FxPro MT4 Backtest

A backtesting guide for MetaTrader 4
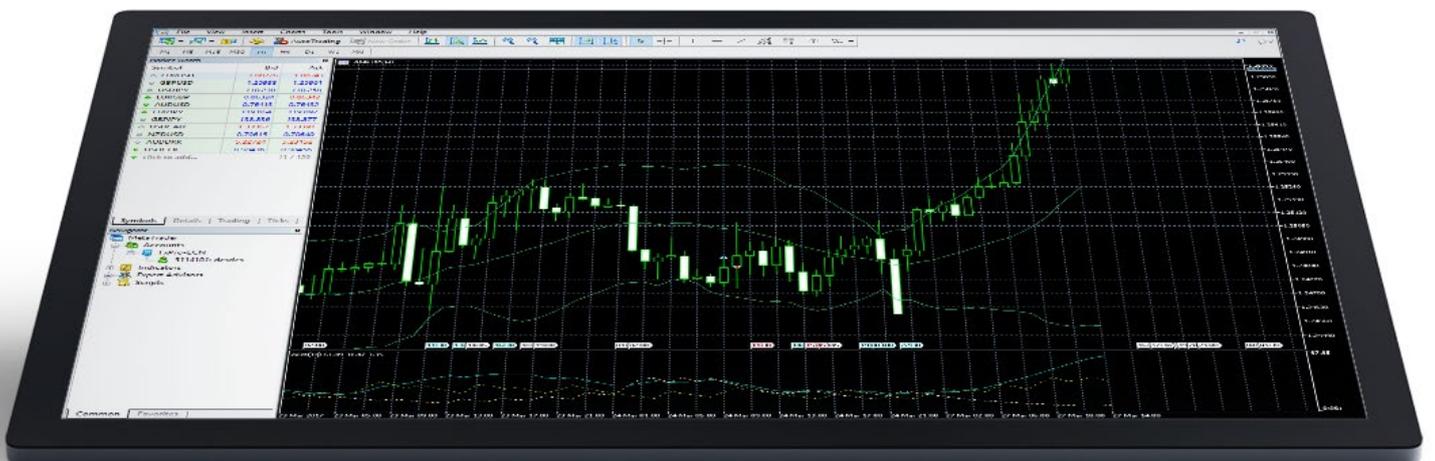
User Guide

# Disclaimer

The backtesting functionality of the Metatrader 4 platform allows a trader to check how an EA (Expert Advisor) would have traded in the past. It allows to test how dierent indicator inputs and other EA parameters may aect protability as well as allowing developers to test for any errors in the logic of their strategy.

Backtesting can save a lot of time, since it allows a trader to see trade results quickly, without having to test it real-time on a demo to gain results. It can also be used as a research tool, allowing a strategy developer to check how a given setup will work in a range market as opposed to trending market as well other market conditions.

The following guide will take you through the main steps in backtesting a strategy, as well as some of the common problems encountered.

