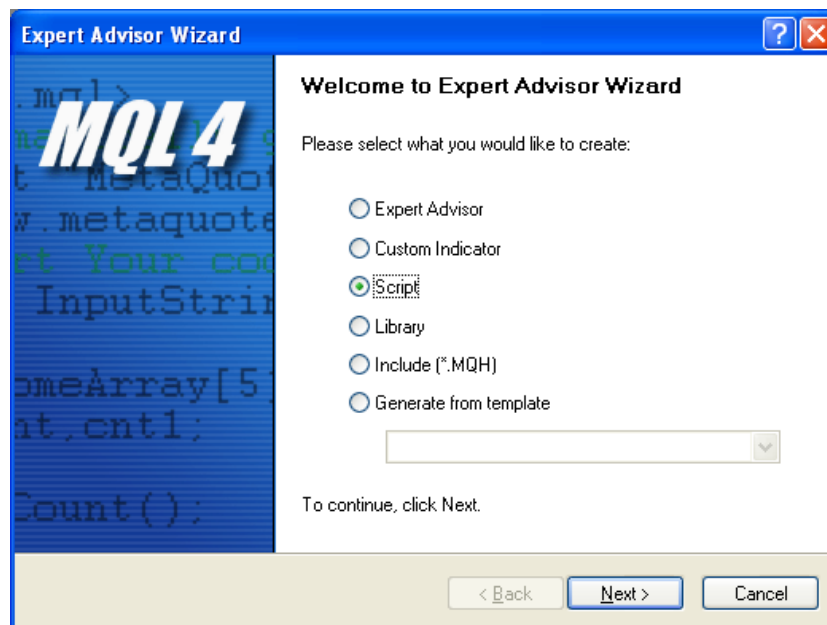
You can also remove custom indicators from the chart using the Indicators List. In the Indicators window, select the indicator you want to remove and click **Delete**.

Creating a Script

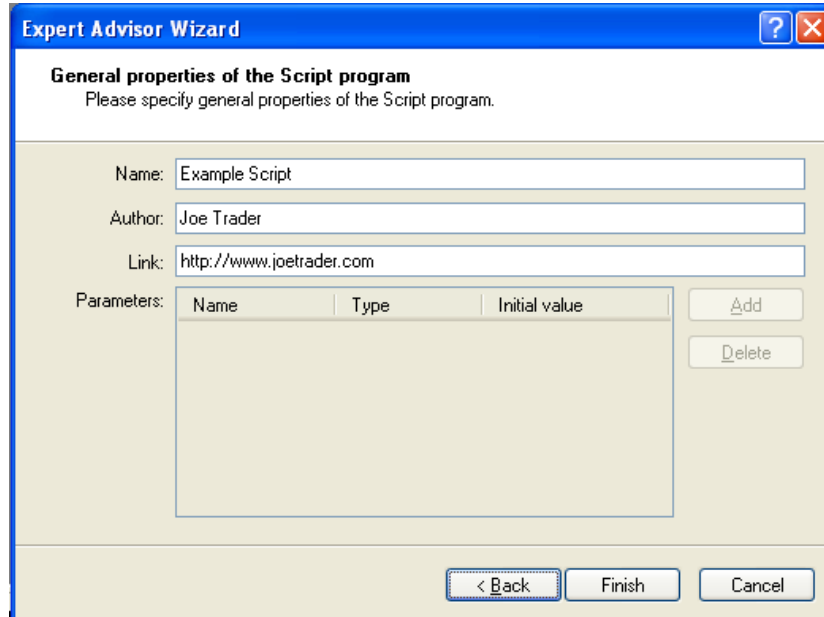
You can create a new script by right-clicking on the **Scripts** menu in the Navigator window and selecting **Create**.



This opens MetaEditor, an application installed with MetaTrader that develops autotrading tools, and displays the Expert Advisor wizard.



The wizard helps you specify which type of script you want and name the file.



Expert Advisor Wizard

General properties of the Script program
Please specify general properties of the Script program.

Name:

Author:


Link:

Parameters:


| Name | Type | Initial value |
|------|------|---------------|
| | | |

When you click **Finish**, the wizard closes and opens a text file so you can view and edit the code. You can continue to add code for the script. You can view the file in the Scripts menu of the Navigator window in MetaTrader.

Creating a Script:

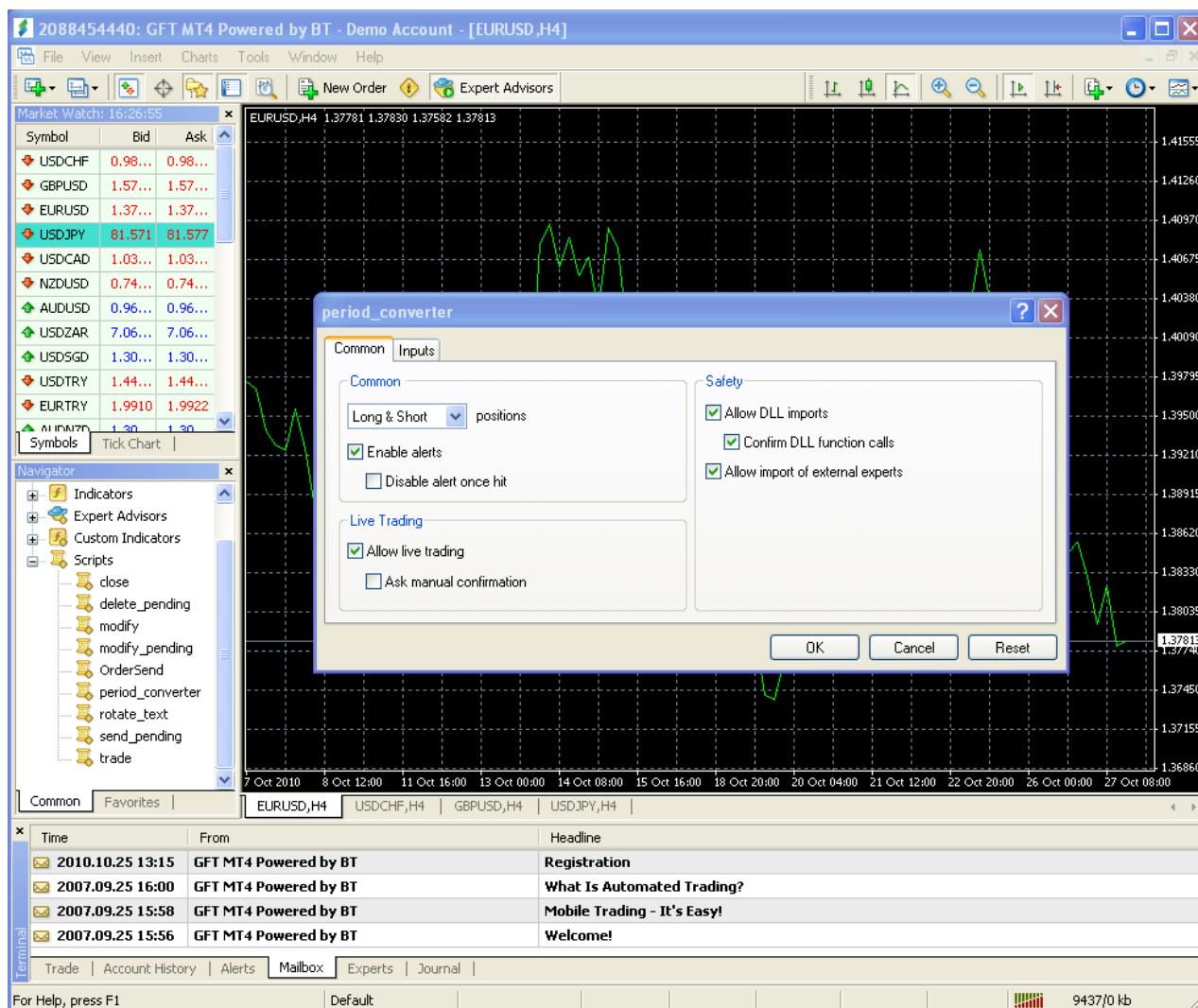
1. In MetaTrader, right-click on the **Scripts** menu in the Navigator window and select **Create**.
2. When the Expert Advisor Wizard opens in MetaEditor, make sure **Script** is selected and click **Next**.
3. Enter the script name, the developer's name and the developer's website.
4. Click **Finish**.
5. Make the changes you want to the code file, as desired.
6. Click  **Compile**.



Once compiled, you can view the script in the Scripts list in the Navigator window of MetaTrader. You can switch back to MetaTrader by clicking  **Terminal** in the MetaEditor toolbar.

Executing a Script on the Chart

Once you've imported, created or modified the script as you want, you can display it in the chart window by clicking and dragging it from the Navigator window. Depending on what the script does, MetaTrader will either see a confirmation or view a settings window so you can customize the script.



If your script is designed to execute a command based on certain conditions, you will see a confirmation window. After you click **Yes**, you may see the settings window, depending on the type of script.

If the settings window appears, you can specify how you want the script to perform on the Common tab. While you may have already specified how MetaTrader handles permissions for all expert advisors, custom indicators and scripts, you can specify individual settings for the script here. The **Positions** drop-down menu allows you to select if the script opens both long (buy) and short (sell) positions or only long or short positions.

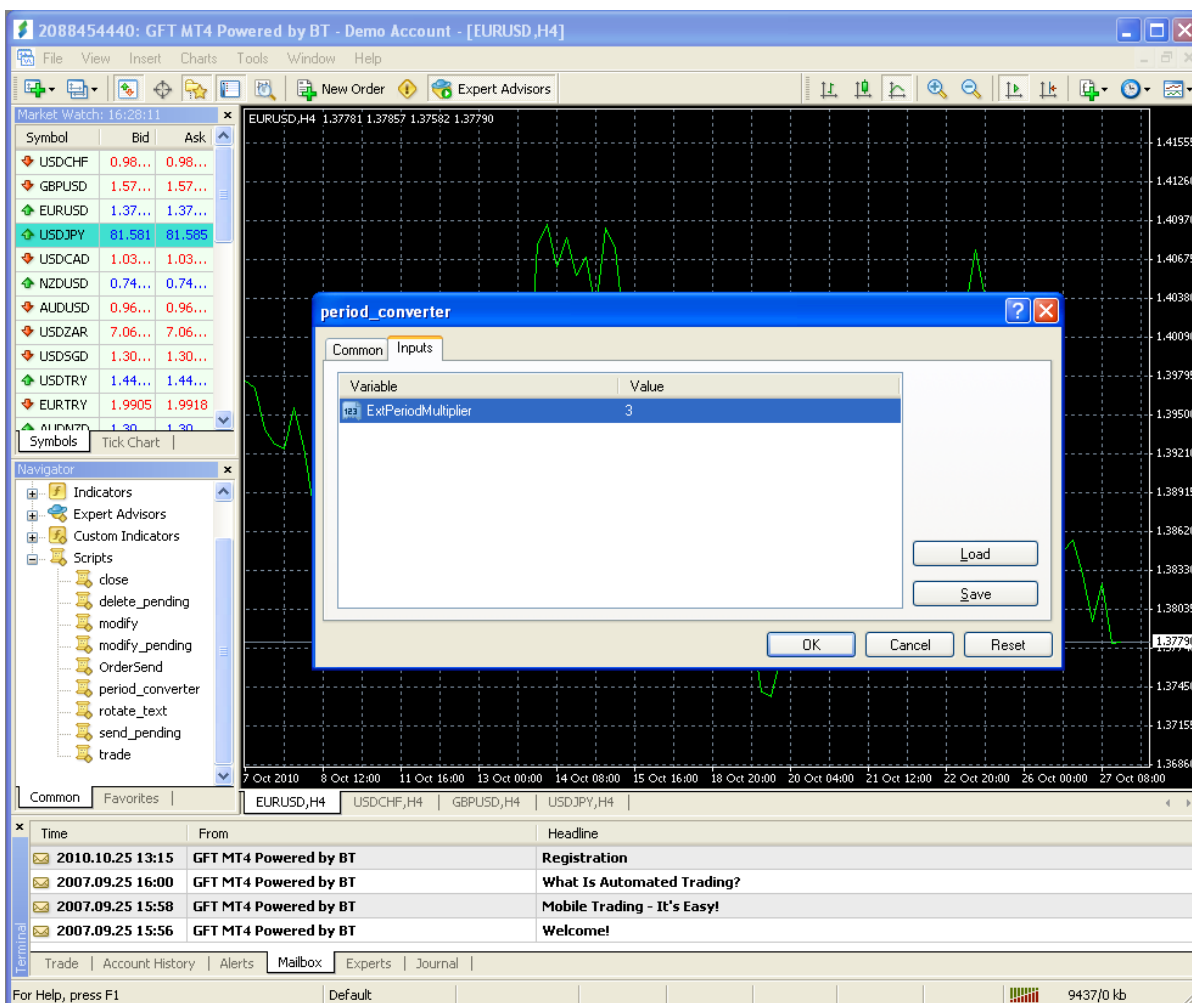
You can click the **Enable Alerts** checkbox so that MetaTrader sends you a message when the script has placed a trade. You can also click **Disable Alerts Once Hit** so MetaTrader only sends a notification once.

