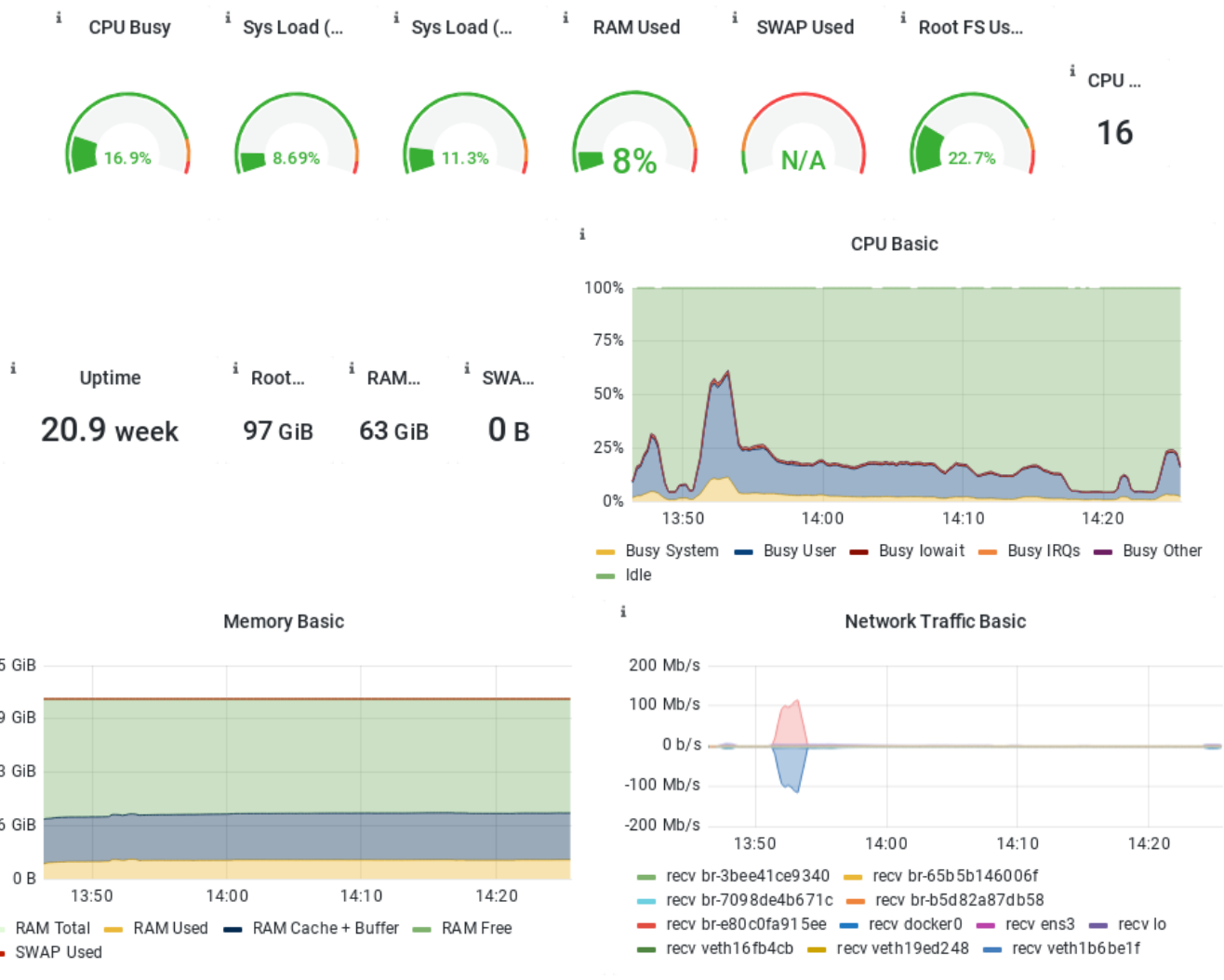
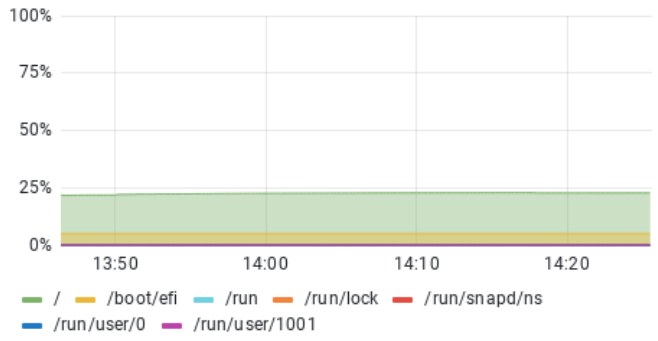
Host Metrics

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

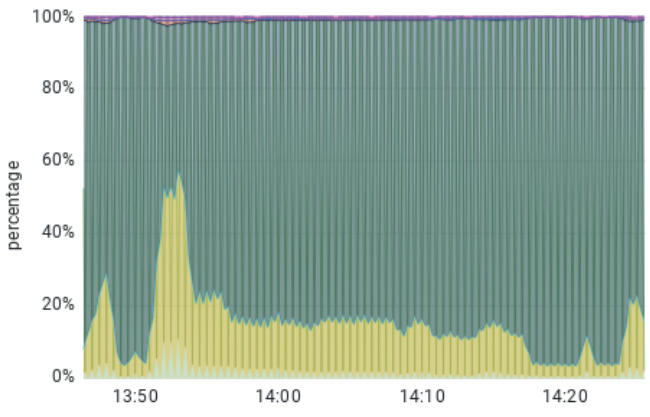
Mon Mar 7 13:46:24 UTC 2022
to
Mon Mar 7 14:25:37 UTC 2022



Disk Space Used Basic

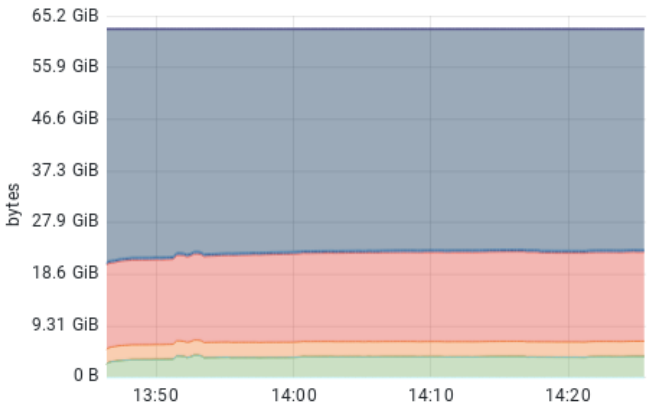


CPU



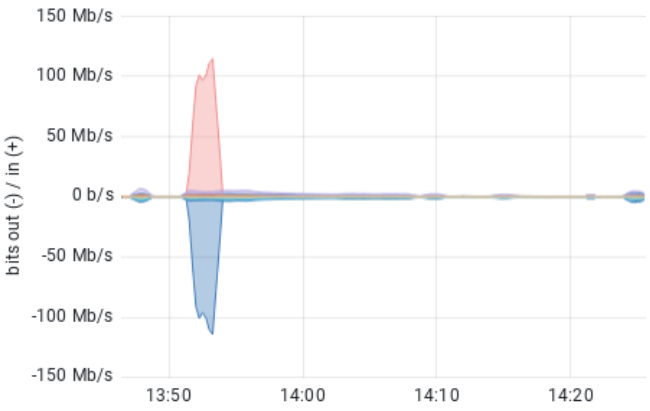
- System - Processes executing in kernel mode
- User - Normal processes executing in user mode
- Nice - Niced processes executing in user mode
- Idle - Waiting for something to happen
- Iowait - Waiting for I/O to complete

Memory Stack



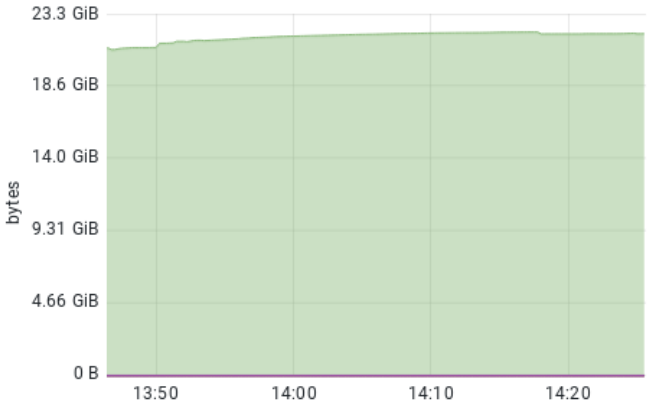
- Apps - Memory used by user-space applications
- PageTables - Memory used to map between virtual and physical memory addr
- SwapCache - Memory that keeps track of pages that have been fetched from s
- Slab - Memory used by the kernel to cache data structures for its own use (cacl
- Cache - Parked file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

Network Traffic



	min	max	avg	curre
br-3bee41ce9340 - Receive	0 b/s	0 b/s	0 b/s	0
br-65b5b146006f - Receive	777 b/s	1.61 Mb/s	387 kb/s	818 k
br-7098de4b671c - Receive	8.05 kb/s	2.46 Mb/s	764 kb/s	1.03 M
br-b5d82a87db58 - Receive	0 b/s	0 b/s	0 b/s	0
br-e80c0fa915ee - Receive	0 b/s	0 b/s	0 b/s	0

Disk Space Used

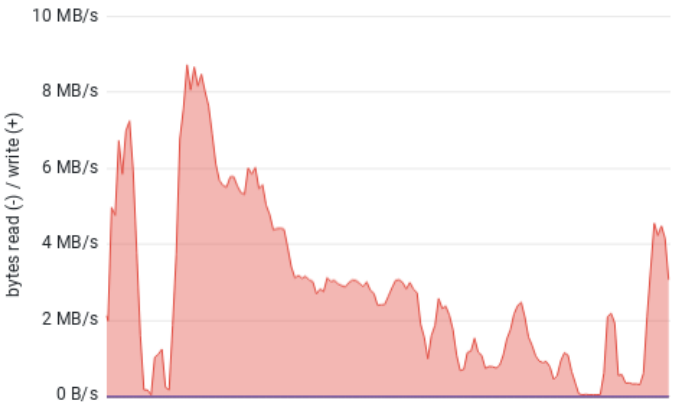


	min	max	avg	current
/run/lock	0 B	0 B	0 B	0 B
/run/user/0	0 B	0 B	0 B	0 B
/run/user/1001	0 B	0 B	0 B	0 B
/run	3.047 MiB	3.113 MiB	3.112 MiB	3.113 MiB
/run/snapd/ns	3.047 MiB	3.113 MiB	3.112 MiB	3.113 MiB

Disk IOps

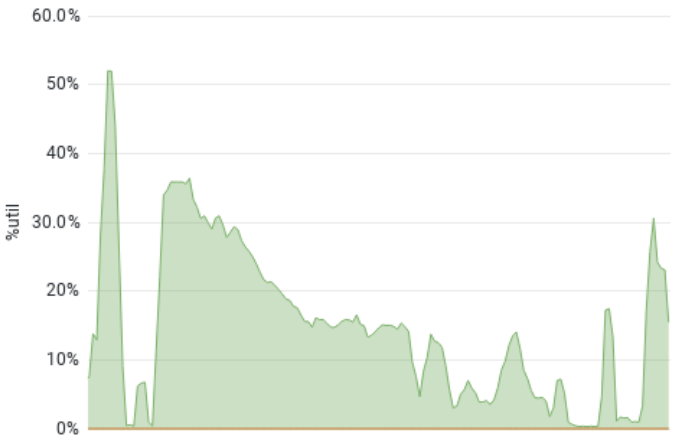
	min	max	avg	current
vda - Writes completed	3.73 io/s	281 io/s	106 io/s	122 io/s

I/O Usage Read / Write



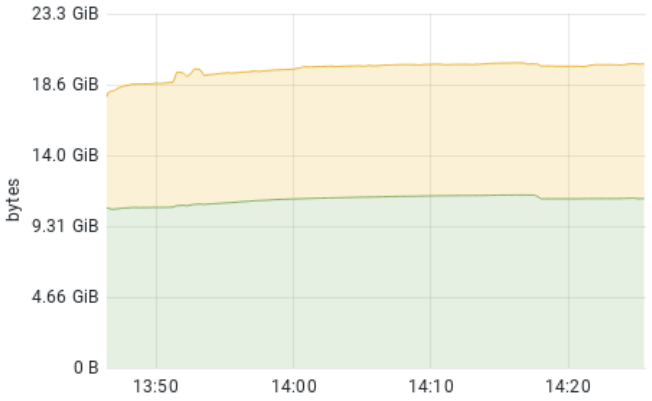
	min	max	avg
vda - Successfully read bytes	0 B/s	0 B/s	0 B/s
vdb - Successfully read bytes	0 B/s	0 B/s	0 B/s
vdc - Successfully read bytes	0 B/s	0 B/s	0 B/s
vdd - Successfully read bytes	0 B/s	0 B/s	0 B/s
vda - Successfully written bytes	44.694 kB/s	8.710 MB/s	2.856 MB/s

I/O Utilization



	min	max	avg	current
vda	0.276%	52.000%	14.882%	15.450%
vdb	0%	0%	0%	0%
vdc	0%	0%	0%	0%
vdd	0%	0%	0%	0%

