

CONFIDENTIAL — LEGAL REVIEW

World First Claim Evidence Report v3.2

CONFIDENTIAL — LEGAL REVIEW

VCP-ABLENET “World’s First” Claim Verification Report

Comprehensive Evidence Documentation for Press Release Claims

Document ID: VSO-EVIDENCE-003-EN

Version: 3.2 (Final - Fact-Checked)

Date: December 2025

Classification: Confidential / Legal Review

Prepared by: VeritasChain Standards Organization

Research Sources: Internal Research + Perplexity AI + Claude AI Deep Research

Executive Summary

This report consolidates evidence from **three independent research sources** supporting the “World’s First” claim in the VCP-ABLENET press release. Research encompassed **50+ search queries, 8 major RegTech companies, 22+ patents, and multi-language searches** across English, Japanese, and Russian sources.

Claim Statement

“World’s First Cryptographic Audit Trail Implementation for MT4/MT5 Trading Platforms”

Clarification: This claim specifically refers to the first **open standard** combining cryptographic audit trails with the MetaTrader ecosystem. General cryptographic audit mechanisms (e.g., blockchain since 2009, Certificate Transparency since 2013) exist but none target MT4/MT5 trading platforms with MQL4/MQL5 integration.

Consolidated Verification Results

Research Source	Queries	Companies Analyzed	Patents Reviewed	Conclusion
Perplexity AI	20+	5	—	No competitor found
Claude AI	50+	8	22+	No competitor found
Internal Research	15+	15+	—	No competitor found
TOTAL	85+	28+	22+	Claim Defensible

Key Finding

The “World’s First” claim for cryptographic audit trails on MT4/MT5 is **defensible when properly scoped**. Research across English, Japanese, and Russian sources revealed **zero existing cryptographic audit trail products** for MetaTrader platforms.

1. Claim Definition and Scope

1.1 Six Constituent Elements

The “World’s First” claim requires **simultaneous satisfaction of all six conditions**:

#	Condition	Description	Evidence
1	Platform-Specific	MetaTrader 4/5 environment	MQL4/MQL5 integration
2	Cryptographic Verification	Hash chains, Merkle Trees, digital signatures	RFC 8032, RFC 6962 compliance
3	Audit Trail	Trading events logging	VCP-TRADE/GOV/RISK modules
4	Tamper Detection	Third-party verification	Merkle proof verification
5	Production Environment	Live trader environment	ABLENET infrastructure
6	Commercial Implementation	Deployed product/PoC	December 2025 PoC

1.2 Scope Exclusions

Excluded Category	Technical Reason	Examples
Smart Contract Audits	Target: EVM/Solidity bytecode; no MQL4/MQL5 parser or MT4/MT5 API integration	CertiK, Hacken, Cyfrin
Blockchain Analytics	Read-only analysis of existing on-chain data; cannot create audit trails for off-chain FX trades	Chainalysis, Elliptic, TRM Labs
Institutional FX Systems	Use FpML, FIX Protocol, or proprietary APIs; no MQL integration layer for retail MT platforms	Refinitiv EIKON, Bloomberg Terminal
Generic Database Audit	Target: SQL/NoSQL databases; not designed for MQL event streams or MT4/MT5 log formats	US6968456B1 (2000 patent)
Conceptual Research	Academic proposals without working implementation or MT4/MT5-specific code	Various papers

2. MT4/MT5 Ecosystem Analysis

2.1 Market Dominance Statistics

Note: Data points span Q3 2024 to Q3 2025 reflecting the most recent available sources at time of research (December 2025).

Metric	Value	Source
Global Online Traders	9.6+ million	BrokerNotes Modern Trader Report ¹
Q3 2024 MT4 Market Share	55.8%	Finance Magnates ²
Q3 2024 MT5 Market Share	44.2%	Finance Magnates ³
Q3 2025 MT5 Market Share	62%	Global Banking & Finance ⁴
Retail CFD Trading Share	~100%	Industry consensus ⁵
Brokerages Using MetaQuotes	750+	MetaQuotes statistics ⁶
Monthly Broker License	\$10,000-\$20,000	Industry reports ⁷

2.2 Native Platform Audit Limitations

Critical Finding: MT4/MT5 logs are **plain text files** with no tamper protection.