In the Live Trading section, you can click **Allow Live Trading** to enable or disable the script in live trading. When this is checked, you can also choose to select the **Ask Manual Confirmation** checkbox below it. If your script is about to perform a trade and this checkbox is selected, a notification appears, asking you to confirm the trade.

The Safety section contains options for specifying how to handle dynamic-link library (.dll) files. When checked, the **Allow DLL Imports** checkbox allows a script to automatically access .dll files associated with them. When this is checked, you can also choose to select the **Confirm DLL Function Calls** checkbox below it. If your script is about to access a set of .dll files and this checkbox is selected, a notification appears, asking you to confirm the request.

The **Allow Import of External Experts** checkbox enables your script to automatically import functions from other MQL4 files. This is a security option that protects you when you are working with a script from an unknown source.

On the Inputs tab, you can view the variables used to calculate the script. The variables are specific to the script you selected. You can change the variable values by double-clicking in the Value column of the variable row.



If you need to return to the original settings, click **Reset**.

Executing a Script on the Chart:

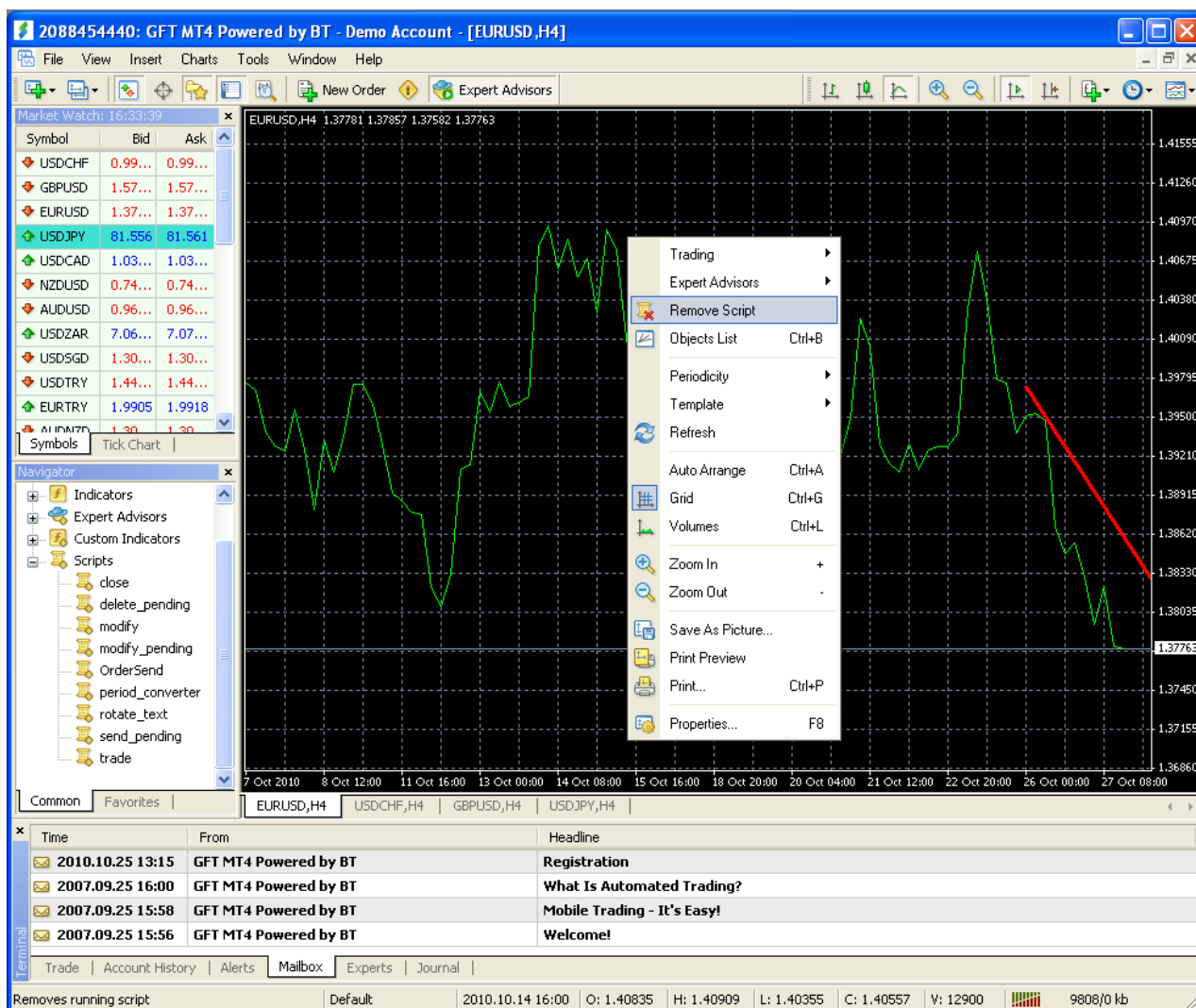
1. Right-click on the script you want in the Navigator window and select **Executing a Script on the Chart**.
2. If the confirmation window appears, click **Yes** to confirm the settings. If the settings window appears, select the options you want on the Common tab.
3. If desired, click on the Inputs tab. You can click **Load** to navigate to the external set you want and click **Open**.
4. Click **OK**.



Only one script can be attached to a chart at a time. When a chart already has an attached script, a confirmation window appears, verifying that the new script will be added and the old one removed from the chart.

Removing a Script Attached to a Chart

Unlike expert advisors, which continually work and execute orders based on market moves, a script only performs a function once. Normally, a script shuts down by itself, but there are several ways that you can remove it.




The script will be removed from the chart if you:

- Exit MetaTrader.
- Change the instrument or time frame.
- Click on a script in the Navigator window and drag it to the chart.
- Right-click in the chart and select **Remove Script**.

Modifying an Expert Advisor, Custom Indicator or Script

Once added to the Navigator window, you can edit an expert advisor, custom indicator or script before you add it to the chart if you know MQL4. Right-click on the autotrading tool in the Navigator window and select **Modify** from the drop-down menu. This opens MetaEditor and displays the source code of the file.

Modifying an Expert Advisor, Custom Indicator or Script:

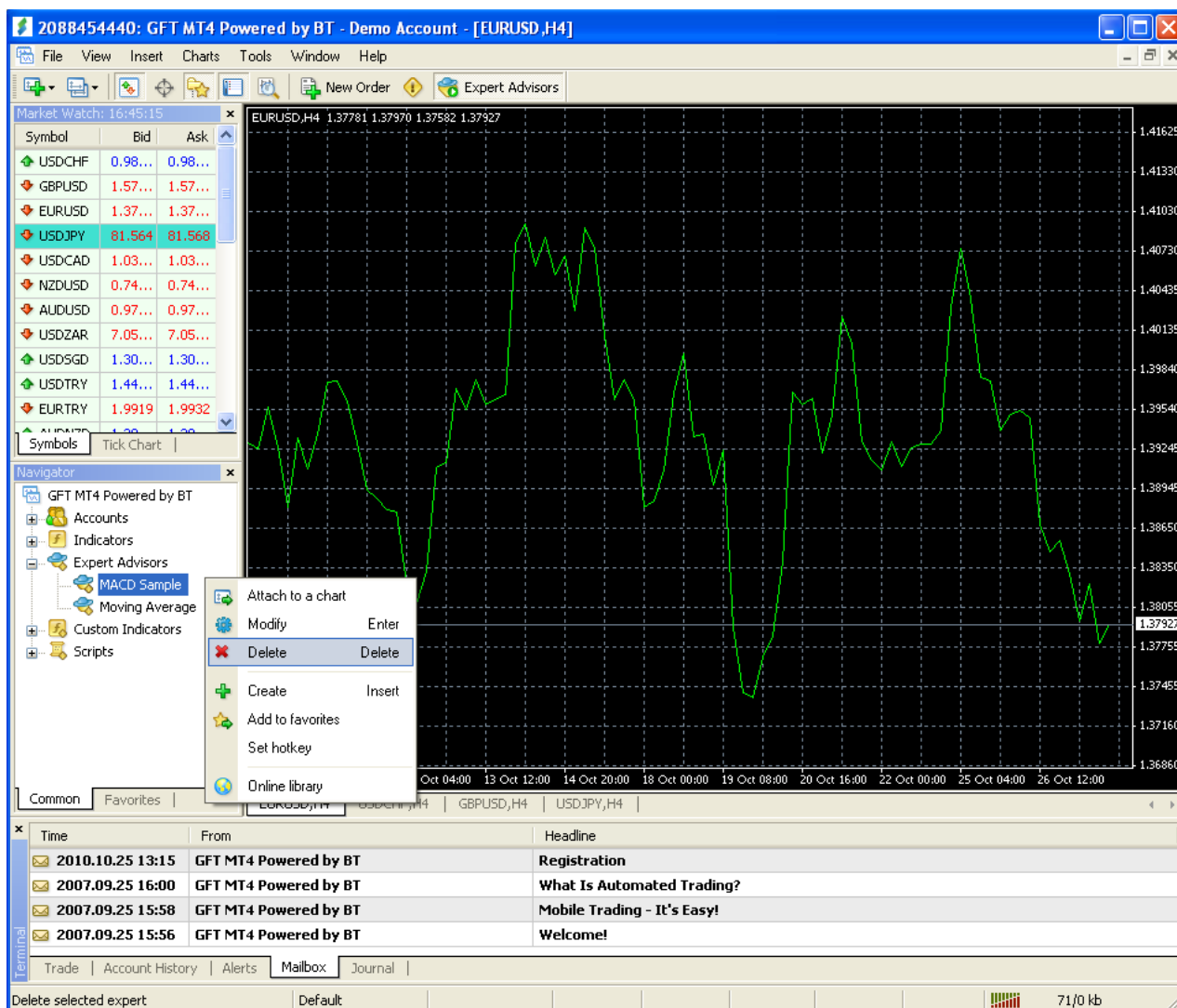
1. Right-click on the autotrading tool you want in the Navigator window and select **Modify**.
2. In MetaEditor, make the changes you want to the code file, as desired.
3. Click **Save**.
4. Click  **Compile**.



MetaEditor is an application installed with MetaTrader that enables traders to import, create and modify expert advisors, custom indicators, scripts and other autotrading tools. See *Section 4: Opening MetaEditor for the First Time* for more information.

Deleting an Expert Advisor, Custom Indicator or Script from the Navigator

If you make a mistake or change your mind after you add an expert advisor, custom indicator or script to the Navigator window, you can permanently remove it from MetaTrader.



Deleting an Expert Advisor from the Navigator:

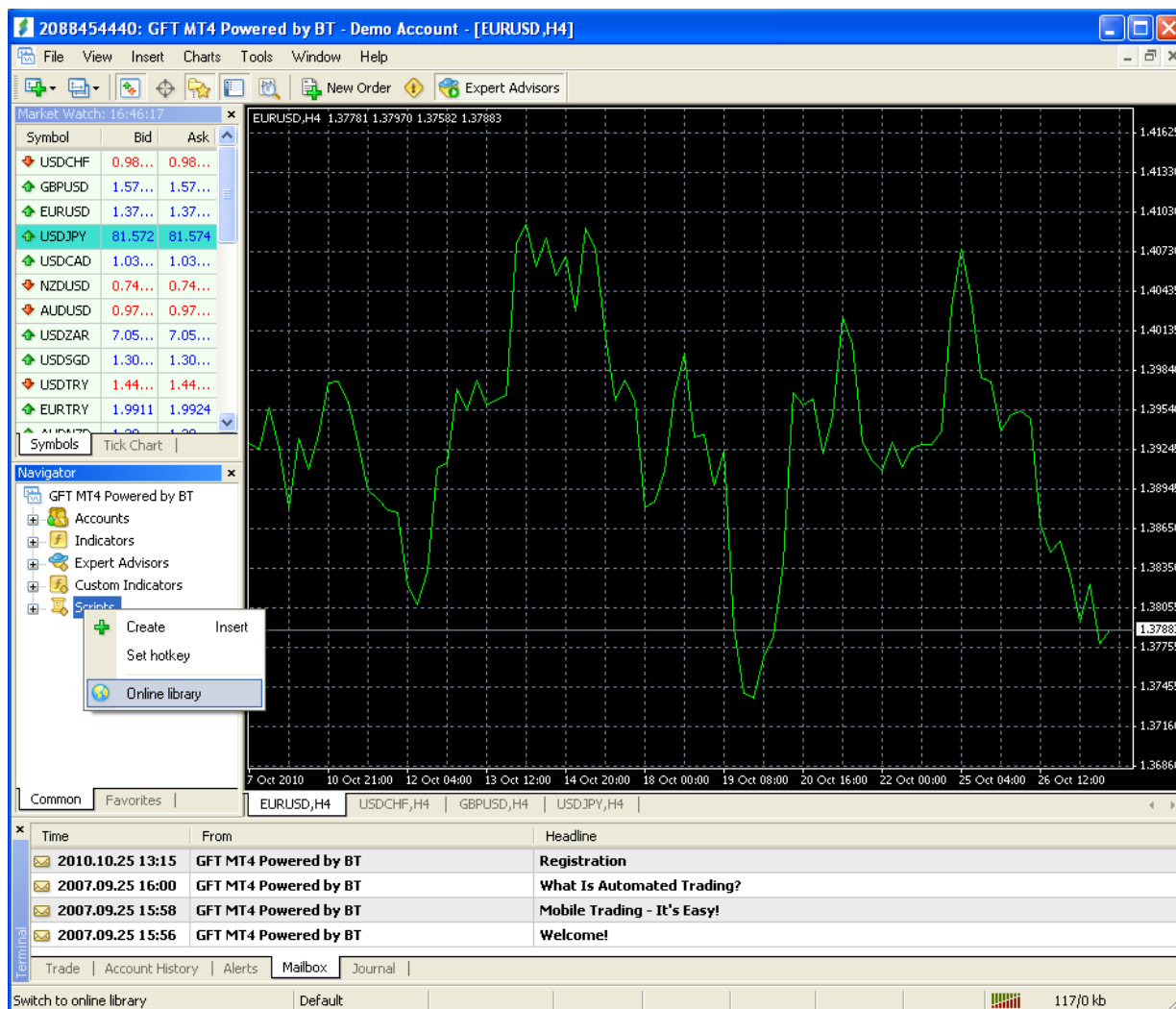
1. Right-click on the expert advisor, custom indicator or script you want in the Navigator window and select **Delete**.
2. Click **Yes** to confirm.




