



Centrifuge Radial Token Executive Summary

Abstract

The Radial Token Model powers Centrifuge, providing the framework needed to run the platform without reliance on a single point of failure, including the Centrifuge team or company, and to accelerate its utility. To accomplish this, Centrifuge leverages the cryptoeconomic primitives of a native token called Radial (RAD), a Nominated-Proof-of-Stake consensus algorithm that employs Radial to stake value, rewards for Centrifuge adoption, and an on-chain governance mechanism that empowers Radial holders to guide the development of Centrifuge.

Radial Economics

Value

As the utility of Centrifuge grows, the Radial token will capture the growing value provided to users of the network through each of the utilities described above. This value is primarily captured in the use of RAD for transaction fees, and additionally through its importance in Governance of the network. The token will also serve as a store-of-value through the implementation of the insurance DAO in which RAD will be staked.

Token Supply

Minting Mechanisms

The token supply of RAD will increase in the short term as it is minted in order to pay for chain security, as well as to reward Centrifuge adoption. The current yearly mint rate of the token to reward and incentivize chain security through native Validators and Nominators is 3% of the current token supply. Additionally, tokens are minted in order to reward participation in Tinline pools by both Asset Originators and Investors. Governance will re-evaluate these reward rates on a regular basis, adjusting the mint rate down as the inherent utility of the network becomes sufficient to draw in users.

Burning Mechanisms

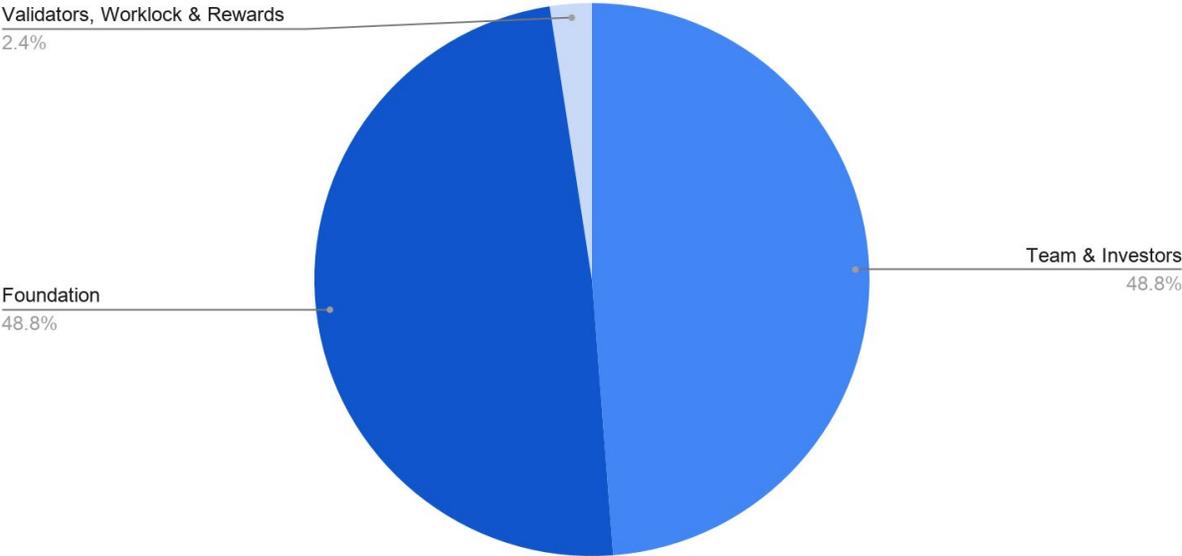
A portion of the transaction fees will be allocated to an on-chain Treasury in control of RAD token holders. This Treasury may choose between using the tokens to fund development of the

network or burning the tokens. As network growth slows in the long-term, this burning mechanism will eventually serve to balance the total supply of the token over time, and allow token holders to control inflation of the value of the token.

Radial Distribution

Current Snapshot, 415M RAD

The initial Radial Token Generation Event was executed by the Centrifuge Network Foundation. The initial distribution created 400,000,000 RAD, which was distributed to the Foundation and initial contributors, including; the core team, investors, and validators. Since genesis, 15.95 million additional tokens have been minted as rewards for adoption.



