

MYTHERRA



Whitepaper

June 21th, 2025

**BUILT FOR PRIVACY.
ENGINEERED FOR
FREEDOM.**

Mytherra is an open source censorship-resistant peer-to-peer network.

Don't trust; verify. Not your keys not your coins.

Preprint



TABLE OF CONTENTS

01	Mytherra (MYT) Whitepaper
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03	<ul style="list-style-type: none">• Executive Summary• Introduction• Blockchain Specifications• Security and Consensus
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04	<ul style="list-style-type: none">• Performance and Scalability• Philosophy and Compliance• Regulatory Compliance• Value Propositions
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05	<ul style="list-style-type: none">• Integration of Blockchain (SHA-256) and DHT• Mytherra Architecture: Blockchain-DHT Integration• Mytherra Hybrid Protocol Documentation
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06	<ul style="list-style-type: none">• Technical Workflow• Key Components• Compliance Features• Example Use Case: Mytherra Messenger
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07	<ul style="list-style-type: none">• Technical Vision for Mytherra Messenger & MYT• Block Time and Real-Time Requirements in Messenger Context
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EXECUTIVE SUMMARY

Mytherra (MYT) is a decentralized cryptocurrency based on the proven SHA-256 algorithm. With a total supply of 26,000,000 MYT and a block time of 5 minutes, it provides a stable and secure foundation for building a decentralized communication and value storage network. At its core, Mytherra is not just a digital currency but a holistic ecosystem focused on privacy, technological independence, and scalability.

INTRODUCTION

Mytherra emerged from the vision of creating a modern cryptocurrency that not only serves as a means of payment but also as a technical foundation for digital applications committed to privacy and decentralization. The planned Mytherra Messenger will be the first core application, built directly on MYT and a distributed DHT system.

BLOCKCHAIN SPECIFICATIONS

- Layer 1 Blockchain: Provides the foundational framework for decentralized transactions.
- Auditable Open-Source Protocol: Ensures full transparency and strengthens community trust.
- SHA-256 Algorithm: A proven cryptographic hash algorithm for maximum security.
- Max Coin Supply: 26,000,000 MYT – permanently fixed amount.
- Circulating Supply: Dynamically increasing through mining – publicly verifiable.
- Mining Supply: 26 million MYT available under fair, decentralized conditions.
- Block Time: 5 minutes – balances security and efficiency.
- Halving: Built-in halving model for long-term inflation control.

SECURITY AND CONSENSUS

- Proof of Work with Variable Difficulty: The mining algorithm automatically adjusts difficulty to maintain network security and deter attacks.
- Self-Adjusted Difficulty: Dynamic difficulty recalibration occurs every 288 blocks to ensure consistent block generation.
- Block Expiration: A technical expiry rule at 200 blocks optimizes performance and mitigates fork risks.
- Halving Scheme: The emission mechanism follows a scheduled halving interval (similar to Bitcoin's model), periodically reducing mining rewards to control inflation.

PERFORMANCE AND SCALABILITY

- The selected 5-minute block time strikes a balance between security and speed. By integrating DHT (Distributed Hash Table) structures, Mytherra is prepared for future off-chain scaling. In the long term, sidechains or Layer 2 solutions are also possible.

PHILOSOPHY AND COMPLIANCE

Mytherra adheres to the principle of digital sovereignty.

Users retain full control over their data, communications, and capital, while the architecture remains open enough to constructively integrate regulatory frameworks (e.g., MiCA, GDPR) rather than hinder them.

Regulatory Compliance

Despite its decentralized nature, Mytherra prioritizes compliant interfaces for users, developers, and businesses. While there is no central governing entity, open-source governance mechanisms are planned to proactively address regulatory requirements.

VALUE PROPOSITIONS

Commodity and Store of Value

MYT functions as a digital asset deriving value from scarcity, integrity, and transferability.

Growing adoption within digital ecosystems enables long-term value preservation.

Innovation and User-Centric Approach

Mytherra puts people first.

User-friendly wallets, intuitive interfaces, open-source clients, and transparent development lower entry barriers. Innovation cycles are collectively shaped by the community.

Long-Term Investor Focus

MYT is designed for sustainable growth, not short-term speculation.

Technical robustness, real-world utility, and a dedicated community form the foundation for long-term investment.

