

CPS Marketplace / CPS Coin

CPSCoin: An Asset Node
Building Efficiency within a
Peer-to-Peer Electronic Value System

Jagdeep Sidhu, Msc.
Syscoin Core Developer
Blockchain Foundry Inc.
Email: jsidhu@blockchainfoundry.co

Alexander Alexandrovich Alexandrov
Chief Executive Officer
CoinPayments, Inc.
Email: alex@coinpayments.net

Caution: This is a new speculative digital venture with substantial risk. See Caution to Reader.

Online merchants have been eager to accept cryptocurrencies as payment for several years now, and CoinPayments has been the *de facto* leader in online cryptocurrency payment gateways since its inception in 2014. The CoinPayments framework has made it easier for merchants to accept cryptocurrency payments for their goods and services, but merchants still had to run their own expensive web store, cart, and checkout software. Transaction settlements were still as slow as the blockchain confirmation times, and merchants still had to manage their own stores or pay a 3rd party to manage upgrades and security patches. It was easier to use Bitcoin in online commerce, but it was still not completely seamless, and point-of-sale was still untapped.

In 2018, the CoinPayments framework is filling that gap with the introduction of the CPS Marketplace and its integrated token, CPS Coin.

Introducing CPS Coin

CPS Coin is a new utility token used within the greater CoinPayments framework, and is used to facilitate instant transactions within the CoinPayments system. And because CPS Coin is integral to the CoinPayments system, our merchants and users benefit from discounted transactions fees, rebates on conversion and network fees, staking rewards and access to discounted allocations of select ICOs hosted by CoinPayments.

How CPS Coin Works

CPS Coin is built on Syscoin, the professional decentralized marketplace blockchain, and features the innovative Syscoin Z-DAG “zero confirmation” transaction settlement technology. Payments using CPS Coin are settled while the transaction is still in the mempool, which means that, for the first time, physical point-of-sale merchants can receive payments in a cryptocurrency instantaneously, without waiting for even a single confirmation block.

Benefits for Merchants and Their Customers

Discounted Transaction Fees

Merchants who utilize the CoinPayments framework can now also begin to take CPS Coins as payment through the existing CoinPayments portal. CoinPayments merchants will be charged 50% less transaction fees when their customers pay with CPS Coin. Merchants also have the option to pay their transactions fees in CPS Coin (when receiving payments in other coins), which will reward them with a 50% rebate in CPS Coin.

Discounted Conversion Fees

Merchants and users utilizing the convert feature on CoinPayments will receive a 50% rebate on conversion fees (paid in CPS Coin). Users can also convert their coins stored on CoinPayments into CPS Coin. If it's a non-ERC20 token supported by CoinPayments, you can trade it for CPS Coin.

Zero Confirmation Transactions

Merchants can utilize CPS Coin at their Point of Sale systems with the knowledge that their transaction is settled as soon as it is broadcast and picked up by the network. The Z-DAG technology of the underlying Syscoin blockchain prevents double spends even while the transaction is in the mempool, so transactions can be safely completed using PoS systems without having to wait for inclusion in a block.

Benefits for CPS Coin Holders

Staking

CPS Coins can be staked to earn monthly staking rewards. This staking system is also used for our loyalty program to help benefit the CPS Coin user base and gradually increase coin supply.

ICO Escrow Services

CoinPayments is a leader in ICO escrowing services, facilitating payments using any supported CoinPayments currency. Companies that choose to raise funds with CPS Coin can benefit from discounted escrow fees and can stake their ICO funds and earn rewards while the funds are in escrow.

Strength through Merged Mining

The Syscoin blockchain that CPS Coin runs on top of is mined using the same SHA-256 algorithm that Bitcoin uses, and is merge-mining capable. Any mining node that mines Bitcoin blocks can also mine Syscoin blocks simultaneously with no additional hashing overhead, so existing work can be applied directly to the Syscoin and CPS Coin networks without the need for additional hashpower or specialized equipment. In other words, the strength of the Bitcoin blockchain is used to simultaneously strengthen the Syscoin/CPS Coin blockchain.

