

Overview

Date of Incident:

Sunday, April 7, 2024

First Identified:

Approximately 09:30 UTC, April 8, 2024

Resolution Completed:

Approximately 10:45 UTC, April 9, 2024

Incident Summary

An unprecedented use of the SAFE multisig wallet's multisend feature for delegation events on April 7, 2024, led to significant disruptions. This included the halting of a critical block scanning job (gov-polling-db) and inaccuracies in the user interface (UI) for displaying delegation balances and history. The multisend feature, which bundles multiple transactions into a single one, was not previously tested in this context, exposing unhandled scenarios in both the block scanner and UI.

Impact

- Block Scanner Shutdown:

The job monitoring delegation events was unexpectedly stopped.

- UI Display Inaccuracies:

Delegation balances and historical data were incorrectly presented for transactions involved in the incident.

- New Polls Delayed:

Due to the impacts mentioned above, the Governance Facilitators decided to postpone the go-live of new weekly governance polls by 24 hours, in consultation with Jetstream.

- No Effect on Previous Data:

Historical data and balances before the incident were not affected.

Root Cause Analysis

The core issues identified include:

1. Block Scanner Duplicate Handling:

The block scanner attempted to process multiple delegation events within the same transaction as separate instances, leading to attempts at duplicate record insertions and consequent shutdown of the job responsible for handling Chief contract events.

1. UI Transaction ID Filtering:

A segment of the code responsible for retrieving delegation history, which was initially intended to remove duplicate transaction IDs, inadvertently excluded valid delegation events that were grouped together in multisend transactions.

Mitigation and Improvement Steps

Implemented Mitigations

- Block Scanner Code Adjustment:

Following a collaborative debugging, testing, and code implementation effort by Jetstream and Techops, a deployment was made to address the issue of handling duplicate delegation events. This intervention allowed the block scanner job to return to normal operation by 04:00 UTC on April 9.

- UI Filtering Logic Correction:

Adjustments were made to the UI code to properly handle delegation events from multisend transactions, with a fix deployed by 10:45 UTC on April 9.

Ongoing and Future Improvements

- Monitoring and Adaptation:

Continuous monitoring of transaction methodologies and event triggering mechanisms will be maintained to adapt to evolving transaction patterns.

- Modernization of Block Scanner:

Recognizing the outdated nature of the current block scanner technology, there's an ongoing evaluation for migrating governance data indexing to more contemporary solutions, such as subgraphs. This move would align the scanner's functionality with the latest network developments and improve community contributions to the codebase by drastically simplifying the Governance Portal stack and improving the ease of maintenance & development.

However, this transition is part of a broader strategic plan that includes determining the future of MakerDAO's governance system throughout the Endgame rollout, and balancing priorities with other key projects that Jetstream is involved in as contributor to the Launch Project.

Jetstream, as steward of the governance portal, apologizes for any inconveniences caused, and we thank the Governance Facilitators and TechOps for their collaboration on the issue. (cc [@EE-Gov-Facilitator](#) [@techops-services-ea](#))