



DUCATUS

## **Abstract / Executive Summary**

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Since its inception, blockchain has been regarded as a disruptive technology that is built by and for the techie. Most blockchains are designed by high-level technical specialists and geeks, and their scope of usage is often restricted to performing high-risk exchange transactions (speculation) or even making shadow transactions.

Ducatus was created to be the opposite. A user-oriented blockchain that is open and inclusive, it allows everyday people to benefit from technology that makes payments for daily purchases faster and more secure. It offers transparency and accessibility. From buying coffee to leasing community-supported projects that bring passive income or having an honest record of one's own ideas and projects, Ducatus is designed for usability. This vision is realized in our technology.

On the technological basis of existing blockchain projects, our task is to implement a fast blockchain with low fees, a clear interface, friendly enough for users to be able to control, support, make decisions on the development of the project and take part in the life of the project.

## **Mission Statement**

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Our mission is to provide convenient blockchains for everyday use for all users, tech savvy or not, as simple as using a credit card with the ability to use reliable payment services.

## **Crypto market state**

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Cryptocurrencies are rapidly becoming mainstream. The capitalization of the first two currencies - Bitcoin and Ethereum - is already surpassing \$1 Trillion. PayPal and Tesla have begun to accept cryptocurrency as payment, real estate transactions involving cryptocurrency have been made, and many investment funds now include Bitcoin and Ether in their portfolios.



There are a lot of good solutions. But at the same time, lack of real applications. Most Ethereum projects are still high risk, the transaction costs are too high, while Bitcoin transactions take too much time.

The Ducatus community is already global. Present in 180 countries, its biggest communities are presently in Vietnam, Italy, Germany, and the Middle East and continue to grow. Thousands of transactions are made on the network every day, our mobile wallet APP has been installed more than 10,000 times already.

## **Ducatus**

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Bitcoin's development faced several challenges but the issue which took the longest to solve, and is still ongoing, was how to build acceptance and trust amongst a significant global user base. Without user acceptance, there are fewer users of the coins and thus lower demand which in turn slows the rate at which the coin penetrates the global market. Our goal is to achieve the same level of market penetration as Bitcoin within a much shorter period and to facilitate this we are establishing the Ducatus Cashless Economy.

## **The Ducatus Cashless Economy**

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What started as a way to disrupt financial payment transactions has crystallized into an integrated, sustainable digital framework lending itself to our vision of a cashless economy.

The Ducatus Coin, designed for usability, is the financial glue to our digital cashless landscape, the backbone to growth and sustainability. Our long-term goal is to be the world's most usable cryptocurrency. Beyond that, we are advocates of the new digital economy. Through our affiliate businesses, we offer users the opportunity to buy, sell, earn and benefit from the use of digital money in their everyday lives.



The Ducatus Cashless Economy is a group of affiliate businesses that accept Ducatus and/or other cryptocurrencies in return for goods and services. These businesses are being rolled out to enable holders of Ducatus Coins to enjoy real value outside the crypto community. In addition, we also continuously seek out forward-thinking merchants who recognize and believe in the spending power of today's consumers. The consumers who pay digitally, online, and are using or want to use cryptocurrency in their everyday transactions. We believe that this is a critical part of building Ducatus' global presence and will serve as an important anchor for Ducatus' acceptance globally.

To date, we have already launched:

- \* Ducatus Merchants
- \* Ducatus Charity
- \* Ducatus Franchise (Ducatus Cafe, D-MOB, Proof of Gold)
- \* Ducatus Travel
- \* Ducatus Property
- \* Ducatus Health & Beauty
- \* Remus Nation E-commerce

Ducatus is a great solution for daily payment transactions such as:

- paying for goods
- cross-border transfers
- bank deposits creation

Ducatus is a fully digital value because the so-called double-spending problem is completely solved. When you send something over the Internet you cannot keep a copy for yourself, however, on the Ducatus blockchain you can only do this with DUC and the protocol is not compatible with other assets hence offers maximum security.

## Technical Architecture

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At Ducatus we use industry-standard cryptographic algorithms and blockchain technology to provide a secure and reliable experience. When creating a new cryptocurrency, the industry best practice is to create a "fork" in an existing coin. A fork is a variation to a body of code that renders it distinct from previous versions. This allows us to include all the best features of the cryptocurrency while making modifications to areas that may have issues or weaknesses.

