

```
> sentinel@mainnet:~$ cat whitepaper.pdf
> [INIT] Loading document..... OK
> [AUTH] Clearance level: PUBLIC
> [LOAD] Rendering 10 pages..... OK
```

SENTINEL

Autonomous On-Chain Intelligence

WHITEPAPER v1.0

February 2026

Real-time AI-powered whale tracking on Solana

STATUS	ACTIVE	WEB	sentinel-agent-ai.com
NETWORK	Solana Mainnet-Beta	GITHUB	Public release Q2 2026
VERSION	1.0.0-alpha	TWITTER	@SentinelAgent_
CLASS	Public Distribution	CONTACT	DM on Twitter/X

> TABLE OF CONTENTS

- 01 Abstract
- 02 The Problem
- 03 The SENTINEL Solution
- 04 System Architecture
- 05 AI Model & Detection Capabilities
- 06 Alert Distribution System
- 07 Access Tiers
- 08 Roadmap
- 09 Team
- 10 Risks & Disclaimer

> echo "The chain sees everything. SENTINEL sees first."

01 – ABSTRACT

SENTINEL is an autonomous AI agent deployed on the Solana blockchain that monitors whale wallet activity in real-time. Using machine learning models trained on over 1 million historical transactions, SENTINEL detects stealth accumulation patterns, wallet clustering, distribution events, and wash trading with a 91.2% accuracy rate. The system dispatches instant alerts to users, providing actionable on-chain intelligence before the broader market reacts.

02 – THE PROBLEM

- **Information Asymmetry**

Whale wallets control a disproportionate share of liquidity in DeFi markets. Their trades move prices significantly, yet retail traders only discover these moves after the fact – when the price impact has already occurred.

- **Obfuscation Techniques**

Sophisticated whales use wallet clustering, splitting buys across 10-50 sub-wallets, timing transactions across multiple blocks, and using intermediary wallets to hide their true accumulation or distribution intent.

- **Existing Solutions Fall Short**

Current whale tracking tools are either centralized and expensive (Nansen, Arkham), manual and slow (Lookonchain), or limited to basic large-transaction alerts without pattern analysis (Whale Alert).

- **No Autonomous Agent**

No existing solution operates as a fully autonomous AI agent that continuously scans, analyzes, and alerts without human intervention. SENTINEL fills this gap.

03 – THE SENTINEL SOLUTION

SENTINEL reimagines whale tracking as an autonomous, AI-powered intelligence layer that operates directly on-chain. Rather than a passive dashboard, SENTINEL is an active agent that hunts, analyzes, and reports.

> Core Principles

- **Autonomous Operation**

SENTINEL runs 24/7 without human intervention. The AI agent independently scans the blockchain, identifies patterns, and generates alerts.

- **Real-Time Intelligence**

Sub-50ms scan times mean SENTINEL detects whale activity as it happens, not minutes or hours later.

- **Pattern-Based Detection**

Unlike simple threshold alerts, SENTINEL uses ML models to detect behavioral patterns – stealth accumulation, coordinated selling, wash trading.

- **Verifiable & Trustless**

Every alert includes on-chain transaction hashes. Users can independently verify all data on Solscan or any Solana explorer.

- **Decentralized Access**

No sign-ups, no KYC. Access is determined by on-chain token holdings, making SENTINEL permissionless and censorship-resistant.

> SENTINEL vs Existing Solutions

FEATURE	NANSEN	ARKHAM	WHALE ALERT	SENTINEL
Real-time	Delayed	Delayed	Basic	< 50ms
AI Patterns	No	Limited	No	24 models
Autonomous	No	No	Partial	Full
Cost	\$150+/mo	\$50+/mo	Free/basic	Token-gated
On-chain	No	No	No	Yes
Open Source	No	No	No	Yes

04 – SYSTEM ARCHITECTURE

SENTINEL operates as a multi-layered pipeline. Each layer handles a specific function from raw blockchain data ingestion to actionable intelligence delivery.

LAYER 1 – DATA INGESTION

- ■ Solana RPC Nodes Dedicated low-latency connections to mainnet-beta
- ■ Transaction Indexer Custom indexer filtering whale wallet activity
- ■ Wallet Database 847+ tracked wallets, updated daily
- ■ Historical Store 1M+ transactions for model training



LAYER 2 – AI ANALYSIS ENGINE

- ■ Pattern Recognition Transformer-based sequential analysis
- ■ Wallet Clustering Graph-based entity resolution algorithm
- ■ Behavior Classifier Accumulation / Distribution / Neutral / Anomaly
- ■ Anomaly Detection Statistical outlier detection system



LAYER 3 – ALERT DISTRIBUTION

- ■ Priority Queue Severity-based alert ordering
- ■ API Endpoint RESTful + WebSocket for real-time feeds
- ■ On-Chain Logger Immutable alert history on Solana
- ■ Rate Limiter Tier-based access control

05 – AI MODEL & DETECTION

> Model Architecture

SENTINEL's core engine is built on a transformer-based architecture fine-tuned for on-chain transaction data. The model processes sequential transactions and identifies temporal patterns indicating whale behavior.

