Why

MEV Boost is used by all >85% of Node Operators, but at the moment there is little transparency to the reliability and performance of Relays. If a Relay were to stop providing bids, Node Operators and Builders would be unaware and unable to take corrective actions. For example, on November 10th, the Flashbots Mainet Relay experienced a DoS attack which resulted in a drop in MEV-Boost blocks between 12:00 - 16:00 UTC. Furthermore, existing dashboards are incomplete due to limited datasources, lack of real time data, and insufficient metrics. After connecting with Chris Hager from Flashbots, regarding Metrika's Ethereum Data Challenge Blog, we discussed potential solutions to the Relay transparency problem that Flashbots had previously outlined. Additionally, Relays are a trusted party where builders must trust that their blocks are not shared with validators or other builders and validators must trust that Relays are verifying builders' claims about potential blocks. At Metrika, we believe in transparency and accessibility therefore we are creating a MEV Relay Dashboard to help the community have access to basic data regarding the performance of Relays.

What

We are building (and releasing soon!) a free public MEV Relay Dashboard that will provide charts and visualizations of several metrics listed below grouped by Relays. The data for these dashboards and alerts will be collected via a modified version of open source the Relay Monitors.

The dashboard will display the following metrics:

- Total bids Ping each Relay for a bid in each Slot
- Bid faults The number of faulty bids submitted by a Relay. Currently we are tracking malformed and consensus invalid bids.
- Relay latency the latency of each Relay is dependent on the location of a Validator or Relay Monitor. We provide the average latency across several regions.
- Time series of MEV blocks The percentage of block on the chain that are MEV-Boost blocks vs naively built blocks

Users will be able to view the metrics by these 8 Relays (and we will add any additional Relays that come online):

- 1. Flashbots
- 2. BloXroute Max Profit
- 3. Eden
- 4. Blocknative
- 5. BloXroute Ethical
- 6. BloXroute Regulated
- 7. Manifold
- 8. Relayooor

Metrika - Ethereum Relay Monitor (1)

1920×4218 390 KB

](https://collective.flashbots.net/uploads/default/original/1X/6195a11dcb17bc43e8e16e65c44b9bcc691b3535.jpeg)

Future considerations

Some ideas we have for the future are adding more metrics and alerts:

Future metrics:

- · Normalized profitability of relays
- · Comparison of Actual vs Expected pay from Builders/Relays

Alerts that will be provided:

• Consecutive Missed Bid - Alert if a Relay misses five consecutive bids

- Bid Fault Alert Alert if a Bid Fault occurs
- Relay Latency Alert if a bid request takes more than 0.5 second

Call to action

We'd like to invite the community to provide feedback on the metrics we are displaying. A couple open questions:

- Are these the most important and useful metrics? What are we missing?
- · What is the best methodology to calculate these metrics?
- What else might be useful for you in the future?
- Want early access to a beta version? Get in touchhere