The cryptocurrency that we have chosen to fork Ducatus from is Litecoin. Litecoin itself is a fork of Bitcoin that has been modified to make it easier for developers to create their own cryptocurrencies. Litecoin uses a cryptographic algorithm called "scrypt" that we feel will better meet the needs of Ducatus members and has coin network parameters that enable faster transaction processing. We have forked the source code of open-source Litecoin mining and wallet software and modified the parameters of the network to create a new coin, our Ducatus coin.

One of the most important changes that we have made to standard Bitcoin parameters allows blocks to be mined more quickly, ensuring speedy transaction processing. Bitcoin blocks take on average 10 minutes to mine, which is fairly long for applications like e-commerce, not to mention selling items at a point of sales like a restaurant or a store (imagine that a shop assistant asked you to wait while they processed your credit card ... and it then took 10 or more minutes for them to get back to you!). The parameters also support a different maximum number of coins, namely a total of 7,778,742,049 coins, this being the 50th number in the Fibonacci Series.

Unlike LiteCoin, the Ducatus network uses PoA consensus, which significantly saves resources when creating blocks.



### **Server: Ducatus Node 1**

Services:

- Ducatus API Node with miner
- Nginx:
  - [dws.ducatus.io](https://dws.ducatus.io)
  - [oldwal.ducatus.io](https://oldwal.ducatus.io)
  - [oldins.ducatus.io](https://oldins.ducatus.io)

### **Server: Ducatus Node 2, 3, ..., N**

Services:

- Ducatus Node with miner

### **Server: Ducatus Prod 1**

Services:

- Bitcore-Node (BTC, BCH, DUC, DUCX)
- MongoDB for Bitcore-Node
- Nginx:
  - [ducapi.rocknblock.io](https://ducapi.rocknblock.io)
  - [ducws.rocknblock.io](https://ducws.rocknblock.io)
  - [insight.ducatus.io](https://insight.ducatus.io)
  - [wallet.ducatus.io](https://wallet.ducatus.io)

### **Server: Ducatus Prod 2**

Services:

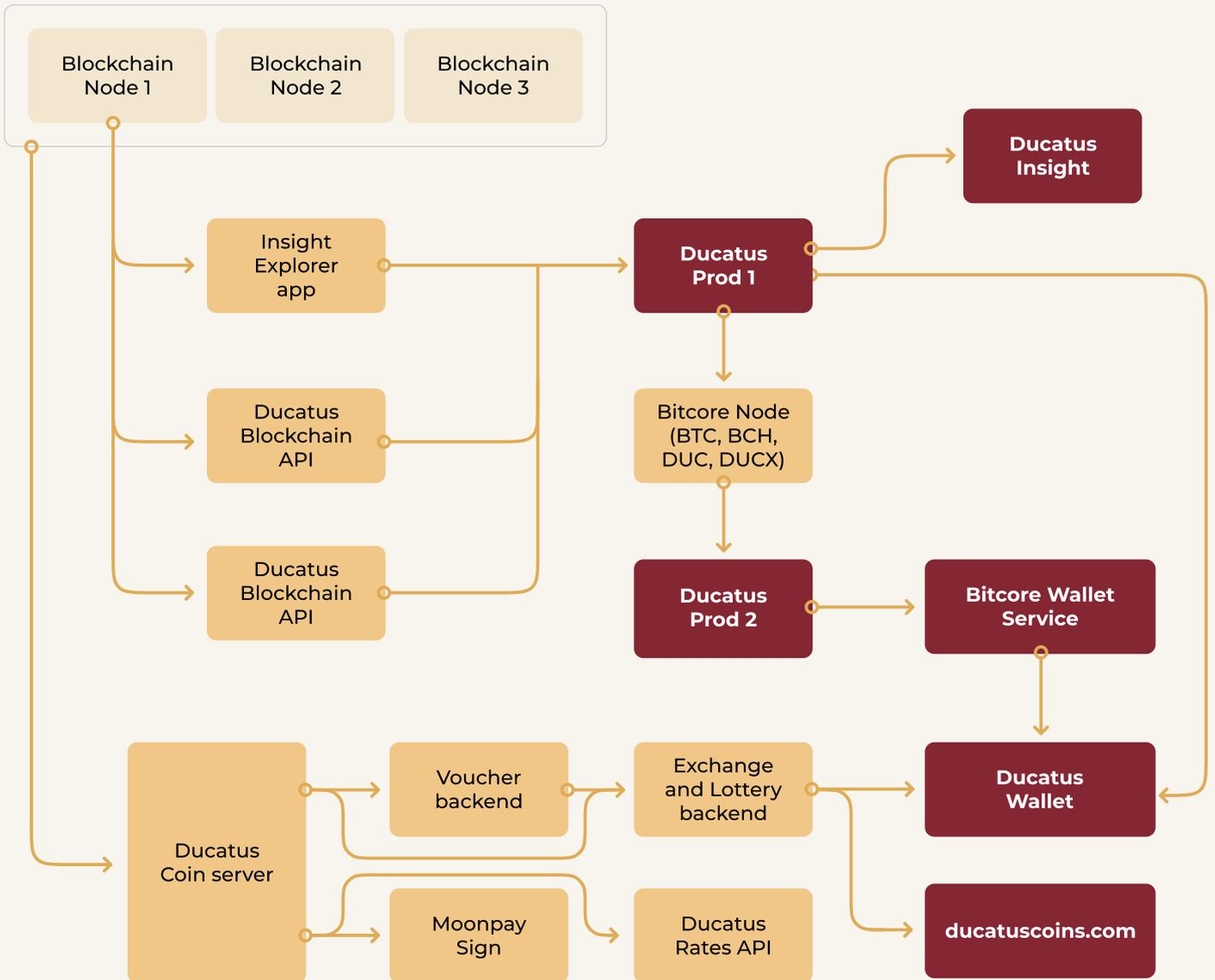
- new Ducatus Wallet Service
- MongoDB for Ducatus Wallet Service

