



# Avalut Metatrader 5 Expert Advisor Manual

15.09.2023

This manual applies to Avalut Gold X1, Avalut Gold Light  
and Avalut Gold Light Mini.



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# 1. Introduction

# 1.1 About Avalut

The Avalut Gold Expert Advisor series is a collection of fully automated trading systems for the gold spot market. The EA is available in different versions, including Avalut Gold Light (1 strategy), Avalut Gold X1 (portfolio of 4 strategies) and Avalut Gold Light Mini (1 strategy – limited lot size – without MM) Free version.

Picture on the right: Overview Avalut Gold Series

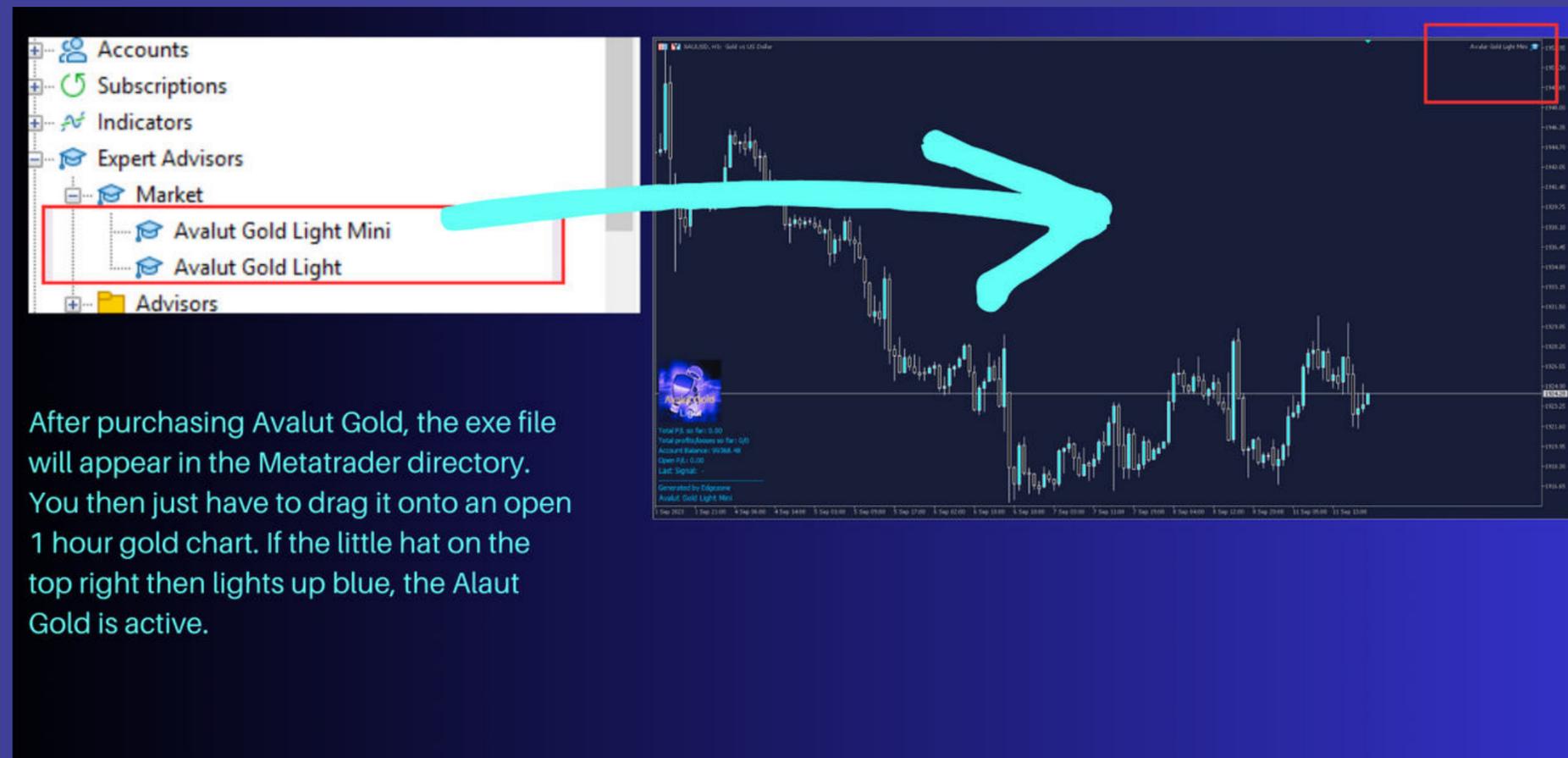
## Versions:

Avalut <b>Gold</b> Full	590 \$	4 Systems 1 with full MM	Demo for Backtests <b>COMING SOON</b>
Avalut <b>Gold</b> Light	199 \$	1 System with full MM	Demo for Backtests
Avalut <b>Gold</b> Light Mini	FREE	1 System without MM and max. Lotsize 0.03	Demo for Backtests & Live Trading (Demo or Real)

## 1.2 Installation

The installation of Avalut is done through the Metatrader Market. After purchasing and downloading the product, the name of the EA will automatically appear in the navigator. If not, a restart of the Metatrader is likely to be required.

