



QUORUM - KB ANALYTICAL SOLUTIONS INC.

Platform Architecture Technical Reference

Version 1.0

DOCUMENT TYPE Technical Whitepaper	CLASSIFICATION Confidential	AUDIENCE CISO / CRO / CTO
VERSION 1.0 — May 2026	PAGES 48	COMPANION DOCS QRM-BEH-002, QRM-ZKC-003

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SECTION 01

Executive Summary

QUORUM is a behavioral intelligence platform purpose-built for financial institutions operating under sustained adversarial pressure. It functions as an analytical layer that operates on top of existing fraud tooling — enhancing detection accuracy and reducing false positive rates without displacing the compliance, rules, or case management infrastructure already in place.

The platform synthesizes signals across four domains simultaneously: transaction context, device characteristics, behavioral biometrics, and network environment. These signals are processed by a four-tier LLM consensus engine (SENTINEL, INQUISITOR, ADVERSARIAL, ARBITRATOR) that produces a risk score, inter-tier confidence metric, and a structured set of human-readable reason codes derived from the reasoning chains produced during evaluation.

QUORUM's core architectural premise is that no single signal is decisive. Sophisticated actors can spoof IP addresses, recycle device identifiers, and fabricate transaction context. What they cannot reliably replicate is the composite behavioral signature that emerges from the intersection of all four signal domains over time. The platform is designed to exploit this asymmetry at scale.

PLATFORM CAPABILITY INDICATORS

4-tier

LLM CONSENSUS (SENTINEL · INQUISITOR · ADVERSARIAL · ARBITRATOR)

214

DERIVED FEATURE SIGNALS

24,066/s

WAF THROUGHPUT — CLEAN TRAFFIC (MEASURED)

700+

RED TEAM EXERCISES PER MONTH

5 min

RL THRESHOLD RE-OPTIMIZATION CYCLE

The platform is API-first and integration-agnostic. Deployment does not require changes to existing transaction processing infrastructure. QUORUM's modular architecture is designed to integrate with existing security systems.

FULL DOCUMENT

Access the complete whitepaper

Institutional access, complete benchmark data, and full technical implementation details are available to qualified partners and prospects.

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