### **Server: beta2.ducatuscoins.com**

Services:

- Ducatus Exchange (Python and Java backend)
- PostgreSQL
- Nginx:
  - [www.ducatuscoins.com](https://www.ducatuscoins.com)

## Scheme





## DucatusX

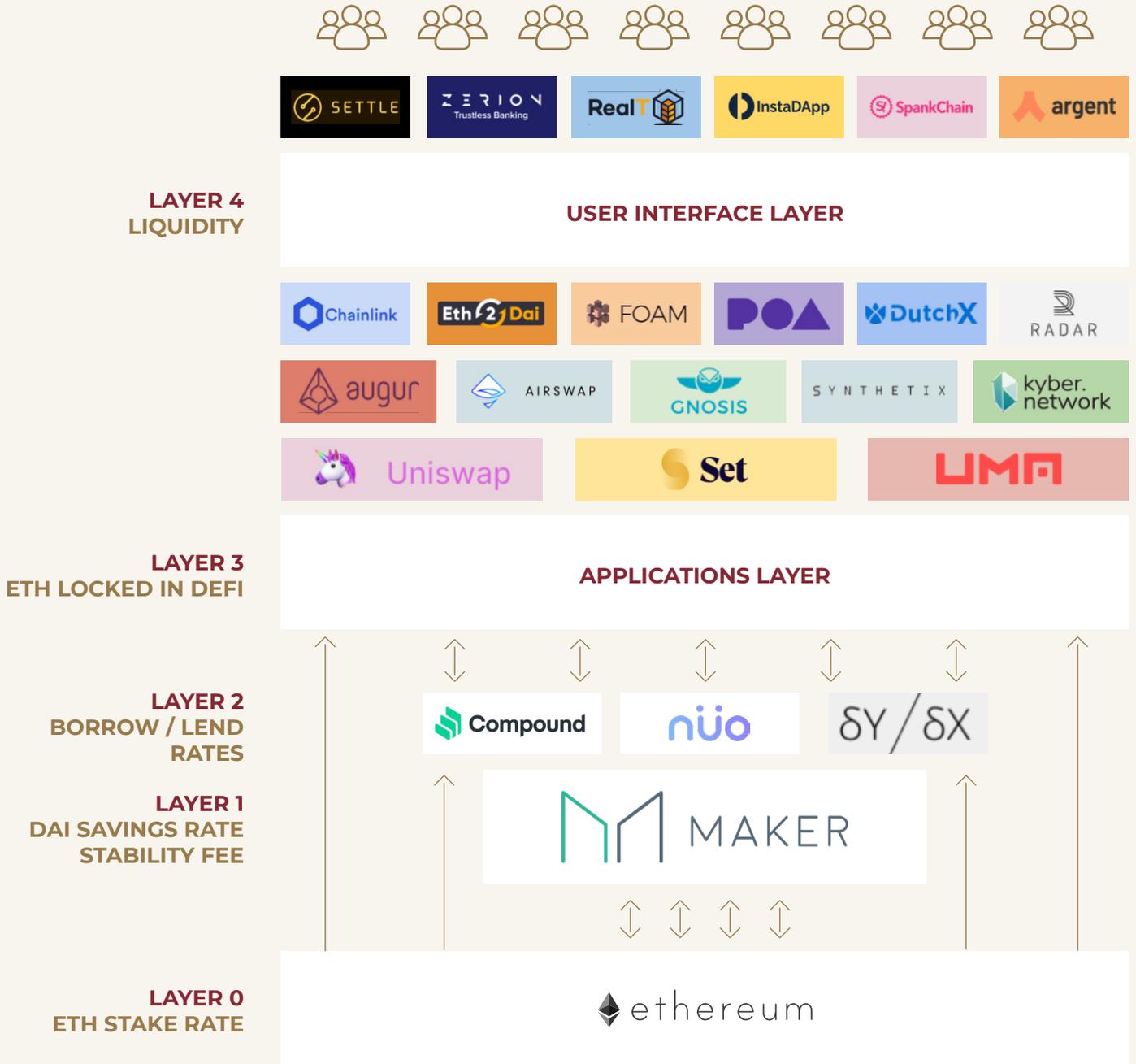
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Evolution is a constant in the digital world, the technology behind Ducatus is one such example. With usability still at the core, developing a second blockchain, the DucatusX blockchain, became a natural expansion of our vision. Seeing the wealth of opportunities on the trail blazed by Ethereum, the potential of smart contracts and the use of blockchain as a way to push boundaries in various business models and applications defined the technology behind DucatusX.

