



METATRADER 5 UTILITY · VERSION 2.56

Broker Execution Inspector

User guide for the Pro and Essential editions: install, read every screen, save reports where you want, feed your own EAs and run it on a VPS.

MT5 UTILITY · PASSIVE

See what your broker really does during the news

Spread peak, widening and recovery time for NFP, CPI and rate decisions, measured on **your** account from your broker's own tick history.

Never places orders

No DLL · No WebRequest

VPS-friendly

■ Broker Execution Inspector

BROKER NEWS PROFILE / XAUUSD / 20 windows from tick history					
TYPE	EVENTS	NORMAL ⓘ	MAX ⓘ	WIDENING ⓘ	RECOVERY ⓘ
JOBS	3	6.7	94 pts	x8.0	22 s
OTHER	8	7.1	88 pts	x4.8	43 s
RETAIL	1	7.0	300 pts	x24.6	83 s
CPI	1	7.0	300 pts	x42.1	68 s
PMI	4	8.5	98 pts	x6.3	47 s
2026.10.22 15:30	USD Initial Jobless Claims ⓘ		95 pts	x6.4	28 s
2026.10.21 17:30	USD EIA Crude Oil Stocks Ch... ⓘ		68 pts	x2.4	--
2026.10.15 19:00	USD EIA Crude Oil Stocks Ch... ⓘ		53 pts	x3.2	14 s
2026.10.15 15:30	USD Retail Sales m/m / USD ... ⓘ		300 pts	x24.6	83 s
2026.10.14 15:30	USD CPI m/m / USD Core CPI ... ⓘ		300 pts	x42.1	68 s
Normal = median before. Widening = peak P95 / normal. ⓘ					

x42 spread on CPI · gold

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What the utility does

Broker Execution Inspector watches the execution conditions of your broker: the spread on every quote, what happens to it around economic releases, and the real cost of your trades. It reads the native MT5 calendar and history: no DLL, no WebRequest, no API key.

The utility is **passive**: it never opens, modifies or closes an order and gives no trading signals. "Allow Algo Trading" is not needed.

Essential and Pro

Feature	ESSENTIAL	PRO
Live spread, gauge, median, P95, maximum, ping, 2/5/15 min spread line	✓	✓
Next USD high-impact release, countdown and alert	✓	✓
Spread before / during / after each release, last report kept	✓	✓
Spread threshold alert, push and e-mail notifications NEW	✓	✓
HTML session report (simplified in Essential) NEW	✓	✓
Broker news profile replayed from tick history	—	✓
Closed trades: net, charges, spread cost, slippage, fill time	—	✓
Costs and slippage by EA (magic number) NEW	—	✓
Best and worst hours from the broker's tick history NEW	—	✓
Session history (last 30 sessions), daily session for a VPS NEW	—	✓
Signals for other EAs (BEI_Signals.mqh) NEW	—	✓
Compare brokers on the same PC, 9 news currencies, rollovers	—	✓
Executions view, previous session, wide panel, CSV export, chart image	—	✓

The edition is always visible: the HUD title reads "BEI PRO" or "BEI ESSENTIAL" and the panel title carries a PRO or ESSENTIAL tag. In Essential, Pro views are marked PRO and do not open.

What is new in 2.56

- **HTML report** of every session, written on demand or automatically when a session ends.
- **Reports folder of your choice** (`ExportFolder`) or the Common folder; one folder and one file name per symbol.
- **By EA view**, **session history**, **best hours** from history, **signals** for your EAs, **e-mail** alerts.
- Median shown first (the average is pulled up by spikes). Lighter: the panel only updates what changed.

