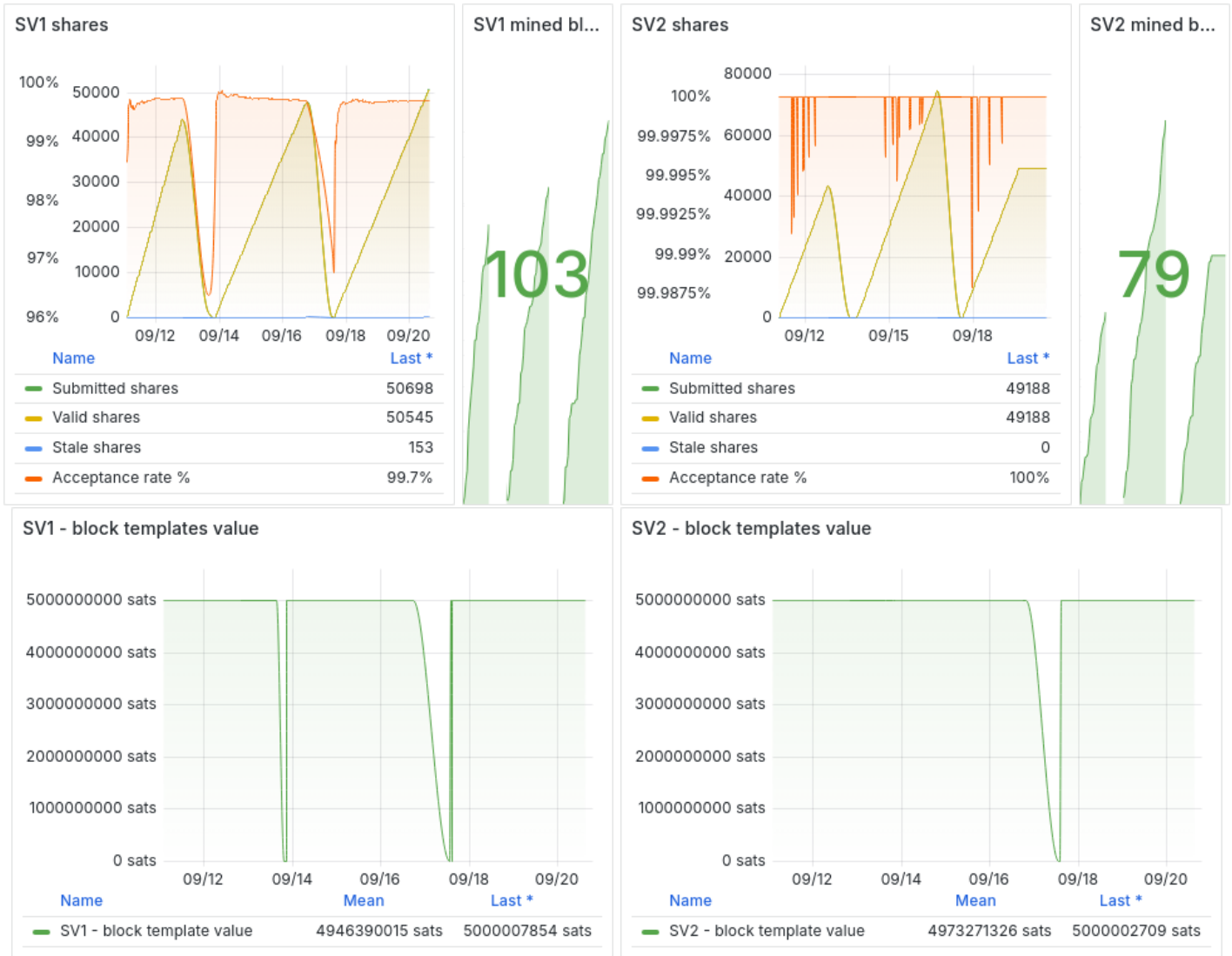
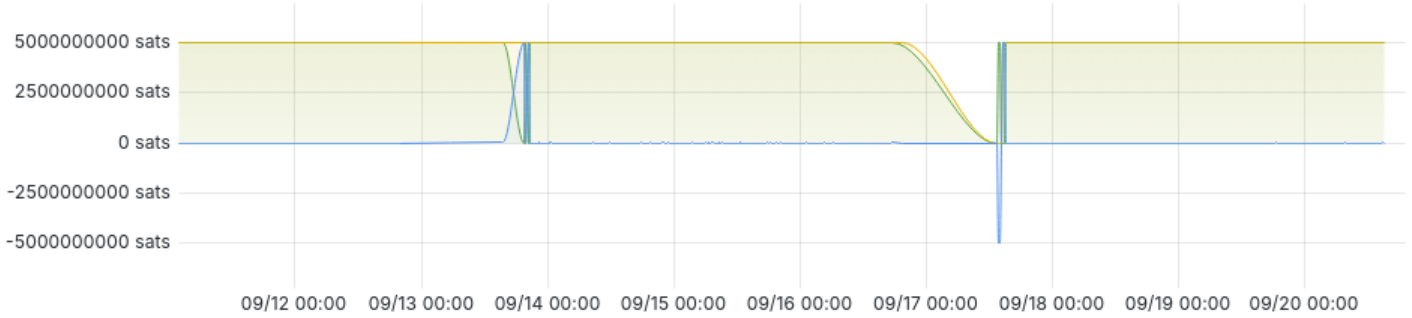
SRI benchmarking tool

Benchmarking tool to measure Stratum V2 and Stratum (V1) protocol performances in different contexts

