BloXroute Relays Delivering Invalid Blocks - 2022-09-27

Over the course of the day on 09/27 the bloXroute ethical relay was receiving and returning bad blocks to validators from one of our block builders running an experimental build strategy that resulted in missed slots.

Overview

This builder was improperly committing transactions and caused improperly formatted blocks. Because the relay was not simulating blocks from known builders these blocks were getting sent to validators causing them to miss slots due to proposing blocks with improper receipts or log blooms. A total of 15 slots were missed due to this issue.

Contributing Factors

BloXroute's relay was not simulating blocks from internal builders and was instead relying on these builders to submit valid blocks.

Resolution

This was resolved as quickly as we were able to identify where the issue was located.

- The experimental builder was taken offline and ensured that it was no longer submitting blocks to any of our relays.
- All of the validators who missed slot's were paid for the bids they received from the bloXroute relay.

Additionally:

On 09/30 all of the relays now simulate all block submissions regardless of source.

Timeline

- · Slot first seen
- 4790116
- 4790116
- · Slot last seen
- 4791561
- 4791561

Additional Request

While transferring funds to our builder to pay for the missed slots the builder considered the transfer of 10 ETH as an MEV tip for the validator and paid that 10 ETH to a validator on slot <u>4791729</u>.

Payment to builder: 0x471e84820d6b4761949f193f26f006755482bdda30fe80972216949b5ccd61ec

Payout to Validator:

0xb6b5c290bd9d7f8217defc048a24e0fa62d90dc35880272da12a73a2eee0f628

If it's possible could the funds be delivered back to the sender of that transaction: 0xea48ba2edefae9e4ddd43ea565aa8b9aa22baf08

Total of 11ETH was sent in error to the validator during this with an additional 1 ETH occurrence as well in slot 4792026

Transfer to builder: 0xacfa882698c1d691d0375a5f851c91d0048de1df1c1f2a67bdf28e4bb4d1b675

Payout to Validator: 0xe6a126d0a95bfd787ef6401a6e85547251d2bae38457ce2dbcbf87c28076c90e