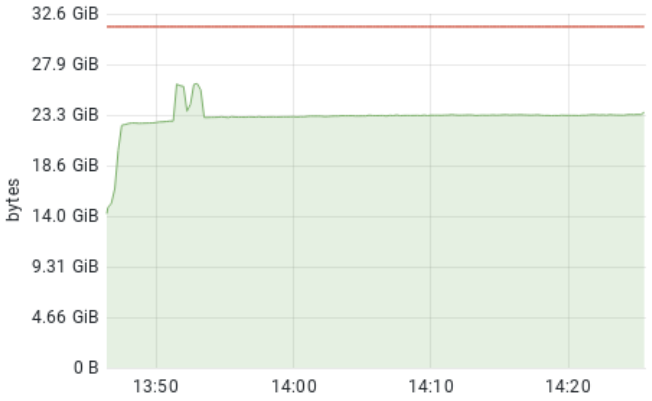
Memory Active / Inactive



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

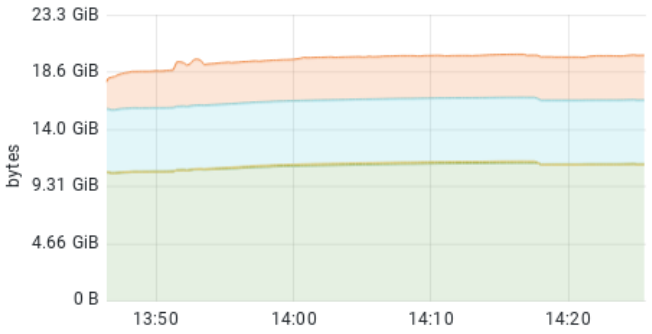
Memory Commited



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



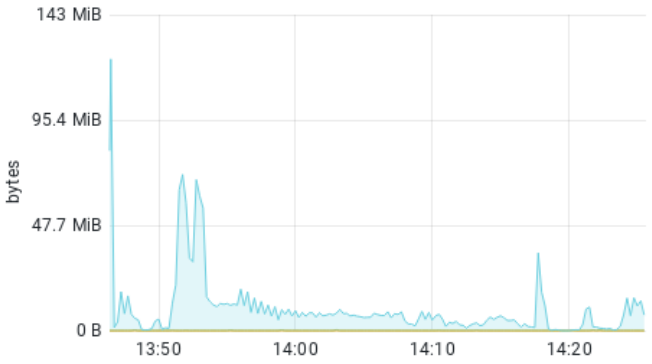
Inactive_file - File-backed memory on inactive LRU list

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

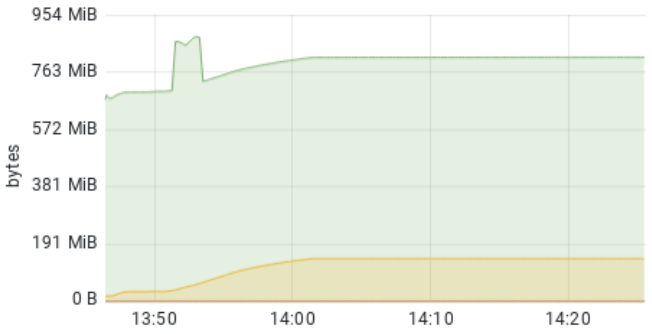


Writeback - Memory which is actively being written back to disk

WritebackTmp - Memory used by FUSE for temporary writeback buffers

Dirty - Memory which is waiting to get written back to the disk 4.00

Memory Shared and Mapped



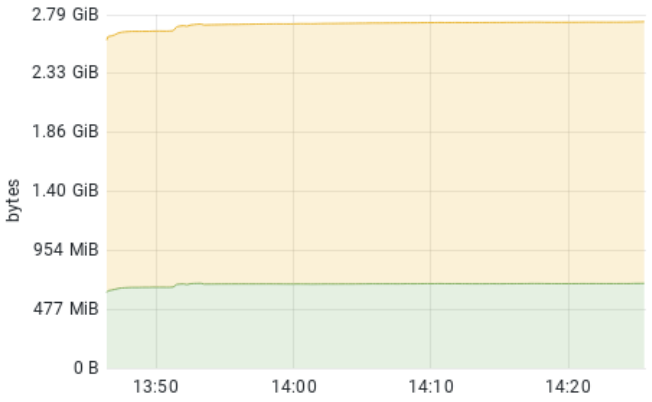
Mapped - Used memory in mapped pages files which have been mmaped, such

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

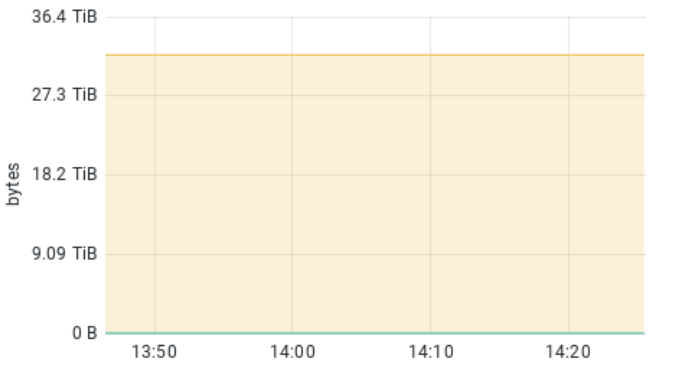
Memory Slab



SUnreclaim - Part of Slab, that cannot be reclaimed on memory pressure 58

SReclaimable - Part of Slab, that might be reclaimed, such as caches

Memory Vmalloc

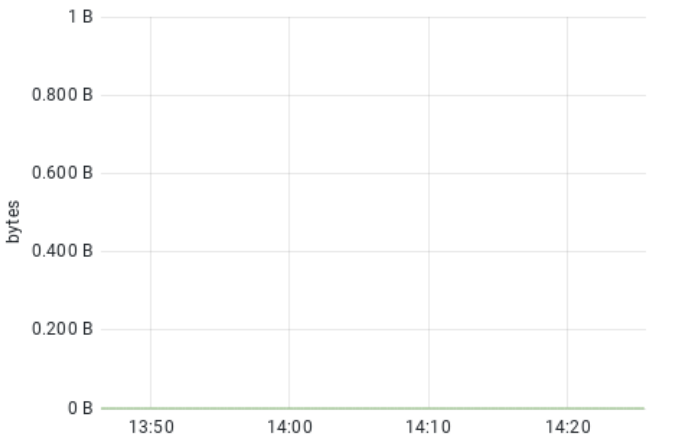


VmallocChunk - Largest contigious block of vmalloc area which is free

VmallocTotal - Total size of vmalloc memory area 32.0

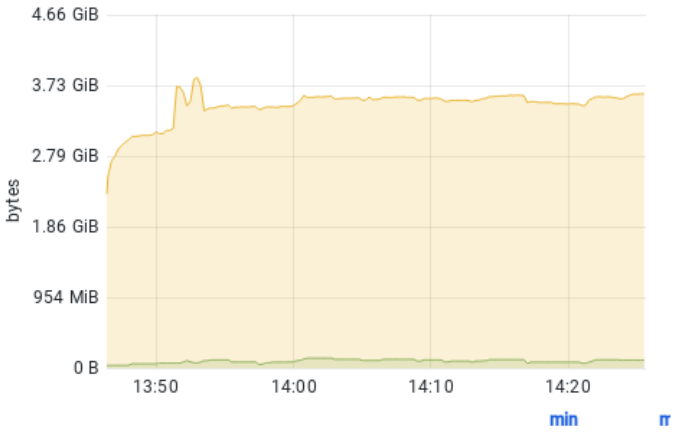
VmallocUsed - Amount of vmalloc area which is used 34.1

Memory Bounce



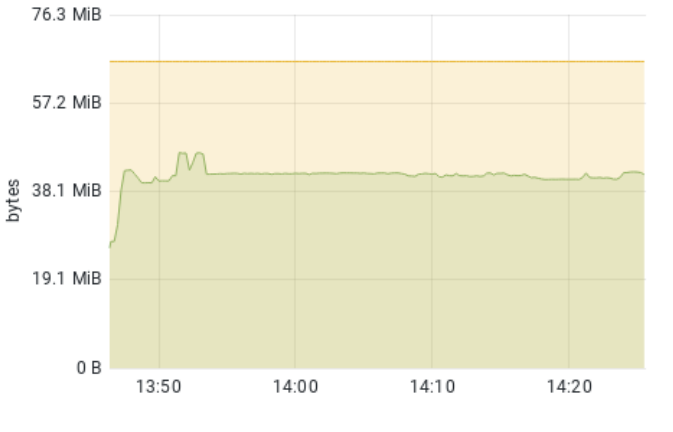
	min	max	avg	curr
Bounce - Memory used for block device bounce buffers	0 B	0 B	0 B	

Memory Anonymous



	min	m
AnonHugePages - Memory in anonymous huge pages	32.00 MiB	134.00
AnonPages - Memory in user pages not backed by files	1.85 GiB	3.83

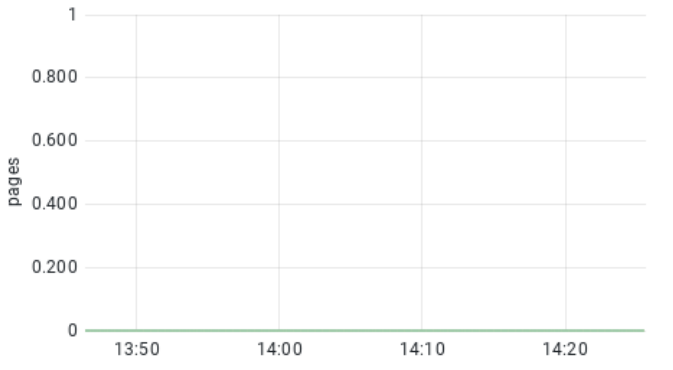
Memory Kernel / CPU



KernelStack - Kernel memory stack. This is not reclaimable 23.3

PerCPU - Per CPU memory allocated dynamically by loadable modules 66.1

Memory HugePages Counter

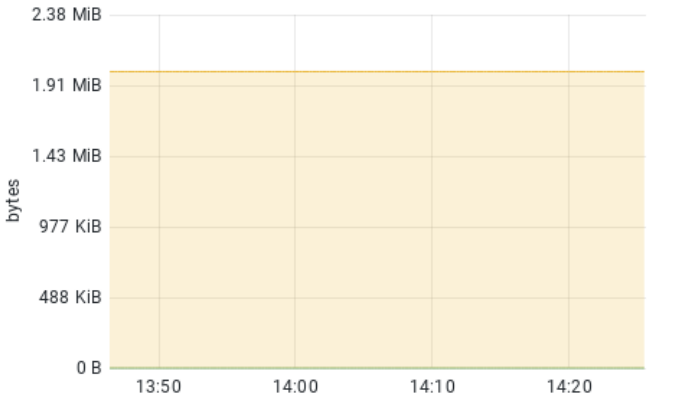


HugePages_Free - Huge pages in the pool that are not yet allocated

HugePages_Rsvd - Huge pages for which a commitment to allocate from the p

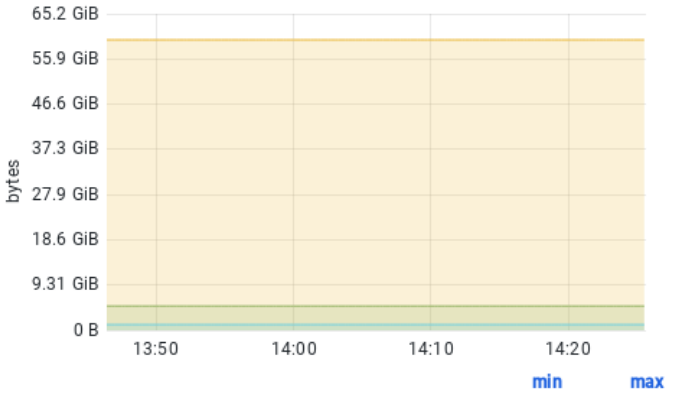
HugePages_Surp - Huge pages in the pool above the value in /proc/sys/vm/nr

Memory HugePages Size



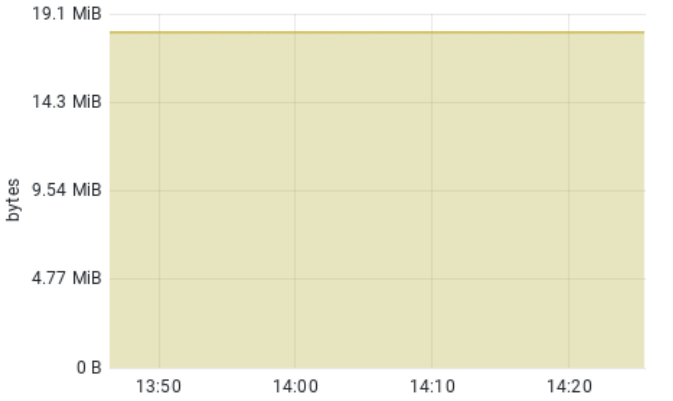
	min	max	cu
HugePages - Total size of the pool of huge pages	0 B	0 B	
Hugepagesize - Huge Page size	2.00 MiB	2.00 MiB	2.0