INSTALLATION

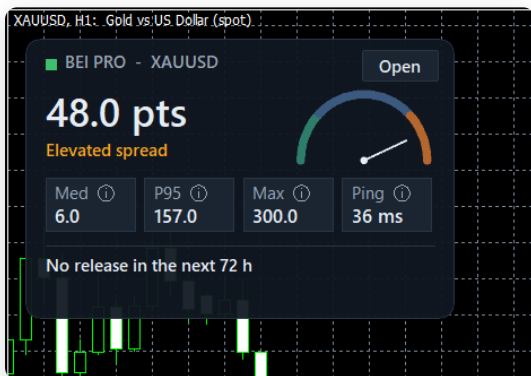
Install in 2 minutes

1. Buy or download the product from the MQL5 Market inside MT5 (Market tab of the Toolbox). It is installed under **Navigator > Expert Advisors > Market**.
2. Drag **Broker Execution Inspector** onto the chart of the symbol you trade.
3. In the window that opens you can leave "Allow Algo Trading" unchecked: the utility sends no orders. Click **OK**.
4. The mini HUD appears in the top-left corner (below the One Click Trading box if it is shown). The gauge is ready at once when the market is open: the last 5 minutes of ticks are reloaded. The broker news profile is ready after about one minute.

One instance per chart. You can attach it to several charts of the same symbol: the first one writes the local memory and the reports, the others are "Viewer" charts that only display.

FIRST STEPS

HUD, panel and beginner help



Mini HUD on a live XAUUSD chart

Mini HUD (default view): current spread, gauge, **Med / P95 / Max / Ping** tiles and the next release. **Open** shows the full panel; the – button at the top right returns to the HUD.

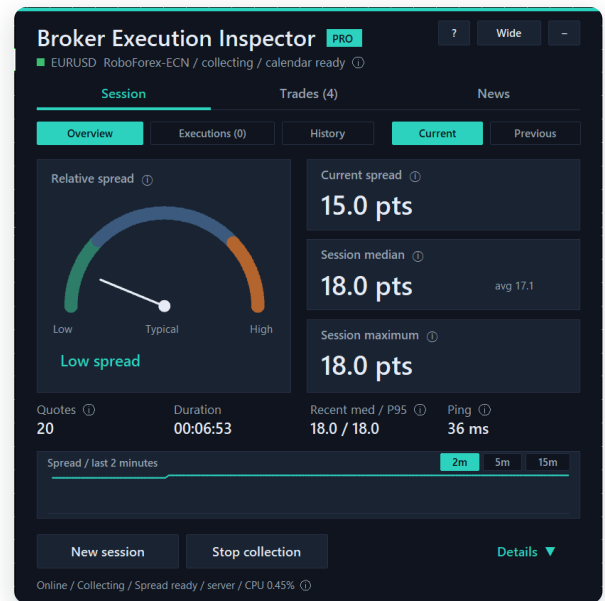
Drag the HUD or the panel header to move it. Position, view and spread-line length are remembered per chart.

- **Header:** title with the PRO / ESSENTIAL tag, then one status line (symbol, broker, collecting, calendar). On the right: ? (help), **Wide** (Pro, two columns), – (minimize). A control that is on is filled in green.
- **Tabs** on top: Session · Trades · News. Under each tab, small **pills** choose the view. The selected pill is always filled in green.
- **Wide:** Session on the left and Trades / News on the right (Pro, needs a wide chart). On a small chart the utility falls back to the HUD.
- **Theme:** Auto (follows the chart background), Dark or Light.
- **"?" button:** adds a "How to read this view" card under every view, in plain words. **ⓘ marker:** hover any label with ⓘ for a short explanation.

Session view

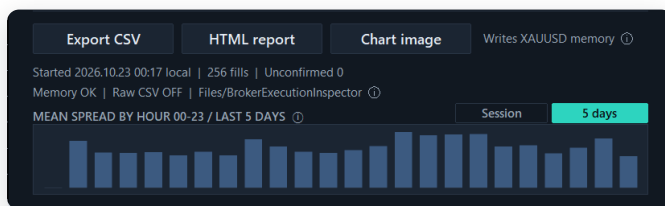
Everything measured since you attached the utility or clicked **New session**:

- **Current spread** in points of the symbol (not pips).
- **Session median**: the usual spread of the session, half of the quotes were tighter. The average is shown small next to it: one spike is enough to pull it up.
- **Relative spread gauge**: where the current spread sits among the recent quotes. Left is cheaper than usual, middle normal, right wider. Not a broker rating. "Waiting 12 / 20" means fewer than 20 quotes so far; "Market closed?" means no quote for 2 minutes.
- **Recent median / P95**: the usual spread and the "normal worst case" of the last quotes (95 % were at or below it).
- **Ping**: delay to the trade server measured by MT5. Under 50 ms is good.
- **Spread line** over 2m / 5m / 15m (pills at its top right). Each point keeps the highest spread, so spikes stay visible.
- **New session** asks for a second click within 3 seconds ("Click again to reset"); the current session is kept as Previous. **Stop collection** stops recording quotes; trades and news keep updating.
- **Executions** (Pro) lists every fill of the session with the spread just before and after and the slippage. **Previous** (switch on the right) shows the last finished session of this symbol, read only.



