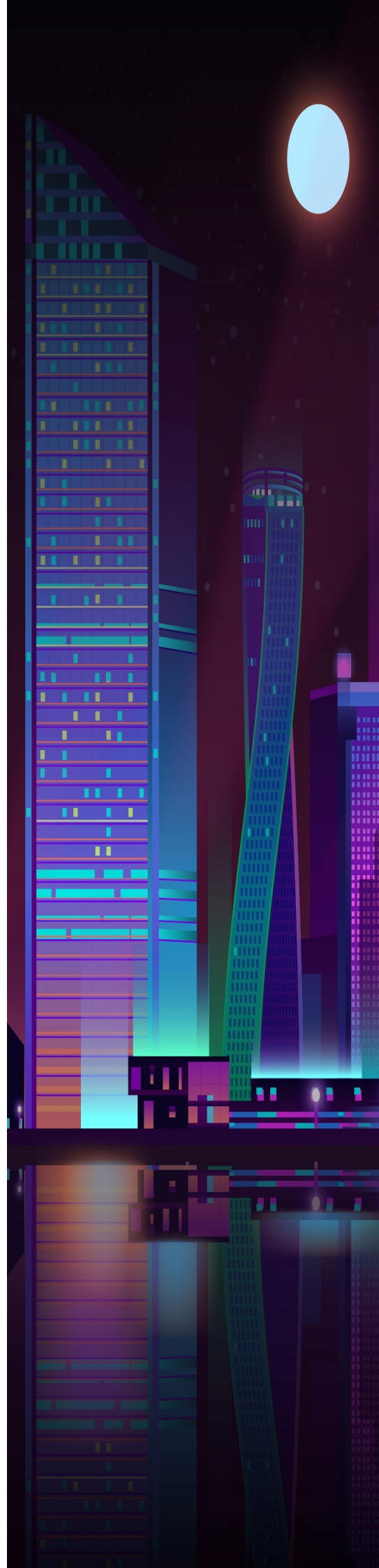




GRISE TOKEN

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1. Introduction

GRISE Token, hereinafter referred to as GRISE, is an ERC-20 compliant smart contract designed for deployment on the Ethereum and Binance blockchain. GRISE is a decentralized, fairly launched, automatically liquid, trustlessly exchangeable, interest-bearing, bond-like token.

This document is a general technical specification of the contract and its functionality.

Ethereum Mainnet launch of the GRISE contract is scheduled for April 26, 2021

Binance Mainnet launch of the GRISE contract is scheduled sooner.

1.1 GRISE Token Purpose

The core purpose of the GRISE token — staking — is similar to both bonds and CDs (certificates of deposit): rewarding the holder with earned interest in exchange for locking up their funds for a period of time. GRISE incorporates some of the features from both of these traditional instruments but improves greatly upon them.

CDs tend to be lower risk, lower return, and only pay out interest on their maturity date.

Bonds tend to be somewhat higher risk, higher return, and pay out interest regularly on a set schedule (typically every six months).

GRISE is most similar to a bond, in that it earns relatively high interest, but allows users to withdraw it whenever they want.

GRISE is superior to bonds and CDs in every way:

GRISE gives the staker complete flexibility in choosing exactly when to withdraw their interest during the life of the stake. You can withdraw interest/Reward weekly, Monthly or, wait until maturity, or whatever you like!

GRISE stakes have higher return, much lower risk (due to being decentralized and trustless), and far higher flexibility than both bonds and CDs. No more trusting banks and governments to stay solvent and not change their rules. No more worrying that a bond issuer may default on you. GRISE is pure, immutable code.

1.2 Motivation and Principles

Trusting your money in the custody of other humans is inherently risky. This glaring flaw in traditional financial instruments is a primary motivation for developing GRISE. The GRISE contract aims to ensure that a user can always be in full custody and control of their GRISE tokens, even during the course of various economic activities.

The initial minting of GRISE, earning referral bonuses, opening and closing stakes, receiving interest, and even selling GRISE for ETH or other tokens can all be done end-to-end without the user's GRISE tokens ever being under the control of another person or system. Compare this to the world of banks you can't trust and traditional money managers that (don't) have your best interests at heart.

One very important aspect of owning cryptocurrencies is having a place to safely, easily, and quickly trade them when the need arises. We believe Uniswap and Pancakeswap, popular and highly regarded decentralized exchange (DEX) smart contracts on Ethereum and Binance Chain respectively, are such places. Following the fifty-day Liquidity Transformer Epoch, the GRISE contract will automatically, trustlessly, and irrevocably bootstrap its own initial liquidity pool on Uniswap and Pancakeswap. At least 85% of all ETH and BNB sent by users to the GRISE contract during the LT Epoch will in turn be automatically transferred to Uniswap and Pancakeswap by the GRISE contract, along with an amount of minted GRISE in equal value.

In exchange for and simultaneous to this liquidity pool deposit, Uniswap and Pancakeswap transfer to the GRISE contract an appropriate amount of UNI liquidity tokens, which carry the sole power to later withdraw that liquidity pool. The GRISE contract will automatically, immediately, and provably destroy these UNI tokens by transferring them to a known burn address. In doing so, the GRISE contract ensures that this initial ETH/GRISE and BNB/GRISE liquidity pool cannot be withdrawn from Uniswap or Pancakeswap by any person, party, contract, or entity — for all eternity.

