



CIPHER

Cipher Messenger

Link: <https://github.com/bbmoron/cipher>

Cipher Messenger is an extreme-private messaging application based on TOR Network and Blockchain entropy. Cipher Messenger uses device-based onion services to communicate between users with no servers in between. P2P-connection established between users guaranties protection against MITM-type of attacks.

- Blockchain-based project
- IPFS-based project
- TOR-based project

Backend Task

- Develop a micro-service architecture using robust solutions
- Achieve a point where web-servers are running on each device
- Create API for Blockchain communication using Ethereum "goeth"
- Create API for TOR communication using embed TOR executable

Result

- Project made in pure Golang
- Onion services host on each device
- Network using VPN by default, making 99.9% of traffic untraceable
- File-exchange based on IPFS project, reducing TOR traffic to only text exchange
- Combination of most reliable encryption algorithms makes it considerably impossible to crack messages
- Salt generation for every message enhances encryption making every message unique