Session > Overview, EURUSD

Details ▼



Details: buttons, folder and spread by hour

- **Export CSV** (Pro): closed trades, news report, news profile and session summary.
- **HTML report**: the one-page summary described on the next page.
- **Chart image** (Pro): PNG of the chart with the panel.
- The line under the buttons shows where files go, for example `Files/BrokerExecutionInspector`.
- **Mean spread by hour**: the pills `Session` and `5 days` switch between this session and your broker's tick history (Pro, `HourProfileDays`).

Session history

Session > History lists the last 30 finished sessions of this account and symbol: start, duration, median, P95, maximum, share of time with a wide spread and average slippage. Follow a broker day after day, or compare a quiet Monday with an NFP Friday.

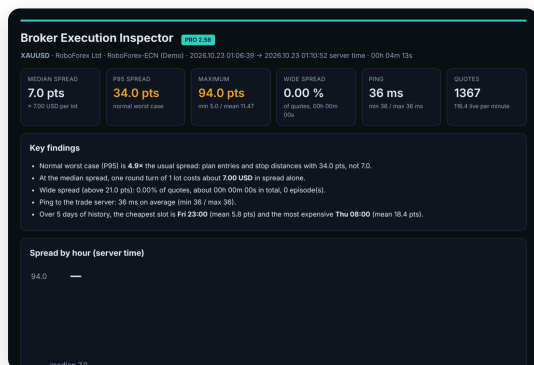
A session is added when it ends: Stop collection, New session, removing the utility, closing MT5, or at server midnight when `NewSessionDaily` is on (useful on a VPS: one session and one report per day).

Sessions shorter than one minute (a quick parameter change, a restart while the market is closed) are not added.

START (SERVER)	DURATION	MEDIAN	P95	MAX	WIDE %	SLIP
2026.10.23 01:05	00:01:00	9.0	47.0	276.0	1.00	--
2026.10.23 01:02	00:03:21	15.0	155.0	300.0	0.27	--
2026.10.23 00:41	00:20:32	7.0	138.0	300.0	23.91	--
2026.10.23 00:36	00:05:09	10.0	13.0	18.0	0.00	--

Session > History, XAUUSD

HTML session report



Top of an HTML report (dark theme)

One self-contained page you open in any browser, mail or print: no script, no internet. Light or dark follows your system.

- **Key numbers** and **findings** in plain words.
- Spread by hour, **weekday x hour heatmap** with the cheapest and the most expensive slot (Pro).
- Distribution, statistics, symbol trading conditions.
- **Data quality**: quotes per minute, first and last quote, gaps, longest silence, repeated, zero-spread and invalid quotes.
- Fills, closed positions with an **EA** column and a **by EA** table, session history and news (Pro).

Written by the **HTML report** button, and automatically when a session ends if `HtmLReportOnStop` is on (default). File:

Reports/XAUUSD/XAUUSD_20261023_090000_session.html .
Essential writes a simplified report from the button.

Trades

Broker Execution Inspector PRO

XAUUSD RoboForex-ECN / collecting / calendar ready

Session Trades (4) News

All symbols XAUUSD only By EA Closed in the last 30 days

TRADE	NET USD	CHARGES	SPREAD I/O	SLIP	MS
BTCUSD BUY 2026.10.17 17:44	-0.19	-0.16	-- / --	--	298
BTCUSD BUY 2026.10.17 17:44	-0.19	-0.16	293.0 / --	--	228
BTCUSD BUY 2026.10.16 07:10	-0.58	-0.16	-- / 1.0	0.0	119
BTCUSD BUY 2026.10.16 07:10	-0.75	-0.16	-- / --	--	147

Last 4: net -1.71 USD | charges -0.64 USD
Spread cost - -0.03 USD | slippage effect - 0.00 USD

Trades > All symbols

Your last closed positions (1 to 20, pages of 6), read from the account history of the last 30 days. Pills: **All symbols** or only the chart symbol.

