



Atomic Wallet Technical Details

Atomic Wallet is a convenient decentralized solution for custody-free cryptocurrency trading. Our project is a combination of technology, design and user experience.

Problems

In most mechanisms employed by centralized exchanges providers inherit custody risks, which counterposes the ideas of transparency, openness, and independence from trust-based mechanisms. Manipulation and failure to deliver actual trading data can devolve into severe losses for the investors.

Solution

Atomic Wallet is introducing a fundamentally new platform for transparent cryptocurrency trading. Our platform is the simplest way to connect buyers and sellers within a decentralized framework.

Advantages

↔ Asset management

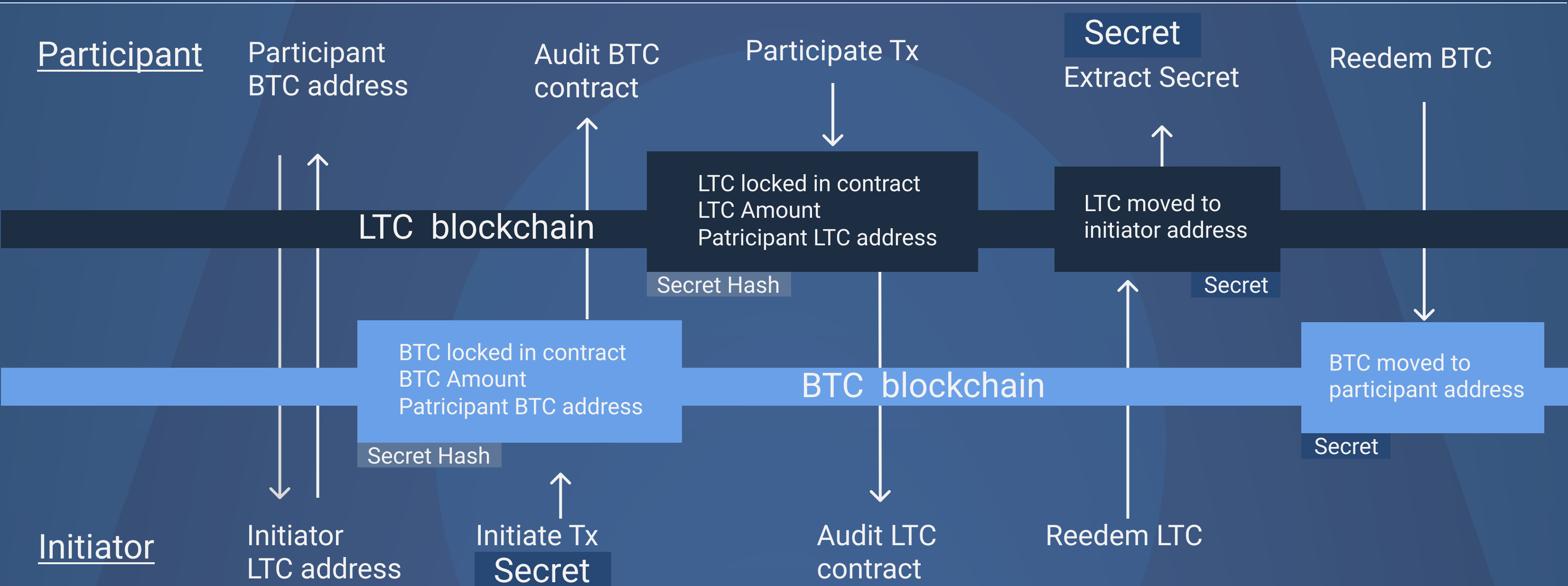
- Receive 270+ assets to the generated wallet.
- Send assets to other addresses.
- Import assets using private keys.
- Store private keys in a securely encrypted environment.
- Select cryptocurrency node, blockchain explorer to use.
- Exchange assets via Changelly or ShapeShift.

🔒 SPV technology

Allows customers avoid prolonged blockchain synchronization and maintain the security of so-called 'full node wallets'. The keys are stored in an encrypted manner on the end-user device or a hardware wallet. Keys can be backed up with the passphrase for all the listed currencies or with a string format key for each currency.

🔄 Atomic Swap technology

With Atomic Swap technology exchange one cryptocurrency to another becomes available without a third-party risks.



📖 Distributed Order Book (DOB)

Atomic DOB transmits information about the exchange orders among Atomic Wallet users and constantly updates it in real time throughout the day.

📄 Order characteristics

- An order is an offer, not a commitment.
- Order placement doesn't block funds.
- An order can be executed with multiple trades.
- Trader should be online to trade.
- Execution is a manual operation.
- Maker is free to reject execution.

🛡️ DOB mempool

When an order is transmitted to the network it first gets verified by all available Atomic Wallet users. After necessary checks Atomic Wallet adds Order to the DOB and starts seeding it with the neighbouring Atomic Wallets.

📋 Trades history

Atomic Wallet will use a custom-built Byzantine consensus algorithm that keeps DOB historical data safe without needing to "mine" blocks, even in the case of a situation where your nodes malfunction or become susceptible to the actions of bad actors.

🖥️ Atomic SDK

You can develop applications working with Atomic Wallet DOB and Atomic Swaps code. The protocols will be open and available for integration.