

StakeDrop

StakeDrop is a token distribution mechanism that allows token holders of some of the most prominent dPoS/nPoS networks to get exposure to \$XPRT tokens (Persistence tokens). It's designed to have near-zero principal risk.

Persistence will be running StakeDrop campaigns on the below mentioned dPoS/nPoS networks. Token holders of these networks can stake their native assets with any active validator to earn \$XPRT tokens, in addition to the current network staking rewards they're earning (block rewards and/or transaction fees).

There will be additional incentives for token holders to delegate their tokens to our AUDIT.one validators (AUDIT.one is the staking arm of Persistence).

Every unique participating wallet can earn up to a maximum of 5,000 \$XPRT tokens (max 5000 \$XPRT tokens for every ERC20 wallet address). The cap is based on a few parameters which we'll discuss in this document.

Partner Networks

1. Cosmos Network
2. Terra
3. Kava Labs
4. IRISnet
5. Polkadot
6. Matic Network
7. Tezos

Token and Distribution Details

Persistence has allocated 1% of its total supply (1,000,000 \$XPRT) at genesis for StakeDrop. These tokens will be distributed over a period of 12 months following the token generation event. All tokens earned via StakeDrop have a six-month lockup period and will be linearly vested over the next six months.

\$XPRT tokens will initially be launched as a standard ERC20 token. They will be swapped with our Tendermint-based native Persistence token following the launch of the Persistence mainnet.

Read more about the role of \$XPRT in the Persistence ecosystem in our Token Utility and Design paper.

Benefits of StakeDrop

The Persistence StakeDrop is designed in such a way that it benefits all stakeholders involved.

The three key stakeholders:

1. Persistence
2. Delegators or StakeDrop Participants
3. Partner Networks

Persistence

Our StakeDrop is a highly targeted method of airdrop, allowing us to distribute our tokens to the staking community. These stakers are long-term token holders, not merely speculators. One role of the \$XPRT token is to secure the network. This StakeDrop gives us the perfect opportunity to ensure a wider distribution of \$XPRT tokens amongst individuals familiar with staking, allowing us to bootstrap network security prior to launching the Persistence mainnet.

Delegators or StakeDrop Participants

Key benefits for delegators participating in the StakeDrop are:

- There's no need for liquidation of current holdings to get exposure to \$XPRT tokens. Long-term holders in dPoS/nPoS networks can stake their assets to receive \$XPRT token while retaining their original holdings.
- (Near) zero principal risks. The StakeDrop is one of a few ways people can get exposure to a promising project like Persistence without any principal risk. The only risk a delegator undertakes is that of the delegators' validator nodes getting slashed for downtime, or double signing.
- It's non-custodial in nature. Delegators retain custody of staked assets at all times (unlike the [Edgeware Lockdrop](#) where assets were locked up in a smart contract).

Partner Networks

Benefits for networks we partner with are two-fold:

- The ability for token holders to earn \$XPRT tokens at near-zero principal risk, incentivizes token holders to stake their assets on our partner networks, thus strengthening the security of these networks (the higher the staking ratio, the higher the security).

- Campaigns such as these reward long-term token holders and stakers of our partner networks by giving them exposure to new projects like Persistence without any complications. This could be seen as an additional incentive along with staking rewards for being a staker on the network.

Mechanism

The mechanism is designed in such a way that the number of \$XPRT tokens dropped each day increases linearly, until a certain amount of campaign days have passed. After this, a fixed number of \$XPRT tokens are dropped each day which will be distributed amongst all participants of the StakeDrop. The fixed number will vary from network to network.

For every StakeDrop campaign, there are two ways a delegator can earn \$XPRT tokens:

1. Delegate your tokens to any active validator on the network.
2. Delegate your tokens solely to the AUDIT.one validator on the participating network, which will be running at a 10% commission rate.

This means there are two rewards pools per campaign. All participants are rewarded through the **Network Rewards Pool**. There's a separate **AUDIT.one Rewards Pool** which incentivizes delegation to our AUDIT.one validator. As a result, delegators of AUDIT.one receive their share of rewards from the Network Rewards Pool as well as the AUDIT.one Rewards Pool.

Therefore, total rewards for AUDIT.one delegators = rewards from the Network Rewards Pool + Rewards from the AUDIT.one Rewards Pool.

If a token holder delegates her tokens to the AUDIT.one validator then they will receive additional \$XPRT tokens based on the ratio of the number of tokens they've delegated, with respect to the total number of tokens delegated to the AUDIT.one validator by StakeDrop participants.

Every block, "X" \$XPRT tokens are dropped (the drop per block changes every day up to a certain day, after which it becomes constant till the end of the campaign, therefore X is a variable). These X tokens per block will be distributed amongst all delegators of the network participating in the StakeDrop, i.e. each unique address. The variable is based on the ratio of individual tokens delegated with respect to the total number of tokens staked on the network by StakeDrop participants.