- **Net:** profit after commission, deal fees and swap.
Charges: commission + fees + swap.
- **Spread in / out:** spread when the position was opened and closed, from session quotes or broker tick history.
- **Slip:** exit slippage in points, positive is worse than the reference (your SL/TP level, the pending price or the quote when you clicked).
- **MS:** milliseconds between the exit order and its fill (server timestamps).
- Click a row for the detail: costs breakdown, entry and exit slippage, broker comment and the EA that traded it.

By EA NEW

The **By EA** pill groups the same positions by magic number: trades, net result, charges, average slippage and average fill time for each EA. "Manual" is magic 0 (your own clicks).

Run two EAs, or an EA and your manual trading, on the same account: you see at once which one pays the most in costs and slippage. The HTML report contains the same table.

Broker Execution Inspector PRO

XAUUSD RoboForex-ECN / collecting / calendar ready

Session Trades (4) News

All symbols XAUUSD only By EA Closed in the last 30 days

EA (MAGIC)	TRADES	NET USD	CHARGES	AVG SLIP	AVG MS
Manual	4	-1.71	-0.64	0.0	198

Trades > By EA

Live window and broker profile

Big releases move prices fast and brokers widen their spreads. BEI measures every window: 5 min before, 2 min during, 8 min after.

- **Upcoming:** the next or current release, live.
- **Last observed:** the last finished window, kept on this computer.
- **Broker profile (Pro):** the last 20 releases and 4 rollovers, replayed from your broker's tick history and grouped by type (NFP, CPI, RATES, GDP, JOBS, PMI, RETAIL, ROLLOVER, OTHER).

Broker Execution Inspector PRO ? Wide -

EURUSD RoboForex-ECN / collecting / calendar ready ⓘ

Session Trades (4) News

Upcoming Last observed **Broker profile** Compare brokers

Source: MT5 economic calendar
USD high impact / server time / refreshed 00:47

No timed release in the cached 72 h range.

SPREAD (pts) / EURUSD

BROKER NEWS PROFILE / EURUSD / 24 windows from tick history

TYPE	EVENTS	NORMAL ⓘ	MAX ⓘ	WIDENING ⓘ	RECOVERY ⓘ
ROLLOVER	4	1.5	47 pts	--	--
JOBS	3	1.0	15 pts	x3.7	20 s
OTHER	8	1.0	5 pts	x2.4	182 s
RETAIL	1	1.0	61 pts	x18.0	26 s
CPI	1	1.0	91 pts	x15.0	36 s

2026.10.23 00:00	Daily rollover 00:00 server ⓘ		49 pts	--	--
2026.10.22 15:30	USD Initial Jobless Claims ⓘ		4 pts	x2.0	21 s
2026.10.22 00:00	Daily rollover 00:00 server ⓘ		45 pts	--	--
2026.10.21 17:30	USD EIA Crude Oil Stocks Ch... ⓘ		2 pts	x2.0	--
2026.10.21 00:00	Daily rollover 00:00 server ⓘ		57 pts	--	--

