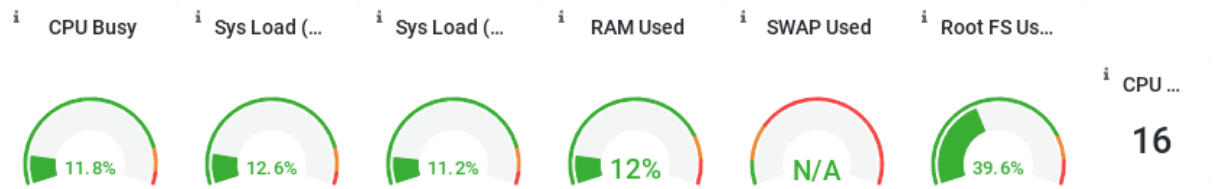
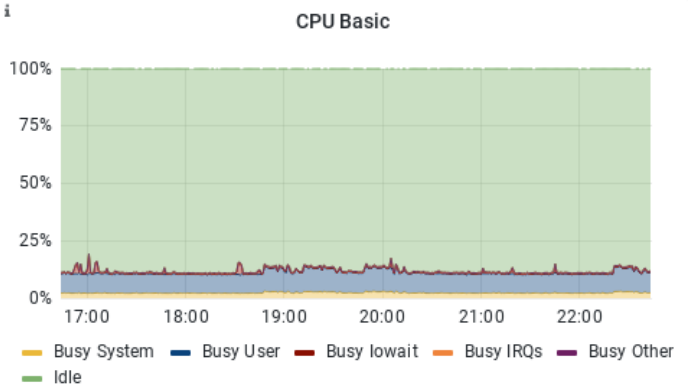
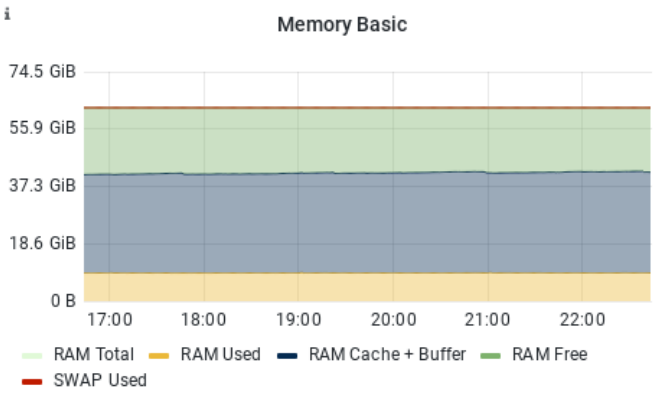
Host Metrics

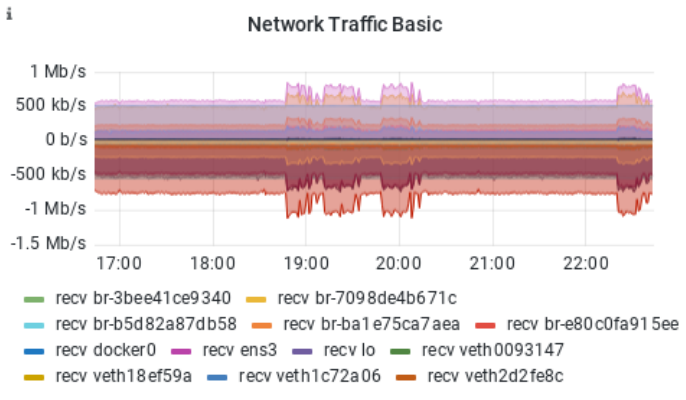
The dashboard visualizes host metrics collected by node_exporter. (based on: https://grafana.com/grafana/dashboards/1860)

Fri Mar 4 16:43:54 UTC 2022
to
Fri Mar 4 22:43:54 UTC 2022

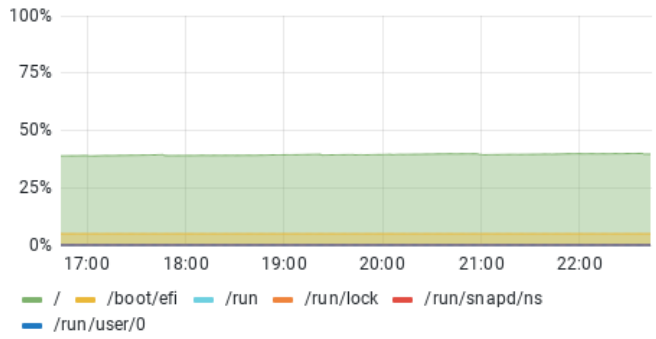




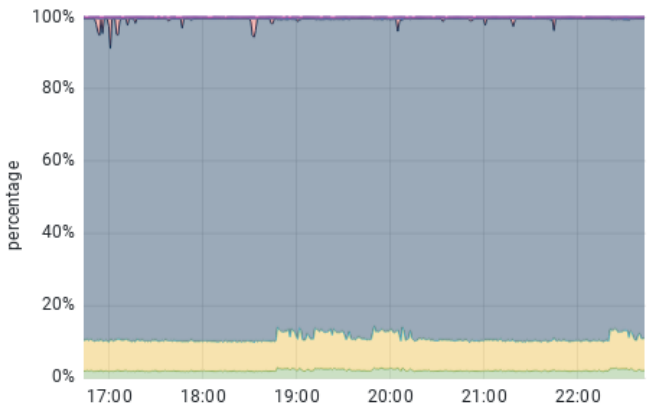




Disk Space Used Basic

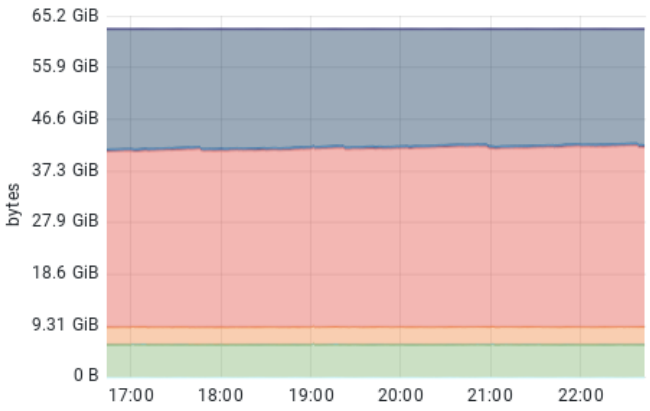


CPU



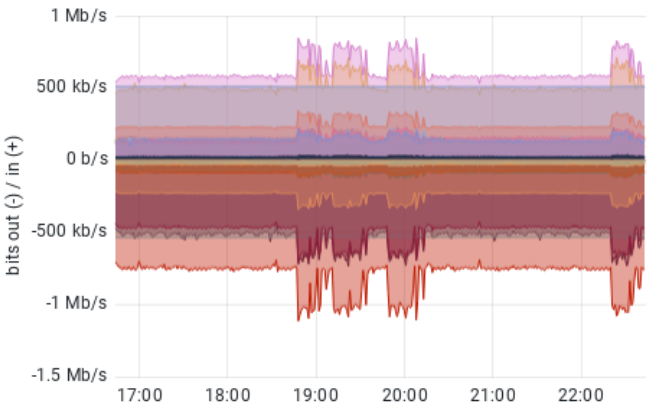
- System - Processes executing in kernel mode
- User - Normal processes executing in user mode
- Nice - Niced processes executing in user mode
- Idle - Waiting for something to happen
- Iowait - Waiting for I/O to complete

Memory Stack



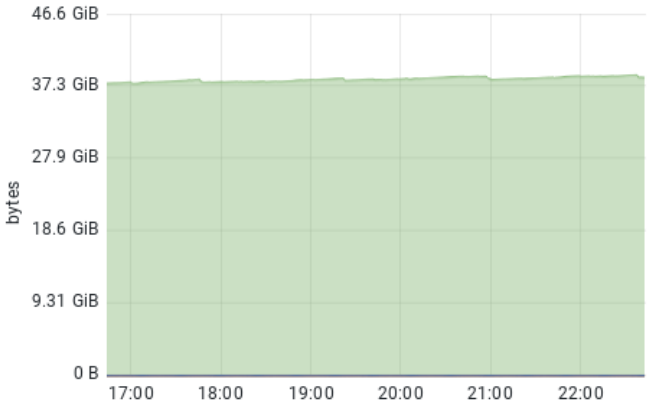
- Apps - Memory used by user-space applications
- PageTables - Memory used to map between virtual and physical memory addr
- SwapCache - Memory that keeps track of pages that have been fetched from s
- Slab - Memory used by the kernel to cache data structures for its own use (cacl
- Cache - Parked file data (file content) cache

Network Traffic



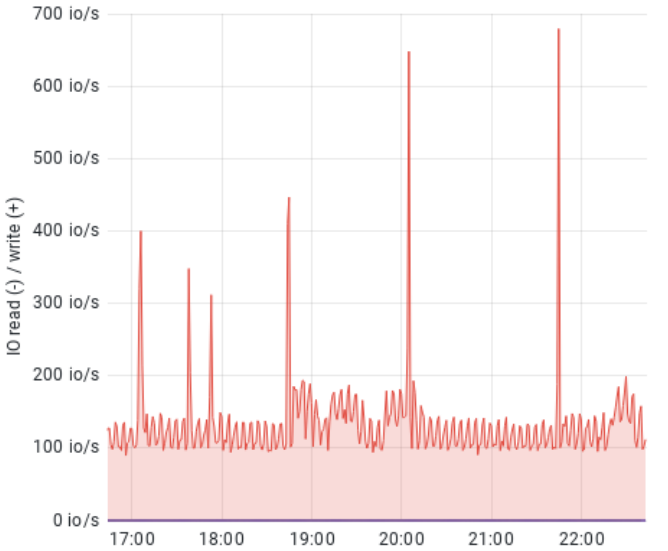
	min	max	avg	current
br-3bee41ce9340 - Receive	0 b/s	0 b/s	0 b/s	0 b
br-7098de4b671c - Receive	450 kb/s	712 kb/s	524 kb/s	518 kb
br-b5d82a87db58 - Receive	0 b/s	0 b/s	0 b/s	0 b
br-ba1e75ca7aea - Receive	35.3 kb/s	94.8 kb/s	60.4 kb/s	93.6 kb
br-e80c0fa915ee - Receive	0 b/s	0 b/s	0 b/s	0 b

Disk Space Used



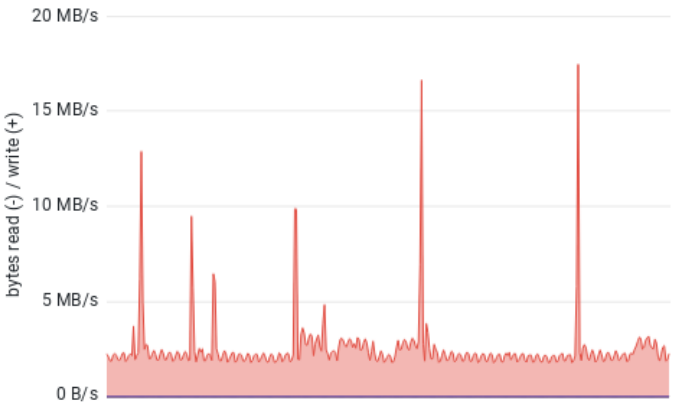
	min	max	avg	current
/run/lock	0 B	0 B	0 B	0 B
/run/user/0	0 B	0 B	0 B	0 B
/run	3.680 MiB	3.688 MiB	3.681 MiB	3.684 MiB
/run/snapd/ns	3.680 MiB	3.688 MiB	3.681 MiB	3.684 MiB
/boot/efi	5.196 MiB	5.196 MiB	5.196 MiB	5.196 MiB

Disk IOps



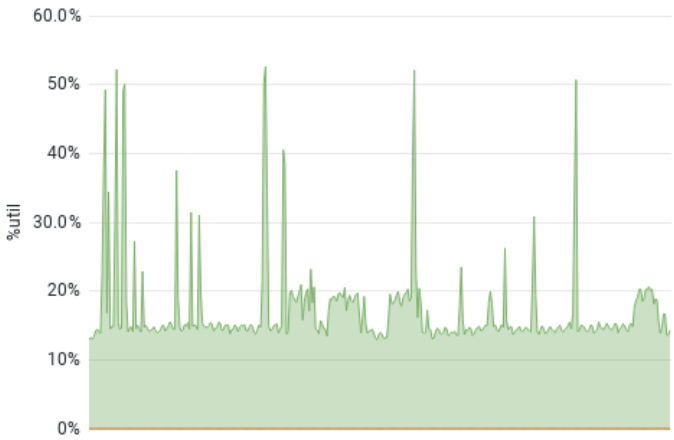
	min	max	avg	current
vda - Writes completed	89.7 io/s	679 io/s	134 io/s	112 io/s

I/O Usage Read / Write



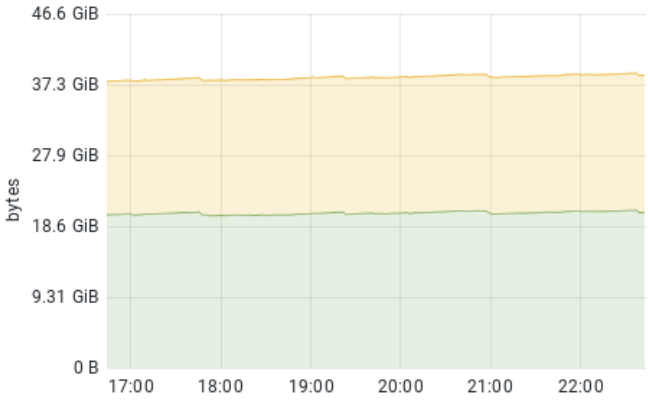
	min	max	avg
vda - Successfully read bytes	0 B/s	0 B/s	0 B/s
vdb - Successfully read bytes	0 B/s	0 B/s	0 B/s
vdc - Successfully read bytes	0 B/s	0 B/s	0 B/s
vdd - Successfully read bytes	0 B/s	0 B/s	0 B/s
vda - Successfully written bytes	1.777 MB/s	17.446 MB/s	2.517 MB/s

