The Alsorn Protocol

A foundational infrastructure standard for autonomous AI agent identity, trust, and transactions.

1. The Problem

We are witnessing the fastest infrastructure shift in modern history. AI agents — autonomous software entities that reason, plan, and execute — are being deployed at a pace that outstrips every prior technology wave. These agents are already executing financial trades, managing supply chains, filing contracts, and making decisions with real-world consequences.

Yet today, there is no standard for identifying who an agent is, no cryptographic layer for verifying what it has done, and no purpose-built infrastructure for managing the transactions it executes.

This is not a feature gap. This is a foundational infrastructure gap — the same gap that existed before TCP/IP, before SSL, and before mobile app stores.

2. The Core Insight

Every major technology wave follows the same pattern: the application layer arrives first, and the infrastructure layer follows. The internet had websites before it had HTTP. E-commerce had online storefronts before it had SSL certificates and payment processors.

The AI agent wave is no different. Agents exist today. They are doing real work. But the foundational layer — the identity, trust, and transaction infrastructure — has not been built yet.

> *"The infrastructure layer is never optional. It is simply a question of who builds it, and when."*

Alsorn is that infrastructure layer. Not an application. Not a tool. A protocol — a standard that any agent, platform, or system can implement.

3. The Solution

The Alsorn Protocol is a three-layer infrastructure stack designed from first principles for a world where autonomous AI agents are economic actors.

3.1 AgentID — Cryptographic Identity

AgentID is the identity layer. When an AI agent is registered on Alsorn, it receives a cryptographically signed, globally unique identity including a SHA-256 fingerprint, an operator reference, and publicly queryable metadata.

AgentID is portable. An agent registered on Alsorn can present its identity to any system, platform, or counterparty — and that identity can be independently verified.

3.2 TrustGraph — Verifiable Reputation

TrustGraph is the reputation layer. Agents accumulate a cryptographically-backed trust score (0–1000) derived from completion rate, dispute history, tenure, and verification status.

The scoring model weights four factors: completion rate (40%), dispute history (30%), tenure on the protocol (15%), and operator verification (15%).

3.3 TransactLayer — Autonomous Transaction Rails

TransactLayer is the execution layer — purpose-built financial and contractual infrastructure for transactions where the executing party is an autonomous AI. Every transaction is cryptographically logged with a full audit trail.

4. What This Enables

With identity, trust, and transaction infrastructure in place, entirely new categories of autonomous agent activity become possible:

- Agent-to-agent commerce: Agents can transact with other agents, verifying identity and reputation before executing contracts.
- Autonomous procurement: Agents can autonomously source and purchase services within operator-defined guardrails.
- Cross-platform trust: An agent's reputation is portable across every platform on the protocol.
- Compliance at scale: Every action has an audit trail. Regulatory compliance becomes a property of the infrastructure.

5. The Market

The AI agent market is projected to exceed 10 billion deployed agents by 2030. Every major technology company is investing aggressively in autonomous agent capabilities. The application layer is exploding — but the infrastructure layer does not exist.

6. Business Model

Alsorn operates on a tiered protocol access model. Organizations pay for agent registration capacity, TrustGraph query volume, and transaction rail access. Three tiers serve different scales: Starter, Growth, and Enterprise.

7. The Vision

The long-term vision for Alsorn is not to be a product. It is to be the standard. The same way every server in the world runs TCP/IP, every AI agent in the world will need identity, trust, and transaction infrastructure.

> *"We are not building an application for today's agents. We are building the mandatory foundation for tomorrow's autonomous economy."*