Creaton White Paper v. 1.0

https://creaton.space

December 15, 2021

Motivation

Since the beginning of time, humans allied in groups to progress faster and get better protection. Soon they discovered that centralization was an optimum model of governance for those groups. It helped them to develop more rapidly, become bigger and stronger. But as time passed, adverse aspects of centralization started to rise corruption, inequality and abuse of authority were only a tip of the iceberg.

With the invention of the Internet, humans received a new chance to get their freedom of speech and the right to privacy. But the technology always moves forward, and it didn't take long before the World Wide Web became infected too. Multibilliondollar companies seized control over users by creating "free" online mass market products. Free email accounts, free search engine results, and free social media accounts have one mission in common: gathering and "selling" to advertisers the most valuable product on Earth information. Governments of many countries also understood the significance of this product and passed complicated laws to be able to reach it.

The new hope is blockchain technology, but it has already drawn the attention of politicians, for example, multiple attempts to deanonymize Bitcoin have taken place. That's when we decided to take action and create a simple yet effective product for every user. During the research and development, we discovered for ourselves tons of possibilities blockchains are capable of. Soon, Creaton became not just a safe storage, but a platform for endless solutions which cover multiple industries.

We believe that blockchain technology together with decentralized applications can ensure privacy and restore our basic online freedoms. The goal of Creaton is to bring those changes in the most simple for a user way through the endless possibilities of our device. We perceive a dream of a safe future and can't wait to fulfill it.

Creaton

Creaton is a hardware blockchainbased complex with guaranteed privacy. Creaton performs a significant number of functions, starting from providing a safe file storing and finishing with the ability to provide Internet connection. It is a comfortable and intuitive solution which solves multiple problems people face on daily basis. Creaton substitutes cloud storages by delivering free, secure and reliable persisting of your data by using a high level security combined with blockchain resources. It also works as a defender of your Internet connection.

Creaton interacts with your devices through a personal VPN network (or VPN over TOR Network). It guarantees the highest level of secure connection. Your devices act solely as an interface for Creaton because it is impossible to implement full encryption locally or store a blockchain due to the technical limitations.

Autonomy

Creaton is designed to keep working nonstop even in emergency situations. It is equipped with a powerful 4500 mAh battery in case the electricity shuts down. That, together with an LTE ensures a 24/7 Internet connection and a 99% uptime for a microserver to run the dapps. The LTE module will keep Creaton going if there should be any troubles with the primary source of the Internet.

Extensibility

Keeping in mind that different users have different needs, we designed Creaton as the center for connecting with various modules. A zigbee, BLE or mesh protocol will expand the capabilities of the device in the future. Every user will be able to customize the device with additional storage, a higher capacity battery, alternative means of communication, etc. A universal bus for connecting additional solutions will allow expanding the opportunities of a personal security center in just a few minutes. Presently we are developing modules that will increase the Internet coverage area at your house. They can serve as a platform for gas, light and temperature indicators which will become a part of simple and affordable smart home solutions.

Pixi

Creaton works with decentralized applications built on Pixi platform. All dapps developed on Pixi and ran on Creaton have an open source, so you could see for yourself that they are totally transparent and have no pitfalls. Creaton enables creating a working connection scheme with no central unit (which, in most cases, gets easily hacked). The main goal of this device is to become a tool for the developers to build end to end decentralized applications with a zero knowledge proof.

Pixi's decentralized application are based on blockchain networks. The core principle of the platform is to sustain the highest security requirements. That is why each app is created and ran in a separate LXC container which allows sandboxing processes from one another, and controlling their resource allocations. We have simplified the process of building the applications by allowing developers to write them in any programming language of their choice. The interaction between user's dapps is carried out using 2048 bits encryption key or higher. The entire traffic runs through TOR networks to avoid possible disclosure of IP addresses. Traffic is transmitted between nodes in closed containers and is isolated from the relay holders and the interception of packets on the provider level.

Private Internet

We see Creaton as a tool that someday will assist in creating the P2P Internet by being a connecting link between blockchain and Torrent. This new type of World Wide Web will have no place for privacy threats, data leaks, censorship or surveillance. It will be safe and free, just the way it was originally designed to be. Right now Creaton can be used for developing a blockchainpowered advertisement blocking database. A database like that will protect against malvertising, phishing, and other Internet scams. Users will access only the content they choose to. Moreover, the solution will protect not just a single device, but its whole decentralized network.

Mesh Networks

To ensure the freedom of connection at all times we added an option to create the mesh networks. It's a type of the network with a typology built on a principle of cells, which are connected between themselves and can take over the role of a switchboard for other participants when every node is connected to each other. A large number of links provides a broad range for picking a route to follow traffic within the network, so the breakage of one

compound does not disrupt the functioning of the entire mesh network. The biggest benefit of mesh networks is the ability to transport the Internet to the places where it has no coverage and to build private networks.

Private networks are P2P and securely connect users between themselves with no external servers. Mesh networks allow users to access Internet network even in places with no coverage or during natural disasters. It can even serve as a guaranteed communication system for emergency notifications.

Distributed storage

Creaton's disk space can be allocated to a distributed storage. It allows storing data on multiple devices, providing additional security (privacy).

Creaton + IPFS = love

The InterPlanetary File System (IPFS) is a peer-to-peer distributed file system that seeks to connect all computing devices with the same system of files. In some ways, IPFS is similar to the Web, but IPFS could be seen as a single BitTorrent swarm, exchanging objects within one Git repository. Under the hood Creaton uses IPFS to store any of your data, in combination with TOR it gives the ability to store data anonymously, reliable and fast.

Personal (Blockchain) ID

Creaton makes it easy to create a precise digital blockchainbased identification. To confirm the identity of a person a publication in any public source with a signed message can be used. Afterward, you can link their name and a social network account to a public key.

These possibilities create a variety of options for personal identification systems. One can develop a BankID with a digital signature from the bank.

On the other hand, to keep the anonymity, the user can use an "anonymous key", which is confirmed by the network. In this case, it is impossible to link it directly to the personal public key.

Finance

We see enormous possibilities for Creaton in the financial sector. A blockchain ID provides an opportunity to use P2P transactions available nowadays thanks to cryptocurrencies and perform lending or deposit operations without the fear of fraudulence. A digital ID and Smart Contracts will protect a person or an organization from scammers. Another great opportunity for this sector is the creation of services without the central node through which it will be possible to use cryptocurrencies such as Bitcoin or any other in the conventional retail sales points.

Communication between users

Data transmission, including voice, is one of today's most fundamental issues, because data privacy begins with personal correspondences, posting, file transferring, etc. Creaton can be easily implemented into digital social solutions and guarantee full privacy to a user. Time will come, when decentralized social solutions like instant messengers, social networks, and blogs will become an Internet standard instead of being a tool for people who have something to hide.

Blockchain fusion

We don't see a reason to create another cryptocurrency and a new blockchain when there are already available a few popular networks that can satisfy the needs of new solutions based on their platforms. Creaton combines them together in a single solution and uses the strengths of each of them to perform the most suitable task. For instance, one can create a solution where two parties will conclude an agreement by combining an Ethereum smart contract, Bitcoin's blockchain ID for identification and complete it by paying anonymously through Dash, Monero, Zcash, etc.