

LIGHTNING NETWORK

Making Bitcoin Transactions
Faster & Cheaper Than Ever



WHAT IS THE LIGHTNING NETWORK

How it works

The Bitcoin Lightning Network is the “layer-2” solution to solve the issue of the time it takes for transactions to be approved on the blockchain.

With the Lightning Network, thousands of offchain transactions can be completed within the same time period it takes for a block to be added onchain.

Two parties can connect, like a smart contract, and they can complete as many transactions as they'd like, with the first and last transactions being placed on the blockchain when the channel is closed.

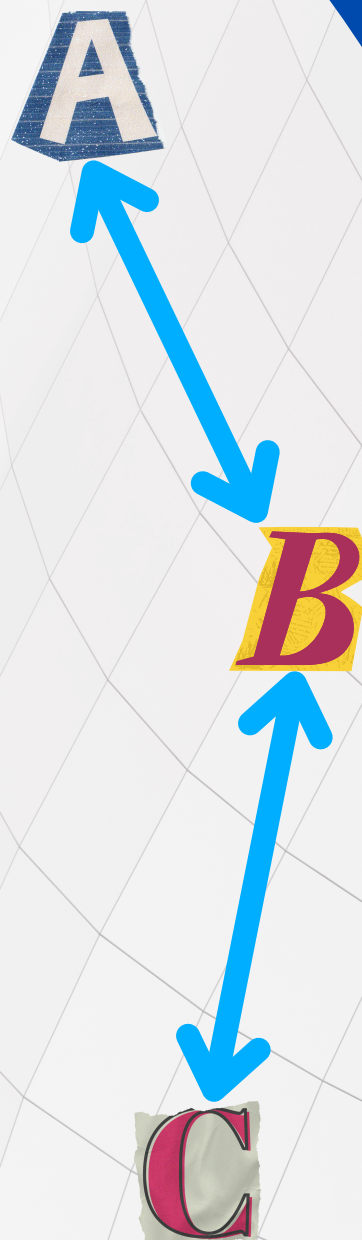




A participant must place their Bitcoin on the channel, and it's held until the channel is closed, at which point the final balances are sent to the blockchain.

The network really comes to life when other parties are connected who would like to conduct transactions. For example, if Person A wants to transact with Person C, and both happen to already be connected with Person B, this transaction is doable using Person B as the man in the middle!

Micro transactions are possible since fees and, energy used, are only settled once the channel is closed and it's placed onto the blockchain.



ISSUES & VULNERABILITIES

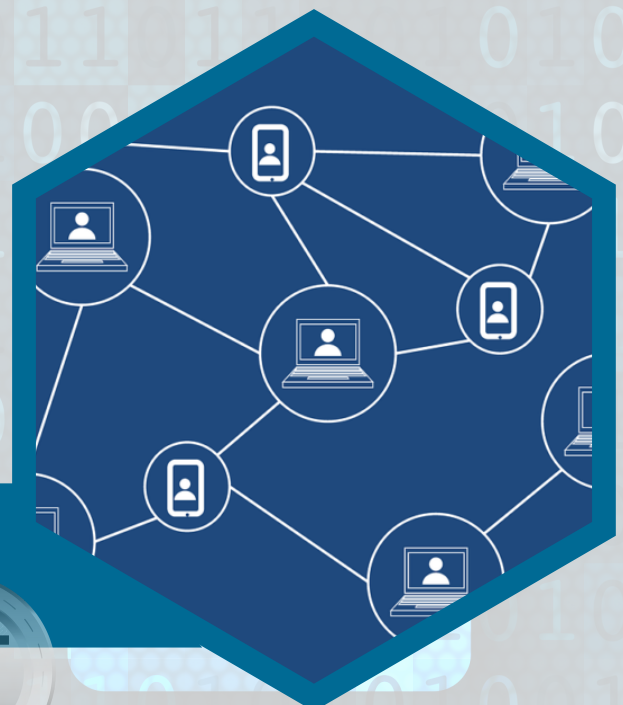
Due to the newness of the Lightning Network, there are issues and vulnerabilities which need to be worked through in order for it to be considered a success.

NETWORK

In order for all the micro-transactions to take place, there needs to be a large network, which could leave many vulnerable to attacks.

CUSTODIAL VS NON-CUSTODIAL WALLETS

Non-Custodial wallets can be difficult for new users so Custodial would be used more but that means relying on a 3rd party for your Bitcoin.



GRIEFING ATTACKS

Funds are frozen so no transactions can go through; no funds are lost.

TIME DILATION ATTACKS

An attacker lengthens the time a victim becomes aware of new blocks by delaying block delivery.

FLOOD & LOOT

An attacker forces many people to claim funds at the same time. The attacker steals any funds not claimed before the deadline.

PINNING ATTACKS

A victim is tricked into closing their LN channel improperly and steals individual transactions.