Normal = median before. Widening = peak P95 / normal. ⓘ

News > Broker profile, EURUSD, 24 windows from tick history

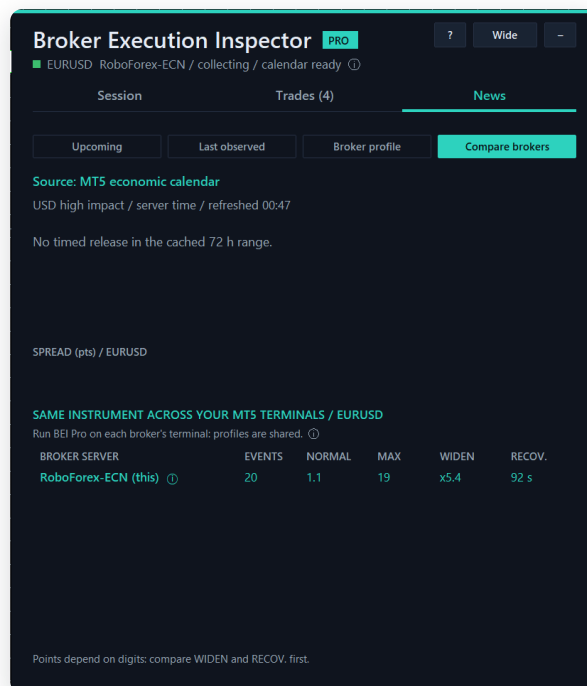
Column	Meaning
NORMAL	Median spread in the 5 minutes before the release.
MAX	Highest spread seen in the window.
WIDENING	P95 during or after / normal. x10 means a normal 6-point spread jumps to about 60 points.
RECOVERY	Seconds until the spread stayed normal for 5 seconds in a row. Wait at least this long before entering.

Stop-loss check: before a release, open positions of the symbol whose stop loss is closer than the usual peak of that release type are flagged. Information only: BEI never changes your orders.

Compare brokers

Run BEI Pro on the MT5 terminals of several brokers on the same PC. Each terminal writes its news profile to `Common/Files/BrokerExecutionInspector/Profiles`; the **Compare brokers** view shows all of them for the same instrument.

Compare WIDENING and RECOVERY first: points depend on the number of digits each broker uses.
Local files only: no server, no account data.



News > Compare brokers

ALERTS

Alerts

- **Spread above a threshold** (`AlertSpreadPoints`): at most one alert per minute, re-armed below 80 % of the threshold.
- **Before a release** (`AlertNewsMinutes` , default 5 minutes).
- **Spread back to normal** after a release (`AlertSpreadRecovered` , Pro).
- **Push** to MT5 mobile (`AlertPush`): set your MetaQuotes ID in Tools > Options > Notifications.
- **E-mail** (`AlertEmail`) **NEW**: set the mail server in Tools > Options > Email and click Test there first.

Pop-up alerts are always shown in the terminal; push and e-mail are added when switched on.

Signals for your EAs

While it runs, BEI Pro publishes its measurements every 2 seconds as terminal global variables named `BEI.<SYMBOL>.*`. Your own EA reads them with the free include file **BEI_Signals.mqh**: skip entries when the spread is wide or a release is close, with one line.

1. Copy `BEI_Signals.mqh` to `MQL5\Include` (File > Open Data Folder).
2. Keep BEI Pro running on a chart of the same symbol in the same terminal (`PublishSignals` = true, default).
3. Add the include and the filter to your EA.

```
#include <BEI_Signals.mqh>

void OnTick()
{
    // skip this entry: spread above 25 points, or a release within 15 minutes
    if(!BEISpreadOK(25) || !BEINewsClear(15)) return;
    // or a relative rule: spread more than twice the usual
    if(BEIReady() && BEISpread() > 2.0*BEIMedian()) return;
    ...
}
```

Function	Returns
<code>BEIReady()</code>	true when BEI runs on the symbol, has enough quotes and updated in the last 15 s
<code>BEISpread()</code> · <code>BEIMedian()</code> · <code>BEIP95()</code>	live spread, recent median and P95 in points (-1 when not ready)
<code>BEISessionMedian()</code>	median of the whole BEI session
<code>BEISpreadWide()</code>	true while the spread is above the wide threshold
<code>BEIMinutesToNews()</code>	minutes to the next high-impact release (-1 when none)
<code>BEINewsWindow()</code>	true from 5 minutes before to 10 minutes after a release
<code>BEINewsPeak()</code>	usual spread peak measured for the next release type
<code>BEISpreadOK(max)</code> · <code>BEINewsClear(min)</code>	ready-made filters

The filters return **true (allowed) when BEI is not running**, so your EA keeps trading if you close the BEI chart. Pass `strict=true` to block instead: `BEISpreadOK(25,"",true)`. Every function takes an optional symbol, for example `BEISpread("XAUUSD")`. Global variables are local to the terminal: nothing leaves your PC.

Files and folders

MetaTrader only lets an EA write inside `MT5\Files` of the terminal or the **Common** folder shared by all terminals. Open them from MT5: **File > Open Data Folder > MQL5 > Files**.

