



Rhenium

NETWORK

Whitepaper 2.0



Vision

“Rhenium [XRH] is an open source, community driven, decentralized POW/POS hybrid cryptocurrency. We aim to increase mainstream adoption of cryptocurrency with innovative ideas and development”.

What is Rhenium?

The Rhenium network is an open source, primarily proof of stake (POS) cryptocurrency with a focus on decentralization, privacy, speed, sustainability and the community.

Masternodes/Staking

Masternodes will play a vital role on securing the Rhenium network. Collateral for a masternode is 10,000 coins. Early investors will benefit greatly with the increased block reward and high Return on Investment. Masternodes are a source of passive income and one can be set up via VPS or locally on your computer. Also if you don't have 10,000, worry not, as you can still stake the coin and earn rewards passively. Look for reward table structure section for further details on this. This ensures that the barrier for entry is low, because you don't need a masternode to earn passive income with Rhenium.

Privacy

With the implementation of Zerocoin protocol, Rhenium ensures that you have the right for privacy should you need it. We live in a world where the need for privacy and anonymity is growing stronger by day, therefore we feel that we must provide that service to Rhenium investors. We will allow full anonymity on receiving and sending XRH on the blockchain.

Community Driven

The community plays an important role in the current cryptocurrency space and we strongly believe that by harnessing the community, we can bring Rhenium to its full potential. The community will have the option to participate in voting via governance for future developments as the project becomes more established.

Coin specifications

Rhenium is a fork of PIVX. We are building upon the PIVX code and improving it by implementing new features. The premined coins will be used to fund the developers, founders, marketing, exchange fees and costs and lastly to fund bounties. As soon as the max total supply has been met after the POS stage, the yearly inflation of the coin will decrease heavily.

Coin Name	Rhenium
Ticker	XRH
Algorithm	QUARK
Block time	60 seconds
Difficulty re-targeting	Every block
Masternode Requirement	10,000 coins
Max coin supply (POW)	49,500 coins
Max coin supply (POS)	32,258,830 coins then infinite after block 500,000
Premine	6.19%

Block Rewards

POW block rewards

Block height	Reward	Masternode	Miner
2-200	250	80%	20%

POS block rewards

Block height	Reward	Masternode	Staking
201-10,000	200	80%	20%
10,001-50,000	150	80%	20%
50,001-100,000	100	80%	20%
100,001-200,000	75	80%	20%
200,001-300,000	50	80%	20%
300,001-350,000	40	80%	20%
350,001-400,000	30	80%	20%
400,001-450,000	15	80%	20%
450,001-500,000	10	80%	20%
500,001+	5	80%	20%

POS vs POW?

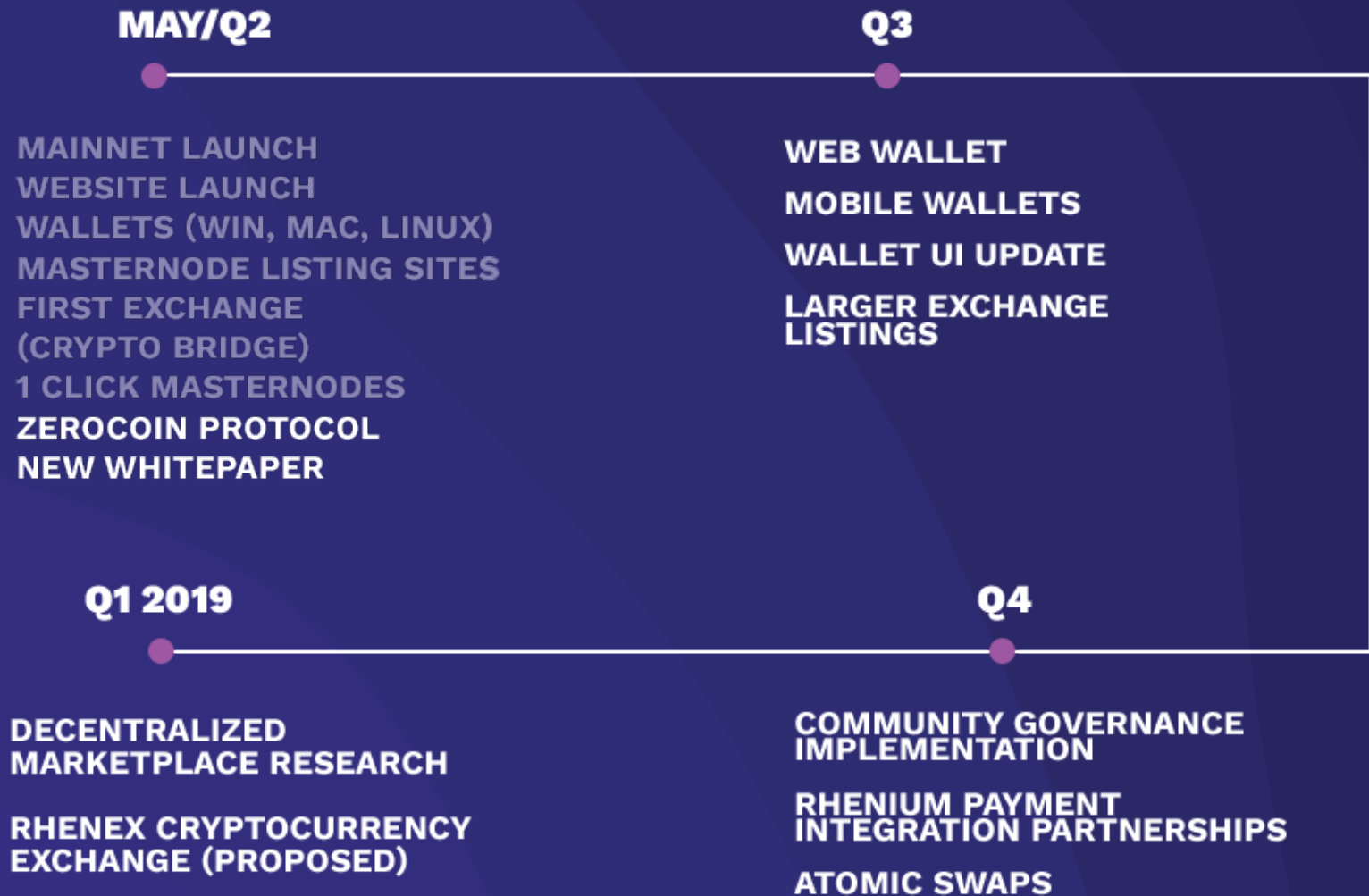
POS (Proof of Stake)

