

Bitcoin Basics 9 - What is the Lightning Network?

Lightning Network has been up and running since January 2018, enabling fast, cheap, and reliable payments across a decentralized network of channels.

The Lightning Network is a protocol that forms a second layer above bitcoin.

Lightning Network channels make it possible to transfer Bitcoin to other channels quickly and easily. Lightning wallets thus enable instant payments in Bitcoin between users.

The routing algorithm in the Lightning Network can automatically find the most efficient route for a payment across the network of channels.

It uses a variant of Dijkstra's algorithm, which considers the cost, capacity and uptime of each channel, and automatically finds the most efficient route.

Lightning Network also uses Atomic Multi Path Payments to split payments into smaller chunks and send them through separate channels.

You can also transfer bitcoin from a Lightning Channel back to your own bitcoin address. Such final settlement is done through a traditional bitcoin transaction. A so-called on-chain transaction on the bitcoin blockchain.

Basically, Lightning Network makes bitcoin more scalable, extremely fast and cheap. But also even easier to use.