

Mycelium

Unleashing the Power of Decentralized Networks

Discover Mycelium, an end-to-end encrypted IPv6 overlay network. The future of secure, efficient, and scalable networking.

Coming Soon: New Decentralized Features

[↓ Get Mycelium](#)[▶ Watch the Demo](#)

Discover Mycelium

Mycelium is an unbreakable network, always finding the shortest path and providing 100% secure, peer-to-peer communication. But this is just the beginning.

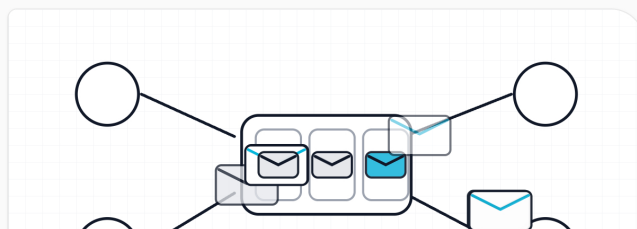
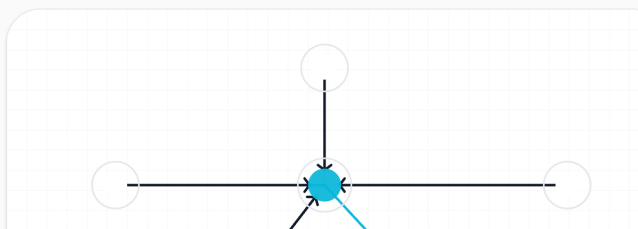
Our mission is to create a sustainable digital ecosystem where communication is seamless, data is secure, and scalability knows no bounds.

[Learn More](#)

Network Capabilities

Built for resilience and autonomy, the Mycelium Network dynamically connects nodes through intelligent routing, proxy discovery, and decentralized delivery.

Each component — from message passing to content distribution — works in harmony to create a fully self-healing, self-optimizing data mesh.



Routing

Automatic pathfinding

The Mycelium Network automatically discovers the shortest and fastest routes between nodes, ensuring optimal data flow and network efficiency without manual configuration.

Communication

Distributed message bus

Acts as a global message layer that lets nodes exchange information seamlessly. Enables resilient, asynchronous communication across the entire decentralized mesh.

Discovery

Automatic proxy detection

The system continuously scans for open SOCKS5 proxies within the network, making it effortless to find available connection points without manual setup.

Connectivity

Seamless proxy forwarding

Local SOCKS5 connections can be forwarded through nearby nodes or remote proxies. When browsers use the local proxy, traffic moves securely through the mesh—like a built-in VPN.

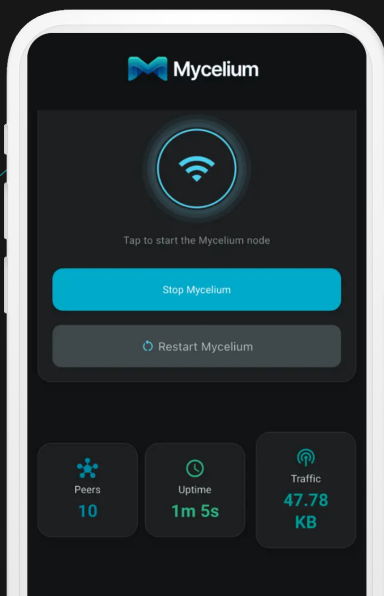
Delivery

Decentralized content distribution

Mycelium can serve data from distributed ODBs, creating a CDN-like layer that delivers content faster and more reliably—without relying on centralized servers.

How Mycelium Operates

Mycelium, like its natural namesake, thrives on decentralization, efficiency, and security, making it a truly powerful force in the world of decentralized networks.



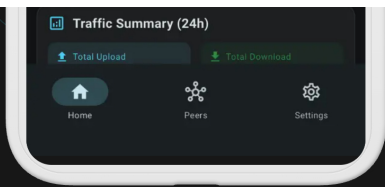
Mycelium Connector

Start (and stop) your Mycelium connector to gain access to sites, apps, and workloads available exclusively on the Mycelium Network. View statistics around peers and traffic.



Mycelium Peers

Search and discover active peers on the Mycelium Network, or add your own.



Network Setting

Find version and network information and trigger light or dark mode.

Coming Soon: The Future of Mycelium

Mycelium is evolving to bring even more powerful decentralized features, designed to enhance your experience and expand possibilities. Be the first to explore what's coming next by staying connected with our latest updates.



Quantum Safe Storage Functionality

Mycelium's quantum safe storage enables flexible, scalable, and efficient data distribution across a decentralized network, ensuring redundancy and security.



Entry and Exit Points for AI Workloads

Seamlessly connect AI applications to Mycelium, providing optimized and secured data pipelines for training, inference, and real-time processing.



Data Storage and Retrieval Mechanisms

Users can choose between storing data locally for quick access or utilizing the distributed grid for enhanced scalability and resilience.



Integrated Name Services (DNS)

The Integrated DNS system efficiently finds the shortest path between users and websites, automatically balancing loads and identifying alternative routes in case of internet issues.



Frontend/Backend Integration

Mycelium provides seamless integration with existing applications, enabling developers to leverage decentralized storage across both frontend and backend architectures.



CDN (Content Delivery Network)

Mycelium accelerates data distribution by acting as a decentralized CDN, ensuring fast, secure, and efficient content delivery across global nodes with minimal latency.

Get Started Today

Download the Mycelium app and step into the future of secure, peer-to-peer networking; fast, private, and decentralized.



Frequently asked questions

If you have anything else you want to ask, [reach out to us](#).

What is Mycelium?

Mycelium is an end-to-end encrypted IPv6 overlay network written in Rust. Each node joining the network receives an IP in the 400::/7 range, facilitating secure and private communications.

Is mycelium ready to scale to the world?

No, Mycelium is not yet fully scalable to a global level. Currently, each network can support around 100,000 users, but multiple networks can be deployed to expand capacity. We anticipate resolving these scalability challenges by 2025.

How do I install Mycelium?

The Mycelium app supports iOS, macOS, Android and Windows. For Linux, a binary is available. Installation guides are available for both local machines and virtual machines running on the TFGrid. Note that Windows users need to have wintun.dll in the same directory as the Mycelium executable.

How can I find and use my Mycelium address?

Upon using the Mycelium app, you're assigned a unique Mycelium address. To copy this address, click the button located to the right of the displayed address in the app interface.

Can I deploy workloads on the TFGrid using Mycelium?

Yes, after installing Mycelium, you can deploy workloads on the TFGrid and connect to them using the Mycelium network. Detailed deployment guides are available in the documentation.

Is there an API available for Mycelium?

Yes, Mycelium offers an API for administrative operations, peer management, and message subsystem operations. Comprehensive API documentation can be found in the official Mycelium GitHub repository.

What should I do if I encounter issues during installation or usage?

If you face any challenges, refer to the troubleshooting section in the Mycelium documentation. Additionally, ensure that all prerequisites are met, such as having wintun.dll in the correct directory for Windows installations.

How does Mycelium handle routing within its network?

Mycelium incorporates core principles of the Babel routing protocol, enabling efficient and dynamic routing within its encrypted IPv6 overlay network.



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Download Mycelium

Head to the GitHub to access the latest Mycelium builds for your devices.

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