Memory DirectMap



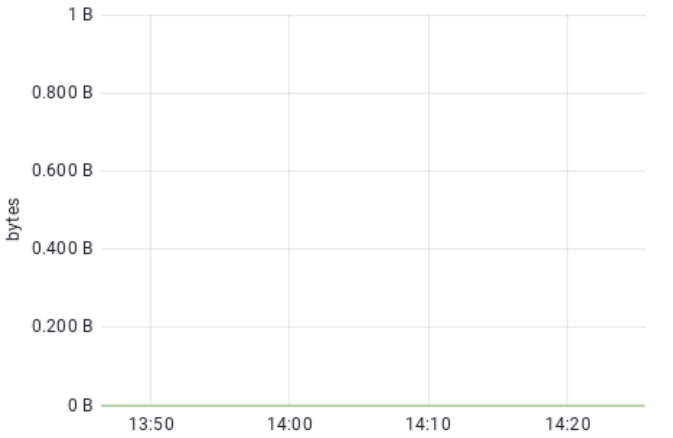
	min	max
DirectMap1G - Amount of pages mapped as this size	5.00 GiB	5.00 GiB
DirectMap2M - Amount of pages mapped as this size	59.83 GiB	59.83 GiB
DirectMap4K - Amount of pages mapped as this size	1.17 GiB	1.17 GiB

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

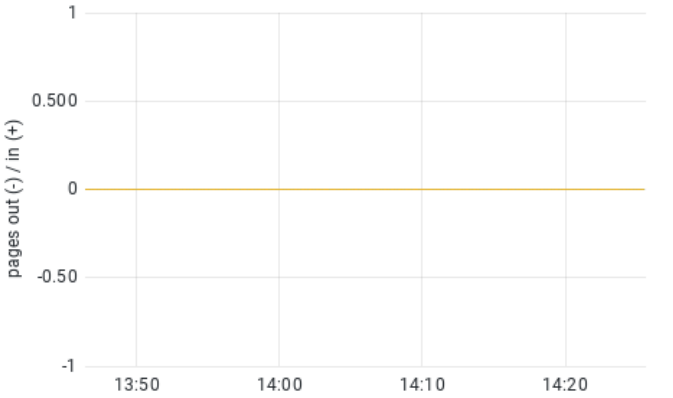


- NFS Unstable - Memory in NFS pages sent to the server, but not yet commited t

Memory Pages In / Out

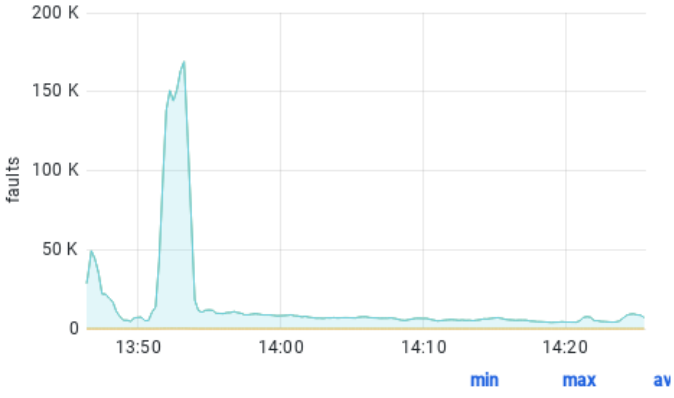
	min	max	avg	current
Pagesin - Page in operations	0	0	0	0
Pagesout - Page out operations	43.6	8.51 K	2.79 K	3.00 K

Memory Pages Swap In / Out



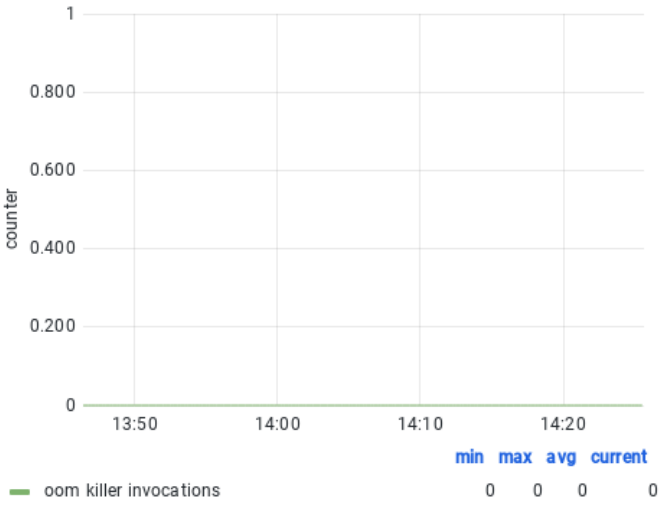
	min	max	avg	current
Pswpin - Pages swapped in	0	0	0	0
Pswpout - Pages swapped out	0	0	0	0

Memory Page Faults



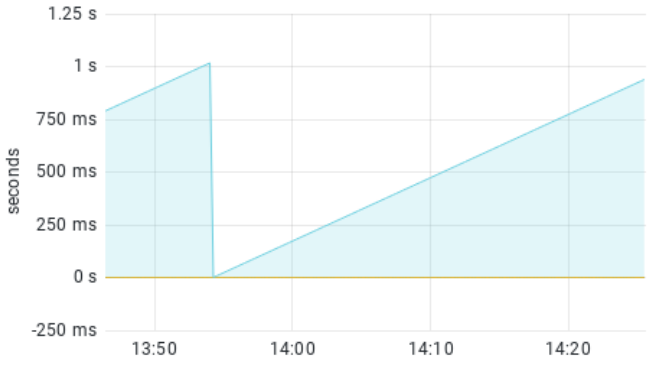
	min	max	av
Pgfault - Page major and minor fault operations	3.89 K	169.15 K	15.5
Pgmajfault - Major page fault operations	0	60.36	2
Pgminfault - Minor page fault operations	3.89 K	169.09 K	15.5

OOM Killer



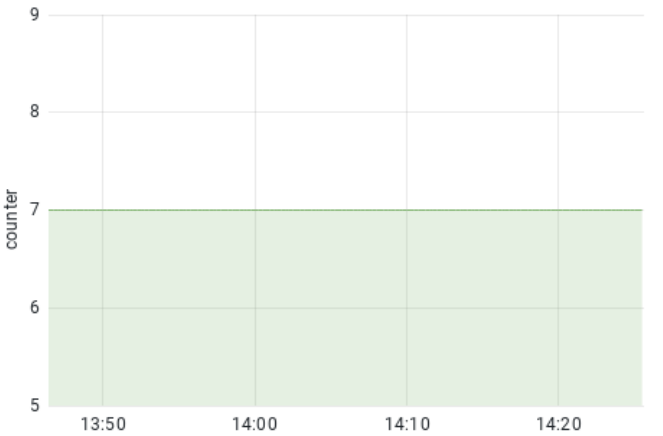
	min	max	avg	current
oom killer invocations	0	0	0	0

Time Syncronized Drift



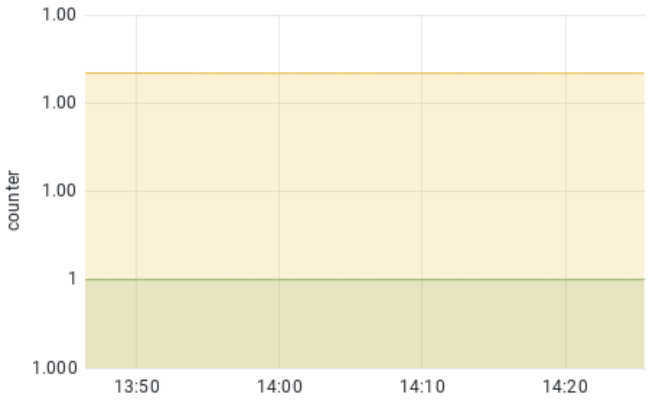
	min	max
Estimated error in seconds	0 s	0 s
Time offset in between local system and reference clock	-49 µs	1.75 µs
Maximum error in seconds	500 µs	1.02 s

Time PLL Adjust



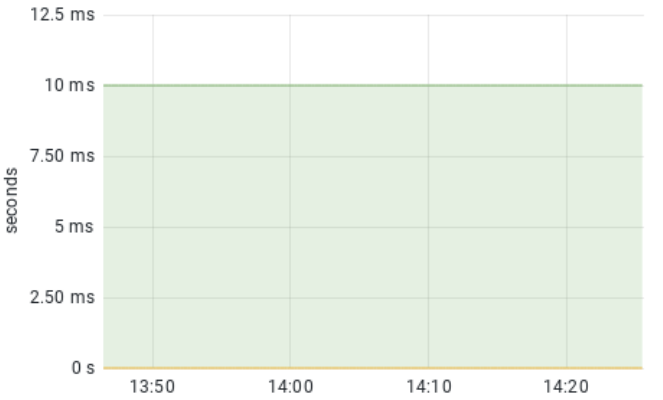
	min	max	avg	current
Phase-locked loop time adjust	7	7	7	7

Time Syncronized Status



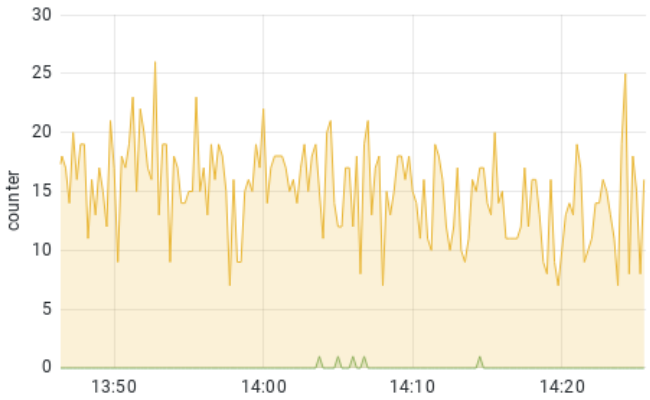
	min	max	avg
Is clock synchronized to a reliable server (1 = yes, 0 = no)	1	1	
Local clock frequency adjustment	1.00	1.00	1.0

Time Misc



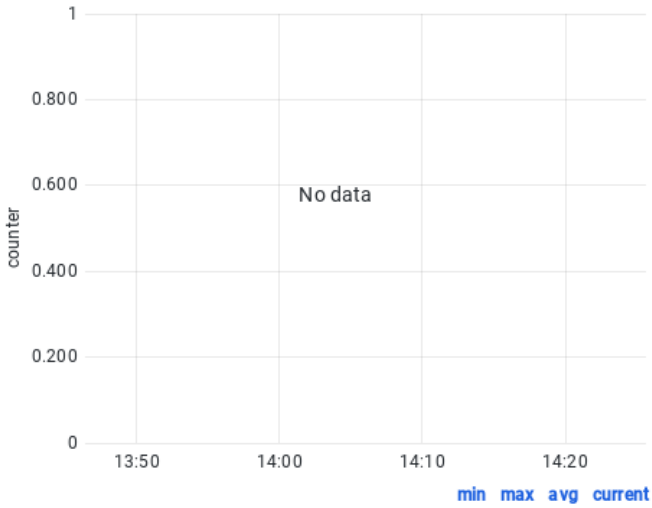
	min	max	avg	current
Seconds between clock ticks	10 ms	10 ms	10.0 ms	10 ms
International Atomic Time (TAI) offset	0 s	0 s	0 s	0 s

Processes Status

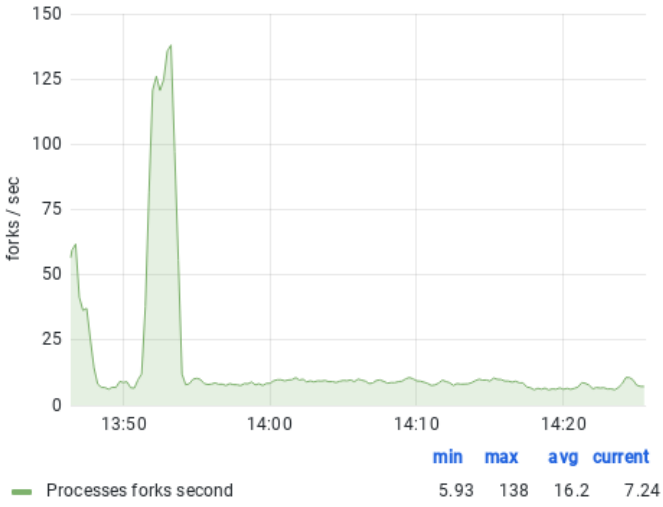


	min	max	avg	current
Processes blocked waiting for I/O to complete	0	1	0.0316	0
Processes in runnable state	7	26	15.1	16

