



CRUUX

The Heart of CryptoCoins



INTRODUCTION

Cryptocurrency is a form of digital money that is designed to be secure and, in many cases, anonymous. It is a currency associated with the internet that uses cryptography, the process of converting legible information into an almost uncrackable code, to track purchases and transfers.

Cryptocurrencies have emerged as the latest brave market in the trading world. These trading markets are relatively young and thus full exploitation has not yet been achieved. The fact that some coins like Bitcoin can rise by 10% in a single day signifies the need for other stable coins to join the market. The tender age cryptocurrency in the trading world has prevented the established trading houses and only left the young companies to invest. The market capitalization for cryptocurrency stood at \$300 bn and still growing.



RISE OF CRYPTOCURRENCIES

The concept of decentralized digital currency, as well as alternative applications like property registries, has been around for decades. The anonymous e-cash protocols of the 1980s and the 1990s were mostly reliant on a cryptographic primitive known as Chaumian Blinding. Chaumian Blinding provided these new currencies with high degrees of privacy, but their underlying protocols largely failed to gain traction because of their reliance on a centralized intermediary.

In 1998, Wei Dai's b-money became the first proposal to introduce the idea of creating money through solving computational puzzles as well as decentralized consensus, but the proposal was scant on details as to how decentralized consensus could actually be implemented.

In 2005, Hal Finney introduced a concept of reusable proofs of work, a system which uses ideas from b-money together with Adam Back's computationally difficult Hashcash puzzles to create a concept for a cryptocurrency, but once again fell short of the ideal by relying on trusted computing as a backend. In 2009, a decentralized currency was for the first time implemented in practice by Satoshi Nakamoto, combining established primitives for managing ownership through public key cryptography with a consensus algorithm for keeping track of who owns coins, known as "proof of work." The mechanism behind proof of work was a breakthrough because it simultaneously solved two problems. First, it provided a simple and moderately effective consensus algorithm, allowing



nodes in the network to collectively agree on a set of updates to the state of the Bitcoin ledger. Second, it provided a mechanism for allowing free entry into the consensus process, solving the political problem of deciding who gets to influence the consensus, while simultaneously preventing Sybil attacks. It does this by substituting a formal barrier to participation, such as the requirement to be registered as a unique entity on a particular list, with an economic barrier - the weight of a single node in the consensus voting process is directly proportional to the computing power that the node brings.

In 2009, cryptocurrency was invented during the financial crisis and benefited many businesses and start-ups to expand themselves as it led to the easy procedure of financial proceedings. The first one to be launched as a cryptocurrency was bitcoin. Bitcoin was invented as an open source document by an anonymous developer under the name of “Satoshi Nakamoto” Cryptocurrency is an encrypted, decentralized digital currency transferred between peers and confirmed in a public ledger via a process known as mining.

CRUX: HEART OF CRYPTOCOINS

Project Crux started with multiple ambitious goals from the start. Crux aims to be a cryptocurrency that will be masternode ranking platform currency, will have payment gateway, automated masternode hosting and finally its own new tech debit card.





MNMARKETCAP: A NEW FUNCTIONAL PORTAL FOR ALL MASTERNODE COINS

Mnmarketcap designed to operate with Crux and to include multiple options for new masternode coins to get a head start on their journey. With it's simple design and friendly user interface Mnmarketcap offers both users and coin developers multiple options to promote their projects and get what they need effortlessly.

The main role of Masternode Market Capital in crux is for the services in Masternode Market Capital you can use the CRUX coin. You can use CRUX for the payment for the services which you like. Mnmarketcap helps to all the Cryptocurrency to popular around the web by giving the services like Coin marketing, Email marketing, Facebook marketing, Twitter marketing, Discord Service, Telegram service it will makes any cryptocurrency to popular all over the world.

PAYCC: FAST, EASY AND SECURE PAYMENTS

Paycc aims to be an easy payment gateway that will function with Crux. Users will be able to vote for adding new payment options as in coins with Crux. Paycc will offer multiple payment options and new features to offer an easy solution for paying with cryptocurrencies.