I/O Utilization



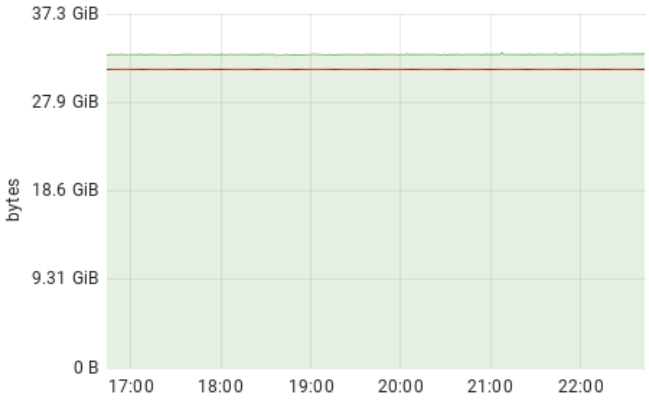
	min	max	avg	current
vda	12.933%	52.587%	17.170%	14.300%
vdb	0%	0%	0%	0%
vdc	0%	0%	0%	0%
vdd	0%	0%	0%	0%

Memory Active / Inactive



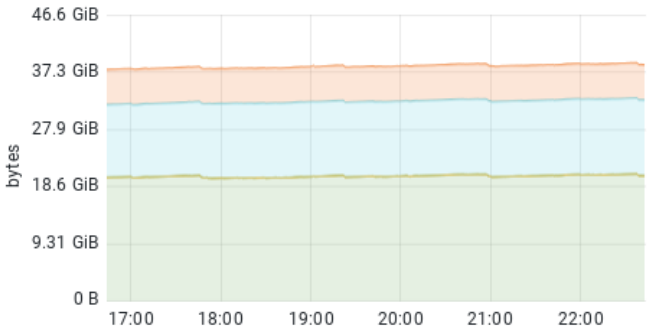
- Inactive - Memory which has been less recently used. It is more eligible to be re
- Active - Memory that has been used more recently and usually not reclaimed u

Memory Commited



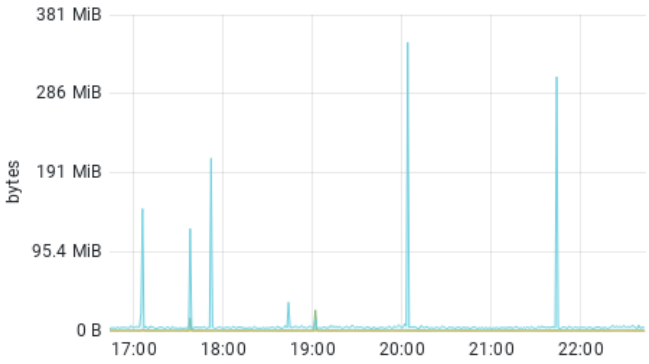
- Committed_AS - Amount of memory presently allocated on the system
- CommitLimit - Amount of memory currently available to be allocated on the sy

Memory Active / Inactive Detail



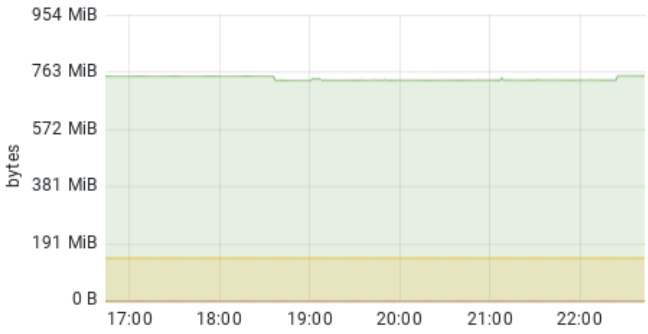
- Inactive_file - File-backed memory on inactive LRU list
- Inactive_anon - Anonymous and swap cache on inactive LRU list, including tmp
- Active_file - File-backed memory on active LRU list
- Active_anon - Anonymous and swap cache on active least-recently-used (LRU)

Memory Writeback and Dirty



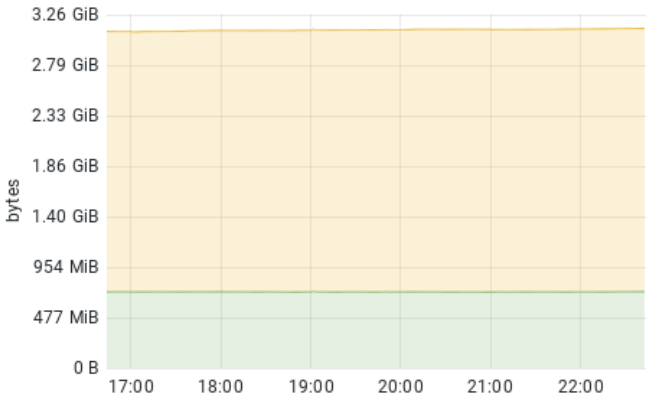
- Writeback - Memory which is actively being written back to disk
- WritebackTmp - Memory used by FUSE for temporary writeback buffers
- Dirty - Memory which is waiting to get written back to the disk 1.86

Memory Shared and Mapped



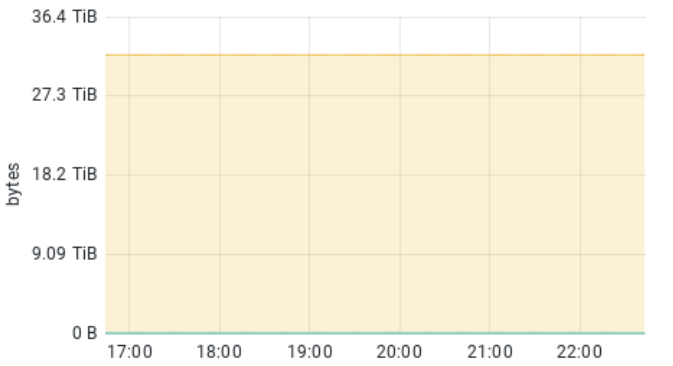
- Mapped - Used memory in mapped pages files which have been mmaped, such
- Shmem - Used shared memory (shared between several processes, thus includ
- ShmemHugePages - Memory used by shared memory (shmem) and tmpfs allc
- ShmemPmdMapped - Ammount of shared (shmem/tmpfs) memory backed by

Memory Slab



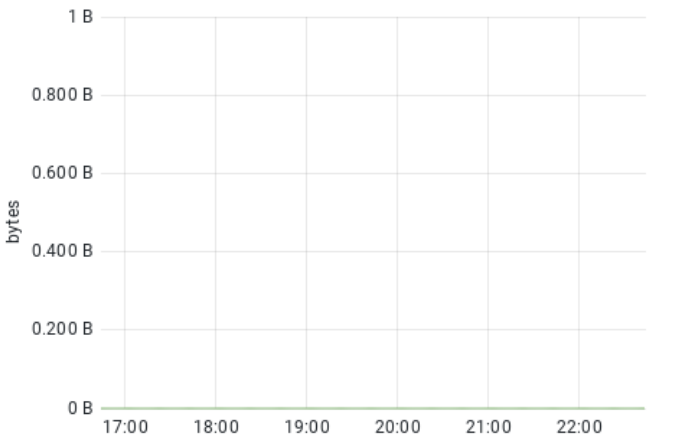
- SUnreclaim - Part of Slab, that cannot be reclaimed on memory pressure 71
- SReclaimable - Part of Slab, that might be reclaimed, such as caches

Memory Vmalloc



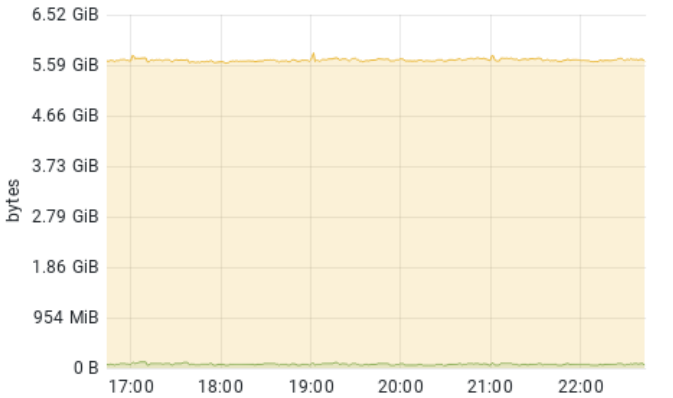
VmallocChunk - Largest contigious block of vmalloc area which is free		
VmallocTotal - Total size of vmalloc memory area		32.0
VmallocUsed - Amount of vmalloc area which is used		70.3

Memory Bounce



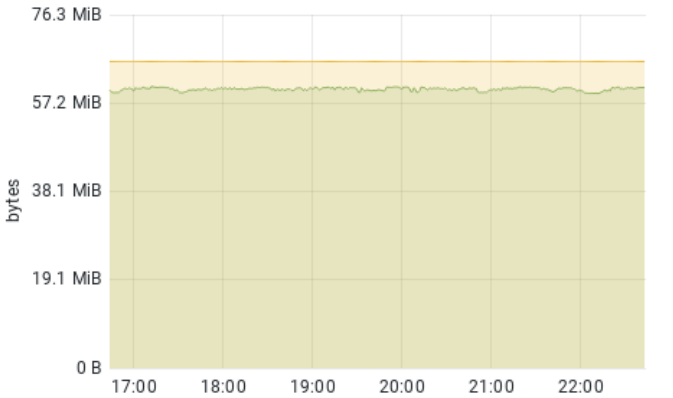
	min	max	avg	curr
Bounce - Memory used for block device bounce buffers	0 B	0 B	0 B	

Memory Anonymous



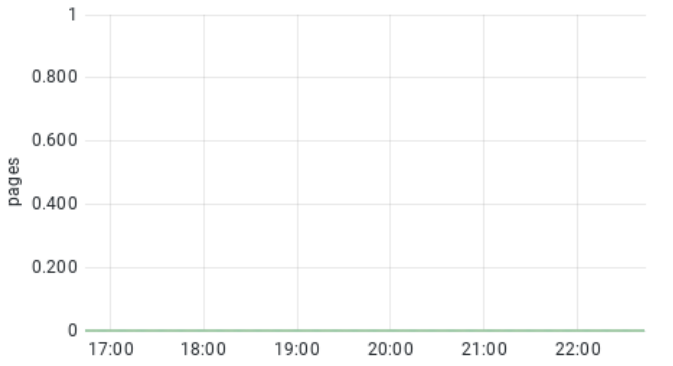
	min	m
AnonHugePages - Memory in anonymous huge pages	40.00 MiB	116.00
AnonPages - Memory in user pages not backed by files	5.63 GiB	5.81

Memory Kernel / CPU



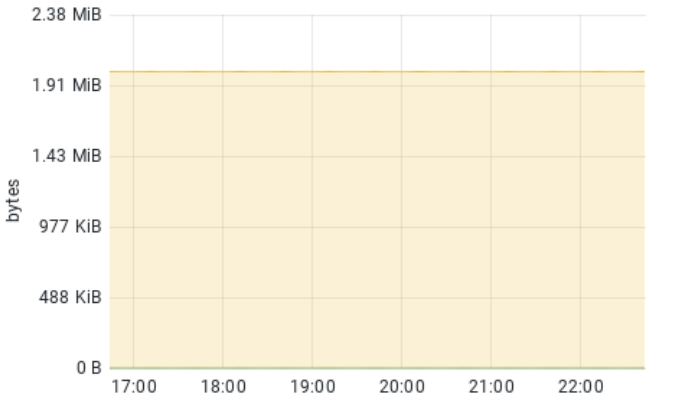
KernelStack - Kernel memory stack. This is not reclaimable	59.2
PerCPU - Per CPU memory allocated dynamically by loadable modules	66.1

Memory HugePages Counter



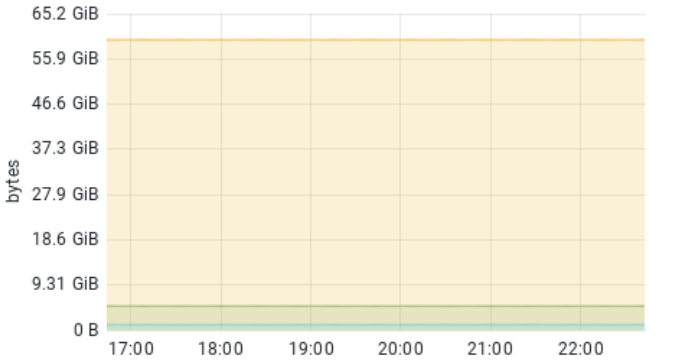
HugePages_Free - Huge pages in the pool that are not yet allocated	
HugePages_Rsvd - Huge pages for which a commitment to allocate from the p	
HugePages_Surp - Huge pages in the pool above the value in /proc/sys/vm/nr	

Memory HugePages Size



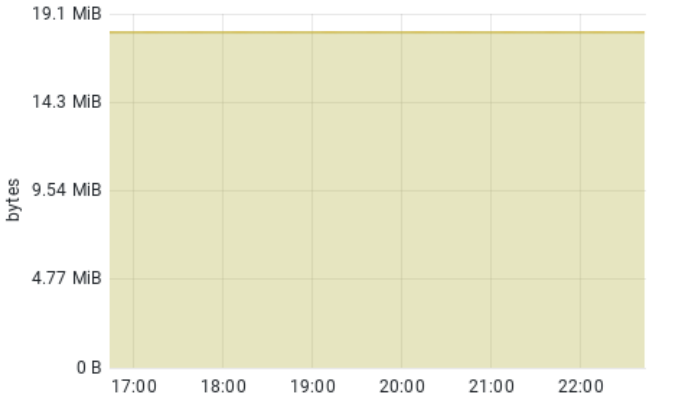
	min	max	cu
HugePages - Total size of the pool of huge pages	0 B	0 B	
Hugepagesize - Huge Page size	2.00 MiB	2.00 MiB	2.0

Memory DirectMap



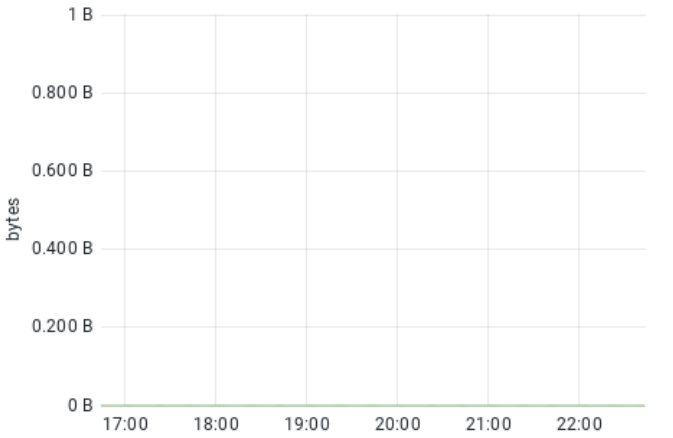
	min	max
DirectMap1G - Amount of pages mapped as this size	5.00 GiB	5.00 GiB
DirectMap2M - Amount of pages mapped as this size	59.85 GiB	59.85 GiB
DirectMap4K - Amount of pages mapped as this size	1.15 GiB	1.15 GiB