Picture on the right: Navigator



The image shows two side-by-side screenshots from the Metatrader platform. The left screenshot displays the 'Navigator' window with a tree view containing 'Accounts', 'Subscriptions', 'Indicators', 'Expert Advisors', 'Market', and 'Advisors'. Under the 'Market' folder, 'Avalut Gold Light Mini' and 'Avalut Gold Light' are listed, with a red box highlighting them. A large blue arrow points from this box to the right screenshot. The right screenshot shows a 1-hour candlestick chart for 'Gold vs USD Outer'. In the top right corner of the chart area, a small blue icon with a hat is visible, indicating that the 'Avalut Gold' EA is active. A red box highlights this icon.

After purchasing Avalut Gold, the exe file will appear in the Metatrader directory. You then just have to drag it onto an open 1 hour gold chart. If the little hat on the top right then lights up blue, the Avalut Gold is active.

# 1.3 Licensing and Activation

Purchasing through the Metatrader Marketplace currently includes a lifetime license for Avalut. Additional licenses (max. 5) can be requested if required, for example if another computer is used.

Picture right: Currently available Avalut versions in Metatrader Market

The screenshot shows the Metatrader Marketplace interface. At the top, there are navigation links: Home, Main, Statistics, and Register company. Below this, the section is titled "Published products" and includes filters for "MetaTrader 5" and "Experts". Two product listings are visible, both for "Avalut Gold Light INSTITUTIONAL HIGH-END TRADING SYSTEM" by "dgezone". The first listing is priced at "199 USD" and the second is "FREE". Both listings show a 5-star rating. Below the listings, the word "Company" is partially visible.

# 1.4 Avalut-Strategy

The Avalut EA series consists of 1 to 4 strategies, depending on the version, which are based on a momentum model and use different indicators. Our intention during development was to construct a system that clearly distinguishes itself from the systems used in the retail segment and provides us with stable performance over many years.

Picture below: Strategy Portfolio EA Avalut Gold  
X1



We know from experience that such retail systems are usually optimized constructs to generate a nice equity curve that attracts buyers to the systems.

However, the buyers of these systems certainly do not earn money, but only the sellers of these EAs, as they exploit the naivety of traders in the retail segment.

In our research, we have highlighted the most successful institutional trading companies of the last decades and recognized that they pursue momentum approaches achieve a significant outperformance with low drawdowns.

In order to build such a model, which then also delivers good results stably on Out Of Sample data, we had to set the bar very high in development.

We implemented advanced testing methods such as Walk Forward, SSP, Monte Carlo, tests on different markets, timeframes, commissions, spread, slippage, advanced tick data tests, just to name a few.

We can now present the results of this with the Avalut Gold EA Series. We are primarily traders and used Avalut for our own trading.

The beginning of the sale of the EA was more of a coincidence than planned and is an experiment for us.

In the future, we will consider whether it is profitable for us to sell and rent EAs, or whether we will withdraw from this area.

The Avalut Gold  
Light uses the  
following indicators:

# Keltner Channel, ADX und ATR

We cannot reveal  
further details.

Avalut is based on very complex tests, uses intelligent entry points that are placed by means of entry stop orders. Each position is hedged with Stop Loss. Depending on the version, Profit Target and Trail are used.

Our historical tests show that Momentum models deliver very good results over decades in a variety of markets! Avalut is specifically waiting for an expansion in volatility in the expectation that a strong price movement (momentum) will occur.

In order to reduce false signals, we use a well thought-out filter system, which helps the Avalut to its strengths.

Depending on the version, an average of 1 to 4 trades are generated per week. A few days, or even weeks without trades, do not mean that the EA no longer works. No, it does exactly what it is supposed to do, and that is to do NOTHING if the probability of a strong price movement is low.

It can also happen that there is a strong market movement and the EA still does not enter into a trade.

Again, this is not a failure of the EA!  
As algorithmic traders, we have to deal with such things by trusting our test data.  
And these show that the EA was very successful in the long run.