The Rhenium network will be ran on POS during the majority of its existence. This will come in effect once the POW period has finished. POS was originally introduced by Sunny King and Scott Nadal and then was later implemented into a hybrid coin called Peercoin. POS is seen to have many benefits which its counterpart POW lacks in. Firstly it is energy efficient, mining uses tremendous amounts of electricity and hardware power and POW has large costs involved which can lead to an unfair playing field + centralized power. POW requires hardware power to perform computational tasks whereas a POS system requires the holder to show the ownership of a set amount of coins. Attacks are also vastly more expensive than those done on POW networks.

POW (Proof of Work)

POW validates the work happening on the blockchain and proving that it's immutable. Miners compete on trying to solve the mathematical equations in order to gain block rewards. Many early coins such as Bitcoin are on POW networks. Rhenium will be ran on POW for the first 200 blocks only.

Roadmap overview



Roadmap key features

Zerocoin protocol

Zerocoin allows direct anonymous payments between parties. Zerocoin transactions exist alongside the (non-anonymous) currency. Each user can convert (non-anonymous) coins into (anonymous) coins, which we call zerocoins. Users can then send zerocoins to other users, and split or merge zerocoins they own in any way that preserves the total value. Users can also convert zerocoins back into bitcoins, though in principle this is not necessary: all transactions can be made in terms of zerocoins. [Credit to Zerocoin.org](https://zerocoin.org)



Roadmap key features

Web Wallet

Our web wallet will allow the use of Rhenium without the need for desktop/mobile wallet. This wallet can be accessed directly via an unique URL. The Web wallet will allow the user to send and receive coins just like on the normal wallets.

Web wallets will be a great addition for those without the option to run a conventional crypto wallet such as a chrome-book or tablet.