Memory Unevictable and MLocked



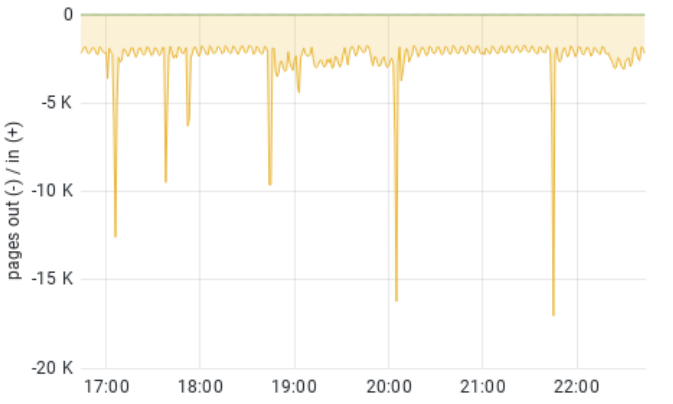
- Unevictable - Amount of unevictable memory that can't be swapped out for a v
- MLocked - Size of pages locked to memory using the mlock() system call

Memory NFS



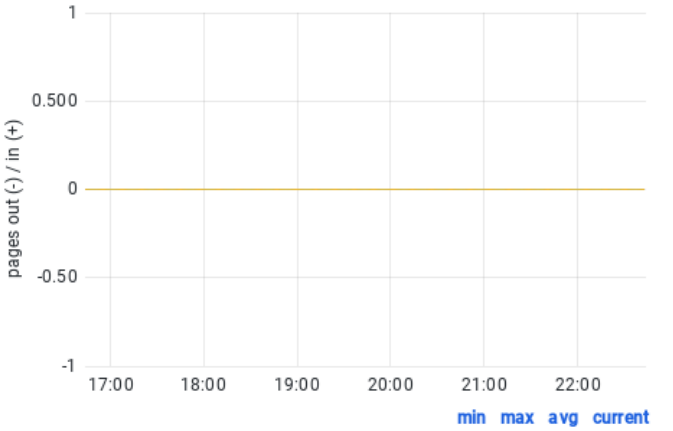
- NFS Unstable - Memory in NFS pages sent to the server, but not yet commited t

Memory Pages In / Out



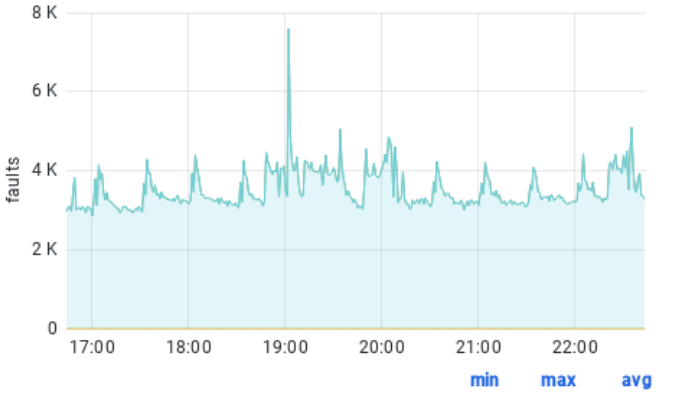
	min	max	avg	current
Pagesin - Page in operations	0	0	0	0
Pagesout - Page out operations	1.74 K	17.0 K	2.46 K	2.20 K

Memory Pages Swap In / Out



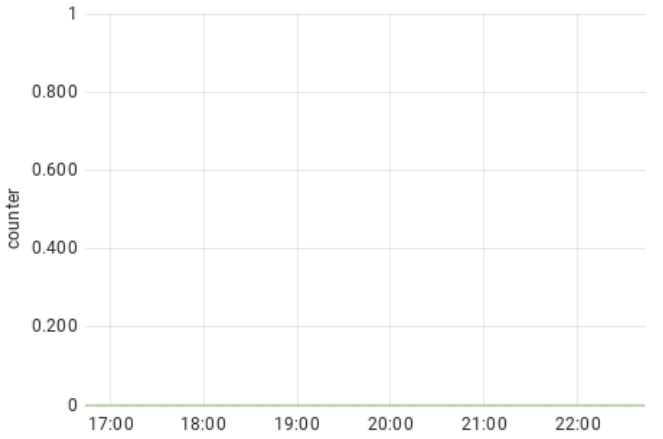
	min	max	avg	current
Pswpin - Pages swapped in	0	0	0	0
Pswpout - Pages swapped out	0	0	0	0

Memory Page Faults



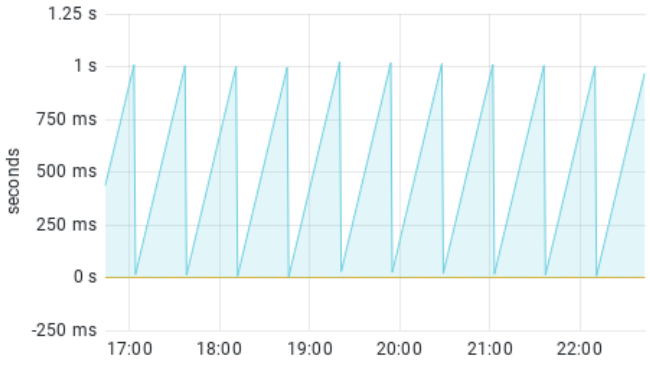
	min	max	avg
Pgfault - Page major and minor fault operations	2.85 K	7.60 K	3.52 K
Pgmajfault - Major page fault operations	0	0	0
Pgminfault - Minor page fault operations	2.85 K	7.60 K	3.52 K

OOM Killer



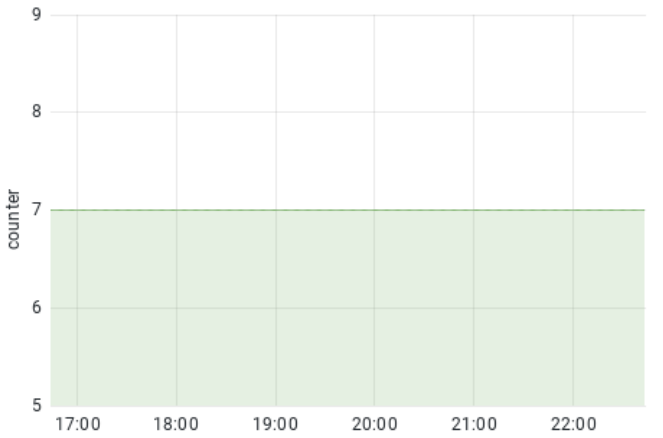
	min	max	avg	current
oom killer invocations	0	0	0	0

Time Syncronized Drift



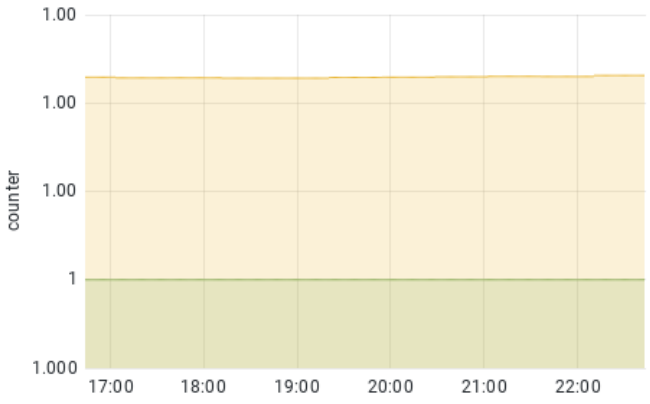
	min	max
Estimated error in seconds	0 s	0 s
Time offset in between local system and reference clock	-165 µs	239 µs
Maximum error in seconds	2 ms	1.02 s

Time PLL Adjust



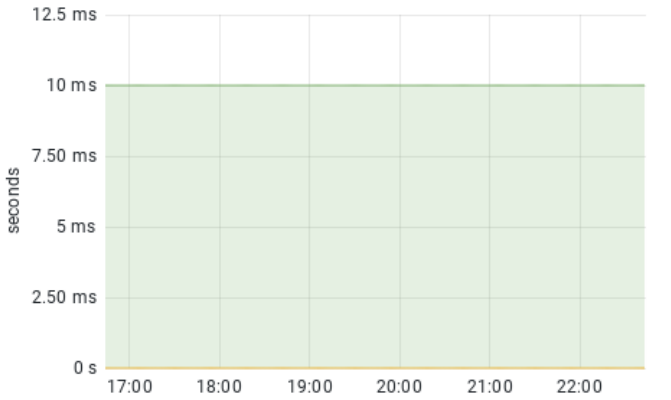
	min	max	avg	current
Phase-locked loop time adjust	7	7	7	7

Time Syncronized Status



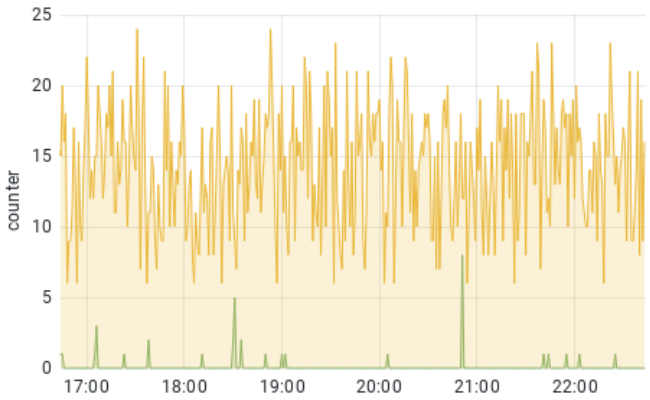
	min	max	avg
Is clock synchronized to a reliable server (1 = yes, 0 = no)	1	1	
Local clock frequency adjustment	1.00	1.00	1.0

Time Misc



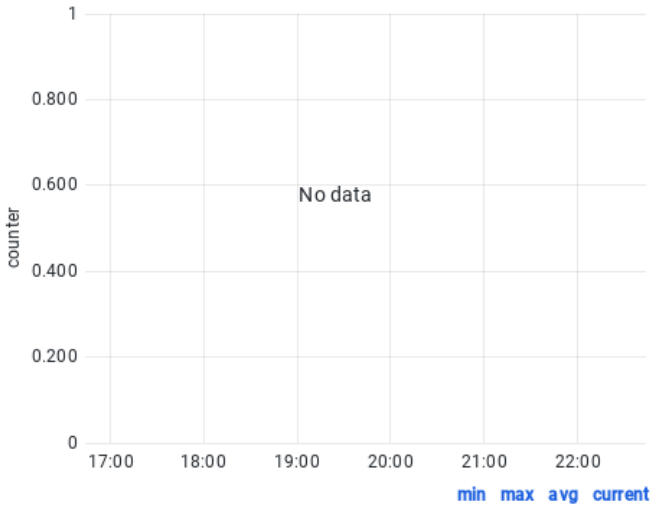
	min	max	avg	current
Seconds between clock ticks	10 ms	10 ms	10.00 ms	10 ms
International Atomic Time (TAI) offset	0 s	0 s	0 s	0 s

Processes Status

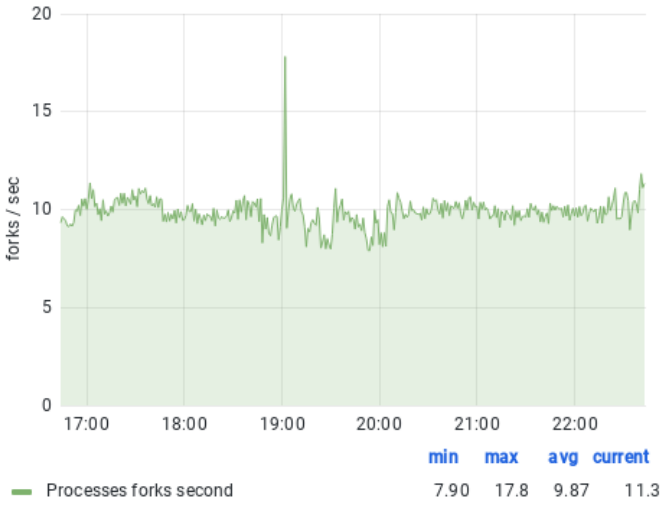


	min	max	avg	current
Processes blocked waiting for I/O to complete	0	8	0.0997	0
Processes in runnable state	6	24	14.2	16