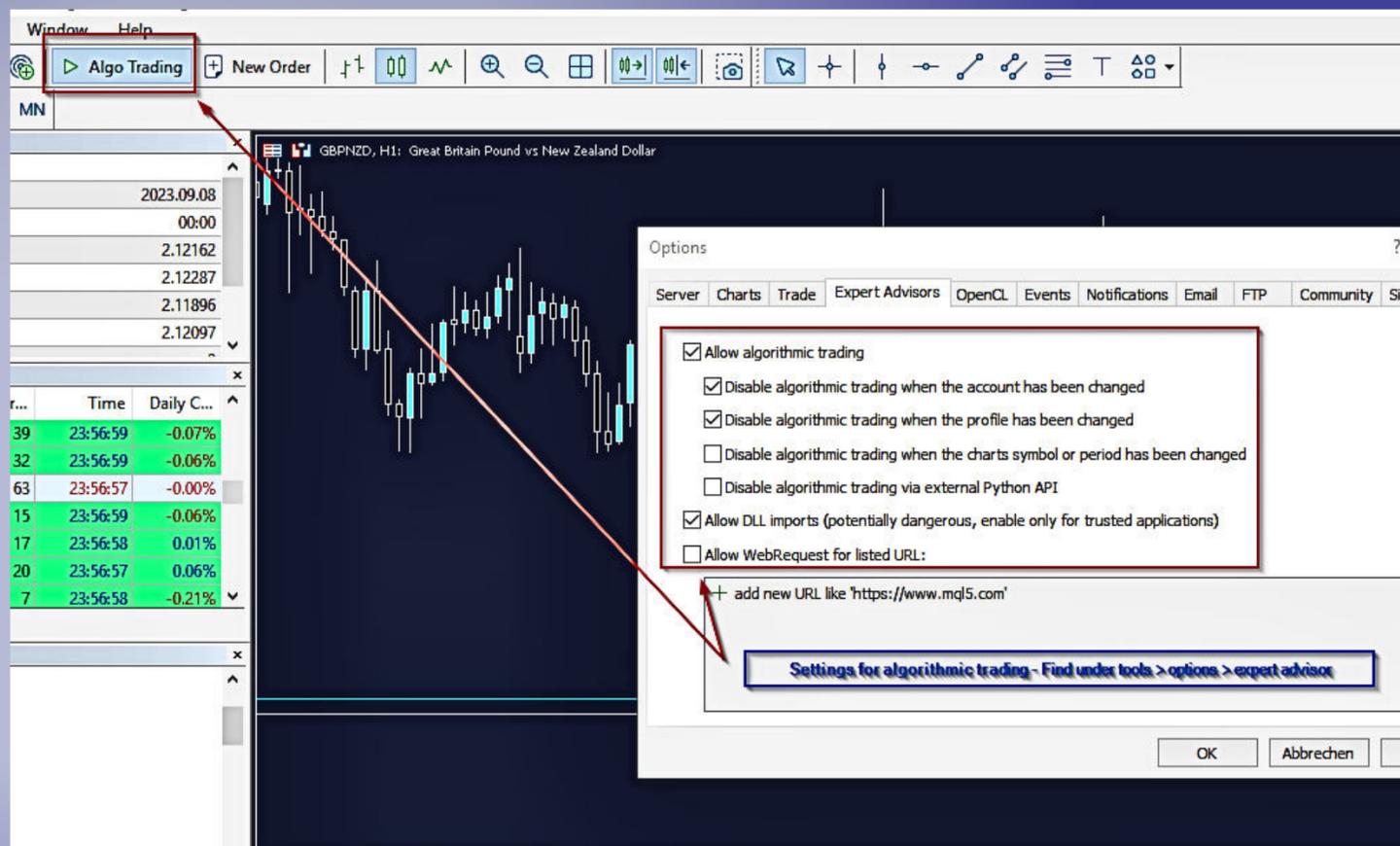
# 2. Basics

# How to use MetaTrader 5

Metatrader 5 (MT5) is a versatile trading platform for trading various financial instruments, including currency pairs, stocks, and commodities. It provides powerful charting tools, an economic calendar, and automated trading capabilities through programmed trading systems (Expert Advisors).

In our experience, Metatrader is one of the best and most stable platforms for automated trading. That's why we have also made the decision to develop our systems for this platform.

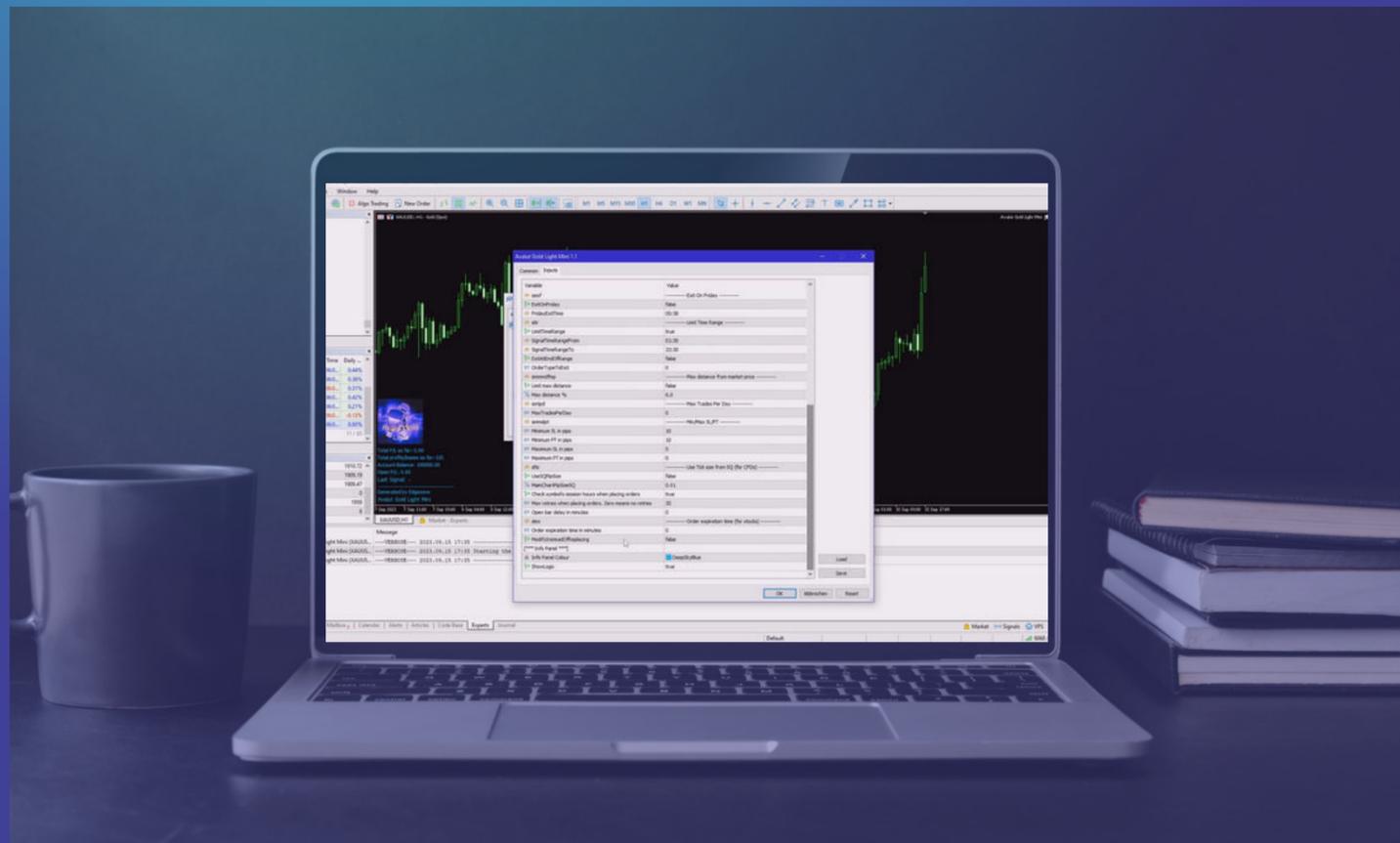
Picture left: Settings in MT for algorithmic trading





