Serialization & Copy Audit | Public Evidence Brief

Public IP-safe technical summary | 08 Nov 2026 | Not an industrial certification

Scope

Bounded same-process buffer ownership audit with exact-byte comparison.

Measured historical evidence

- Mac2 R3 1 KiB borrowed-buffer local median: 367.38 ns (5 x 200,000 operations).
- Paired allocate-copy median 571.04 ns; 1.55x reference/candidate in this local scope.
- Separate Linux local 1.35x comparison used a different protocol.
- No wire-to-wire latency, compression or network zero-copy result.

Independent Linux synthetic reference

120/120 checks for this module, four scenarios x 30 repetitions. Six-module suite 720/720. These measure an independent simplified reference, NOT private engine performance.

Optimized comparison and open gates

Optimized memory ownership/copy path, plus gRPC/Protobuf where applicable and exact-byte p99/p99.9 checks.
Native fault testing, competitive superiority, production p99/p99.9, third-party lab certification and real client savings are NOT established by the reference suite.

Fixed-scope diagnostic

EUR 3,200: One compatible 1 KiB-class boundary and sample, isolated test environment, up to 30 paired runs. Client baseline, correctness oracle, failure review and report with GO / NO-GO / INCONCLUSIVE.

Intellectual property

No private source, bitstreams, internal thresholds, confidential logs, client data, credentials or privileged implementation details in this public brief.
All results are bounded to their test protocol. No guaranteed savings, protection against all failures or production SLA.