Enable Strategy Tester

If the Strategy Tester does not appear on the screen, you can enable it by selecting View → Strategy Tester or simply click **Ctrl+R**
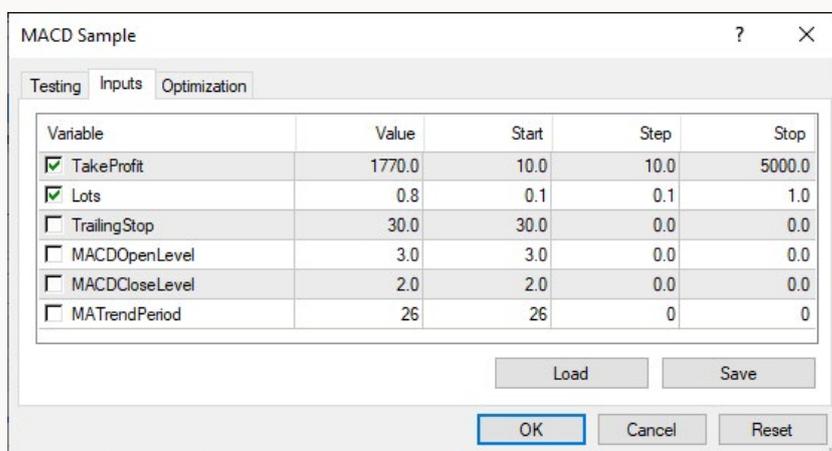
the Strategy Tester window should appear similar to this:
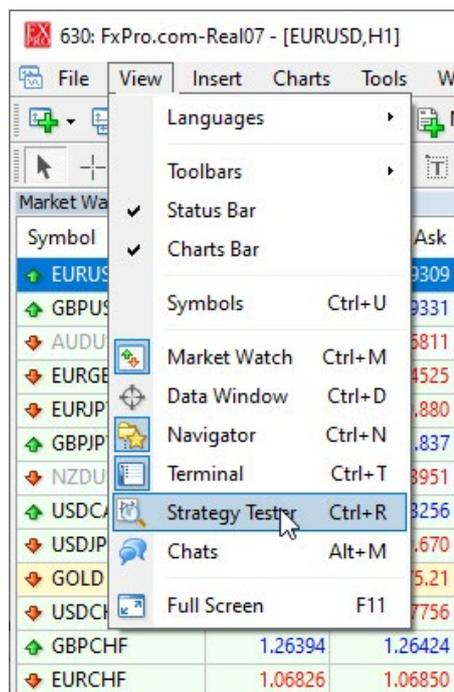
Set Inputs

To set the backtest input values for the EA, click on Expert properties → Inputs tab.

Here you can set the value for each of the EA inputs or simply use the default ones. Only the **'Values'** column will be used and other columns are used for optimization and are irrelevant for the backtest.
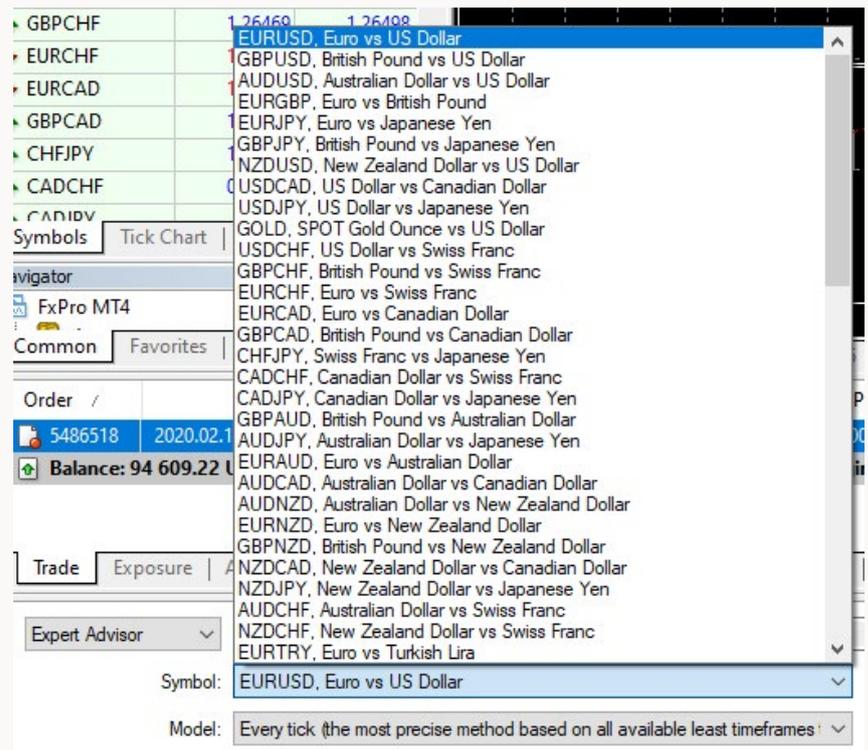

Select the Expert Advisor from the list

If the Expert Advisor that you wish to select is not in the list, make sure that its placed in the right folder eg: **C:\Program Files\FxPro - Metatrader 4\experts**

Select Symbol/
Currency pair

You can specify the symbol that you wish to be used for the backtest by selecting it from the drop down menu

Select data generation model

Open prices only method will check the prices and react to them only at the open of each bar. **'Every tick'** method will do so at every tick. Please note that MT4 does not use historical tick data and instead simulates tick based on 1 minute bars.