Wed Sep 11 01:55:00 UTC 2024
to
Fri Sep 20 19:00:00 UTC 2024

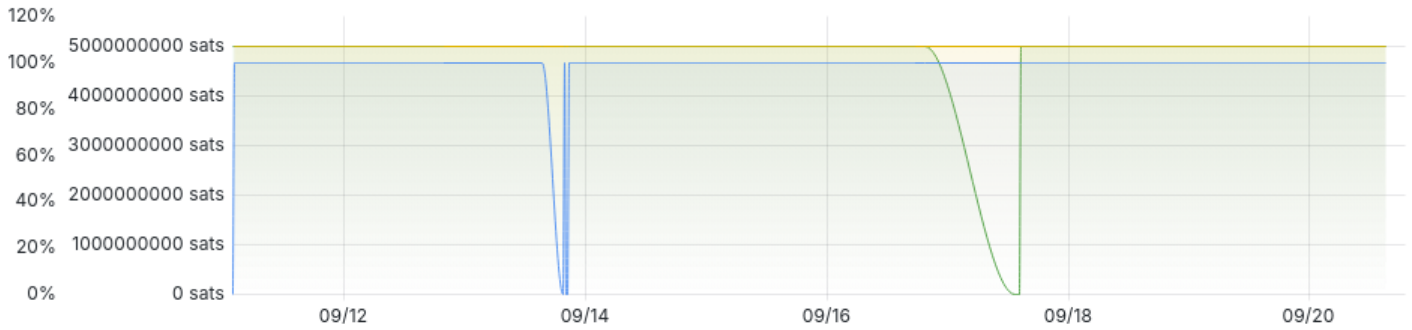


SV1 vs SV2 - block templates value



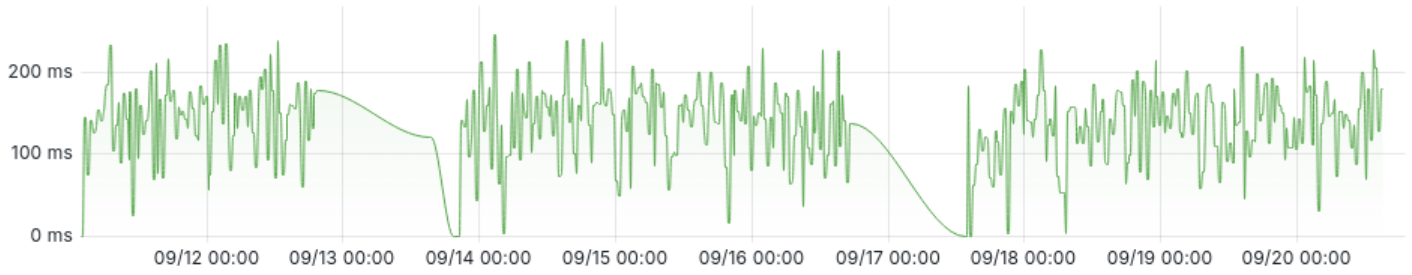
Name	Mean	Last *
SV1 - block template value	4953028959 sats	5000007854 sats
SV2 - block template value	4973199158 sats	5000002709 sats
SV2 delta	20107233 sats	-5145 sats

SV2 - block templates value - comparison with mined blocks on the network



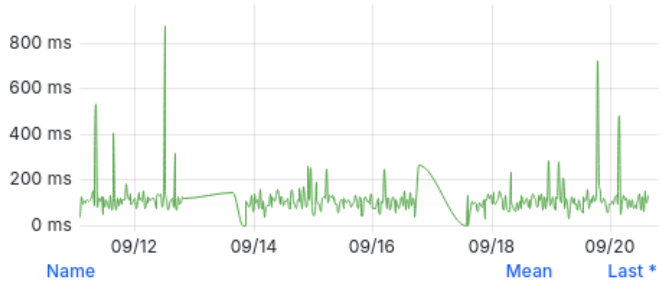
Name	Mean	Last *
Network - block template value	4973195736 sats	5000001506 sats
SV2 - block template value	5000007340 sats	5000001506 sats
SV2 delta %	99.5%	100%

Average latency with major pools (RTT)



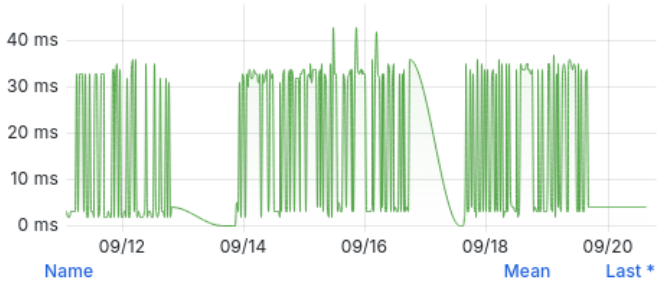
Name	Mean	Last *
Average latency with major pools (RTT)	139 ms	179 ms

SV1 - time to get a new job from Pool



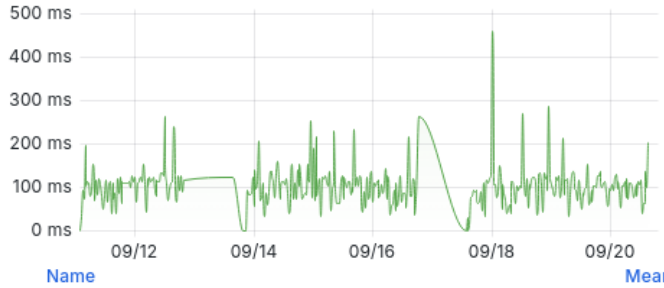
Name	Mean	Last *
SV1 - time to get a new job from Pool	115 ms	134 ms