Processes State

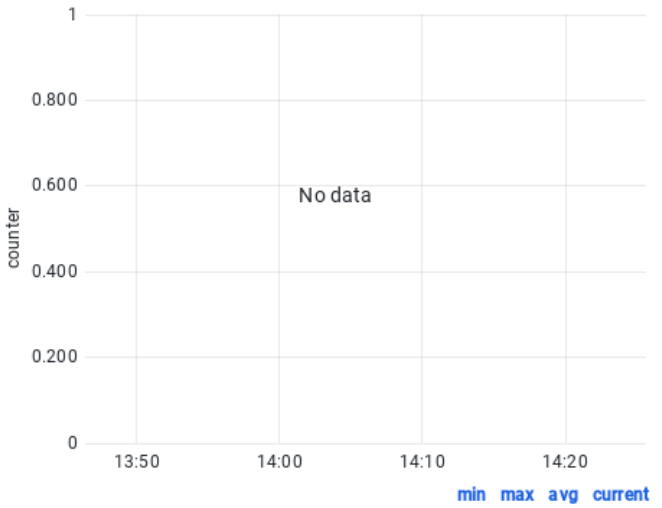


Processes Forks

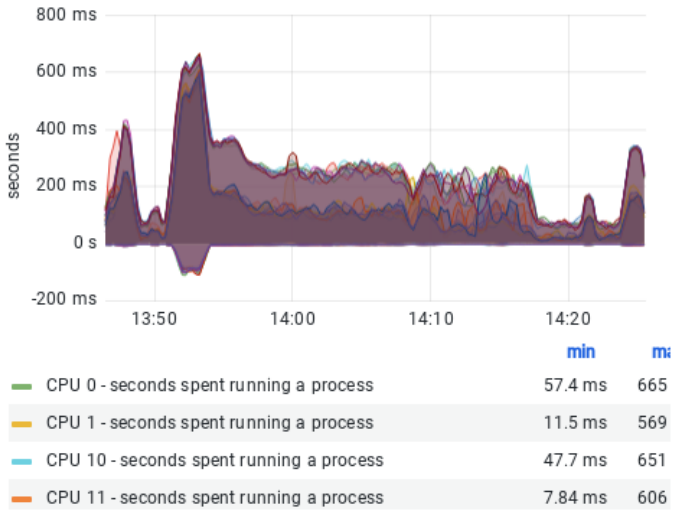


Processes Memory

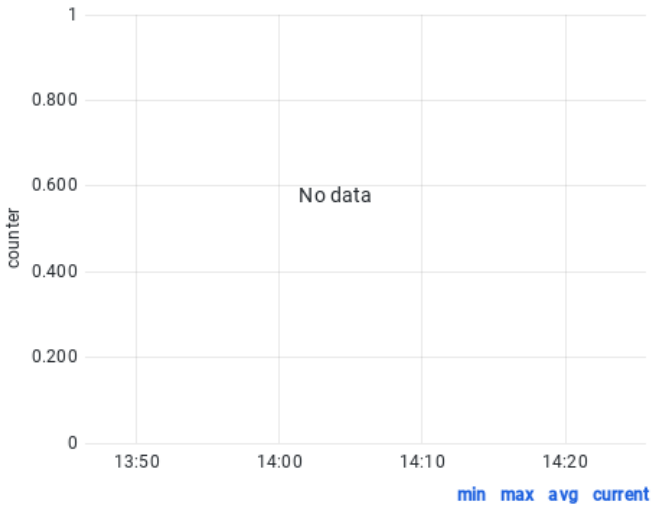
PIDs Number and Limit



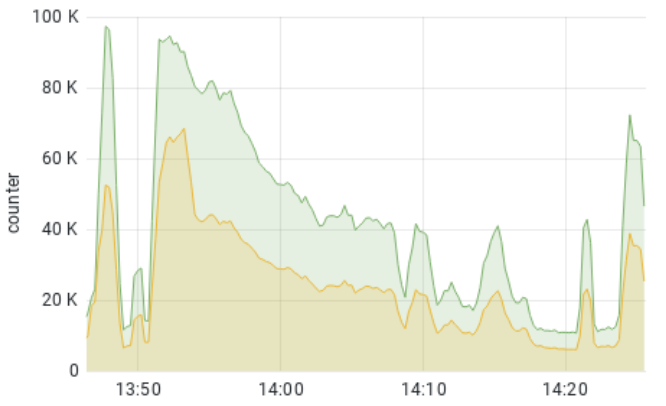
Process schedule stats Running / Waiting



Threads Number and Limit

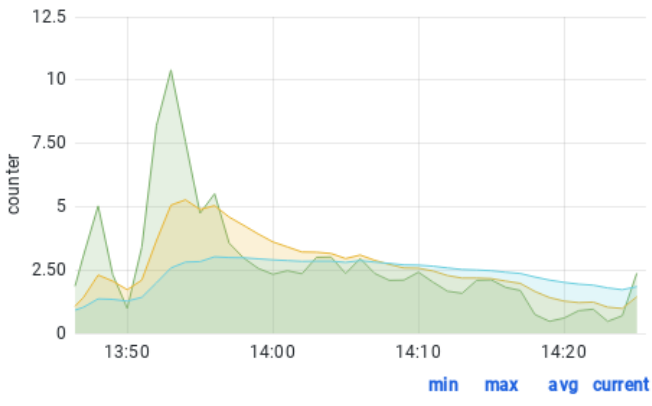


Context Switches / Interrupts



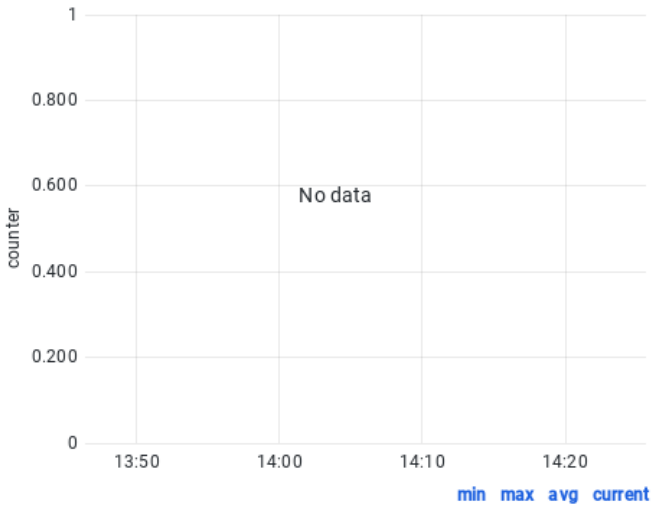
	min	max	avg	current
Context switches	10.7 K	97.3 K	42.3 K	46.5 K
Interrupts	5.98 K	68.6 K	24.1 K	25.3 K

System Load



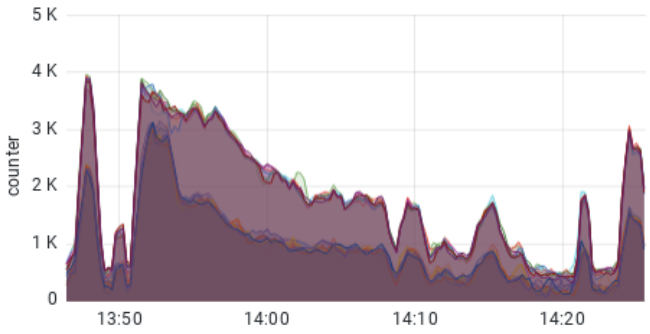
	min	max	avg	current
Load 1m	0.470	10.4	2.72	2.37
Load 5m	0.820	5.27	2.65	1.44
Load 15m	0.830	3.02	2.33	1.84

Interrupts Detail



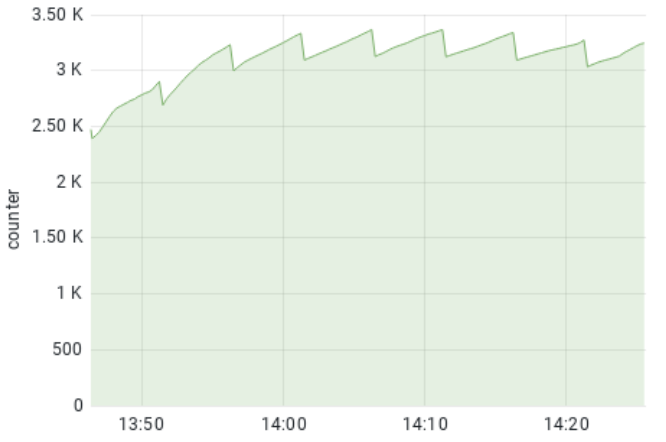
	min	max	avg	current

Schedule timeslices executed by each cpu



	min	max	avg	current
CPU 0	343	3.96 K	1.78 K	1.96 K
CPU 1	65.1	3.09 K	934	994
CPU 10	430	3.85 K	1.75 K	2.05 K
CPU 11	72.6	2.86 K	931	984

Entropy

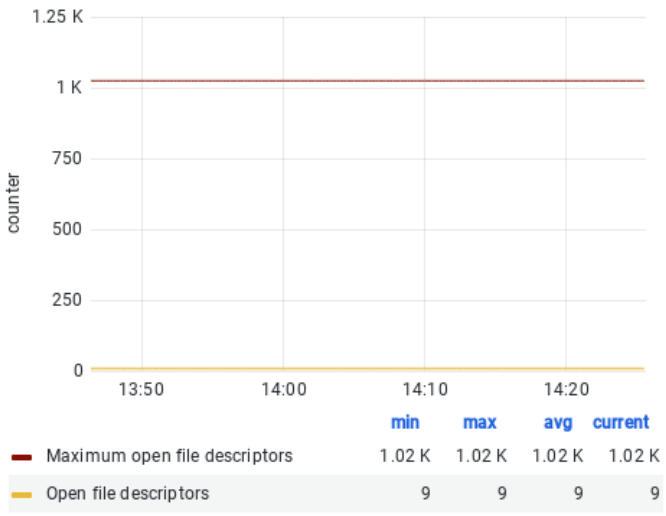


	min	max	avg
Entropy available to random number generators	2.39 K	3.37 K	3.11 K

CPU time spent in user and system contexts

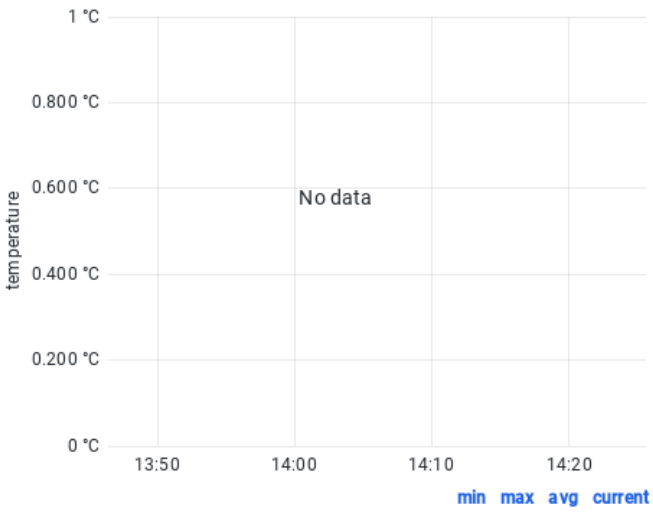
	min	max	avg	current
Time spent	4.73 ms	8.00 ms	6.25 ms	6.67 ms

File Descriptors

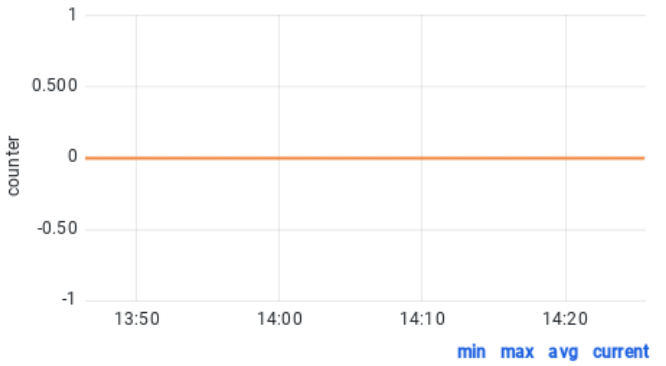


	min	max	avg	current
Maximum open file descriptors	1.02 K	1.02 K	1.02 K	1.02 K
Open file descriptors	9	9	9	9

Hardware temperature monitor

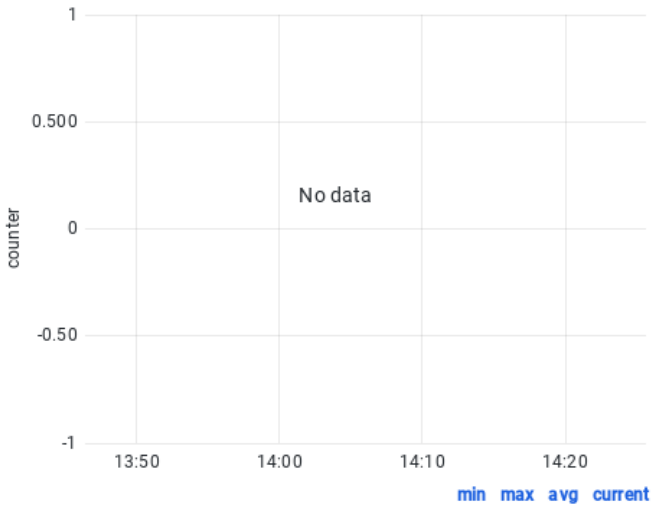


Throttle cooling device

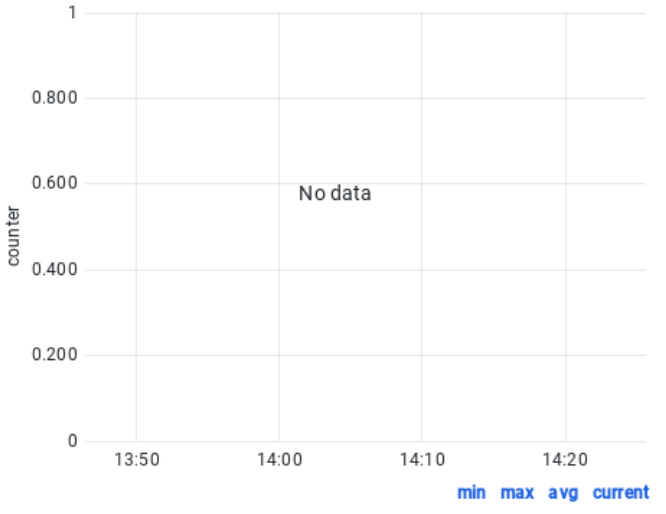


	min	max	avg	current
Current 0 in Processor	0	0	0	0
Current 1 in Processor	0	0	0	0
Current 10 in Processor	0	0	0	0
Current 11 in Processor	0	0	0	0