For more details about different data models used during testing see: http://articles.mql4.com/70
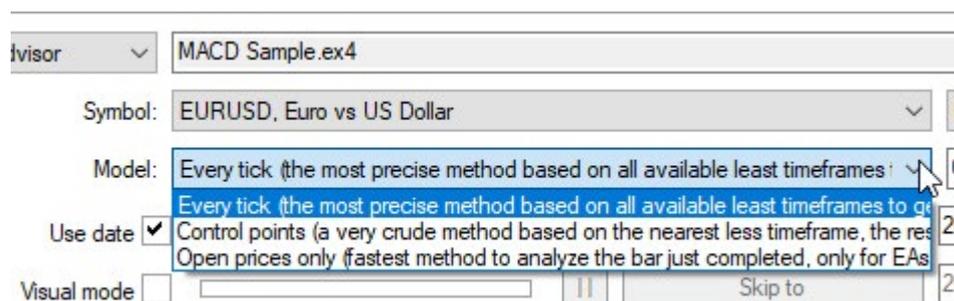
Time Period restrictions

If you want to restrict the EA to backtest over a specific time period, select '**Use date**'.

| Use date ☑ | From: 2019.10.01 ▦▾ | To: 2020.02.10 ▦▾ |
| Visual mode ☐ | ⬜⬜⬜⬜ ‖ Skip to | 2020.02.10 ▦▾ |

Now you can press **Start** (bottom right corner) and you should see the backtest start.

Viewing results

If your backtest was successful , you can view all the results in the **results** tab.

#	Time	Type	Order	Size	Price	S / L	T / P	Profit	Balance
268	2019.10.08 17:39	modify	3	0.80	1.09730	1.09569	1.07960		
269	2019.10.08 17:43	s/l	3	0.80	1.09569	1.09569	1.07960	128.80	10088.62
270	2019.10.09 21:38	sell	4	0.80	1.09719		1.07949		
271	2019.10.09 23:39	modify	4	0.80	1.09719	1.09718	1.07949		
272	2019.10.09 23:39	modify	4	0.80	1.09719	1.09717	1.07949		
273	2019.10.09 23:39	modify	4	0.80	1.09719	1.09716	1.07949		
274	2019.10.09 23:54	s/l	4	0.80	1.09716	1.09716	1.07949	2.40	10091.02
275	2019.10.15 00:02	buy	5	0.80	1.10287		1.12057		

Settings | Optimization Results | Optimization Graph | Results | Graph | Report | Journal |

For Help, press F1   Default

See the balance graph in the **Graph** tab

Balance / Equity / Every tick (the most precise method based on all available least timeframes to generate each tick) / 68.18%

Settings | Optimization Results | Optimization Graph | Results | Graph | Report | Journal |

For Help, press F1   Default
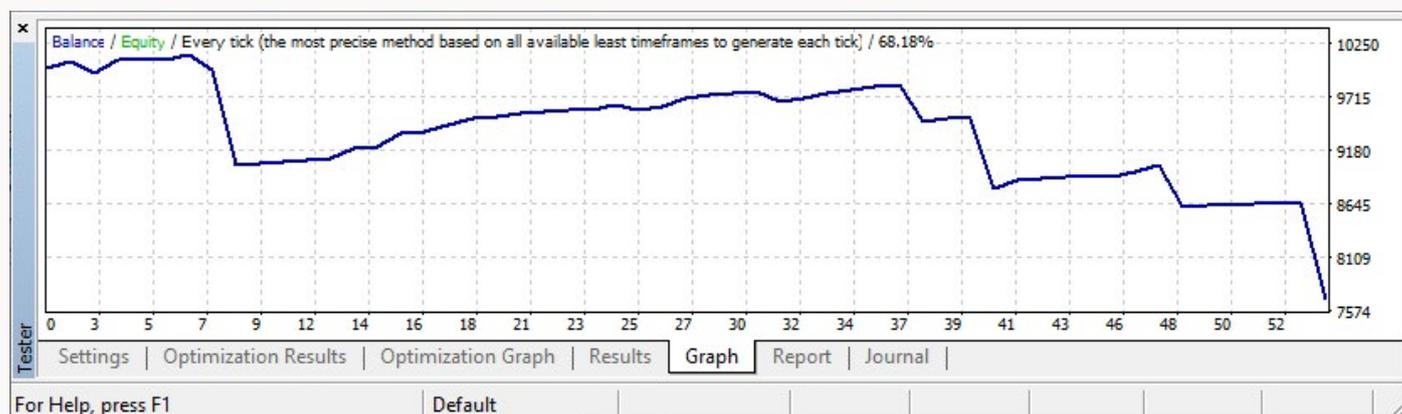
You can view the backtest summary report in the Report tab