## 2.2 What is an Expert Advisor?

An Expert Advisor (EA) is software programmed on trading platforms such as MetaTrader that implements automated trading strategies. Often referred to as algos or trading bots.



### 3. Setting up AVALUT

Avalut usually does not require any user adjustments to the input parameters for live trading. However, if you want to make adjustments, you should exercise caution, especially if you have little experience optimizing trading systems.

Always test new settings  
first in the backtester,  
demo or live with small  
lot size!

## 3.1 Configuration and settings

The most important parameters can be found in the "Main Trade Parameters" section. These parameters have the most significant impact on Avalut's functionality. Other parameters have less influence. The parameters are clearly labeled and easy to understand.

If you have adjusted the parameters while testing Avalut and wish to reload the original parameters, click on the Backtester, select the "Inputs" tab, right-click anywhere, and then choose "Defaults."



## 3.2 Input parameter

By optimizing or changing the main trader parameters, the behavior of the EA will change. If you do backtests, you will see that the EA is successful with many parameter combinations.

Avalut Gold Light Mini 1.1

Common Inputs

Variable	Value
[*** Main Trade Parameter ***]	
01 DIPeriod1	52
01 MTKeltnerChannelPrd1	9
01 DIPeriod2	5
1/2 ProfitTargetCoef1	6.7
1/2 StopLossCoef1	4.5
[*** Settings_1 ***]	
Preferred filling type - will be applied if available	ORDER_FILLING_FOK
If set to true, it will force using preferredFillingType when o	false
ab CustomComment	Avalut Light
01 MagicNumber	9999
[*** Money Management ***]	
ab smm	----- Money Management - Fixed size -----
1/2 mmLots	0.01
[*** Trading Options ***]	
ab sdtw	----- Dont Trade On Weekends -----
If set to true, it will force using preferredFillingType when o	true
ab FridayCloseTime	00:38
ab SundayOpenTime	00:38
ab seod	----- Exit At End Of Day -----
If set to true, it will force using preferredFillingType when o	false
ab EODExitTime	23:00
ab seof	----- Exit On Friday -----
If set to true, it will force using preferredFillingType when o	false
ab FridayExitTime	00:38
ab sltr	----- Limit Time Range -----
If set to true, it will force using preferredFillingType when o	true
ab SignalTimeRangeFrom	01:30
ab SignalTimeRangeTo	22:30
If set to true, it will force using preferredFillingType when o	false
01 OrderTypeToExit	0
ab smmddfmp	----- Max distance from market price -----
If set to true, it will force using preferredFillingType when o	false
1/2 Max distance %	6.0
ab smtpd	----- Max Trades Per Day -----
01 MaxTradesPerDay	0
ab smmslpt	----- Min/Max SL/PT -----
01 Minimum SL in pips	10
01 Minimum PT in pips	10
01 Maximum SL in pips	0
01 Maximum PT in pips	0

We strongly recommend sticking to the parameters we provide. There is a high risk that curvefitting will occur if you have too little knowledge in the area of optimization.

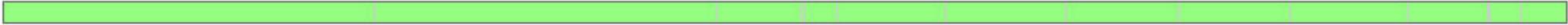
Picture left: Input parameters when opening on the chart

