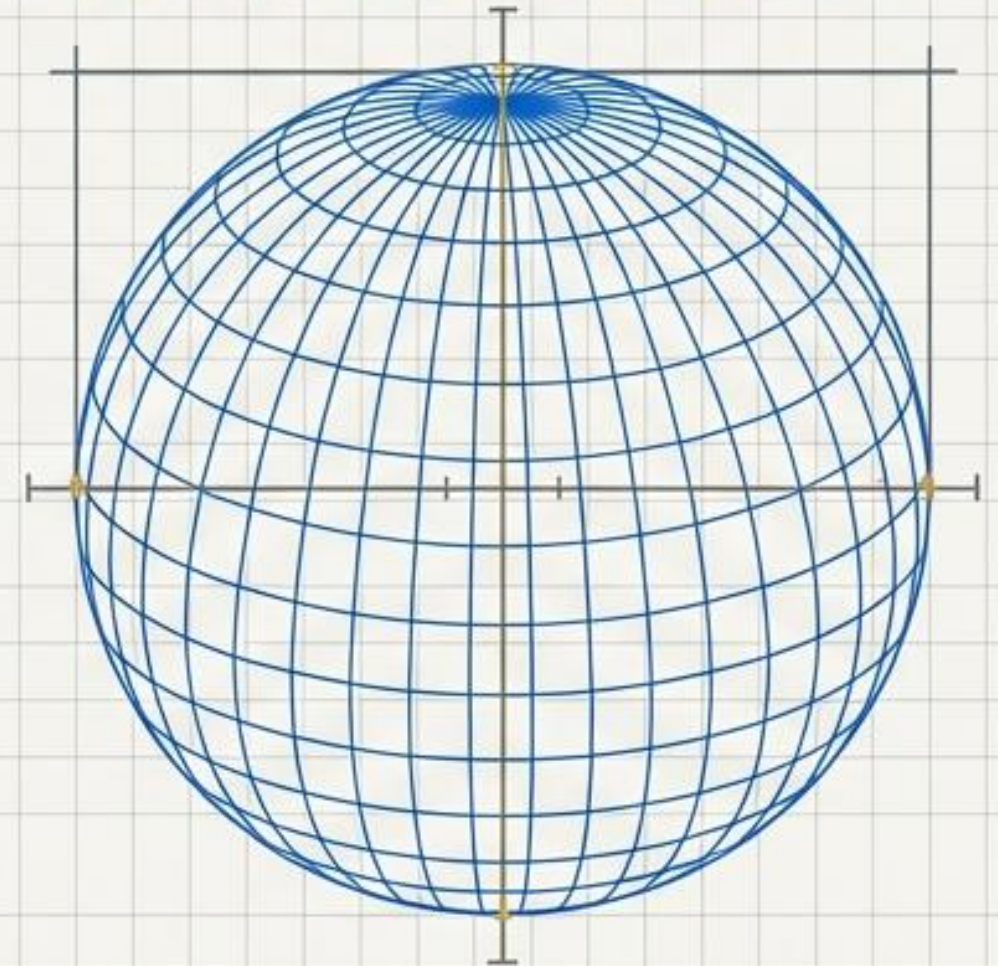


VER: 2026.03 // STATUS: SECURE // TARGET: ENTERPRISE

The SAA Sovereign Risk OS

Orchestrating Deterministic Mathematics and Autonomous AI Swarms at Enterprise Scale.

PLATFORM SUMMARY: Bridging the gap between real-world signals and financial models in real-time. SAA executes a paradigm shift from siloed quantitative models to a unified, 7-module Operating System orchestrated by the KOKON control plane. Latency: <400ms.




