Verana

The Open Trust Layer for the Internet.

Own your identity, your data, and your digital services.

Ecosystems Use Verana to Build Their Own Trust Networks

Verana empowers **ecosystems**, from governments to industries, to establish **sovereign, verifiable trust networks** that they fully control.
Each ecosystem leverages Verana as a **trust anchor** to define, enforce, and evolve their credential-based governance rules.

Who Can Build an Ecosystem?

- 🏛️ **Governments**: issue and verify digital IDs, business credentials, regulatory licenses...
- 🏥 **Healthcare**: manage professional certifications, patient access, cross-border mobility...
- 📡 **Telecommunications**: verify customer onboarding (KYC), issue proof of mobile phone number, proof of address,...
- 🏦 **Banks & Finance**: establish verified credit, KYC/AML compliance, and financial trust frameworks.
- 🎓 **Education**: issue diplomas, professional training certificates, and lifelong learning credentials.
- ...and countless others.

Core Building Blocks

Each ecosystem defines its governance through a **modular trust architecture**:

- 📜 **Ecosystem Governance Framework (EGF)**
  Defines the mission, rules, and policies that govern the ecosystem.
- 🗂️ **Trust Registries**
  Maintain lists of authorized issuers, verifiers, and schema operators.
- 📄 **Credential Schemas**
  Establish standardized formats for verifiable credentials (identity, training, licenses, etc.).
- 👨‍💼 **Onboarding & Delegation**
  Onboard issuers and verifiers directly—or delegate this task to **trust registry operators**.

Privacy-Preserving Business Models

Ecosystems can activate **new business models** that:

- Reward issuers, verifiers, and service providers for their contributions.

- Ensure privacy by default: payments and rewards are processed without exposing personal data.
- Eliminate dependency on centralized intermediaries.

Looking Ahead

With Verana, ecosystems move beyond **centralized control** to build **autonomous trust networks**.
They gain the tools to **self-govern, incentivize participants, and enforce trust at scale**, while keeping data ownership and privacy in the hands of individuals and organizations.

Organizations and Individuals Use Verana to Build Decentralized Verifiable Services They Truly Own

With Verana, **anyone**, from global organizations to individual creators, can deploy their own **Verifiable Service (VS)**.
Unlike centralized platforms, Verifiable Services are **self-sovereign**, meaning you fully control your data, identity, and audience relationships.

Why Verifiable Services Matter

Owning a Verifiable Service means:

- 🔐 **Full Data Ownership**: you control your data and connections.
- 🛡️ **Privacy by Design**: no intermediaries exploiting or mining user interactions.
- ✅ **Proof of Authenticity**: prove ownership of your service to your audience.
- ✍️ **Signed Content**: integrate with **C2PA** so all published content is cryptographically signed by your DID.
- 🏗️ **Deployment Freedom**: host anywhere: cloud, self-hosted, or migrate freely at any time.

This is a radical departure from today's platforms, where your content and connections are **rented** rather than **owned**.

Examples of Verifiable Services

- 📣 **Decentralized Social Channels**
  e.g., the official channel of an influencer who owns 100% of their reach.
- 🤖 **Decentralized AI Agents**
  e.g., a personal AI assistant that runs under your DID and respects your privacy.
- 🔄 **Agent-to-Agent Communication**
  e.g., two autonomous AI agents exchanging credentials to securely negotiating a contract, making a payment request, or exchanging verifiable data.
- 💬 **Decentralized Messaging & Chatbots**
  e.g., a customer support chatbot for a mobile operator, verifiable and portable.

- 🎬 **Decentralized Content Delivery Channels**
  e.g., a film catalog directly published by a studio, with provenance guaranteed.
- ...and many more innovations waiting to be built.

The Big Picture

Verifiable Services give individuals and organizations **true digital sovereignty**.
They are not bound by the rules of a centralized platform, cannot be de-platformed arbitrarily, and can move freely between hosting providers, all while maintaining verifiable trust and privacy.

Verifiable Service Controllers Register their Services in the Verifiable Service Directory

Anyone can register a **Verifiable Service** in the **Verifiable Service Directory**. Once registered, services are automatically crawled, their credentials dereferenced and verified, and then indexed in the **Verana Trust Resolver**. Think of it as the **yellow pages of verifiable data**, but cryptographically guaranteed.

With this index in place, users, services, and apps can perform **advanced trust-based queries**, such as:

- 🔍 *Where is Alice's AI Assistant whose attached **AI Assistant Credential** shows the owner name "Alice"?*
- 🌐 *Which social channels hold a **Blue Network Credential** from **Ecosystem DEF** and have an avatar credential containing **@bob_influencer**?*
- 🛍️ *Which services in Bristol, UK present an **E-commerce Credential** from issuers of the **Ecosystem Ecommerce Global Alliance** and sell **baby shoes**?*
- 🏨 *List all services with a valid **Hotel Credential** from **Ecosystem PMS Vendor ABC** located in **France**.*
- 🔧 *Show certified plumbers who hold a **Plumber Credential** from **Ecosystem Verified Workers** in **Bogotá**.*

The **Trust Resolver** ensures search results are based solely on **verifiable data** contained in verifiable credentials—not arbitrary or opaque ranking algorithms.

This fundamentally **disrupts today's economy** of advertising-driven visibility (Google Ads, Facebook Ads, etc.) and replaces it with a **decentralized economy of trust**, where:

- ✅ Ecosystems certify claims and issue credentials.
- ✅ Results are transparent and verifiable.
- ✅ Businesses and individuals compete on **trust and authenticity**, not ad budgets.