An additional "Y" = $0.25 \cdot X$ \$XPRT tokens. These are dropped per block for the delegators of each AUDIT.one validator (Y is a variable dependent on the value of X). These $0.25 \cdot X$ \$XPRT tokens will be distributed amongst all delegators of AUDIT.one. Distribution is based on the ratio of the number of tokens delegated by an account to the AUDIT.one validator with respect to the total number of tokens delegated to the AUDIT.one validator by StakeDrop participants.

Thus, if a token holder has delegated their tokens to the AUDIT.one validator, they will receive a portion of the \$XPRT rewards from X per block pool. Additionally, they'll receive a reward directly proportional to the ratio of their delegated tokens to the total number of tokens delegated to the AUDIT.one validator by StakeDrop participants.

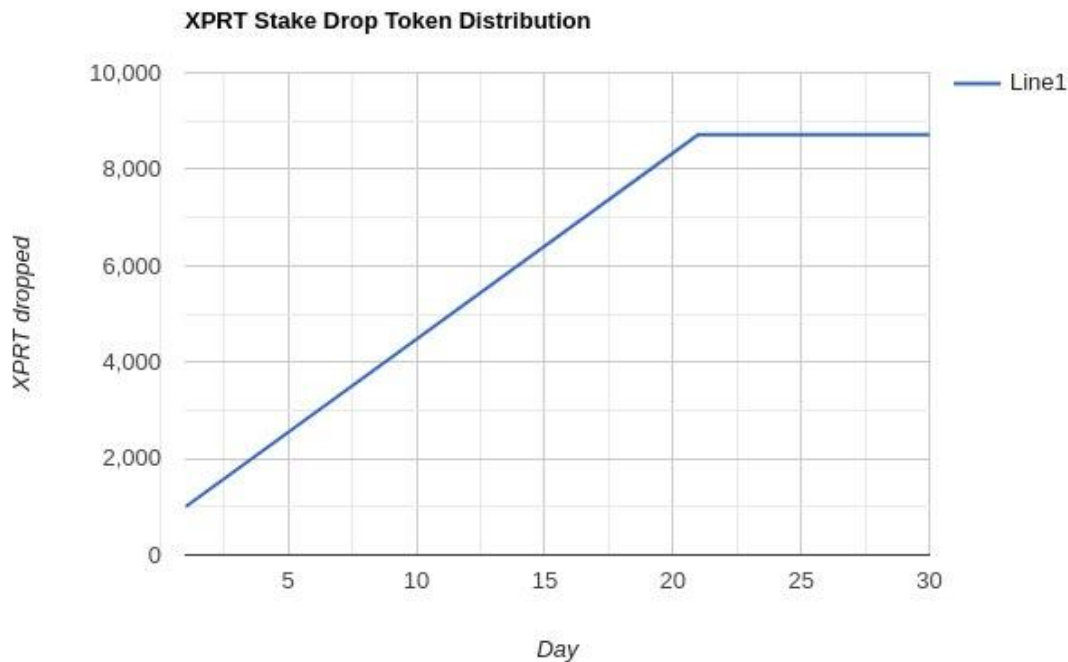


Fig: Graph of \$XPRT dropped per day for the Cosmos Network Campaign.

Let's use the Cosmos Network StakeDrop campaign as an example to illustrate daily XPRT drop rates. As can be seen from the graph above, the number of \$XPRT tokens dropped per day increases linearly for the first 21 days of the campaign (thus 'a'=21 days). After 21 days, the number of \$XPRT tokens dropped stabilizes and becomes constant throughout the rest of the campaign.

Any delegator who participates early is incentivized to keep their tokens staked for the entire duration of the campaign as the daily rewards continually increase.

The increase in daily rewards then stops and remains constant until the end. This is to ensure any delegators beginning late don't get a very high percentage of tokens as rewards. It also ensures early delegators have much better incentives.

Understanding the Mechanism with an Example:

For simplicity, let us assume that 1 \$XPRT token is dropped at a particular block height on the Cosmos Network. Say, there's 10 participants, each with 100 ATOMs delegated to any active

validator for the StakeDrop on the Cosmos Network (this 1 \$XPRT for a block height does not include the additional rewards for delegating to the AUDIT.one validator). This means the total stake participating in the StakeDrop at this height is 1,000 ATOMs. Now this 1 \$XPRT will be distributed amongst all the participants of the StakeDrop as rewards for this particular block height. Each participant will therefore receive 0.1 \$XPRT at this block height. The calculation is shown below:

- Total addresses participating in the StakeDrop by delegating their ATOMs = 10 (each staking 100 ATOMs, for example)
- Total stake participating in the StakeDrop = 1000 ATOMs
- \$XPRT dropped at this particular block height = 1
- Therefore, tokens dropped per address at this block height = $(100/1000)*1 = 0.1$ (tokens earned depends on the number of tokens an account delegates)

Now let's assume that out of these 10 addresses, 5 have delegated their tokens to the AUDIT.one validator.