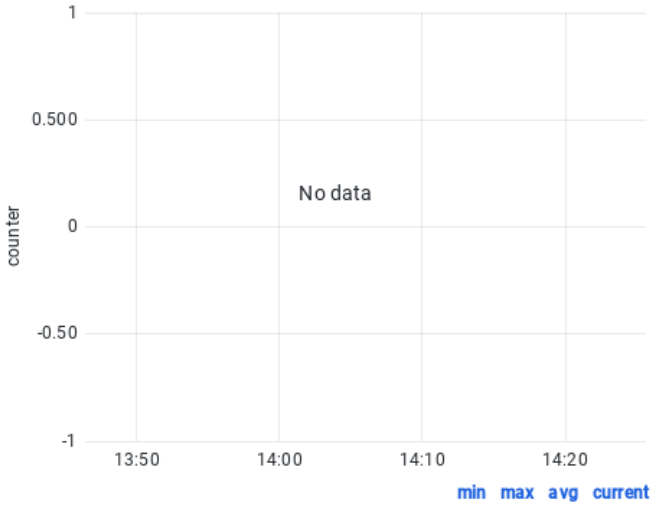
Power supply

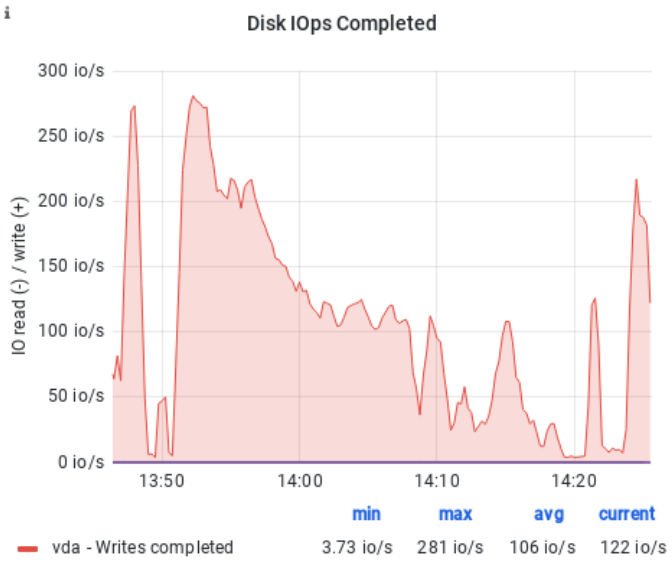


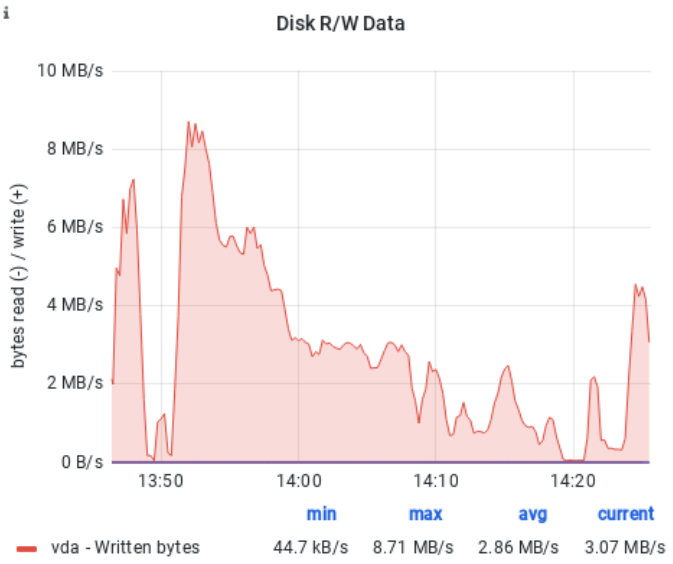
Systemd Sockets

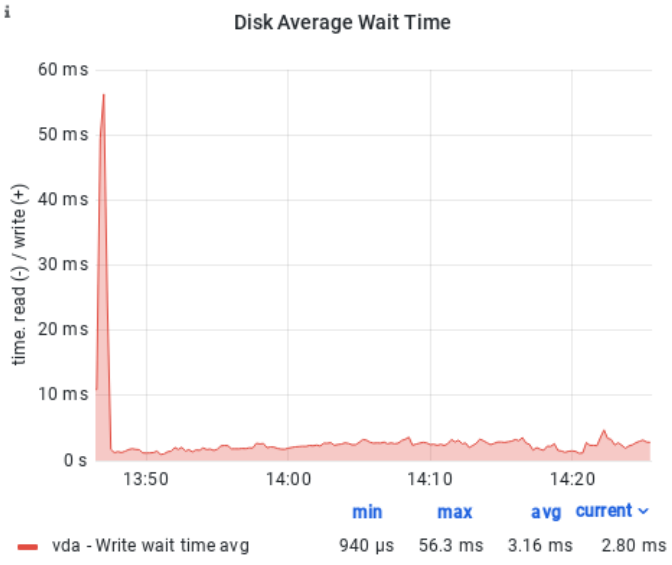


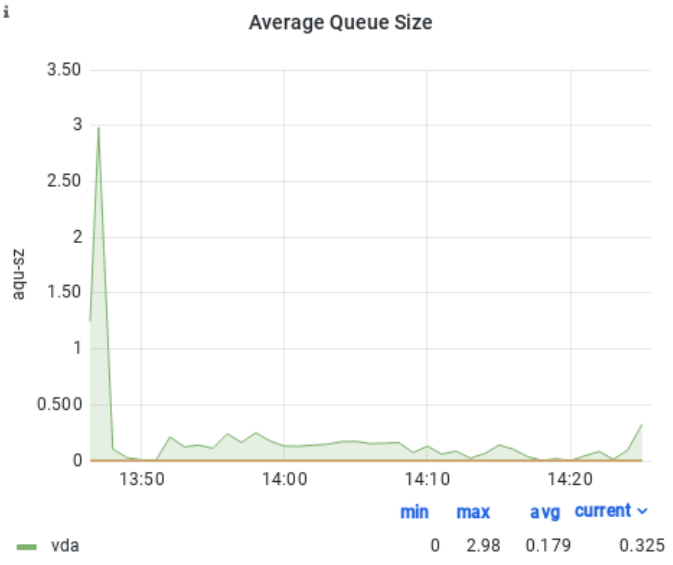
Systemd Units State

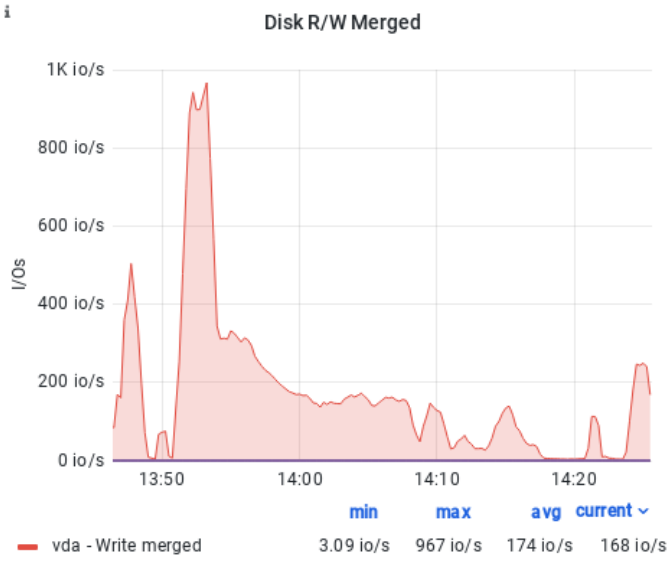


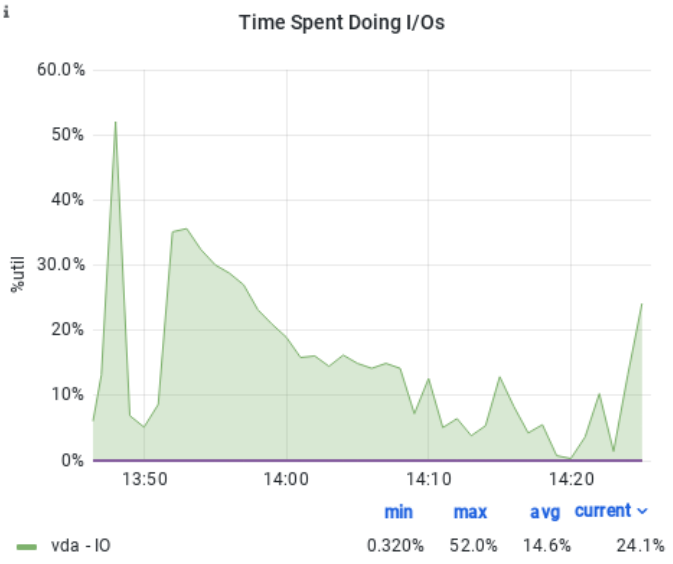

Disk IOps Completed
300 io/s
250 io/s
200 io/s
150 io/s
100 io/s
50 io/s
0 io/s
IO read (-) / write (+)
13:50
14:00
14:10
14:20
min max avg current
vda - Writes completed 3.73 io/s 281 io/s 106 io/s 122 io/s


Disk R/W Data
10 MB/s
8 MB/s
6 MB/s
4 MB/s
2 MB/s
0 B/s
bytes read (-) / write (+)
13:50
14:00
14:10
14:20
min max avg current
vda - Written bytes 44.7 kB/s 8.71 MB/s 2.86 MB/s 3.07 MB/s

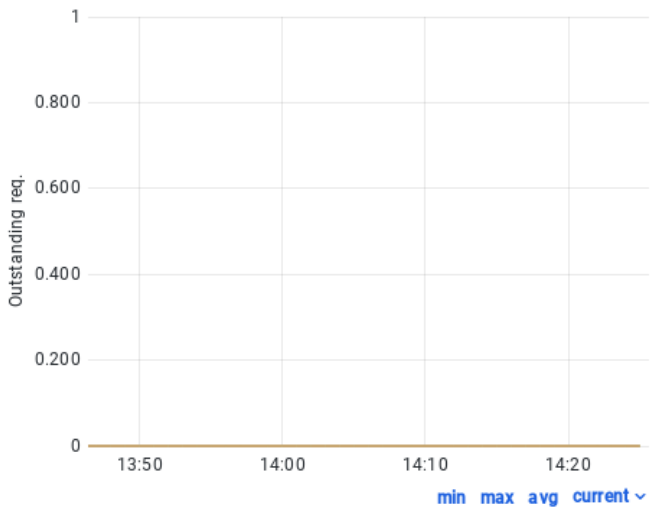

Disk Average Wait Time
60 ms
50 ms
40 ms
30 ms
20 ms
10 ms
0 s
time. read (-) / write (+)
13:50
14:00
14:10
14:20
min max avg current
vda - Write wait time avg 940 µs 56.3 ms 3.16 ms 2.80 ms


Average Queue Size
3.50
3
2.50
2
1.50
1
0.500
0
aqu-sz
13:50
14:00
14:10
14:20
min max avg current
vda 0 2.98 0.179 0.325

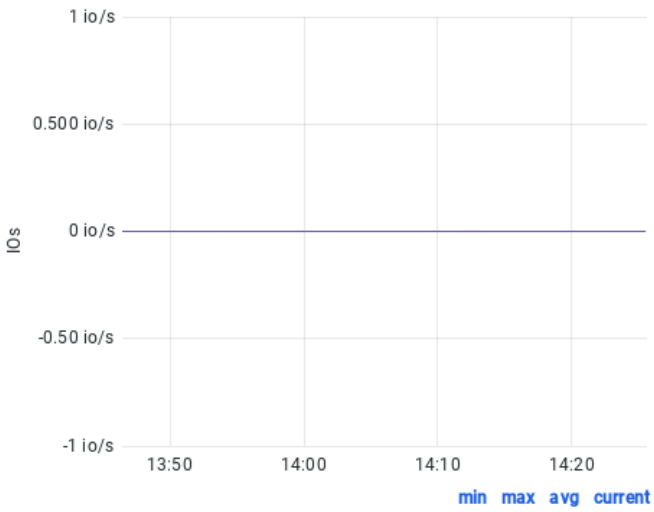

Disk R/W Merged
1K io/s
800 io/s
600 io/s
400 io/s
200 io/s
0 io/s
I/Os
13:50
14:00
14:10
14:20
min max avg current
vda - Write merged 3.09 io/s 967 io/s 174 io/s 168 io/s


Time Spent Doing I/Os
60.0%
50%
40%
30.0%
20%
10%
0%
%util
13:50
14:00
14:10
14:20
min max avg current
vda - IO 0.320% 52.0% 14.6% 24.1%

