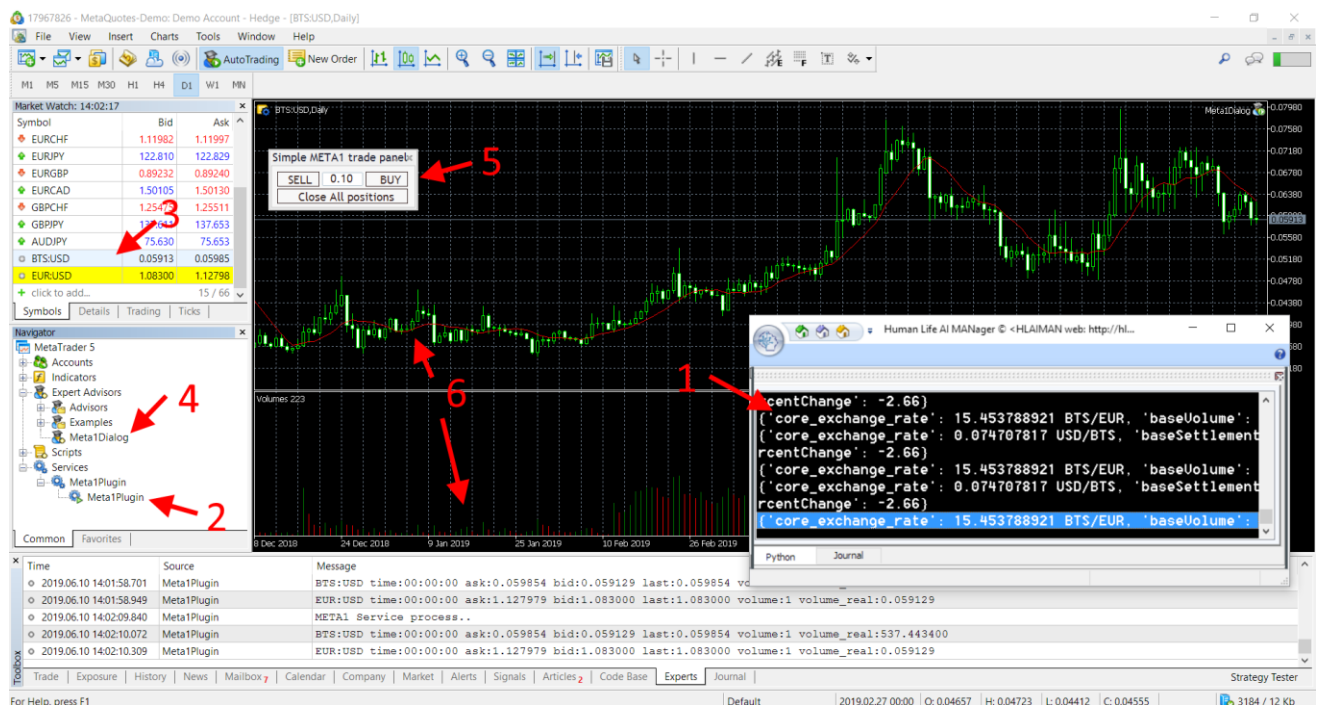


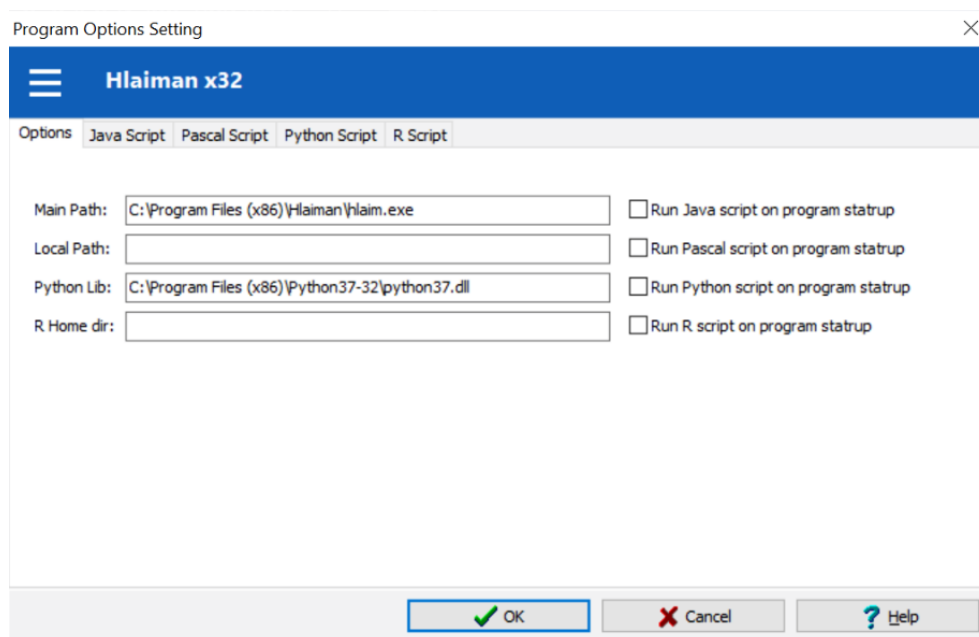
The diagram illustrates the integration of four components: MetaTrader 5, HLA MAN, Python, and META1. MetaTrader 5 is on the left, HLA MAN is in the center, Python is to the right of HLA MAN, and META1 is on the far right. Blue arrows indicate a flow from MetaTrader 5 to HLA MAN, from Python to HLA MAN, and from HLA MAN to META1. Green arrows indicate a flow from HLA MAN to MetaTrader 5 and from HLA MAN to Python.