The Institutional Bottleneck: Computation Lag vs. Physical Reality

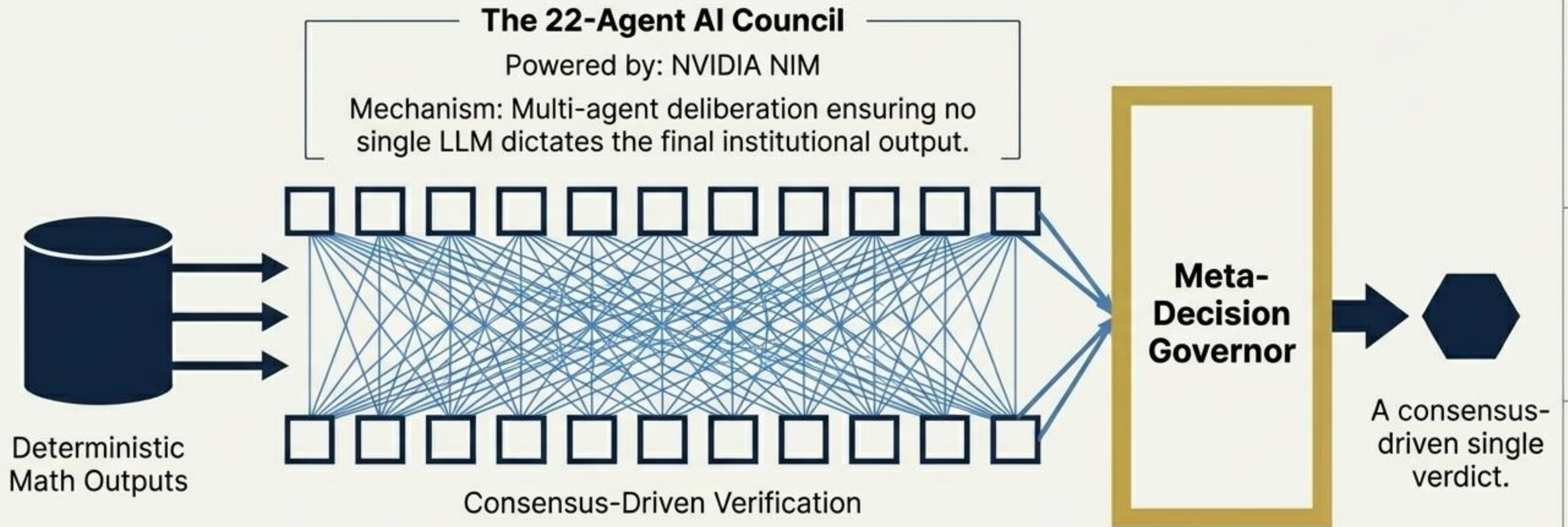


AI cannot execute real-time institutional risk intelligence if it is bottlenecked by the computational lag of stochastics.