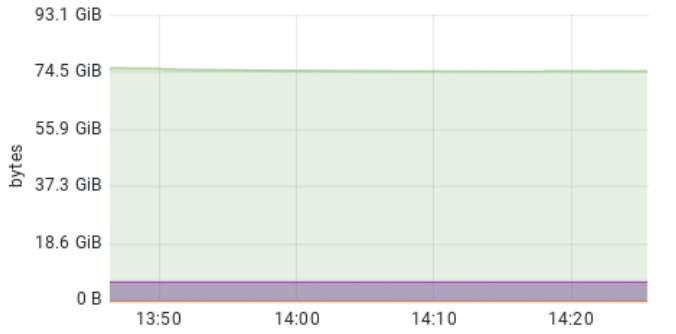
Instantaneous Queue Size



Disk IOps Discards completed / merged

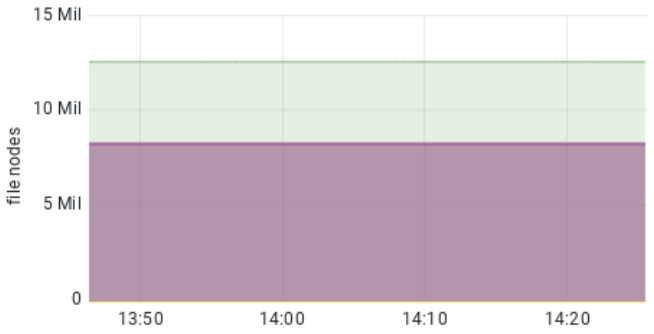


Filesystem space available



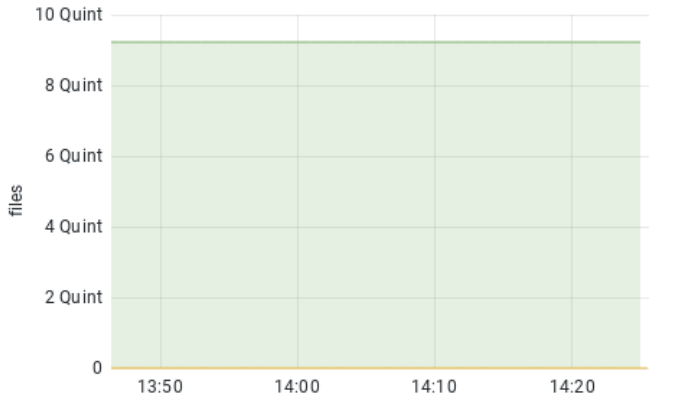
	min	max	avg	cu
/ - Available	74.643 GiB	75.783 GiB	74.935 GiB	74.7
/boot/efi - Available	99.157 MiB	99.157 MiB	99.157 MiB	99.15
/run - Available	6.279 GiB	6.279 GiB	6.279 GiB	6.2
/run/lock - Available	5.000 MiB	5.000 MiB	5.000 MiB	5.00

File Nodes Free



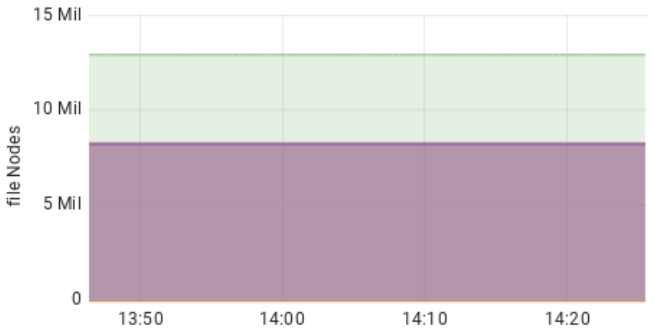
	min	max	avg	current
/ - Free file nodes	12.5 Mil	12.5 Mil	12.5 Mil	12.5 Mil
/run - Free file nodes	8.23 Mil	8.23 Mil	8.23 Mil	8.23 Mil
/run/lock - Free file nodes	8.23 Mil	8.23 Mil	8.23 Mil	8.23 Mil
/run/snapd/ns - Free file nodes	8.23 Mil	8.23 Mil	8.23 Mil	8.23 Mil

File Descriptor



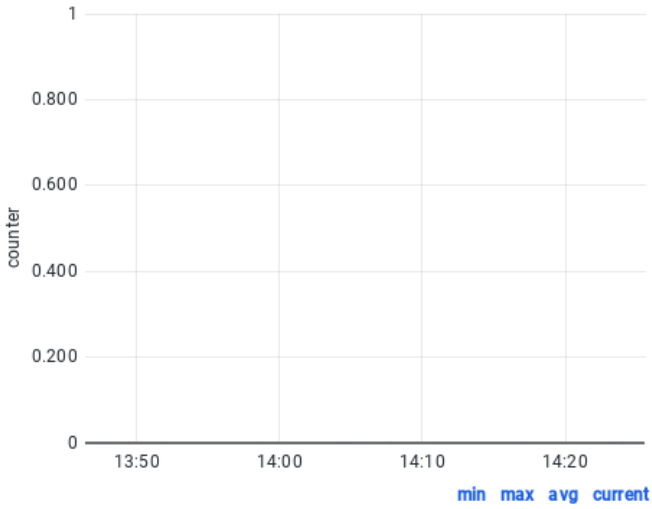
	min	max	avg	current
Max open files	9.22 Quint	9.22 Quint	9.22 Quint	9.22 Quint
Open files	5.98 K	12.5 K	8.16 K	8.29 K

File Nodes Size

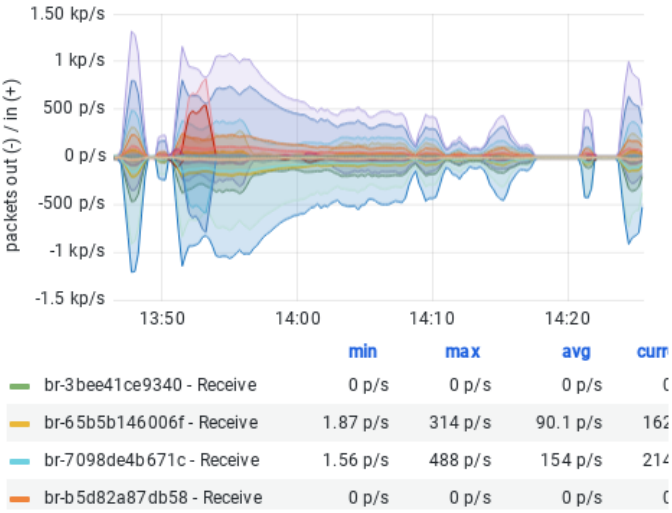


	min	max	avg	current
/ - File nodes total	12.9 Mil	12.9 Mil	12.9 Mil	12.9 Mil
/run - File nodes total	8.23 Mil	8.23 Mil	8.23 Mil	8.23 Mil
/run/lock - File nodes total	8.23 Mil	8.23 Mil	8.23 Mil	8.23 Mil
/run/snapd/ns - File nodes total	8.23 Mil	8.23 Mil	8.23 Mil	8.23 Mil

Filesystem in ReadOnly / Error

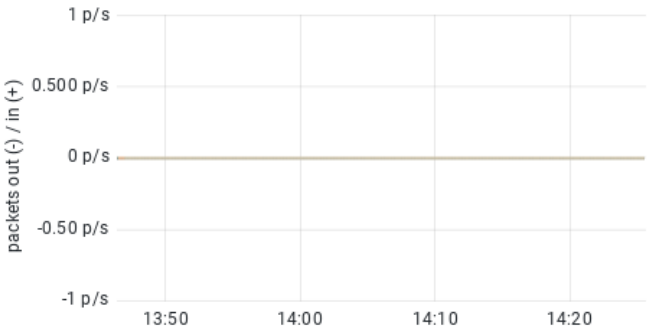


Network Traffic by Packets



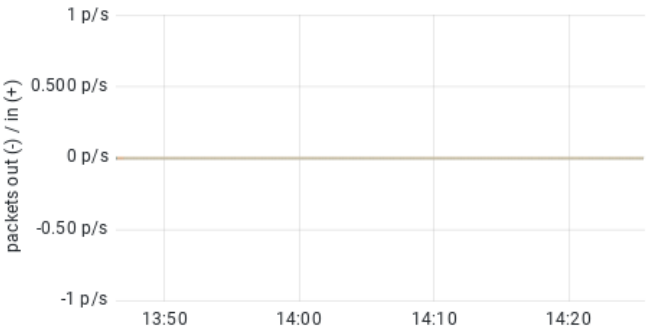
	min	max	avg	curr
br-3bee41ce9340 - Receive	0 p/s	0 p/s	0 p/s	0
br-65b5b146006f - Receive	1.87 p/s	314 p/s	90.1 p/s	162
br-7098de4b671c - Receive	1.56 p/s	488 p/s	154 p/s	214
br-b5d82a87db58 - Receive	0 p/s	0 p/s	0 p/s	0

Network Traffic Errors



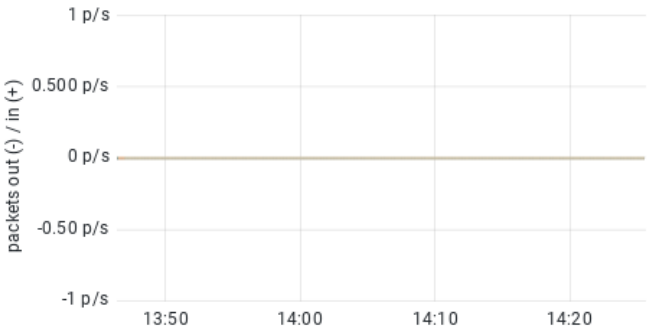
	min	max	avg	current
vethfef57ee - Rransmit errors	0 p/s	0 p/s	0 p/s	0 p/s
vethd571ab6 - Rransmit errors	0 p/s	0 p/s	0 p/s	0 p/s
vethd4aaa77 - Rransmit errors	0 p/s	0 p/s	0 p/s	0 p/s
vethd0980e4 - Rransmit errors	0 p/s	0 p/s	0 p/s	0 p/s

Network Traffic Drop



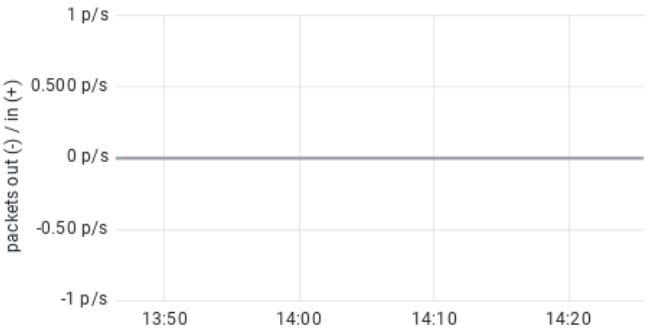
	min	max	avg	current
vethfef57ee - Transmit drop	0 p/s	0 p/s	0 p/s	0 p/s
vethd571ab6 - Transmit drop	0 p/s	0 p/s	0 p/s	0 p/s
vethd4aaa77 - Transmit drop	0 p/s	0 p/s	0 p/s	0 p/s
vethd0980e4 - Transmit drop	0 p/s	0 p/s	0 p/s	0 p/s

Network Traffic Compressed



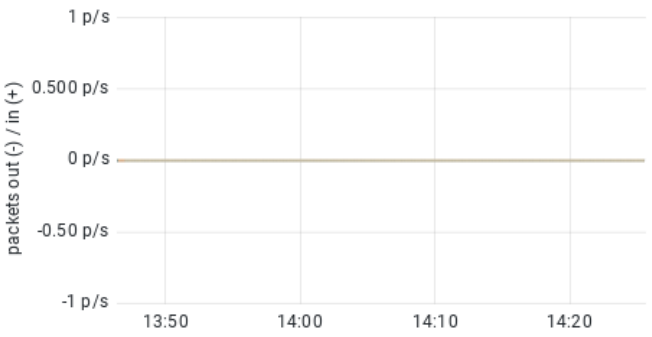
	min	max	avg	current
vethfef57ee - Transmit compressed	0 p/s	0 p/s	0 p/s	0 p/s
vethd571ab6 - Transmit compressed	0 p/s	0 p/s	0 p/s	0 p/s
vethd4aaa77 - Transmit compressed	0 p/s	0 p/s	0 p/s	0 p/s
vethd0980e4 - Transmit compressed	0 p/s	0 p/s	0 p/s	0 p/s

Network Traffic Multicast



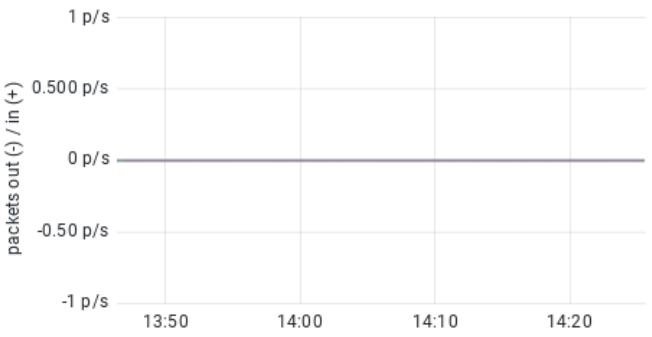
	min	max	avg	current
vethfef57ee - Receive multicast	0 p/s	0 p/s	0 p/s	0 p/s
vethd571ab6 - Receive multicast	0 p/s	0 p/s	0 p/s	0 p/s
vethd4aaa77 - Receive multicast	0 p/s	0 p/s	0 p/s	0 p/s
vethd0980e4 - Receive multicast	0 p/s	0 p/s	0 p/s	0 p/s

