BlockCompass Report

Dec 7, 2021

Description

This report presents the results of running the *BlockCompass* workload that performs simple insert action to a Blockchain Network. The observed metrics are resource consumption metrics (CPU, Memory, Network Input and Network Output) and performance metrics (latency, emit rate, throughput and error rate).

Configuration

Platform: Ethereum

Consensus: Clique | Proof of Authority

Number of Nodes: 5

DataSize: 8

Receivers Nodes: miner 1 , miner 2 , miner 3

1. Summary

#	Minimum	Maximum	Mean	Variation
CPU Utilization	0.626	10.486	4.748	2.413
Memory(%)	1.08	3.006	2.059	0.155
Network Input (MB)	0.454	1,094	541.148	12,599,6
Network Output (MB)	0.363	572.2	541.148	3,360,20
Users #	0	100	60.833	800.989
Emit rate (transaction/sec)	113	464	355.05	10,096.8
Throughput (transaction/sec)	113	464	355.05	10,096.8
Latency (ms)	0	238,218.007	836.033	180,516.
Error rate	0	0	0	0

2. Performance Metrics

Fig2.1. Number Of Users

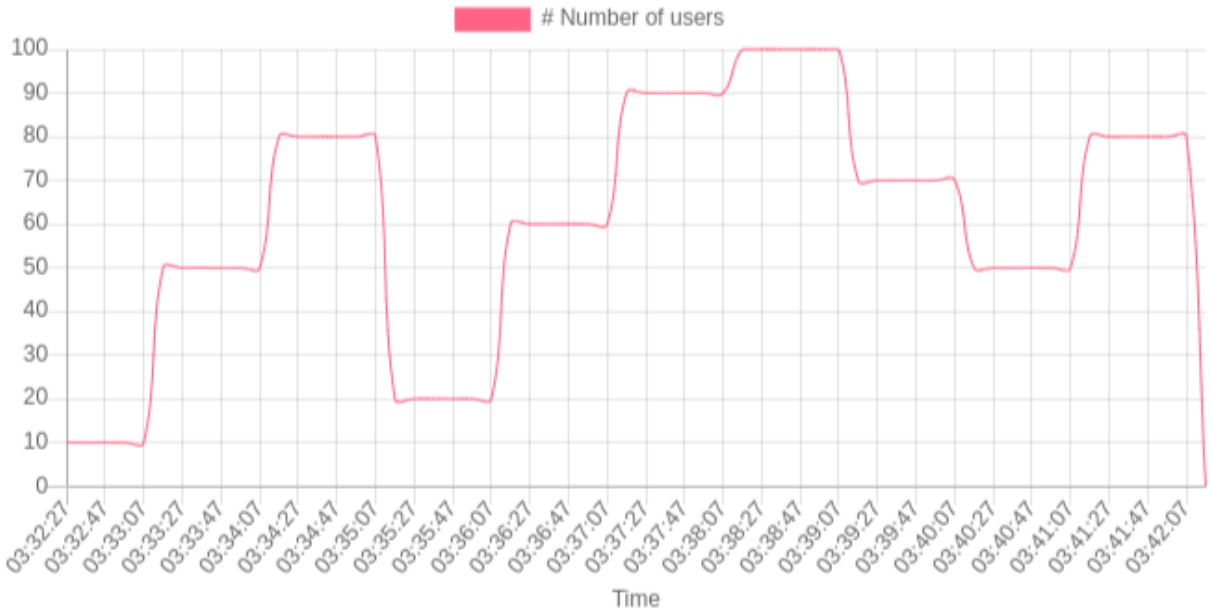
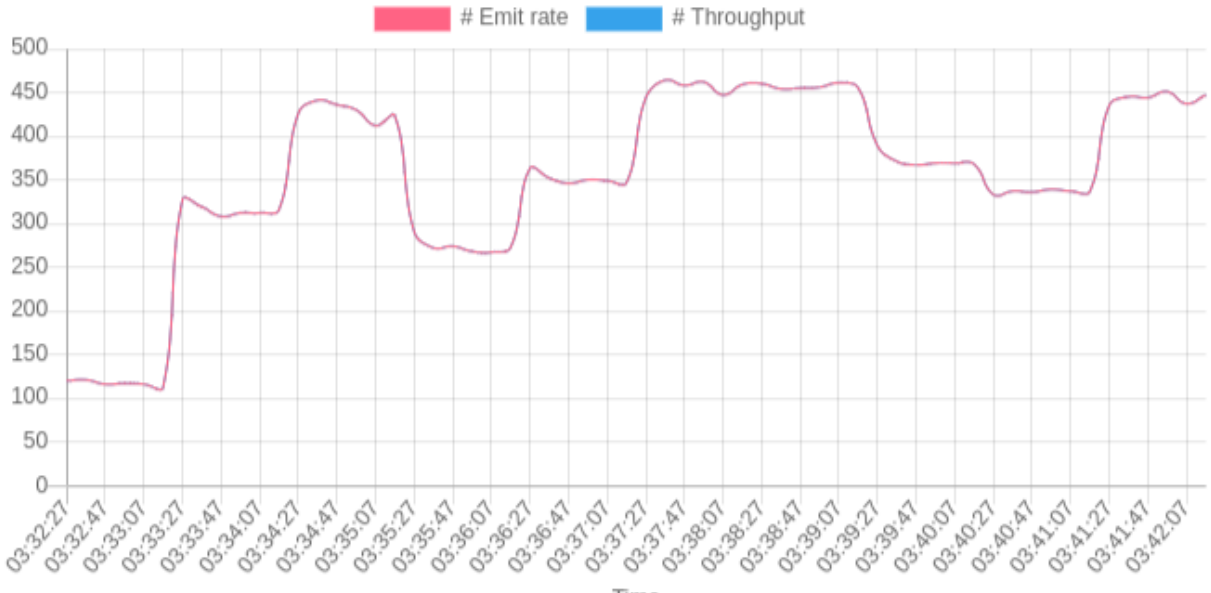


