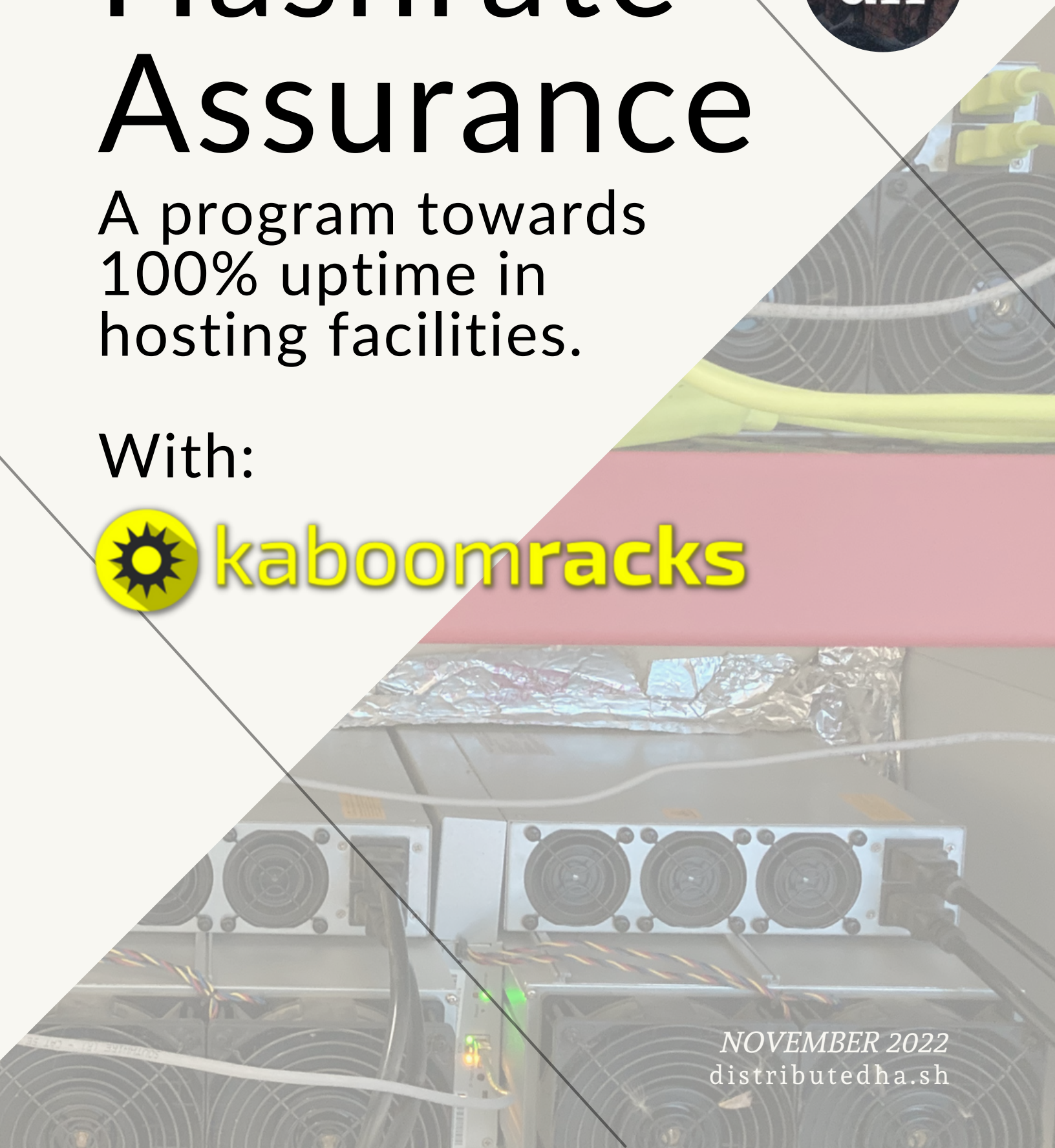
Hashrate Assurance

A program towards 100% uptime in hosting facilities.

With:

kaboomracks



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distributedha.sh

Introducing: Hashrate Assurance

Even in the ideal world of free energy and 100% facility uptime, you will still have the issue of machine level failure. While ASICs are incredibly robust machines, and can run for years on end without much more than periodic cleaning--inevitably something will break. Machine level ASIC issues are specific and arise from sources such as fans, control boards, chip failure, or even PSU overheating and bricking.