The GRISE contract also allows users to earn interest on GRISE token time deposits called stakes, which are most similar to bonds, but more flexible. A stake earns interest like a bond, but with the added feature of allowing interest withdrawals at any time during the life of the stake; not something bonds allow. These bond-like interest-bearing stakes in GRISE are always full in the custody of the user and their wallet, never held, influenced, or able to be confiscated by any third party.

2. GRISE Contract Functionality

The GRISE contract has several key properties and core functions, outlined in detail in the following sections. Some of the important mathematical calculations and data structures are also presented here. Various example scenarios of user and multi-user activity and contract state evolution are illustrated where appropriate.

2.1 Genral Properties

The contract defines the token name as “Grise Token”, the tokensymbol as “GRISE”, and the number of decimals as 18.

The base unit of GRISE is called REI. One GRISE is composed of one 18 quintillion (1×10^{18}) REI.

Time is tracked by the contract in whole day increments, beginning at Day 0, which starts at the midnight UTC preceding the contract deployment. The individual Slots (4 Hours) used for the LT will be higher numbers in the code, rather than literally being slot numbers 1–50.

The contract has no special functionality granted to the deploying account, no administrative keys, and no concept of a contract owner. All users, including the founders and developers, have precisely equal access to the contract’s functionality.

The contract, once deployed, is immutable. No proxy or delegate contracts are involved.

2.1.1 Token Supply

The contract has no set token supply. The total initial supply minted by users through the Liquidity Transformer (LT) will fall within a defined range, determined partially by confined randomness, and partially by referral bonuses.

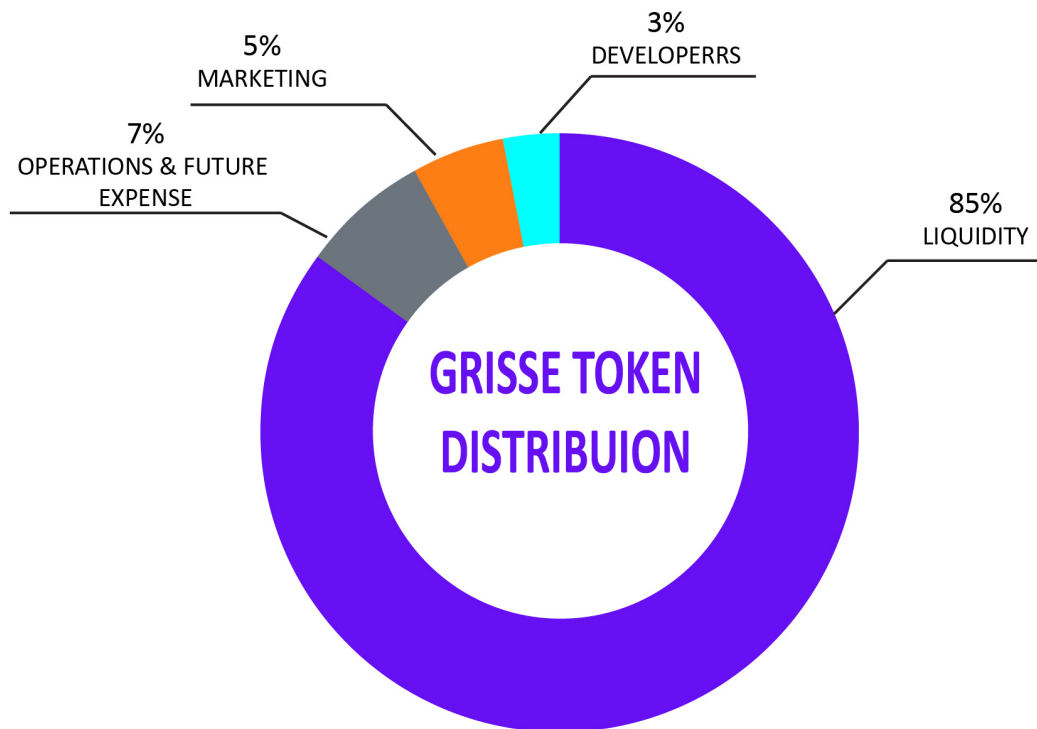
The 50 Slot Liquidity Transformer has an average of 6000 GRISE available each day, though some days have randomness involved. This means the total supply available in the LT will likely be around 1 million GRISE. Due to referrer bonuses, there could be up to an additional 10% minted on top of that (i.e. up to 0.1 million more).

This total supply is then matched by a minted batch that is then sent permanently to Uniswap and Pancakeswap, depending on the chain. The amount of GRISE sent to Uniswap or Pancakeswap will be 15% less than what was mintable through the Liquidity Transformer and referral bonuses due to the team reimbursement. From

the 15%: 3% will go to developers, 5% will go to marketing and the remaining 7% will go to operations and future expenses. During the circulation epoch, an extra 5% to 8% of the GRISE’s token total supply will be minted for bounty campaigns. Regardless, the ratio of GRISE/ETH and GRISE/BNB sent to Uniswap, and Pancakeswap respectively, will match wexactly the ratio of mintable LT GRISE (including referral bonus GRISE) to LT ETH and LT BNB. This ensures that the initial Uniswap and pancakeswap price matches the overall price of the LT, respectively.