The result is a **public, verifiable database of claims**, open and searchable by anyone, that shifts value from centralized intermediaries to decentralized ecosystems.

App Developers Create a New Class of Browsers: Verifiable User Agents

Verifiable User Agents (VUAs) are a new category of applications that **aggregate and interact with decentralized Verifiable Services (VSs)**. Instead of relying on centralized APIs or walled-garden platforms, these apps query the **Verana Trust Resolver**, making any compatible Verifiable Service instantly visible and usable.

What VUAs Can Be

VUAs open the door to a wide variety of decentralized applications:

- 🌐 **Decentralized Social Networks** — e.g., an X-like network built from decentralized Social Channels.
- 🤖 **Chatbot & AI Assistant Browsers** — apps for discovering and talking with official chat services and personal AI assistants.
- 🎬 **Decentralized Video Apps** — streaming apps that aggregate film catalogs published by creators.
- 🏨 **Decentralized Hotel PMS Apps** — apps where users can search hotels powered by compatible PMS software.
- 🛒 **E-commerce Aggregators** — apps that list all businesses using e-commerce Verifiable Services.

Because indexing is trust-based, inclusion is **automatic and verifiable**: no gatekeepers, no paywalls.

Business Models for VUA Builders

VUA developers can also create their **own Ecosystem** within Verana. This allows them to:

- Define their **Ecosystem Governance Framework (EGF)**.
- Issue or sell **credentials** to Verifiable Service owners.
- Control how services appear within their VUA app.

When a service owner attaches such a credential to their Verifiable Service's DID, they **automatically become discoverable** inside the VUA.

Example: Blue Network

Imagine an influencer running a **Social Channel Verifiable Service**. To appear in the **Blue Network VUA**:

- They can obtain a **free credential** from Blue Network, making their channel visible in the app.
- Or, they may purchase a **premium credential**, which guarantees that their content feed remains **ad-free**.

This creates a **sustainable, privacy-preserving business model** for app developers while giving service owners full autonomy over their visibility and monetization strategy.

Why This Matters

Traditional apps depend on opaque algorithms and advertising-driven models.
VUAs flip this model: visibility and ranking are based on **verifiable credentials and ecosystem-defined governance**, ensuring fairness, privacy, and transparency.

Business Models

Verana empowers ecosystems to design and enforce **privacy-preserving business models** built on Verifiable Credentials. These models define **who pays, when, and how rewards are distributed** among participants, ensuring fairness and transparency without exposing sensitive data.

Examples:

- **Credential Holders** pay **issuers** to be verified and obtain a credential.
- **Issuers** pay the **ecosystem owner** when issuing credentials.
- **Verifiers** pay both the **issuer** and the **ecosystem owner** when requesting credential presentations from holders.

Business models are **fully customizable**, enabling ecosystems to tailor incentives to their unique needs. A percentage of all fees is automatically distributed to **Verifiable User Agents (VUAs)**, ensuring wallets, apps, and browsers that power user adoption are rewarded too.

Trust Deposit

A portion of trust fees collected in business models is allocated to **Trust Deposits** for both payers and payees.

A **Trust Deposit** acts as a **stake** that grows with participant activity across ecosystems. It reflects engagement, integrity, and contribution to the Verana Trust Network, serving as a foundation for decentralized accountability.

Key Purposes of Trust Deposits:

Purpose	Description
Incentivize Good Behavior	Participants risk losing part of their deposit if they violate governance rules.
Signal Serious Intent	Ensures participants have “skin in the game,” discouraging fraud, spam, and low-effort engagement.
Enable Slashing	Deposits can be reduced or removed when trust policies or contractual roles are breached.
Ecosystem-Specific Control	Each ecosystem can only slash deposits linked to its activities, preventing abuse.
Non-Custodial	Deposits are fully on-chain, beyond the reach of centralized authorities.

Purpose	Description
Rewards	Deposits generate yield — the more participants engage in ecosystems, the higher their returns.

This mechanism makes governance **self-enforcing**, combining **incentives** with **accountability** in a decentralized way.

Trust Reputation

Trust Reputation transforms on-chain activity into a **transparent and verifiable measure of credibility**. It is built on factors such as:

- Start date of participation in Verana.
- Size of the participant's Trust Deposit.
- Ecosystems they actively contribute to.
- Number of credentials issued and/or verified.
- Governance history, including slashes.

Trust Reputation is **publicly accessible** and visible across Verifiable User Agents (VUAs). It can be verified by services, apps, and even AI agents, enabling peers to decide who they trust before engaging.

A **Hall-of-Fame dashboard** highlights leading participants and their deposits, making the reputation economy not only verifiable but also transparent and rewarding.

Verana is an Infrastructure, Not a Platform

Verana is **public digital infrastructure**, built to be open, decentralized, and free from vendor lock-in.
It is not a subscription service or a platform you must depend on—it is technology anyone can run, extend, and govern.

- 🌍 **Open and accessible**: free and open source, available for anyone to use.
- 🔗 **Decentralized by design**: no single operator, no central point of control.
- 🛡️ **Neutral and flexible**: works with any wallet, any credential format, any identity method.
- 🤝 **Sovereign by default**: ecosystems, organizations, and individuals remain fully in control of their trust networks and data.

With Verana, you don't "sign up" to a platform—you **own the rails** of your digital trust infrastructure.