Bars in test	3193	Ticks modelled	3551569	Modelling quality	68.18%
Mismatched charts err...	1				
Initial deposit	10000.00			Spread	Current (15)
Total net profit	-2303.74	Gross profit	1534.20	Gross loss	-3837.94
Profit factor	0.40	Expected payoff	-42.66		
Absolute drawdown	2327.74	Maximal drawdown	2491.55 (24.5...	Relative drawdown	24.51% (2491.55)
Total trades	54	Short positions (won %)	31 (90.32%)	Long positions (won %)	23 (73.91%)
		Profit trades (% of total)	45 (83.33%)	Loss trades (% of total)	9 (16.67%)
	Largest	profit trade	129.60	loss trade	-979.56
	Average	profit trade	34.09	loss trade	-426.44

Settings | Optimization Results | Optimization Graph | Results | Graph | **Report** | Journal

For Help, press F1   Default

Here you can see the total net profit that the EA generated during the backtests, as well as other key performance metrics such as '**Profit factor**', '**Drawdown**' and '**win percentage**'. For more information about what all of these numbers mean, please refer to the following article: http://articles.mql4.com/83

Backtest chart

To view the historical trades plotted on the chart, simply click the '**Open Chart**' button on the right hand side.

A new chart window will be opened and trades will be drawn on the chart you can scroll back and forth to review the historical trades of the EA.

Backtest troubleshooting

If the backtest does not show any trades or does not happen at all, click on the Journal tab to check for any errors:

If click the **'Start'** button and backtest does not start, the most likely issue is that there is no data in the history centre

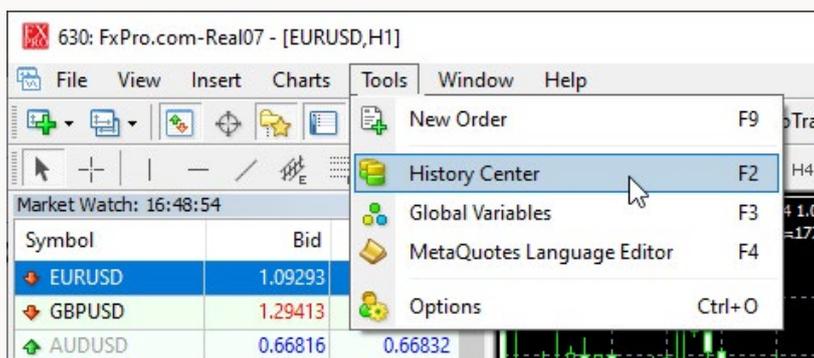In this case you will need to either **Download** or **import the data**

To download historical data go to Tools → History Centre

Select the Symbol that you wish to backtest for and the download dialog box will appear.

Select the timeframe that you wish to backtest by double-clicking on it Then simply click **Download**

If during your backtest you get 'Order Send error 130' or 'Order Modify error 130', the take profit or stop loss is too close to the opening price of the trade or to the current price.

If you see an error similar to this one: there must be an error in the code of the EA and it cannot compile. You will not be able to backtest the EA until the error is resolved.

If you see an error similar to this one: the EA needs a custom indicator to be present in order for it to work. Please put the relevant indicator into the 'indicators' subfolder of the 'experts' folder where your EA is.

Contact us today

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