Abstract

The rise of blockchains as a new Internet infrastructure has led to developers deploying tens of thousands of decentralized applications at rapidly growing rates. Unfortunately, blockchain usage is not yet ubiquitous due to frequent outages, high costs, low throughput limits, and numerous security concerns. To enable mass adoption in the web3 era, blockchain infrastructure needs to follow the path of best infrastructure as a trusted, scalable, cost-efficient, and continually improving platform for building widely-used applications. We present the DeXit blockchain, designed with scalability, safety, reliability, and truly share economy, and upgradeability as key principles, to address these challenges. It offers new and novel innovations in consensus, smart contract design, system security, performance, and decentralization. The combination of these technologies will provide a fundamental building block to bring web3 to the masses.

Legal Disclaimer

This white paper and its contents are not an offer to sell, or the solicitation of an offer to buy, any tokens. We are publishing this white paper solely to receive feedback and comments from the public. Nothing in this document should be read or interpreted as a guarantee or promise of how the Dexit blockchain or its tokens (if any) will develop, be utilized, or accrue value. DeXit only outlines its current plans, which could change at its discretion, and the success of which will depend on many factors outside of its control. Such future statements necessarily involve known and unknown risks, which may cause actual performance and results in future periods to differ materially from what we have described or implied in this white paper. DeXit undertakes no obligation to update its plans. There can be no assurance that any statements in the white paper will prove to be accurate, as actual results and future events could differ materially. Please do not place undue reliance on future statements. Finally, the DeXit blockchain is experimenting with future initiatives to scale beyond individual validator performance.

Introduction to DeXit Chain

Peerless, immutable, deflationary, Proof of Stake Authority blockchain with efficient and stable transaction fees including incentives and rewards, redistribution, residual

returns, and novel burning methods DeXit is Ethereum sidechain that uses POSA consensus mechanism, validators are selected based on their staking weight to secure the network.

Mission

To accelerate the flow of value around the world without boundaries. We envision an open, borderless world.
A world in which people and machines collaborate and exchange value globally and freely, without gatekeepers or intermediaries. A world in which communities thrive, unconstrained by artificial borders and archaic regulations. We will strive to empower everyone to effortlessly join this new, better world.

Inspiration of Model

DeXit want to provide a solution to a fair transactional economy. Leveraging and improving upon, while finding inspiration from, technologies of EOS/Ethereum/QTUM/LTC/BTC/BCH/BSV among others. deXit believes that more competition in decentralized finance, the better. -with Compatible with EVM Ethereum virtual machine, smart contract capabilities are available for interoperability, green emissions, providing a secure ecosystem that does not rely on green-house gases and unnecessary emissions, the emissions via deXit are all to enable the network and do not relate to the general definition of emissions/greenhouse gases.