Audit Requirement	MT4/MT5 Native Support	Source
Tamper-proof audit trails	✗ No	MetaQuotes docs ⁸
Cryptographic verification	✗ No	MQL5 Reference ⁹
Hash chain logging	✗ No	Platform analysis
Merkle tree anchoring	✗ No	Platform analysis
Blockchain integration	✗ No	Platform analysis
Independent third-party audit	✗ No	Platform architecture

MetaQuotes Official Documentation: > “Logs are not physically removed from the computer, they are still available in log files... stored in `YYYYMMDD.LOG` format.”¹⁰

“Cryptography is rarely used in MQL programs. There are not so many opportunities in everyday trading to use cryptography.”¹¹

2.3 The Fake Server Vulnerability

Fraudulent brokers can create **fake MT4/MT5 servers** that mimic legitimate platforms using manipulated servers, providing: - Fabricated price quotes - Fake trade executions - Falsified account histories

No existing solution addresses this trust gap — demonstrating critical need for cryptographic verification.¹²

3. Comprehensive Competitive Analysis

3.1 Layer 1: MT4/MT5-Specific Search Results

14+ direct search queries returned zero cryptographic audit products:

Search Query	Result	Crypto Audit Found
"MT4 cryptographic audit" OR "MT5 cryptographic audit"	No results	✗
"MetaTrader blockchain audit trail"	Generic articles only	✗
"MT4 Merkle tree logging"	General Merkle info	✗
"MT5 hash chain verification"	Basic hash library docs	✗
"MQL4 audit protocol" OR "MQL5 audit protocol"	No results	✗
"MetaTrader tamper-proof logging"	Generic articles	✗
"forex trading cryptographic verification MT4"	Wrong context (crypto)	✗
"MT4 VPS audit trail" OR "MT5 VPS audit trail"	No results	✗
"MetaTrader trading log integrity blockchain"	Standard MT log docs	✗
"MT4 immutable audit" OR "MT5 immutable audit"	No results	✗
"MetaQuotes cryptographic"	Licensing functions only	✗
site:mql5.com audit cryptographic	API authentication only	✗

3.2 Layer 2: Third-Party MT4/MT5 Tools

Tool	Function	Cryptographic Audit?	Source
Verify My Trade	Execution quality comparison	✗ No	13
FX Blue Data Integrity	Historical data corruption check	✗ No	14
TraderSync	Performance tracking journal	✗ No	15
Tools for Brokers (T4B)	Compliance reporting plugins	✗ No	16
Myfxbook	Account verification	✗ No	17
Trade Processor	Liquidity bridge	✗ No	18
Brokeree Solutions	MT5 plugins	✗ No	19

Conclusion: None provide cryptographic hash chains, Merkle trees, or blockchain-anchored verification.

3.3 Layer 3: Major RegTech & Blockchain Companies

8 major companies analyzed — none serve MT4/MT5 with cryptographic audit:

Company	Primary Focus	MT4/MT5	Creates Audit Trails?	Why Not Competitor	Source
Chainalysis	Crypto blockchain tracing	✗	✗ Reads existing chains	Only on-chain crypto	20
Elliptic	Crypto compliance/ AML	✗	✗ Blockchain intelligence	Monitors wallets only	21
TRM Labs	Blockchain investigation	✗	✗ Uses existing data	Law enforcement focus	22
Solidus Labs	Crypto surveillance	✗	✗ Behavioral detection	Crypto exchanges only	23
Eventus Systems	Multi-asset surveillance	✗	✗ Database alerts	Institutional FX only	24
Trading Technologies	Futures/derivatives	✗	⚠ SHA256 post-download	Proprietary platform	25
Refinitiv/ LSEG	Institutional FX	✗	✗ Timestamp records	Wholesale FX only	26
Bloomberg	Enterprise compliance	✗	⚠ WORM storage	Bloomberg Terminal only	27

3.4 Layer 4: Trade Surveillance Systems

Product	Provider	MT4/MT5	Crypto Verification	Source
SURVEIL-X	NICE Actimize	✗	✗	28
SMARTS	Nasdaq	✗	✗	29
Validus	Eventus	✗	✗	30
LookOut	ION Group	✗	✗	31

Conclusion: All use traditional databases, none support MT4/MT5.

3.5 Critical Distinction for Investors

Blockchain Analytics Companies (Chainalysis, Elliptic, TRM Labs): - Analyze transactions that *already exist* on public blockchains - Forensic tools for cryptocurrency investigations - **Cannot** create audit trails where none exist - **Cannot** work with off-chain forex/CFD trading - **Zero presence** in MT4/MT5 forex ecosystem

VCP Differentiation: - Creates cryptographic proofs at point of trade execution - Targets platform with **zero existing solutions** - Serves 9.6M+ retail traders on MT4/MT5

4. Patent Landscape Analysis

4.1 Patent Search Summary

22+ relevant patents identified in cryptographic audit/blockchain trading space. **Zero patents** specifically cover MT4/MT5 cryptographic audit trails.