Crux coin is used as payment currency and it is also used for coin voting in paycc. The following programs will be done in paycc.

Dec 2018 the wordpress and woocommerce plugins will be released.

Jan 2019 Blesta Zencart Plugins will be released and in

Feb 2019 ATM Withdrawal will be introduced it will help withdraw fiat currency easily.

Mar 2019 Android Application will be released and

Apr 2019 Bank Withdrawal (SEPA, Wire Transfer) will be introduced.

June 2019 Magento, Oscommerce, VirtueMart Plugins

Sep 2019 Skrill, Neteller, Perfect Money, OkPay Withdrawals will be introduced.

Oct 2019 UberCart, Drupal Commerce Plugins will be released

Nov 2019 Opencart, Prestashop Plugins.

Dec 2019 We will develop iOS Application and submit it to Apple for approval.

EFFORTLESS AUTOMATED MASTERNODE HOSTING

Crux will also offer an easy way to host various community selected masternodes with one easy click. Crux coin will be the currency for hosting.



CRUX DEBIT

Crypto Debit Cards

The Crypto debit cards are prepaid debit cards which allow you to top-up your card with cryptocurrency, which is then converted into fiat (USD, EUR, GBP, etc.) so that you can make a purchase. Some Crypto debit cards hold your Cryptocurrency and convert it into fiat only at the time of a transaction. Some other cards convert it into equivalent fiat as soon as you top it up.

Regardless of how it works, your Bitcoin debit card can be used for everyday purchases and payments, as they are linked to VISA and/or MasterCard, which are prominent payment processors used around the globe.

When you get a crypto-debit card you also get a digital wallet that has a currency-conversion feature. You deposit cryptocurrency into the wallet then when you swipe the card at a store or an ATM, the altcoins get converted into fiat currency.

To work, crypto-debit cards have to have the brands of one of the major credit-card providers. In most of the world that means Visa or MasterCard, the two major brands, but in some areas – it



means a lesser brand, such as Diner's Club, Discover, or American Express (Amex).

There are some added advantages to crypto-debit cards including the ability to get cash from ATMs or cash registers at retailers like Walmart with a PIN number. That means you can get cash without finding a Bitcoin or Ethereum ATM. Such ATMs are rare, and many of them charge high fees. Using a crypto-debit card it might even be possible to get cash without paying a fee at some retailers.

It would also be possible to use Visa or MasterCard crypto-debits at large internet retailers like Amazon and Walmart, which do not accept Bitcoin. Another use for Visa and MasterCard crypto-debit plastic would be to buy altcoins from miners like Genesis Mining or exchanges such as Coinbase. Most of the Miners and exchanges accept Visa and MasterCard payment. There are some exchanges that will not accept bank transfers from some countries such as Canada.

Beyond that, it should be possible to use MasterCard and Visa crypto-debit products to make payments through Apple Pay, Samsung Pay, and Android Pay. Those payment apps are designed to support MasterCard and Visa payments.

We offer you a new Crux Debit Card that will help us to users to convert it also to Crypto Currency. Crux enables your suppliers and customers to spend at over 38 million merchants worldwide. Debit Cards generated by Crux Will provide full access to the best-known payment network in the world.



Crux Debit

We offer you a new Crux Debit Card that will help Crux Debit Owners to convert it also to Cryptocurrency. Crux enables your suppliers and customers to spend at over 38 million merchants worldwide. Debit Cards generated by Crux will provide full access to the best-known payment network in the world.

Why Choose CRUX?

- ♥ Project Crux will be an apex currency that will contain multiple already working goals with its release.
- ♥ Payment Gateway will be a solution for cryptocurrencies, with CRUX as voting currency in Paycc (Cryptocurrency Payment Gateway) <https://www.paycc.io>
- ♥ Masternode Market Capital is already up and running, CRUX will be the currency for adding new community chosen coins and other alike.
- ♥ Automated Masternode Hosting for Cryptocurrencies with CRUX Coin for Paying Hosting Fee. Currently a feature of CRUX, various coins will be added in Q1 2019.
- ♥ Various new features: Ecommerce Platform with Crux Coin as Currency and many more



Why would I need Crux Card ?