Fig2.2. Number Of Requests



Time

Fig2.3. Latency

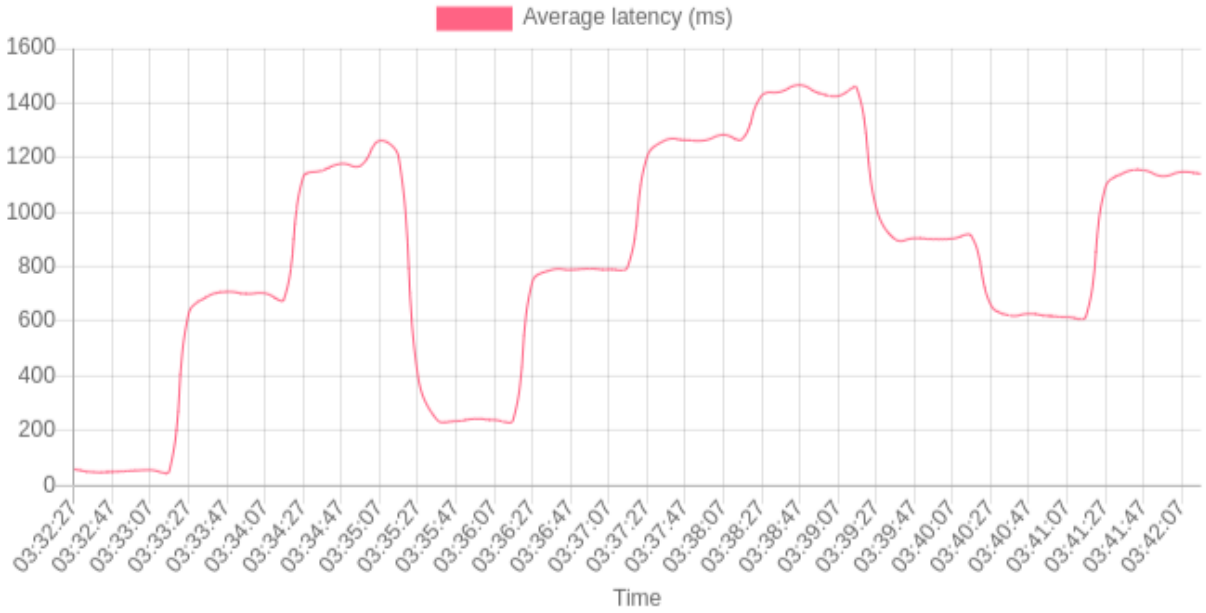
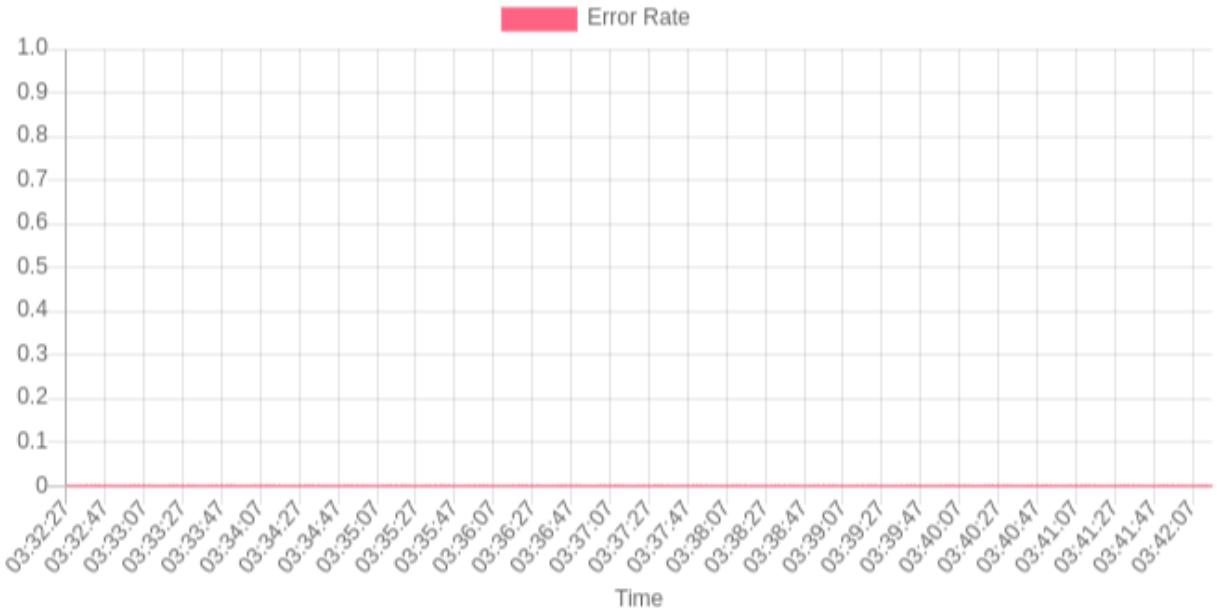


