



Explaining Context: The Web3 Data Engine

Context Definition

Mainstream

Context is the first decentralized Data Engine designed to organize, read, and share public and private data in a sovereign, trusted, and verified way. No more worrying about misinformation, lost data, or complex hashing mechanisms. Context redefines the way we interact with and manage data in the decentralized digital landscape.

We offer the best of both worlds: a Web2 Experience, with all the benefits of Web3 storage.

Key Features:

- ◆ **Structured Data Storage:** Say goodbye to chaotic data storage! Context offers a structured approach to organizing your data using industry-standard templates on top of web3.
- ◆ **Verified Data Traceability:** Get information accuracy verification through our semantic layer, ensuring trust and reliability.
- ◆ **AI Empowerment:** AI is the future, and Context ensures that AI models are trained with structured and verified data, enhancing overall AI performance.
- ◆ **Brand Control:** Enable real-time synchronization of your data ensuring updates are promptly propagated across all platforms and partners.

Developers

Context is an abstraction layer designed to integrate Web3 storage technologies, providing distinctive features that enhance data management. Dive into creation with our SDK, which helps users to **organize, read and share public and private**

data in a sovereign, trusted and verified way. Saying goodbye to hashes, and embracing domains and documents within the blockchain ecosystem. We empower developers to innovate, providing the tools you need to build groundbreaking applications on top of our platform.

Every data on Context is publicly available, free, and forever for other developers to use everywhere through our public gateway - i.e. rpc.ctx.xyz/contextprotocol/

Headlines (Marketing Purposes)

About Context

- Store, structure and verify all your data on top of Web3 storage with our innovative Data Engine
- The all-in-one solution to structure, store & share your data using the power of Blockchain!
- Context redefines the way we interact with and manage data in the decentralized digital landscape
- We're building the new way users store, structure & share data.
- Everything you need to take your data management experience to the next level.
- We operate by creating documents for data storage and structuring them with industry-standard templates, ensuring consistency and compatibility

Web 2 Experience

- Web3 made easy
- Allowing a Web2 experience with all the benefits of Web3 storage
- Powering Web3 storage into the Web2 world
- Seamless integration with Web3 storage, enhanced by a Web2 experience.

- Enjoy a Web2 experience while benefiting from verified data traceability powered by blockchain technology.

Call to Actions

- Join our community of builders and start shaping the future today.
- Join Context, the first decentralized web3 engine that transforms the way you interact with data. Build, innovate, secure and reshape the future of your data today.
- Control your brand, communicate, and sell your way with Context. Join the data management revolution today.

Other Definitions

- **Documents** → Context Documents are files designed to store and organize JSON data. Each Document serves as a repository for specific sets of information, facilitating efficient data management and retrieval.
- **Templates** → Context templates help organize data by providing a standardized layout for storing information. With them, you can easily create, share, and utilize consistent data structures.
- **Domains** → Domains represent verified and curated entities, such as companies, projects, or products.

Problems

- **Centralized Cloud Storage Dominance:** Approximately 99.985% of data worldwide is stored in centralized cloud systems. While these systems offer convenience and scalability, they also have challenges such as data security vulnerabilities and potential downtime risks. Moreover, centralized storage solutions are reported to be five times more expensive than web3 alternatives. This cost disparity underscores the need for businesses to explore more cost-effective and efficient data storage options to remain competitive in the market.

- **Unstructured & Duplicated Data:** Billions of dollars are lost annually due to unstructured and duplicated data. This inefficiency not only impacts financial resources but also hampers decision-making processes and undermines the overall effectiveness of data-driven strategies within businesses and individuals.
- **Challenges in maintaining Brand Control:** Difficulty in updating data poses a significant risk to brand control. Outdated or inaccurate information can compromise brand reputation and credibility, highlighting the importance of efficient data management processes.
- **Rising Costs of AI Fakes:** By 2025, companies are projected to incur costs totaling \$10.5 trillion due to the proliferation of AI-generated fake data. This emerging threat not only undermines the integrity of data but also erodes trust in AI-powered systems and decision-making processes.

▼ *Shorter version*

Compatibility → Data needs structure (Lack of standards and data modeling is hard)

Propagation → Lack of instant updates (Compromised by difficult Data updates and without full control)

Web3 migration → Complex integration (Fear of the Web3 tech stack and pain of migration)

AI integration → Hard to verify (Fake AI data will cost \$10.5T to companies by 2025. Hard to distribute and integrate)

Our Solution

Store

Create your Documents for well-organized storage and easy access using our decentralized naming system.

