

Flexpool Progress Report — November 2020

Abstract

We are glad to announce our second progress report, this time for November 2020. In this month, we have done major internal refactoring on our infrastructure. This includes most of the software rewritten to be multi-coin capable and better in terms of DevOps, deployment, and testing cycle for our team.

Key events

- **Migration from OpenEthereum node towards Geth**

During this month, we fully migrated our infrastructure to the [Go-Ethereum](#) Ethereum Implementation. The migration's primary reasons were mainly stability issues and [this won't-fix issue](#) that made the OpenEthereum node unsuitable for the modern mining pools.

- **Complete rework of internal Flexpool's codebase for the multi-coin compatibility**

This month, we have done much work on implementing significant fundamental changes in Flexpool's design to mine multiple coins.

- **First Orphan Block**

This is not great news, but we must deal with it as it was not a Flexpool's problem — our software is well-tested and passes multiple checks done by real people before the deployment. The [issue](#) was on the Ethereum Node side, Geth, the node we used to migrate to earlier.

Audit

Note: The change percentages are relative to the previous month.

We have collected the pool data for the whole of November 2020.

Total Ether Mined

In November 2020, **Flexpool** mined **8 blocks (+33%)** with **22.1814 ETH (+47%)** in total.

Hashrate Evolution

The average hashrate for the November period was 11.55 GH/s (+32%), ranging from the minimum daily average of the 8.40 GH/s (+40%) to an average of 18.34 GH/s (+52%)

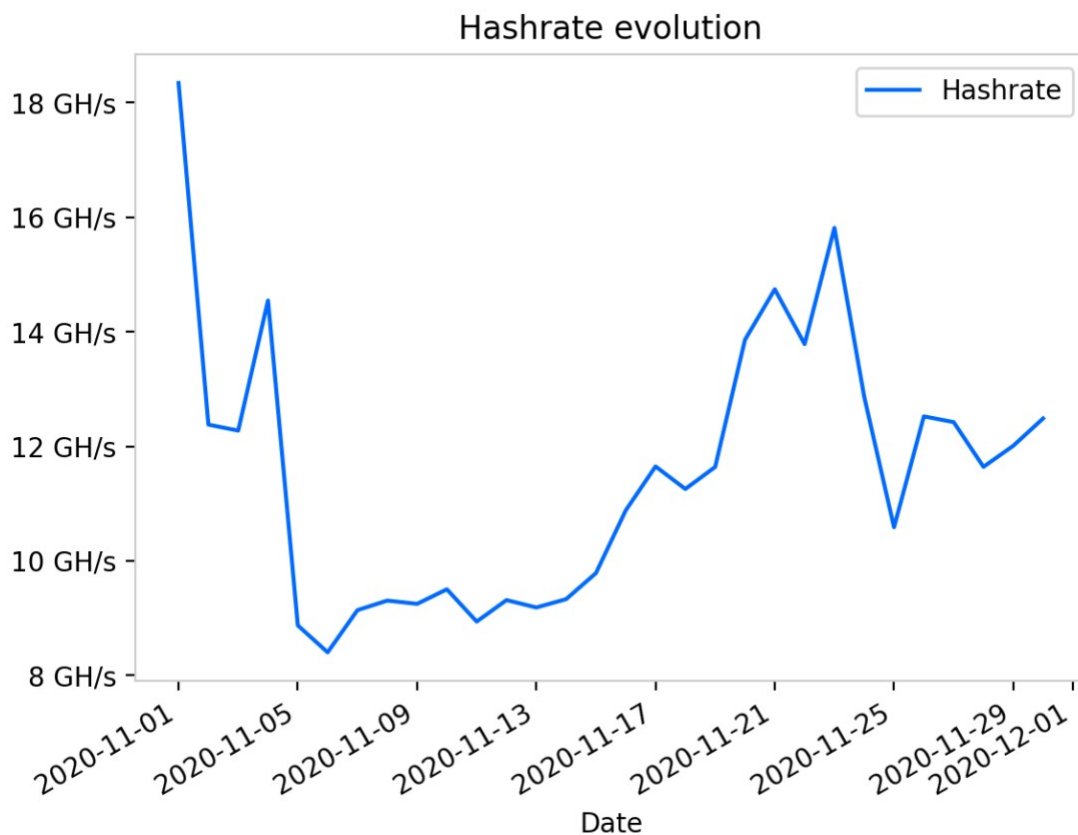


Figure 1. The hashrate evolution from Nov 1 until Nov 31.

Miner Count Evolution

Another month, another **Flexpool** miner count record. We managed to break the 40 miners barrier this month, making it the highest amount of miners concurrently mining on **Flexpool**.