The total supply of GRISE in existence after the LT and Uniswap provision is subject to LT randomness, referral activity, and whether the team reimbursement ends up being a full 15%.

The total token supply will inflate at a rate of 6% per year, starting once the Liquidity Transformer Epoch ends and the Circulation Epoch begins. Some of the new tokens will be minted directly to stakers upon closing a stake, and some minted to stake referrers. If no stakes are closed on a given day, and no stakers scrape interest on that day, no new tokens are actually minted that day though they are earmarked to be minted later. Once a stake is closed, all tokens the stake had earmarked to it for all past days are then minted at once.



For example, if we assume the randomness averages out, assume half of all possible referrer bonuses are earned, and assume the team reimbursement cap causes it to be only 15% of the LT ETH, then the total initial supply would be:

- ***baseLTSupply = 500,000 GRISE***
- ***referrerBonuses = baseLTSupply × 10% = 50,000 GRISE***
- ***totalLTSupply = baseLTSupply + referrerBonuses = 550,000 GRISE***
- ***uniswapBatch = totalLTSupply × 85% = 467,500 GRISE***
- ***BountyCampaign = (totalLTSupply + uniswapBatch) × 5% = 50,875 GRISE***
- ***totalInitialSupply = totalLTSupply + UniswapBatch + TeamReward = 1,068,375 GRISE***

2.2. Liquidity Transformer Epoch

The launch of the GRISE contract will kick off an initial 8-day phase during which users may send ETH (or any ERC-20 token traded on Uniswap V2) to the contract in order to reserve GRISE tokens in 50 different slots of 4 Hours each. The tokens reserved can be minted by the users immediately following the end of the LT Epoch, i.e. the start of day 9.

Each Slot of the LT Epoch will have an amount of GRISE tokens that are reservable by all those who deposit ETH or BNB to that day. Most days will have exactly 6000 GRISE available, but the other days will have their available GRISE amount randomly set within a predefined range. These random amounts will be determined by the contract shortly after the end of each random day, by leveraging the Provable (formerly called “NRE API”) smart contract’s Random Data-source interface. The generated randomness is delivered on-chain in a trustless, please read their Random Datasource White Paper and their security deep dive.

Each Slot’s available GRISE ends up getting split amongst the users who deposited ETH or BNB to that Slot, in direct proportion. In other words, a user that made a reservation on a particular LT Slot will later be able to mint the fraction of that Slot’s available GRISE that equals the fraction of the Slot’s total ETH or BNB they personally sent in.

2.2.1 Token Reservation

On any given slot of the LT Epoch, users may choose to send ETH (or any ERC-20 token traded on Uniswap V2) or BNB (or any contract traded on Pancakeswap) to the contract and assign it to any of the LT Epoch slots that have not yet concluded. We call this action a “token reservation”.

For example, during slot 12, users may send and assign ETH to any of the Slot’s 12–50, but not to slots 1–11, since those slots have already concluded.

Each token reservation is assigned to a single slot, but users may make as many such reservations as they wish, to as many different slots as they wish. The GRISE contract front end will also include the ability for a user to spread a single reservation amount of ETH (or ERC-20) or BNB evenly across all remaining LT slots. This “dollar cost averaging” feature saves gas for the user who wishes to reserve an equal part of each LT slot.

Reservations cannot only be made with ETH or BNB, but

also with any ERC-20 token that’s traded on Uniswap V2 and Pancakeswap. This is done via direct integration with Uniswap and Pancakeswap, which swaps the ERC-20 and BEP-20 for ETH and BNB respectively as part of the reservation transaction. This is functionally the same as the users themselves swapping the ERC-20 for ETH on Uniswap or BEP-20 tokens for BNB on Pancakeswap, and then later sending the ETH or BNB to the GRISE contract for a token reservation.

The benefit of using the GRISE reservation interface to do this is that it saves the user some gas fees and time.

Each single token reservation must be of a minimum amount, to make spam attacks cost-prohibitive. The specific minimum amount will be finalized at a later date, closer to launch. This is because the price of ETH and BNB may change significantly between the time of this writing and the contract launch. The minimum will likely be in the neighborhood of 0.1 ETH and 0.5 BNB.

The contract will provide public interfaces for viewing the total amount of ETH and BNB currently assigned to each LT Epoch slot across all users, as well as the total GRISE available for each slot (where that supply has been determined, in the case of random slots). For slots where the supply has not yet been finalized, the min/max range will also be retrievable from the contract



2.2.2 Daily LT Supply Schedule

Every LT Slot has an average of 6,000 GRISE available for reservation.

For the Ethereum Blockchain, some of the days with randomly determined amounts have tight ranges only a 2,150 to 16,850 GRISE in variance, and others are extremely variant, ranging from 3,650 to 11,850 GRISE. In this way, the LT Epoch provides various exciting options for users wishing to gamble with their ETH, and at various levels of risk/reward.

The Binance chain on the other hand does not have any random slots. It has 50 fixed slots each with 6,000 tokens.

Slots on the ERC-20 contract will have a limit of 147 spots while slots on the Binance Chain will have a limit of 207 spots.

