



Clockchain Time and Timestamping API

Independently verifiable time for digital systems

Modern applications depend on timestamps, but conventional timestamps are generally produced and controlled by the same systems that record them. When records must be audited, compared across organizations, or defended during a dispute, an application-generated timestamp may be difficult to verify independently.

As modern applications increasingly operate across cloud providers, organizations, countries, blockchains, and autonomous systems, digital interactions become more distributed. Relying on a single application's internal clock becomes less sufficient. Independently verifiable time provides a common reference that these otherwise independent systems can share.

The Clockchain Time API provides applications with a unified, UTC-aligned time reference established through multiple independent observations and validated by the Clockchain network.

It enables developers to integrate cryptographically verifiable proof of time into existing applications, platforms, and automated processes through a straightforward API.

CAN YOU INDEPENDENTLY PROVE WHEN IT HAPPENED?

Clockchain provides a verifiable chronology layer for systems in which the timing and sequencing of events matter. Applications can reference Clockchain time to strengthen the integrity of transaction records, system logs, AI activity, digital evidence, automated operations, and other time-sensitive data.

Clockchain complements existing time infrastructure—including NTP, PTP, GNSS, and internal system clocks. It does not replace these technologies. It adds independent auditability and a common reference that can be verified across systems, organizations, and jurisdictions.

HOW IT WORKS

Independent time sources. Clockchain collects time observations from multiple trusted sources.

Distributed validation. Network validators evaluate the observations and reach consensus on a unified time reference.

Chronology anchoring. A synchronized, UTC-aligned timestamp is recorded on the Clockchain network every second.

API access. Applications retrieve Clockchain time and supporting verification data through the Time API.

KEY CAPABILITIES

Verifiable time access. Retrieve a consensus-derived, UTC-aligned time reference from the Clockchain network.

Independent verification. Establish evidence of time that does not depend solely on the clock or database of a single organization.

Cross-system consistency. Give distributed applications and organizations a common reference for comparing time-sensitive records.

Cryptographic integrity. Connect timestamps to tamper-resistant records anchored on a decentralized network.

Application-ready integration. Add verifiable time to existing software, data platforms, automated workflows, and connected devices through an API-first architecture.

Long-term auditability. Preserve a verifiable reference that can support later audits, investigations, reconciliation, and dispute resolution.

DESIGNED FOR TIME-SENSITIVE SYSTEMS

Artificial intelligence. Create verifiable timelines for model releases, training events, agent actions, approvals, policy changes, and automated decisions.

Financial infrastructure. Strengthen transaction records, trading timelines, payment histories, reconciliation, regulatory reporting, and dispute resolution.

Cybersecurity and digital evidence. Support incident reconstruction, forensic analysis, chain of custody, authentication records, and security-event correlation.

Robotics and autonomous systems. Provide a shared time reference for machine actions, sensor events, control decisions, and interactions among autonomous systems.

Digital commerce and smart contracts. Establish independently verifiable timing for authorizations, transactions, deliveries, renewals, deadlines, and time-based execution.

Enterprise and critical infrastructure. Improve auditability across distributed systems, operational technologies, supply chains, connected devices, and regulated workflows.

WHY CLOCKCHAIN

Conventional application time	Clockchain Time API
Generated by an individual device or system	Derived through distributed consensus
Generated and maintained within the organization's own systems	Independently verifiable
May be affected by drift, configuration, latency, disruption, or manipulation	Built from multiple independent time observations
Difficult to compare across organizational boundaries	Provides a common, UTC-aligned reference
Often depends on trust in the record holder	Provides cryptographic evidence that can be examined independently

BUILT FOR INTEGRATION

The Clockchain Time API is designed around four principles:

Simplicity. Predictability. Consistency. Transparency.

Organizations can incorporate verifiable time without replacing their existing clocks, applications, databases, or operational infrastructure. Clockchain provides the verification layer; each organization determines how that evidence is applied within its systems, governance processes, and compliance programs.

BUILD TRUST INTO EVERY TIMESTAMP

Use the Clockchain Time API to give your applications something conventional timestamps cannot provide on their own: **independently verifiable time.**

[Explore the public testnet](#) | [Review the API documentation](#) | [Discuss a pilot integration](#)

Visit us at www.clockchain.network or contact us directly at info@clockchain.network

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