Structure

Use & Create industry-standard Templates to structure and organize your data, ensuring consistency and compatibility.

- Open repository of data templates, using unique identifiers to enhance interoperability and data integrity across decentralized applications.

Verify

Get information accuracy verification through our semantic layer, ensuring trust and reliability.

Total Brand Control

Your brand information updates automatically, ensuring accurate data delivery

- **Real-Time Marketing Updates (Open Data):** Enable real-time synchronization of your data ensuring updates are promptly propagated across all platforms and partners. This seamless integration guarantees efficient and secure data updates, providing traceability and verifiability to ensure your information remains up-to-date and accurate at all times.
- **Direct Communication with Customers:** Establish transparent, open, and direct communication channels with your resellers. Your brand information updates automatically, eliminating the need for manual changes, and ensuring accurate data delivery to both third parties and customers. Communicate and sell your way with Context.
- **Verifiable Data:** Context enables verification of information accuracy through our semantic layer, ensuring trust and reliability.

AI Integration

Integrate with AI systems (such as RAG) to train language models using structured and verified data

- **Seamless Integration:** Our Templates ensure structured data, facilitating seamless integration for improved learning and accuracy
- **Dynamic Data Feed:** Real-time updates ensure that AI models are continuously fed with the most current information

- **Semantic Understanding:** Empowers AI systems with a semantic layer, enabling better context interpretation and decision-making

The increasing reliance on AI tools such as ChatGPT for information retrieval poses a challenge for companies striving to ensure the real-time verification and updating of their data. Context allow AI models to be trained using structured and verified data. This improves language models and enhances overall AI performance.

Context steps in to empower AI systems by training them with structured and verified data, and ensures instant data propagation across all platforms and partners, allowing for complete Brand Control.

Vision

Context is revolutionizing data management by offering a seamless blend of Web2 user experience with the powerful benefits of Web3 storage. Our decentralized Data Engine provides structured, secure, and verified data solutions, ensuring accuracy and reliability in an increasingly digital world.

We empower businesses and developers with tools to organize, store, and share data efficiently, eliminating the complexities of traditional hashing mechanisms. With features like verified data traceability, AI integration, and real-time updates, Context ensures brand control and enhances AI performance, paving the way for a trusted and innovative digital future. Join us in transforming the way we interact with data and secure your place in the decentralized landscape.

Use Cases

Oxfam (<https://app.ctx.xyz/domain/oxfam>), a global non-governmental organization (NGO), is one of the first use cases on Context Protocol, with more than 30,000 documents already created. Within the JeSAC Project in Burkina Faso and Niger, they address challenges in data credibility and transparency. The project focuses on combating desertification and climate change through

improved agricultural practices. We ensure immutable data storage, traceability, and auditability of records. This enhances stakeholder trust and accountability while seamlessly integrating with Oxfam's existing systems. For more details, you can read the full case study here (<https://www.ctx.xyz/post/how-context-protocol-helps-oxfam-ensure-data-traceability>).

BMAT (<https://app.ctx.xyz/domain/bmat>), a company specializing in music data and rights management, utilizes Context in the music industry to establish standards and register information on-chain for verification. This helps in creating a reliable and transparent system for music rights and data management.

The Gobierno de Navarra (https://app.ctx.xyz/domain/gobierno_de_navarra), a regional government in Spain, uses Context through Poloiris to map companies involved in their programs. They offer public services that enhance transparency and accessibility. We help them ensuring the data is traceable, searchable and auditable.

Diputació de Lleida (<https://app.ctx.xyz/domain/diputaciolleida>), a governmental entity in Catalonia, started using Context for tracking internal information regarding asset management. This improves the efficiency and accountability of their processes.

Another use case we're planning to kick off soon is with Blast Royal, a web3 game, which aims to launch a collection of in-game NFTs and store their metadata through Context. Utilizing our solution, Blast Royal can create dynamic NFTs that evolve based on in-game events and player achievements. This dynamic metadata feature allows NFTs to change attributes and characteristics over time, offering a richer and more interactive gaming experience. Our integration of version control ensures that every change is securely recorded on-chain, enhancing transparency and trust. Additionally, the access to the metadata is semantic, enabling more efficient and meaningful interactions with the NFT data. This innovative approach we are extending to the whole gaming industry but also to ticketing, art, or digital identities.

We've also started working with Vallformosa and other wineries in Catalonia and China to implement traceability and verification of their products. We will help them and other big companies on brand control and campaign distribution in real-time. There's a huge potential on the sector and a lot of interest on implementing a Web3 storage solution.

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