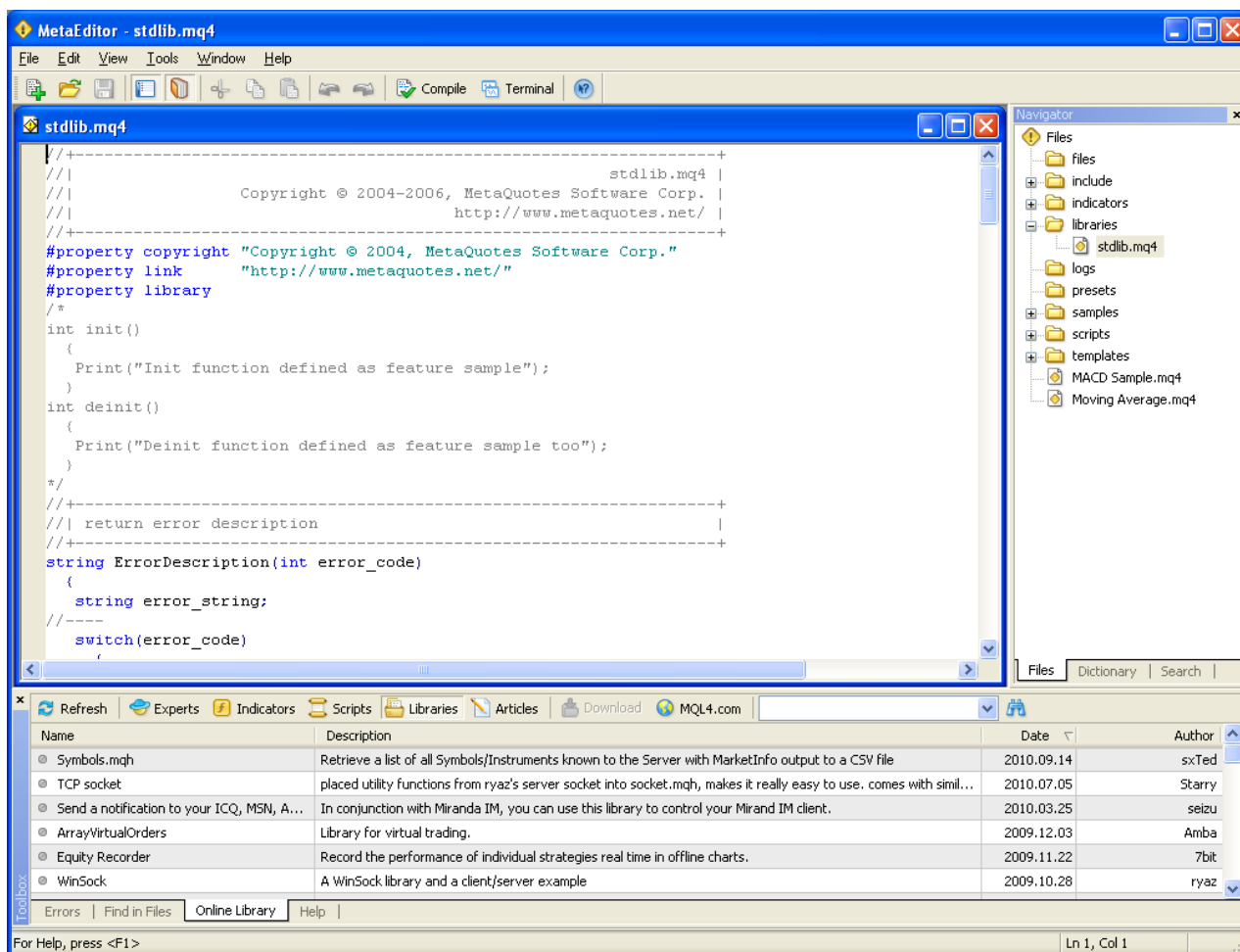
If an expert advisor, custom indicator or script is attached to a chart, deleting it from the Navigator window does not stop it from performing autotrading. You need to remove it from the chart.

Adding a Library to an Expert Advisor or Script

As you create expert advisors or scripts, you may want to add a dynamic-link library (.dll) to the file. You can download or create one in MetaEditor, an application installed with MetaTrader that develops autotrading tools.



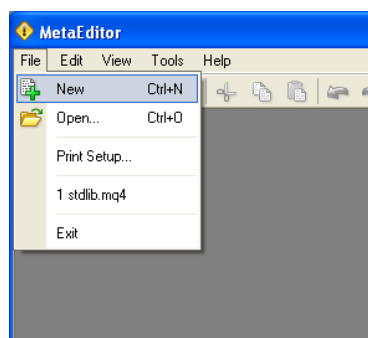
You can either download .dll files from the MetaEditor Online Library or create one using the tools in MetaEditor. To access MetaEditor from MetaTrader, click the **MetaEditor**  button in the Standard toolbar.



To download a library, make sure the Online Library tab is open in the Toolbox window and that **Libraries** is selected.

You can use the scroll bar to move through the list. You can also click **Refresh** to see if any new library files have been added.

When you find the library file you want, select it and click **Download**. You can also right-click in the library row and select **Download** from the drop-down menu. This opens the library source code file in the workspace.





To create a new library from scratch, click **New** in the **File** menu. This opens the Expert Advisor window. Make sure **Library** is selected.

Once you click **Next**, the wizard opens the General Properties window. When you click **Finish**, the wizard closes and opens a text file with the code for the parameters in it.

You can edit the code manually or add additional components from the tools in the Navigator window. You can also open other source code files and copy and paste sections of code into the downloaded file.

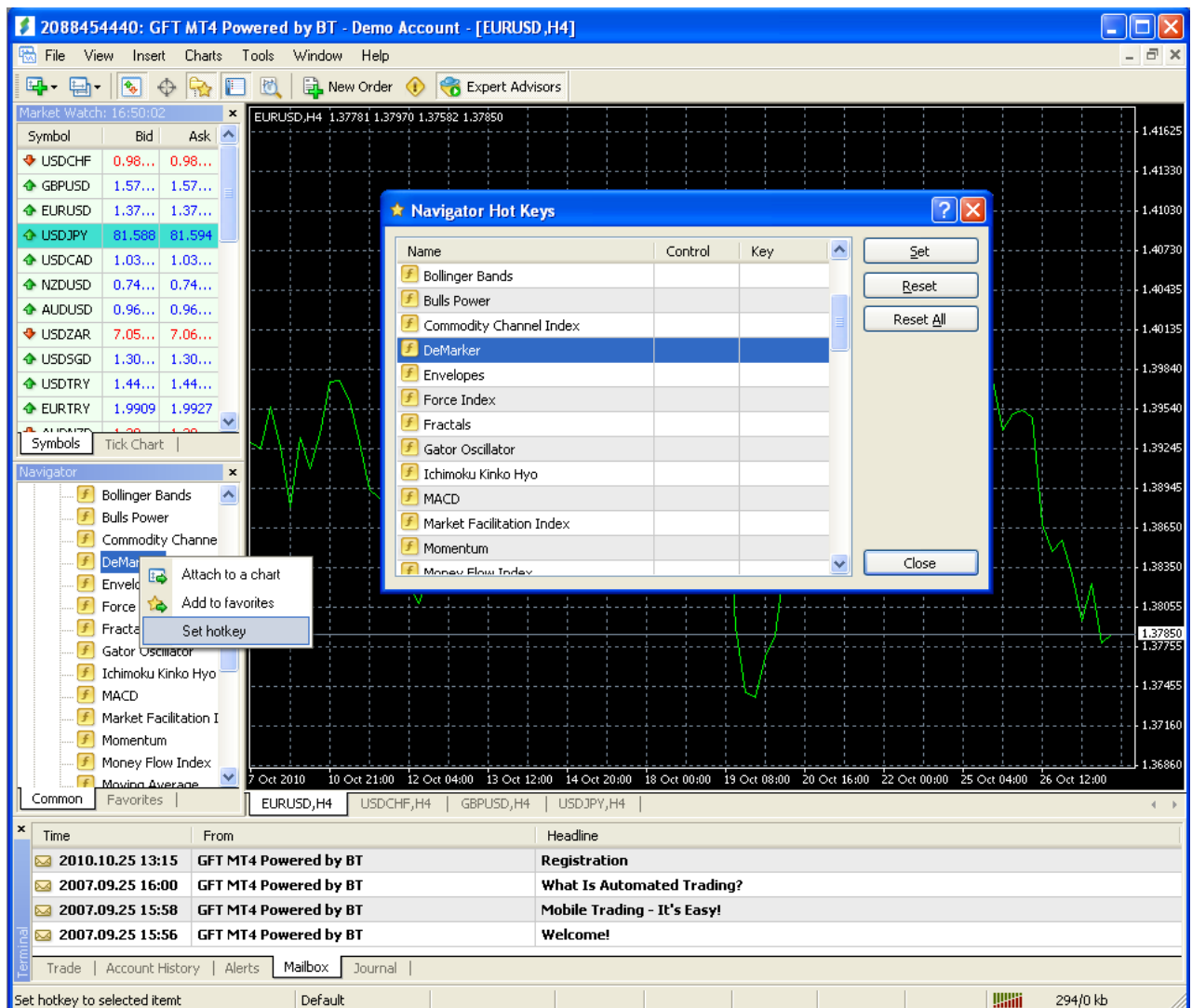
A star appears in the header of the library source code file after you've edited it. You can click **Save**  to save your changes and continue working.

Once your edits are made, click **Compile** . This verifies if the code works as programmed. The Errors tab opens automatically in the Toolbox window to show you if there are any errors or warnings. When the compilation is successful, MetaEditor saves the file.

 See *Section 4: Opening MetaEditor for the First Time* for more information on MetaEditor.

Setting Keyboard Shortcuts for Autotrading Tools in the Navigator Window

If you think you will use an expert advisor, custom indicator or script frequently, you can set a keyboard shortcut or hot key to open the autotrading tool automatically in the chart.



When you right-click on one of these items in the Navigator window, you can select **Set Hotkey**. This opens the Navigator Hot Key window, where you can select an item from the list and set a keystroke combination.

If you make a mistake, you can click **Reset** to remove the hot key from the selected indicator, expert advisor, custom indicator or script. To remove all of the hot keys from these items, click **Reset All**.

Setting Keyboard Shortcuts in the Navigator Window:

1. In the Navigator window, right-click on a specific indicator, expert advisor, custom indicator or script and select **Set Hotkey**.
2. In the Navigator Hot Key window, make sure the item you want is selected. If not, scroll to it.
3. Click **Set**.
4. Use the drop-down menu in the Control column to select either ALT or CTRL.
5. Enter the keyboard button in the Key column.
6. Click **Close**.