SV2 - time to get a new job from JDC



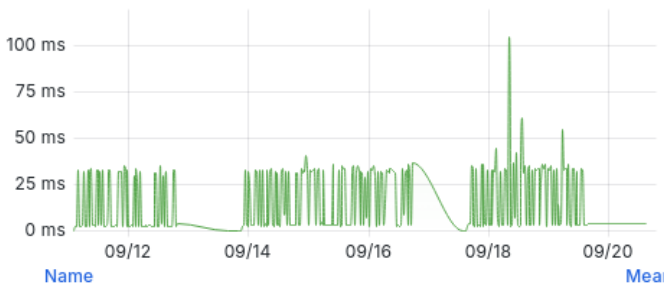
Name	Mean	Last *
SV2 - time to get a new job from JDC	16.1 ms	4 ms

SV1 - time to get a new job (after a new block found) from Pool



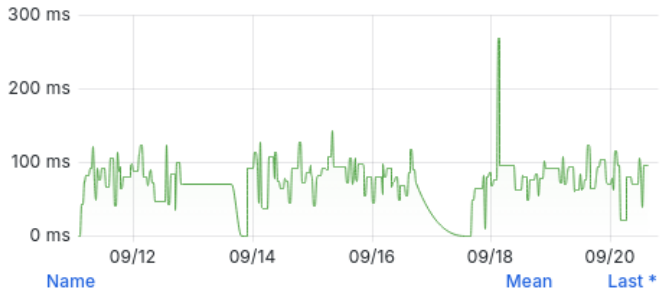
Name	Mean
SV1 - time to get a new job (after a new block found) from Pool	102 ms

SV2 - time to get a new job (after a new block found) from JDC



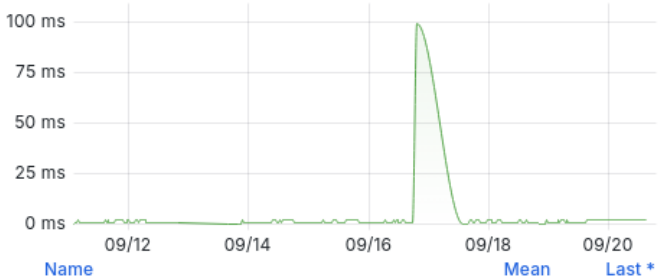
Name	Mean
SV2 - time to get a new job (after a new block found) from JDC	15.2 ms

SV1 block propagation time



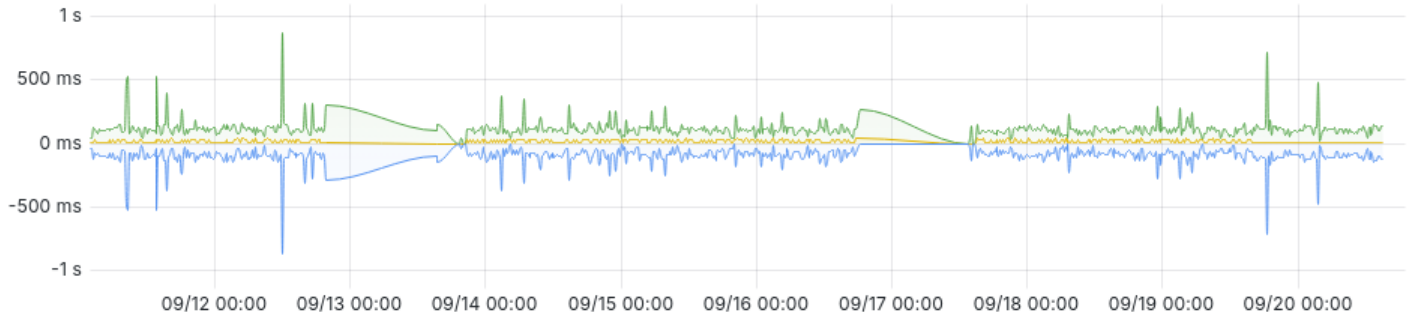
Name	Mean	Last *
SV1 block propagation time	79.1 ms	96 ms

SV2 block propagation time



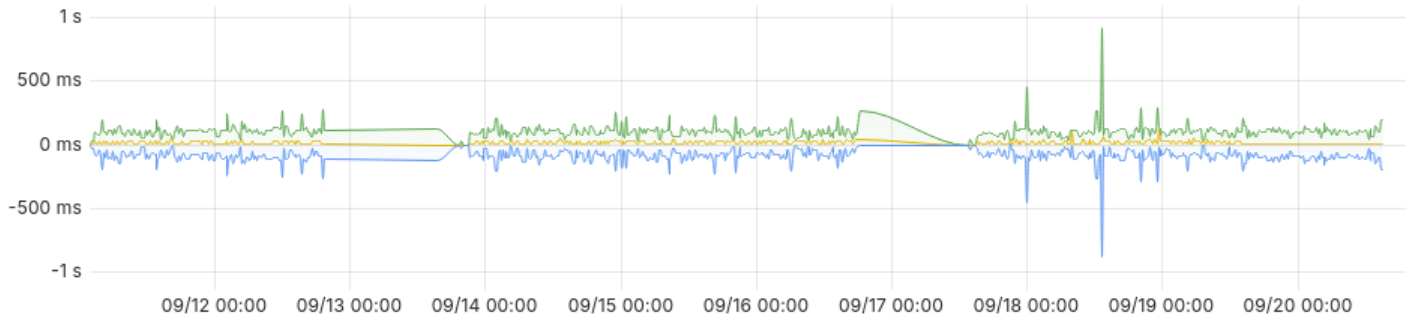
Name	Mean	Last *
SV2 block propagation time	1.56 ms	2 ms

