

ZKS: The CPU Token for EOS Blockchain

Michael Gucci, MD
Michael.Gucci@21Zephyr.com

Abstract

ZKS is a EOSIO compatible token that can be redeemed for CPU on EOS Blockchain. Transactions are free on EOSIO, but users do need CPU and NET resources to complete transactions. Recently CPU has become a bottleneck for completing transactions. User experience is adversely affected by the limited availability of CPU. We propose a solution to the CPU problem by using a redeemable token. 10 ZKS can be redeemed for 1 EOS worth of CPU for 3 hours and 100 ZKS can be redeemed for 1 EOS worth of CPU for 24 hours. For many users, they only need the CPU boost for a short period of time to complete a limited number of transactions. ZKS is an elegant solution to the most common problem faced by users today. ZKS improves the user experience for EOSIO platform and helps its widespread adoption.

Introduction

EOSIO is a blockchain software protocol that enables developers to build, deploy and run high-performing decentralized applications (DAPPs). Free usage is the key differentiator for EOSIO. In Bitcoin users pay a transaction fee and in Ethereum, users pay a gas fee to complete transactions. However in EOS, all transactions are free.

However, the EOS account does need CPU and NET to complete transactions.

Generally, users stake EOS in a 3-day staking contract. This gives them a percentage of the available capacity proportional to the amount of tokens staked. However, if the network is not congested, users are allowed to use more than their allocated share of CPU and Bandwidth. At times of network congestion, CPU availability is throttled and users can only use their allocated share of CPU and NET. Recently, users have been surprised to find that, they can't do any transaction on their account, because their CPU is maxed out. ZKS is developed as a solution to this everyday problem.

Design

The ZKS token contract is at [zkstokensr4u](#). Staking of EOS for 3 hours is carried out by another smart contract on [zksredeemcpu](#). There are 5 rollover accounts --- [zksredeem111](#) to [zksredeem115](#), which rotate every 24 hours. To redeem 3 hour ZKS, user sends the token to [zksredeemcpu](#), which then stakes the EOS from the active account to the user. If the EOS in the active account is depleted, then ZKS can not be redeemed until, the active account rolls over to a new account at the end of the 24 hour period.

Staking of EOS for 24 hours is carried out by the smart contract on [zksredeem24h](#). There are another 5 rollover accounts associated with this smart contract --- [zksredeem311](#) to [zksredeem315](#) and they function in a similar way described above.

ZKSPLAY

ZKS is a unique token on the EOSIO platform with 0 precision. This design was essential as only the whole ZKS can be redeemed for CPU. It is not practical to redeem fractions.

But for ZKS to be used as a token for gaming platforms, a more traditional EOSIO token with 4 precision points was needed. ZKSPLAY is designed to meet this demand. ZKS and ZKSPLAY are essentially the same. You can send ZKS to the token contract `zkstokensr4u` and get back ZKSPLAY and vice versa.

Note: Since there will be times of high demand, and given the finite resources of staking accounts, the ZKS token can not always be redeemed for CPU. If the EOS in the active account for the day is depleted, then the user has to wait until the next account is activated. The active account rolls over at 00:00 UTC every day.

Token economics

Initial supply: 1,000,000,000

Max supply : 10,000,000,000

Token distribution: 31 ZKS tokens were airdropped through a Claim Invitation model to every EOS account with a balance of 0.1 EOS or more in November. They will also be distributed to EOS account

holders in partnership with gaming platforms, exchange operators, event organizers and ecommerce retailers.

Redemption schedule:

10 ZKS tokens = 1 EOS worth of CPU for 3 hours

100 ZKS tokens = 1 EOS worth of CPU for 24 hours

Team

ZKS3103 SEZC

ZKS3103 SEZC is a software company in the Cayman Enterprise Zone.

Advisors

Michael Gucci, MD

Interim custodian for AirDropsDAC, Founder of Z-Meta private investment firm, Z11K accelerator in Chicago and 21Zephyr, Inc. Former ER physician and an early adopter of EOS.

Nathan Rempel

CTO for AirDropsDAC, founding partner of Australian block producer GenerEOS and the sole developer of eostoolkit.io

Roadmap

