

Introduction

Create an Expert Advisor to Open Pending Trades at a specific Date + Time, based on certain simple parameters.

Requirements

The idea is rather simple: To place Pending Buy and Sell Trades at a given point in time on a specific date.

#	Requirement Description	Example
1	Choose a Currency Pair	EUR/USD
2	Choose a Date and Time. Time in 24 hour format hh:mm:ss. Both are based on the local time of my computer	Date: 10/March/2023 Time: 19:08:09 Assume the price at this point is 1.06020
3	No of ticks +/- the price at the date time above	+50 ticks, -50 ticks
4	The opening price for each Pending Buy Trade would be the price of the trade at the time chosen + the number of Pips entered in the parameter file. If required I could choose to open 1,2,3...n exactly similar trades of the same type at that point in time	If the price at 19:08:09 is 1.06020, then the place order price for the buy deal is 1.06020 + 50 ticks (5 pips) = 1.06070.
5	Similarly Pending Sell Trades would be opened based on the price of the trade at - the number of Pips entered in the parameter file. If required I could choose to open 1,2,3...n exactly similar trades of the same type at that point in time	The place order price for the sell deal is 1.06020 - 50 ticks (5 pips) = 1.05970
6	Depending on the market movement the trades from points 3 and 4 above would get opened.	MT5 will do this if the place orders are placed based on the above criteria
7	Based on the % Profit and %Stop Loss or Profit Amount (actual amount in USD), Stop Loss Amount (actual amount in USD), the trade would get closed.	Example: If % profit = 70% or the amount of USD 100 has been reached MT5 should close the deal. Similarly with the Stop Loss. <i>In both cases of TP and SL, I should be able to choose either a % profit or amount and not both</i>
8	Trailing Stop Loss % or Ticks based on the parameter file will need to be placed. This will come into picture only after a Trade Percentage Profit is reached. In other words: Choose a percentage profit amount. If the %profit has been reached, the Trailing Stop Loss, either as a percentage of amount will come into effect.	Example of a Profit 50% has been reached then the TSL of 2% or 5 ticks comes into effect. <i>Again, I should be able to choose either a % profit or amount and not both</i>

Sample Parameter Settings:

A sample parameter file is below for your understanding:

#	Parameter	Variable 1	Variable 2	Variable 3	Variable 4	Variable 5	Variable 6	Description
1	Currency pair	EUR/USD	EUR/USD	GBP/USD	CAD/USD	EUR/USD	EUR/USD	Currency Pair for the deal
2	Date of Execution	7-Mar-23	7-Mar-23	8-Mar-23	9-Mar-23	10-Mar-23	14-Mar-23	Date of Opening the trade based on my local computer
3	Time of Execution	10:59:59	12:00:05	12:59:59	13:59:59	14:59:59	15:59:59	HH:MM:SS in 24 hour format. At what time on my computer this scenario will be executed and will pick up the market price of the currency pair
4	Ticks for Pending Buy Trade Set	+ 50	+10	+ 25	+ 0	+ 50	+ 55	If the market price at 10:59:59 is 1.06020, then the Pending Buy Order for the deal is 1.06020 + 50 ticks (5 pips) = 1.06070 as in variable 1. Similar calculation for the other variables
5	Ticks for Pending Sell Trade Set	- 50	- 5	- 20	- 15	- 50	- 55	If the market price at 10:59:59 is 1.06020, then the Pending Sell Order for the deal is 1.06020 - 50 ticks (5 pips) = 1.05970 as in variable 1. Similar calculation for the other variables
6	No of similar Pending Buy Trades to open	3	2	1	2	0	2	no of Buy deals to create. In this case it will create 3 deals with price 1.06070 as in variable 1. Similar calculation for the other variables
7	No of similar Pending Sell Trades to open	3	2	1	2	3	0	no of deals to create. In this case it will create 3 deals with price 1.05970 as in variable 1. Similar calculation for the other variables
8	Lot Size Amount	100	10	0.1	10	100	100	Amount of USD being put up for the deal
9	Lot Size of Account Balance	3%	3%	3%	3%	3%	3%	Will take a percentage of the Total Account Balance. <i>I should be able to enter Lot Size as a percentage (#8) or an amount (#9), not both</i>
10	Leverage	30	30	30	30	30	30	Leverage multiplier
11	Stop loss %	10%	10%	10%	10%	10%	10%	% of each trade amount, in this case 10 USD as in variable 1. the same calculation for the other variables
12	Stop Loss Amount	50 USD	60 USD	100 USD	25 USD	200 USD	75 USD	Amount of USD as the Stop Loss. I should be able to Stop Loss as a percentage or an amount, not both
13	Take Profit %	50%	70%	30%	30%	30%	30%	% of each trade amount, in this case 50 USD as in variable 1. the same calculation for the other variables
14	Take Profit Amount	100 USD	200 USD	150 USD	300 USD	750 USD	200 USD	Amount of USD as Take Profit. <i>I should be able to enter Take Profit as a percentage (#13) or an amount (#14), not both</i>
15	Trailing Stop Loss: Profit %	70%	80%	30%	25%	90%	15%	Trailing Stop Loss will kick in if the % profit in the deal has been reached
16	Trailing Stop Loss %	3%	2%	3%	2%	3%	3%	Can be expressed in percentage of the Profit reached
17	Trailing Stop Loss Ticks	10	15	10	15	10	15	Can be expressed in ticks if the percentage profit in #13 has been reached. <i>I should be able to enter Trailing Stop Loss as a percentage (#16) or an amount (#17), not both</i>

Note: If you feel there are additional parameters / settings that need to be added from a programming point of view, please do so and we can discuss this.

At the end of the assignment, I will need the complete source code for the assignment above that can be:

- fully compiled without errors and warnings
- and executed.

- Thank You -

----- End of Specification Document -----