The Crux Card enables users to spend funds to any store of value he/she controls. We are working hard to enable users to connect everything from bank, airline mile, and alternative currency accounts to their Crux Card.

CAN I USE ANY OTHER CRYPTOCURRENCY OTHER THAN CRUX ITSELF?

Yes. Whereas payment services will start with Crux as you can see from our whitepaper. Crux card eventually support other alternate cryptocurrencies. The crux coin support other cryptocurrencies by withdrawing fiat money from the ATM for all cryptocurrency. It will make the users to purchase things using the debit card.

PLANNED FEATURES

Debit Cards for Community Voted Currencies

One of the exciting features that is planned is to create a platform or a system that will allow users to vote for their coins. Users will vote with CRUX and selected currencies will be offered an option



to issue debit cards for their currencies.

Ecommerce Platform

Crux team will also create a decentralized marketplace which will operate with various selected coins along with CRUX. Team plans to bring some new gamechanger features for the platform.

TECHNICAL ASPECTS

Masternodes

Masternodes can be thought of as a second tier of incentivized infrastructure. They are full nodes that provide services and validations on the blockchain that miners do not, but unlike Bitcoin full nodes, masternode operators are rewarded economically, just like miners in a proof-of-work system. Masternodes are also called “bonded validator systems” – they require a bond or collateral in order to operate, and they provide validating services to the network. The exact “bond” required for operating a masternode varies across projects, but is usually set at a significant amount in order to ensure the masternodes perform their tasks correctly. If masternodes validate blocks incorrectly, for instance their bond is slashed. The high staking requirement also mitigates the risk that one party controls a majority of masternodes at once.



The most interesting thing about a masternode system is perhaps its implications on the economic dynamics of a network. The built-in incentive to hold coins as a staking collateral suppresses velocity, which is defined as total transaction volume divided by average network value, and can be understood as the turnover rate of an asset or the amount of times an asset changes hand within a network.

For users of a blockchain network, masternodes may signal enhanced stability and network loyalty, as there is a layer of the infrastructure incentivized by the large initial staking investment to stick around and do its job correctly. Various coins have different designs for dismantling a masternode and recovering staking collateral, but most payouts happen only periodically, which means that pulling out the collateral jeopardizes the most recent payout. Contrast this with miners, who can frictionlessly switch work across blockchains in response to changing rewards. Building a network of stable and loyal participants is quite important in the cryptocurrency space, where investment and development are rife with fickle speculation, pump and dumps, and other short termism.

PROOF OF STAKE

Proof of stake (PoS) is a type of algorithm by which a cryptocurrency blockchain network aims to achieve distributed consensus. In PoS-based cryptocurrencies, such as Peercoin invented by Sunny King and Scott Nadal, the creator of the next block is chosen via various combinations of



random selection and wealth or age (i.e., the stake). In contrast, the algorithm of proof-of-work-based cryptocurrencies such as bitcoin uses mining; that is, the solving of computationally intensive puzzles to validate transactions and create new blocks.

ZEROCOIN PROTOCOL

The zerocoin extension to bitcoin would have functioned like a money laundering pool, temporarily pooling bitcoins together in exchange for a temporary currency called zerocoins. While the laundering pool is an established concept already utilized by several currency laundering services, zerocoin would have implemented this at the protocol level, eliminating any reliance on trusted third parties. It anonymizes the exchanges to and from the pool using cryptographic principles, and as a proposed extension to the bitcoin protocol, it would have recorded the transactions within bitcoin's existing blockchain.

The anonymity afforded by zerocoin is the result of cryptographic operations involved with separate zerocoin mint and spend transactions. To mint a zerocoin, a person generates a random serial number S , and encrypts (that is commits) this into a coin C by use of second random number. In practice, C is a Pedersen Commitment. The coin C is added to a cryptographic accumulator by miners, and at the same time, the amount of bitcoin equal in value to the denomination of the zerocoin is added to a zerocoin escrow pool.