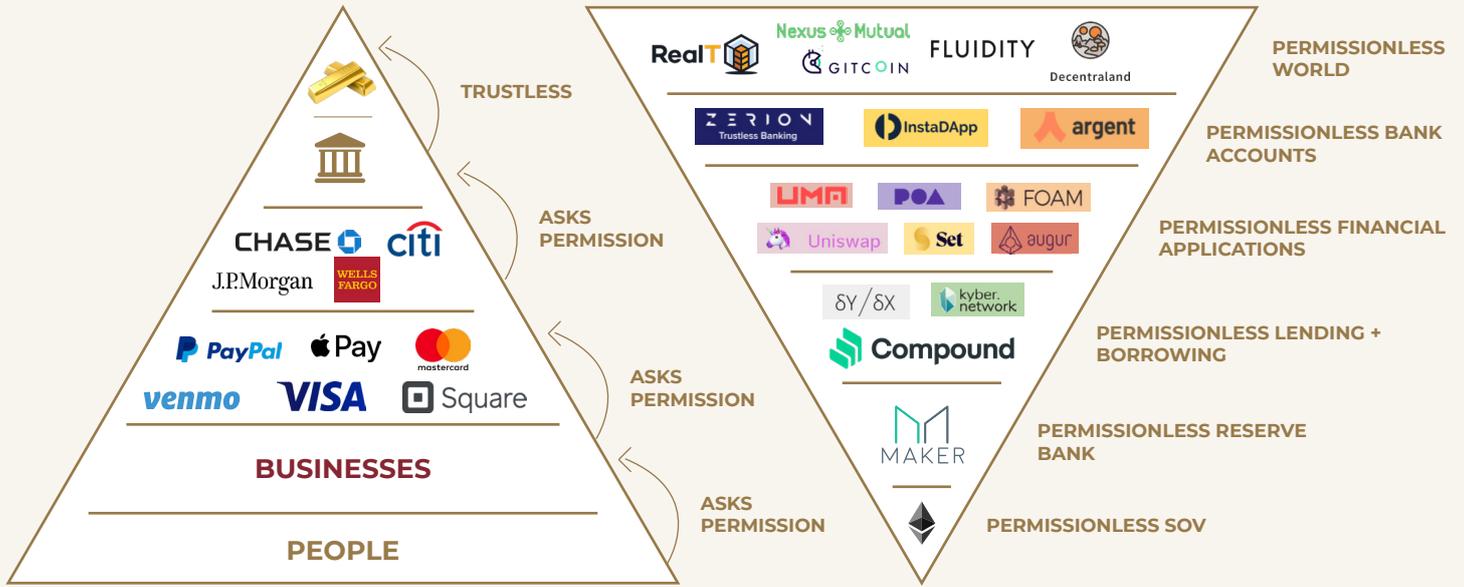
The DucatusX blockchain is a protocol capable of digitizing and limiting the quantity of any asset, not just DUCX. Like many exciting new protocols, it creates an additional layer of applications on top of the Internet. The current generation Internet (Web 2.0) is the Internet of centralized databases, DucatusX offers a real alternative. While Web 2.0 is oversaturated and dominated by giant corporations, Web 3.0 is a blank canvas that opens up endless possibilities for building value-driven applications.