Fig2.4. Error Rate



3. Resource Utilization

Fig3.1. CPU Utilization (%)

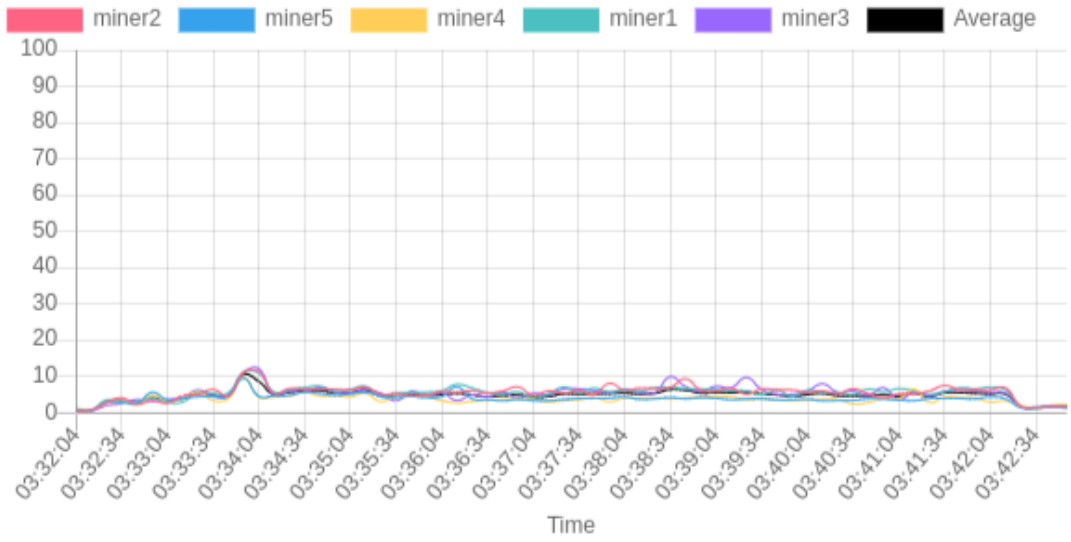


Fig3.2. Memory Utilization (%)

