

Team Multiplier Proposal

Benjamin Wenger

This isn't not a proposal from the team, but instead my personal analysis of a problem and its potential solution. I would like community feedback before deciding if I should try to get the rest of the team to support it, given it has more impact on the community than the team.

Introduction

When we designed the team multiplier, our goal was to ensure that the geographic decentralization built in the BetaNet process would continue into MainNet.

After more than 6 months of MainNet, I have learned much about the long term effects of the team multiplier on the network's economics and believe that the program needs to be adjusted. Essentially, we have achieved our goal too well.

Problem Statement

The primary issue with the Team Multiplier is how it interacts with the [Phragmen](#) algorithm. The implementation of Team Multiplier somewhat broke Phragmen elections because nodes get elected based upon how much Team Multiplier they get, but Team Multiplier is not counted when disbursing rewards. As a result, Phragmen will put more coins on nodes who don't have team multiplier, making it very hard to run a non TM node with any reasonable sense of returns.

For example, a node with 100kxx on it and a TM node with 100kxx and 200kxx TM have the same profitability for a coin staked on them. If a nominator takes 50kxx and stakes them on both, Phragmen will put all 50kxx on the non TM node. This will mean the TM node will make more at the expense of both the non TM node and the nominator.

In the long term steady state, we initially believed that this was not an issue because the nominator can manually split their 50kxx into multiple wallets. We viewed this as more of an inconvenience than a true flaw. This view has turned out to be incorrect for 2 reasons:

- You have to at least split wallets once, which may require an un-bond which takes 28 days
- Many nominators do not want to be as active as that approach would require

Although I have always wanted to reward TM nodes well for their substantial amount of network support pre-mainnet, we believe this particular situation has resulted in unfair compensation.

The larger issue is that it has caused the staking process to become anti-competitive. TM nodes do not have enough incentive to be performant, while at the same time it is too hard for nominators and non TM nodes to make returns, further reducing competition.

Proposal

I think that a restructure in TM can fix these issues. The tradeoff will be a less powerful TM in exchange for a system which better incentivizes coin ownership and staking.

In general, the solution I propose has 3 components

- Make Team Multiplier take its share of rewards and return them back to the rewards pool
- Make it possible to adjust the amount of TM you receive (up to your maximum) through the Team Multiplier applet
- Increase minimum requirements for TM (Set realtime and precomp requirements)

This will remove the imbalance within Phragm, putting TM and non TM nodes at the same level. I believe that the reduction of rewards that this will cost TM nodes will be offset by increased price pressure after listing because there will be much more incentive to buy coins and stake them on the network.

Currently, the maximum amount of Team Multiplier a node can receive is capped based upon the total staking ratio to ensure there isn't too large of a differential in stake. Given that node operators are incentivised to reduce their TM with the new system, capping TM is no longer necessary.

This proposal essentially converts the TM into a guaranteed nomination system, provided performance metrics are met.

I am not proposing changing the commission at this time. In theory, a system where your maximum commission changes with your performance would be powerful, but in practice all systems which can accomplish that which I have been able to think of are too cumbersome to function.

Overall, I want to know what the community thinks about these proposals and how they think these issues should be addressed.

Timeline

This would require 1 weeks work from 1 blockchain engineer and 1 backend engineer from the team and a resolution to pass on chain which changes how Team Multiplier is handled within rewards. Overall, it is a relatively light lift for the team.