What	Where (default ExportFolder)
HTML report, CSV export, chart image	BrokerExecutionInspector\Reports\XAUUSD\
Raw CSV export (ExportEnabled)	BrokerExecutionInspector\XAUUSD\20261023_090000_<chart>\
Local memory, session history	BrokerExecutionInspector\State\
Broker profiles (compare)	Common\Files\BrokerExecutionInspector\Profiles\

- **One folder and one file name per symbol:** `XAUUSD_ticks.csv` , `XAUUSD_health.csv` , `XAUUSD_executions.csv` , `XAUUSD_summary.csv` , `XAUUSD_session.csv` . The executions file contains only the chart symbol (`ExportAllSymbolFills` adds the others).
- `ExportFolder` changes the folder name and accepts sub-folders, for example `BEI\Gold` . `ExportToCommon` = true writes to the Common folder instead.
- A path with a drive letter or "." is refused (MT5 sandbox) and a message is written in the Experts log.
- Raw export: when `TickLimit` or the disk budget is reached, only the tick file stops ("CSV full" in the status line); measurements, health log and executions continue.

Save to another drive (Windows folder junction)

To keep the reports on `D:\BEI` for example:

1. Close MT5. Move the folder `MT5\Files\BrokerExecutionInspector` to `D:\BEI` (or create an empty `D:\BEI` and delete the old folder).
2. Open a Command Prompt (Windows key, type `cmd`) and run, with your own data folder path:

```
mklink /J "C:\Users\you\AppData\Roaming\MetaQuotes\Terminal\
<ID>\MQL5\Files\BrokerExecutionInspector" "D:\BEI"
```

3. Start MT5. BEI writes to `MT5\Files\BrokerExecutionInspector` as before, Windows stores the files on `D:\BEI` . No administrator rights are needed.

Parameters (Pro)

Parameter	Default	Role
Economic news		
EnableNews	true	Use the MT5 calendar and measure news windows
NewsCurrencies	USD	Currencies, comma separated (USD, EUR, GBP, JPY, CAD, AUD, NZD, CHF, CNY)
NewsImportance	High only	Or medium and high impact
NewsHistoryEvents	20	Past releases replayed for the profile (0 = off, max 40)
NewsHistoryDays	45	How far back to look for past releases (1–120 days)
RolloverMonitor	true	Add the daily 00:00 server rollovers to the profile
Alerts		
AlertSpreadPoints	0	Spread alert threshold in points (0 = off)
AlertNewsMinutes	5	Alert X minutes before a release (0 = off)
AlertSpreadRecovered	true	Alert when the spread is back to normal
AlertPush	false	Push notifications to MT5 mobile
AlertEmail NEW	false	E-mail (MT5 Options > Email must be set up)
Spread analysis		
WideThresholdPoints	0	"Wide spread" threshold; 0 = automatic (3 × recent median)
RecentQuotes	2048	Quotes used for recent median, P95 and gauge (20–8192)
GapSeconds	5	Quote gaps excluded from "wide" durations
HourProfileDays NEW	5	Days of tick history replayed for the spread by weekday and hour (0 = off, max 20)
Closed trades		
ClosedTradesShown	6	Closed positions analysed (1–20)
ClosedTradesChartSymbolOnly	false	Start the Trades tab on the chart symbol only
Chart panel		
StartView	Mini HUD	First view (then remembered per chart)
Theme	Auto	Auto, Dark or Light
ShowLocalTime	false	Show computer time instead of server time
ShowPanel	true	Show the chart panel
PanelLeft / PanelTop	15 / 25	First position in pixels