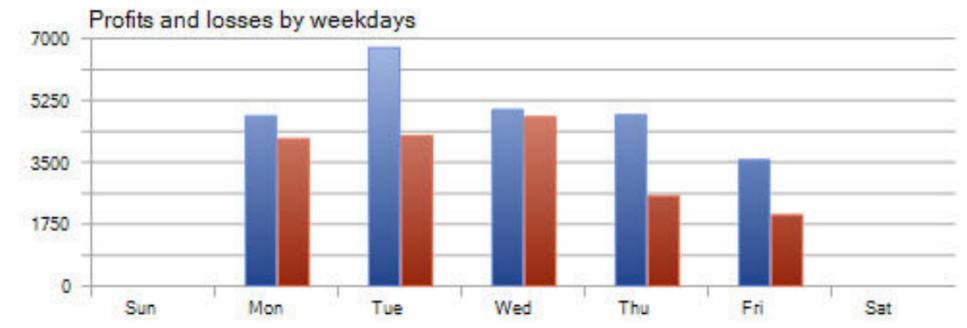
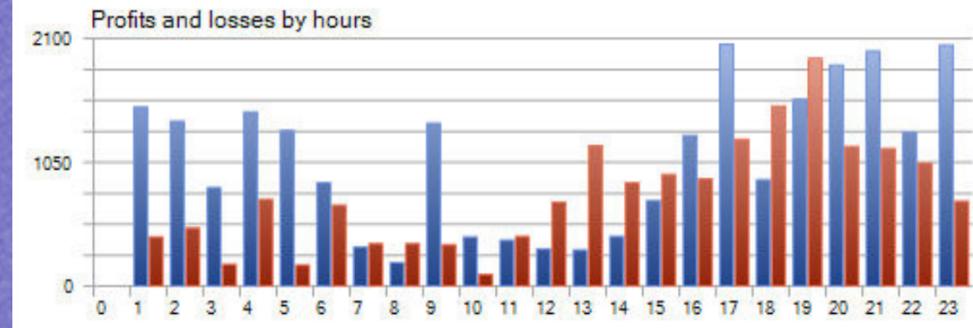
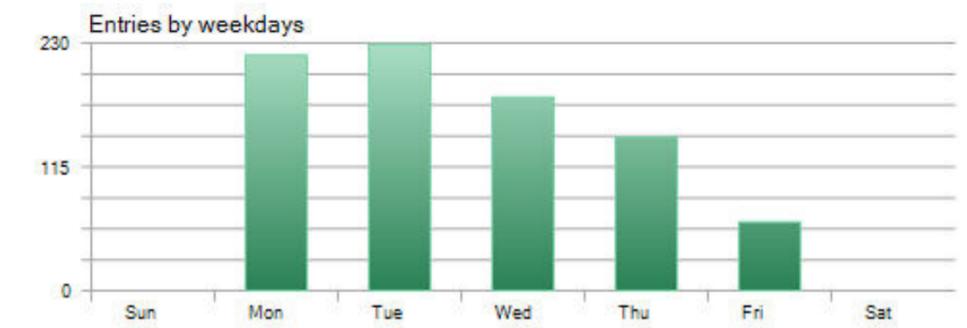
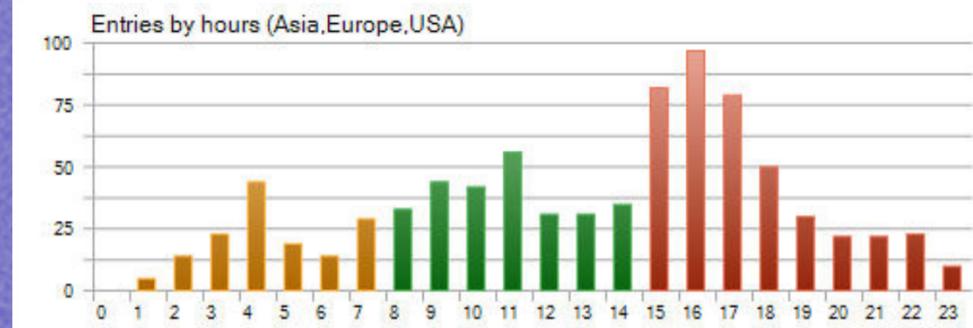


## 3.3 Backtests

For backtests, we recommend using high-quality data sources, such as those from Dukascopy, as the quality of the test results depends on the quality of the historical data.

We have developed Avalut on Dukascopy minutes and tick data.

History Quality	100%				
Bars	81817	Ticks	476913963	Symbols	1
Initial Deposit	10 000.00				
Total Net Profit	6 960.47	Balance Drawdown Absolute	62.62	Equity Drawdown Absolute	89.53
Gross Profit	24 967.88	Balance Drawdown Maximal	535.84 (3.19%)	Equity Drawdown Maximal	702.38 (5.65%)
Gross Loss	-18 007.41	Balance Drawdown Relative	3.85% (471.44)	Equity Drawdown Relative	5.65% (702.38)
Profit Factor	1.39	Expected Payoff	8.34	Margin Level	6271.03%
Recovery Factor	9.91	Sharpe Ratio	4.18	Z-Score	0.40 (31.08%)
AHPR	1.0007 (0.07%)	LR Correlation	0.95	OnTester result	0
GHRP	1.0006 (0.06%)	LR Standard Error	578.57		
Total Trades	835	Short Trades (won %)	395 (45.82%)	Long Trades (won %)	440 (47.50%)
Total Deals	1670	Profit Trades (% of total)	390 (46.71%)	Loss Trades (% of total)	445 (53.29%)
	Largest	profit trade	769.52	loss trade	-470.88
	Average	profit trade	64.02	loss trade	-39.94
	Maximum	consecutive wins (\$)	7 (595.50)	consecutive losses (\$)	10 (-181.15)
	Maximal	consecutive profit (count)	1 356.93 (4)	consecutive loss (count)	-533.88 (6)
	Average	consecutive wins	2	consecutive losses	2



You can also test on your broker's data, but the results may differ from ours because most brokers provide poor historical data feeds. If your results are much worse than ours, it may not necessarily indicate poor live trading performance.

The key factors to consider are the quality of the live data feed, the spreads, and commissions charged by your broker.

A very useful free tool for downloading and importing data into MetaTrader is offered by Strategyquant with their Data Manager.

You can find more information about it on their website:

[StrategyQuant – StrategyQuant](#)

## 3.4 Broker- und Kontoanforderungen



Avalut can be used with most brokers without any problems. Brokers with low fees and low spreads, such as IC Markets, Pepperstone, Dukascopy and BlackBull, are recommended.