Network Traffic Fifo



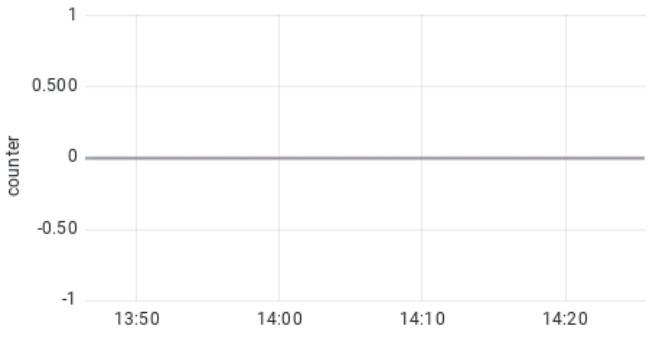
	min	max	avg	current
vethfef57ee - Transmit fifo	0 p/s	0 p/s	0 p/s	0 p/s
vethd571ab6 - Transmit fifo	0 p/s	0 p/s	0 p/s	0 p/s
vethd4aaa77 - Transmit fifo	0 p/s	0 p/s	0 p/s	0 p/s
vethd0980e4 - Transmit fifo	0 p/s	0 p/s	0 p/s	0 p/s

Network Traffic Frame



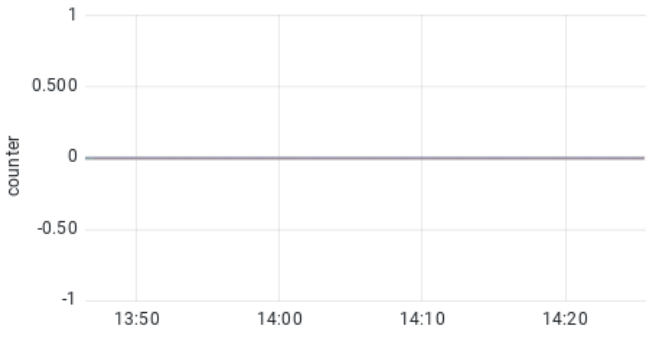
	min	max	avg	current
vethfef57ee - Receive frame	0 p/s	0 p/s	0 p/s	0 p/s
vethd571ab6 - Receive frame	0 p/s	0 p/s	0 p/s	0 p/s
vethd4aaa77 - Receive frame	0 p/s	0 p/s	0 p/s	0 p/s
vethd0980e4 - Receive frame	0 p/s	0 p/s	0 p/s	0 p/s

Network Traffic Carrier



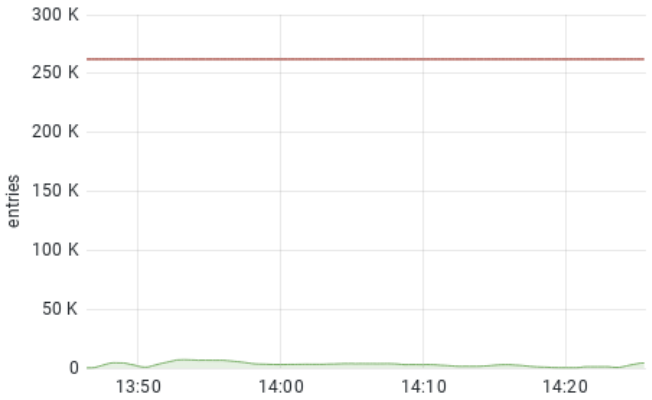
	min	max	avg	current
vethfef57ee - Statistic transmit_carrier	0	0	0	0
vethd571ab6 - Statistic transmit_carrier	0	0	0	0
vethd4aaa77 - Statistic transmit_carrier	0	0	0	0
vethd0980e4 - Statistic transmit_carrier	0	0	0	0

Network Traffic Colls



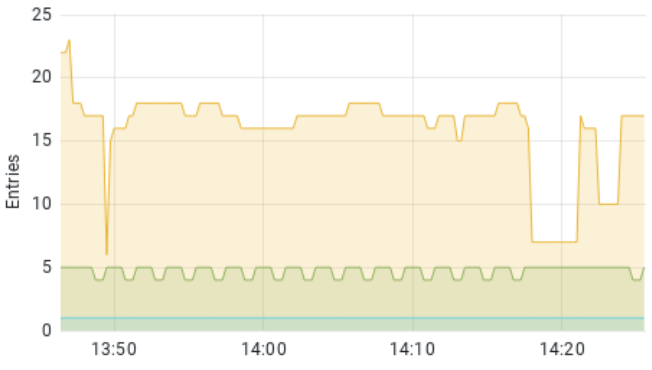
	min	max	avg	current
vethfef57ee - Transmit colls	0	0	0	0
vethd571ab6 - Transmit colls	0	0	0	0
vethd4aaa77 - Transmit colls	0	0	0	0
vethd0980e4 - Transmit colls	0	0	0	0

NF Contrack



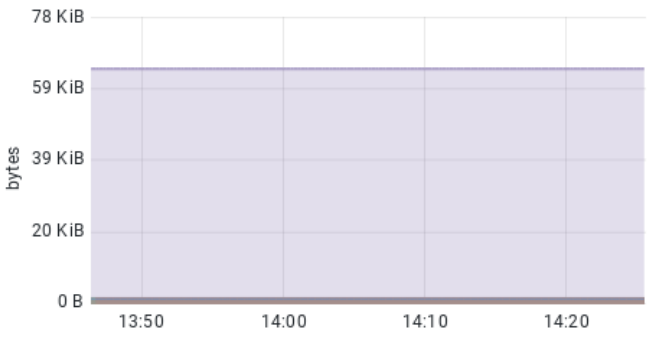
	min	max	avg	current
NF conntrack entries	118	7.09 K	3.00 K	4.27 K
NF conntrack limit	262 K	262 K	262 K	262 K

ARP Entries



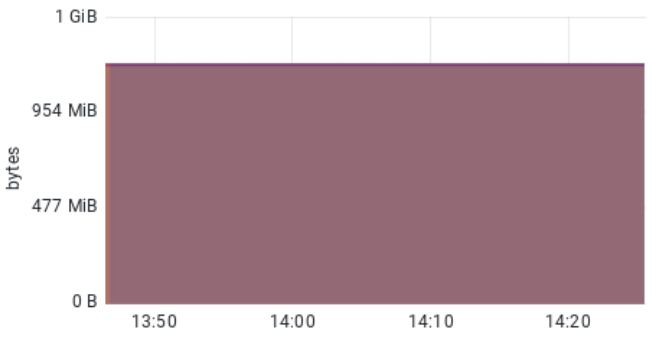
	min	max	avg	current
br-65b5b146006f - ARP entries	4	5	4.70	5
br-7098de4b671c - ARP entries	6	23	16	17
ens3 - ARP entries	1	1	1	1

MTU



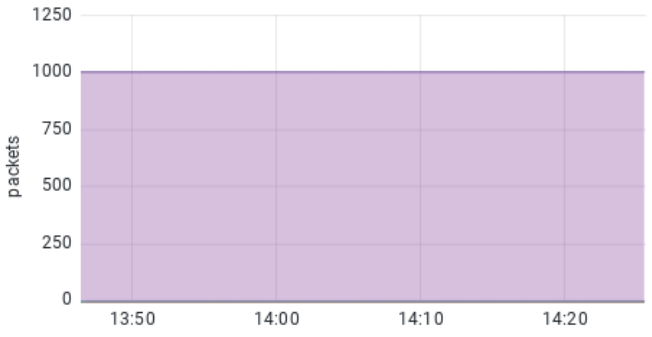
	min	max	avg	current
br-3bee41ce9340 - Bytes	1.5 KiB	1.5 KiB	1.5 KiB	1.5 KiB
br-65b5b146006f - Bytes	1.5 KiB	1.5 KiB	1.5 KiB	1.5 KiB
br-7098de4b671c - Bytes	1.5 KiB	1.5 KiB	1.5 KiB	1.5 KiB
br-b5d82a87db58 - Bytes	1.5 KiB	1.5 KiB	1.5 KiB	1.5 KiB

Speed



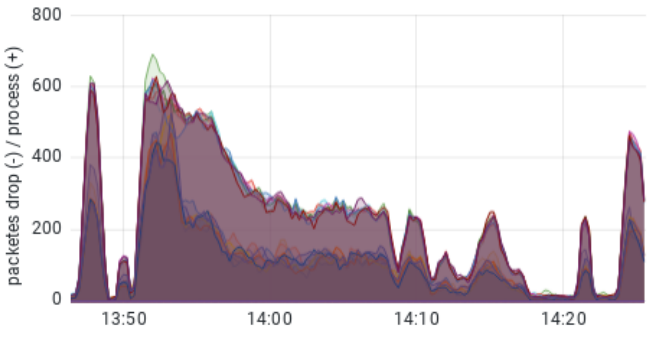
	min	max	avg	current
ens3 - Speed	-122.1 KiB	-122.1 KiB	-122.1 KiB	-122.1 KiB
veth16fb4cb - Speed	1.2 GiB	1.2 GiB	1.2 GiB	1.2 GiB
veth19ed248 - Speed	1.2 GiB	1.2 GiB	1.2 GiB	
veth1b6be1f - Speed	1.2 GiB	1.2 GiB	1.2 GiB	1.2 GiB

Queue Length



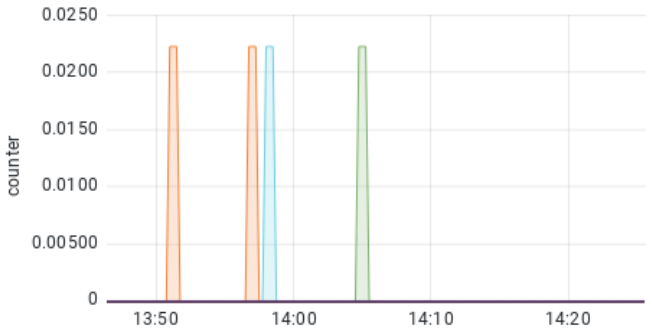
	min	max	a
br-3bee41ce9340 - Interface transmit queue length	0	0	
br-65b5b146006f - Interface transmit queue length	0	0	
br-7098de4b671c - Interface transmit queue length	0	0	
br-b5d82a87db58 - Interface transmit queue length	0	0	

Softnet Packets



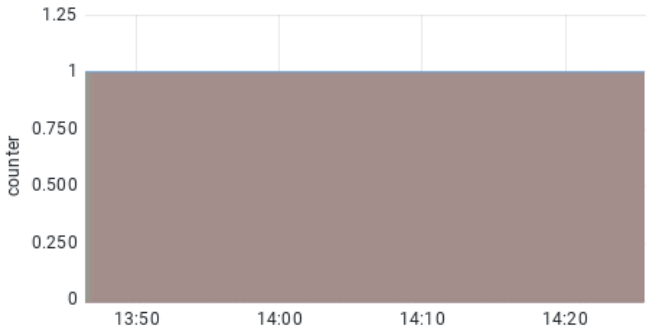
	min	max	avg	current
CPU 12 - Processed	8.13	603	233	291
CPU 0 - Processed	5.93	690	235	286
CPU 8 - Processed	3.11	616	233	283
CPU 4 - Processed	2.47	617	228	282

Softnet Out of Quota



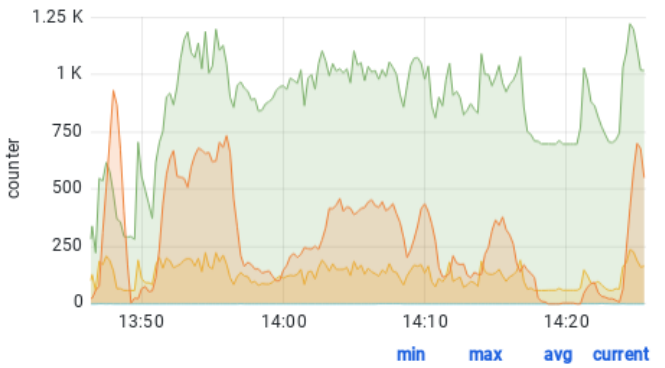
	min	max	avg	current
CPU 9 - Squeezed	0	0	0	0
CPU 8 - Squeezed	0	0	0	0
CPU 7 - Squeezed	0	0	0	0
CPU 6 - Squeezed	0	0	0	0

Network Operational Status



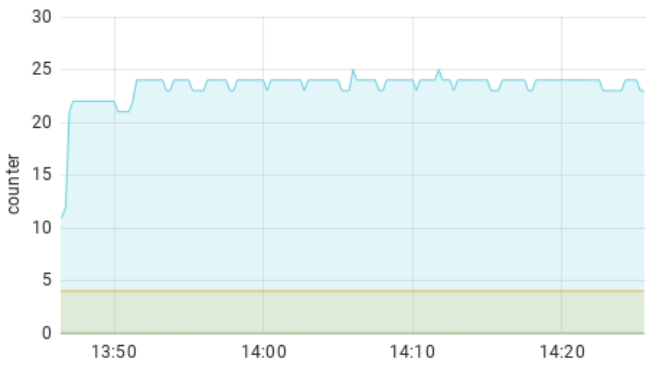
	min	max	avg	current
vethfef57ee - Physical link state	1	1	1	1
vethd571ab6 - Physical link state	1	1	1	1
vethd4aaa77 - Physical link state	1	1	1	1
vethd0980e4 - Physical link state	1	1	1	1