2.2.3 Reservation Referrals

The GRISE contract has a direct, one-level referral system that rewards both the referrer and referee when a user reserves GRISE tokens in the LT. This referral system is an incentive to help increase the amount of ETH and BNB sent in, in turn funding a larger and more robust initial liquidity pool on Uniswap and Pancakeswap.

When a user makes a token reservation using referee referral link, the contract makes note of the referrer's Ethereum or Binance address and associates it with the referee's token reservation. The contract also tags the user's token reservation as having been through a referral, and this reservation is credited as having been 10% more ETH or BNB than it actually was. When the user mints their reserved tokens after the end of the LT Epoch, each token reservation that was through a referral will thus mint 10% more GRISE than if it hadn't been through a referral.

2.2.4 Referrer Bonuses

When the LT Epoch ends, referrers that have referred enough ETH or BNB into the system, via their referred users' token reservations, can then mint an amount of bonus GRISE.

The LT referrer bonus system has two tiers. Bonuses (paid in GRISE) are based on how much total ETH or BNB their referral link brought in to the LT, as illustrated below:

A) Refer amount: 0.1 -19.999999999999999999

ETH or BNB

Bonus = 5% of ETH or BNB (paid in GRISE)

B) Refer 20 or more ETH or BNB

Bonus = 10% of ETH or BNB (paid in GRISE)

Examples:

- Bob refers several friends who, in total, send 1 ETH into the LT. Bob qualifies for the first bonus tier, so he earns a 5% bonus of 0.05 ETH worth of GRISE.
- Eve creates several GRISE videos and publishes her referral link on them. Users clicking her referral link send a total of 64 ETH in to the LT. Eve qualifies for the top bonus tier, so she earns a 10% bonus of 6.4 ETH worth of GRISE.

Note: all referral bonuses are paid in GRISE. When the LT ends, an effective total LT GRISE/ETH exchange rate is calculated by looking at the total amount of ETH sent in by all users, and the total amount of GRISE made available for reservation. This ratio is then used to calculate the amount of GRISE for each referral bonus.

2.3 Circulation Epoch

When the final LT Epoch Slot ends, the Circulation Epoch begins. At this point, no further token reservations can be made.

Reserved GRISE and referrer bonus GRISE may now be minted by users, at their leisure. Users may begin staking GRISE. 85% of all ETH or BNB sent into the LT and a matching batch of GRISE is automatically sent to Uniswap and Pancakeswap, so users may begin trading GRISE, BNB and ETH. All standard ERC-20 functions involving minted tokens are also now available.

Once the LT Epoch has ended, there is a public function in the contract that may be called by anyone to trigger the following onetime sequence of actions to start the Circulation Epoch:

1. Calculate the total ETH or BNB sent into the LT. Set aside 15%, for the Grise team reimbursement performed in Step 4 below. The remaining 85% of this ETH or BNB is the “Uniswap/Pancakeswap Provision Ether or Binance Coin”.
2. Calculate the total GRISE that is available to be minted due to token reservations and referrer bonuses. Calculate the same fraction of this GRISE (85%) that was used to determine the Uniswap/Pancakeswap Provision in Step 1 above. Immediately mint this amount of new GRISE. This is the
3. Transfer the “Uniswap/Pancakeswap Provision Ether/BNB” and “Uniswap/Pancakeswap Provision GRISE” to the GRISE/ETH Uniswap and GRISE/BNB Pancakeswap exchange pair contract, forming its initial liquidity pool. As part of this transfer, the GRISE contract receives back from the Uniswap and Pancakeswap contract an amount of UNI-V2 liquidity tokens and immediately burns these by transferring them to a known burn address
4. Transfer the 15% of LT ETH and BNB set aside in Step 1 to the Grise team’s Ethereum or Binance address.

2.3.1. Uniswap/pancakeswap Provision

The GRISE contract’s constructor function, executed when deploying the GRISE contract, will make a call to the Uniswap and Pancakeswap V2 factory contract in order to create the Uniswap GRISE/ETH and Pancakeswap GRISE/BNB exchange pair contract. This newly created exchange contract’s address will be stored internally in the GRISE contract. This newly created Uniswap and Pancakeswap exchange pair contracts will simply lie dormant until the Circulation Epoch begins and the Uniswap and Pancakeswap provision transfer is executed, using the stored address. No minted GRISE exists until that point, so no liquidity can be added until then.

As part of sending the Uniswap provision GRISE and ETH or Pancakeswap GRISE and BNB to the exchange pair contract, a Uniswap/PancakeswapV2Router contract is used, which internally wraps the ETH into WETH (wrapped ETH) and BNB to wBNB (wrapped BNB), as is standard in Uniswap V2.

The V2Router contract returns an amount of UNI-V2/Pancakeswap-V2 liquidity tokens to the GRISE contract as part of the Uniswap and Pancakeswap provision transaction. These UNI-V2 liquidity tokens represent ownership of the liquidity pool the GRISE contract just sent in, and carry the sole power to withdraw that liquidity. The GRISE contract has no code or function allowing such a liquidity withdrawal. However, as a further show of the Grise team’s commitment to making GRISE a totally trustless system, the GRISE contract will automatically and irrevocably destroy these UNI-V2 liquidity tokens upon receipt. This is done by transferring them to a known “burn address”, such as 0x0 .

Once the Uniswap provision is complete, users are free to use Uniswap’s front end to swap GRISE into ETH, and vice-versa. They may also choose to deposit their own liquidity pools of GRISE/ETH in order to earn fees from traders.