WALLET TRANSACTIONS

There are wallet options for anyone wanting to try the Lightning Network. Below are the most common wallets:

Wallet of Satoshi: Best and most popular wallet, even though it's not available in the US

Breez: a pocket-sized Lightning node

Phoenix: non-custodial Bitcoin Lightning wallet

Strike: popular Bitcoin payment app partnered with Shopify

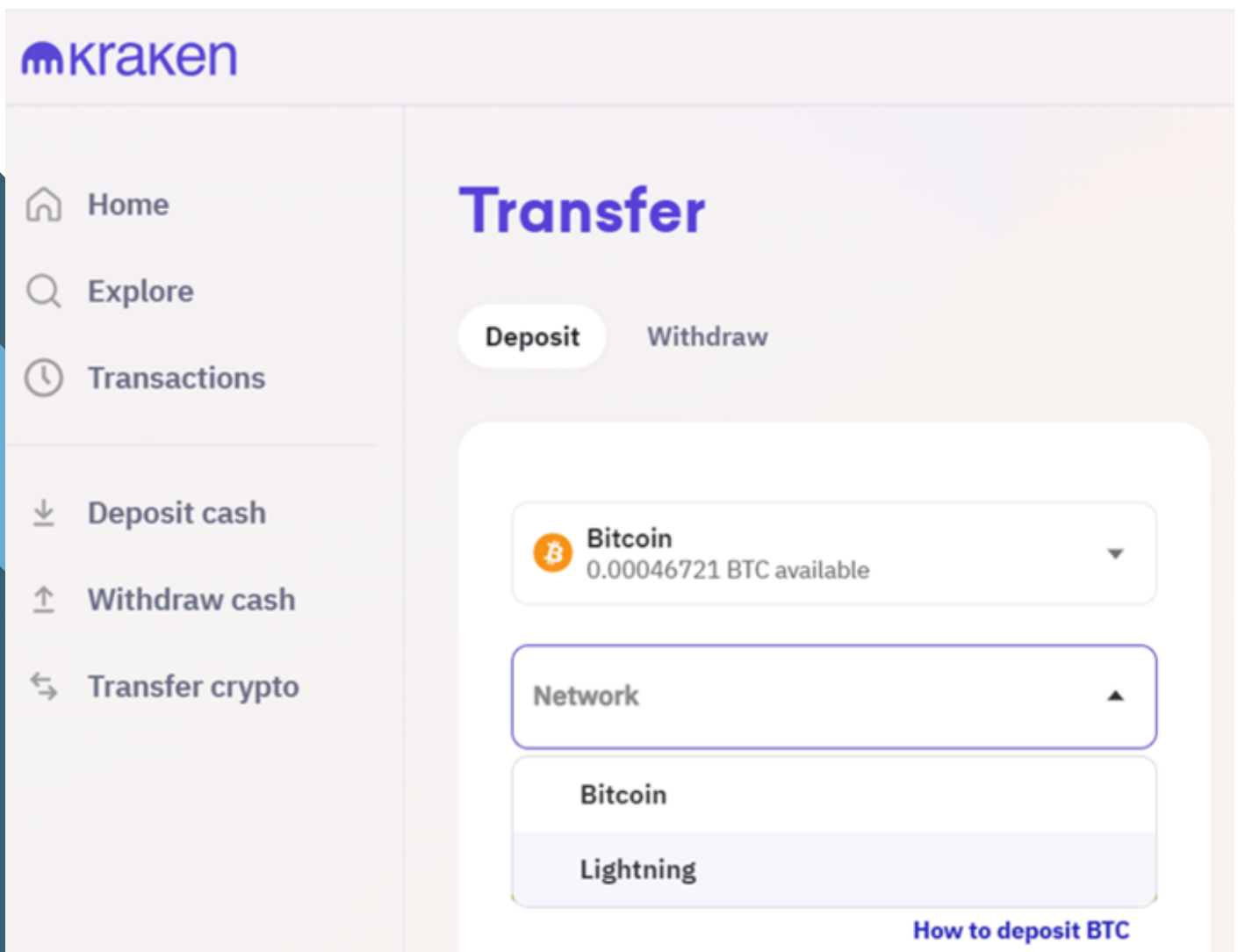
Zap: software for desktop and mobile

Muun: a wallet combining the benefits of on- and off-chain transactions



CASHING OUT

When someone is ready to take the funds out of their wallet and turn it into cash, there are options. Cash App and Kraken Exchange do allow Lightning Transfers to be cashed out, see the example below of what that looks like.



LASTLY,

Having the Lightning Network allows Bitcoin owners the opportunity to complete as many transactions as they'd like without the steep costs in fees and energy usage. The increase in privacy as well for these transactions stems back to the original idea of cryptocurrency and its decentralized intentions.

To learn more about cryptocurrency and enjoy a 30-day free trial using our tracker, visit www.cryptotrackpro.us