As of July 13, 2020

Token distribution mechanisms to our users

In addition to the genesis distribution, Radial are minted in order to incentivize the critical functions of the network, accelerate adoption, and distribute the token to core users. Rewards are distributed to users to bring assets onto the platform, provide liquidity, perform underwriter services, and secure assets, investments, and Centrifuge Chain itself. These rewards create an additional incentive on top of fees for entities to perform critical network functions, and to perform them early on. In addition, the burning mechanism will allow the chain to maintain a stable supply of the token over time.

The distribution of Radial to key contributors and core users of Centrifuge will grow the community, incentivize contributions, and accelerate adoption. This wide token distribution is core to the decentralization of Centrifuge.

Radial Utility

Radial is more than a traditional network token. Because basic functionality is delegated to Polkadot, the RAD token can be used for Centrifuge-specific utility. RAD functions differently, and is used for both standard network functions such as chain security and transaction fees - as well as unique utility including on-chain governance, a money market, and credit insurance. Users have incentives to participate in the network through Radial token rewards. As a result, the users of Centrifuge are directly empowered to operate, control, and gain value from the platform.

Money Market for Investors - *future utility*

Centrifuge Chain will provide a mechanism for Tinline pools to obtain liquidity through a native, on-chain money market. The RAD token functions as the gatekeeper for assets to this money market as well as empowering its holders with governance to set risk parameters for different DROP tokens. This functionality is still in the development phase.

Downside Protection to Investors - *future utility*

Investors in the Tinline pools will be able to access on-chain insurance paying fees to an insurance DAO. This insurance DAO has RAD staked by members that serves as a downside protection. This protects Tinline pool assets and further minimizes trust within the system allowing the risk of one asset class to be hedged against the pooled risk of all assets.

Governance

RAD holders participate in governance through on-chain voting. Token holders have the ability to make decisions to upgrade the chain, including to add new functionality, or amend the fee structure. This includes control over how the chain implements the Tinline functionality such as risk models, liquidity provision, and reputation for participating entities. RAD holders can also vote to distribute funds through grants for new features or as protocol rewards.

Transaction Fees

Transaction fees are paid in RAD by users for: anchors, NFT minting, Tinline financing transactions, and many more functionalities to come. A percentage of transaction fees will go to an on-chain Treasury controlled by RAD holders, and the remainder will be distributed to collator nodes. The Treasury automatically burns any surplus not used for on chain grants and other expenses (such as the parachain slot) on a regular basis.

Rewards for Centrifuge Adoption

Users of centrifuge are incentivized to provide value to the platform through RAD rewards. “Liquidity Mining” rewards incentivize users to provide liquidity to Tinklake pools. Additional rewards will also incentivize Asset Originators and Underwriters, and will encourage a decentralized network of participants in Centrifuge Tinklake. These rewards are temporary, with a capped allotment of tokens up to the decision of on chain governance, in order to kick-start network growth and subsidize liquidity.

Chain Security

Users pay fees for transactions in RAD. Collators, transaction aggregators for the Polkadot relay chain, receive a fraction of the fees for performing the work to execute the transaction itself as well as storage of chain data. These fees, together with an NPoS staking and RAD reward mechanism, incentivize an honest and distributed set of collators providing the censorship resistance needed for the network to function. The remaining RAD fees go to the on-chain treasury, governed by token holders, to pay for additional functionality.

The larger part of chain security will come from the Polkadot Relay Chain through the acquisition of a Parachain slot by locking DOTs, Polkadot’s native token. To secure the DOTs necessary to bid on a Parachain slot, Centrifuge will use a constant RAD auction mechanism. The use of the Polkadot Relay Chain for security will result in a higher security for Centrifuge at a lower cost than a Centrifuge-native set of independent validators. This allows those RAD to instead be used to incentivize users to provide liquidity to the Tinklake Pools running on Centrifuge.

Learn More

Centrifuge Chain Documentation

<https://developer.centrifuge.io/chain/overview/introduction/>

Centrifuge Chain Portal

<https://portal.chain.centrifuge.io/#/explorer>

Centrifuge Community Discourse

<https://discourse.centrifuge.io/>