The CPS Marketplace

The CPS Marketplace is a fully decentralized platform that leverages the Syscoin P2P network for data distribution and its underlying blockchain for storage. As a distributed system, the CPS Marketplace offers 100% uptime for client-based connections while also offering a lightweight web-based gateway through the CoinPayments web portal.

Marketplace Management

Managing listings in the CPS Marketplace is possible using the CoinPayments web portal or the CPS Coin client application, which can be used online or offline when coupled with online synchronization. The intuitive interface allows merchants to list items and services with optional context descriptors, so buyers can sort and filter items based on their specific buying needs. Using these merchant-driven descriptors, listings can be sorted and filtered by the listing's description, price, geolocation, and many other fields, as well as by seller profiles and even seller reputation. The power of the Syscoin blockchain's distributed database is horizontally scalable via sharding, allowing the number of listings to scale infinitely with the number of users.

Marketplace Listings

Listings on the CPS Marketplace can handle a variety of types, from pure digital goods to digital representations of physical goods and services, such as a redeemable code or registration keys that trigger physical order fulfillment. The flexibility of the underlying Syscoin system allows CPS Marketplace Auctions as well, with familiar auction styles and features such as fixed duration, minimum bid, reserve price, escrow services, and Buy it Now. Since escrow services are a key component to a decentralized system such as this, escrow features are built into the blockchain smart contract system, making auctions just as secure as any other transaction on the blockchain.

Accounts and Identities

The anonymous, trustless nature of a decentralized system benefits greatly from the aggregation of feedback and ratings for market participants, so the CPS Marketplace presents all participants with the opportunity to send and receive feedback and ratings with each transaction. Buyers, merchants, and escrow arbiters are each responsible to the other participants, encouraging fair dealings and a robust market. Each user account is defined by an underlying identity hash, and each identity has the opportunity to create a globally unique named alias on a first-come-first-served basis, much like a Twitter handle or domain name, for ease of use and simplicity. Aliases have optionally public data (avatar, name, location, Facebook/Twitter IDs, etc.) and private data (shipping address, PGP private keys, etc.) to make it easy to search for a user based on what they choose to make public, while simultaneously storing the encrypted private data on the blockchain for ease of retrieval by the user later. Encrypted instant messaging is also enabled using the identity keys, with arbitrarily large messages passing through the P2P network without being stored permanently on the blockchain. For further protection, aliases have a finite lifespan and expire after a set interval to ensure services such as an escrowed transaction do not become permanently stuck if a user becomes unable to transact on the network due to incapacitation or a lost private key.

Marketplace Moderation

Much like user aliases can receive feedback and ratings, listings themselves need a degree of moderation. Decentralized markets can sometimes be abused, and the CPS Marketplace has introduced a moderation system that allows blacklisting of unethical or immoral items from public view – but, recognizing that there may be some items and services that are considered immoral in one jurisdiction and completely benign in another, there is also an option for merchants to create private listings on the system that are still protected by the security of the blockchain.

Integration of CPS Coin and the CPS Marketplace

The CPS Coin is tightly integrated with the CPS Marketplace. Behind the scenes, whenever a user makes a purchase from a CPS Marketplace merchant by using any supported cryptocurrency, the system abstracts the payment by converting it automatically to CPS Coin, which is then held in escrow. In cases where settlement is not instant, such as when shipping a physical item from a store, if a buyer pays via an illiquid, volatile coin, merchants are protected from wild swings in price while waiting for the escrow arbiter to approve settlement.

Conclusion

CoinPayments is excited to be the first asset built on the Syscoin blockchain, and is proud to partner with the development team behind Syscoin to bring the CPS Marketplace to the growing list of services under the CoinPayments framework. Please visit our website at <https://coinpaymentscoin.com> for more information on CPS Coin and how you can get involved.

Caution to Reader. *This paper is intended for persons who are highly sophisticated in the blockchain and crypto world. It is not a finance document nor a description of securities. This paper describes what is believed to be a utility to enhance functionality. Any person participating should be aware of the state of unsettled law regarding cryptocurrencies and be aware not just of the risk of being a participant (all funds you contribute could be lost) but of the risk that one or more securities regulators may decide the tokens described herein are securities which could result in cease trades or legal actions affecting or preventing liquidity and price, which price could drop to zero. No person should participate herein unless they are willing to suffer complete loss of any and all funds contributed.*