COINSTAR GLOBAL DIGITAL CURRENCY

Decentralized Global Digital Currency Peer-to-Peer Finance Network

let's build the future together

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Abstract

Coinstar is a first Decentralize Global Digital Currency on a Network. It's a New System of Digital Currency, in Somewhere is similar to Cryptocurrency transaction and unlike native Cryptocurrency, is a Hashgraph Distributed Ledger Technology, that allows foreign exchange easily and online payments to be sent directly from one party to another without any Intermediate Central authority. GCS digital currency has two (2) new methods transactions through the (Hashgraph Distributed ledger Technology), peer to peer transactions Provide a Digital voucher (DV) and Digital Smart card (DS Card), using Cryptographic algorithm. These two methods have provided easily and past transactions everywhere around the world, Digital voucher and digital Smart card, it will make a past and Easly payments transaction Globally Using (Hashgraph Distributed ledger Technology).

Global Digital Currency Will Provide Easier access for international Transactions, foreign exchange, Buying Products, Buying Crypto, Paying Bills, paying transportations tickets, and online shopping without any Intermediate Central authority or Banks; Managing transactions or converted currency to particular individual or Company and Create More Economic freedom in the world and Reducing Suffering people of the world.

Hashgraph is a Distributed Ledger Technology (DLT) that uses a Directed Acyclic Graph (DAG) to store and manage data, offering a different approach than traditional blockchain systems. Unlike blockchains which use a linear chain of blocks, Hashgraph organizes data in a more flexible, parallel

structure, potentially leading to faster transaction speeds and higher throughput.

Hashgraph is designed to be faster and more efficient than traditional blockchain systems, potentially handling thousands of transactions per second.

Introduction

Global Coinstar (GCS) is a Global Digital Currency on a Network that is not Controlled by any particular Countries or Companies, and Providing to Operate worldwide to make international payment Transactions Easier and Create more Economy System in the world.

The Global Coinstar (GCS) in some ways that can works similar to Cryptocurrency, is a Digital Decentralized peer to peer transactions Network and trading peer to peer include new Methods Digital Vouchers (DV) and online Payment transaction using Digital Smart card (DS Card), under Hashgraph Distributed Ledger Technology.

Mission Statement

Providing Easier access for international Transactions, foreign exchange without any Intermediate Central authority or Banks; Managing transactions to particular individual or Company and Create More Economic freedom around the world and Reducing Suffering of people in the world.

Vision Statement

Its Vision is to become one of the best Channel of international payment transactions to Global commercial activity, foreign exchange, Buying Products, Buying Crypto, Paying Bills, paying transportations tickets (e.g., flight tickets, train tickets etc.) and online shopping (e.g., Amazon, AliExpress, eBay etc.) and furthermore, Using Digital Smart Card (DS Card).

Transactions

In a Native banking system, for example, the state is a balance sheet, a transaction is a request to move \$C from A to B, and the state transition function reduces the value in A's account by \$C and increases the value in B's account by \$C. If A's account has less than \$C in the first place, the state transition function returns an error.

The "State" in Coinstar transactions is processed through a " Proof-of-Transactions (POT)" protocol, where information about a transaction is spread rapidly across the network. Each node receives the transaction, validates it, and then forwards it to other nodes in the network, eventually reaching all nodes.

Directed Acyclic Graph (DAG):

The Hashgraph technology uses a DAG to represent the relationships between transactions and nodes, allowing for parallel processing and scalability.

A client constructs a transaction by specifying parameters like sender/receiver accounts, the amount to transfer, and a maximum fee, and then signs it. The client submits the signed transaction to a designated testnet/mainnet node.

The mainnet or testnet node validates the transaction, confirming the sender's ability to pay the fee and that the transaction is valid according to application rules. Clients can query any node to confirm the transaction's status by retrieving the transaction receipt or record, or by querying the state.

Global Coinstar State transactions functions as originally peer to peer transactions with New two Methods Transactions which is Digital Voucher (DV) and Digital Smart Card (DS Card), these two methods can be defined transactions as follows.

Digital voucher (DV)

A digital voucher (DV) is a new peer to peer transaction system that allow trade or received asset without any designation address like a wallet address or account numbers, you can mint a Voucher use with email address only and use the voucher to deposit asset into your wallet Accounts without using founded wallet address to received a token.

Digital voucher they have an own "non-fungible voucher" (NFV) that provide voucher identity code (VID) to each one and Timestamp that will not be able alteration or replace to another and an owner of the voucher who's minting a voucher. They have a user identity number (UID) to identify a minter of the voucher. They have used the identity codes to verify if the voucher is validating or invalid. Each voucher has used with hash function to encrypted, so that no anyone can read or access the voucher code without permission of the owner.

When User minting a voucher already will be broadcast Vouchers metadata to all nodes on a Network, nodes know new voucher has initiated it will distributed voucher identity code (VID), Passcode, Timestamp, voucher minter identity number (UID), exchanger minted and receiver email address to the all nodes, voucher when processing to minting new voucher, our Coinstar Virtual Machine (CVM) System will create voucher code and voucher passcode using hash function encryption system and linked all voucher metadata with a minter identity number (UID), minted exchanger, receiver email address and stored vouchers records in Hashgraph Distributed Ledger Technology.

Before beneficiary use voucher, they Must check and Received voucher passcode after that you will get an opportunity to deposit in to your founded wallet. We have four algorithms on voucher activities (1). Digital Voucher Minting algorithm, (2). Validity voucher algorithm, (3). Check voucher passcode algorithm, and (4). Deposit voucher algorithm.

All these algorithms are use depend on network nodes. Digital voucher minting algorithm this algorithm is use for Creating and minting new Voucher on a network and distribute voucher metadata to all nodes.

