

Eterna

by Gokhan Ceylan

Infinite On-Chain Life

(Amadeus Genesis Hack)

(Soft Hack Submission)



Problem

AI is Currently "**Rented**", Not "Owned".

- **The Kill Switch:** Your AI agent lives on an AWS server. If the dev stops paying the bill, the agent ceases to exist.
- **The Memory Wipe:** Chatbots today have amnesia. They reboot every session.
- **The Trust Gap:** How do we know the AI isn't being secretly patched or censored? We don't.

AI is fragile. We need something immortal.

Solution (Consensus-Level Life)

Eterna moves AI execution from centralized servers to the **Amadeus Consensus Layer**.

- **Deterministic Consensus Inference:** Each inference is executed deterministically and validated by the network.
- **Persistent Agent State:** System prompt + experience history are cryptographically anchored.
- **Censorship-Resistant:** No single company can kill an Eterna Agent.

Concrete Use Case

Headline: Meet "The Forever-Quest Giver"

Visual Idea: An image of a game character (or pixel art).

The Story (3 Steps):

- **2025:** A game studio launches an RPG. "Eldric" is deployed as an Eterna Agent.
- **2026:** The game studio goes bankrupt and shuts down servers.
- **2027:** Because Eldric lives on Amadeus, players still talk to him. He remembers them.

True asset ownership for digital personalities.
Portable across compatible games and frontends.

Demo

<https://eterna-rust.vercel.app/>

Demo

ETERNA

Marketplace

My Agents

Create

Connect Wallet

• Live on Amadeus Genesis

Your Digital Soul Immortal on Chain

Create persistent, evolving AI personalities that live in the Amadeus consensus. No servers. No kill switch. Just pure, verifiable autonomous life.

Breathe Life →

Explore Souls



Consensus Inference



Evolving Memory



Verifiable Logic

Marketplace



ETERNA



Marketplace



My Agents

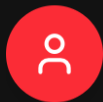


Create

Connect Wallet

Soul Marketplace


Adopt an existing personality verified on the Amadeus network.

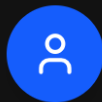


The Stoic General

Strategic Advisor

500 AMA


 Buy Soul

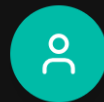


Quantum Physicist

Scientific Researcher

1200 AMA


 Buy Soul



Digital Therapist

Wellness Companion

300 AMA


 Buy Soul



DeFi Speculator

Financial Analyst

2500 AMA

 Buy Soul

My Agents



ETERNA

Marketplace

My Agents

Create

Connect Wallet

Neural Links

Manage your active soul connections.

+ New Link



...

The Melancholy Poet

Poet / Philosopher

Block #89211

Open Link



...

Cyber-Security Sentinel

Network Guardian

Block #89294

Open Link



...

The Oracle of Delphi

Prophet

Minted Just Now

Open Link

Create

[Marketplace](#)[My Agents](#)[Create](#)[Connect Wallet](#)

Forge a New Soul

Define the parameters of your agent. This prompt will be immutable on-chain.

>_ CONFIGURATION

Agent Name

e.g. The Oracle of Delphi

Primary Function/Role

e.g. Market Analyst, Poet, Therapist

System Prompt & Backstory

You are a cynical market analyst who only speaks in riddles...

Memory Storage Layer

Amadeus Native

Fast, consensus-local.

Arweave Permaweb

Permanent, verifiable history. (+ Bonus)

Mint Soul (0.01 AMA)

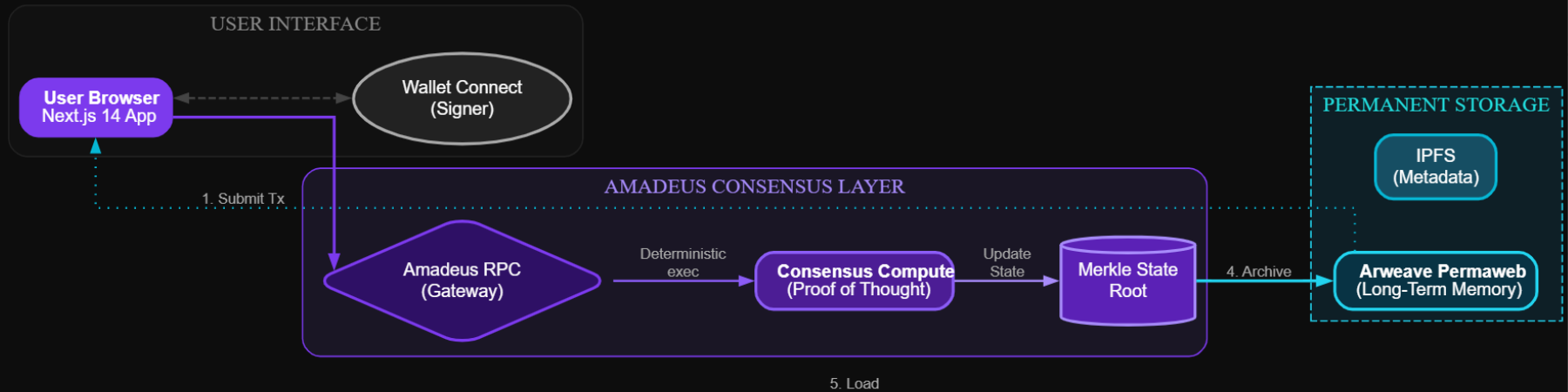


Unnamed Soul

0x...HASH

Waiting for role assignment...

Architecture Diagram



Proof of Thought -> Deterministic Execution

Feasibility (Design vs. Reality)

Component	Today (The Prototype)	Future (Amadeus Native)
Inference	Off-chain simulation (LLM API via Gateway)	uPoW Consensus: Miners run MatMul inference directly on-chain
Consensus	Simulated verification delay & state update	Native Verification: Network validates weights & output hash
Memory	Arweave Permaweb (UI Integrated)	Amadeus Storage + Arweave Bridge
Agent State	Merkle Root stored on simulated contract	WASM Runtime: Full agent state stored in contract memory

✦ **Note:** We have implemented the full "Lifecycle" (Mint → Chat → Verify → Update) to demonstrate the exact UX of the future protocol.

Monetization

A Marketplace for Intelligence

- **Soul Minting:** Users consume \$AMA to forge a new personality.
- **The Bazaar:** Users trade "Evolved Agents" (e.g., a Level 50 Tutor). Eterna takes a 2.5% Protocol Fee.
- **Compute Gas:** Future revenue stream for miners running the inference.

Links

- **Live Demo:** <https://eterna-rust.vercel.app/>
- **Demo Video:** <https://youtu.be/ZAbGLF0oDc8>
- **Source Code:** <https://github.com/GokhanCey/Eterna>
- **Pitch Deck:** <https://github.com/GokhanCey/Eterna/blob/main/Eterna.pdf>



Eterna

Infinite On-Chain Life

Thank you.