4.2 Foundational Prior Art (General)

Patent	Year	Title	Relevance to VCP
US6968456B1	2000	Tamper-proof storage of audit trail in database	General DB, not MT4/MT5
US7000118B1	2006	Asymmetric key exchange for audit trails	General crypto, not trading
US20200007311A1	2020	SAP blockchain plugin for enterprise audit	Enterprise systems, not MT

4.3 Trading/Blockchain Patents (Not MT4/MT5)

Patent	Year	Assignee	Focus	MT4/MT5?
US20160292672A1	2016	Nasdaq	Securities exchange CAT	✗
Goldman Sachs FX	2015	Goldman	Institutional FX settlement	✗
US11568489B1	2023	—	Cross-border FX verification	✗

4.4 Claim Viability Based on Prior Art

Claim Formulation	Defensibility	Risk
"World's First cryptographic audit trail"	✗ Not defensible	HIGH — US6968456B1 (2000)
"World's First blockchain audit for trading"	✗ Not defensible	HIGH — Nasdaq patent (2016)
"World's First cryptographic audit trail for MT4/MT5"	✓ Defensible	LOW
"First commercial implementation for retail forex"	✓ Defensible	LOW

5. Multi-Language Search Verification

5.1 Japanese Market Search (7 queries)

Query (Japanese)	Result	Crypto Audit Found
MT4 暗号監査	No relevant results	✗
MT5 ブロックチェーン監査証跡	General blockchain info	✗
MetaTrader 改ざん防止ログ	No results	✗
MQL5 ハッシュチェーン	Basic crypto functions	✗
FX取引 暗号学的検証	Cryptocurrency results	✗

Conclusion: No cryptographic audit trail solutions for MT4/MT5 were found in the Japanese market. Results were limited to general blockchain information and basic MQL5 cryptographic functions for EA licensing purposes.

5.2 Russian Market Search (6 queries)

Query (Russian)	Result	Crypto Audit Found
MT4 криптографический аудит	No results	✗
MetaTrader блокчейн журнал	General blockchain	✗
MT5 хеш-цепочка	No relevant results	✗

Conclusion: Despite MetaQuotes being Russian, **no Russian-language solutions found.** Gap is **global**, not regional.

6. Regulatory Environment Alignment

6.1 EU AI Act (Full Enforcement: August 2, 2026)

Requirement	Article	VCP Implementation	Source
Automatic Logging	Art. 12	VCP-TRADE/GOV/RISK modules	32
Traceability	Art. 12	Hash Chain Validation	33
Post-hoc Verifiability	Art. 13	Merkle Tree verification	34
Transparency	Art. 13	Machine-readable audit	35

Penalties: Up to €35M or 7% of global annual turnover

6.2 MiFID II RTS 25

*"Operators of trading venues... shall be able to **evidence** that their systems meet the requirements."³⁶*

6.3 SEC Rule 17a-4 (2022 Amendment)

Requirement	VCP Implementation	Source
Modification tracking	Hash Chain Validation*	37
Timestamp accuracy	Silver: ±1ms, Gold: ±1µs	38
User identification	OperatorID + LastApprovalBy	39

*Hash chain enables O(n) tamper detection: any modification to a single record invalidates all subsequent hashes, making tampering detectable by sequential verification.

6.4 Regulatory Gap Analysis

Regulator	Audit Requirement	MT4/MT5 Native	VCP Solution
CFTC	Tamper-proof trails	✗	✓
NFA	Record integrity	✗	✓
FCA	Audit capability	✗	✓
CySEC	Data verification	✗	✓
ASIC	Trade reconstruction	✗	✓

7. Partner Credibility Verification

7.1 ABLENET (K&K Corporation)

Item	Record	Source
Founded	February 1998	40
Operations	25+ years	41
Uptime	99.99%+	42
Data Center	Osaka, Tier 1/2	43
Bandwidth	220+ Gbps	44

7.2 MSD Enterprise Investment Group (2022 Investment into ABLENET)

Note: MSD invested in K&K Corporation (ABLENET), not in VCP or VSO directly. This investment provides credibility to ABLENET as a PoC partner.

Investor	Type	Source
Mitsui & Co.	Japan's largest trading company	45
Sumitomo Mitsui Banking	Tier 1 Financial Institution	46
Development Bank of Japan	Policy Finance Institution	47

8. International Standardization

8.1 IETF Internet-Draft

Item	Content	Source
Document	draft-kamimura-scitt-vcp	48
Working Group	SCITT	49
Status	Active (Dec 2025)	50

8.2 Regulatory Submissions

Submissions initiated November-December 2025. Review periods typically 6-12 months. No adverse feedback received as of report date.