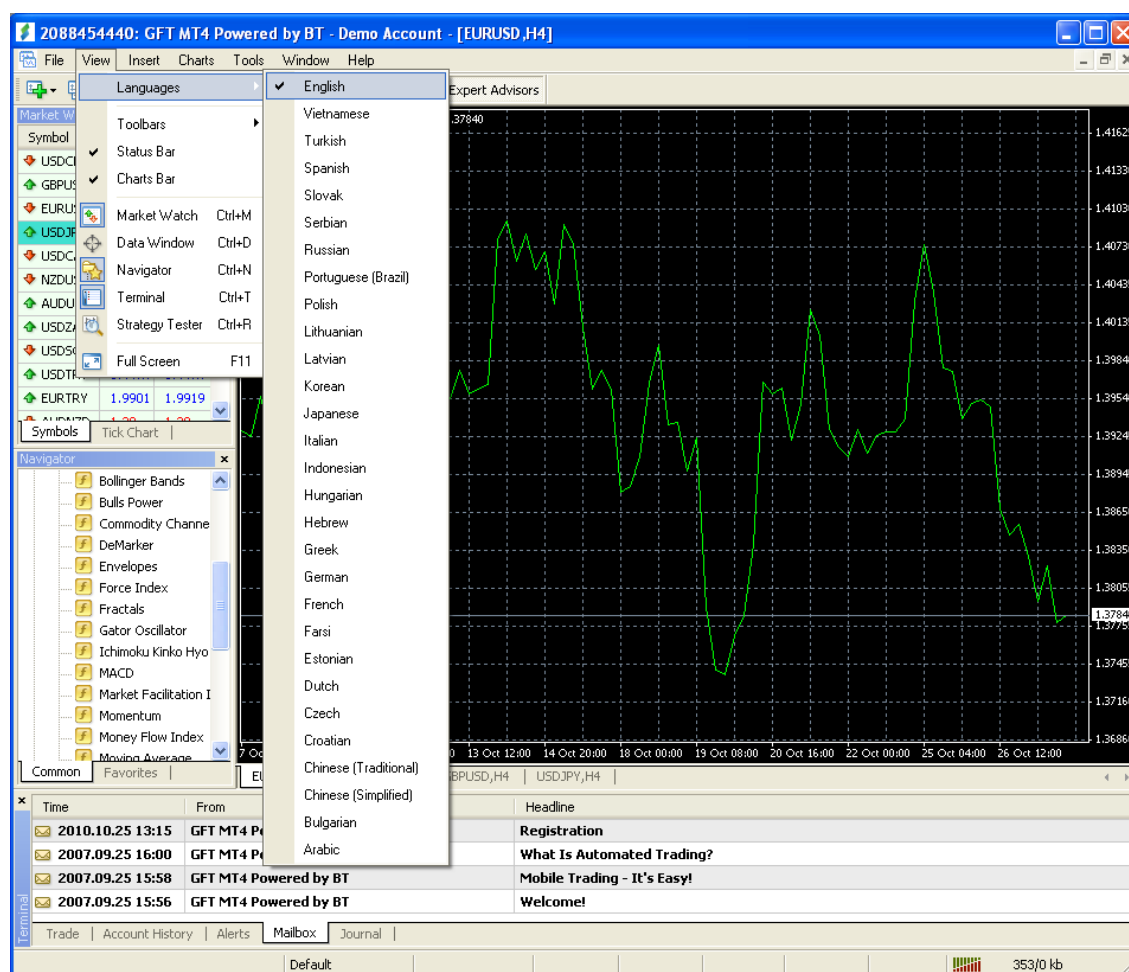
MetaTrader already has a number of commands set as hot keys. For a full list, see ***Appendix A: MetaTrader Hot Keys***. If you accidentally set an indicator, expert advisor, custom indicator or script to a hot key that's already used by the system, click **Reset** and change the hot key to another combination.

Section 6: Customizing the Appearance and Settings in MetaTrader

As you become more familiar with MetaTrader, you may want to change some of the settings to make the platform fit your trading style. In this section, we'll look at ways to customize windows and other tools in MetaTrader.

Changing the Language in MetaTrader

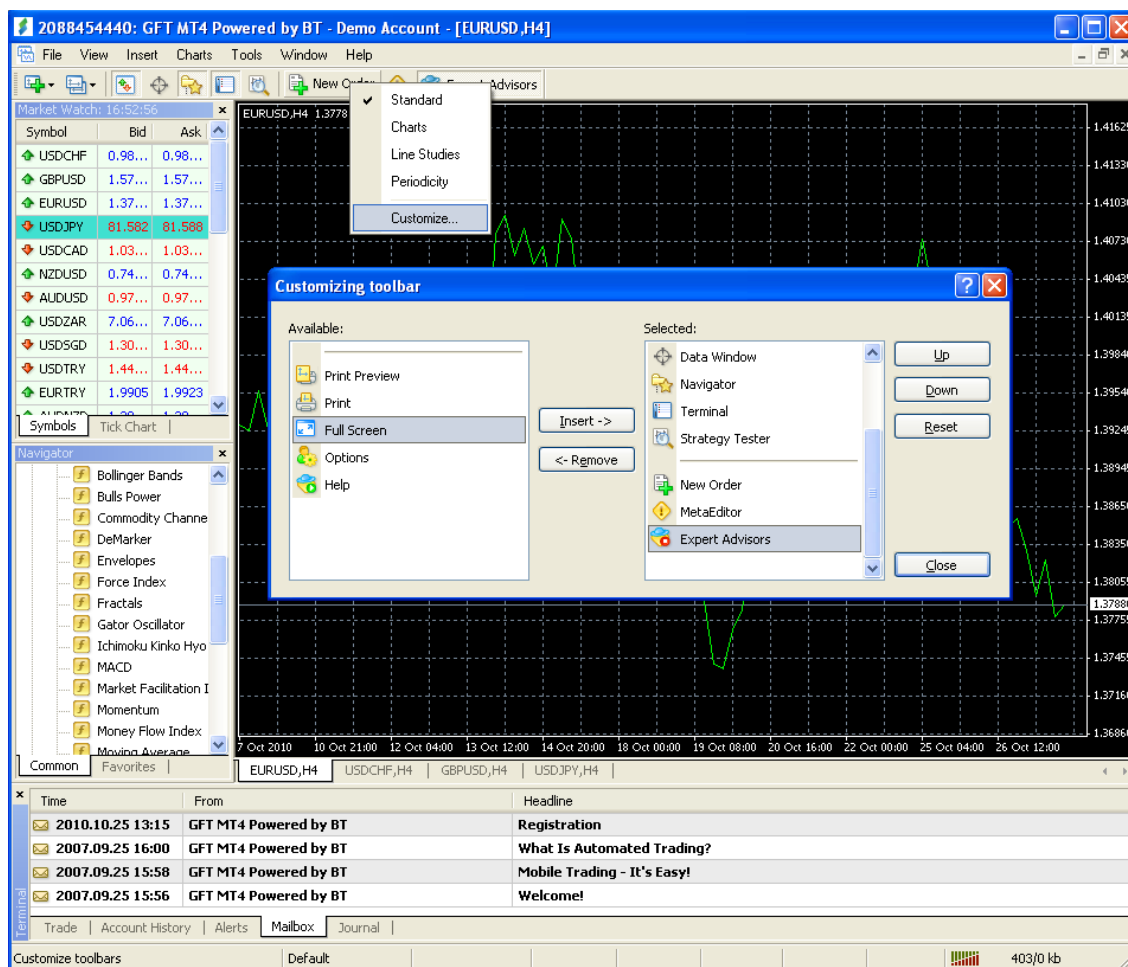
You can select the language you want the functionality of MetaTrader to appear in by clicking the **View** menu and selecting **Languages**. You can then select the language you want from the drop-down menu.



You will need to restart MetaTrader for the language change to take effect. When you re-login, MetaTrader will display its windows in the language you specified.

Customizing the Toolbars

You can modify the options that appear in the four toolbars in MetaTrader by right-clicking on the toolbar and selecting **Customize...** from the drop-down menu. This displays the Customizing Toolbar window for that specific toolbar.



This window is where you can specify what appears in the selected toolbar. The Available section shows any menu options that are currently not in the toolbar and can be added. The Selected section displays all of the options that are currently displayed in the toolbar.

The tools that appear in the Available and Selected section depend on which toolbar you right-clicked on.

To place a tool on the toolbar, you can select it in the Available section and click **Insert**. Conversely, you can remove a tool from the toolbar by clicking it in the Selected section and then selecting **Remove**.

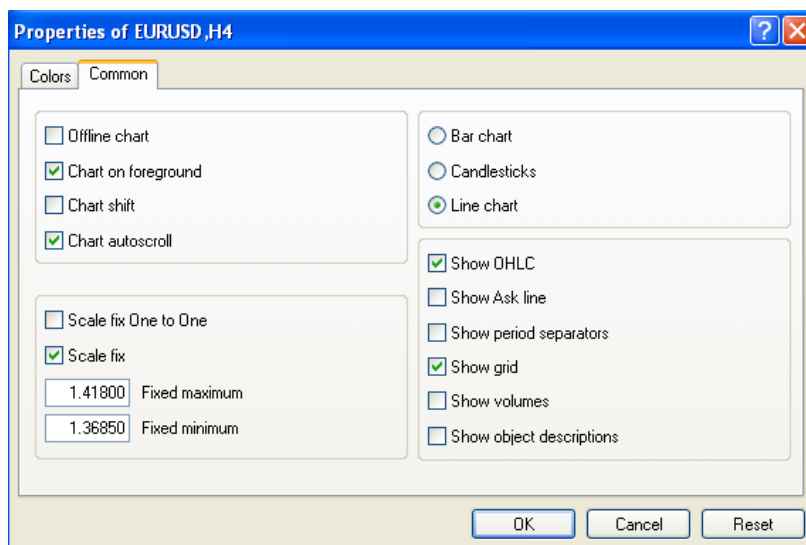
You can also reposition the order of the tools in the menu bar by selecting a tool and clicking **Up** or **Down**.

If you need to return to your original settings, click **Reset**.

When you are done reordering the toolbars, click **Close**.

Customizing the Appearance of the Chart Window

You can change the setup of the chart window by right-clicking in the chart and selecting **Properties** from the drop-down menu. This opens the Chart Properties window.



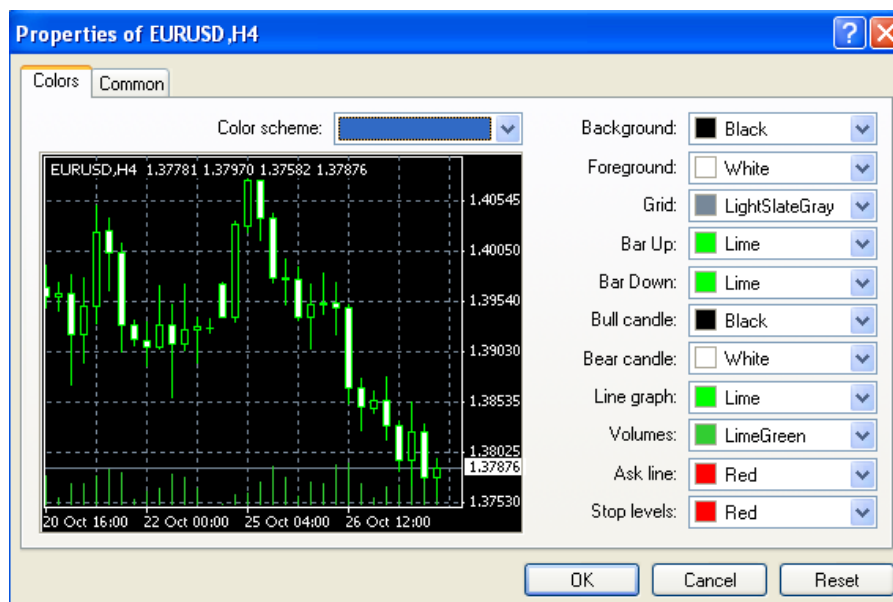
This window organizes the various settings for the selected chart window on two tabs: the Colors tab and the Common tab.

If you make a mistake while entering settings, you can click **Reset** to restore all of your settings to the original ones.

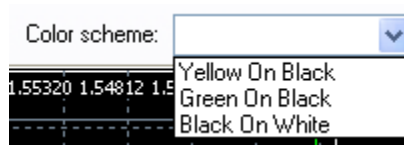
When you are done customizing the settings, click **OK**.

Changing the Colour of the Chart Window

On the Colors tab, you can specify the colours for the chart window background, foreground and grid. You can also select colours for the bars, candles, line graph and other features.