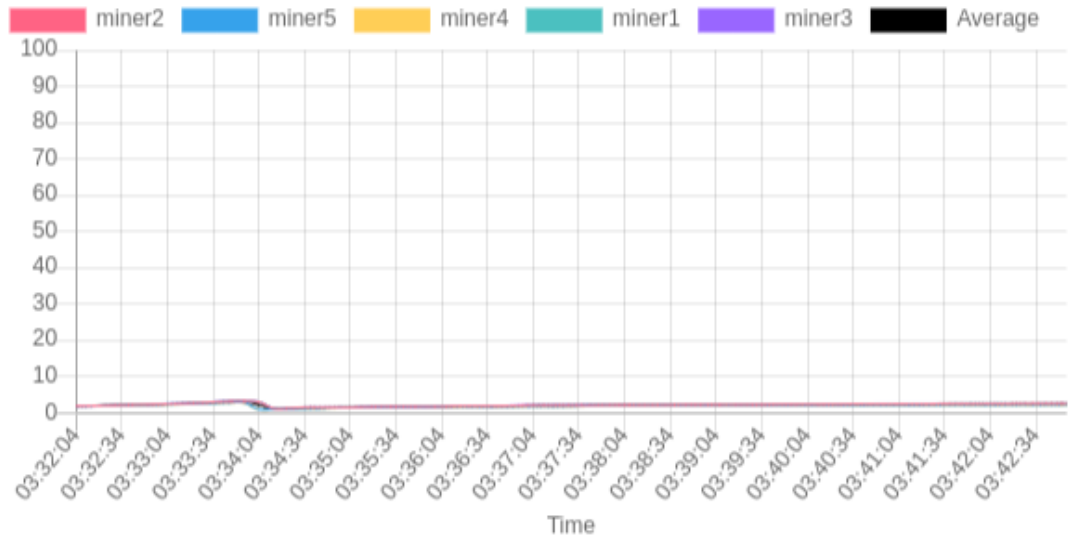


Fig3.3. Network Input (Bytes)

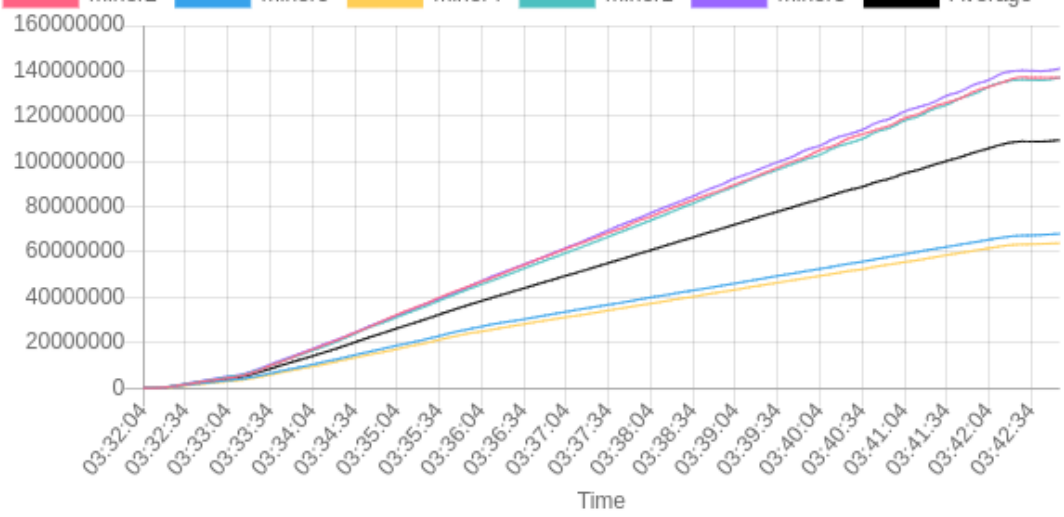
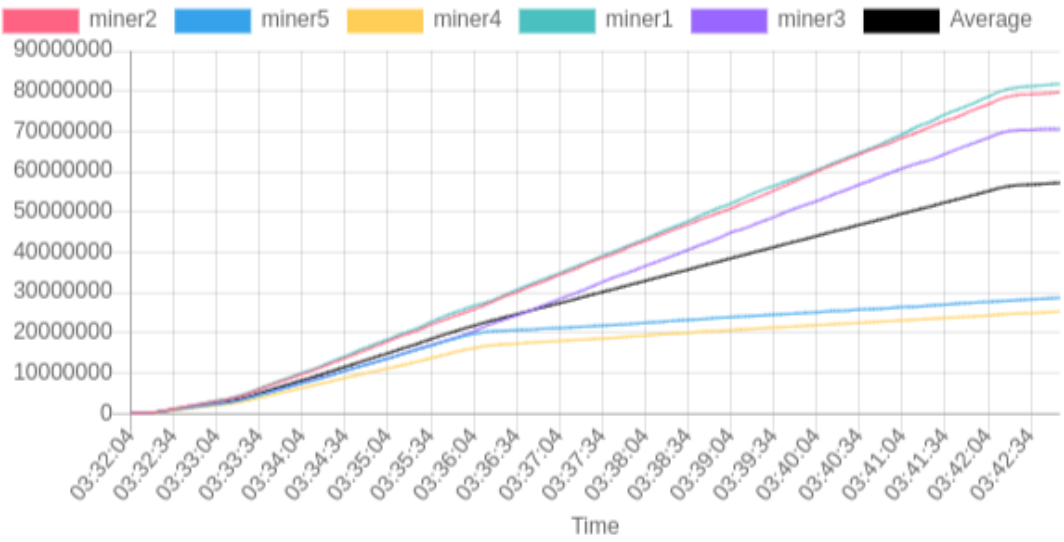


Fig3.4. Network Input Output (Bytes)



4. Comments