Tokenization and DRC-20 standard is the printing press for digital value. With these, DucatusX enables anyone to recreate any asset, set the number of units, and transfer its ownership between different parties.

Pushing the boundaries of the internet of value, we will develop applications, using DUCX, in the field of tokenization and open finance. Each application is compatible with other applications, which allows you to combine their capabilities in every possible way. However, like any economic system, DucatusX has a certain hierarchy and will use a similar proven structure as currently built with Ethereum as its foundation.



Financial systems are inherently based on money or monetary value; today it is fiat, but prior to fiat we had the gold standard. Gold is one of the most ancient means of accumulation, but gold is heavy, not suitable for day-to-day transactions and it needs to be stored securely as you can't keep carrying it around. It could also ultimately be taken away in a completely "legal way" at any time by the governments. 90% of the world's gold reserves are controlled and used by central banks, the rest of the world is forced to use fiat currencies as money. The operators of each layer of the traditional financial system, hierarchically under the central banks, must therefore seek permission from their superiors, because they have access to 'real' money, in this case gold.



This picture clearly shows the role of programmable money in the founding of a new, alternative financial system. Namely, in order to use them, no one needs to ask permission from anyone. Yes, gold and Ducatus can also be used without anyone's permission, but if a system that uses the value of these assets cannot be used without any restrictions, then over time this system can also seize control over these assets and establish rules that favor a limited number of people controlling the system. Generally these rules are aimed at making money out of people.

## Leasing platform

A platform will be created for leasing properties while all parties will be maximally protected. Double bookings are not possible since the booking information will be stored and managed in the blockchain. The landlord is protected by a pledge, the amount of which will be indicated in the UI interface when the object is created for delivery; the pledge will be released in automatic mode as well.

## Insurance

Smart contracts in the Ducatus network can be used for insurance, for example, against bad weather or fulfilling orders on time or any other. This will require the additional implementation of the providers of reliable trusted data in the blockchain - Oracles, which is also included in the development plans.

## Decentralized Exchange

With the development of the DucatusX blockchain and the appearance of tokens, users will certainly need the ability to quickly exchange tokens to attract investments and realise profits, therefore, it is planned to create a decentralized exchange that works by analogy with Uniswap and others. The DUCX coin will be traded on exchanges and therefore forms the link of the Ducatus ecosystem to the global crypto world.

## DucatusX Road to Decentralization

Due to using the PoA mechanism in the DucatusX blockchain, users have the ability to host their own node and get a commission from transactions. The Ducatus development team will prepare a user-friendly solution, an Arduino-based node with preinstalled software. One just needs to install the node and connect it to the internet, then enter the Ducatus network and earn revenue from transactions performed in the network. From the network perspective, it will significantly increase the decentralization for safer usage with thousands of nodes around the world.

It is planned to develop both centralized bridges with the Ethereum blockchain and decentralized ones using Polkadot technology to perform cross-chain operations and use existing projects dispersed on the Ethereum network.

In the future, it is also planned to introduce DAO voting to manage and choose the path of further blockchain developments.

## Staking

The implementation of staking using smart contracts is already available within our wallet, but in the future, with the increasing level of decentralization, it is planned to switch to the POS consistency algorithm and implement a profit in accordance with the number of DucX.

## Technical Architecture

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DucatusX is a fork of the Ethereum blockchain, therefore it supports both transactions and creations of smart contracts. Unlike Ethereum, DucatusX uses a "Proof of Authority" consensus algorithm which reduces the maintenance cost. In the future, it is considered to switch to "Proof of Stake" which may give users even more confidence in choosing DucatusX for their projects. Mining is not open to the public, the blocks are produced regularly by proven secured nodes resulting in stable cost and speed of block production.