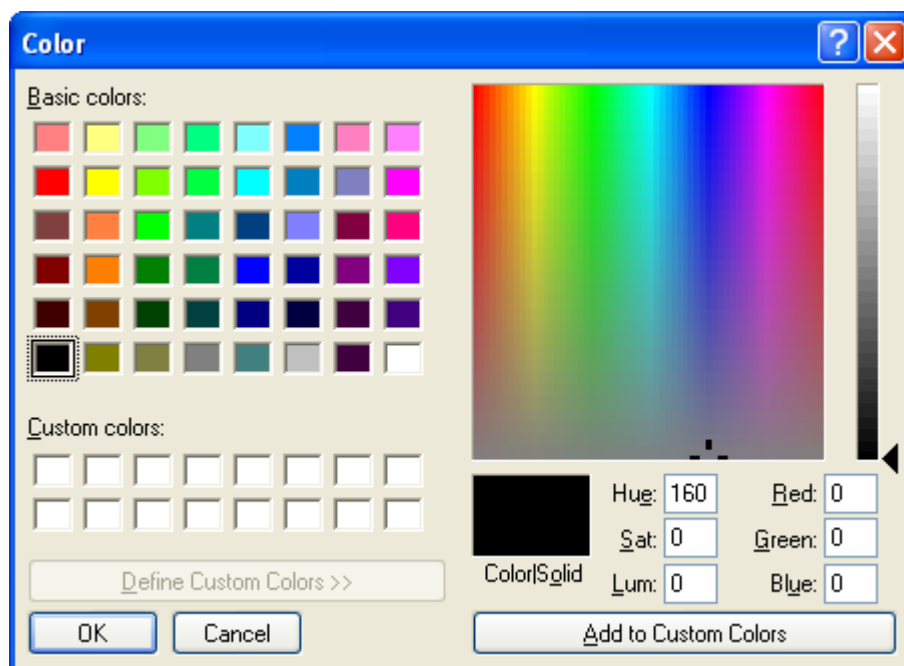
You can use the **Color Scheme** drop-down menu to select a set of pre-defined colour properties. You can choose from three types of commonly used colour schemes.



To select a colour, click on the drop-down icon for the setting you want to change and select a colour from the **Color Selection** menu.

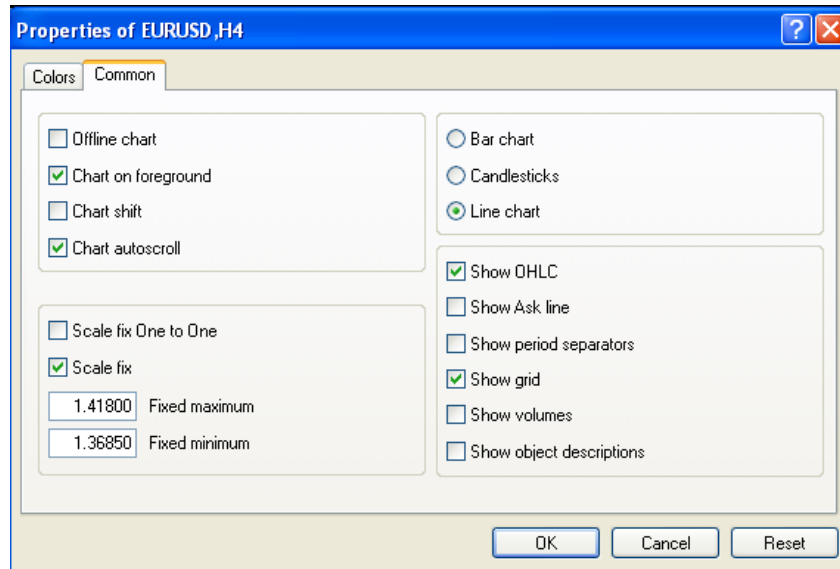


If you don't see a colour you want to add, click **Custom** at the bottom of the Color Selection menu. This displays the Color window. You can enter a colour code or use the colour view to click and drag to mix the colour you want. When you have the colour you want, click **Add to Custom Colors**. You can add up to 16 custom colours. When you are done, click **OK**.



Customizing Viewing Settings on the Chart Window

On the Common tab, you can also specify settings. Some of these may already be selected based on what you chose in the **Charts** toolbar.



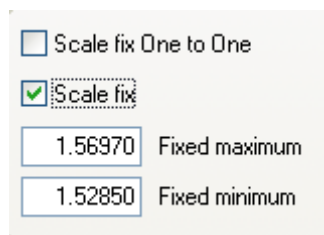
The **Offline Chart** checkbox turns the chart offline; when checked, the chart window stops receiving and drawing price data. The **Offline Chart** checkbox will be checked if you click the **File** menu and select **Open Offline**.

The **Chart on Foreground** checkbox places the chart in the foreground. When this is checked, all drawing objects will look as if they are under the price chart. The **Chart on Foreground** checkbox will be checked if you click the **Charts** menu and select **Foreground Chart**.

The **Chart Shift** checkbox arranges the chart so the latest price moves appear at a certain point in the chart. When active, you can click the marker at the top of the chart window and set it anywhere between the right side of the chart and the middle of the chart. The **Chart Shift** checkbox will be checked if you click the **Charts** menu and select **Chart Shift**.

The **AutoScroll** checkbox updates the chart so that it always scrolls to the right to show the latest price moves. The **AutoScroll** checkbox will be checked if you click the **Charts** menu and select **AutoScroll**.

The **Scale Fix One to One** checkbox sets the chart scale as "one to one"; the size of one point of the vertical axis in pixels is equal to the distance between the bars axes in pixels. When placing lines and other drawing objects or indicators on the chart, many traders prefer to set **Scale Fix One to One** because it creates the most accurate objects or indicators.



The **Scale Fix** checkbox sets the current chart scale to a value that you specify in the **Fixed Maximum** and **Fixed Minimum** text box.

When selected, the **Bar Chart** radio button displays the price moves of the selected instrument as a sequence of bars.

When selected, the **Candlestick Chart** radio button displays the price moves of the selected instrument as a sequence of blocks or candles. Each candle displays the high, low, open and close of the instrument and represents the trading activity for the time frame selected in the chart.

When selected, the **Line Chart** radio button displays the price moves of the selected instrument as a continuous line. The line connects the close prices for the time frame selected in the chart.

The **Show OHLC** checkbox displays or hides price information that appears in the upper left corner of the chart window. You can view the open, high, low and close of the latest bar, candle or line on the screen.

The **Show Ask Line** checkbox displays or hides a horizontal line on the chart that tracks the ask price of the last quote. In MetaTrader, the price moves that you see on the chart track the bid prices of the selected instrument, but when you open a long position or close a short position, the ask price is always used. This line shows traders what the ask price is.

The **Show Period Separators** checkbox displays or hides vertical lines in the chart to mark periods of time, depending on the time frame. For example, if the **Periodicity** drop-down menu in the chart window is set between M1 and H1, MetaTrader will draw vertical lines to separate the days. If **Periodicity** is set to H4, the period separators represent weeks; for D1, the period separators depict months and, for W1 and MN1, they represent years.

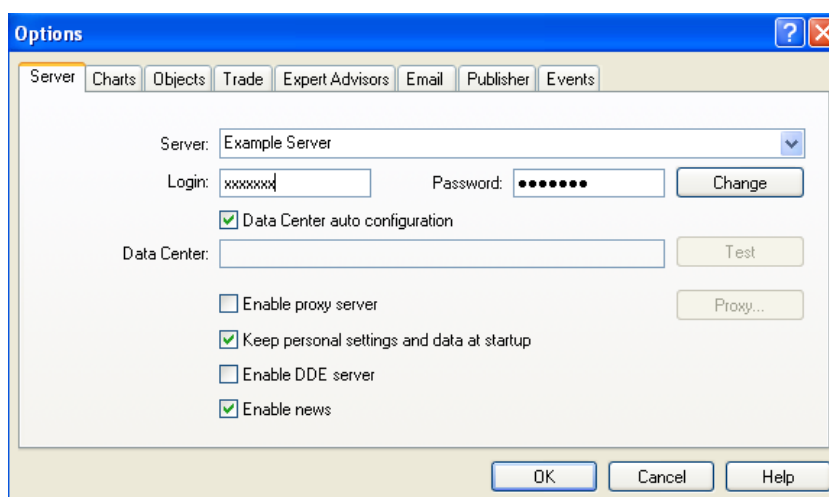
The **Show Grid** checkbox displays or hides vertical and horizontal grid lines in the chart window. The **Show Grid** checkbox will be checked if you click the **Charts** menu and select **Grid**.

The **Show Volumes** checkbox displays or hides the current trading volume for the selected instrument in the chart window. The **Show Volumes** checkbox will be checked if you click the **Charts** menu and select **Volumes**.

The **Show Object Descriptions** checkbox displays or hides the description of objects in the chart window. If this option is enabled and there are descriptions of objects imposed into the chart available, they will be shown directly in the chart.

Specifying MetaTrader User Settings

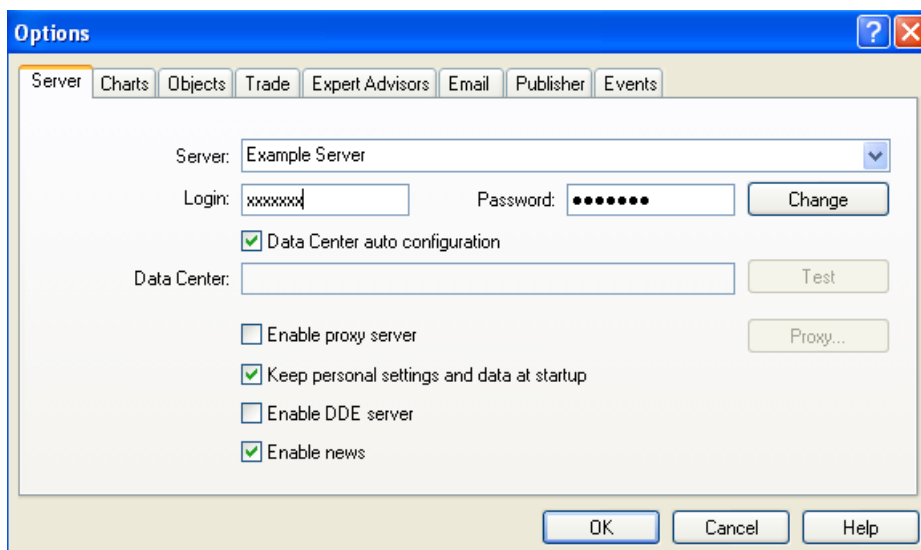
You can customize MetaTrader features and tools using the Options window. You can open this by clicking on the **Tools** menu and selecting **Options**.



The Options window organizes the various settings for MetaTrader on several tabs. In this topic, you'll see how to specify features on each tab.

Viewing MetaTrader Server Settings

The Server tab in the Options window displays the settings that specify how MetaTrader connects to the GFT servers.



The **Server** drop-down menu enables you to select one or more servers. This should already be set with the server IP address and port number you need.

The **Login** and **Password** text boxes are where your login information is stored. If you need to change your password, click **Change**. This opens the Change Password window, where you can enter and confirm your new password.

If your version of MetaTrader is set up to use a data centre, make sure the **Data Center Auto Configuration** checkbox is selected.

The **Keep Personal Settings and Data at Startup** checkbox stores personal information and other data about your trading. If you are using MetaTrader on a shared computer, you can clear your login information by unchecking this checkbox.

The **Enable DDE Server** checkbox displays whether expert advisors and other tools in MetaTrader can use the Dynamic Data Exchange (DDE), a tool on Microsoft Windows operating systems that allows your computer to exchange information with other applications.

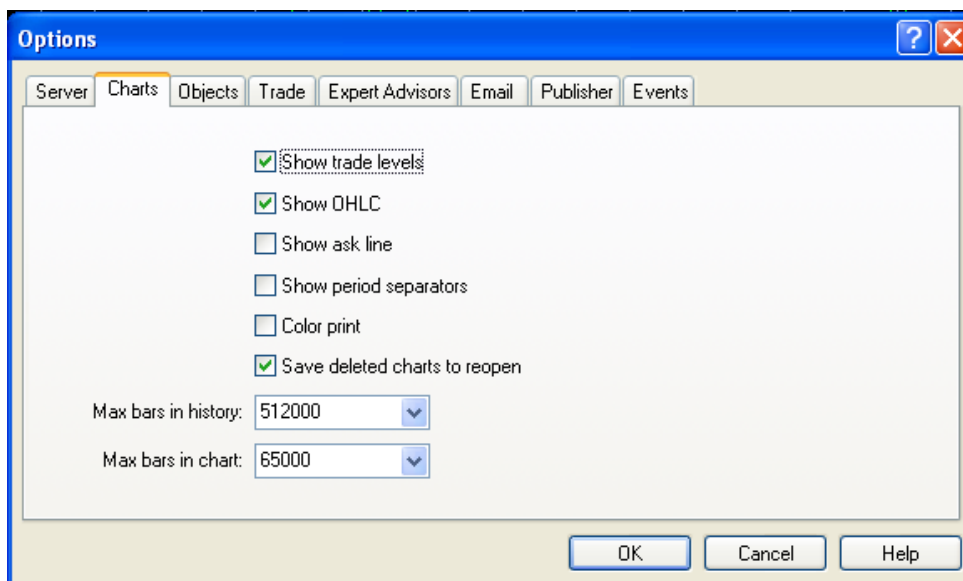
The **Enable News** checkbox displays whether MetaTrader can import news, messages and other information from the server.