2.3.2 Grise Team Reimbursement

Prior to deploying the GRISE contract, the Grise team will determine its total expenses incurred in developing and launching GRISE. These will include wages paid to developers, fees paid to lawyers, marketing spend, and the cost of the audit.

When the LT Epoch closes and the Circulation Epoch begins, the total ETH or BNB sent into the LT gets divided into two buckets:

- 15% of the LT ETH and BNB + 5% to 8% of total Supply of Grise Token from each Blockchain platform.
- All remaining LT ETH and BNB

The 15% bucket of ETH and BNB is then transferred to an Ethereum or Binance address owned by the Grise team. The other bucket (85%) is sent to Uniswap and Pancakeswap depending on the blockchain, to create the first liquidity pool for GRISE

2.3.3 Minting Tokens

Once the LT Epoch has ended and the Circulation Epoch has begun, users may now mint GRISE tokens, either due to having reserved GRISE in the LT Epoch or having earned referral bonus GRISE, or both.

The minting of GRISE is done on-demand by the user, in a single batch, through the front-end interface. The interface will show how many GRISE the user can mint, broken down by reservation and/or referral bonus sources. Users may mint their GRISE immediately, or wait as long as they like, without penalty.

Users will likely want to mint their GRISE sooner rather than later in order to take advantage of staking them to earn interest, which becomes less profitable the longer one waits.

2.3.4 Supply Inflation

The total circulating supply of GRISE inflates at a constant rate of 6% per year. At the end of every day of the Circulation Epoch, the contract calculates how many new GRISE will need to be minted for that day in order to achieve that rate of inflation.

totalGriseSupply = circulatingGrise + stakedGrise

dailyInflationRate = $(1.06 ^ (1 / 336)) - 1$

dailyInflationRate = ~0.00017343440742472039397293689971578

newGriseToday = totalGriseSupply × dailyInflationRate

These new daily inflation GRISE are not immediately minted. Instead, they are earmarked for distribution to two parties: Long term staker and Medium term Staker, 70% and 30% respectively. Each active stake is earmarked a fraction of this new GRISE in proportion to the stake's shares' percentage of the total share pool that day. The same apportionment scheme is used for the GRISE earmarked to qualified CM shares.

As an Example:

On day X, suppose there are:

100,000,000 total circulating GRISE

30,000,000 total staked GRISE

10,000,000 total shares

The total new GRISE that will be generated this day is then:

newGriseDayX = $(100,000,000 + 30,000,000) \times 0.00017343441$

newGriseDayX = 22,546.4733 GRISE

This new GRISE is split into two amounts:

- **70% to Long-Term Staker**
- **30% to Medium-Term Staker**

Now, suppose user A has an active Long-Term stake that is 2,000,000 shares. On day X, this user's stake then gets some GRISE earmarked for it:

userANewGriseDayX = newGriseDayX × $(70\%) \times \text{stakeShares} / \text{totalShares}$

userANewGriseDayX = $22,546.4733 \times (70\%) \times 2,000,000 / 10,000,000$

userANewGriseDayX = 3156.506262 GRISE

Now, suppose user B has an active Medium-Term stake that is 1,000,000 shares. On day X, this user's stake then gets some GRISE earmarked for it:

userANewGriseDayX = newGriseDayX × $(30\%) \times \text{stakeShares} / \text{totalShares}$

userANewGriseDayX = $22,546.4733 \times (30\%) \times 1,000,000 / 10,000,000$

userANewGriseDayX = 676.394199 GRISE

2.4 Staking

The GRISE contract allows users to stake their GRISE, locking it up for a period of days, in order to earn interest. This is the primary function of the contract during the Circulation Epoch.

Users may open as many stakes as they like. After a stake reaches full maturity, the user may close it at any time to receive their full principal, plus interest, without penalty.

Unlike some other stakeable tokens, GRISE never penalizes a mature stake, no matter how late it is eventually closed. This allows users much more flexibility, especially for taxable income purposes. Also, should a user pass away before being able to close their stakes in a timely fashion, the GRISE contract thus remains in compliance with estate laws of various jurisdictions that make it illegal to penalize the assets of a deceased person.

2.4.1 Opening Stakes

When a user opens a new stake, they choose an amount of GRISE to stake, and a stake length in days. The minimum stake amount is varying based on type of Stake. The minimum stake length is also varying based on type of stake:

1) Short-Term Stake

- Minimum contribution is 50 Grise Token
- Min and Max stake length is 1-week to 12-weeks respectively
- Short-Term stake will have maximum 1250 slot to be occupied, if all slots are occupied new user will not be able to create new Short-Term stake until other user close/brake one of his Short-Term stake.

2) Medium-Term Stake

Here Medium-Term stake has 3 different options: 3-month, 6-month and 9-month.

3- MONTHS STAKE	6- MONTHS STAKE	9- MONTHS STAKE
The minimum contribution is 250 Grise Tokens	The minimum contribution is 100 Grise Tokens	The minimum contribution is 100 Grise Tokens
Minimum stake length is 3 months	Minimum stake length is 6 months	Minimum stake length is 9 months
Maximum of 250 slots to be occupied	Maximum of 500 slots to be occupied	Maximum of 300 slots to be occupied

3) Long-Term Stake

- Minimum contribution is 100 Grise Token
- Min and Max stake length is 1-year to 10-years respectively
- Long-Term stake will have maximum 300 slot to be occupied, if all slots are occupied new user will not be able to create new Long-Term stake until other user close/brake one of his Long-Term stake.