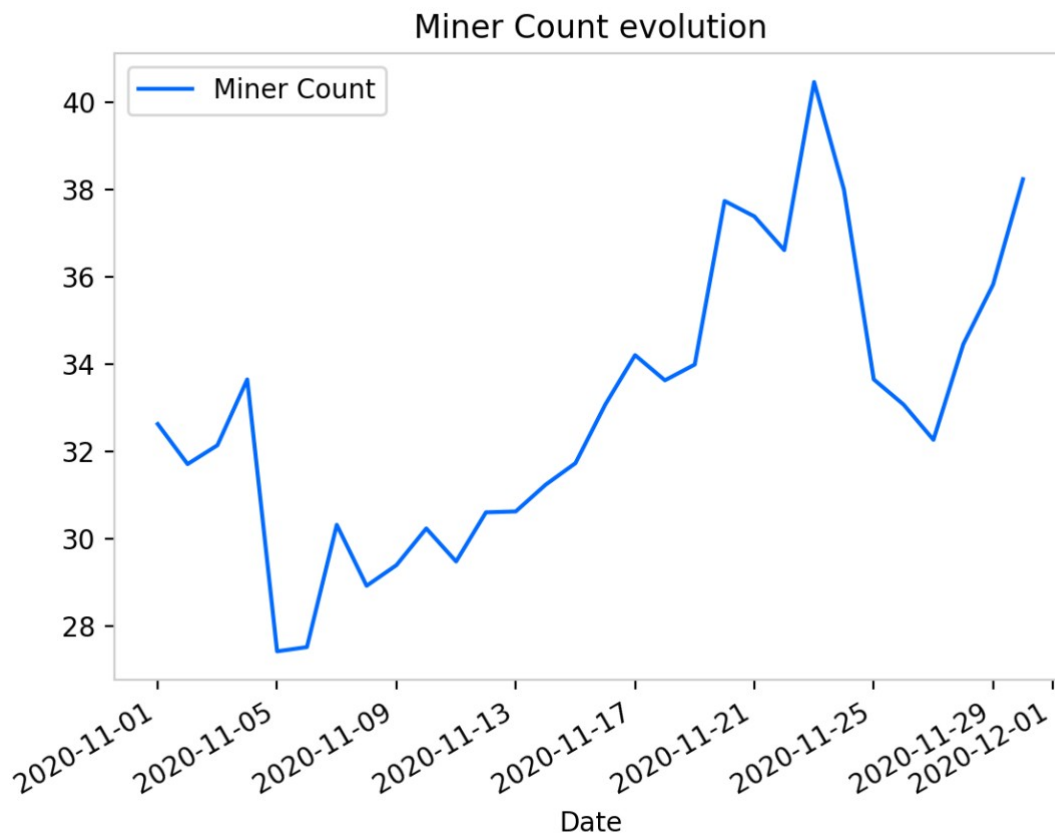


Figure 2. The miner count evolution from Oct 1 until Oct 31.

The minimum daily average was 27 miners (+32%), the max average was 40 miners (+14%), and the overall monthly average was 33 miners (+25%).

Block rewards

The block with the highest reward (**7.32 ETH**) was mined by 0x06e73a12d18331A76c04F79e6083AD60F18224a4at Nov 26 2020, 03:46 UTC.

The block with the lowest reward (**0 ETH**) is an orphan that was mined by 0x6a897510498e078e641033c4C5e8C8c03136f168at Nov 29 2020, 17:52 UTC.
See [Geth Ethereum Node failure](#).

The mean reward was **2.7 ETH** (+8%).

Top block finder

The November's top block finder was 0xDD5F68E68198520e60FaD24CBf1aDd2C6fcA7538, who mined 2 blocks with the total reward of **5.1 ETH**.

Average Luck

The November's mean luck was **120%** (lower-is-better).

Incidents & Maintenances

Maintenances

- [US Server Node Migration](#), Duration: 1 hour. Date: Nov 10, 15:30 - 16:30 UTC.
- [EU Server Node Migration](#), Duration: 1 hour. Date: Nov 12, 08:30 - 09:30 UTC.
- [ASIA Server Node Migration](#), Duration: 9 minutes. Date: Nov 14, 11:56 - 12:05 UTC.
- [ASIA Gateway Maintenance](#), Duration: 1.5 hours. Date: Nov 19, 14:30 - 16:00 UTC.
- [US Gateway Software Migration](#), Duration: 6 hours. Date: Nov 20, 08:15 - 14:15 UTC.
- [EU Gateway Software Migration](#), Duration: 42 minutes. Date: Nov 20, 14:45 - 15:27 UTC.
- [Stats Upgrade](#), Duration: 25 minutes. Date: Nov 20, 20:00 - 20:25 UTC.

Incidents

- [EU Gateway Node Failure](#), Duration: 1 hour 16 minutes. Date: Nov 29, 18:31 - 19:47 UTC. *Comments: A Geth Node Bug. See the [link](#).*

Note: All maintenances and incidents did not result in the pool downtime.

Roadmap

- **Flexpool 2.0** — Multi-coin Flexpool with the global website redesign and the internal software refactors.
 - o Software rework. (*done*)
 - o New Flexpool Web Application.
 - o A first other-coin integration.