Usually, the information that appears on the Server tab is first entered when MetaTrader is installed and you do not need to change it. If you believe you need to change it, contact GFT Technical Support.

Specifying Chart and History Data Properties

The Charts tab in the Options window displays the settings for the chart windows and history data.



The **Show Trade Levels** checkbox displays or hides a horizontal line on the chart that shows where a position was opened or where a Stop Loss or Take Profit order will occur.

The **Show OHLC** checkbox displays or hides price information that appears in the upper left corner of the chart window. You can view the open, high, low and close of the latest bar, candle or line on the screen.

The **Show Ask Line** checkbox displays or hides a horizontal line on the chart that tracks the ask price of the last quote. In MetaTrader, the price moves that you see on the chart track the bid prices of the selected instrument, but when you open a long position or close a short position, the ask price is always used. This line shows traders what the ask price is.

The **Show Period Separators** checkbox displays or hides vertical lines in the chart to mark periods of time, depending on the time frame. For example, if the **Periodicity** drop-down menu in the chart window is set between M1 and H1, MetaTrader will draw vertical lines to separate the days. If **Periodicity** is set to H4, the period separators represent weeks; for D1, the period separators depict months and, for W1 and MN1, they represent years.

The **Color Print** checkbox allows you to print all charts in colour when enabled. If unchecked, the charts appear in black and white.

The **Save Deleted Charts to Reopen** checkbox saves the settings from charts that were deleted or closed. When enabled, any chart can be restored when you click the **File** menu and select **Open Deleted**.

The **Max Bars in History** drop-down menu allows you to specify how many bars, candles or line ticks are saved with the chart history. When you open a chart history, MetaTrader will display only the amount of bars, candles or line ticks as specified in the drop-down menu.

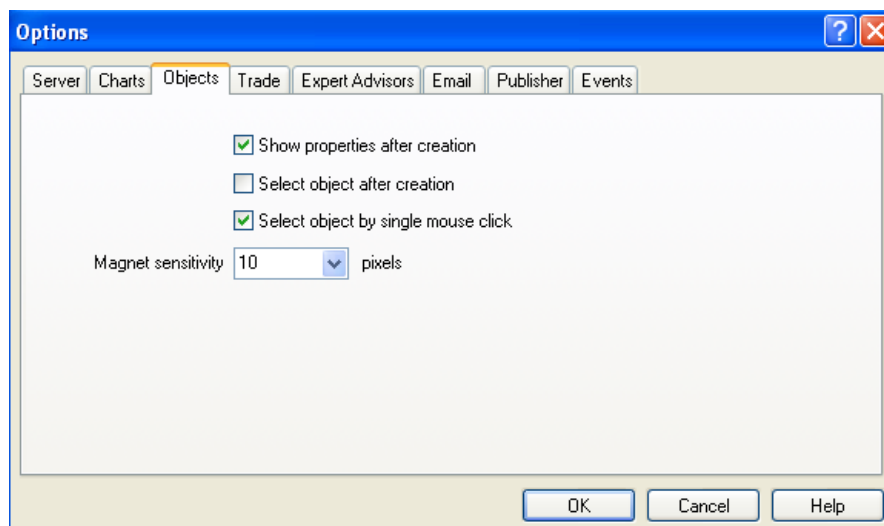
The **Max Bars in Chart** drop-down menu allows you to specify how many bars, candles or line ticks appear in the chart. When you open a chart, MetaTrader will display only the amount of bars, candles or line ticks as specified here. If the chart is set to display the latest price information or is refreshed after being in offline mode, MetaTrader will discard older bars, candles or line ticks as specified in the drop-down menu.



The settings you specify here will be used whenever you open a new chart window. If you change any settings on this tab, it will not affect individual chart settings you may have already specified on the Common tab of the Chart Properties windows.

Customizing Object Properties on the Chart

The Objects tab in the Options window displays the settings for objects, such as line studies, technical indicators and drawing items, that appear in the chart window.



The **Show Properties After Creation** checkbox displays the edit window immediately after you draw an object. That way, you can specify settings for the object. When not checked, MetaTrader configures your drawings with the current settings.

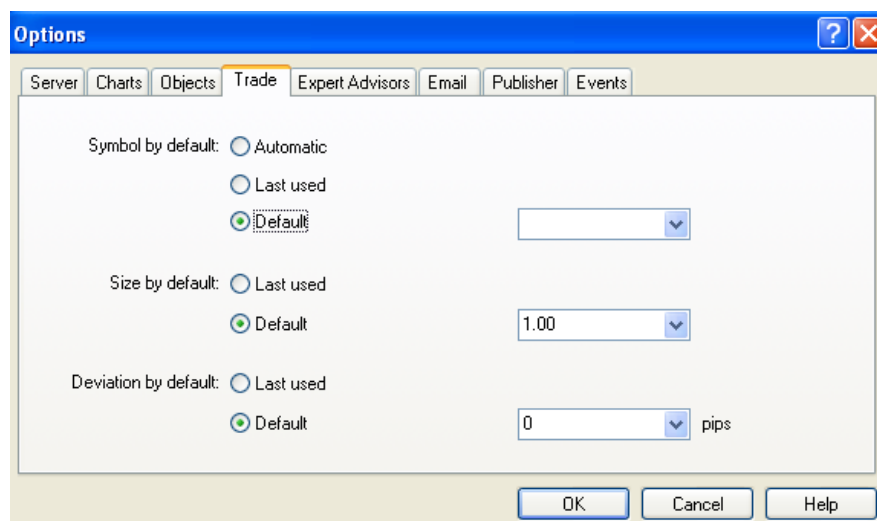
The **Select Objects after Creation** checkbox allows you to specify if you want the object you've just drawn to appear in the chart window. When not checked, the last selected item remains active.

The **Select Objects by a Single Mouse Click** checkbox allows you to click once on an object to select it. When not checked, you need to double click on an object to select it.

The **Magnet Sensitivity** drop-down menu automatically places objects that you've drawn a certain number of pixels from an open, close, high or low price point on the chart. For example, if you select 10, the object on the chart will automatically be anchored within 10 pixels of the nearest open, close, high or low price point on the chart. You can disable this option by selecting zero from the drop-down menu.

Specifying Order Settings

The Trade tab in the Options window displays the settings for opening orders in MetaTrader.



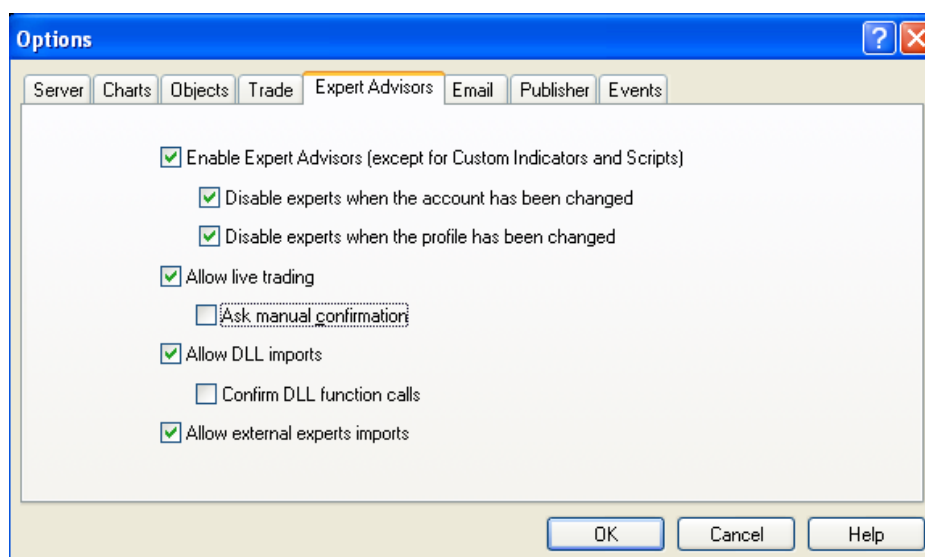
The **Symbol by Default** section specifies which instrument to use when you open the New Order window to place a market order. When **Automatic** is selected, the first instrument in the instrument list is selected in the **Symbol** drop-down menu of the New Order window. When **Last Used** is selected, the last instrument you traded is selected. When **Default** is selected, you can use the drop-down menu beside it to select a specific instrument.

The **Size by Default** section sets the lot size of the trade you want to fill. The number of lots you entered in your last trade is used indefinitely when **Last Used** is selected. If you want to trade using a constant number of lots, you can select **Default** and use the drop-down menu beside it to set the lot size.

The **Deviation by Default** section specifies the number of pips that the price can change when you place an order. If markets are fast moving or become extremely volatile, such as during a news announcement, the price of the market that you're trying to trade may suddenly jump or drop in a moment. If this should occur, MetaTrader 4 fills your order, but at the nearest market price; this may be a multiple pips away from the original price. This is called **slippage**. In this section, you can click **Default** and specify that MetaTrader fill your order as long as the price is within the number of pips above or below the price at which you placed the order. If you select **Last Used**, MetaTrader uses the number of pips at which the last order was placed, if there is slippage.

Customizing Autotrading Settings

The Expert Advisors tab in the Options window displays settings that specify how MetaTrader uses expert advisors, custom indicators, scripts or libraries.



Enable Expert Advisors activates (or deactivates) all expert advisors in MetaTrader. When the checkbox is not checked, the expert advisors will not analyse chart price movements. The **Disable...** checkboxes beneath it allows MetaTrader to automatically deactivate all of your expert advisors if you change your account or your profile.

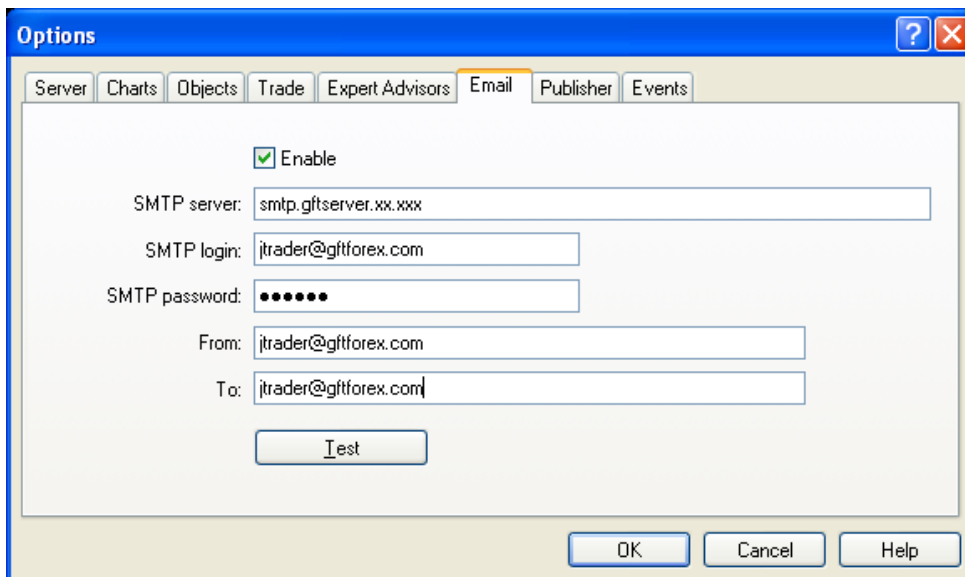
Allow Live Trading enables you to place orders when an expert advisor or script is active. When this is checked, you can also choose to select the **Ask Manual Confirmation** checkbox below it. If your expert advisor or script is about to perform a trade and this checkbox is selected, a notification appears, asking you to confirm the trade.

Allow DLL Imports allows your expert advisors, custom indicators or scripts to automatically access dynamic-link library (.dll) files associated with them. When this is checked, you can also choose to select the **Confirm DLL Function Calls** checkbox below it. If your expert advisor, custom indicator or script is about to access a set of .dll files and this checkbox is selected, a notification appears, asking you to confirm the request.

Allow External Experts Imports enables your expert advisors, custom indicators or scripts to automatically import functions from other MQL4 files. This is a security option that protects you when you are working with expert advisors, custom indicators or scripts from an unknown source.

Entering Email and Server Settings

The Email tab is where you can enter your email and server information.



Options

Server Charts Objects Trade Expert Advisors **Email** Publisher Events

☒ Enable

SMTP server: smtp.gftserver.xx.xxx

SMTP login: jtrader@gftforex.com

SMTP password:

From: jtrader@gftforex.com

To: jtrader@gftforex.com

Test

OK Cancel Help

To begin entering information, click **Enable**.

The **SMTP Server** text box is where you will enter the address of your SMTP server and the port number.

The **SMTP Login** text box and **SMTP Password** text box are where you enter the login and password for the trader server.