SV1 vs SV2 - time to get a new job from Pool/JDC



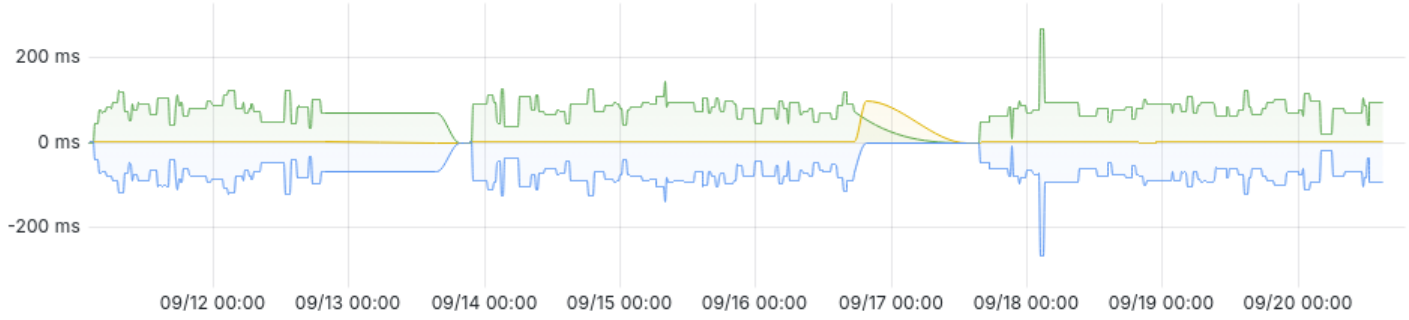
Name	Mean	Last *
SV1 - time to get a new job from Pool	113 ms	134 ms
SV2 - time to get a new job from JDC	16.0 ms	4 ms
SV2 delta	-96.6 ms	-130 ms

SV1 vs SV2 - time to get a new job (after a new block found) from Pool/JDC



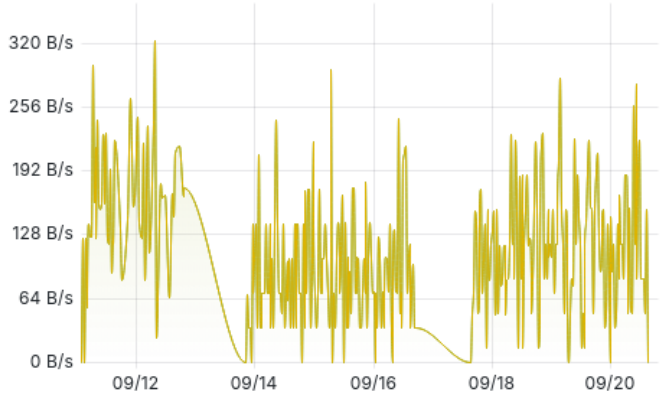
Name	Mean	Last *
SV1 - time to get a new job (after a new block found) from Pool	104 ms	202 ms
SV2 - time to get a new job (after a new block found) from JDC	15.5 ms	4 ms
SV2 delta	-88.2 ms	-198 ms

SV1 vs SV2 - block propagation time



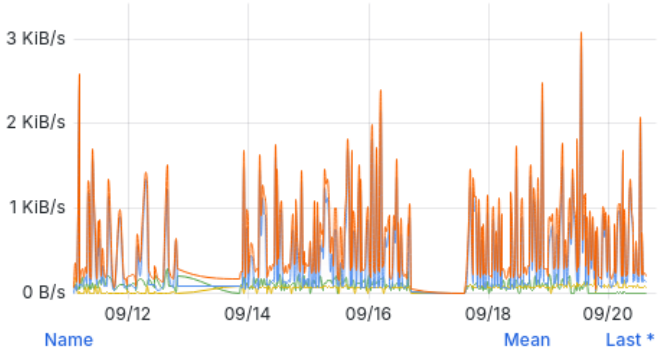
Name	Mean	Last *
SV1 - block propagation time	78.9 ms	96 ms
SV2 - block propagation time	1.43 ms	2 ms
SV2 delta	-77.5 ms	-94 ms

SV1 - Network Tx (farm level)



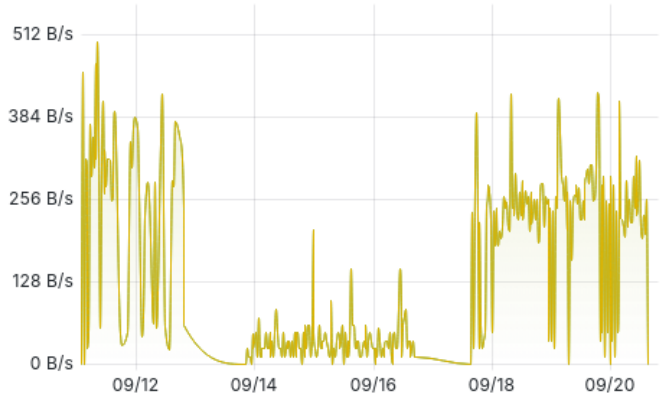
Name	Mean	Last *
Mining Farm Network Interface	111 B/s	0 B/s
Total (farm level)	111 B/s	0 B/s

SV2 - Network Tx (farm level)



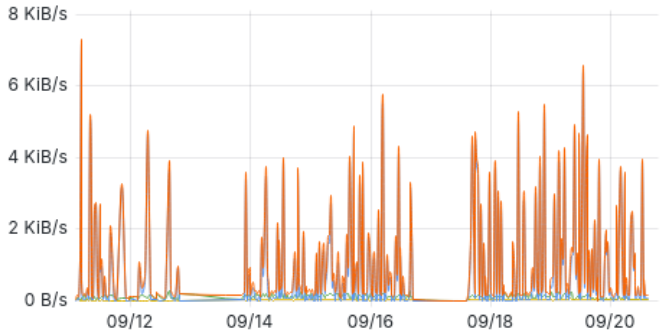
Name	Mean	Last *
Translator	91.6 B/s	6.93 B/s
Job Declarator Client (JDC)	69.1 B/s	74.8 B/s
Template Provider (TP)	475 B/s	135 B/s
Total (farm level)	636 B/s	217 B/s

SV1 - Network Rx (farm level)



