



SPACE AND TIME: THE WEB3-NATIVE DATA WAREHOUSE

PRODUCT BRIEF



Space and Time

The Web3-native data warehouse.

Overview

Space and Time is a Web3-native data platform that joins tamperproof Web3 data indexed from major blockchains with customer-provided off-chain datasets.

- **HTAP Data Warehouse:** Low-latency transactions and scalable analytics in a single cluster.
- **Indexed Blockchain Data:** Blockchain data from major chains, decoded and provided for free.
- **OpenAI-Powered UI:** Pipelines, dashboards, and natural-language queries with OpenAI.
- **API Gateway:** Pre-built APIs for SQL operations, blockchain data, Kafka streaming, security, and more.
- **Tamperproof Python:** Extract, transform, and load data into Space and Time and run complex computations.
- **Proof of SQL (*coming soon*):** Novel zero-knowledge proof to cryptographically guarantee SQL operations in Space and Time.

HTAP Data Warehouse

Space and Time is a hybrid transactional and analytic (HTAP) data warehouse that supports OLTP and OLAP in a single, GPU-accelerated cluster. The OLTP cache runs at cluster scale—caching tens of terabytes and serving up to double the performance of legacy databases. The OLAP engine runs in real time with direct access to fresh data and is up to 2x more cost-efficient than legacy data warehouses. The Space and Time data warehouse comes preloaded with indexed blockchain data for free.

Indexed Blockchain Data

Space and Time captures every event/transaction/block on every major chain and stores the data in a relational state, available for free. Space and Time currently indexes Ethereum, Avalanche, Polygon, and BNB Chain, with more chains being added all the time. Customers can query relational blockchain data tables (such as blocks, wallets, and NFT transfers), access data for specific protocols (including Uniswap, Aave, and hundreds more), and also create new tables from their smart contract

events with one click. Space and Time enables a user to join this blockchain data with their own provided off-chain data in a single query. Data storage is always free.

OpenAI-Powered UI

Space and Time provides a comprehensive UI for exploring blockchain data, running queries, and publishing to custom-branded dashboards. With the UI, users can explore and visualize Space and Time's indexed blockchain data and generate queries from simple natural-language inputs with the OpenAI-powered chatbot. The chatbot can also generate pipelines with Python, SQL, APIs, streams, oracles, and smart contracts, and can publish queries to APIs, dashboards, applications, blockchains, and other databases. Space and Time is the first data warehouse that automates building a high-performance data backend in seconds.

API Gateway

Space and Time has a built-in API gateway that allows developers to easily access the data warehouse with familiar tools and build scalable data-driven applications directly on top of Space and Time. The Space and Time API gateway features pre-built REST APIs for blockchain data and SQL operations, as well as Kafka instances for data streaming. Space and Time handles large streams and complex query workloads with the same service guarantees provided by centralized databases and enterprise data warehouses.

Tamperproof Python

Space and Time provides a Tamperproof Python service for extracting, transforming, and loading data into the platform from any source. Developers can write Python scripts (or generate them with our OpenAI-powered chatbot) to transform and mold data before inserting it into Space and Time. The service also enables a user to run complex calculations against data stored in Space and Time and publish the results of the computation on-chain or into a new Space and Time table.

Proof of SQL (Coming Soon)

Space and Time has developed a novel cryptography called Proof of SQL. The novel zero-knowledge proof cryptographically guarantees that each query computation run in Space and Time was done accurately and that both the query and the data are verifiably tamperproof. Proof of SQL allows smart contracts on major blockchains to query Space and Time directly, opening up a wealth of powerful new use cases and business logic on blockchain technology.