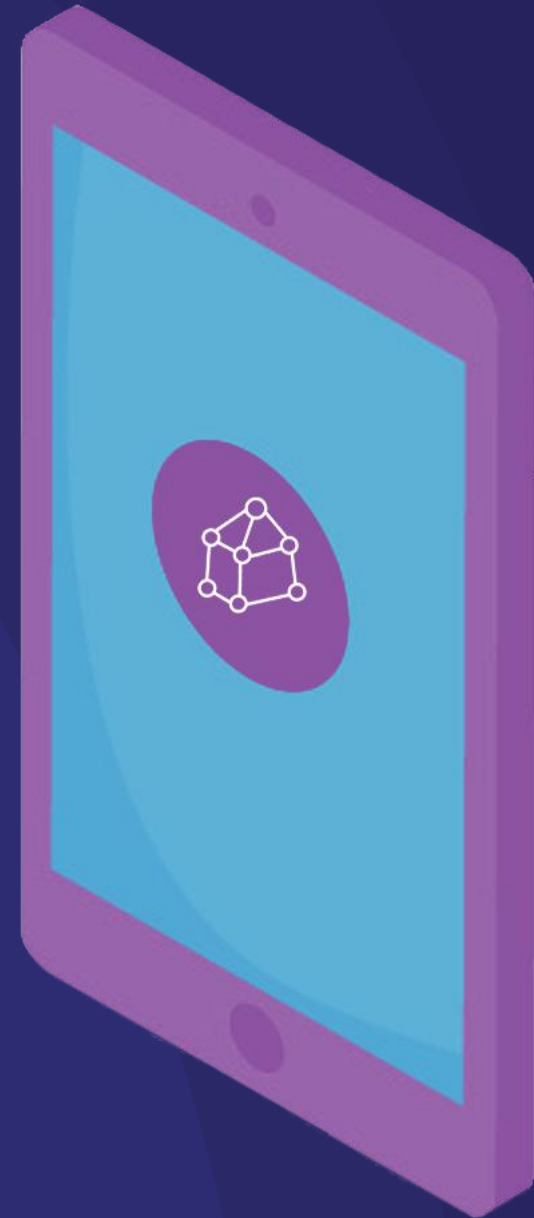


Roadmap key features

Mobile Wallets

We will launch an Android based wallet in Q3 2018. This will enable users to access their wallet on the move via their smartphone device. The wallet will be able to send and receive XRH just as a desktop wallet would. The wallet will come with a unique passphrase upon installing.

We may look to launch an IOS app once we receive community feedback from android version.



Roadmap key features

Community Governance

This will be implemented via the wallet and will give users the option to vote on upcoming proposals. Proposals will be found via a unique URL that will be given at a later date. This will ensure for a fair and transparent project.

Voting rights will be the same for each holder whether you have 1000 XRH or just 1! This ensures everyone has their say and avoids the project becoming centralized with a few large holders.



Roadmap key features

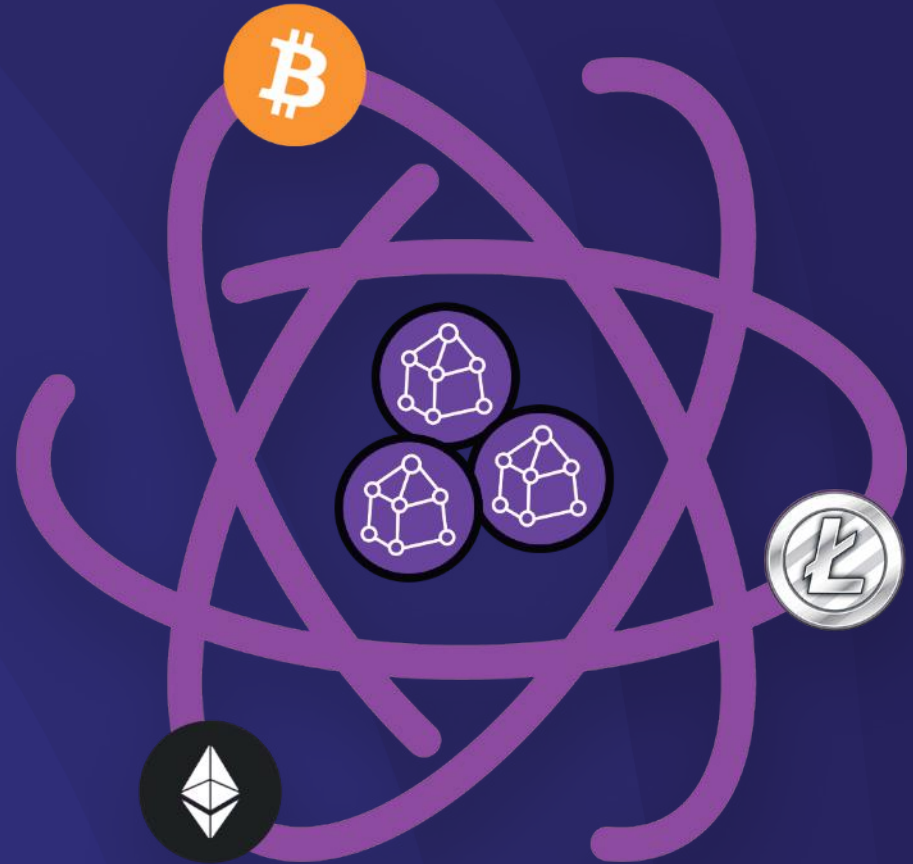
Atomic Swaps

Atomic swaps will enable users to trade XRH for other cryptocurrencies. This, in essence is another evolution of the DEX. Atomic swaps take away the need for users to engage with a third party.

Atomic swaps are done using hash time-locked contracts - this makes sure the atomic swap process is trustless by ensuring that all parties cover the requirements of the trade.

For more detailed information on atomic swaps please see here:

https://en.wikipedia.org/wiki/Atomic_swap



Roadmap key features

DEX/Marketplace

We are always looking to expand what Rhenium can offer to the crypto space and how to improve it. A Rhenium marketplace will allow users to trade, buy and sell goods using XRH in a decentralized method.

A DEX would offer XRH as a base trading pair and help establish the coin as well as offering users a great way to trade cryptos!

At this current stage in the project these are simply proposals and something that the project may look to develop during 2019.



References

- <http://zerocoin.org/>

- <https://peercoin.net/>

- https://en.wikipedia.org/wiki/Atomic_swap