Once a stake is opened, it is in "Pending" status. This means that the stake won't technically begin until the following day. A user may close a stake in Pending status, receiving back the stake's principal, without penalty or interest.

Pending stakes become "Active" status once the next day begins. At this point, closing the stake before it reaches "Mature" status will incur a penalty.

When a stake is opened, the GRISE tokens staked are actually burned by the contract and converted into "shares". These shares exist for the life of the stake. Once the stake is closed, the shares are destroyed, and GRISE is minted back to the user (along with any interest added and penalties deducted).

2.4.2 Shares and Interest

When a stake is opened, its GRISE principal is burned and converted into shares. Stakes earn interest daily through the GRISE supply inflation, transaction fee, reservoir rewards, as well as from other stake's penalties paid. The GRISE supply inflates at about 6% per year.

2.4.3 Scrapping Stake Interest

Users will have the ability to withdraw (scrape) any amount of earned interest from an Active stake (i.e. before the stake fully matures). Scraping interest from an Active stake can be done multiple times over the course of the stake.

Here we have multiple types of rewards been reward to stakers, like

- **Transaction fee reward:** (All staker are eligible for transaction fee reward)
User will be able scrape transaction fee rewards weekly like, user has created stake of 2nd day, then user will be able scrape/claim reward on/after 7th days. Only every 7th day of staking user can scrape reward of past week.
- **Reservoir reward:** (Only Medium-Term and Long-Term stakers are eligible for reservoir reward)
User will be able scrape reservoir fee rewards monthly like, user has created stake of 2nd day, then user will be able scrape/claim reward on/after 28 days. Only every 28th day of staking user can scrape reward of past month.

- **Pre-mature stake penalty reward:** (All staker are eligible for Pre-mature stake penalty reward)
User will be able scrape penalty fee rewards weekly like, user has created stake of 2nd day, then user will be able scrape/claim reward on/after 7th days. Only every 7th day of staking user can scrape reward of past week.

- **Inflation reward:** (Only Medium-Term and Long-Term stakers are eligible for Inflation reward)

Inflation rewards can't be scrape in-between, Inflation rewards is claimable at the end of stake only.

Scraping interest is possible starting on every week of the active stake. On day 1 (the first active day), the stake has not yet completed a full day of being active, and thus has not yet accrued any interest.

When a stake is closed, whether Active or Mature, the interest minted back to the user only includes interest that hasn't already been scrapped. Scraping interest will not affect the stake's principal

2.4.4 Closing Stakes

A user may close a stake at any time. Depending on the stake's status (where the stake is in its lifecycle), different things will happen:

- Closing a Pending stake - the stake shares are destroyed. The entire stake principal is minted back to the user, without interest or penalty.
- Closing an Active (premature) stake - the stake shares are destroyed. The stake principal is penalized (see below) and minted back to the user along with all interest accumulated thus far.
- Closing a Mature stake - the stake shares are destroyed. The entire stake principal and all interest accumulated is minted back to the user. There are never any penalties for closing a Mature stake, no matter how late.

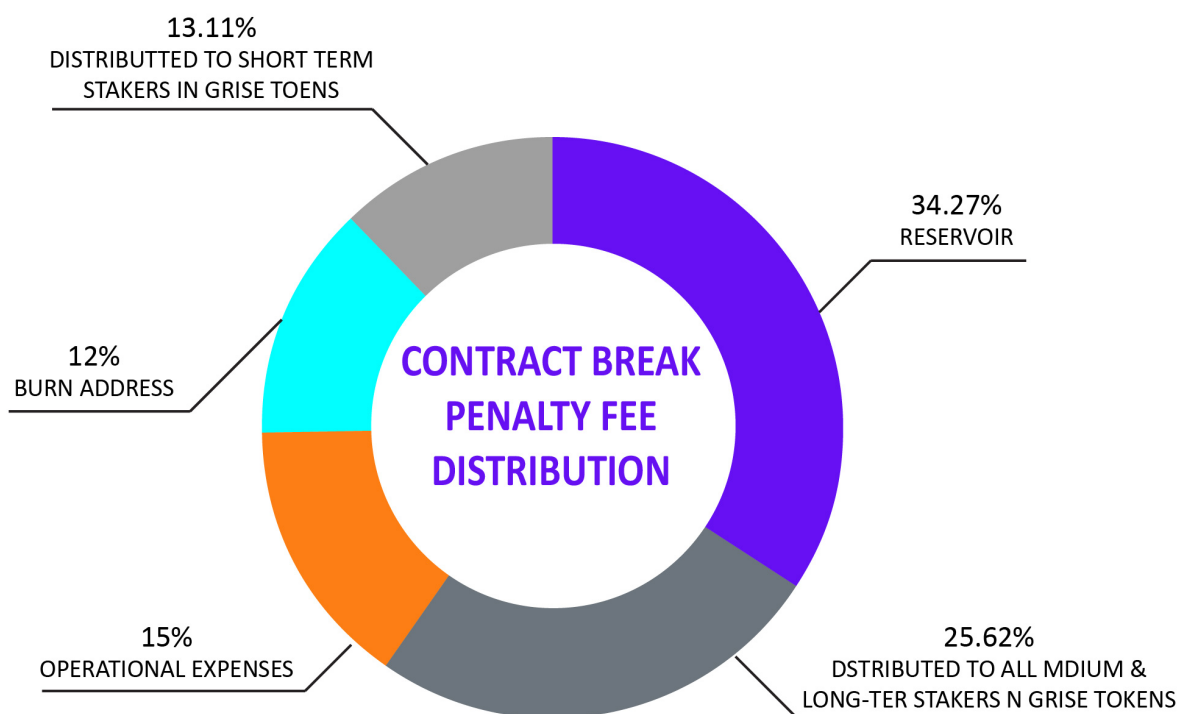
The penalty deducted from the principal (stakedGrise) when closing an Active stake is as follows:

If the stake is two or more days long:

penaltyAmount = stakedAmount * [170 * {(daysLeft - 1) / (stakedDays - 1)}] / 1000 //for 17% - 0% penalty for Grise

Thus, if you close an Active stake that was 100 days long on its final day before maturity, you get a 1.7% penalty applied to the principal. If you close the same stake on the first day of it being Active, you get a 17% penalty. The penalty scales linearly between those two extremes.

Any such GRISE penalized from a stake's return is earmarked for distribution to all active stake shares that day. These penalty distributions are described below.



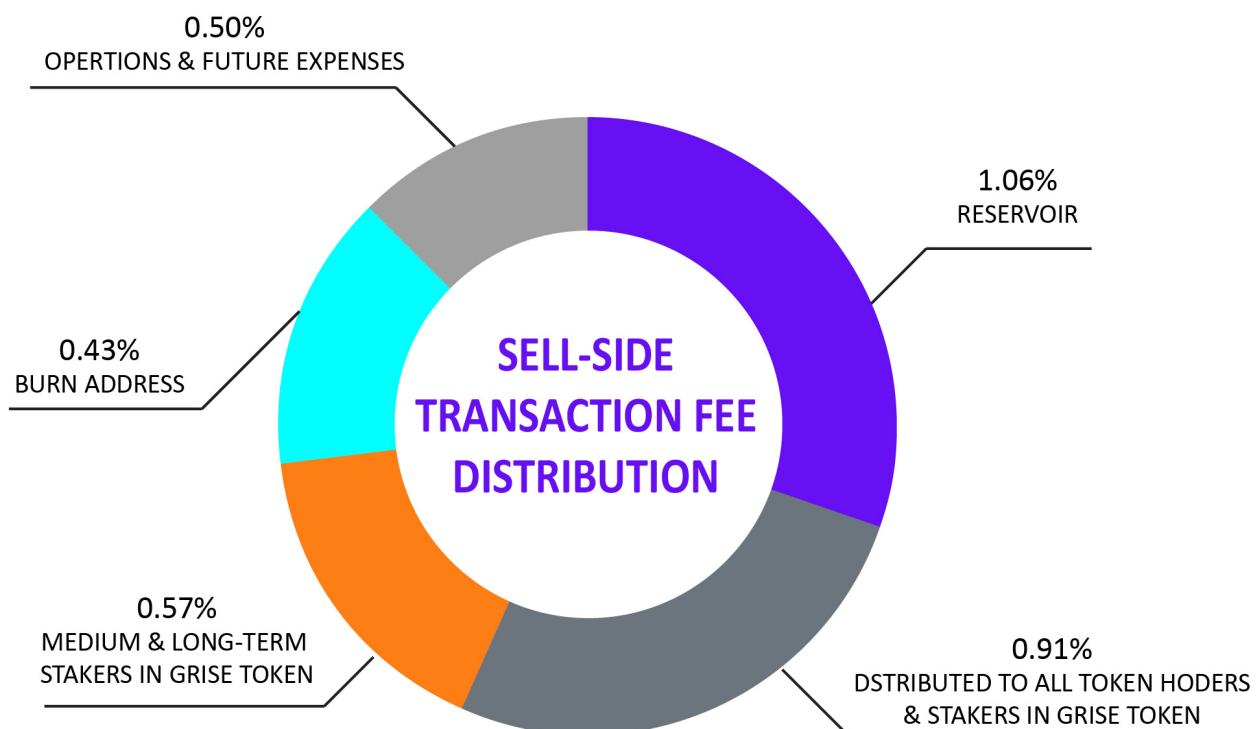
2.5 ERC-20 & Binance Chain Functionality

The GRISE contract conforms fully with the ERC-20 token standard, as proposed in EIP-20. This is essentially a set of functions that a token contract must implement in order to be an ERC-20 token.

This ERC-20 standard compliance means that applications, websites, exchanges, and smart contracts can very easily integrate with or be built on top of the GRISE contract.

GRISE contract will incur a transactional fee 3.47% on the sell side. Sell side fees can be reduced or eliminated if you stake your tokens for any amount of time. (All type of staker will have benefit of sell side transaction fee, they won't be charged any sell side transactional fee).

This sell side transactional fee (3.47%) will be divided among the token holder and staker, as described below.