These have always been a good choice for us in recent years. However, this may change in the future. Do your own research on this.

Important!

Only Hedge Account  
Type and Leverage  
 $\geq 30!$



We tested with  
timezones from GMT  
0 to GMT+3

A backtest allows you to quickly see what the results would be on your broker.

With the Avalut Gold Light MINI, we also offer the possibility to test the suitability of your broker on live data, demo or real. The only restriction is a maximum adjustable lot size of 0.03 and no integrated money management.

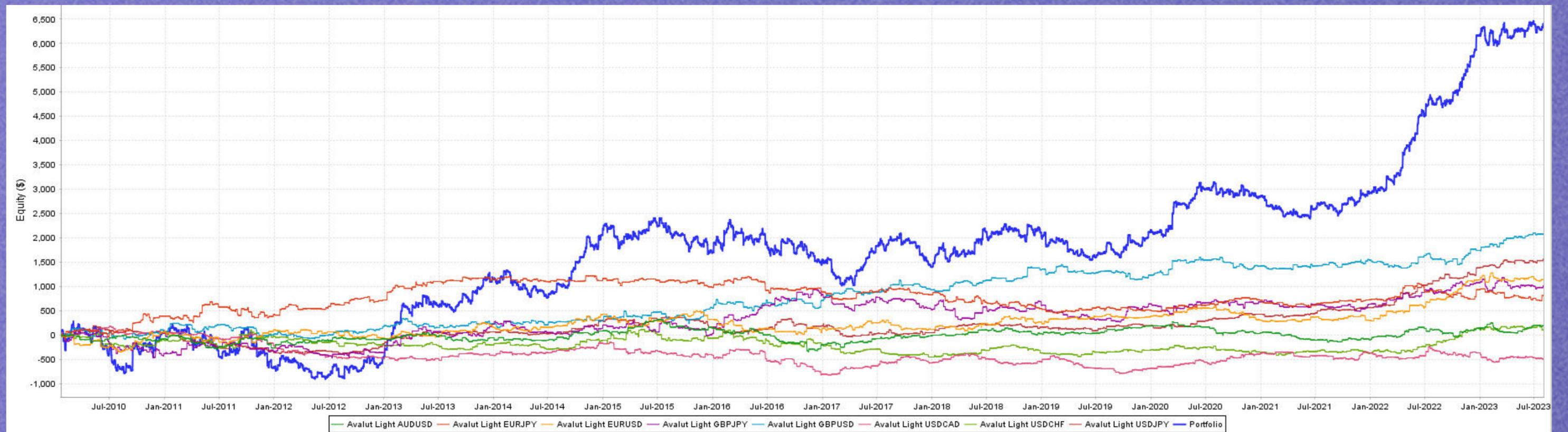
## 4. How to use Avalut



Avalut was developed for the gold market, specifically in the 1-hour chart. However, it can be used on other timeframes and markets as well. Caution and thorough testing are essential, though. In our tests, we obtained good results in timeframes ranging from 30 minutes to 4 hours when applied to the gold market.

Tests also demonstrated robust results on various forex pairs such as EURUSD or GBPUSD.

In the image below, you can see a portfolio of forex pairs using Avalut Gold Light without any optimization, using the standard parameters for the gold market. Avalut continues to deliver strong results in this scenario, showcasing its high level of robustness!



If you decide to allow the system to trade in different markets, make sure to assign different Magic Numbers and start a new risk evaluation for your account.