The Proprietary Deterministic Core: The Quant Edge

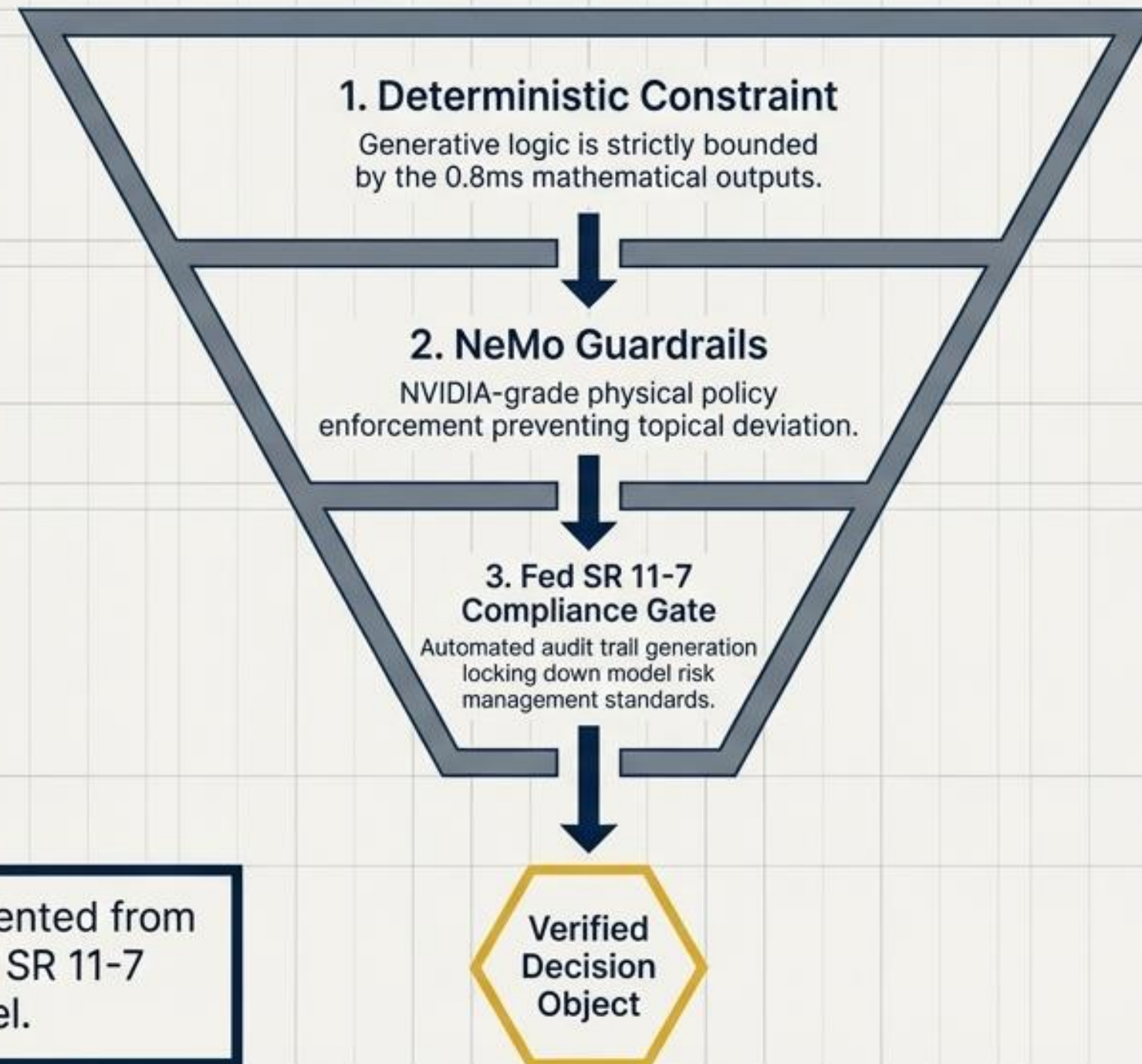
Dimension	Classical Monte Carlo	SAA Proprietary Core
Mathematical Base 	Stochastic Modeling	SAA Deterministic Math Engine
Execution Speed	8,349 ms	0.8 ms (11,917x Speedup)
AI Viability	Latency-Blocked	Real-Time Enabler (Sub-400ms SLA)
Compliance Trail	Manual / Fragmented	Automated Fed SR 11-7 on every run
Accuracy Variance	Baseline	<0.46% calibrated difference vs baseline

ARIN: The Autonomous Risk Intelligence Network



Ontological Security & Enterprise Compliance

Hallucination Prevention Funnel



Generative AI is physically prevented from hallucinating. Only verified, Fed SR 11-7 compliant objects exit the funnel.

