Testing plan

Team introduction

Our team is called Xinji Rongwei, base in Chengdu, China. We have already deployed six IDCs distributed in Chengdu, Xian, Wuhan, Shanghai, Guangzhou, and Chongqing, with different Networking Operators. Configuring 3PB+ storage pool for each IDC, high-performance CPU of Intel,378GB RAM, and 10 Gigabit networking. We will also add new high-performance servers to achieve the optimal configurations and maximum efficiency of the cluster.

We currently have a team of 12 people including R & D, hardware and software engineering and maintenance personnel for Filecoin. So, we have adequate resources to participate in the PB-scale miner test, and we are willing to provide real valuable testing data.

Test list

- Sealing rates and Proofs metrics
- Sector loss monitoring and sector failed rates
- Daemon - Miner configurations
- Blockchain metrics(including get ticket latency and committing wait time)
- Mined block and committed block metrics
- Seal Worker configurations(divided by different jobs that are based on the job which is needs resources and consumption time, different configurations do a different job, maximum efficiency)
- Seal speed per US Dollar (GB/h) metrics
- Performance of ePoSt on 5 PB+ of sealed data metrics
- Find out performance bottlenecks if we could found
- Supporting software configurations

Supporting software configurations

- Storage layer(RAID6 on Dell storage pool via FC-SAN, and there is another strategy: shared-block storage, OCFS2. it already working on Testnet II)
- Gigabit and 10 Gigabit networking
- Firewall and Fortress machine
- Operation and maintenance tools developed by ourselves
- Configurations(for precommit1: AMD EPYC 7402, 512~1024GBRAM, for precommit2 and commit: Intel 4216, 378GB RAM, 2TBNVMe, and for miner: AMD EPYC 7702, 512GBRAM, 2TBNVMe)
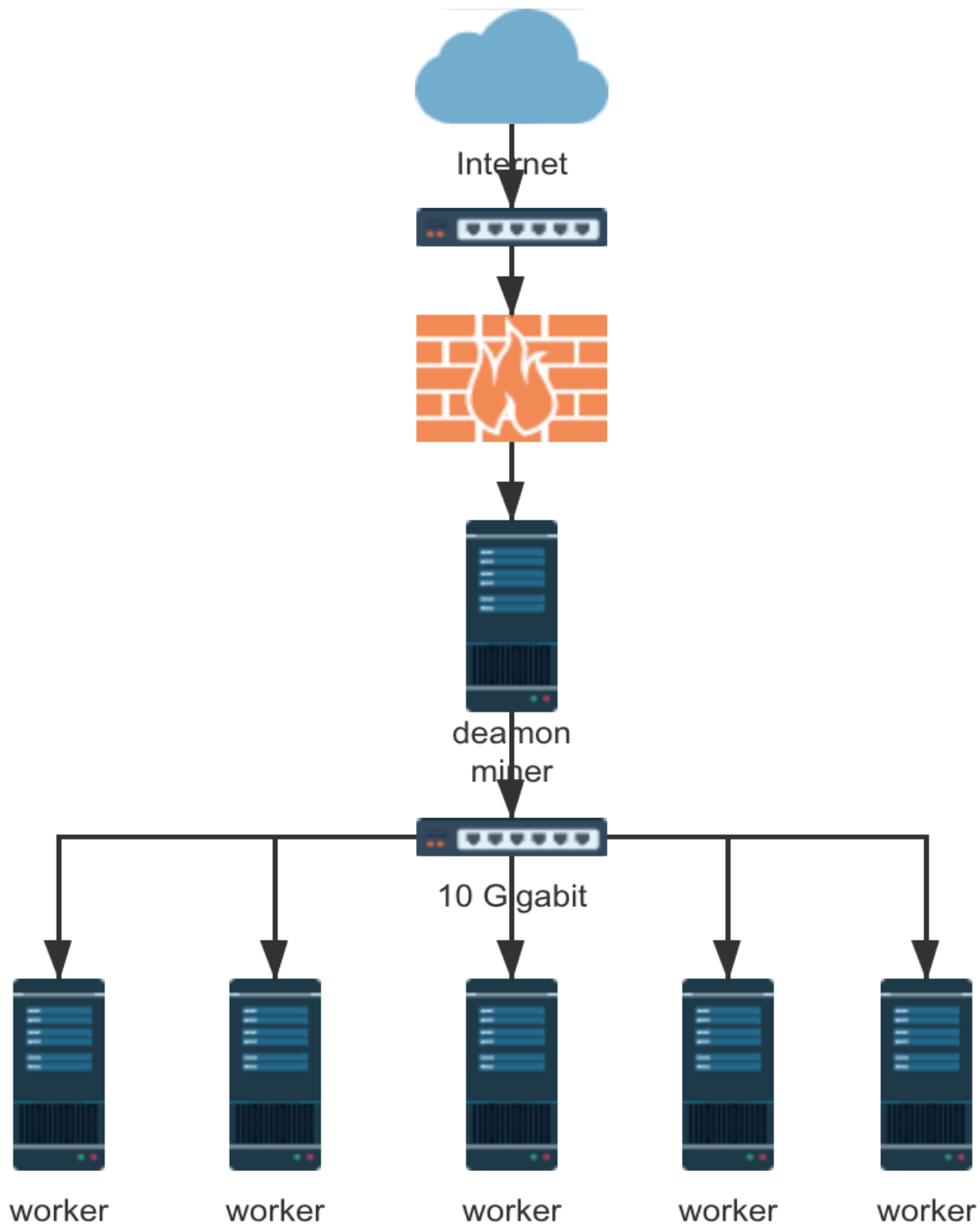
Power validation(Testnet II)

Topology

There are not be enough details about our mining operation, some due to we add new high-performance servers and another is writing English level. But the test list as above we listed will be strictly performed and get the conclusions of each test item to help you figure out the pearls and bottlenecks.