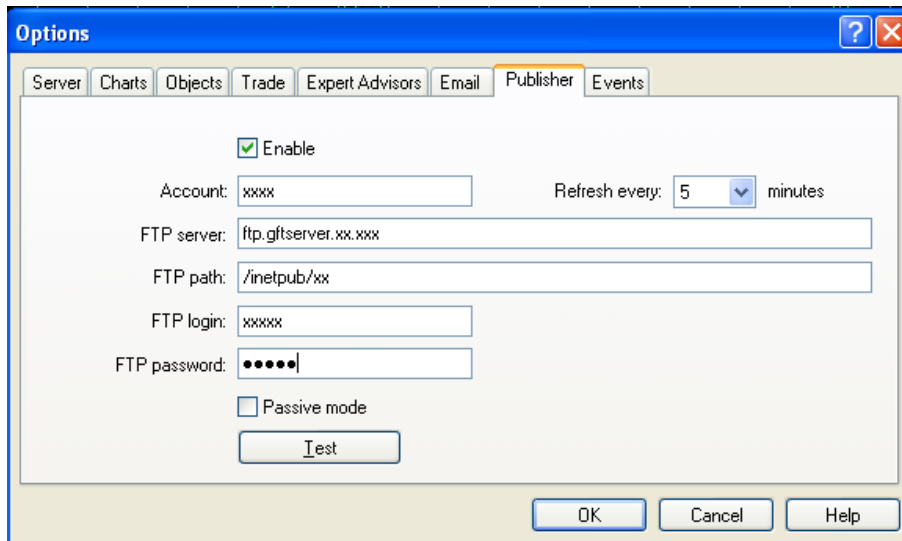
The **From** text box is where you enter your name and the email address on the SMTP; this is the address from which the message will be sent.

The **To** text box is where you enter the name and email address that you want to send the message to.

The **Test** button sends a message using the settings specified. If the test is successful, click **OK**. If not, check the settings and test again.

Entering Reporting Settings

The Publisher tab is where you can publish reports about your account status to the internet automatically.



To begin entering information, click **Enable**.

The **Account** text box is where you'll enter the account number that you want published.

The **Refresh Every** drop-down menu allows you to specify how often MetaTrader sends a report to the server. You can select time frames from five minutes to 1440 minutes.

The **FTP Server** text box is where you'll enter the FTP server address where the report will be sent.

The **FTP Path** text box is where you'll enter the name of the FTP server directory where the report will be placed. You'll need to include the path, including the root directory, in this field.

The **FTP Login** text box and **FTP Password** text box are where you enter the login and password for the FTP server.

When **Enable** is selected, the **Passive Mode** checkbox becomes active. In active mode, the server sets up a connection with MetaTrader to transfer data. In passive mode, MetaTrader establishes a connection with the server.

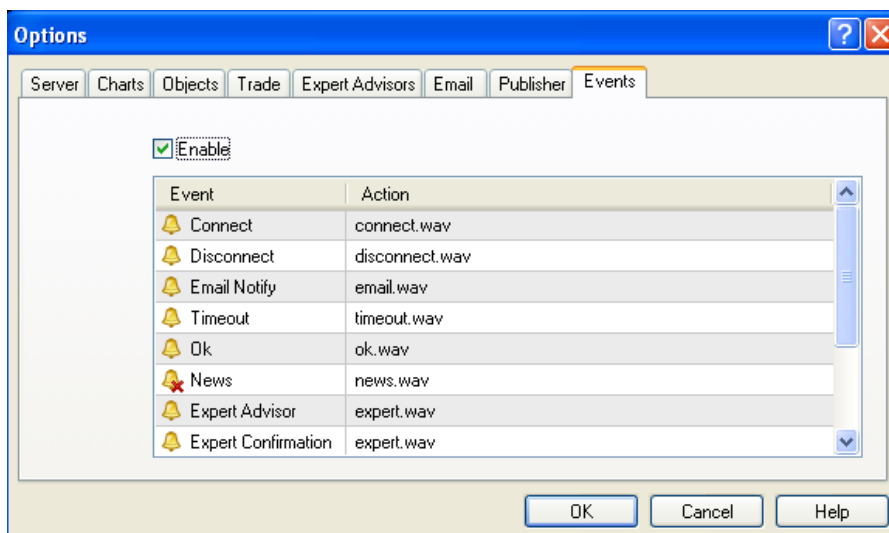
The **Test** button posts a report to the server using the settings specified. If the test is successful, click **OK**. If not, check the settings and test again.



MetaTrader will only publish reports for active accounts. If the account number entered does not match with the one on file, MetaTrader will not publish the report.

Customizing Sounds for MetaTrader

The Events tab displays a list of MetaTrader actions that play a sound file when active.



To begin entering information, click **Enable**.

You can double-click in the Event column to turn on or off a sound. 🔔 means an alarm will sound. 🔔 means the alarm was turned off.

In the Action column, you can double-click to display a drop-down menu of possible sounds. Simply click on the new .wav file to select the sound.

If you have other sound files on your computer, you can double-click in the Action column and select **Choose Other...** from the drop-down menu. This opens the Open window and you can navigate to the folder where your sound files are stored. When you find one, click on it and select **Open**.

If you want to use sounds, you should choose a different sound file for each event. You can view what each event does in the list below:

Connect signals that MetaTrader has successfully connected to the server.

Disconnect indicates that the connection to the server has been lost.

Email Notify signals that a new email has been received in the MetaTrader mailbox. You can view it on the Mailbox tab of the Terminal window.

Timeout indicates that the time range for performing a specific trade operation has ended. For instance, you might hear this sound if you place an order in an extremely volatile market and your order was not placed.

OK signals that the trade operation you just executed was successfully performed.

News indicates that MetaTrader has received a new news story. You can view it in the News tab of the Terminal window.

Expert Advisor signals that an expert advisor has performed a trade operation.

Expert Confirmation indicates that a manual confirmation is open and needs your confirmation. When the Ask Manual Confirmation is selected in the Expert Advisors tab, MetaTrader displays a notification, asking you to confirm the trade when your expert advisor or script is about to perform a trade.

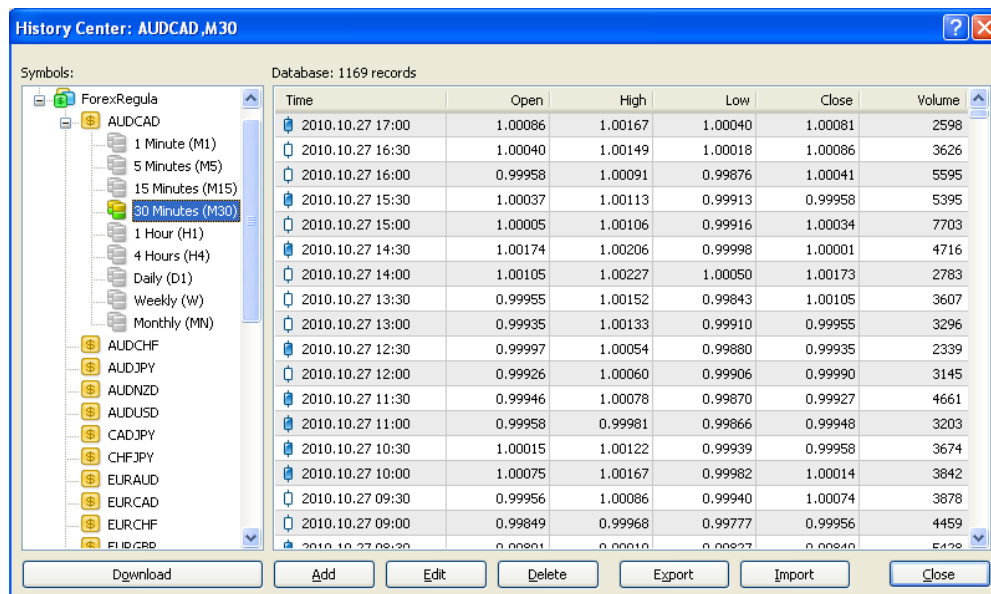
Alert signals that market conditions have hit the alert you specified with your expert advisor.

Requote indicates that the price of the instrument you placed the order for changed in the middle of the trade operation.

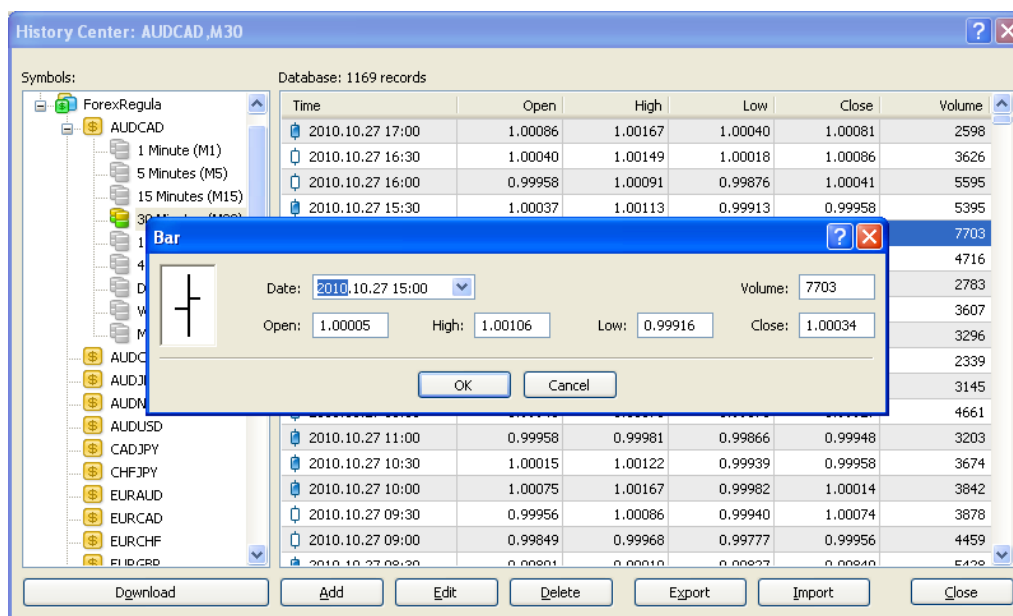
Trailing Stop signals that one of your trailing stop orders has been triggered.

Accessing the History Center

MetaTrader stores historical data for all symbols and time frames in its server. If you need to research the price moves of an instrument over time or want to test how an expert advisor strategy would perform on a particular event, you can access this historical data by clicking the **Tools** menu in the menu bar and selecting **History Center**.



You can download quotes for instruments from 1999 to present by selecting the instrument and the timeframe you want from the list and clicking **Download**.



If you need to add a time point, you can click **Add**. This opens the Bar window, where you can enter the time and modify the open, high, low or close.

You can also modify a time point by selecting a time point and clicking **Edit** or remove a time point by selecting a time point and clicking **Delete**.

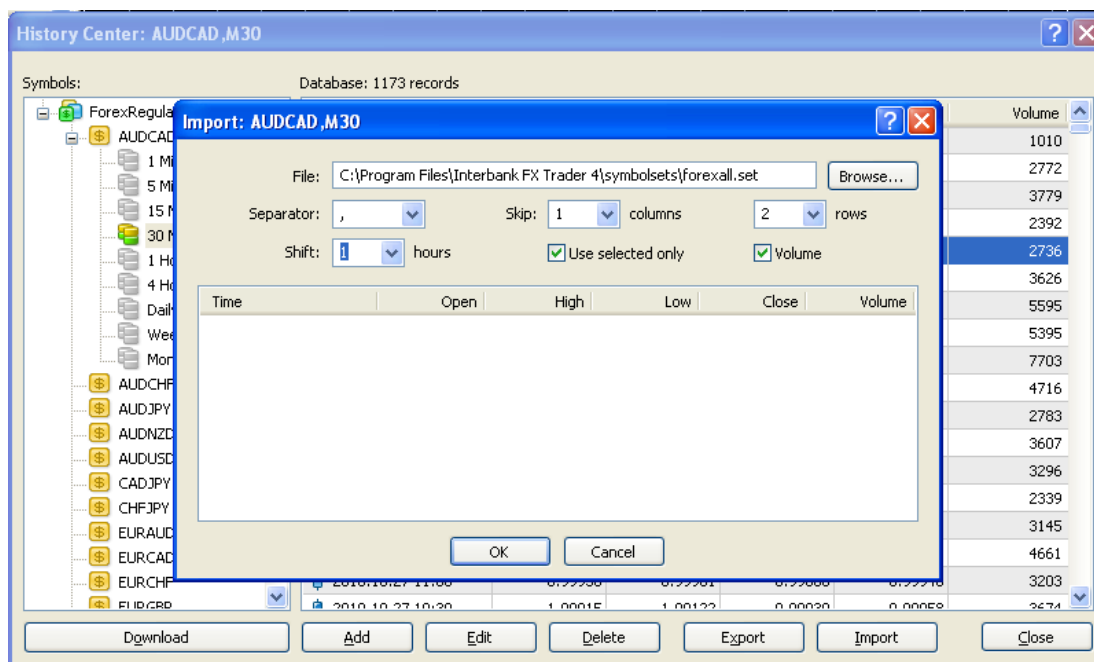


Data that appears in the History Center is downloaded from MetaQuotes servers, even though your account is available through GFT. Data that appears in the History Center can vary from the historical information stored on GFT's trade server.



