

Digix is building a decentralized autonomous organization (DAO) for the governance of a network focused on tokenizing physical assets.

The project provides the infrastructure to create tokens backed by physical assets on the blockchain. Digix gold token (DGX) was the first asset launched on the blockchain and is a token that is backed by one gram of gold held in a vault. DGX was launched on the Ethereum blockchain on April 18, 2018. The team is now focused on creating the decentralized governance mechanism to allow DigixDAO (DGD) token holders to control the network.

Project Overview

Name	Digix
Issuer	DigixGlobal
Category	Security token
Sector	Asset management
Sale Start	03/30/2016
Sale End	03/30/2016

Token Overview

Name	DigixDAO
Symbol	DGD
Type	ERC20 token
Initial Distribution	2,000,000
Current Supply	2,000,000
Max Supply	N/A
Emission Type	Decided by vote

Resource Links

- [Website](#)
- [GitHub](#)
- [Twitter](#)
- [Telegram](#)
- [Reddit](#)
- [Medium](#)
- [Whitepaper](#)

Project Background

Digix is building a decentralized autonomous organization (DAO) called DigixDAO, which will focus on the tokenization of physical goods. The first token released on the platform was the digix gold token (DGX), which represents ownership of physical gold at a rate of one DGX to one gram of gold. New tokens are created in the system using a proof-of-provenance (PoP) mechanism which creates an audit trail for assets and allows third-party vendors, custodians, and auditors to digitally sign transactions attesting to the purchase, quality, and storage of assets.

The team believes that by creating tokens backed by physical assets, like gold, three key advantages can be realized. First, tokens can theoretically act as stable forms of payment on the Ethereum network due to their fully collateralized nature. Second, assets recorded on the public ledger allow users to audit holdings and ensure that the custodian holds the collateral they claim. Finally, if a central party, like DigixGlobal, fails token owners have a public record of their holdings that can be used to retrieve their physical collateral.

Currently, the project is run by DigixGlobal, which has been responsible for developing the underlying infrastructure for the platform and launching the DGX token. Once development of the DigixDAO is complete, the project plans to shift governance to holders of the DigixDAO (DGD) token.

Holders of the DGD token will vote on proposals to improve the Digix Ecosystem. Proposals can be submitted by developers, and if the proposal is approved, they will receive funding, in ether (ETH), from Digix to complete the project. The team plans to make this process decentralized, with voting and disbursement of funds managed by smart contracts. In the future, the project sees DGD tokens as a mechanism to vote for other changes on the network, like setting transaction fees.

Technology

Digix was built on the Ethereum blockchain and integrates inter-planetary file storage (IPFS) technology to store details of an assets provenance. The smart contracts for the network are live on the Ethereum main network and completed security audits in Dec. 2018.¹ Future upgrades will be made using an underlying modular smart contract system.

The primary participants in the network are a vendor, which supplies certified gold bullion, a custodian that stores the gold, and an auditor that provides checks on the quality and quantity of gold stored.

The process for creating a DGX token starts with creating a proof-of-provenance (PoP) "card" on the blockchain which contains the timestamp of card creation, the SKU of the gold bar, the bar serial number, the chain of custody digital signatures from the vendor, custodian, and auditor, purchase receipt, audit documentation, depository receipt and storage fees due. Each card can represent multiple one gram denominations of gold.

Once a PoP card is created a "minter" contract is invoked to produce DGX tokens. For example, a PoP card that attests to the purchase and storage of one kilogram of gold would create 1,000 DGX tokens. These tokens can be exchanged like any other token on the Ethereum platform. If a user wishes to do so, they can send DGX to a "recaster" smart contract which will provide them with a PoP card for their holdings. This card can be used to redeem an equivalent amount of physical gold, which can be picked up at the warehouse or mailed to the owner. At this point, the PoP card is removed from the blockchain.

DGX holders are charged an annual fee of 0.60% (charged daily) for storing and securing the physical gold backing tokens (demurrage). This fee will be waived during the first year to incentivize adoption. In addition, the network charges a fee of 0.13% for transactions. Out of the 0.60% demurrage fee, 0.20% will be sent to a pool for future DGD rewards along with the entire 0.13% transaction fee. Once the governance system is finalized the team plans to use these rewards to compensate DGD holders for voting on proposals and other network-wide changes.²

Once the full governance system is built the team plans to use two primary tokens. The DGD token will be used as the primary mechanism for voting whether or not to include new proposals.

While proposals can be submitted by anyone a second class of token, DGB, which is used to vote on which proposals are included in the DGD voting process. This token, of which there are 385, was distributed during the token sale to any participant that contributed more than \$15,000. Unlike the DGD and DGX tokens, DGB is not an ERC20 token and is non-fungible. Its primary purpose is to serve as a spam prevention mechanism and ensure only quality proposals are included for voting.

Distribution

DigixDAO completed a token sale on March. 30, 2016 after raising 466,648 ETH (equivalent to \$5.5 million at the time). DigixGlobal has stated that the ETH raised will not be sold to fund operations and the team will instead rely on venture funding to complete development. This means that at the current exchange rate of \$750 per ETH the total holdings of DigixGlobal stands at \$350 million. Once the DigixDAO governance structure is put in place it will control the ether raised during the token sale and use it to fund proposals.

A total of two million DGX were created and sold during the sale. Of this, 85% of tokens (1.7 million) were distributed to the public. DigixGlobal retained the remaining 15% (300,000). On July 23, 2017, a bug was discovered in the smart contract allowed an attacker to receive unclaimed DGD from the token sale. The attacker removed 4,162.3 DGD from the contract before it was corrected on July 27, 2017. At this time Digix announced that any holders impacted by the attack would be reimbursed.

There were 385 DGB tokens created during the sale which were allocated to those that contributed more than \$15,000. Digix has suggested that the DAO hold a vote every two years to decide if more DGD need to be issued in order to replenish the DAO's reserves.

The outstanding supply of DGX tokens is variable and depends on the amount of gold held in reserves.

¹ Source: <https://medium.com/@Digix/digix-dev-update-feb-13th-2018-audit-fixes-kovan-deployment-uiux-testing-for-marketplace-and-fdcbffa86e73>

² Source: <https://medium.com/@Digix/digix-faq-deaf53fcc1e8>

Team

Kai C. Chng
Co-founder and CEO

- Co-organizer of the Official Ethereum Meetup of Singapore
- Received B.Sc. in finance and economics from New York University

Anthony Eufemio
CTO

- Received a bachelors degree in computer science from the University of Southern California

Shaun Djie
Co-founder

- Lead coordinator of the Official Ethereum Meetup of Singapore

Investors

Global Brain
Fenbushi Capital

Additional Resources

- [Digix Marketplace](#)
- [Digix Knowledge Base](#)
- [Digix Discord](#)

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