On April 3rd, we posted a post-mortem on the MEV-Boost relay vulnerability (signed, but invalid, block header from malicious proposers) that allowed malicious proposers to drain the funds of multiple sandwich bots two days ago: Post mortem: April 3rd, 2023 mev-boost relay incident and related timing issue. This vulnerability has been patched by relays.

In the last few days the network has seen anincrease in the number of forked blocks. We wanted to communicate with the staking community about this increase and what we are seeing with MEV-Boost relays. There are two related things to note:

First, the fix to the signed, but invalid, block header vulnerability introduced additional latency to MEV-Boost relays. We think that this additional latency is leading to an increase in missed slots. We're working to reduce this latency as soon as possible but it will take a bit of time to develop, test, and deploy changes. We believe that we can reduce the latency significantly, which in turn will lead to less missed slots.

Second, some clients have updated their fork choice in advance of theCapella upgrade to more aggressively reorg blocks proposed late. As we get closer to Capella more clients are updating, leading to an increase in the number of forked blocks, especially in combination with the additional latency from MEV-Boost relays.

The net effect has been an increase in the number of missed slots caused by late proposals, from roughly 1 an hour to several blocks an hour. We recommend that stakers carefully evaluate whether they are comfortable with a slightly increased risk of missed proposals due to the additional latency of MEV-Boost relays.

Thank you to the protocol maintenance, research, security and relay communities for the incredible contributions as we continue to respond to and monitor mev-boost relay latency issues as they relate to validators. If you are seeing missed slots, please send logs to us directly through eth2@flashbots.net or directly in another communication channel you have with us (e.g. Telegram).