Because the chart history is stored on the server, it may take MetaTrader a few moments to generate the historical data.

You can save data from the History Center as an external .csv, .prn or .htm file by clicking **Export**. This opens the Save As window. Here, you can navigate to the folder you want, select a file type, add a file name and click **Save**.



If you already have historical chart data from another source, you can click **Import**. This displays the import window. Here, you can select a.csv, .prn, .txt, .htm or .hst file by clicking **Browse** and navigating to the file.

Once selected, you can use:

- The **Separator** drop-down menu to specify what kind of separator to use. You can select either a comma, semicolon, space or tab.
- The **Skip** drop-down menus to select how many columns or rows MetaTrader should use when importing.
- The **Shift** drop-down menu if you need to shift data by several hours in time.
- The **Selected Only** checkbox to import only data that is selected in the history. You can select data by clicking and pressing CTRL or SHIFT.
- The **Volumes** checkbox to enable or disable MetaTrader's ability to import volume.



When importing a file, the historical data should be written as follows (another separator can be used instead of a space):

- YYYY.MM.DD HH:MM O H L C V
- YYYY-MM-DD HH:MM O H L C V
- YYYY/MM/DD HH:MM O H L C V
- DD.MM.YYYY HH:MM O H L C V
- DD-MM-YYYY HH:MM O H L C V
- DD/MM/YYYY HH:MM O H L C V

.hst files should also include both the following header:

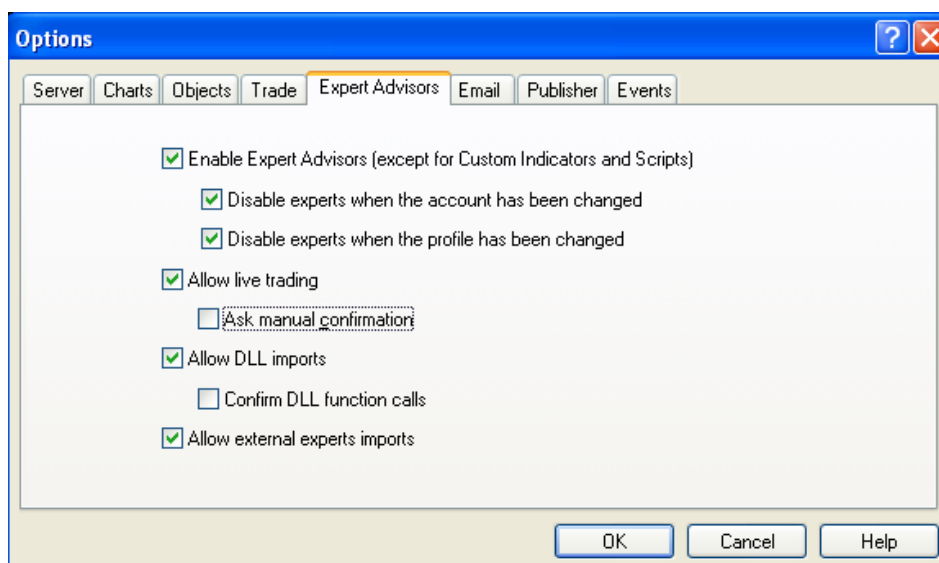
```
struct HistoryHeader
{
    int    version;           // database version
    char   copyright[64];    // copyright info
    char   symbol[12];       // symbol name
    int    period;           // symbol timeframe
    int    digits;           // the amount of digits after decimal point in the symbol
    time_t timesign;         // timesign of the database creation
    time_t last_sync;        // the last synchronization time
    int    unused[13];       // to be used in future
};
```

And the following bars array (with single-byte justification)

```
#pragma pack(push,1)
//---- standard representation of the quote in the database
struct RateInfo
{
    time_t      ctm;           // current time in seconds
    double      open;
    double      low;
    double      high;
    double      close;
    double      vol;
};
#pragma pack(pop)
```

Exporting Quotes

You can export current quotes to other programs using the Dynamic Data Exchange (DDE), a tool on Microsoft Windows operating systems that allows your computer to exchange information with other applications.



You'll need to make sure that **Enable DDE Server** is checked on the Server tab in the Options window. See *Customizing Autotrading Settings* in this section for more information.

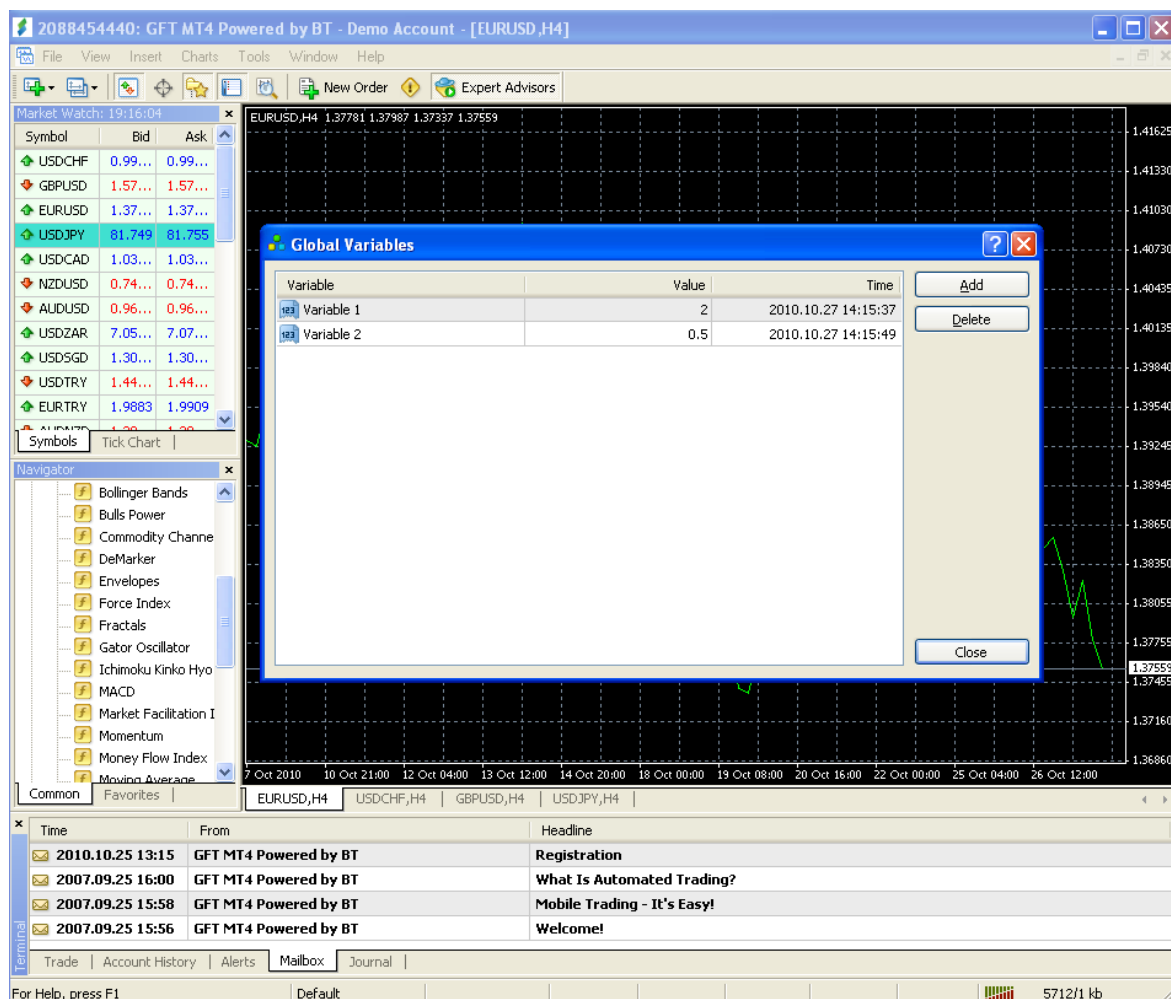


History Data cannot be exported through the DDE. Only current quotes can be exported.

Managing Global Variables

As you trade, you may have more than one expert advisor making and placing trades at one time. In order for these to work at times, the expert advisors need to exchange information through global variables. You can add and manage

global variables by clicking **Tools** in the menu bar and selecting **Global Variables** in the drop-down menu. This opens the Global Variables window.



Click **Add** to add a variable. Double-click in each column to specify the variable name and its value. To remove a variable, select it and click **Delete**.

Using the Advanced Security System

MetaTrader uses 128-bit key encryption when trading. If you work with an organization that needs additional security, MetaTrader also offers an Advanced Security mode that provides public and private keys.

If you are using the Advanced Security system, but need to place a trade at another computer, you will need to transfer the keys from your computer to the one you are trading on. The .key files are stored in the Config folder in the MetaTrader folder.



If the Advanced Security system key has been lost or damaged, contact GFT Technical Support.

Appendix A: MetaTrader Hot Keys

You can access tools and features in MetaTrader using the hot keys. These allow you to use the keys on your computer keyboard to open or close tools and features without navigating through menus or clicking in the toolbar.

| Keystroke | Action |
|--------------------------|--|
| Page Up | Scrolls the chart to the left. |
| Page Down | Scrolls the chart to the right. |
| Home | Moves the chart to the oldest point in the chart history. |
| End | Moves the chart to the most recent chart moves in the chart history. |
| - | Zooms out on the chart. |
| + | Zooms in on the chart. |
| Delete | Deletes the selected drawing and technical objects from the chart. |
| Backspace | Deletes the last drawing or technical object created from the chart. |
| Enter | Opens or closes the Fast Navigation window in the chart. |
| Esc | Closes any windows. |
| F1 | Opens or closes the Online Help file. |
| F2 | Opens or closes the History Center window. |
| F3 | Opens or closes the Global Variables window. |
| F4 | Opens or closes the MetaEditor application. |
| F8 | Opens or closes the Chart Properties window. |
| F9 | Opens or closes the New Order window. |
| F10 | Opens or closes the Popup Prices window. |
| F11 | Opens or closes the chart window in full-screen mode. |
| F12 | Moves the chart by one bar to the left. |
| SHIFT+F12 | Moves the chart by one bar to the right. |
| SHIFT+F5 | Switches to the previous profile. |
| ALT+1 | Changes the chart type to bar chart. |
| ALT+2 | Changes the chart type to candlesticks chart. |
| ALT+3 | Changes the chart type to line chart. |
| ALT+A | Copies all test/optimization results to the Clipboard. |
| ALT+W | Opens the Windows list. If you have more than one chart window open, you can switch to a particular chart by selecting the chart you want and clicking Activate . |
| ALT+F4 | Closes MetaTrader. |
| ALT+Backspace, CTRL+Z | Undeletes the last deleted drawing or analytical object. |
| CTRL+A | Resizes the height of all indicator windows in a chart so that they're the same size. |
| CTRL+B | Opens the Objects List window. You need to have at least one object drawn in a specific chart window. |
| CTRL+C, CTRL+Insert | Copies the select drawing or analytical object to the chart. |
| CTRL+D | Opens or closes the Data window. |
| CTRL+E | Activates or deactivates the Expert Advisors button. |
| CTRL+F | Activates or deactivates the Crosshair cursor in the chart window. |
| CTRL+G | Activates or deactivates the grid in the chart window. |
| | |

| Keystroke | Action |
|--------------------|--|
| CTRL+H | Shows or hides the open, close, high or low prices in the upper-right corner of the chart window. |
| CTRL+I | Opens the Indicators List window. You need to have at least one indicator open in a specific chart window. |
| CTRL+L | Displays or hides the volumes in the chart window. |
| CTRL+M | Opens or closes the Market Watch window. |
| CTRL+N | Opens or closes the Navigator window. |
| CTRL+O | Opens the Setup window. |
| CTRL+P | Prints the current chart window. |
| CTRL+R | Opens or closes the Strategy Tester window. |
| CTRL+S | Saves the chart as a .csv, .prn or .htm file. |
| CTRL+T | Opens or closes the Terminal window. |
| CTRL+W, CTRL+F4 | Closes the currently displayed chart window. |
| CTRL+Y | Displays or hides the period separators in the chart window. |
| CTRL+F5 | Switches to the next chart profile. |
| CTRL+F6 | Moves to the next chart window when more than one chart is open. |
| CTRL+F9 | Opens the Terminal window. |

Finding Further Information

We encourage you to learn more about how GFT can help you maximize your trading potential. Visit www.gftuk.com or call 0800 358 0864 or +44 (0) 20 7170 0770 to speak with a GFT specialist. You can also access Live Chat on our website to text chat with us as well.

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