## Trade commands

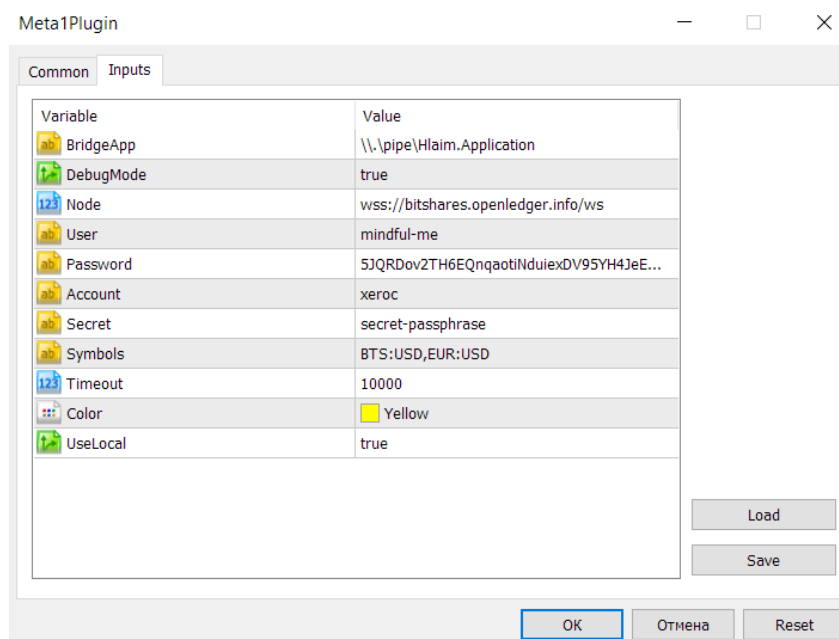


- ### Parameters of the plugin.

In the Hlaiman core parameters can be selected path to the python library. This library file included in the public python distributive package and can be integrated into the final distributive of the plugin.