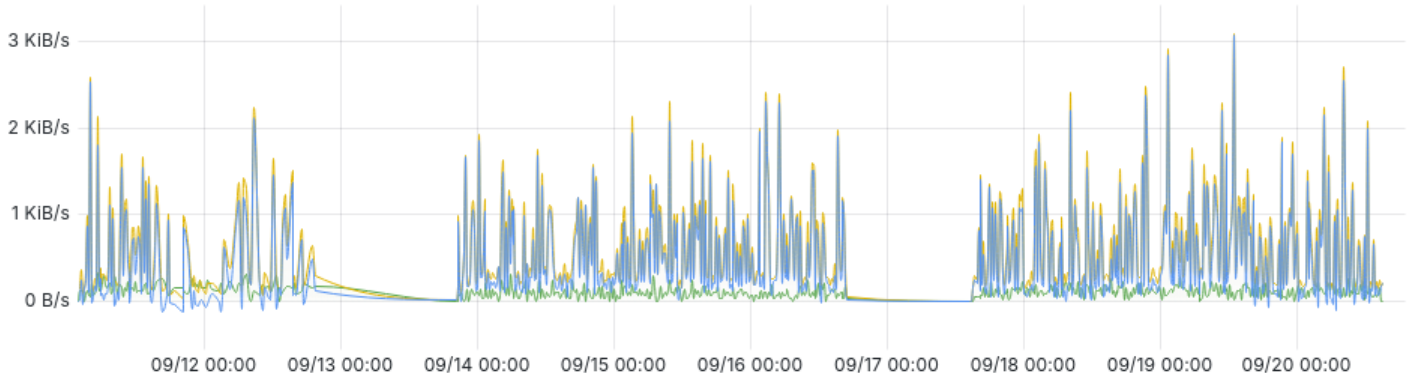
Name	Mean	Last *
Mining Farm Network Interface	151 B/s	0 B/s
Total (farm level)	151 B/s	0 B/s

SV2 - Network Rx (farm level)



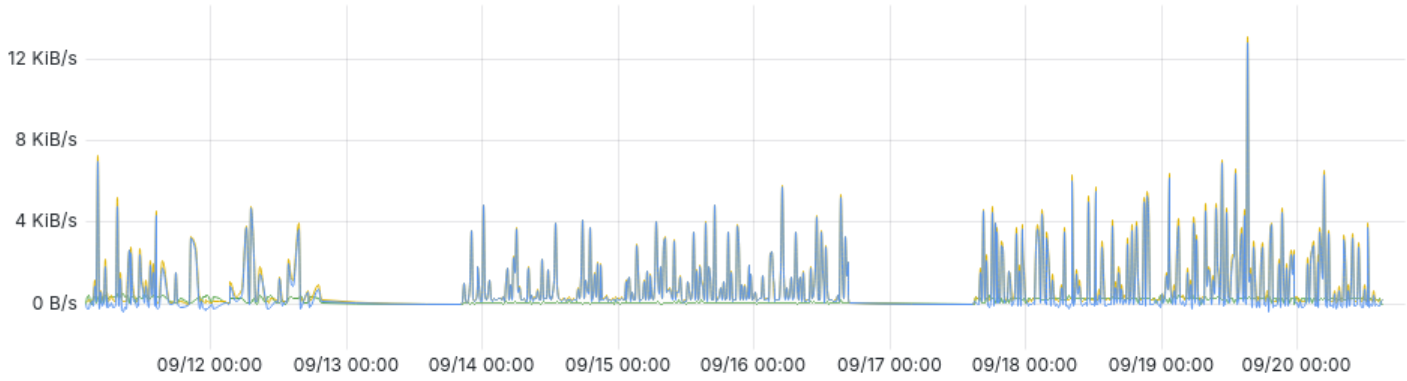
Name	Mean	Last *
Translator	121 B/s	52.5 B/s
Job Declarator Client (JDC)	33.9 B/s	39.5 B/s
Template Provider (TP)	908 B/s	69.3 B/s
Total (farm level)	1.04 KiB/s	161 B/s

SV1 vs SV2 - Network Tx (farm level)



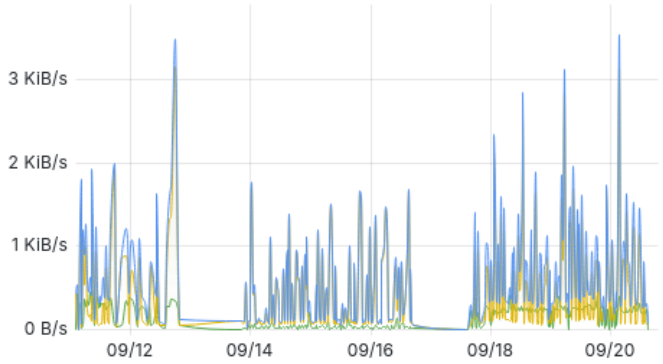
Name	Mean	Last *
SV1 (farm net interface)	112 B/s	0 B/s
SV2 (translator + jdc + tp)	636 B/s	217 B/s
SV2 delta	523 B/s	217 B/s

SV1 vs SV2 - Network Rx (farm level)



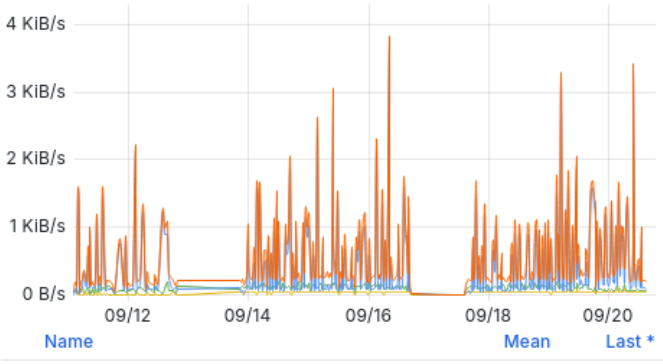
Name	Mean	Last *
SV1 (farm net interface)	154 B/s	0 B/s
SV2 (translator + jdc + tp)	1.04 KiB/s	161 B/s
SV2 delta	909 B/s	161 B/s