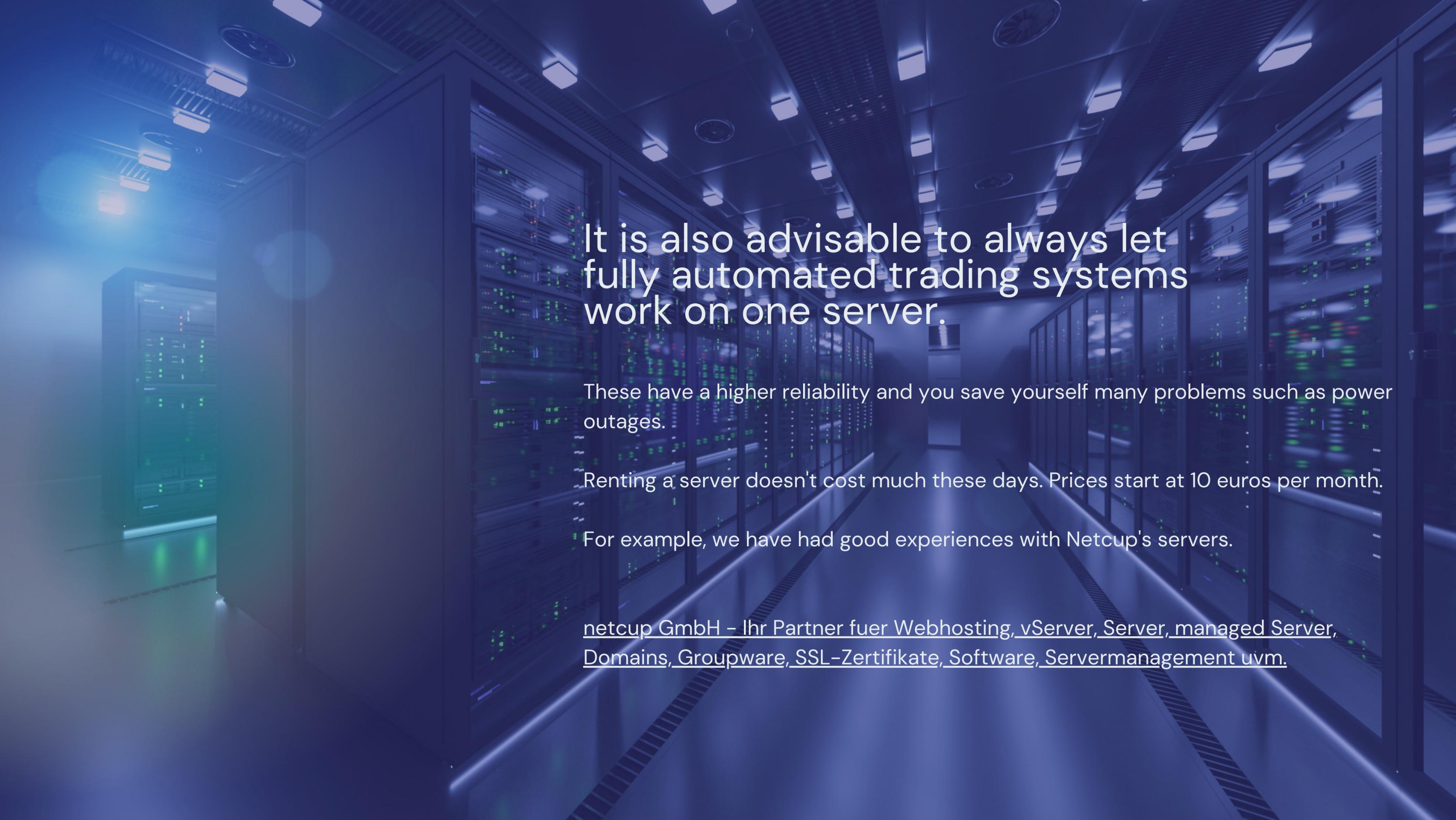
We have currently published our tests only for the Gold Market, and the Avalut is also primarily intended for this market.



Nevertheless, you are of course free to use the EA as you like. However, you should then carry out extensive tests and, if necessary, optimizations.

If you have too little knowledge of this topic, please inform yourself first.

There are good sources of various kinds on the WWW.

A server room with rows of server racks and blue lighting. The racks are filled with server hardware, and the room is illuminated by overhead lights, creating a professional and technical atmosphere.

It is also advisable to always let fully automated trading systems work on one server.

These have a higher reliability and you save yourself many problems such as power outages.

Renting a server doesn't cost much these days. Prices start at 10 euros per month.

For example, we have had good experiences with Netcup's servers.

[netcup GmbH – Ihr Partner fuer Webhosting, vServer, Server, managed Server, Domains, Groupware, SSL-Zertifikate, Software, Servermanagement uvm.](#)



## 4.1 Enabling and disabling Avalut

The EA is activated by dragging it onto a chart. It can be disabled at any time by right-clicking on the chart, selecting "Expert List" and removing the EA from the list of running EAs. Pay attention to any open positions and orders of the EA.

## 4.4 Monitoring and analysis

In live operation, Avalut typically requires minimal monitoring. Regular checks of the internet connection and the Metatrader platform are sufficient.

You can request a report in Metatrader at regular intervals at your convenience, but recommended every quarter, and compare the live results with our backtest reports and evaluations. The data should not deviate too much, as long as the edge of the strategy does not break.

XAUUSD, H1: Gold vs US Dollar

Avalut Gold Light Mini



Total P/L so far: 0.00  
Total profits/losses so far: 0/0  
Account Balance: 99368.48  
Open P/L: 0.00  
Last Signal: -

Generated by Edgezone  
Avalut Gold Light Mini

1 Sep 2023 1 Sep 21:00 4 Sep 06:00 4 Sep 14:00 5 Sep 01:00 5 Sep 09:00 5 Sep 17:00 6 Sep 02:00 6 Sep 10:00 6 Sep 18:00 7 Sep 03:00 7 Sep 11:00 7 Sep 19:00 8 Sep 04:00 8 Sep 12:00 8 Sep 20:00 11 Sep 05:00 11 Sep 13:00

Drawdowns and stagnation can occur in all trading systems and should not cause a breakdown of the strategy on your part, as long as they are within the expectations we have determined through our tests!

Always remember, patience and control of emotions are key to success in trading. To keep the influence of emotions low, pay attention to your money management input settings. Choose a risk that suits you and your account.

## 4.5. Risk management

Adjust the lot size or money management of Avalut so that the possible drawdown risk does not jeopardize your account. We recommend a 1% risk in the Money Management settings.

With more aggressive trading, up to 3% can be considered, but with awareness of possible drawdowns. Use our test results from Monte Carlo simulations. These provide very good information about possible drawdowns.