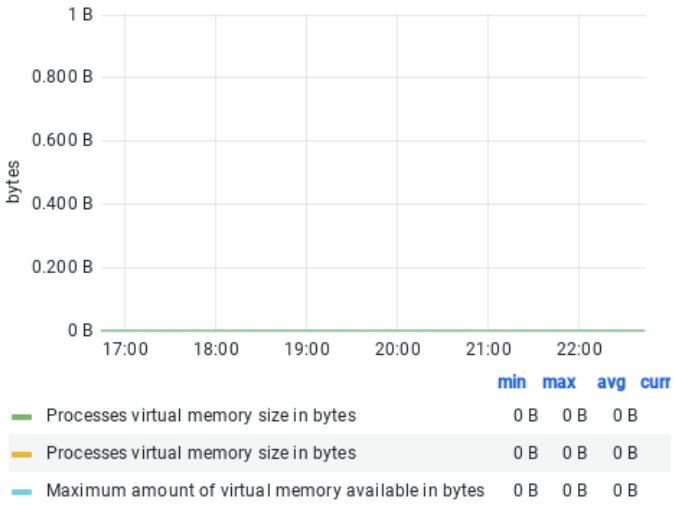
Processes State



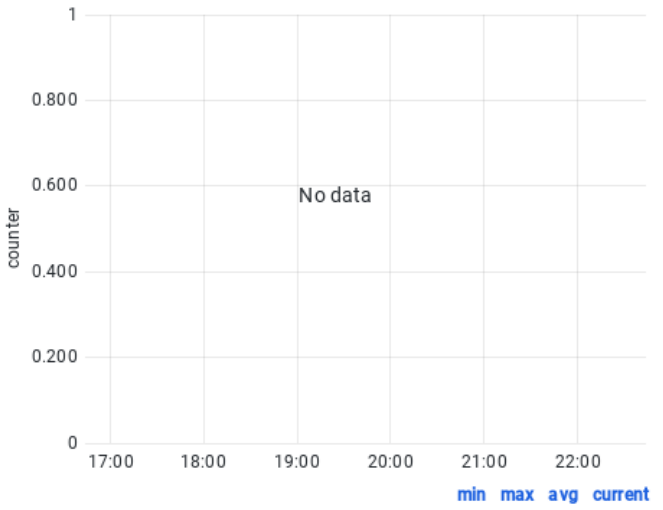
Processes Forks



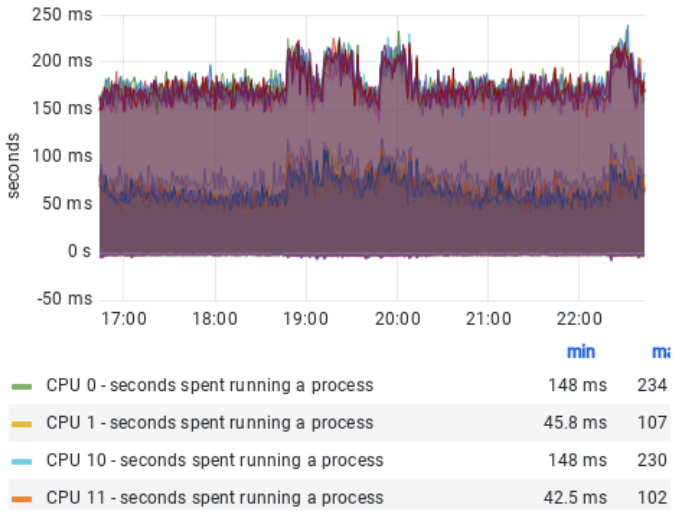
Processes Memory



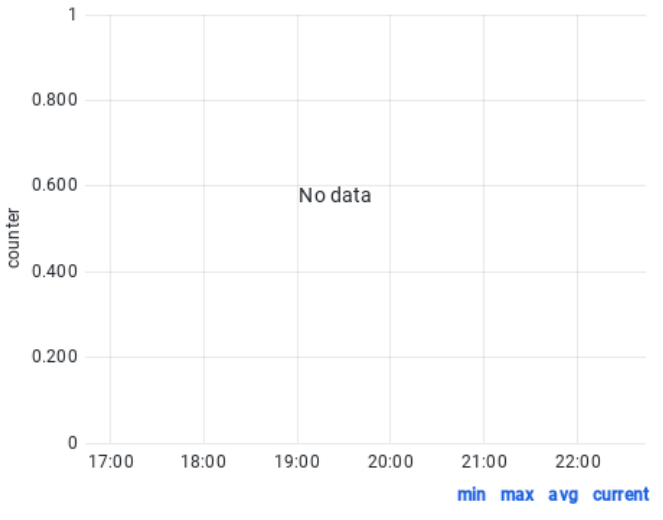
PIDs Number and Limit



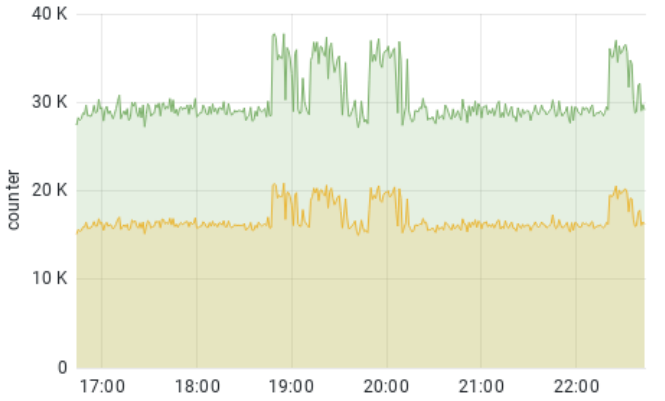
Process schedule stats Running / Waiting



Threads Number and Limit

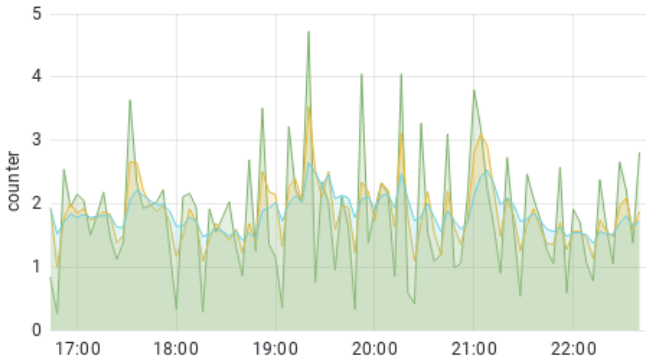


Context Switches / Interrupts



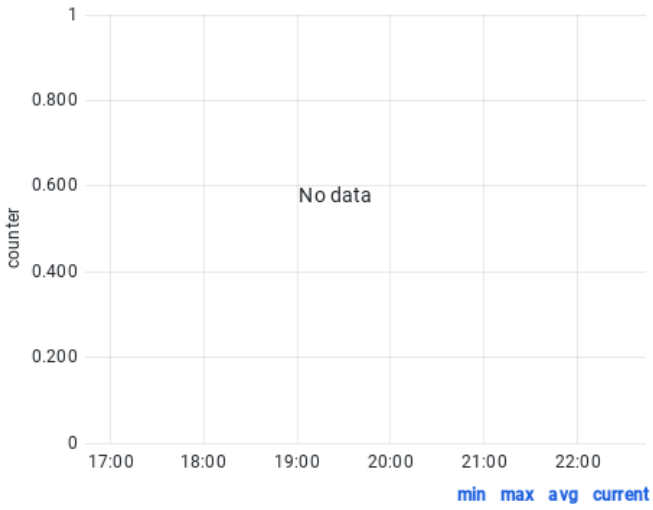
	min	max	avg	current
Context switches	27.1 K	37.8 K	30.3 K	29.1 K
Interrupts	15.0 K	20.9 K	16.8 K	16.2 K

System Load



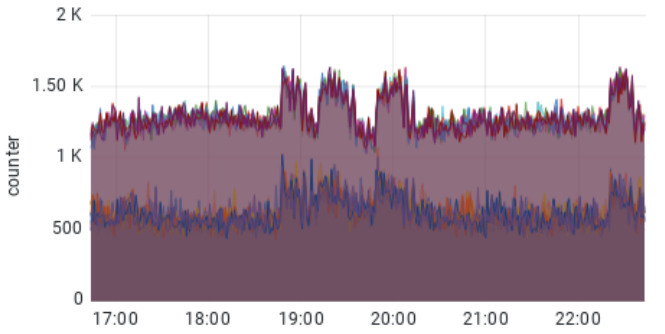
	min	max	avg	current
Load 1m	0.260	4.72	1.84	2.81
Load 5m	0.990	3.54	1.85	1.87
Load 15m	1.37	2.65	1.85	1.72

Interrupts Detail



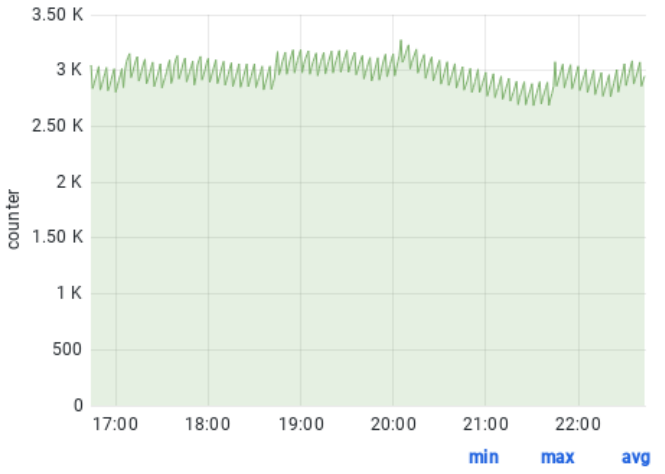
	min	max	avg	current

Schedule timeslices executed by each cpu



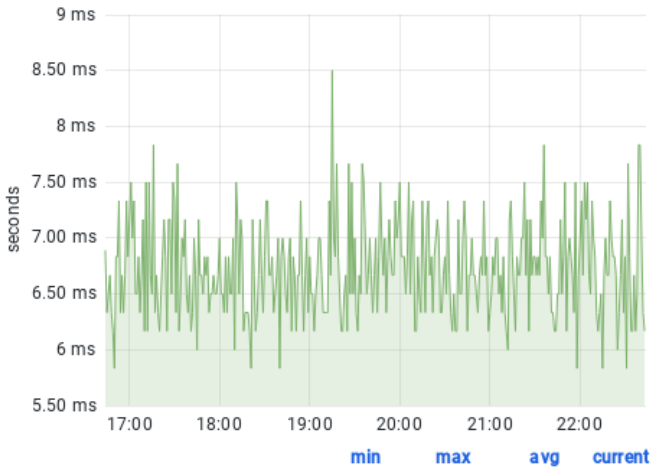
	min	max	avg	current
CPU 0	1.10 K	1.62 K	1.29 K	1.24 K
CPU 1	439	963	616	572
CPU 10	1.09 K	1.60 K	1.29 K	1.22 K
CPU 11	441	1.07 K	621	647

Entropy



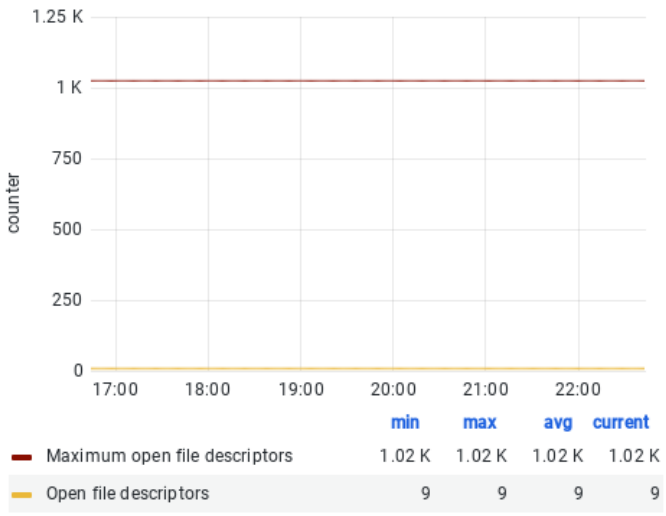
	min	max	avg
Entropy available to random number generators	2.69 K	3.27 K	2.97 K

CPU time spent in user and system contexts



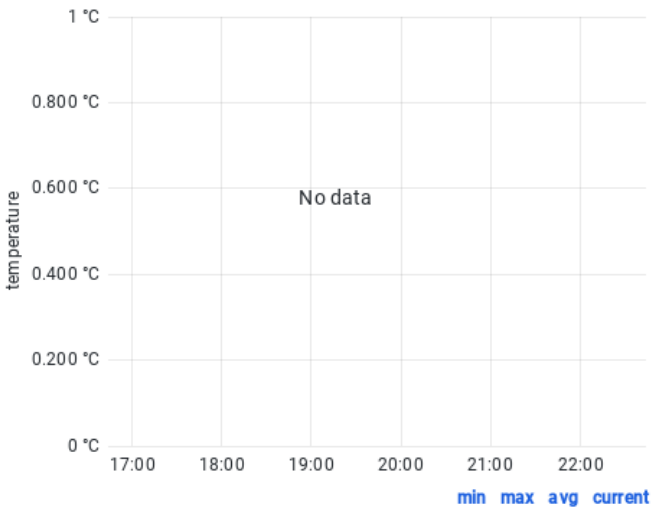
	min	max	avg	current
Time spent	5.83 ms	8.50 ms	6.73 ms	6.17 ms

File Descriptors

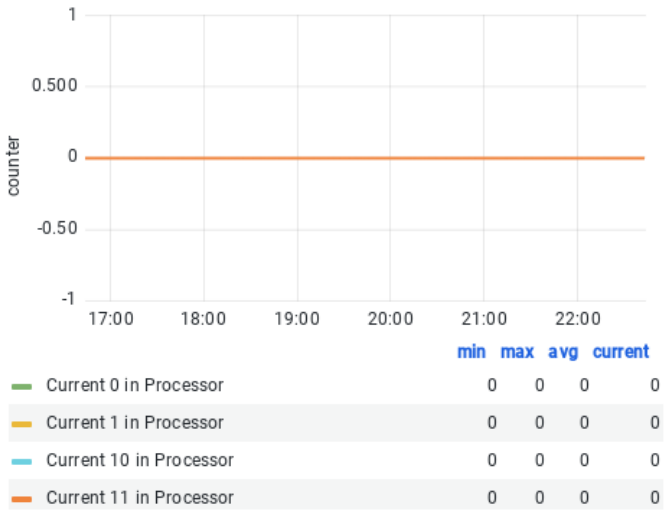


	min	max	avg	current
Maximum open file descriptors	1.02 K	1.02 K	1.02 K	1.02 K
Open file descriptors	9	9	9	9

Hardware temperature monitor

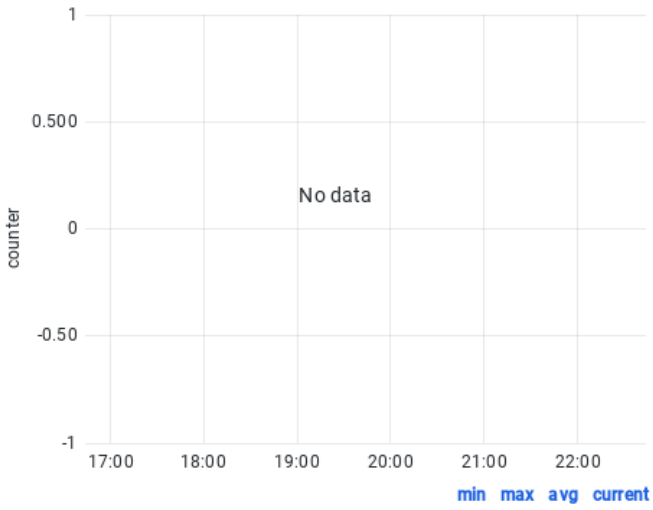


Throttle cooling device

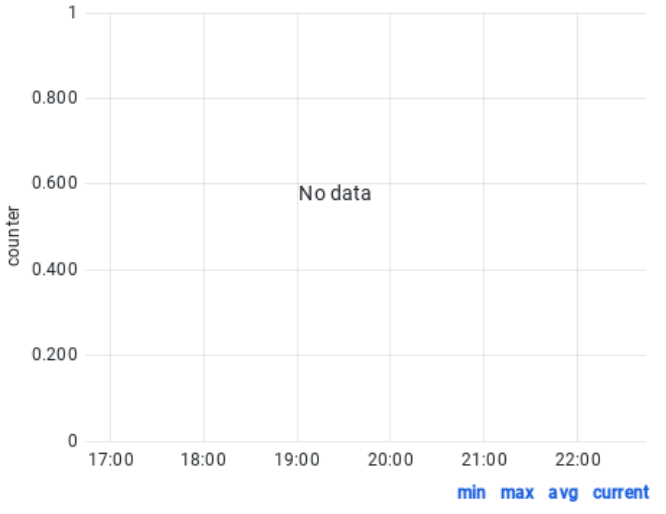


	min	max	avg	current
Current 0 in Processor	0	0	0	0
Current 1 in Processor	0	0	0	0
Current 10 in Processor	0	0	0	0
Current 11 in Processor	0	0	0	0