SV1 - Network Tx (pool level)



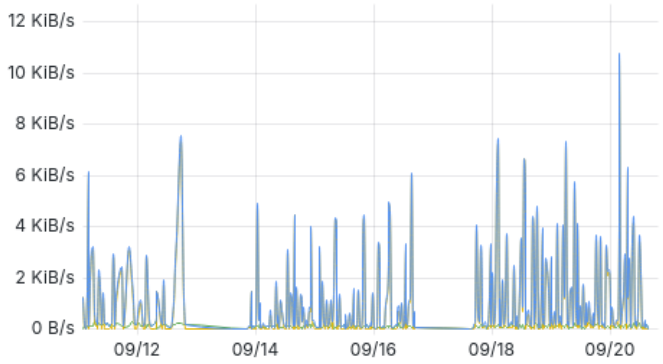
Name	Mean	Last *
Pool	151 B/s	0 B/s
Bitcoin Node	476 B/s	72 B/s
Total (pool level)	626 B/s	72 B/s

SV2 - Network Tx (pool level)



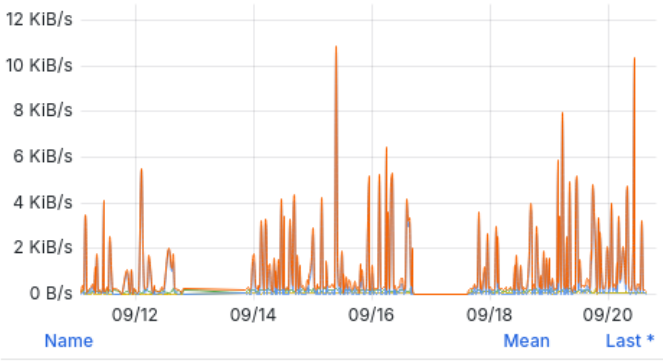
Name	Mean	Last *
Pool	109 B/s	66.1 B/s
Job Declarator Server (JDS)	33.9 B/s	39.5 B/s
Template Provider (TP)	454 B/s	81.7 B/s
Total (pool level)	597 B/s	187 B/s

SV1 - Network Rx (pool level)



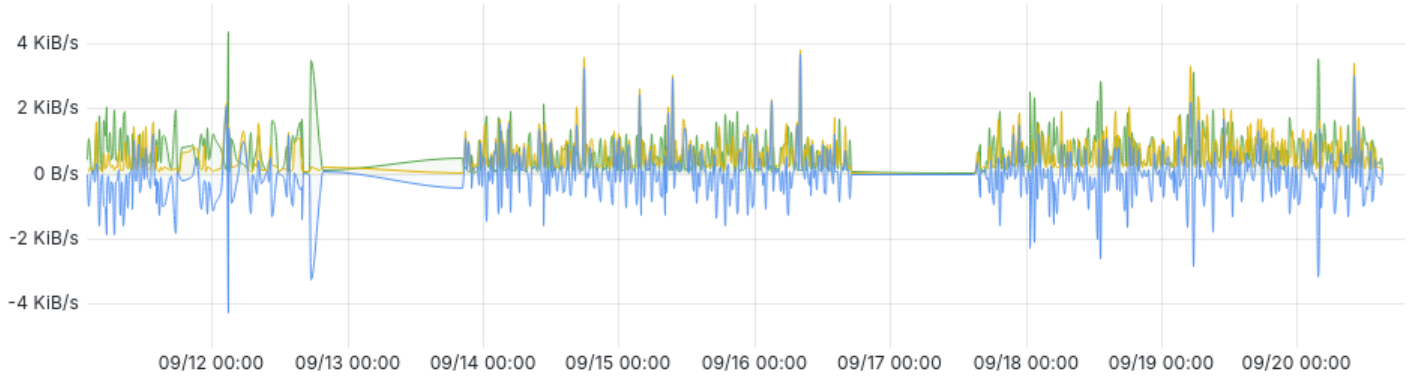
Name	Mean	Last *
Pool	111 B/s	0 B/s
Bitcoin Node	1022 B/s	17.6 B/s
Total (pool level)	1.11 KiB/s	17.6 B/s

SV2 - Network Rx (pool level)



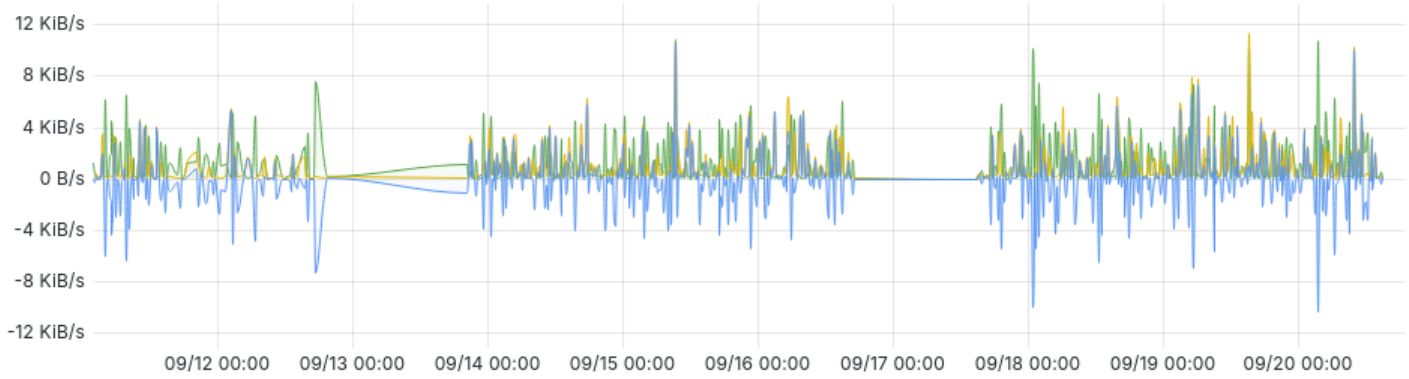
Name	Mean	Last *
Pool	145 B/s	68.8 B/s
Job Declarator Server (JDS)	69.1 B/s	74.8 B/s
Template Provider (TP)	822 B/s	17.7 B/s
Total (pool level)	1.01 KiB/s	161 B/s