BLOCK REWARD STRUCTURE

BLOCK	MASTERNODE REWARD%	POS REWARD%	MASTERNODE REWARD	POS REWARD	BLOCK REWARD
1 to 200	-	-	-	-	-
200 to 5000	80	20	0.8	0.2	1
5001 to 10000	80	20	2.4	0.6	3
10001 to 18000	80	20	3.8	1	4.8
18001 to 22000	80.2	19.8	4.3	1.1	5.4
22001 to 26000	80.4	19.6	4.8	1.2	6
26001 to 30000	80.6	19.4	5.3	1.3	6.6
30001 to 34000	80.8	19.2	5.8	1.4	7.2
34001 to 40000	81	19	6.3	1.5	7.8
40001 to 44000	81.2	18.8	6.8	1.6	8.4
44001 to 50000	81.4	18.6	7.3	1.7	9
50001 to 54000	81.6	18.4	7.8	1.8	9.6
54001 to 58000	81.8	18.2	8.3	1.9	10.2
58001 to 62000	82	18	8.8	2	10.8
62000 to 66000	82.2	17.8	9.4	2	11.4
66001 to 70000	82.4	17.6	9.9	2.1	12
70001 to 74000	82.6	17.4	10.4	2.2	12.6
74001 to 78000	82.8	17.2	10.9	2.3	13.2
78001 to 82000	83	17	11.5	2.3	13.8
82001 to 84000	83.2	16.8	12	2.4	14.4
84001 to 88000	83.4	16.6	12.5	2.5	15
88001 to 92000	83.6	16.4	13	2.6	15.6
92001 to 100000	83.8	16.2	13.6	2.6	16.2
100001 to 105000	84	16	14.1	2.7	16.8
105001 to 110000	84.2	15.8	14.7	2.7	17.4
110001 to 115000	84.4	15.6	15.2	2.8	18
115001 to 120000	84.6	15.4	15.7	2.9	18.6
120001 to 125000	84.8	15.2	16.3	2.9	19.2
125001 to 130000	85	15	16.8	3	19.8
130000 to 135000	85.2	14.8	17.4	3	20.4



135001 to 140000	85.4	14.6	17.9	3.1	21
140001 to 145000	85.6	14.4	18.5	3.1	21.6
145001 to 150000	85.8	14.2	19	3.2	22.2
150001 to 155000	86	14	19.6	3.2	22.8
155001 to 160000	86.2	13.8	20.2	3.2	23.4
160001 to 165000	86.4	13.6	20.7	3.3	24
165001 to 170000	86.6	13.4	21.3	3.3	24.6
170001 to 175000	86.8	13.2	21.9	3.3	25.2
175001 to 180000	87	13	22.4	3.4	25.8
180001 to 185000	87.2	12.8	23	3.4	26.4
185001 to 190000	87.4	12.6	23.6	3.4	27
190001 to 195000	87.6	12.4	23.1	3.3	26.4
195001 to 200000	87.8	12.2	22.7	3.1	25.8
200001 to 230000	88	12	22.2	3	25.2
230001 to 260000	88.2	11.8	21.7	2.9	24.6
260001 to 290000	88.4	11.6	21.2	2.8	24
290001 to 320000	88.6	11.4	20.7	2.7	23.4
320001 to 350000	88.8	11.2	20.2	2.6	22.8
350001 to 360000	89	11	19.8	2.4	22.2
360001 to 370000	89.2	10.8	19.3	2.3	21.6
370001 to 380000	89.4	10.6	18.8	2.2	21
380001 to 390000	89.6	10.4	18.3	2.1	20.4
390001 to 400000	89.8	10.2	17.8	2	19.8
400001 to 420000	90	10	17.3	1.9	19.2
420001 to 440000	90	10	16.7	1.9	18.6
440001 to 460000	90	10	16.2	1.8	18
460001 to 480000	90	10	15.7	1.7	17.4
480001 to 500000	90	10	15.1	1.7	16.8
500001 to 510000	90	10	14.6	1.6	16.2
510001 to 520000	90	10	14	1.6	15.6
520001 to 2100000	90	10	13.5	1.5	15
2100001 to 4000000	90	10	9	1	10
4000000 to Infinite	90	10	0.9	0.1	1