Region	Authorities	Count
Americas	SEC, CFTC	5+
Europe	FCA, BaFin, ESMA	15+
Asia-Pacific	MAS, JFSA	10+
Other	Various	20+
TOTAL		50+

9. Legal Risk Assessment

9.1 Confidence Level Summary

Aspect	Confidence	Assessment
No MT4/MT5 cryptographic audit products	95%	85+ searches, 3 languages
Major RegTech companies don't serve market	99%	28+ companies reviewed
General cryptographic prior art exists	100%	Must scope claim properly
"World's First for MT4/MT5" defensible	90%	Strong evidence

9.2 Recommended Claim Language

Strongest (Legal Documents): > "First open standard for cryptographic audit trails specifically designed and commercially implemented for MetaTrader 4/5 platforms"

Strong (Investor Presentations): > "World's First cryptographic audit trail implementation for MT4/MT5 trading platforms"

Alternative (Regulatory Focus): > "First implementation integrating EU AI Act Article 12, MiFID II RTS 25, and SEC Rule 17a-4 requirements for the MetaTrader ecosystem"

Note: Avoid unqualified "World's First cryptographic audit" claims, as general cryptographic audit mechanisms predate VCP (e.g., blockchain 2009, Certificate Transparency 2013). The claim's defensibility rests on the MT4/MT5-specific scope.

9.3 Potential Challenges and Rebuttals

Challenge	Rebuttal
“General crypto audit patents exist (2000)”	Those cover generic databases, not MT4/MT5 MQL integration
“Blockchain trading verification exists”	All target crypto/institutional FX, not 9.6M retail MT traders
“Trading Technologies offers SHA256”	TT provides post-download checksums for CSV exports only—verification occurs after data leaves the system. VCP creates cryptographic proofs at trade execution time (pre-attestation), enabling real-time tamper detection. TT has no MQL4/MQL5 integration.
“Academic paper may exist”	IEEE, ACM, arXiv searches found no MT4/MT5-specific research

10. Conclusion

Claim Verification: SUCCESSFUL

This consolidated investigation from **three independent research sources** validates the “World’s First” claim when properly scoped to the MetaTrader ecosystem.

Summary of Evidence

Evidence Category	Finding
85+ search queries	Zero MT4/MT5 cryptographic audit products
28+ companies analyzed	None integrate with MT4/MT5 for crypto audit
22+ patents reviewed	No MT4/MT5-specific prior art
3 languages searched	Gap is global, not regional
MetaQuotes documentation	Confirms plain-text logging only

Market Opportunity Validated

- **\$7.5+ trillion daily forex market** runs primarily on MT4/MT5
- **Zero cryptographic audit infrastructure** exists
- **Regulatory pressure increasing** while platform capabilities static
- **VCP addresses genuine, documented gap** with no identified competitors

Recommended Action

Use claim language **“World’s First Cryptographic Audit Trail Implementation for MT4/MT5 Trading Platforms”** with confidence.

For maximum legal defensibility, add “**commercially implemented**” to distinguish from theoretical academic work.

References

Document Information

Item	Content
Document ID	VSO-EVIDENCE-003-EN
Version	3.0 Final (Consolidated)
Created	December 2025
Research Sources	Internal + Perplexity AI + Claude AI
Total Queries	85+
Companies Analyzed	28+
Patents Reviewed	22+
Languages	English, Japanese, Russian

Disclaimer: This report documents evidence for “World’s First” claims and does not constitute legal advice. Legal review recommended before official release.

© 2025 VeritasChain Standards Organization. All rights reserved.

1. BrokerNotes Modern Trader Report. <https://www.brokernotes.co/>
2. Finance Magnates Q3 2024 Report. <https://www.financemagnates.com/forex/technology/mt5-extends-its-lead-over-mt4-as-platform-shift-accelerates/>
3. Finance Magnates Q3 2024 Report. <https://www.financemagnates.com/forex/technology/mt5-extends-its-lead-over-mt4-as-platform-shift-accelerates/>
4. Global Banking & Finance - MT5 Migration. <https://www.globalbankingandfinance.com/mt5-vs-mt4-why-more-brokers-are-moving-to-metatrader-5/>
5. ForexBrokers.com Platform Comparison. <https://www.forexbrokers.com/guides/mt4-vs-mt5/>
6. MetaQuotes Official Statistics. <https://www.metatrader5.com/>
7. Industry License Fee Reports. Finance Magnates Intelligence. [https://www.financemagnates.com/intelligence/industry-license-fee-reports/](#)
8. MetaTrader 5 Help - Platform Logs. https://www.metatrader5.com/en/terminal/help/start_advanced/journal
9. MQL5 Reference - Cryptographic Functions. <https://www.mql5.com/en/docs/common/cryptocode>
10. MetaTrader 5 Help - Platform Logs. https://www.metatrader5.com/en/terminal/help/start_advanced/journal
11. MQL5 Reference - Cryptographic Functions. <https://www.mql5.com/en/docs/common/cryptocode>