SV1 vs SV2 - Network Tx (pool level)



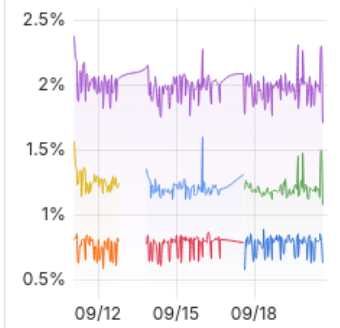
Name	Mean	Last *
SV1 (pool + bitcoin node)	631 B/s	72 B/s
SV2 (pool + jds + tp)	594 B/s	187 B/s
SV2 delta	-34.8 B/s	115 B/s

SV1 vs SV2 - Network Rx (pool level)



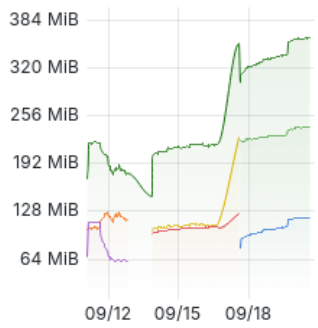
Name	Mean	Last *
SV1 (pool + bitcoin node)	1.08 KiB/s	17.6 B/s
SV2 (pool + jds + tp)	1.05 KiB/s	161 B/s
SV2 delta	-35.4 B/s	144 B/s

Pool Roles (SV1) - CPU Usage



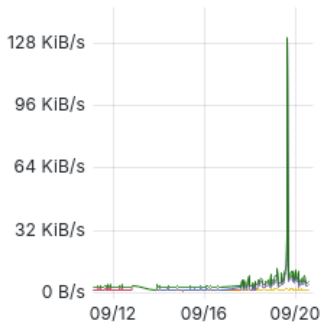
Name	Mean
sv1-pool	1.20%
sv1-pool	1.26%
sv1-pool	1.21%
sv1-node-pool-side	0.759%

Pool Roles (SV1) - Memory Us...



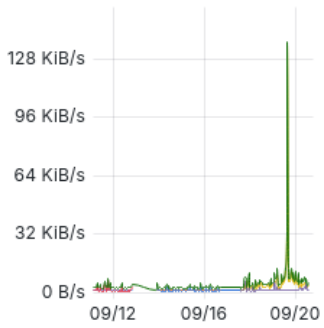
Name	Mean
sv1-pool	231 MiB
sv1-pool	110 MiB
sv1-pool	94.7 MiB
sv1-pool	116 MiB

Pool Roles (SV1) - Network Tx



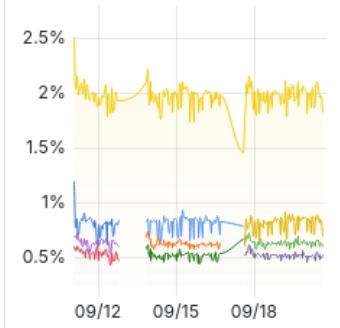
Name	Mean
sv1-pool	1.18 KiB/s
sv1-pool	1.71 KiB/s
sv1-pool	1.32 KiB/s
sv1-pool	1.28 KiB/s

Pool Roles (SV1) - Network Rx



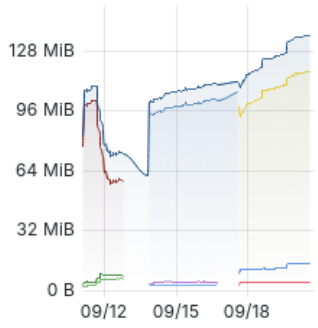
Name	Mean
sv1-pool	1.34 KiB/s
sv1-pool	6.94 KiB/s
sv1-pool	1.64 KiB/s
sv1-pool	1.58 KiB/s

Pool Roles (SV2) - CPU Usage



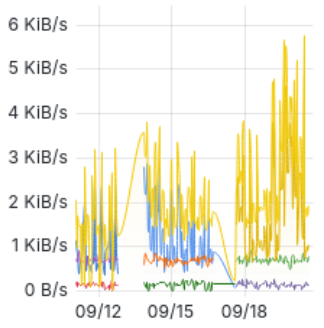
Name	Mean
sv2-jds	0.637%
sv2-tp-pool-side	0.818%
sv2-tp-pool-side	0.816%
sv2-jds	0.629%

Pool Roles (SV2) - Memory Us...