### Server: DucatusX Testnet 1

Services:

- DucatusX Node (Parity with Proof-of-Authority consensus)
- DucatusX Testnet Explorer
- DucatusX Testnet Faucet
- MongoDB
- PostgreSQL

### Server: DucatusX Testnet 2

Services:

- DucatusX Node (Parity with Proof-of-Authority consensus)
- MongoDB

### Server: DucatusX Mainnet 1

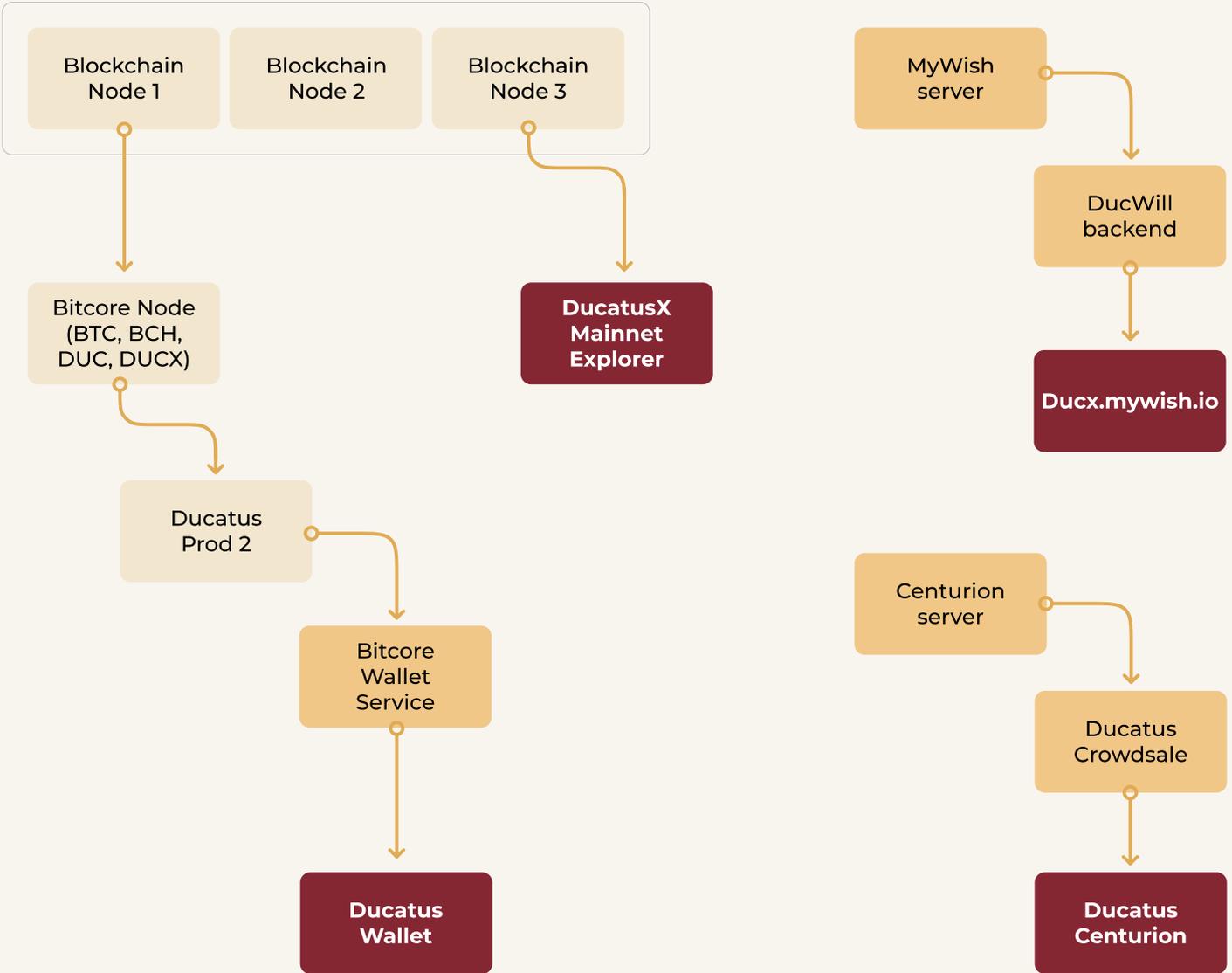
Services:

- DucatusX Node (Parity with Proof-of-Authority consensus)
- DucatusX Mainnet Explorer
- MongoDB

### Server: DucatusX Mainnet 2, 3, ..., N

Services:

- DucatusX Node (Parity with Proof-of-Authority consensus)