Sockstat TCP



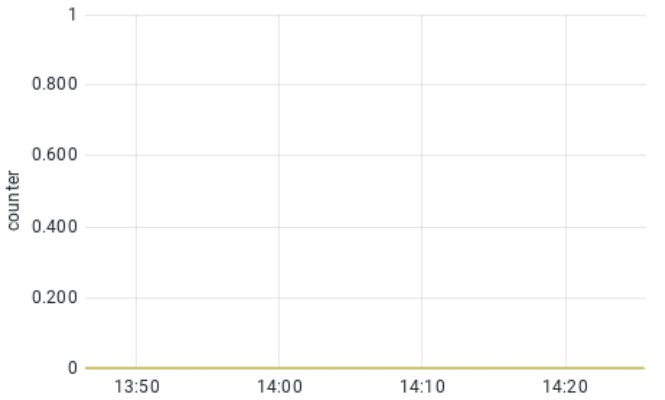
	min	max	avg	current
TCP_alloc - Allocated sockets	175	1.22 K	873	1.02 K
TCP_inuse - Tcp sockets currently in use	56	237	126	165
TCP_orphan - Orphan sockets	0	3	0.152	0
TCP_tw - Sockets wating close	0	930	283	550

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	11	25	23.3	23

Sockstat FRAG / RAW

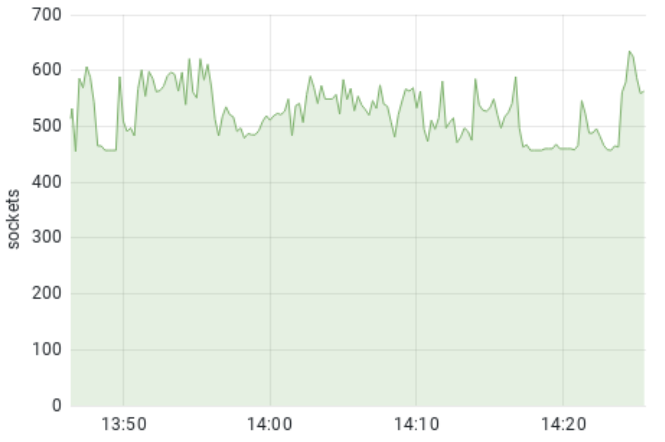


	min	max	avg	current
FRAG_inuse - Frag sockets currently in use	0	0	0	0
RAW_inuse - Raw sockets currently in use	0	0	0	0

Sockstat Memory Size

	min	max	avg	cur
mem_bytes - TCP sockets in that state	24 KiB	5.98 MiB	4.48 MiB	5.1
mem_bytes - UDP sockets in that state	44 KiB	100 KiB	93.3 KiB	9
FRAG_memory - Used memory for frag	0 B	0 B	0 B	

Sockstat Used

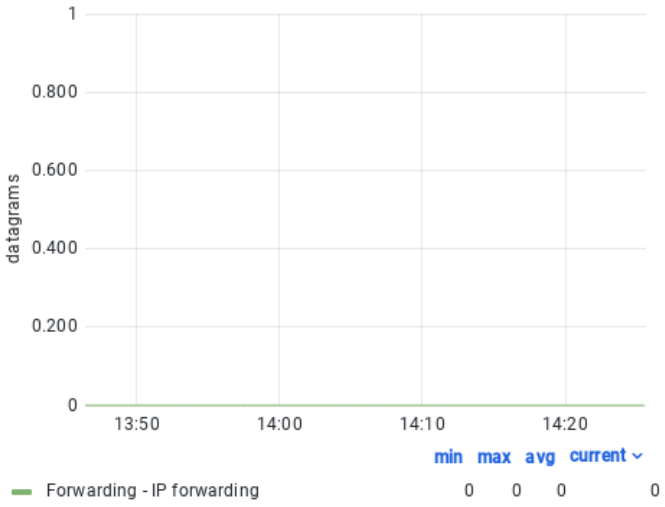


	min	max	avg	current
Sockets_used - Sockets currently in use	455	635	525	563

Netstat IP In / Out Octets

	min	max	avg	current
OutOctets - Sent octets	3.07 K	553 K	156 K	232 K
InOctets - Received octets	1.73 K	509 K	149 K	231 K

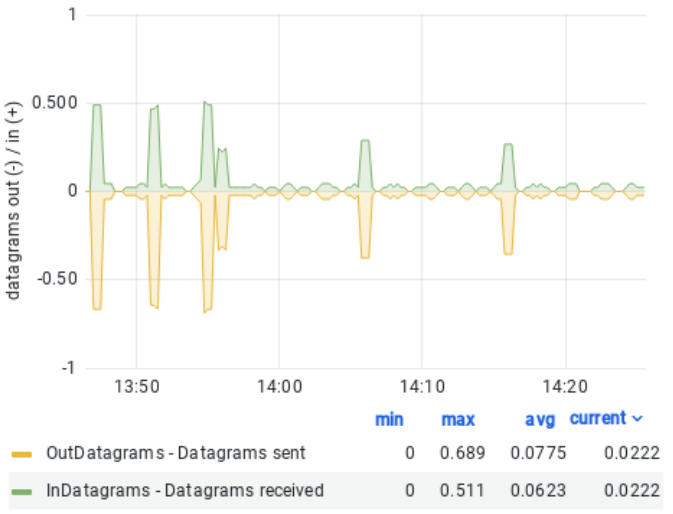
Netstat IP Forwarding



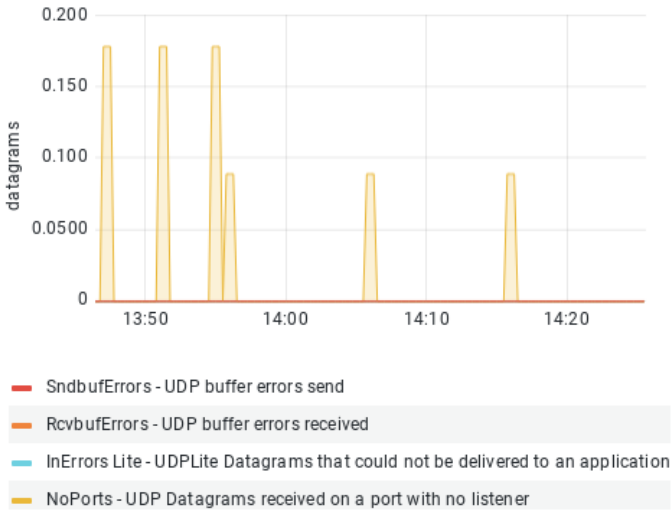
ICMP In / Out

ICMP Errors

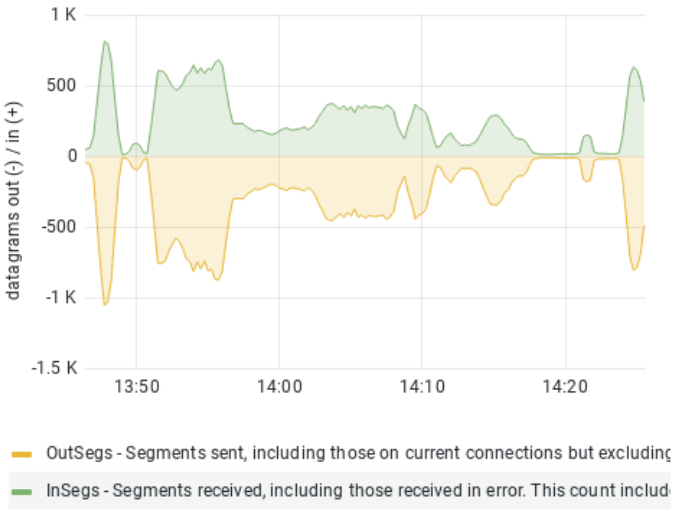
UDP In / Out



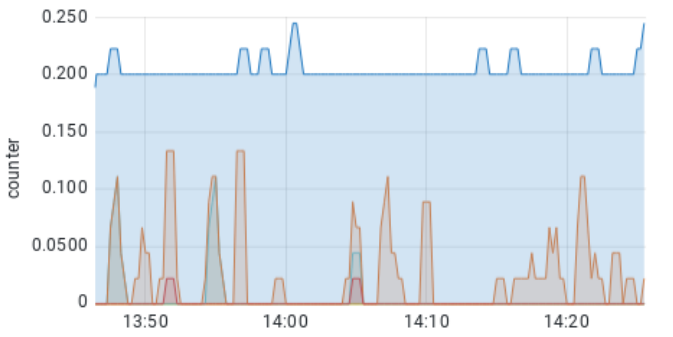
UDP Errors



TCP In / Out

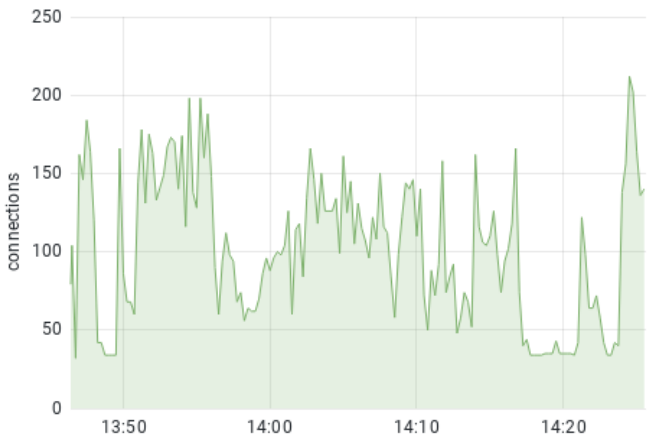


TCP Errors



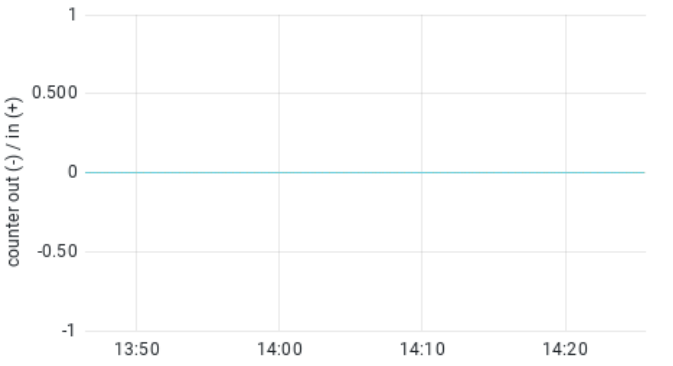
- OutRsts - Segments sent with RST flag
- RetransSegs - Segments retransmitted - that is, the number of TCP segments tr
- InErrs - Segments received in error (e.g., bad TCP checksums)
- TCPSynRetrans - SYN-SYN/ACK retransmits to break down retransmissions in

TCP Connections



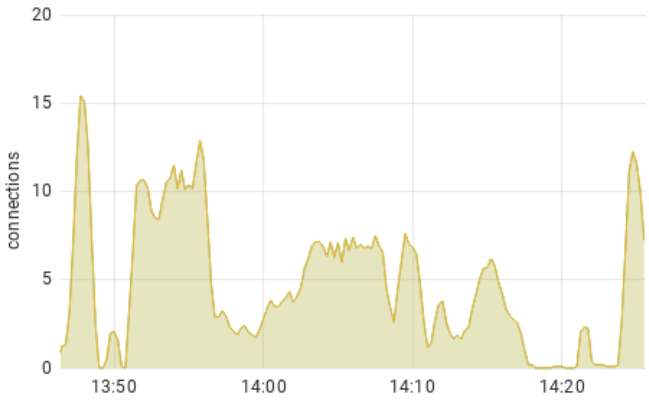
- CurrEstab - TCP connections for which the current state is either ESTABLISHED

TCP SynCookie



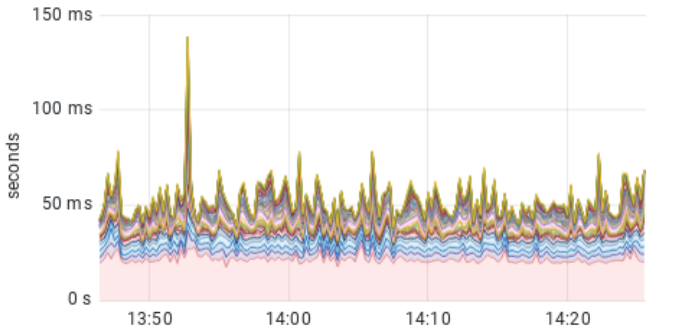
	min	max	avg	current
SyncookiesSent - SYN cookies sent	0	0	0	0
SyncookiesRecv - SYN cookies received	0	0	0	0
SyncookiesFailed - Invalid SYN cookies received	0	0	0	0

TCP Direct Transition



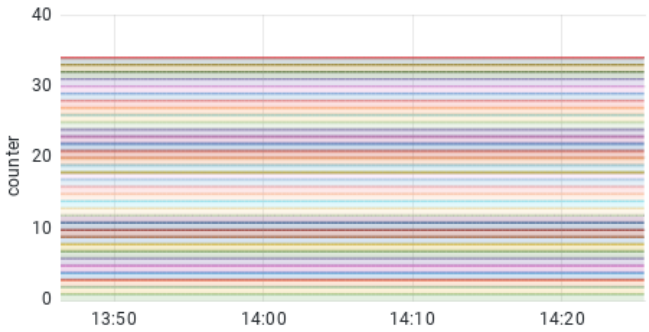
- ActiveOpens - TCP connections that have made a direct transition to the SYN-S
- PassiveOpens - TCP connections that have made a direct transition to the SYN

Node Exporter Scrape Time



	min	max	avg	current
netclass - Scrape duration	17.8 ms	29.6 ms	22.1 ms	20.8
diskstats - Scrape duration	1.76 ms	9.55 ms	3.42 ms	4.01
cpu - Scrape duration	1.14 ms	7.91 ms	3.01 ms	3.86
netdev - Scrape duration	1.35 ms	6.02 ms	3.01 ms	3.74

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