PANIC for Polkadot

Community Acceptance Testing Report

Methodology

To measure the success of PANIC, we decided to collect feedback from the Polkadot/Substrate community by preparing this survey and distributing it:

- By tweeting it from the Simply VC Twitter (Link).
- By posting it in the Riot channels (Kusama Watercooler, Polkadot Watercooler, Substrate Technical (Public), Kusama Validator Lounge).

Despite our repeated effort, only 2 community members filled in this survey. As a result, to get as much feedback as possible, we contacted 233 validators directly from both the Kusama and Polkadot community on Riot. We first presented our tool, in case they did not hear of it, and then asked them for feedback by either filling the survey, or by a quick chat on Riot once they try PANIC out.

Fortunately, some of the community members that we contacted directly replied to us via Riot with their feedback. This feedback is summarized in the following section.

Riot Chats Feedback

As discussed above, many community members preferred to give us feed back via chatting rather than filling out the survey, presumably due to time constraints. In general, all the community members that gave feedback communicated the idea that PANIC handles most of their monitoring/alerting needs. In fact, some community members even praised some alerts raised by PANIC, specifically the validating alerts, such as when being alerted if the validator is not elected for the next session.

Some community members also proposed new features that could be integrated into PANIC in the future to have a more complete alerting/monitoring tool. The following are the features that were suggested:

- Alerts on staking rewards that are about to expire.
- Integrate new channels such as PagerDuty, Slack and OpsGenie.
- Monitor specific peers connected to a node, and alert if the nodes' connection with these peers is lost.

Survey Feedback

The results of the feedback survey linked in the Methodology section were noted down in a spreadsheet inside the panic_polkadot/test/web/ui/acceptance_testing folder (Link).

Outcomes

From the feedback we received, we concluded that in general PANIC has satisfied most of the monitoring/alerting needs of node operators. In fact, as discussed previously, much of the proposed changes were related to making PANIC a more complete monitoring/alerting tool. As such we believe that performing such changes would be out of the scope of this grant, as these would require a lot of changes to the current code base.

However, we did apply some changes in response to feedback. One of the features of PANIC is that it alerts you if 30 minutes pass and your validator has either not authored blocks in the current session, or the last authored block in the current session was 30 minutes ago. In one of the survey responses we were told that this alert is spammy, as this may not be a problem due to the validator, but due to the consensus algorithm. To improve this, we extended the monitoring of blocks authorship over an era rather than a session. As a result, the operators will still be able to know when the validators have not authored blocks for a long time (by default 3 hours, can be extended to 6 hours at most on Kusama), and at the same time the number of alerts has been reduced.