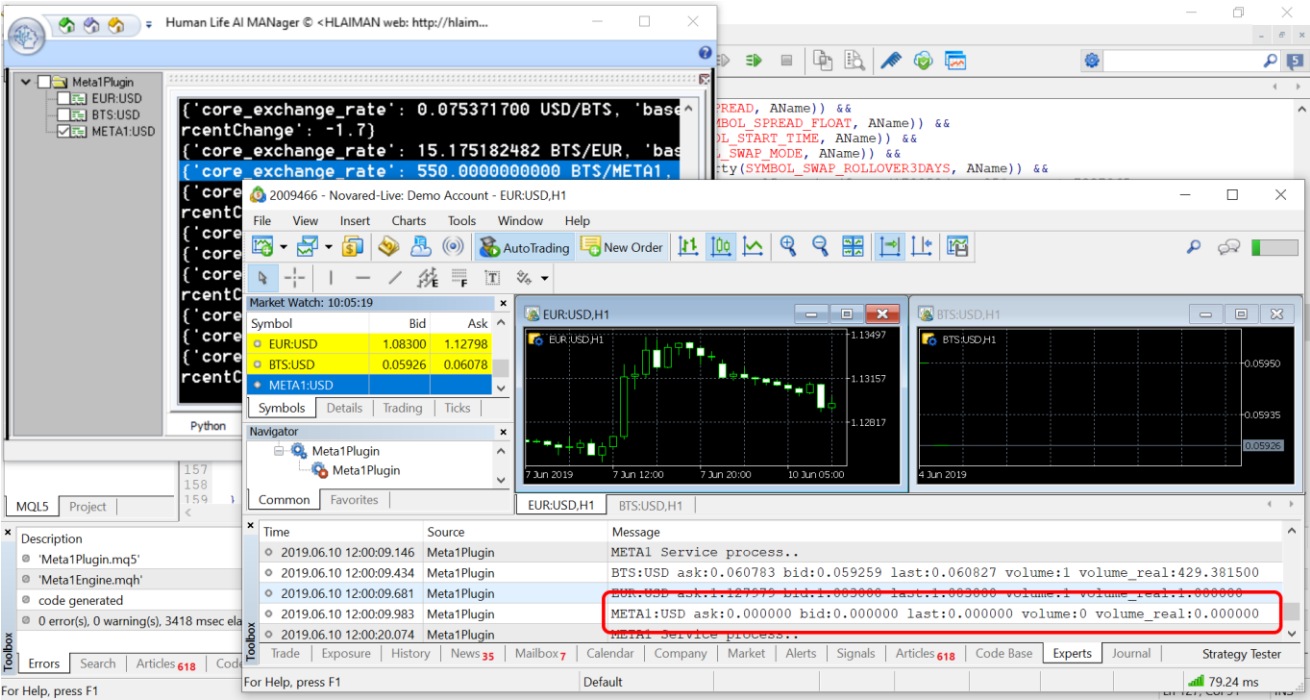


In the parameters of MT5 service user can set desired symbols, login, password, node, secret etc. The plugin initializes all service information for each symbol. Cyclically updates quotes for all symbols. For these symbols, operations in the terminal are available.



The main advantage of the MT5 terminal is ability to test traders strategies in the strategy tester. With plugin user can test any EA in strategy tester using meta1 price data but it needs history data. Unfortunately, the blockchain gives zero Bid Ask quotes for the target META1:USD symbol yet, but for debugging, the interface allows you to download any tick or bar data. Then

on this symbol you can perform any analytical actions - development and launch of indicators, advisors, etc.. For example we tested simplest standard Moving Average MT5 EA on BTS quotes.



### Strategy Tester Report

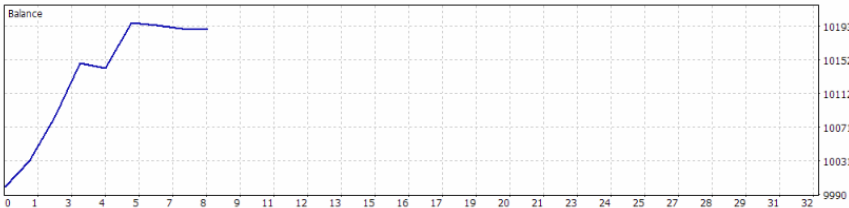
MetaQuotes-Demo (Build 2072)

#### Settings

Expert: **Moving Average**  
Symbol: **BTS:USD**  
Period: **Daily (2018.01.16 - 2019.06.09)**  
Inputs: **MaximumRisk=0.02**  
**DecreaseFactor=3**  
**MovingPeriod=12**  
**MovingShift=9**  
Broker: **MetaQuotes Software Corp.**  
Currency: **USD**  
Initial Deposit: **10 000.00**  
Leverage: **1:100**

#### Results

History Quality:	0%	Ticks:	1715	Symbols:	1
Bars:	408	Balance Drawdown Absolute:	0.00	Equity Drawdown Absolute:	3.88
Total Net Profit:	188.62	Balance Drawdown Maximal:	8.62 (0.08%)	Equity Drawdown Maximal:	49.35 (0.49%)
Gross Profit:	203.48	Balance Drawdown Relative:	0.08% (8.62)	Equity Drawdown Relative:	0.49% (49.35)
Gross Loss:	-14.86				
Profit Factor:	13.69	Expected Payoff:	14.51	Margin Level:	4993.82%
Recovery Factor:	3.82	Sharpe Ratio:	0.58	Z-Score:	-0.72 (52.85%)
AHPR:	1.0014 (0.14%)	LR Correlation:	0.76	OnTester result:	0
GHPR:	1.0014 (0.14%)	LR Standard Error:	42.05		
Total Trades:	13	Short Trades (won %):	10 (60.00%)	Long Trades (won %):	3 (100.00%)
Total Deals:	26	Profit Trades (% of total):	9 (69.23%)	Loss Trades (% of total):	4 (30.77%)
		Largest profit trade:	64.74	Largest loss trade:	-6.24
		Average profit trade:	22.61	Average loss trade:	-3.72
		Maximum consecutive wins (\$):	5 (0.00)	Maximum consecutive losses (\$):	3 (-8.62)
		Maximal consecutive profit (count):	149.03 (3)	Maximal consecutive loss (count):	-8.62 (3)
		Average consecutive wins:	3	Average consecutive losses:	2



To check the manual trading operations (opening orders) for the META1 symbol in the MT5 interface, a script Meta1Dialog.mq5 with the trade panel was developed, but unfortunately, as mentioned above, the blockchain does not provide adequate pricing data on META1 and there are problems with authorization during sending trade commands. We hope that in the near future these problems will be fixed and this feature, just like those listed above, will work fine.