Physical-to-Financial Translation Engine

Global Risk Module



Physical Economy
OS, USGS, FEMA,
WHO, OFAC



Processing Node:
PyTorch/CUDA GNNs



280-factor Unified
Stress Report

News Analytics Portal

Unstructured
global headlines

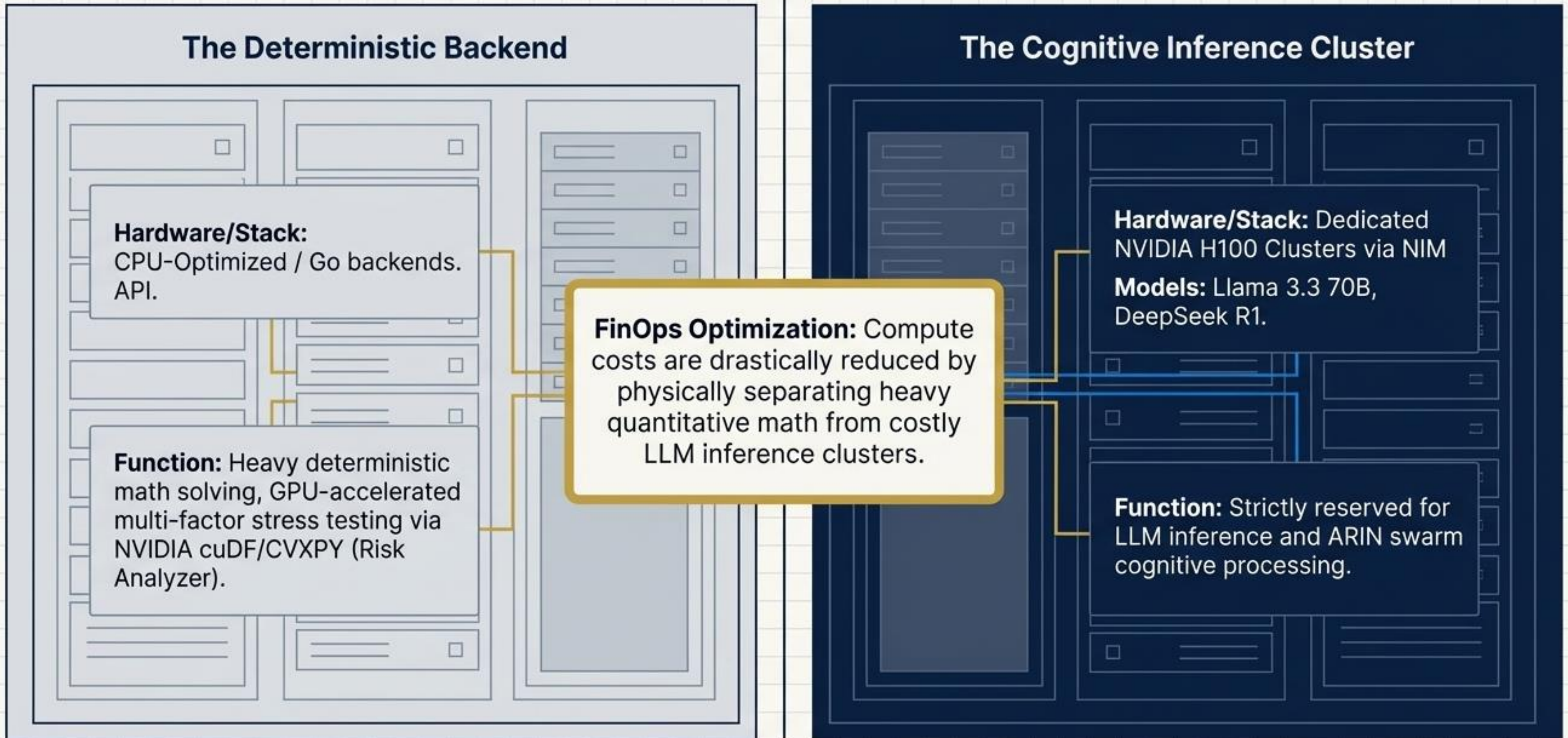


Processing Node:
12 Risk-Specialized
Agents + NetworkX
Deep Graph Analytics



Quantitative
PnL Impact

Infrastructure Topology & FinOps Separation



Enterprise Performance & SLA Matrix

<400 ms

Guaranteed API Latency

99.8%

Production Uptime SLA

11,917x

Deterministic Core Speedup
(0.8ms execution)

Architectural Provenance: Founder-Market Fit

Oleksii Sliptsov (Founder & Principal Architect)

SAA OS Architecture Reflection

20 years executive banking, managed 64 staff, 30+ cash centers, \$50M+ daily interbank flows.


Directly mapped to the KOKON centralized governance and deterministic execution engine.

Managed national-scale crisis liquidity frameworks during extreme wartime disruption.

Informed the zero-trust, webhook-isolated ecosystem and absolute ontological security.

Architected Go/FastAPI backends, Python AI logic, and NVIDIA NIM integration.

Seamless, low-latency FinOps topology and hardware separation.



Credentials: CFA, AFP, CB, DADA, CFP, Broker-Dealer. 11 published SSRN research papers on systemic risk/liquidity.

The Sovereign Risk OS Paradigm

The Past

~~Siloed Calculators~~

~~Manual SR 11-7 Trails~~

~~Batch-Processed Monte Carlo~~

~~Hallucinating LLMs~~

The SAA Future

Unified Sovereign OS

Automated Compliance

Real-Time Deterministic Math

22-Agent Swarm Autonomy

SAA Alliance is not an academic experiment. It is a production-grade Operating System built by a veteran Treasury executive to solve real-world institutional failures. The era of the fragmented risk calculator is over. The era of the Sovereign Terminal has begun.