- Total addresses delegating to the AUDIT.one validator = 5 (each staking 100 ATOMs)
- Total stake delegated to the AUDIT.one validator participating in the StakeDrop = 500 ATOMs
- \$XPRT dropped at this particular block height (additional 25% to that of the tokens dropped on the entire network- AUDIT.one Rewards Pool) = 0.25
- Tokens earned per address at this block height = $(100/500)*0.25 = 0.05$

This 0.05 \$XPRT per address is an additional reward to the 0.1 \$XPRT already earned as part of the network's rewards pool. So in this scenario, the delegator receives 0.15 \$XPRT per block because they delegated their tokens to the AUDIT.one validator, as opposed to 0.1 \$XPRT tokens which they would have received if they had delegated to any validator other than AUDIT.one.

This means the number of \$XPRT earned per address clearly depends on the following parameters:

1. The validator a delegator chooses (additional rewards for AUDIT.one stakers)
2. The number of unique addresses participating in the StakeDrop
3. The total number of tokens delegated on the network by StakeDrop participants
4. The total number of tokens delegated to the AUDIT.one validator

How it Works:

- S = Total number of \$XPRT tokens dropped at a particular block height (the value of S changes daily up to day 'a')
- A = Average block time of the network for the entire campaign duration
- T = The time period of the campaign (T in seconds)

- B = Approx total number of blocks in a campaign
- Z = Total number of \$XPRT tokens allocated to the campaign

Network Rewards Pool

The number of tokens dropped per address (at a particular block height) depends on the following key parameters:

- $N1$ = Number of tokens delegated through a particular wallet
- $M1$ = Total number of tokens staked on the network by StakeDrop participants
- X = Total number of \$XPRT tokens dropped at a particular block height for delegating to any active validator in the StakeDrop
- F = Token drop for a particular wallet which has delegated to any active validator

AUDIT.one Rewards Pool

The number of tokens dropped per address (at a particular block height) depends on the following key parameters:

- $N2$ = Number of tokens delegated through a particular wallet
- $M2$ = Total number of tokens delegated to the AUDIT.one validator by StakeDrop participants
- $Y = 0.25 \times X$. This is the total number of \$XPRT tokens dropped at a particular block height to delegators of the AUDIT.one validator
- D = Token Drop for a particular wallet which has delegated to the AUDIT.one validator

It's important to note that the specifics of these parameters will vary from network to network.

Formulas:

- The time period of the campaign in seconds = $86,400 \times$ the number of days of a campaign
- $B = T/A$ (where B is the approximate total number of blocks in a campaign, T is the time period of the campaign, and A is the average block time of the network)
- $S = X + Y = 1.25X = Z/B$ (where S is the total number of \$XPRT tokens dropped for a particular block height and Z is the total number of \$XPRT tokens allocated to a campaign)
 - ◆ Total number of \$XPRT tokens dropped at a particular block height for delegating to any active validator in the StakeDrop = Total number of \$XPRT tokens allocated to the campaign / $(1.25 \times$ Approx total number of blocks in a campaign) or $X = Z/1.25B$
 - ◆ The total number of \$XPRT tokens dropped at a particular block height to delegators of the AUDIT.one validator = $0.25 \times$ Total number of \$XPRT tokens

dropped at a particular block height for delegating to any active validator in the StakeDrop or $Y = 0.25 * X$

- Token Drop for a particular wallet which is delegated to the AUDIT.one validator = (Number of tokens delegated through a particular wallet/Total number of tokens delegated to the AUDIT.one validator by StakeDrop participants) x Total number of \$XPRT tokens dropped at a particular block height to delegators of the AUDIT.one validator or $D = (N2/M2) \times Y$
- Token drop for a particular wallet per block which has delegated to any active validator = (Number of tokens delegated through a particular wallet/Total number of tokens staked on the network by StakeDrop participants) x Total number of \$XPRT tokens dropped at a particular block height for delegating to any active validator in the StakeDrop
- $F = (N1/M1) \times X$

When Do I Start Receiving Rewards?

One becomes an active participant in the StakeDrop only after they've sent the "Magic Transaction" (a small transaction of 0.001 tokens [ATOM, LUNA, etc.] to the wallet address provided on the StakeDrop page of our website).

The Magic Transaction is considered valid only after the token holder has staked their assets on the network. The Magic Transaction can be sent from anywhere between 24 hours before the start of a campaign to the end of a campaign. However, a delegator will only receive rewards from the subsequent block of sending the Magic Transaction or the start of a campaign (in case the Magic Transaction is sent before the start of the campaign).