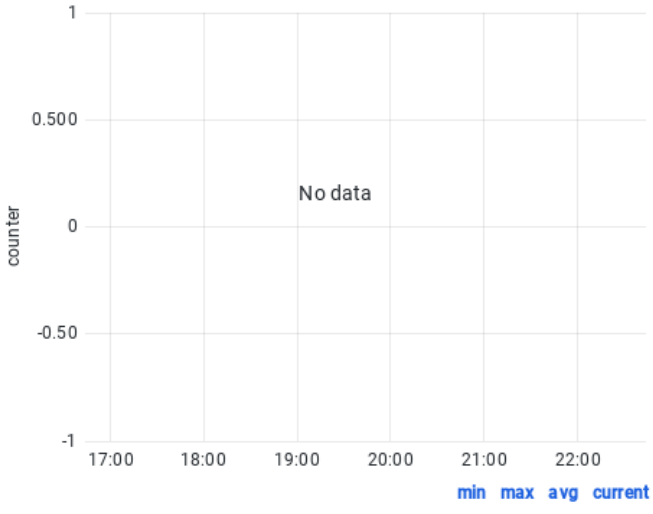
Power supply

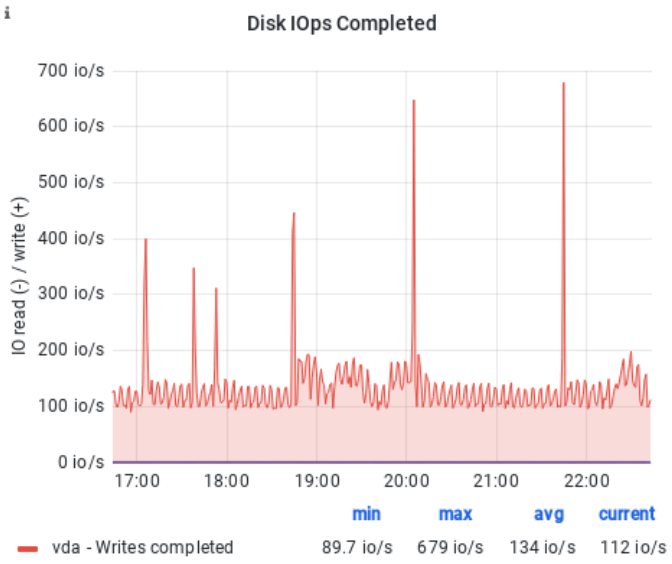


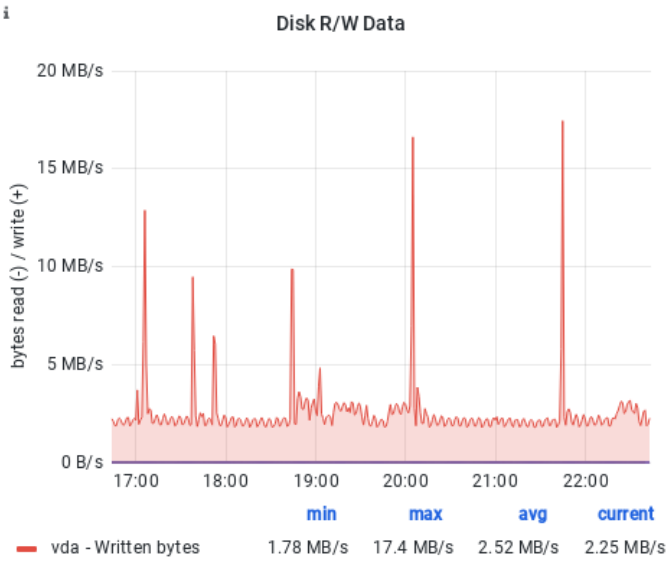
Systemd Sockets

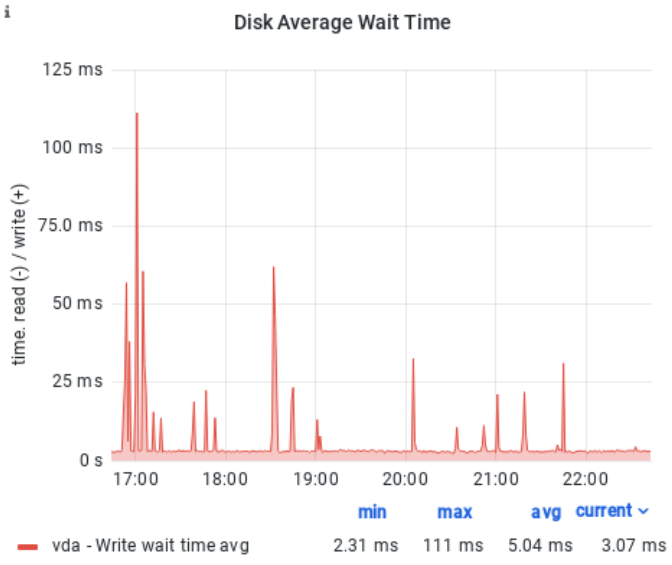


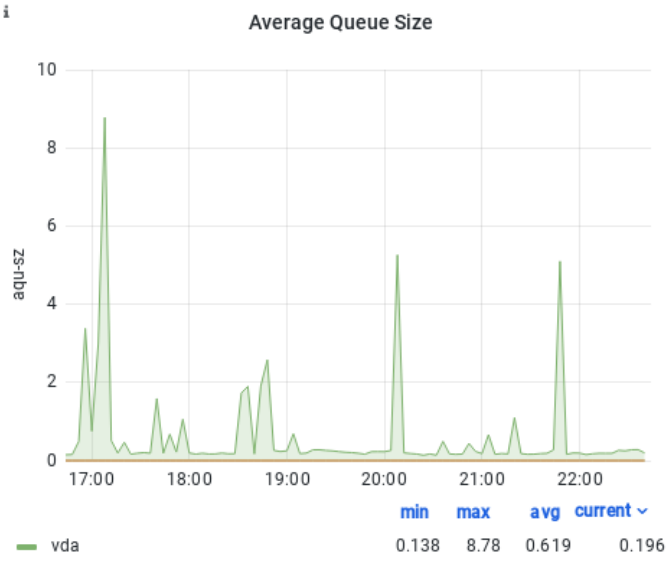
Systemd Units State

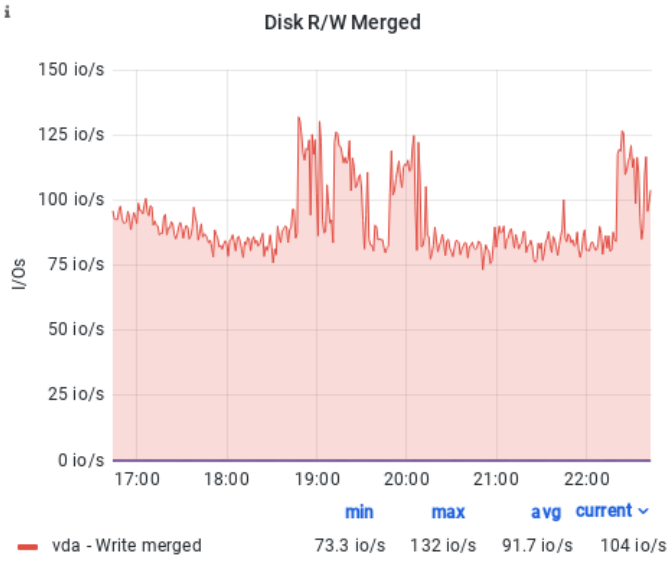


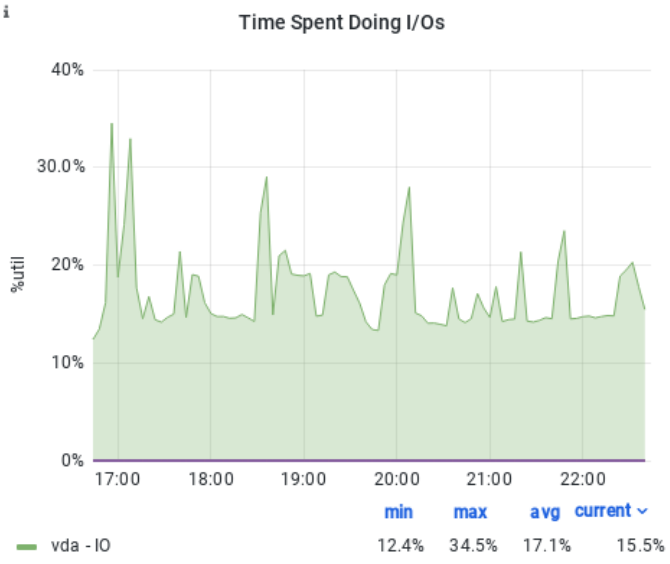

Disk IOps Completed
700 io/s
600 io/s
500 io/s
400 io/s
300 io/s
200 io/s
100 io/s
0 io/s
IO read (-) / write (+)
17:00
18:00
19:00
20:00
21:00
22:00
min
max
avg
current
vda - Writes completed
89.7 io/s
679 io/s
134 io/s
112 io/s


Disk R/W Data
20 MB/s
15 MB/s
10 MB/s
5 MB/s
0 B/s
bytes read (-) / write (+)
17:00
18:00
19:00
20:00
21:00
22:00
min
max
avg
current
vda - Written bytes
1.78 MB/s
17.4 MB/s
2.52 MB/s
2.25 MB/s

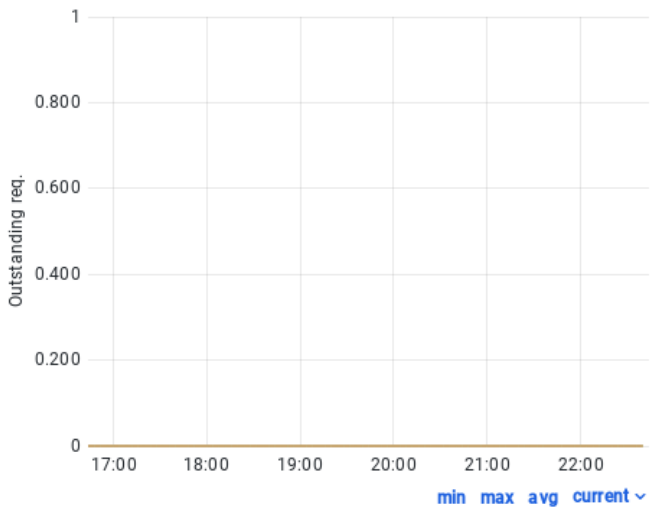

Disk Average Wait Time
125 ms
100 ms
75.0 ms
50 ms
25 ms
0 s
time. read (-) / write (+)
17:00
18:00
19:00
20:00
21:00
22:00
min
max
avg
current
vda - Write wait time avg
2.31 ms
111 ms
5.04 ms
3.07 ms


Average Queue Size
10
8
6
4
2
0
aqu-sz
17:00
18:00
19:00
20:00
21:00
22:00
min
max
avg
current
vda
0.138
8.78
0.619
0.196

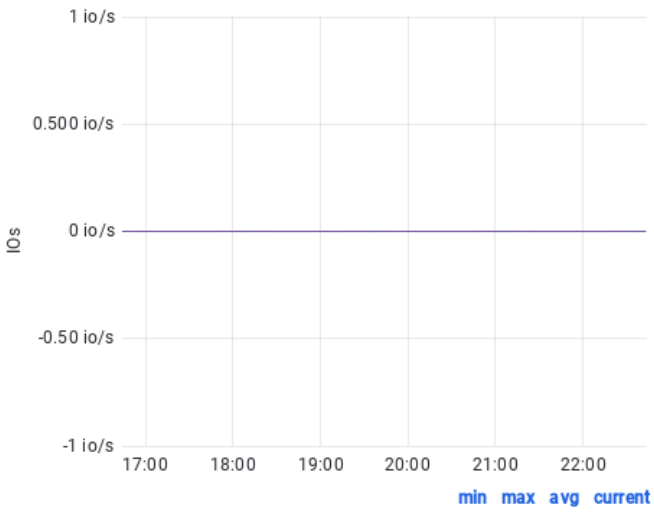

Disk R/W Merged
150 io/s
125 io/s
100 io/s
75 io/s
50 io/s
25 io/s
0 io/s
I/Os
17:00
18:00
19:00
20:00
21:00
22:00
min
max
avg
current
vda - Write merged
73.3 io/s
132 io/s
91.7 io/s
104 io/s


Time Spent Doing I/Os
40%
30.0%
20%
10%
0%
%util
17:00
18:00
19:00
20:00
21:00
22:00
min
max
avg
current
vda - IO
12.4%
34.5%
17.1%
15.5%