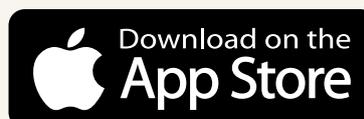


## Ducatus wallet

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The Ducatus ecosystem exists as a web-wallet that runs on all desktop platforms Windows, Linux, macOS <https://wallet.ducatus.io/>

and mobile for iOS platforms and Android



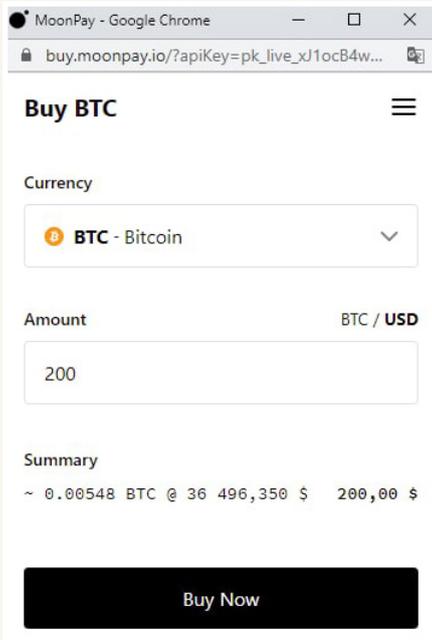
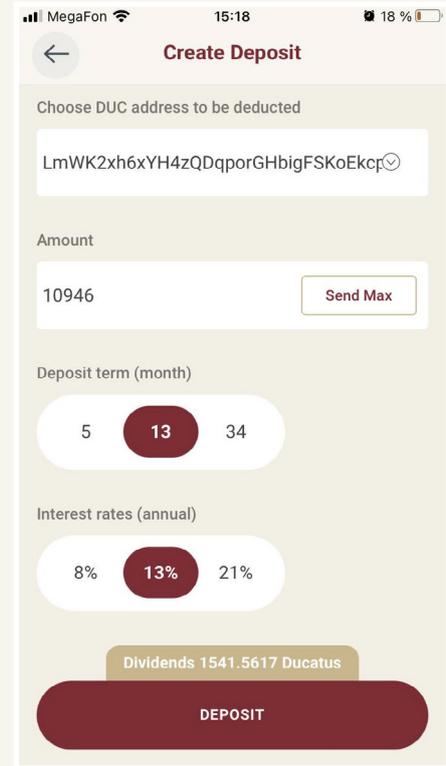
Users can send transactions and accept payments not only in the Ducatus and DucatusX coins but also in Bitcoin, Bitcoin Cash, XRP, Ethereum and USDC, PAX and GUSD tokens. More coins and tokens will be added in the future.

The wallet offers a variety of very useful features:



## Staking

Users can earn passive income in Ducatus. To do this, simply open a deposit for 5, 13, or 34 months and receive 8, 13, or 21% staking bonus per annum respectively.

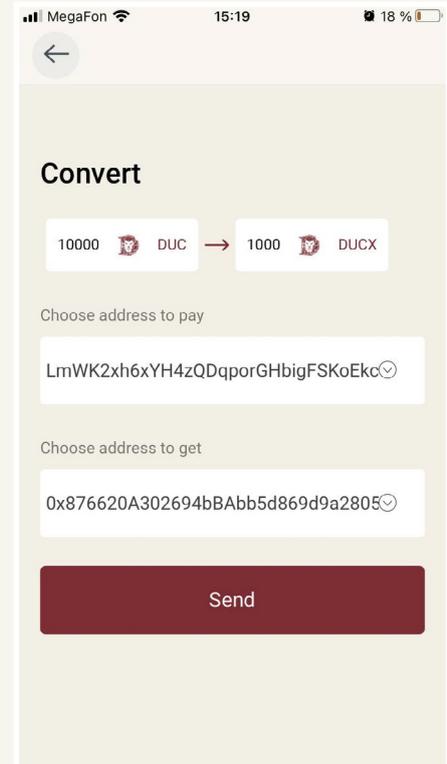


## Purchase crypto

Thanks to the integration with MoonPay, users from all over the world can buy cryptocurrency using a credit card within the Ducatus Wallet. One just needs to pass KYC and you can then easily purchase ETH, BTC or USDC and then exchange them easily for Ducatus or DucatusX.

## Swap between Ducatus and DucatusX

In the wallet, users can not only carry out transactions on the Ducatus and DucatusX networks but can also exchange their Ducatus Coins for DucatusX coins either way at a currently fixed rate of 1DUCX = 10DUC at any time in a manner of minutes.



