

# Overview

Used as a CW20 like token for distributing (vesting) airdropped NTRN tokens.

## Description

Main alterations from cw20-base contract:

- Mint
- mints to the airdrop address only and requires untrn tokens sent along;
- Burn
- /BurnFrom
- /Withdraw
- not only burn tokens, but also transfer untrn tokens to addresses in 1:1 proportion to burned cNTRN tokens;
- OnlyWithdraw
- is permissionless and can be called directly by the user;
- Withdraw
- has a vesting mechanism attached (tokens are linearly vested for a given amount of time);
- Transfer
- only accessible for airdrop contract address.

The contract is owned by the Neutron DAO and needs to know airdrop and lockdrop contract addresses on initialization for permission purposes.

DAO executesMint() with untrn sent along to mint cNTRN funds in 1:1 proportion and assigns newly minted cNTRN funds to the airdrop address.

## Vesting

Vesting algorithm is linear with no cliff.

Users can use queryWithdrawableAmount to find out how many tokens they canWithdraw() now.

## Main usage scenarios

### Initialization and Mint

1. DAO initializes contract, specifies token info with minter, airdrop and lockdrop contract addresses.
2. DAO executesMint()
3. with untrn sent along, that mints cNTRN in 1:1 proportion and assigns them to airdrop contract balance.

### Airdrop distribution

1. Airdrop calculates the amount of airdrops for users and usesTransfer(recipient, amount)
2. together withAddVesting(address, amount, start\_time, duration)
3. to transfer funds and set vesting schedule (Always a linear vesting with 0 CLIFF time).
4. There are two ways of burning cNTRN and sending untrn to user:
5. users can executeWithdraw()
6. to burn cNTRN and get untrn according to the vesting schedule. They can look into how much they can withdraw now usingWithdrawableAmount(address)
7. query.Withdraw()
8. can be called only afterconfig.when\_withdrawable
9. passed (Should be set to lockdrop phase 2 end).
10. lockdrop can executeBurnFrom(owner, amount)
11. to sendamount
12. of untrn toowner
13. (This action skips vesting as a reward for lockdrop participation).NOTE:BurnFrom
14. does not affect vested amounts. So for example if user can get 200 untrn fromWithdraw()
15. , he will get exactly 200 untrn even ifBurnFrom
16. is called just prior to this.Withdraw()
17. method also has additional check to ensure that no more than user balance will be withdrawn.
18. At the end of airdrop stage (3 months after event add), airdrop executesBurn(amount)

19. to burn unclaimed cNTRN. [Previous Queries](#) [Next Messages](#)