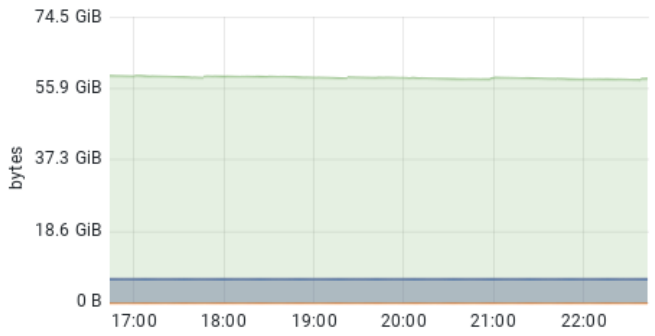
Instantaneous Queue Size



Disk IOps Discards completed / merged

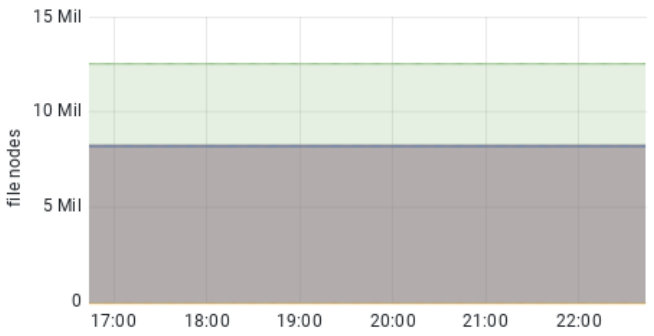


Filesystem space available



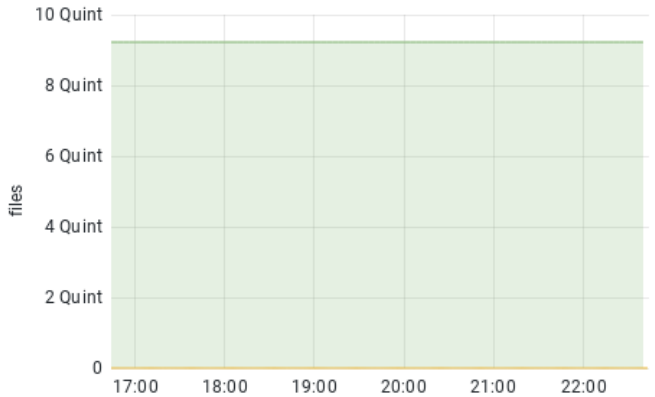
	min	max	avg	cur
/ - Available	58.068 GiB	59.173 GiB	58.624 GiB	58.38
/boot/efi - Available	99.157 MiB	99.157 MiB	99.157 MiB	99.15
/run - Available	6.278 GiB	6.278 GiB	6.278 GiB	6.27
/run/lock - Available	5.000 MiB	5.000 MiB	5.000 MiB	5.00

File Nodes Free



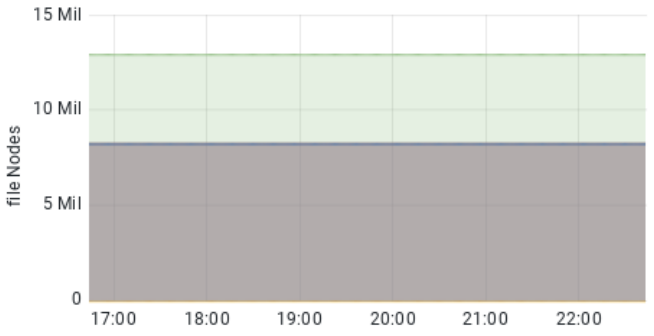
	min	max	avg	current
/ - Free file nodes	12.5 Mil	12.5 Mil	12.5 Mil	12.5 Mil
/run - Free file nodes	8.23 Mil	8.23 Mil	8.23 Mil	8.23 Mil
/run/lock - Free file nodes	8.23 Mil	8.23 Mil	8.23 Mil	8.23 Mil
/run/snapd/ns - Free file nodes	8.23 Mil	8.23 Mil	8.23 Mil	8.23 Mil

File Descriptor



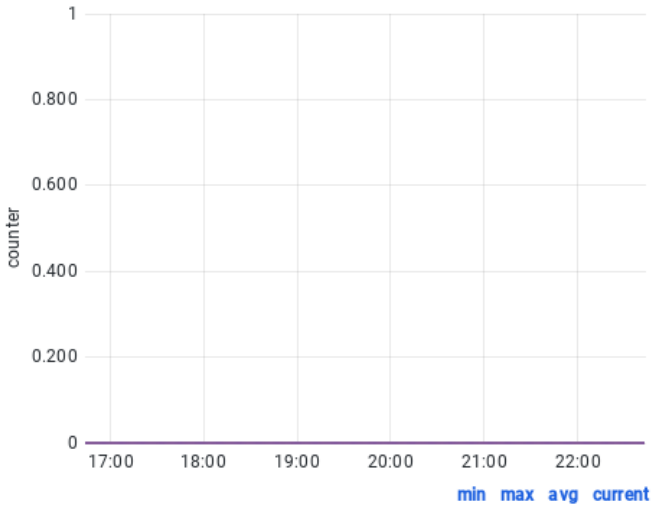
	min	max	avg	current
Max open files	9.22 Quint	9.22 Quint	9.22 Quint	9.22 Quint
Open files	10.1 K	10.9 K	10.5 K	10.9 K

File Nodes Size

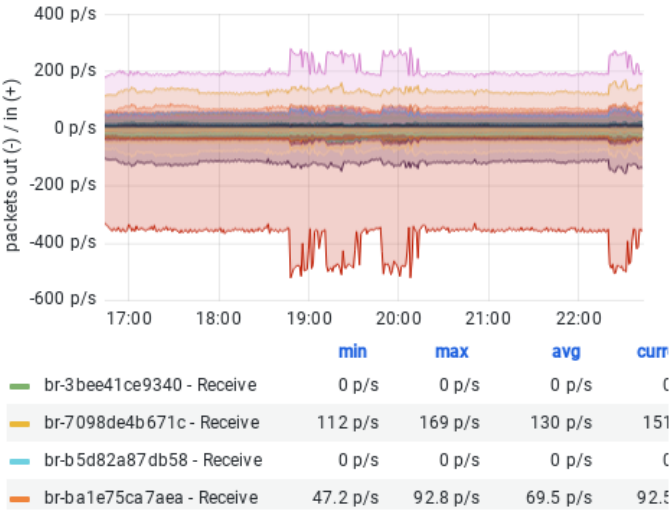


	min	max	avg	current
/ - File nodes total	12.9 Mil	12.9 Mil	12.9 Mil	12.9 Mil
/run - File nodes total	8.23 Mil	8.23 Mil	8.23 Mil	8.23 Mil
/run/lock - File nodes total	8.23 Mil	8.23 Mil	8.23 Mil	8.23 Mil
/run/snapd/ns - File nodes total	8.23 Mil	8.23 Mil	8.23 Mil	8.23 Mil

Filesystem in ReadOnly / Error

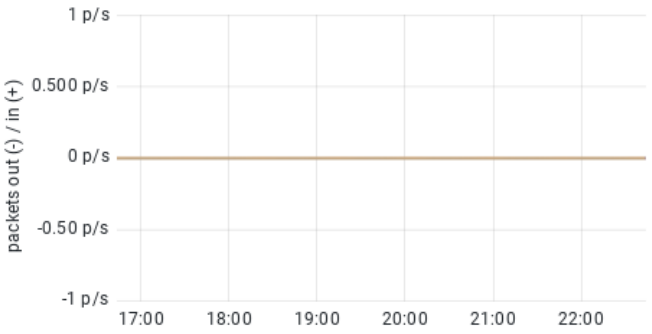


Network Traffic by Packets



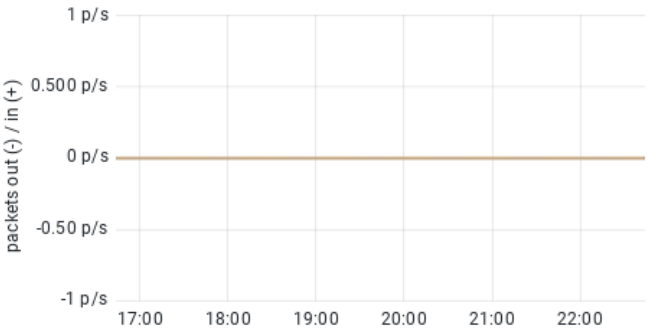
	min	max	avg	curr
br-3bee41ce9340 - Receive	0 p/s	0 p/s	0 p/s	0
br-7098de4b671c - Receive	112 p/s	169 p/s	130 p/s	151
br-b5d82a87db58 - Receive	0 p/s	0 p/s	0 p/s	0
br-ba1e75ca7aea - Receive	47.2 p/s	92.8 p/s	69.5 p/s	92.5

Network Traffic Errors



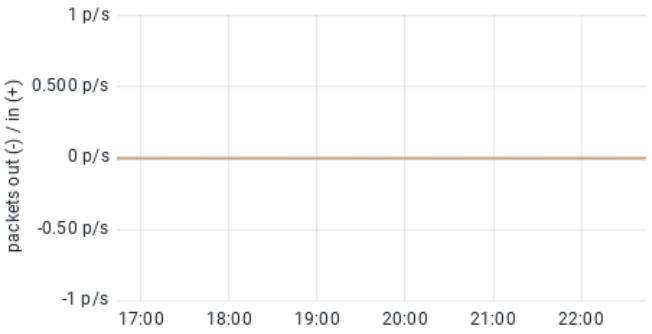
	min	max	avg	current
vethf95a960 - Rransmit errors	0 p/s	0 p/s	0 p/s	0 p/s
vethf7d3be5 - Rransmit errors	0 p/s	0 p/s	0 p/s	0 p/s
vethf6915c9 - Rransmit errors	0 p/s	0 p/s	0 p/s	0 p/s
vethf115519 - Rransmit errors	0 p/s	0 p/s	0 p/s	0 p/s

Network Traffic Drop



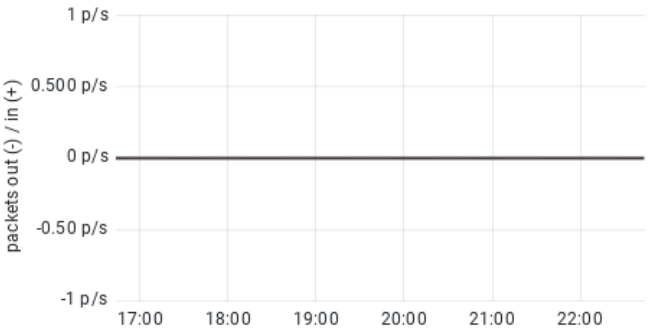
	min	max	avg	current
vethf95a960 - Transmit drop	0 p/s	0 p/s	0 p/s	0 p/s
vethf7d3be5 - Transmit drop	0 p/s	0 p/s	0 p/s	0 p/s
vethf6915c9 - Transmit drop	0 p/s	0 p/s	0 p/s	0 p/s
vethf115519 - Transmit drop	0 p/s	0 p/s	0 p/s	0 p/s

Network Traffic Compressed



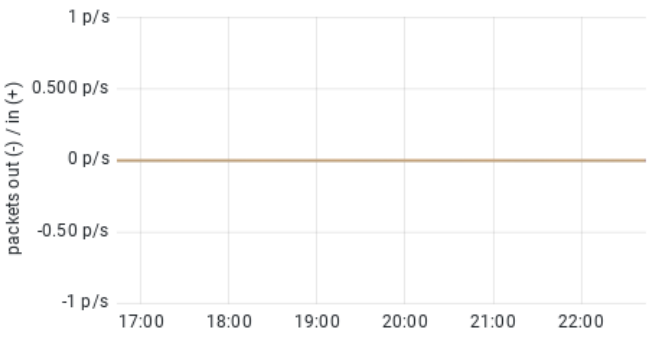
	min	max	avg	current
vethf95a960 - Transmit compressed	0 p/s	0 p/s	0 p/s	0 p/s
vethf7d3be5 - Transmit compressed	0 p/s	0 p/s	0 p/s	0 p/s
vethf6915c9 - Transmit compressed	0 p/s	0 p/s	0 p/s	0 p/s
vethf115519 - Transmit compressed	0 p/s	0 p/s	0 p/s	0 p/s

Network Traffic Multicast



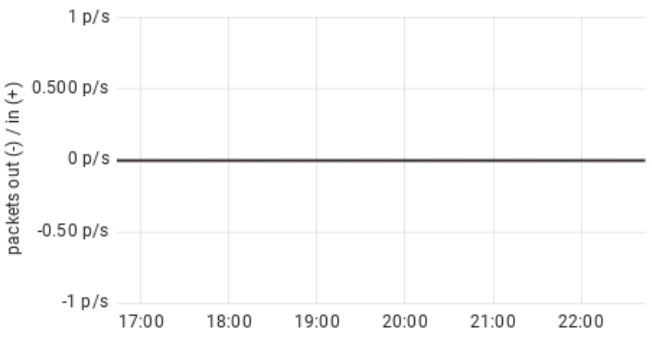
	min	max	avg	current
vethf95a960 - Receive multicast	0 p/s	0 p/s	0 p/s	0 p/s
vethf7d3be5 - Receive multicast	0 p/s	0 p/s	0 p/s	0 p/s
vethf6915c9 - Receive multicast	0 p/s	0 p/s	0 p/s	0 p/s
vethf115519 - Receive multicast	0 p/s	0 p/s	0 p/s	0 p/s

Network Traffic Fifo



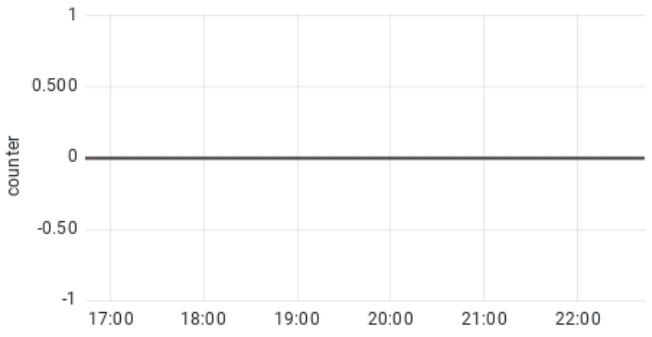
	min	max	avg	current
vethf95a960 - Transmit fifo	0 p/s	0 p/s	0 p/s	0 p/s
vethf7d3be5 - Transmit fifo	0 p/s	0 p/s	0 p/s	0 p/s
vethf6915c9 - Transmit fifo	0 p/s	0 p/s	0 p/s	0 p/s
vethf115519 - Transmit fifo	0 p/s	0 p/s	0 p/s	0 p/s