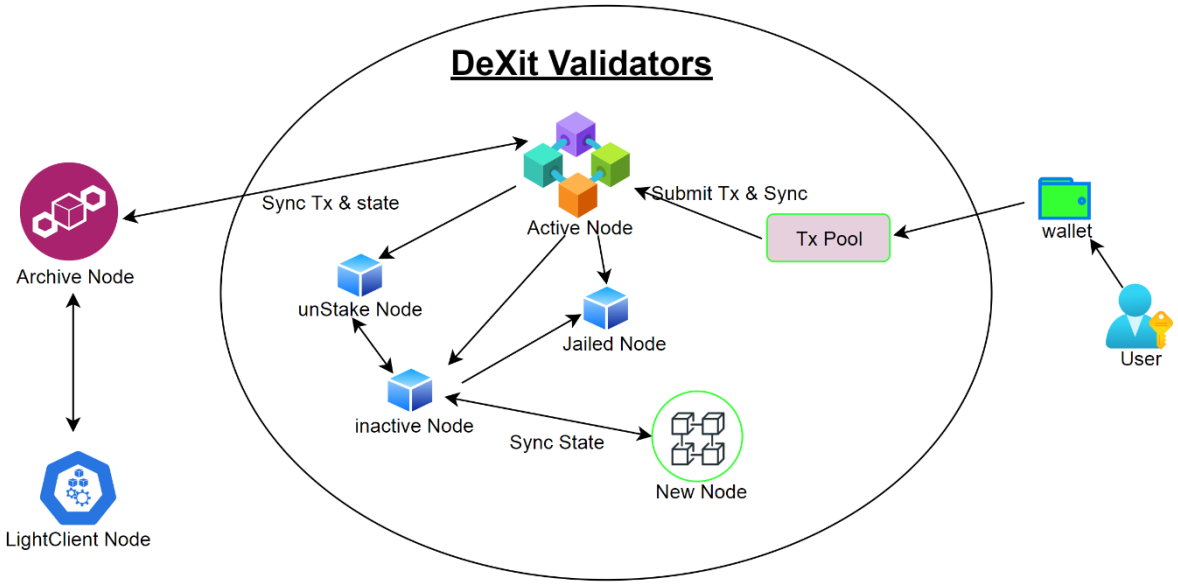
Economic Model

DeXit token on the native chain is DXT; in order to make any transactions it consumes DXT as gas fee. The concept of gas was introduced to maintain a distinct value layer that solely indicates the consumption toward computational expenses on the DeXit network. Having a separate unit for this purpose allows for a practical Miner pledge DXT, to become validator nodes. The reward of nodes is gas fee, which is distributed to validators, Miner is selected based on their staking weight to secure the network. In the other hand smart contract owner also benefit from smart contract interaction they can receive up to 50% gas fee on protocol level.

Technical Characteristics

DeXit implemented proof of stake authority using a new consensus engine, Parlia (based on the Clique proof of authority, consensus protocol in conjunction with other proof-of-stake consensus techniques) (PoSA). Before introducing,

Epoch block. Consensus engine will update validator from ValidatorSet contract periodically. For now, the period is 200 blocks, a block is called epoch block if the height of it is times of 200. Snapshot is an assistant object that help to store the validators and recent signers of blocks.



Step: 1

Prepare new block

A validator node prepares the block header of next block Load snapshot from cache or database,

If (height % epoch) =0, should fetch ValidatorSet from ValidatorSet contract.

Every epoch block, will store validators set message in extraData field of block header to facilitate the implement of light client. The coinbase is the address of the validator

Step2:

FinalizeAndAssemble

If the validator is not the in-turn validator, will call liveness slash contract to slash the expected validator and generate a slashing transaction.

If there is gas-fee in the block, will distribute 1/16 to system reward contract, the rest go to validator contract.

Step3:

Seal

The final step before a validator broadcast the new block.
Sign all things in block header and append the signature to extraData.
If it is out of turn for validators to sign blocks, an honest validator it will wait for a random reasonable time.

Step3:
VerifyHeader

Verify the block header when receiving a new block. Verify the signature of the coinbase is in extraData of the blockheader
Compare the block time of the blockHeader and the expected block time that the signer supposed to use, will deny a blockerHeader that is smaller than expected. It helps to prevent a selfish validator from rushing to seal a block.
The Coinbase should be the signer and the difficulty should be expected value.

Step4:
Finalize

If it is an epoch block, a validator node will fetch validatorSet from ValidatorSet and compare it with extra_data.
If the block is not generated by in-turn validatorvalidaror, will call slash contract. if there is gas-fee in the block, will distribute to system reward contract, the rest go to validator contract. The transaction generated by the consensus engine must be the same as the tx in block.

Step5:
Signature

The signature of the coinbase is in extraData of the blockheader, the structure of extraData is: epoch block. 32 bytes of extraVanity + N*{20 bytes of validator address} + 65 bytes of signature. none epoch block. 32 bytes of extraVanity + 65 bytes of signature. The signed content is the Keccak256 of RLP encoded of the block header.