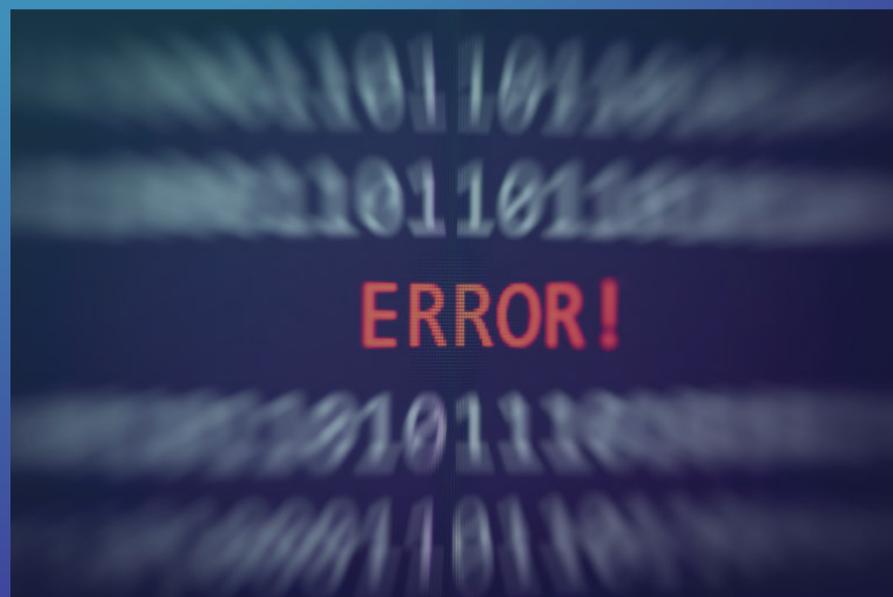
Picture below: Monte Carlo System Risk Simulation

## Monte Carlo results with confidence levels ?

Confidence level	Net Profit	% Net Profit	Number of tra...	Max DD	Max % DD	Ret/DD	R Exp	AR %	Consecutive L...
Original	\$ 5571.06	55.71 %	819.0	\$ 644.44	4.46 %	8.64	0.16 R	4.18 %	10
50	\$ 5537.77	55.38 %	807.0	\$ 1289.9	9.88 %	4.28	0.17 R	4.19 %	10
60	\$ 5485.85	54.86 %	807.0	\$ 1373.14	10.56 %	4	0.17 R	4.15 %	11
70	\$ 5424.64	54.25 %	807.0	\$ 1479.51	11.36 %	3.7	0.16 R	4.11 %	11
80	\$ 5343.88	53.44 %	807.0	\$ 1617.47	12.49 %	3.38	0.16 R	4.05 %	12
90	\$ 5214.28	52.14 %	807.0	\$ 1850.2	14.22 %	2.97	0.16 R	3.96 %	13
92	\$ 5177.22	51.77 %	807.0	\$ 1913.03	14.72 %	2.85	0.16 R	3.92 %	13
95	\$ 5091.83	50.92 %	807.0	\$ 2040.25	15.79 %	2.66	0.15 R	3.86 %	14
97	\$ 5001.42	50.01 %	807.0	\$ 2174.45	16.97 %	2.49	0.15 R	3.8 %	15
98	\$ 4904.59	49.05 %	807.0	\$ 2280.87	17.86 %	2.37	0.15 R	3.72 %	16
99	\$ 4730.93	47.31 %	807.0	\$ 2467.15	19.38 %	2.21	0.14 R	3.59 %	17
100	\$ 3816.33	38.16 %	807.0	\$ 3510.59	26.22 %	1.5	0.12 R	2.9 %	25

We always specify our tests with a fixed lot size of 0.1. This allows you to quickly convert for your account size. As here in the Monte Carlo test given above, there is a 5% chance of a drawdown of \$2040 with a lot size of 0.10.

With a lot size of 0.01 it would be 204 dollars, or e.g. with 0.2 lots 4.080 dollars.



## 5. Troubleshooting

In case Avalut crashes, it can simply be dragged back onto the chart to resume its work. The EA synchronizes with open positions and orders.

# 5.1 Common problems and solutions

At this time, we are not aware of any technical issues in Avalt's live operation.

If there is a problem with the EA, it will display messages in the Experts tab of the MT Terminal. Normally, the error messages that appear have no effect on the operation of the EA.

Time	Source	Message
• 2023.09.16 11:26:44.843	Avalut Gold Light Mini (XAUUS...	---VERBOSE--- 2023.09.15 23:54 -----
• 2023.09.16 11:26:44.843	Avalut Gold Light Mini (XAUUS...	---VERBOSE--- 2023.09.15 23:54 Starting the EA
• 2023.09.16 11:26:44.938	Avalut Gold Light Mini (XAUUS...	---VERBOSE--- 2023.09.15 23:54 -----



## 5.2 Contacting Support

If you have any questions or problems, please do not hesitate to contact our support team at [office@edgezone.consulting](mailto:office@edgezone.consulting)

Ideally, always send us screenshots of your problem.

# 7. Updates and Maintenance

Updates from Avalut are provided by us via the Metatrader Market. You can simply install it and restart Metatrader.

These updates will usually be limited to re-adjusting the trade input parameters, as we develop our systems with walk forward analysis and there may be a more effective input set for the system under the current market situation in regular intervals.

# 8. Conclusion

The Avalut Metatrader 5 Expert Advisor is a powerful trading system for the gold market. Please note that trading always involves risk, do not risk capital that you are not willing to lose and use Avalut responsibly.

We provide the following resources for our systems in PDF format.

- Detailed backtest and simulation results
- Manual

In addition, we always announce news about the systems in our newsletter and our website, as well as regular analyses of live performance.

We also publish useful content related to algorithmic and discretionary trading on our social media channels.

# We are represented at

- Youtube
- TwitterX
- Instagram
- LinkedIn
- Facebook

# Links:

[www.edgezone.consulting](http://www.edgezone.consulting)

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