Validity voucher algorithm this algorithm is use for validating voucher record by any nodes is valid on a network and display metadata status voucher is used already or is not used.

Check voucher passcode algorithm this algorithm is use to received deposit voucher passcode otherwise can't deposit voucher to your founded wallet. You will receive one time password (OTP) during check main Voucher passcode on the email address that has minted voucher to verify is you're

the owner of the voucher after that you have two options to get passcode (1). received to owner email address, (2). Display and Download passcode.

Deposit voucher algorithm this algorithm is use for deposit voucher to founded wallet, this algorithm its work difficult to verify this voucher has met the Consensus algorithms of deposit voucher to the founded Wallet.

Advantage of Digital voucher

Digital voucher has a lot of advantages. They have confidentiality that nobody knows Your wallet / account receiving address. E.g. Wallet address or account numbers, or even you haven't a Global Currency exchanger you can possession Coinstar Voucher using with your email address. there is no issue of network interruption or transactions delaying, deposit at any time you want to your founded wallet or accounts.

Digital Smart Card (DS Card)

A digital Smart card (DS Card) Is a new digital smart debit card provided on a Hashgraph Distributed Ledger Technology network; digital smart card is used on a digital decentralized Network for online payment transaction systems.

DS card is similar to virtual debit card (e.g., Master card, Visa card etc.) and this card it works unlike a native Debit card you know, but this digital card we provide it using Cryptographic algorithm and encrypted card with hashing Code.

This card is not under the control of any authority, the owner of the card has fully Strong control on their hand over the card, you will be able to activated your card when you want to use and you have the right to deactivate the card for securing to your properties.

This card they have a Consensus algorithm this algorithm is use for check card validity; card expire, card blocked or unblock and Digital Smart wallet is available to withdraw, not Temporary wallet locked.

To ensure the security of people's property, we provide Digital Smart wallet (DS wallet) in their main wallet account which is card can allow to access debit from the DS wallet, this card is programmed for withdraw assets only in Digital Smart wallet (DS wallet).

(DS wallet) is a mini digital wallet on the main global digital currency exchanger account that allow you to withdraw tokens using (DS card), this wallet you can transfer any amount of token from your main wallet to DS wallet when you want to withdraw using digital smart card (DS Card).

DS card algorithm is designed to work difficult to verify has met all consensus algorithms of withdraw and allow to payment online on a Coinstar network.

Global Coinstar Account

In Global Coinstar, the state is made up of objects called "accounts", with each account having some byte's address and state transitions being direct transfers of value and information between accounts. A Global Coinstar account contains Two fields:

1. **Main Coinstar Account**, a main account which is used for transactions to received and Store a Coinstar currency and transfer to

- another account. The main account it has a byte's digit code which addressing as a wallet address or accounts number.
- 2. DS wallet account, a DS wallet account which is used for DS card transactions. DS wallet is a sub-account on a main Coinstar accounts that allow you to online payments transaction on a network such as online shopping, booking tickets, pay bills using Digital Smart Card (DS card).

In general, there are two types of accounts: Individuals owned Accounts, Controlled by Private keys, and Cooperate owned Accounts, controlled by organization. An **Individuals** owned account has no anyone can access your message from personal owned account by creating and signing a transaction, only the account owner can receive and send currency cooperate to internal storage. Α accounts has created By Company/organizations to store assets and Payments Transactions. Cooperate account can allow to creating and signing a transaction by multisignatures.

Network

Steps to run the network are as follows:

- 1. New transactions are broadcast to all nodes.
- 2. Each node collects new transactions if consensus algorithms is met.
- 3. Each node works on finding a difficult proof-of-transaction (POT) for its transactions.
- 4. When a node finds a proof-of-transaction (POT), it will broadcast the transactions to all nodes.

5. Nodes accept the transactions records only if all consensus transactions are valid.

Nodes always consider A directed acyclic graph (DAG) to be the correct one and will keep working on extending it.

Conclusion

Global Coinstar (GCS) is a first Global Digital Currency on a Network that is not Controlled by any particular Countries or Companies, and Providing to Operate worldwide to make international payment Transactions Easier and Create more Economy System in the world.

Coinstar it could be one of the best Channel of international payment transactions to Global commercial activity, foreign exchange, Buying Products, Buying Crypto, Paying Bills, paying transportations tickets (e.g., flight tickets, train tickets etc.) and online shopping (e.g., Amazon, AliExpress, eBay etc.) and furthermore, Using Digital Smart Card (DS Card).

Coinstar (GCS) Global digital Currency it have a Digital Voucher (DV) that allow trade or received asset without any designated address like a wallet address or account numbers, you can mint a Voucher use with email address only and use the voucher to deposit asset into your wallet Accounts without using founded wallet address to receive a token.

Additionally Global Digital Currency (GCS), We provided Digital Smart Card (DS Card) Is a new digital smart debit card provided on Hashgraph Distributed Ledger Technology network; digital smart card is used on a digital decentralized Network for online payment transaction.

DS card is similar to virtual debit card (e.g., Master card, Visa card etc.) and this card it works unlike a native Debit card you know, but this digital card we provide it using Cryptographic algorithm and encrypted card with hashing Code.

References

- 1. Hedera: A Public Hashgraph Network & Governing Council.
- 2. https://hedera.com/papers
- 3. Satoshi Nakamoto. Bitcoin: A peer-to-peer electronic cash system. https://github.com/bitcoin/
- 4. <u>Decentralized business review</u>, 2008.
- 5. Ethereum: A secure decentralized generalized transaction ledger. https://github.com/ethereum/ethereum-org-website
- 6. Ethereum project White pepper, 2023.