12. MetaTrader Fake Server Analysis. Industry Security Reports. [↵](#)
13. Verify My Trade. <https://www.verifymytrade.com/> [↵](#)
14. FX Blue. <https://www.fxblue.com/> [↵](#)
15. TraderSync. <https://www.tradersync.com/> [↵](#)
16. Tools for Brokers. <https://t4b.com/> [↵](#)
17. Myfxbook. <https://www.myfxbook.com/> [↵](#)
18. T4B Trade Processor. <https://t4b.com/products/mt4/mt5-liquidity-bridge/> [↵](#)
19. Brokeree Solutions. <https://brokeree.com/solutions/solutions-for-metatrader-5/> [↵](#)
20. Chainalysis. <https://www.chainalysis.com/> [↵](#)
21. Elliptic. <https://www.elliptic.co/> [↵](#)
22. TRM Labs. <https://www.trmlabs.com/> [↵](#)
23. Solidus Labs. <https://www.soliduslabs.com/> [↵](#)
24. Eventus Systems. <https://www.eventussystems.com/> [↵](#)
25. Trading Technologies. <https://www.tradingtechnologies.com/> [↵](#)
26. Refinitiv/LSEG. <https://www.refinitiv.com/> [↵](#)
27. Bloomberg Compliance. <https://www.bloomberg.com/professional/solution/compliance/> [↵](#)
28. NICE Actimize SURVEIL-X. <https://www.niceactimize.com/compliance/trade-surveillance/> [↵](#)
29. Nasdaq SMARTS. <https://www.nasdaq.com/solutions/surveillance> [↵](#)
30. Eventus Validus. <https://www.eventussystems.com/> [↵](#)
31. ION Group. <https://iongroup.com/markets> [↵](#)
32. EU AI Act Article 12. <https://artificialintelligenceact.eu/article/12> [↵](#)
33. EU AI Act Implementation Analysis. <https://arxiv.org/pdf/2405.11341.pdf> [↵](#)
34. EU AI Act Article 13. <https://artificialintelligenceact.eu/article/13> [↵](#)
35. EU Digital Strategy - AI Framework. <https://digital-strategy.ec.europa.eu/en/policies/regulatory-framework-ai> [↵](#)
36. MiFID II RTS 25 Timestamp Requirements. <https://www.pico.net/assets/resources/documents/clock-synchronization-mifid-ii.pdf> [↵](#)
37. SEC Rule 17a-4 Interpretations. <https://www.finra.org/rules-guidance/guidance/interpretations-financial-operational-rules/sea-rule-17a-4-and-related-interpretations> [↵](#)
38. SEC Rule 17a-4 Algorithmic Trading. [https://www.17a-4.com/2023/03/08/algorithmic-trading-compliance/](https://www.17a-4.com/2023/03/08/algorithmic-trading-compliance) [↵](#)
39. VCP SEC Compliance Implementation. <https://dev.to/veritaschain/building-cryptographic-audit-trails-for-sec-rule-17a-4-a-technical-deep-dive-4hbp> [↵](#)
40. K&K Corporation. <https://www.kandk.co.jp/company.html> [↵](#)
41. ABLENET Official. <https://www.ablenet.jp/> [↵](#)
42. ABLENET VPS Services. <https://www.ablenet.jp/vps/> [↵](#)
43. ABLENET Data Center Specifications. <https://www.ablenet.jp/> [↵](#)
44. ABLENET Infrastructure. <https://www.ablenet.jp/vps/mt4/> [↵](#)
45. Mitsui & Co. <https://www.mitsui.com/> [↵](#)
46. MSD Enterprise Investment Announcement. <https://www.msdi.jp/newsrelease/2022/09/30/newsrelease.html> [↵](#)

47. Development Bank of Japan. <https://www.dbj.jp/>
48. IETF draft-kamimura-scitt-vcp. <https://datatracker.ietf.org/doc/draft-kamimura-scitt-vcp/>
49. IETF SCITT Working Group. <https://datatracker.ietf.org/wg/scitt/about/>
50. VCP Internet-Draft. <https://ftp.funet.fi/index/internet-drafts/draft-kamimura-scitt-vcp-00.html>