Network Traffic Frame



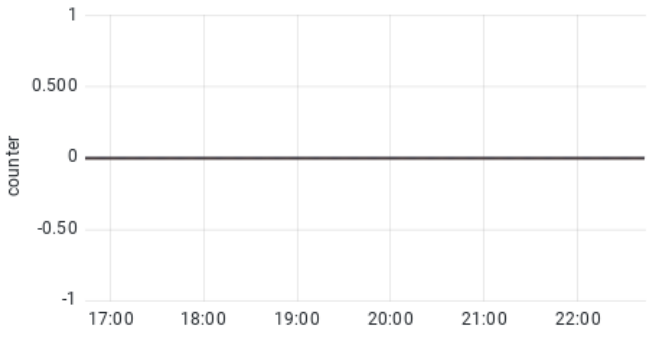
	min	max	avg	current
vethf95a960 - Receive frame	0 p/s	0 p/s	0 p/s	0 p/s
vethf7d3be5 - Receive frame	0 p/s	0 p/s	0 p/s	0 p/s
vethf6915c9 - Receive frame	0 p/s	0 p/s	0 p/s	0 p/s
vethf115519 - Receive frame	0 p/s	0 p/s	0 p/s	0 p/s

Network Traffic Carrier



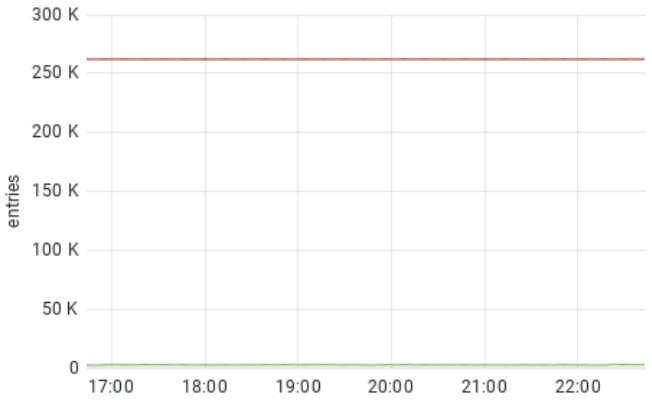
	min	max	avg	current
vethf95a960 - Statistic transmit_carrier	0	0	0	0
vethf7d3be5 - Statistic transmit_carrier	0	0	0	0
vethf6915c9 - Statistic transmit_carrier	0	0	0	0
vethf115519 - Statistic transmit_carrier	0	0	0	0

Network Traffic Colls



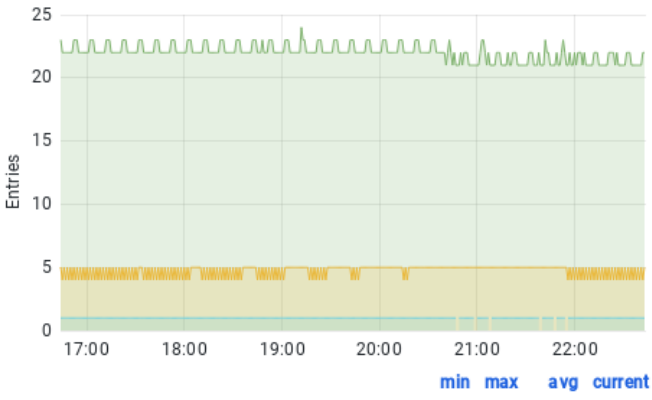
	min	max	avg	current
vethf95a960 - Transmit colls	0	0	0	0
vethf7d3be5 - Transmit colls	0	0	0	0
vethf6915c9 - Transmit colls	0	0	0	0
vethf115519 - Transmit colls	0	0	0	0

NF Contrack



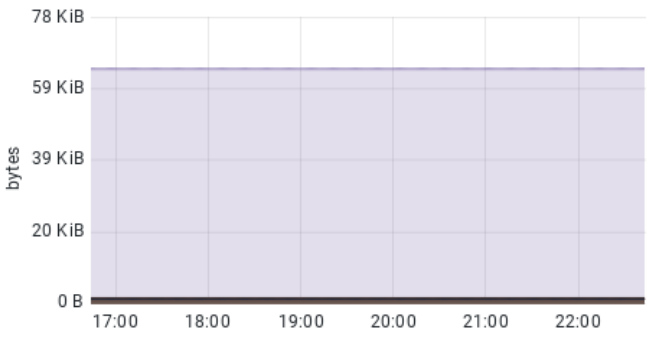
	min	max	avg	current
NF conntrack entries	2.46 K	3.33 K	2.80 K	3.21 K
NF conntrack limit	262 K	262 K	262 K	262 K

ARP Entries



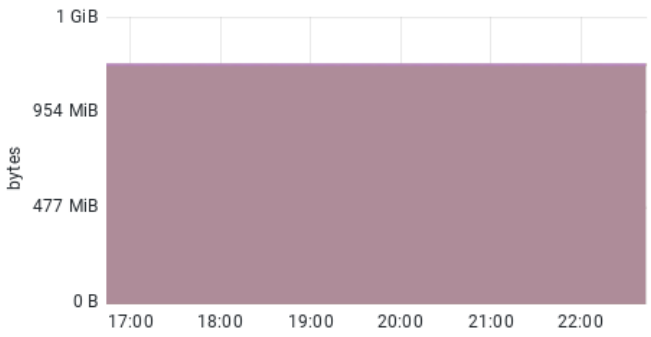
	min	max	avg	current
br-7098de4b671c - ARP entries	21	24	22.0	22
br-ba1e75ca7aea - ARP entries	4	5	4.73	5
ens3 - ARP entries	1	1	1	1

MTU



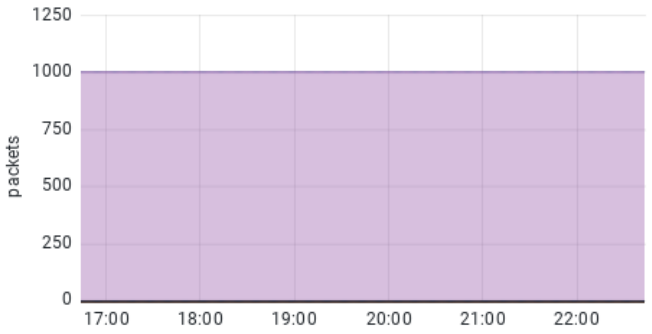
	min	max	avg	current
br-3bee41ce9340 - Bytes	1.5 KiB	1.5 KiB	1.5 KiB	1.5 KiB
br-7098de4b671c - Bytes	1.5 KiB	1.5 KiB	1.5 KiB	1.5 KiB
br-b5d82a87db58 - Bytes	1.5 KiB	1.5 KiB	1.5 KiB	1.5 KiB
br-ba1e75ca7aea - Bytes	1.5 KiB	1.5 KiB	1.5 KiB	1.5 KiB

Speed



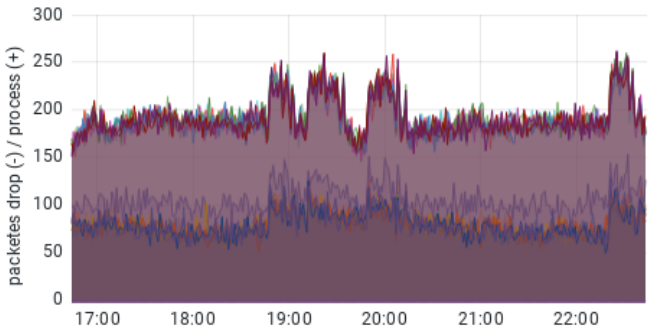
	min	max	avg	current
ens3 - Speed	-122.1 KiB	-122.1 KiB	-122.1 KiB	-122.1 KiB
veth0093147 - Speed	1.2 GiB	1.2 GiB	1.2 GiB	1.2 GiB
veth18ef59a - Speed	1.2 GiB	1.2 GiB	1.2 GiB	1.2 GiB
veth1c72a06 - Speed	1.2 GiB	1.2 GiB	1.2 GiB	1.2 GiB

Queue Length



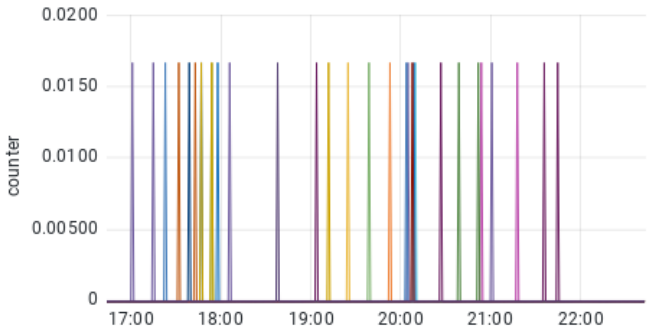
	min	max	a
br-3bee41ce9340 - Interface transmit queue length	0	0	
br-7098de4b671c - Interface transmit queue length	0	0	
br-b5d82a87db58 - Interface transmit queue length	0	0	
br-ba1e75ca7aea - Interface transmit queue length	0	0	

Softnet Packets



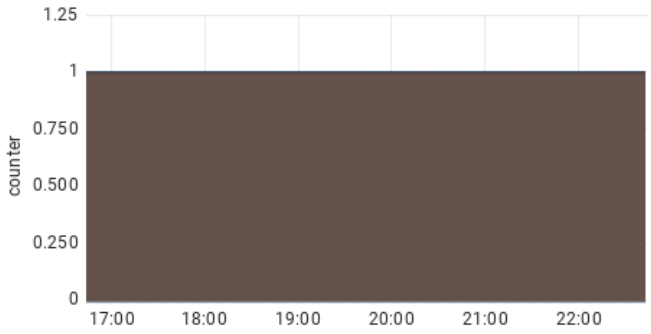
	min	max	avg	current
CPU 12 - Processed	152	260	193	195
CPU 2 - Processed	156	260	193	193
CPU 14 - Processed	147	252	191	191
CPU 8 - Processed	152	262	192	187

Softnet Out of Quota



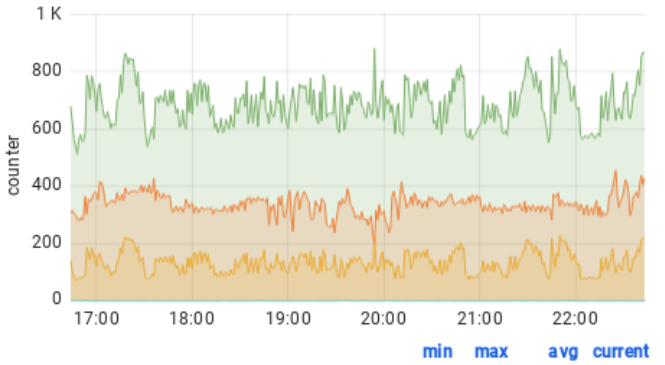
	min	max	avg	current
CPU 9 - Squeezed	0	0.0167	0.0000462	0
CPU 8 - Squeezed	0	0.0167	0.000185	0
CPU 7 - Squeezed	0	0.0167	0.0000462	0
CPU 6 - Squeezed	0	0.0167	0.0000462	0

Network Operational Status



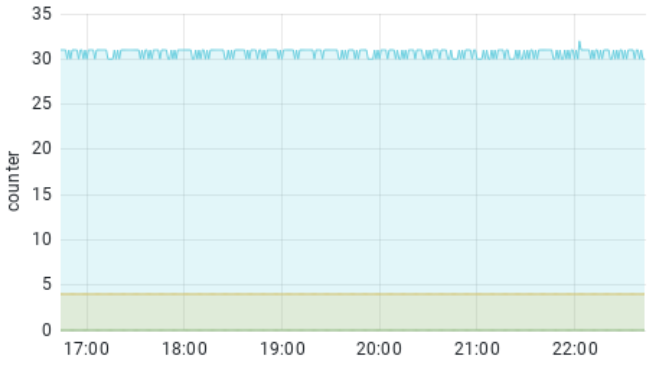
	min	max	avg	current
vethf95a960 - Physical link state	1	1	1	1
vethf7d3be5 - Physical link state	1	1	1	1
vethf6915c9 - Physical link state	1	1	1	1
vethf115519 - Physical link state	1	1	1	1

Sockstat TCP



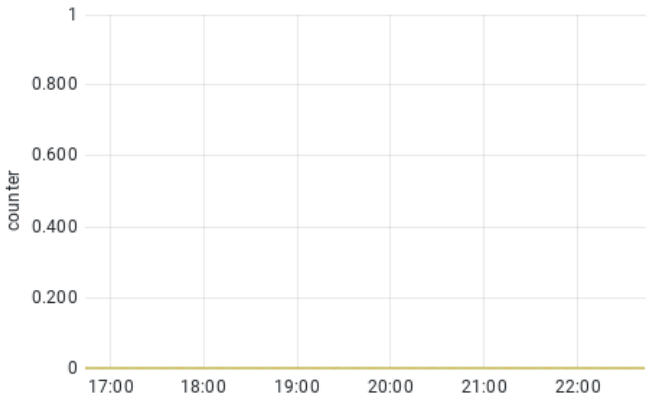
	min	max	avg	current
TCP_alloc - Allocated sockets	512	880	684	865
TCP_inuse - Tcp sockets currently in use	71	228	133	220
TCP_orphan - Orphan sockets	0	3	0.163	0
TCP_tw - Sockets wating close	198	455	337	429

Sockstat UDP



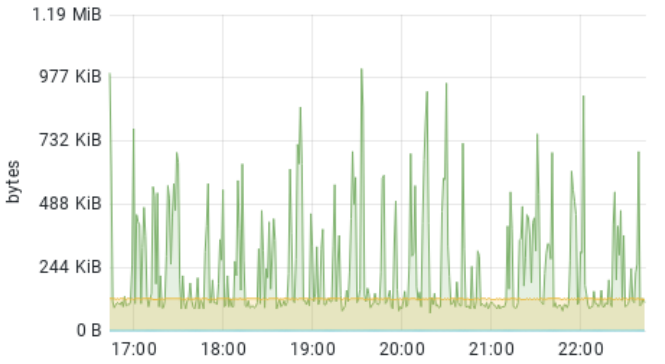
	min	max	avg	current
UDPLITE_inuse - Udplite sockets currently in use	0	0	0	0
UDP_inuse - Udp sockets currently in use	4	4	4	4
UDP_mem - Used memory for udp	30	32	30.7	30