With extensive warranty timelines and repair facilities in short supply, miners often find themselves with many weeks of lost hashing time. This is a severe opportunity cost in the world of Bitcoin Mining that thoughtful hosts can mitigate with a bit of coordination.

To date, no solution has been provided to the market to resolve the issue of lost hashing time due to machine repairs. Below we detail a rationale and implementation strategy for a 'Hash Assurance' program, that distributed hash has rolled out in partnership with Kaboomracks.

This basic strategy is currently operational for all of our current customers at **no additional cost to them,** and will be implemented into all future facilities we build and manage as a company. We hope this framework will be broadly adopted and integrated as a standard feature of Bitcoin Miner hosting, and may even lend itself to standalone companies serving as 'Insurance Hash' for hosting customers.

Let's continue to build products that further the maturity of our industry and represent the best of what we have to offer, and remember always that knowledge is power.

-the distributed hash team

A solution to customer machine downtime.

The inspiration is Cloud Mining.

The most maligned and feared mining arrangement is one in which a customer allocates capital to a host on the premise that they will have X total machines and Y hashpower. Many customers have been financially ruined under these arrangements as the *absence of transparency* between the host and the customer leads to mal-incentives.

Disreputable hosts use inbound cashflow to fund facility buildouts that don't exist, finance machine buys for future dates, or simply allocate the newest capital to prior (unfulfilled) customers in a pure ponzi scheme. If your host is a black box that you allocate capital to under the expectation of receiving satsflow to a pool account, you are at a high risk for cloud mining.

Sunlight is the best disinfectant.

At distributed hash, two of our core company beliefs are, 1. full customer access and control over your machines at all times, and 2. do not sell facility capacity that is not currently electrified.

Because of this we are able to resolve the problem of customer machine downtime, while using the satsflow strategy from Cloud Mining as an unexpected source of inspiration.

The 'Hash Assurance' strategy involves the following:

- Allocate a portion of a given facility to 'Assurance Hash' machines (Variable)
  - Either self-host these machines, **or** find a partner to provide machines (in our case Kaboomracks, as we do not self mine at distributed hash).
    - In a partnership arrangement, the partner providing machines should expect to receive a favorable hosting rate, with the expectation that their machines can be re-allocated (curtailed) at any point.
- When a customer machine fails:
  - Point the matching amount of 'Assurance Hash' to the customer from the existing partner hash amount.
  - De-rack and prepare the customer machine for repair.
- When a repaired machine returns, run the pointing procedure in reverse.

Considerations

The pre-requisites for the 'Assurance Hash' strategy are that your customer has full view of their machines (to audit the validity of both machine downtime and replacement hash from an outside machine to their pool), and that you have available 'Assurance Hash' at the time of machine failure. Ironically, we have used the technique of disreputable cloud miners to improve overall customer outcomes.

This is a pilot program as we have not yet optimized the ideal number of machines per facility to ensure the greatest utilization of 'Assurance Hash', without dis-incentivizing the partner from participating in the favorable rate offered. In our case, Kaboomracks has machines that are otherwise fully functional (and as a result *should* be hashing), but for whatever reason are un-salable to the general public. This serves as an ideal set of units to use as curtailable hash.

A simpler arrangement would be for a host to buy their own machines and have a specific number per site available as 'Assurance Hash', however, this arrangement is not available to us at distributed hash. We do not self mine in order to preserve our legal classification as a strict data center. This protects customers privacy by minimizing any potential targeting due to business designation.

Limitations

Outside of the previously stated pre-requisites of the 'Assurance Hash' strategy, our current implementation does not solve the problems of p*ower outages*, or e*xtreme weather*.

These issues typically cause uniform failure across a facility and are not resolved by our current implementation of the 'Assurance Hash' strategy. One could easily adapt our current model by distributing this strategy across multiple locations in diverse geographies, but that is outside of the scope of our current implementation.

In Summary

We have delineated and reviewed the strategy and setup of an 'Assurance Hash' pilot program, a technique to draw closer to 100% uptime for machines in hosted facilities under certain transparent hosting conditions.