Current Stage of DeXit

Current State and Tokenomics

BEP-20 Token Standard on Binance Smart Chain

Tokenomics

- Supply

o 5B Total Supply

o 2.5B Circulating

o 2.5B Burned (at time of writing)

- Redistribution

o Total 11% tax on every transaction

▪ 1% Redistributed to all DXT holders

▪ 5% to staking Pool

▪ 2 % token burn

▪ 3% Development & Marketing

(Via Binance Smart Chain) Redistribution tax enables profitability and residual income across the entire deXit ecosystem to all participants and holders.

Consensus Mechanism

DeXit implemented proof of staking authority using a new consensus engine, Parlia (based on the Clique proof of authority, consensus protocol in conjunction with other proof-of-stake consensus techniques) (PoSA). Before introducing, Epoch block. Consensus engine will update validator from ValidatorSet contract periodly. For now, the period is 200 blocks, a block is called epoch block if the height of it is times of 200.

Staking and governance

DeXit has two type of staking validator are stake their DXT to participate on consensus to produce block Delegator are delegate their trustworthy validator to increase their top rank and received reward from validator.

1. DXT Coin holders, can Stake into the staking pool or DXT holders can delegate their Coin onto any validator or inactive validator, to expect it can become an actual validator, anytime they can choose a different validator or inactive validator to re-delegate DXT coin.
2. validators are selected based on their staking weight to secure the network. There is Max validator governance protocol introduced on dexit chain, which can be voted by all validator how many validators can be any given time and the top ones will become the real validators.
3. Validators shares their blocking reward with their delegators who delegates them.
4. Slashing is a mechanism to punish the bad behaviours validator. There is an internal smart contract responsible for recording the count of missing blocks for each validator and double sign Block.

5. If a validator misses more than 50 blocks, then reward will not be claimable for validator and distributed to other better validators who are online and sealing blocks. If it misses more than 150 blocks, then its reward will be distributed to other better validators and the status of validator will be changed as jailed and it will be removed from the list of active validators.
6. The validators who are slashed and jailed by the previous cases will be set to JAILED for the duration of 48 hrs. Validator can set it to UNJAIL by paying penalty 1 DXT and can be added to the active validator list if staking is highest enough. Validator node will start signing blocks after touching the next epoch.

Rewarding

every day around UTC 00:00 Validator can claim their reward, in the other hand delegator and smart contract owner can claim anytime their reward.

1. The blocking reward stores on Staking reward smart contract and it can be claimable last 24hrs, any reward less than 24hrs still stays on reward staking smart contract.
2. Any registered smart contract for Gas fee reward, owner need to claim their reward from deXit governance portal, any reward accumulated can be claim anytime.
3. Delegator Reward are share by validator can be claim anytime from deXit governance portal.

Slashing

Slashing discourages validator misbehaviour, which in turn promotes security, availability of the validators, and honest network participation If a validator detects such an action a message generates reporting the action and slash that dishonest validator, all the slashing reward goes to smart contract and distribute to other honest validator proportionally and that malicious validator status changes from active to Jailed. The malicious validator is slashed and receives certain types of penalties, Malicious validator has to pay in order to get remove from jailed status.

Unavailability

DeXit relies on Proof of Staked Authority consensus algorithm, all Active validator can produce and seal blocks in timely when it is their turn. Validators can miss their turn due to any reason; it can be in their hardware, software, configuration or network. This instability of the operation can reduce the performance and introduce more indeterministic into the system. There is slashing internal smart contract responsible for recording the missed blocking metrics of each validator. Once the metrics are above the predefined threshold, the blocking reward for validator are not rewarded, if the metrics remain above another higher level of threshold, the validator will be dropped from the rotation, validators will lose their last 24hrs income and delegators will also not receive their delegating rewards.

Risk statement

- Before any operations in the fields related to Crypto Asset or DeFi, please first do your own research.
- anyone can build dApp in DeXit testnet and mainnet .
- Please distinguish the test environment (the testnet) from the main network environment (the mainnet). The Crypto assets generated in the test environment do not have value, so please be careful against the cryptocurrency fraud.
- promotion and other cooperation through its official social network, please kindly check the official information and avoid phishing sites.
- Please make sure that you are visiting the official website to avoid the loss of private key.