Sockstat FRAG / RAW



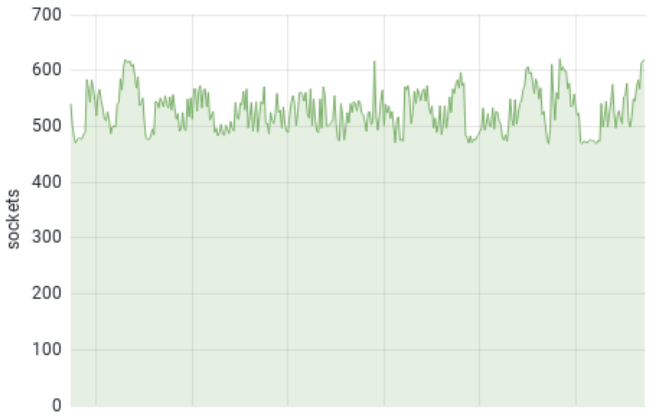
	min	max	avg	current
FRAG_inuse - Frag sockets currently in use	0	0	0	0
RAW_inuse - Raw sockets currently in use	0	0	0	0

Sockstat Memory Size



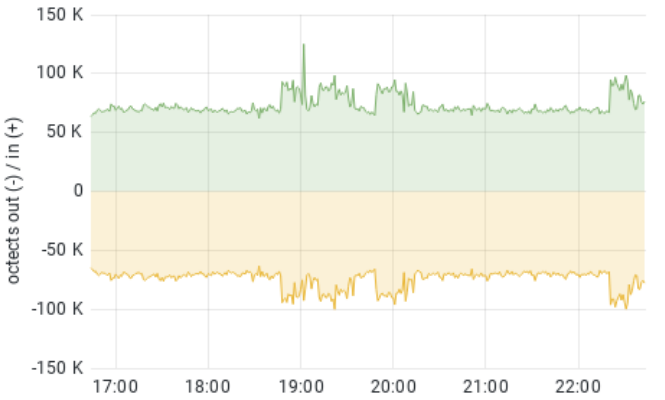
	min	max	avg	cur
mem_bytes - TCP sockets in that state	68 KiB	1.05 MiB	239 KiB	10
mem_bytes - UDP sockets in that state	120 KiB	128 KiB	123 KiB	12
FRAG_memory - Used memory for frag	0 B	0 B	0 B	

Sockstat Used



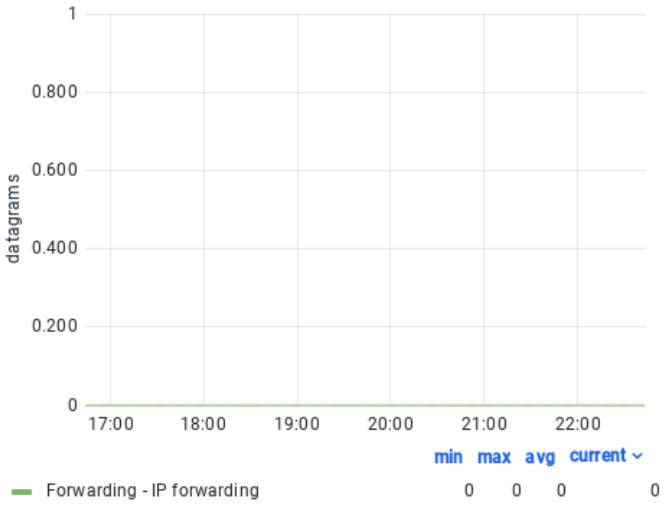
	min	max	avg	current
Sockets_used - Sockets currently in use	469	621	528	619

Netstat IP In / Out Octets

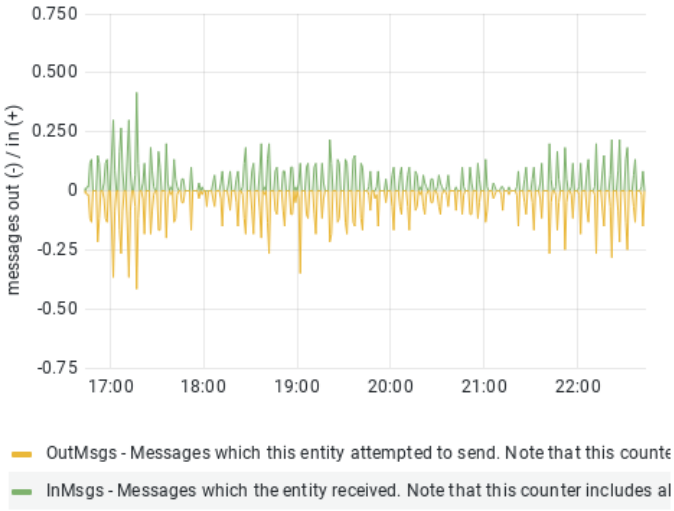


	min	max	avg	current
OutOctets - Sent octets	63.3 K	100 K	74.6 K	77.9 K
InOctets - Received octets	61.9 K	125 K	73.2 K	76.5 K

Netstat IP Forwarding

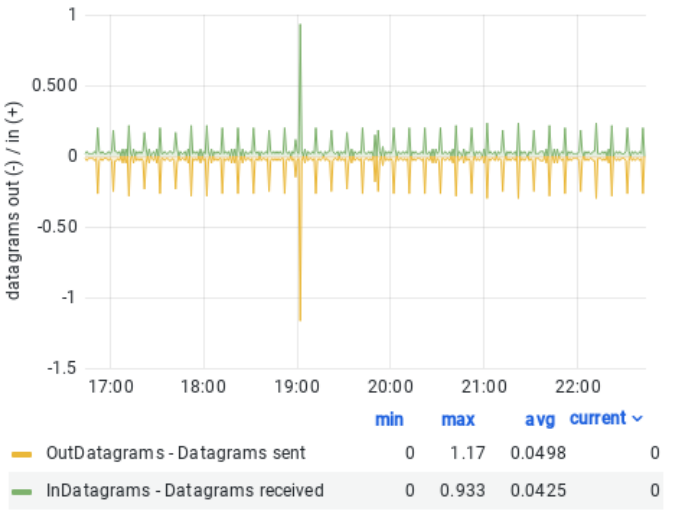


ICMP In / Out

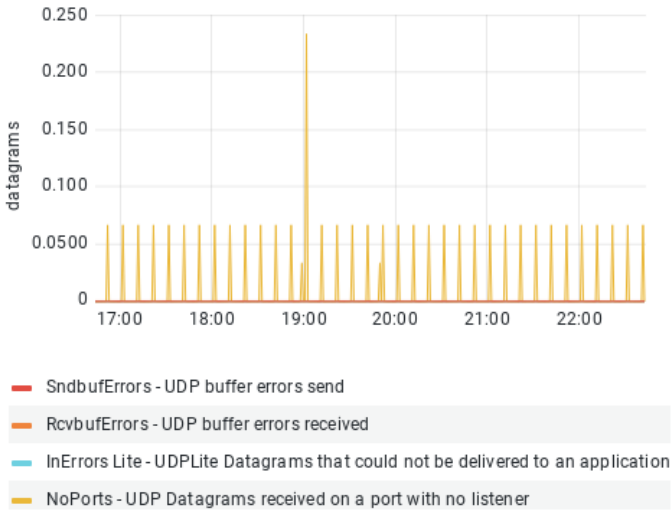


ICMP Errors

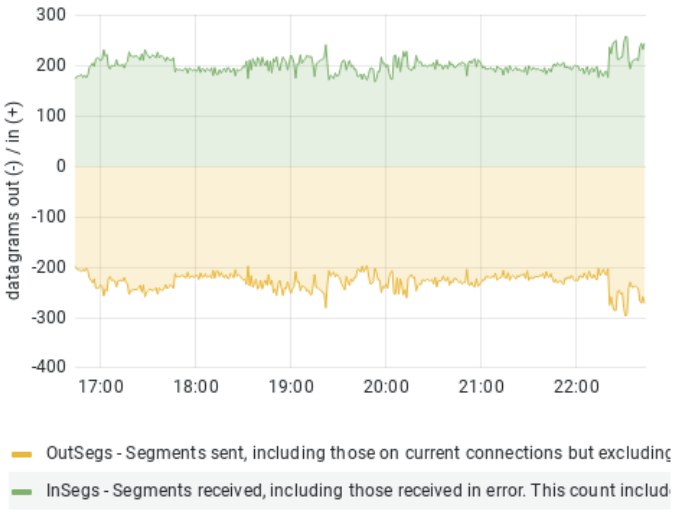
UDP In / Out



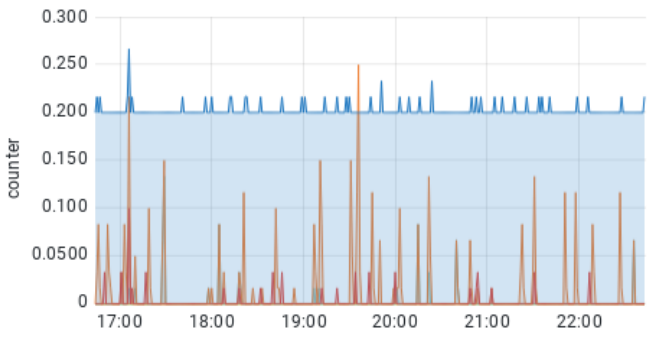
UDP Errors



TCP In / Out

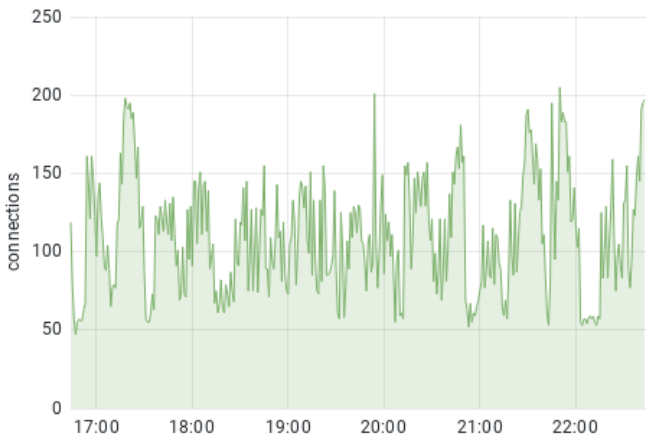


TCP Errors



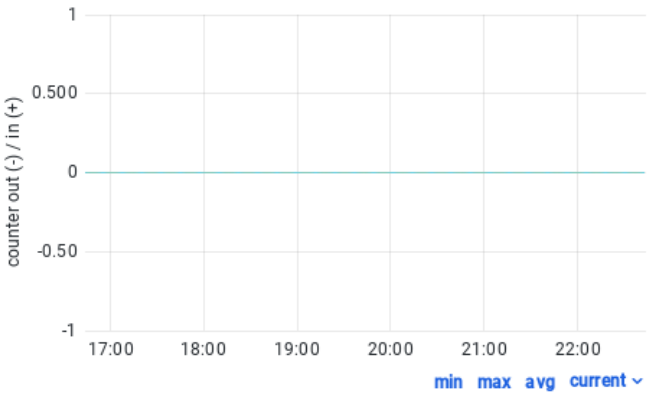
- OutRsts - Segments sent with RST flag
- InErrs - Segments received in error (e.g., bad TCP checksums)
- RetransSegs - Segments retransmitted - that is, the number of TCP segments tr
- TCPSynRetrans - SYN-SYN/ACK retransmits to break down retransmissions in

TCP Connections



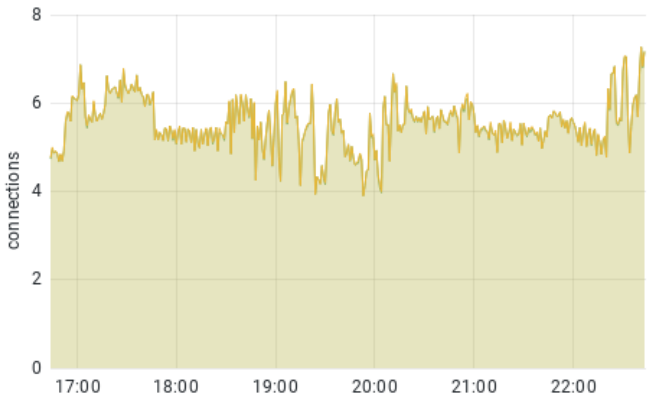
- CurrEstab - TCP connections for which the current state is either ESTABLISHED

TCP SynCookie



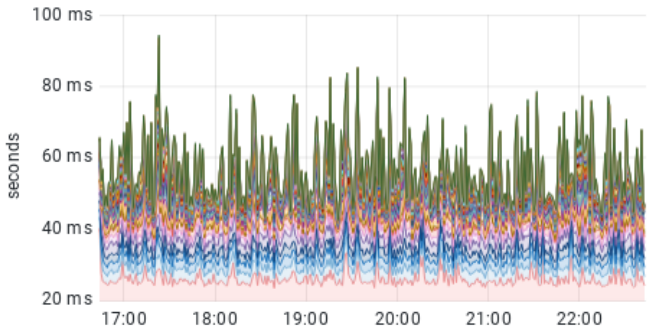
	min	max	avg	current
SyncookiesSent - SYN cookies sent	0	0	0	0
SyncookiesRecv - SYN cookies received	0	0	0	0
SyncookiesFailed - Invalid SYN cookies received	0	0	0	0

TCP Direct Transition



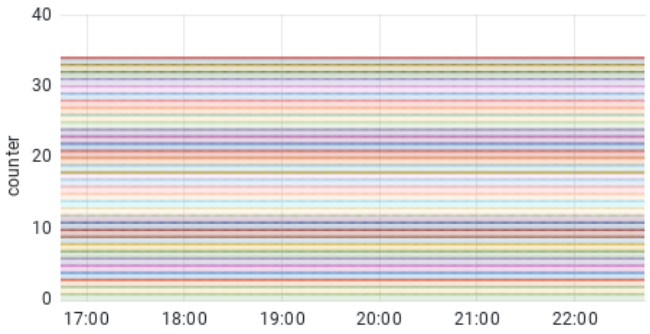
- ActiveOpens - TCP connections that have made a direct transition to the SYN-S
- PassiveOpens - TCP connections that have made a direct transition to the SYN

Node Exporter Scrape Time



	min	max	avg	current
netclass - Scrape duration	23.7 ms	40.4 ms	26.2 ms	24.4
netdev - Scrape duration	1.95 ms	6.23 ms	3.22 ms	2.55
cpu - Scrape duration	1.51 ms	6.98 ms	2.86 ms	2.55
filesystem - Scrape duration	1.57 ms	5.52 ms	2.52 ms	2.42

Node Exporter Scrape



	min	max	avg	current
arp - Scrape success	1	1	1	1
bcache - Scrape success	1	1	1	1
bonding - Scrape success	0	0	0	0
btrfs - Scrape success	1	1	1	1