On the buy side participants will incur a 0.3% transaction fees, 0.2% will go to future developments and 0.1% will go to a burn address.

3. GRISE Website

This section contains additional information about the GRISE website (<https://www.grise.finance>).

3.1 Referral Links

ATTENTION: the GRISE referral link and cookie system is ALREADY LIVE! You can start spreading your ref link today and building a base of referred users well before contract launch. So, do yourself a favor and start spreading your ref link everywhere! Format:

<https://eth.grise.finance/reservation?referralCode=YO-URETHADDRESS> Example: Get 10% Bonus GRISE!

Anyone may use a referral link to direct users to the GRISE website, this Teal Paper, the forthcoming official contract web interface, or any other page on the grisetoken.net domain or its subdomains, in order to potentially earn various referral bonus GRISE from those users' contract interactions.

Referral links containing invalid Ethereum addresses will not work.

4. Conclusion

The Grise team sincerely hopes that our efforts to provide the general public with a trustless, decentralized, interest-bearing instrument will bear fruit, and that GRISE will be a great success. But we can't achieve these goals without the help of the community around us.

The GRISE project was started not with the intention to profit, but from the desire to create something incredibly useful for the world.

We hope this document has made our vision and intentions clear.

We welcome any questions, comments, or criticism you may have. We also have some need for various types of contributors to the project.

Please join us in the official GRISE Telegram group at <https://t.me/grisetoken> to discuss the GRISE project with the founders, developers, supporters, critics, and the rest of the community.

5. Acknowledgements

The Grise team would like to sincerely thank the following people and groups that have been and continue to be instrumental in making GRISE a reality and a success:

- **Dhaval Kumar Davra, India** — for your development of such an impeccable and groundbreaking decentralized exchange protocol, and for your valued advice on how best to integrate GRISE directly with it.
- **Vijay Kumar Bhayani, India** — for your conception, guidance, and development of the Ethereum platform
- **OpenZeppelin** — for your development of essential Solidity smart contract interfaces and building blocks.
- **CRISE** — for your help in auditing the GRISE contract Solidity source code.
- **The GRISE Telegram crowd** — for your steady stream of valuable ideas, constructive criticism, honest feedback, witty banter, and comic relief throughout the design and development process.
- **Alex Bitsadze (Peacock Studio)** — for your sharp design of the GRISE logo, related images, and branding guide.
- **Upwork** — for making the search for talented developers less of a search.

6. Appendices

6.1 Terminology

- **GRISE** — The token and contract described herein.
- **REI** — The base unit of the GRISE token, analogous to wei for ETH, or satoshi for BTC. One GRISE equals one quintillion REI (1,000,000,000,000,000,000).
- **Stake** — A time locked deposit of GRISE which earns interest over time.
- **Liquidity Transformer Epoch** — the first fifty days of the contract's existence, during which users may deposit ETH to reserve part of the initial supply of GRISE.
- **Circulation Epoch** — The epoch immediately following the end of the LT Epoch, during which users may mint their tokens reserved in the LT Epoch, transfer tokens, stake tokens, etc. Uniswap — a decentralized, non-custodial ERC-20 token and ETH exchange on the Ethereum blockchain. The GRISE contract is integrated directly with Uniswap. General info on Uniswap is [here](#), Uniswap exchange stats are [here](#), and the main exchange is [here](#).
- **ERC-20** — a standard interface for Ethereum smart contract tokens. ERC stands for "Ethereum Request for Comment". The original EIP (Ethereum Improvement Proposal) describing ERC-20 tokens can be found [here](#).
- Function and variable names should convey their purpose and usage as clearly and tersely as possible, in plain English. Avoid using digits, unnecessary abbreviations, acronyms, shorthand, or slang.
- Functions should be as short as is practical. They should do what their name implies, and not much else. A good rule of thumb is that a function should try to be viewable in its entirety on a typical monitor, at a typical font size, if at all possible.
- Comments should be employed grudgingly. Don't comment to explain what code does. Good function and variable names will accomplish that. Rather, use comments to explain why something is coded a certain way, Use comments to explain any non-obvious technical points or decisions involved in a piece of code.
- Require () function calls should return a short but descriptive error message, always prefixed with "GRISE: ".
- Avoid duplicated code (don't repeat yourself).
- Wherever possible and practical, write with gas efficiency as a priority. Some parts of the code may sacrifice minuscule gas efficiencies for various important reasons. When deemed to be of greater value, code legibility, clean architecture, and a straightforward and fully featured end-user experience should take priority over such tiny gas savings.

6.2 Coding Standards

- The GRISE contract is written entirely in Solidity and compiled with solc 0.7.6.
- The code should adhere to the formats prescribed by the style guide section of in the official Solidity 0.7.6 documentation. All public interfaces (at a minimum) should be annotated using the NatSpec format.
- Unit tests should provide 100% coverage of the source code. All conceivable edge and corner cases should be covered.

6.3 Source Code Audit

The Grise team has obtained a paid, professional audit of the GRISE contract Solidity source code from CRISE, a reputable auditing firm. The full audit report is included below.

TL;DR - The auditors' conclusion was, "We found that although the project shows a certain complexity, the code [is] well written and security has been taken into account. The documentation provided was also very helpful and relates correctly to what is implemented in the contracts. No security issues were found and the only non-security issue was quickly fixed by the team."

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