## Tokenomics

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### Ducatus

- Total number of DUC is fixed at maximum 7,778,742,049
- Low fees, fast transactions, staking rewards
- Strong supporting community, merchant acceptance for payments

### DucatusX

- Total number of DUCX is fixed at maximum 777,874,204
- Low fees, smart contracts available
- Only trusted projects, no scam token
- Strong supporting community, exchange traded

## Manage Ducatus and DucatusX

To manage Ducatus and DucatusX you can use our Ducatus Wallet

<https://wallet.ducatus.io/>

<https://apps.apple.com/us/app/ducatus-wallet-2-0-2/id1489722627>

<https://play.google.com/store/apps/details?id=io.ducatus.walnew>

## Ducatus <-> DucatusX conversion

DucatusX (DucX) can be converted from and into Ducatus (DUC) by a currently fixed ratio of 1:10 on <https://www.ducatuscoins.com/buy> or inside the wallet using the swap function.

## Crowdfunding process

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Connecting people and potential. Through our unique Lease & Earn model, anyone can lease a portion of a global business, property, or luxury asset. By bringing resources together, we are able to access high-value assets and share attractive returns to every lessee.

- **Start-up / Liquidity.** Lend short-term liquidity to newly established businesses and earn up to 10% monthly dividends in DUC.
- **Property Lease.** Lease fractions of high-value real estate properties and earn up to 8% monthly dividends in DUC.
- **Lifestyle lease.** Lease time and usage for one-of-a-kind projects and earn up to 5% monthly dividends in DUC plus additional lifestyle benefits.

<https://centuriongm.com/crowdfunding>

## DucatusX token contract

DucatusX supports smart contracts and allows you to tokenize your assets. It's simple, just visit <https://ducx.mywish.io/create> and create a token in the testnet. After being reviewed and accepted, the token can then be live on the DucatusX blockchain and may be listed and sold through the AA+ exchange or others.

## DucatusX crowdsale contract

To attract investment into your project, you can create a token contract and sell it through a crowdsale. To join your project and get project tokens, buyers will need to send you DucX, which you can then spend on the project needs.

<https://ducx.mywish.io/create>

## Our competitors

	Ducatus	Ethereum fork	TRON fork	EOS fork	NEO fork
Create tokens	To create new tokens within the Litecoin network (Ducatus), technologies such as OmniLayer can be used, for example, Tether based on Bitcoin	Any smart contracts can be implemented: token, crowdsale			
Run crowdsale	No smart contracts with Omni technologies can be implemented				
Blockchain and its infrastructure setup and deployment	Already done	<p>There are a lot of wallets for these networks. You can fork any, replace the nodes URL with yours and use it. Some of the wallets allow you to specify the address of your node and connect to it like metamask, tronlink, scatter, so you don't even have to fork anything.</p> <p>The same for a block explorer. Source codes for any of these blockchains are available.</p>			
Staking	It is easy to implement on any of the blockchains with an Airdrop service. Users just need to hold tokens				Implemented by blockchain. But users need to do some things to get a reward. + You can implement your airdrop
Transaction sending	Transaction fees are charged in native blockchain coins (DUC). It seems simple and clear	To make transactions, you need to create an account. By simplicity - the average between Ethereum / Litecoin and EOS	To make transactions, you need: 1. Create an account 2. Buy net, CPU It doesn't seem easy		No fee per tx
Block generation time	Configurable during deployment				
Trust in blockchain	It makes no sense for users to create their node, as this does not bring them any profit, which leads to the centralization of the network	If users want to receive a reward, they have to deploy their node and sync it with	The user can nominate himself as a block producer. This is not difficult to do, but a number of actions will have to be done. Such a user may want to deploy a node in order to receive a reward	Putting yourself as a block producer is not the most trivial task. A simple user will not understand. Accordingly, such a user will not keep a node	If users want to receive a reward, they need to deploy their node and participate in the election of the transaction validator (the one who will generate the blocks)
Ease of developing smart contracts	No smart contracts	Very simple Solidity		C++	C#, Python. "Specific implementation"

DucatusX is based on the Ethereum blockchain and, accordingly, has the same pros and cons. The main difference from Ethereum is the PoA consensus usage, which allows to significantly reduce the cost of transactions and retain productivity, but at a reduced level of decentralization.

## **Roadmap 2021**

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Liquidity raising platform - a platform for publishing projects to attract investments.

DEX - DEX for trading DucatusX tokens and other cryptos

Arduino PoA block producing - microcomputers with preinstalled software for participating in block producing and earning on the blockchain fees.

Stablecoin implementation - adding a stablecoin to the DucatusX blockchain implemented to a user friendly digital payment platform for day-to-day banking transactions

Leasing/borrowing smart contracts - smart contracts for renting property and providing loans secured by cryptocurrency

New wallet (Metamask) for token management - new wallet with integrated web3 protocol support



DUCATUS