StakeDrop Participation Tutorial: How to Participate

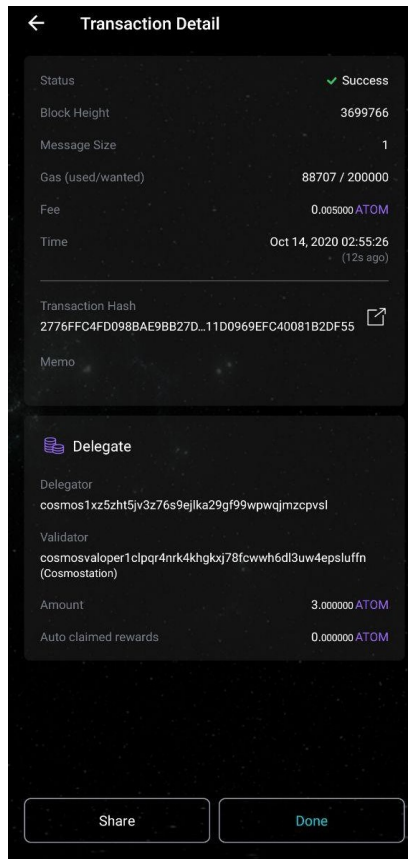
Cosmos Network

Step 1: Stake your tokens.

For this tutorial, we have used the Cosmostation wallet to stake some ATOMs on the Cosmos Network to be eligible to receive \$XPRT token rewards through the StakeDrop.

Staking can be done in just a few simple steps:

1. Log in to your wallet/account
2. Click on 'Delegate'
3. Choose a validator
4. Input the number of tokens you want to delegate
5. Delegate (note that you do not have to input your \$XPRT receiving ERC20 wallet address in the MEMO field while delegating tokens)



Step 2: Provide staking proof and your ERC20 wallet address (where you will be receiving your StakeDrop rewards) by sending a Magic Transaction.

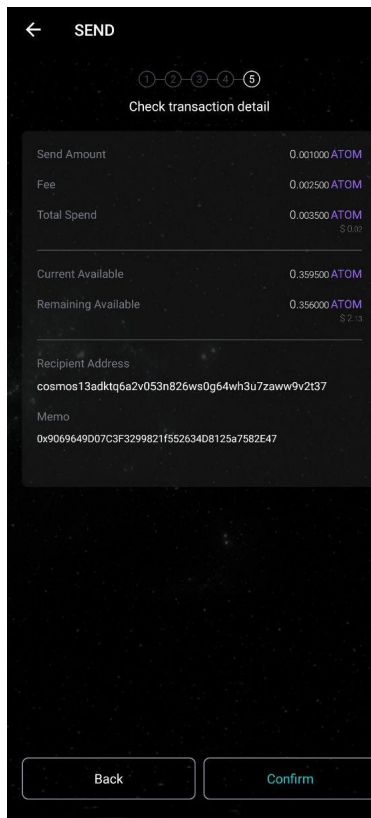
We will be providing an address on the StakeDrop page of our website. You have to paste this address into the recipient address field while sending the Magic Transaction.

Please note that the recipient address provided in the image below is just a dummy address and not the actual address to send the Magic Transaction to for the StakeDrop.

After inputting the address, you have to input the amount (which can be as little as 0.001 ATOM).

The next step is the most important. **In the 'MEMO' field, please input your ERC20 wallet address.** This is the address where you will be receiving your StakeDrop rewards (XPRT) following our token generation event.

As can be seen from the image below, the MEMO field contains the user's ERC20 wallet address and the recipient address field contains the address provided by Persistence on our website (the address in the image is a fake/dummy address).



Once you have sent this transaction, you're all set! You are now an active participant in the StakeDrop campaign and you will start earning \$XPRT rewards.

How to Provide Your Staking Proof and ERC20 Address for StakeDrop Campaigns Other Than Cosmos

Providing Staking Proof

The staking proof procedure will be the same for all StakeDrop campaigns (regardless of the network). Once you've staked your assets on the network in question, you need to send a small transaction (the Magic Transaction) of 0.001 native network token (ATOM, LUNA etc.) from your staking address to the address that will be provided by us. We will provide a unique address for each network's StakeDrop campaign.

Providing your ERC20 address

- a. For Cosmos Network, Terra, IRISnet and Kava: When sending the above transaction, you need to input your ERC20 wallet address in the MEMO field. This is the optional field.
- b. For other networks: We'll be collecting this information on our website. You can provide the details of your staking address and your ERC20 address on the website after sending the Magic Transaction.

NOTE: The magic tx should be 'SendCoin' tx only with the MEMO containing ERC20 wallet address. For example on cosmoshub-3 (and for all cosmos based chains), tx should be 'bank/transfer' (usual 'SendCoin') (msgType: 'cosmos-sdk/MsgSend'), **NOT** Multi-Send tx.