Parameter	Default	Role
Sessions and optional raw export		
RunSeconds	0	Maximum collection time (0 = until stopped)
TradeWindowSeconds	10	Spread context before/after each fill
ExportEnabled	false	Raw tick and fill export to CSV
PollSeconds	1	Collection interval
LookbackSeconds	300	Ticks reloaded from history at start, so the gauge is ready at once (0–3600 s)
TickLimit	500000	Maximum exported tick rows (CSV only, 0 = no limit)
StorageBytes / SegmentBytes / SegmentLimit	64 MB / 8 MB / 8	Disk budget of the raw export
Reports and export folder		
ExportFolder NEW	BrokerExecutionInspector	Folder inside MQL5\Files, sub-folders allowed (e.g. BEI\Gold)
ExportToCommon NEW	false	Write to the Common\Files folder shared by all terminals
ExportAllSymbolFills NEW	false	Raw executions CSV: also fills of other symbols
HtmlReportOnStop NEW	true	Save an HTML report when a session ends
NewSessionDaily NEW	false	New session and report at server midnight (VPS)
Signals for other EAs		
PublishSignals NEW	true	Publish spread and news state for BEI_Signals.mqh

Essential settings

EnableNews , AlertNewsMinutes , AlertSpreadPoints , AlertPush , AlertEmail , StartView , Theme , ShowLocalTime , PanelLeft , PanelTop . Essential always reloads 300 s of history at start and writes its report to MQL5\Files\BrokerExecutionInspector\Reports .

Changing a parameter (F7 on the chart) starts a new session: the previous one is saved as Previous, added to History and reported if it lasted at least one minute.

VPS and resources

- One light timer (1 s, 2 s after collection stops). Statistics are cached and recomputed only when a quote arrives.
- The panel only updates the chart objects whose value changed and redraws the chart only then; images (gauge, spread line, bars) are redrawn only when their content changes.
- Built-in CPU meter in the panel status line and the HUD tooltip, measured after the first minute (the start replays tick history).
- Measured on a live demo account: **{CPU}** of one CPU core.
- **MetaQuotes VPS**: no chart objects are created at all; collection, alerts, reports, signals and memory keep running. Migrate the chart with the utility attached as usual.

STRATEGY TESTER

Strategy Tester and data quality

BEI runs in the Strategy Tester on real or generated ticks. The tester has no economic calendar: the news views show fixed demonstration windows on the tester ticks. The broker hour profile and the session history are not computed there.

At the end of each backtest the HTML report is written to the tester agent folder (`Tester\...\Agent-...\MQL5\Files\BrokerExecutionInspector\Reports`). Its **Data quality** section is the fastest way to check the ticks you test on:

Line	What to look for
Quotes per minute	very low values mean generated or thin data
Gaps, longest silence	holes in the history, with the time of the longest one
Repeated quotes	same bid and ask sent again
Zero spread	normal on raw / ECN accounts at quiet times; suspicious on a standard account
Invalid quotes	bid or ask missing, or ask below bid

Troubleshooting

Symptom	What to do
"Calendar unavailable"	The terminal is disconnected or the broker has not loaded the calendar yet. BEI retries every 5 minutes.
Empty broker profile	MT5 is downloading tick history; the first rebuild can take a minute. The calendar needs a release in the last NewsHistoryDays for the chosen currencies.
"No timed release in the cached 72 h range"	No high-impact release of the chosen currencies in the next 3 days (often on a weekend or a quiet week). Add currencies in NewsCurrencies.
Grey needle, "Waiting 12 / 20"	Fewer than 20 quotes so far. The needle turns white after 20 quotes.
"Market closed?"	No quote for 2 minutes: the market is closed or very quiet.
"Viewer chart" in Details	Another chart of the same symbol already writes the memory and the reports. This is normal.
No HTML report after a session	The session lasted less than one minute or had no live quote, or HtmlReportOnStop is off. Use the HTML report button.
My EA does not see the signals	BEI Pro must run on a chart of the same symbol in the same terminal with PublishSignals on. Check Tools > Global Variables (F3) for BEI.<SYMBOL>.*
E-mail alert not received	Set and test the mail server in Tools > Options > Email.
Nothing is drawn	The chart is too small even for the HUD (below about 200 × 120 px), or the utility runs on the MetaQuotes VPS.
Old version after an update	Restart MT5: it keeps the previous program in memory.

LIMITS

Limits and disclaimer

Spread and slippage come from the quotes and history provided by your broker; missing seconds are never filled in. Fill time is based on MT5 order timestamps, not an isolated network latency. The Strategy Tester has no economic calendar.

Results describe past observations on your account and do not predict future execution. The utility gives no trading advice.