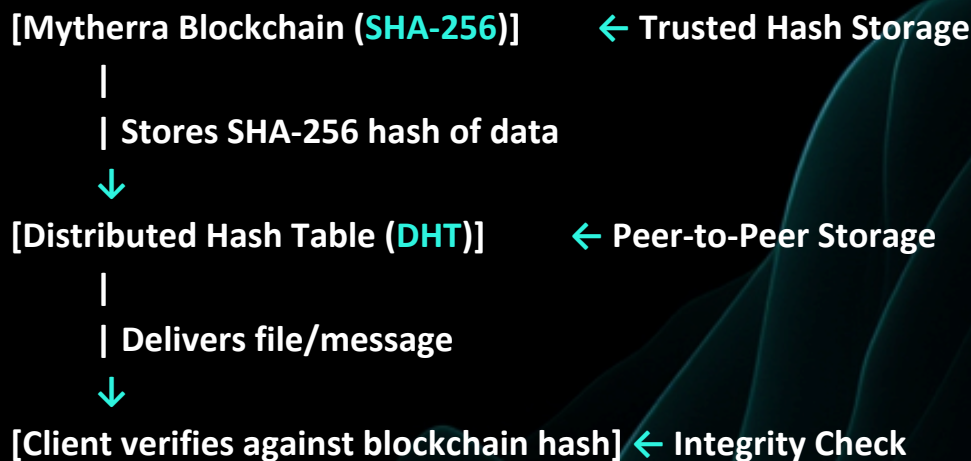
INTEGRATION OF BLOCKCHAIN (SHA-256) AND DHT

The combination of an **SHA-256**-based blockchain and a distributed hash table (**DHT**) enables decentralized content storage while allowing on-chain authenticity verification.

Example Implementation:

- A messenger message is stored in the **DHT**
- Only its **SHA-256** hash is recorded on-chain
- Clients can verify message authenticity against the blockchain without storing the message itself on-chain

MYTHERRA ARCHITECTURE: BLOCKCHAIN-DHT INTEGRATION



Mytherra Hybrid Protocol Documentation (Blockchain-DHT Architecture v1.0)

1. Core Design Principles

- **Data Minimization:** Only cryptographic hashes (**SHA-256**) are stored on-chain; raw data resides in the DHT.
- **Trustless Verification:** Clients validate data integrity against blockchain-anchored hashes without relying on centralized authorities.
- **Regulatory Compliance:** Off-chain storage (**DHT**) enables GDPR/CCPA adherence; on-chain hashes provide immutable audit trails.

2. TECHNICAL WORKFLOW

[Data Owner] → (1) Hashes data → [SHA-256 Hash stored on Mytherra Blockchain]
→ (2) Stores raw data → [Distributed Hash Table (DHT)]

[Data Consumer] → (1) Retrieves data from DHT
→ (2) Verifies hash against blockchain
→ (3) Rejects mismatched/corrupted data

3. KEY COMPONENTS

Layer	Function	Technology
Consensus Layer	Secures hash storage; PoW with SHA-256	Mytherra Blockchain
Storage Layer	Decentralized raw data storage	Kademlia-like DHT
Client Layer	Integrity checks via hash verification	Lightweight SDKs

4. COMPLIANCE FEATURES

- Right to Erasure: DHT data can be purged (off-chain); hashes remain as deletion proof.
- Auditability: All integrity checks are logged via smart contracts (optional ZK-proofs for privacy).

5. EXAMPLE USE CASE: MYTHERRA MESSENGER

- Message Flow:
 - a. User sends message → hashed → hash stored on-chain.
 - b. Message body encrypted → stored in DHT.
 - c. Recipient retrieves message, verifies hash, decrypts.
- Advantages:
 - No metadata leakage (on-chain hashes reveal nothing).
 - End-to-end encryption + blockchain-backed non-repudiation.

TECHNICAL VISION FOR MYTHERRA MESSENGER & MYT

1. Decentralized Messaging Architecture

- Messenger leverages **DHT** for peer-to-peer message distribution
- Message content fully encrypted and stored exclusively in **DHT**

2. Blockchain as Trust Anchor

- Public key binding for identity management
- Message integrity verification via **SHA-256** hashes
- Transparent auditing of all critical operations

3. Future Extensions

- Smart contracts for:
 - Decentralized group management
 - Automated payment flows
 - Bot/agent control systems
- **Layer-2** solutions for scaling



BLOCK TIME AND REAL-TIME REQUIREMENTS IN MESSENGER CONTEXT

The chosen **5-minute block time** is ideal for Mytherra's blockchain functionality: It enables secure mining, stable network load, and reliable transaction finality. However, for a messenger, this timeframe is too slow for real-time communication.

This is why the **DHT (Distributed Hash Table)** handles real-time message delivery and retrieval, while the blockchain is only used for security-critical, identity-related, or financial processes (e.g., payments, key verifications, timestamps). This ensures a smooth user experience without compromising security or data integrity.

MYTHERRA



Mytherra – Your Communication. Your Capital. Your Freedom

Founder & Lead of Mytherra
Panto
(Timo R.)