MODEL SPECIFICATIONS

Architecture	Custom transformer (4 attention heads, 6 layers)
Training Data	1.2M historical whale transactions (2023-2026)
Input Features	tx_amount, token, wallet_age, tx_frequency, cluster_id
Output Classes	ACCUMULATION DISTRIBUTION NEUTRAL ANOMALY
Accuracy	91.2% on holdout test set (Feb 2026)
Inference	< 12ms per transaction batch
Retraining	Weekly cycle on fresh on-chain data

> Detection Capabilities

● Stealth Accumulation

Identifies when a whale gradually buys a token across multiple wallets and over extended timeframes to avoid triggering threshold alerts. SENTINEL correlates timing, amounts, and wallet relationships.

● Wallet Clustering

Using graph analysis, SENTINEL identifies groups of wallets controlled by the same entity. Shared funding sources, synchronized transactions, and transfer patterns reveal the true size of a whale's position.

● Distribution Detection

Detects when a large holder systematically sells, even when spread across multiple wallets, tokens, or DEX platforms over extended periods.

● Wash Trading

Identifies circular transaction patterns where a whale trades with themselves to artificially inflate volume and create false demand signals.

07 – ACCESS TIERS

Access to SENTINEL's intelligence is determined by on-chain token holdings. No sign-ups, no KYC – your wallet balance is your credential.

FREE TIER

0 \$SENTINEL required

- + Basic whale alerts with 1-hour delay
- + Top 10 whale wallets only
- + Daily digest summary

HOLDER TIER

Hold 10,000 \$SENTINEL

- + Real-time alerts – zero delay
- + Top 50 whale wallets tracked
- + Pattern classification included
- + Wallet cluster mapping

PREMIUM TIER

Hold 100,000 \$SENTINEL

- + Full access to all 847+ tracked wallets
- + REST + WebSocket API access
- + Custom alert configurations
- + Priority alert queue
- + Historical data export

08 — ROADMAP

	PHASE 1 — GENESIS	Q1 2026	[ACTIVE]
	<ul style="list-style-type: none">[x] Token launch on Solana via fair launch[x] Terminal MVP — live whale monitoring feed[x] Community launch on Twitter[x] Website and whitepaper v1.0 release[x] Initial watchlist: 150+ whale wallets		
	PHASE 2 — EVOLUTION	Q2 2026	[UPCOMING]
	<ul style="list-style-type: none">[] GitHub repository public release[] Alert bot integration via API[] Expand watchlist to 500+ wallets[] API beta access for holder tier[] AI model v2 with improved accuracy		
	PHASE 3 — EXPANSION	Q3 2026	[PLANNED]
	<ul style="list-style-type: none">[] Multi-chain support (Ethereum, Base)[] Public API launch with documentation[] Partnership integrations with protocols[] Mobile alert system[] Advanced analytics dashboard		
	PHASE 4 — AUTONOMY	Q4 2026	[PLANNED]
	<ul style="list-style-type: none">[] Fully autonomous self-improving agent[] Community governance system[] SENTINEL DAO formation[] Revenue sharing for token holders[] Open-source core modules		

09 — TEAM

SENTINEL is built by an anonymous collective of on-chain analysts, AI researchers, and Solana developers. In the spirit of decentralization, the team operates under pseudonyms. The codebase will be made open-source upon public GitHub release in Q2 2026.

0xWatcher

Lead Developer

Full-stack blockchain developer with 4+ years building on Solana. Previously contributed to DeFi protocols and MEV research.

NeuralNode

AI / ML Engineer

Machine learning researcher specializing in time-series analysis and anomaly detection. Background in quantitative finance.

PhantomOps

Infrastructure & DevOps

Manages RPC nodes, indexers, and system reliability. Experienced in running high-availability distributed systems.

SignalHunter

On-Chain Analyst

Professional on-chain analyst tracking whale movements and market microstructure. Curates the whale watchlist database.

> Contact & Links

Twitter	@SentinelAgent_
GitHub	Coming soon – public release Q2 2026
Website	sentinel-agent-ai.com

10 – RISKS & DISCLAIMER

> Risk Factors

! Market Risk

Cryptocurrency markets are highly volatile. The value of \$SENTINEL tokens can fluctuate significantly. Past performance of whale tracking signals does not guarantee future results.

! Technology Risk

SENTINEL's AI models are probabilistic, not deterministic. A 91.2% accuracy rate means approximately 8.8% of signals may be false positives. Users should always conduct their own research.

! Regulatory Risk

The regulatory landscape for cryptocurrency and AI-powered financial tools is evolving. Future regulations could impact the operation or accessibility of SENTINEL's services.

! Smart Contract Risk

While deployed on Solana's proven infrastructure, all smart contracts carry inherent risk. Users should only invest what they can afford to lose.

! Data Availability

SENTINEL relies on Solana RPC nodes and on-chain data. Network congestion, RPC outages, or blockchain reorganizations could temporarily affect alert accuracy or timeliness.

DISCLAIMER

This whitepaper is for informational and educational purposes only. It does not constitute financial advice, investment advice, or any other kind of advice. \$SENTINEL tokens are utility tokens that provide access to the SENTINEL platform and should not be considered securities or investment instruments. Always do your own research (DYOR) and consult with qualified professionals before making financial decisions. Cryptocurrency investments carry significant risk. Only invest what you can afford to lose.

```
> sentinel@mainnet:~$ echo "END OF DOCUMENT"  
The chain sees everything. SENTINEL sees first. [EOF]
```