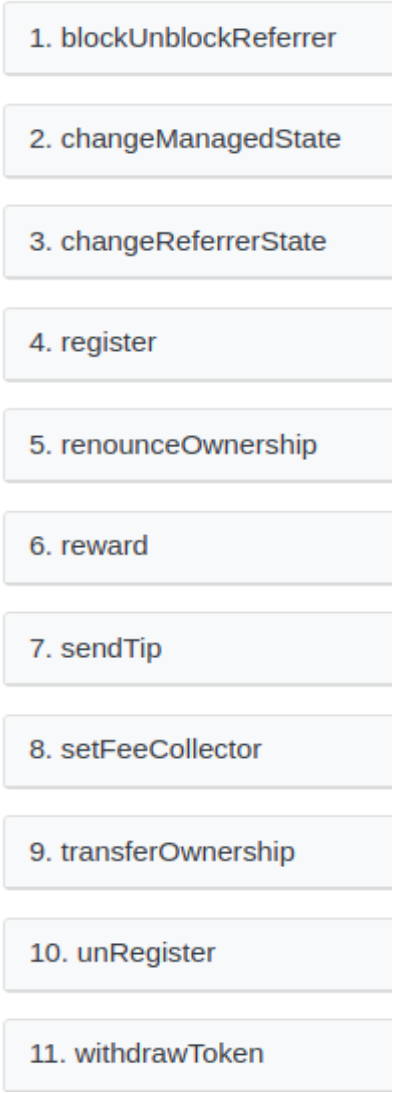
Dint-distributor contract interaction

Overview:

Dint-distributer is a smart contract that can be deployed in any EVM-compatible network (exp: polygon).
It allows a server to re-distribute an erc20 token ($DINT in our case), between holders based on a predetermined fee structure.

Possible Transactions:

As shown a list of transactions to interact with the Contract,



The owner is the deployer and the server
PS: an owner can deploy, giving ownership to another address (used by DINT app server).

1. blockUnblockReferrer:

A function that allows the owner to stop/resume a referrer from receiving more DINT rewards.

2. changeManagedState:

A function that allows the owner to set a user address as managed/non-managed,
Setting an address to be managed, means This means changing the amount for DINT app to 30% (if there is no referrer, and 25% if we Have a referrer) from each tip sent, the opposite (setting to non-managed) will set this amount to 25% (if there is no referrer, and 20% if we have a referrer).

3. changeReferrerState:

A user that is not blocked by the admin can change his state to be a referrer or not.

4. register:

Using this function the owner (the backend server) will be able to register (signup) a new user, including the referrer as a parameter (if there is no referrer, the referrer field should be set to 0x0000000000000000000000000000000000000000).

5. renounceOwnership:

Using this function the owner (the backend server) will be able to update to a new owner.

6. reward:

Using this function the owner (the backend server) will be able to send an amount of DINT tokens from the dint-distributer balance to a registered user.
Is used to send rewards for likes as well as logging in for more than 24 hours.
The backend server should calculate the price before executing this function with the amount of DINTs corresponding to the granted usd reward.

PS: dintDistributer contract should receive DINT tokens periodically to be able to execute this function (the reward function will send tokens from dintDistributer's balance)

7. sendTip:

Using this function a user will be able to send an amount of DINT tokens from his balance to a recipient.

Before executing this function, the user should execute "approve" function from DINT token contract, to approve the dintDistributer contract to use his balance,
Ideally, he should put -1 (minus one) as input to the DINT token approve function
To approve the use of the biggest unsigned integer.

Approving should be automatically executed from the Javascript part.

8. setFeeCollector:

Using this function the owner (the backend server) will be able to set the address that will receive amounts granted for DINT app.

The deployer is the default fee collector.

9. transferOwnership:

As part of an ownable contract, the owner can execute this to transfer ownership to another address.

10. unRegister:

Opposite to register, executing this function will allow the owner to unregister an address removing the ability to send/receive.

The unregistered address will no longer receive the referral reward or any kind of reward.

11. withdrawToken:

For security reasons, by executing this function, the owner will be able to withdraw this contract’s balance of any token (including $DINT).