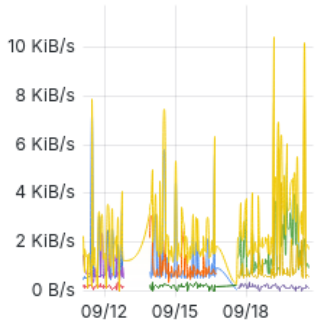
Name	Mean
sv2-pool	5.04 MiB
sv2-pool	5.49 MiB
sv2-pool	3.12 MiB
sv2-pool	3.94 MiB

Pool Roles (SV2) - Network Tx

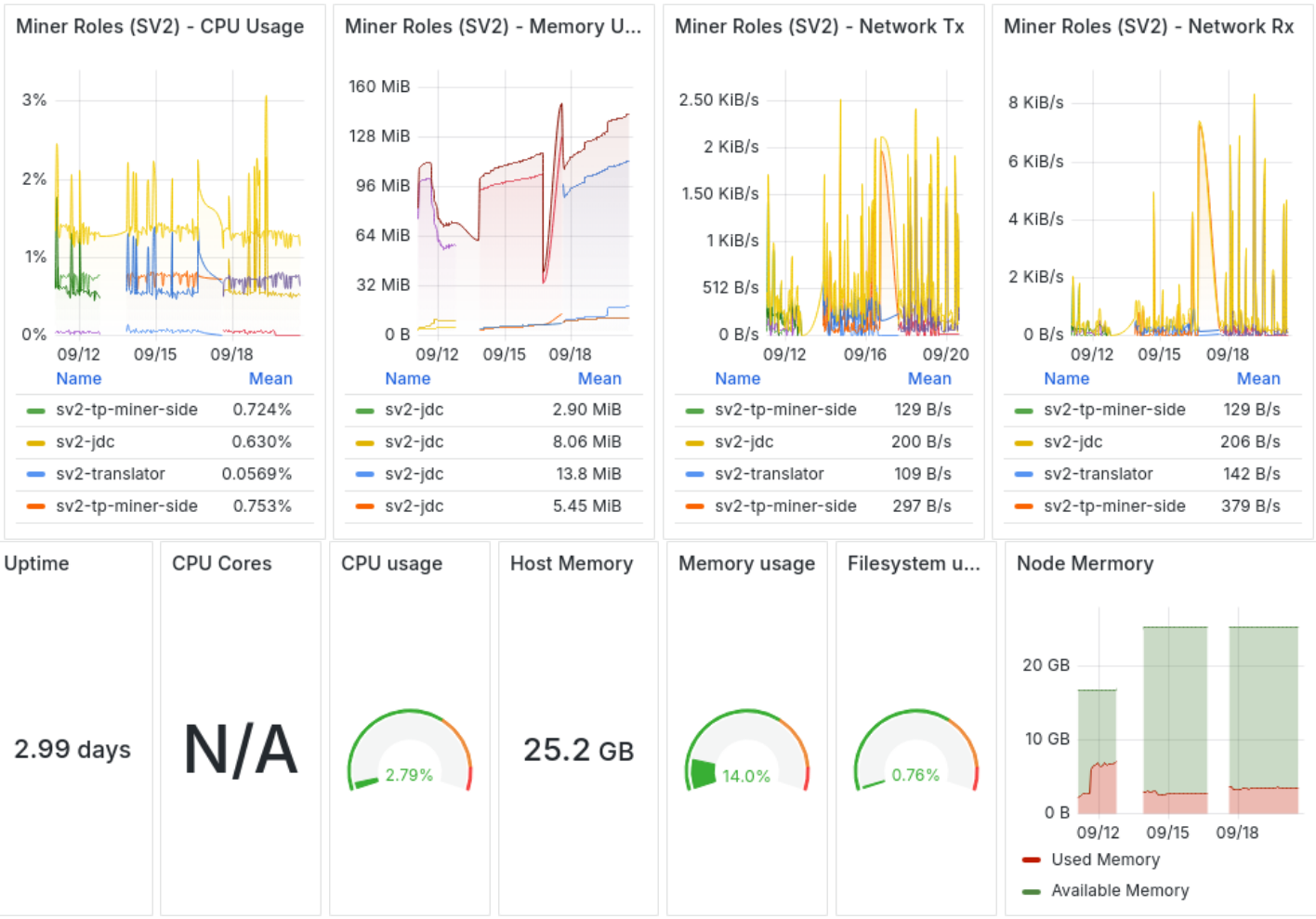


Name	Mean
sv2-jds	712 B/s
sv2-tp-pool-side	1.94 KiB/s
sv2-tp-pool-side	1.17 KiB/s
sv2-jds	710 B/s

Pool Roles (SV2) - Network Rx



Name	Mean
sv2-jds	1.72 KiB/s
sv2-tp-pool-side	1.12 KiB/s
sv2-tp-pool-side	1.08 KiB/s
sv2-jds	1.01 KiB/s


Miner Roles (SV2) - CPU Usage
3%
2%
1%
0%
09/12
09/15
09/18
Name
Mean
sv2-tp-miner-side 0.724%
sv2-jdc 0.630%
sv2-translator 0.0569%
sv2-tp-miner-side 0.753%
Miner Roles (SV2) - Memory U...
160 MiB
128 MiB
96 MiB
64 MiB
32 MiB
0 B
09/12
09/15
09/18
Name
Mean
sv2-jdc 2.90 MiB
sv2-jdc 8.06 MiB
sv2-jdc 13.8 MiB
sv2-jdc 5.45 MiB
Miner Roles (SV2) - Network Tx
2.50 KiB/s
2 KiB/s
1.50 KiB/s
1 KiB/s
512 B/s
0 B/s
09/12
09/16
09/20
Name
Mean
sv2-tp-miner-side 129 B/s
sv2-jdc 200 B/s
sv2-translator 109 B/s
sv2-tp-miner-side 297 B/s
Miner Roles (SV2) - Network Rx
8 KiB/s
6 KiB/s
4 KiB/s
2 KiB/s
0 B/s
09/12
09/15
09/18
Name
Mean
sv2-tp-miner-side 129 B/s
sv2-jdc 206 B/s
sv2-translator 142 B/s
sv2-tp-miner-side 379 B/s
Uptime
2.99 days
CPU Cores
N/A
CPU usage
2.79%
Host Memory
25.2 GB
Memory usage
14.0%
Filesystem u...
0.76%
Node Mermory
20 GB
10 GB
0 B
09/12
09/15
09/18
Used Memory
Available Memory