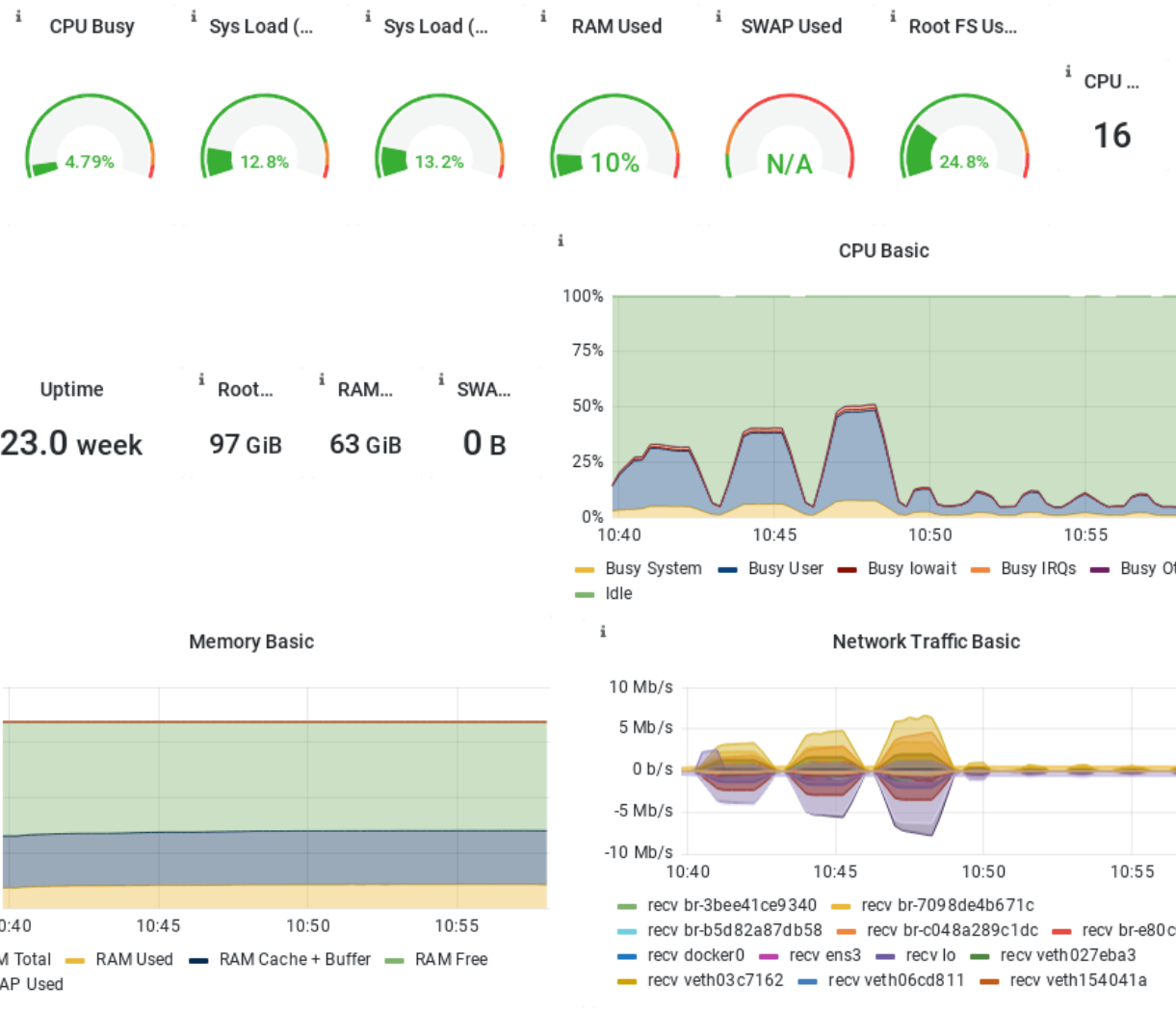
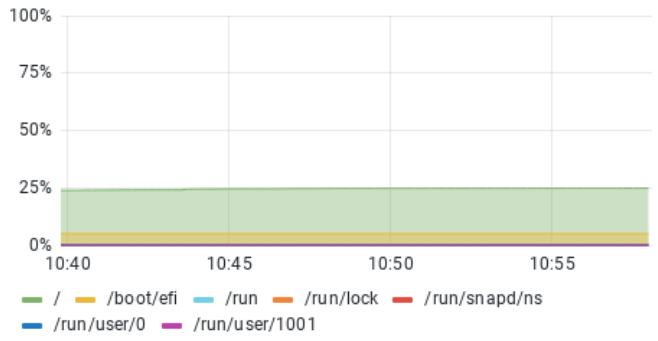
Host Metrics

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

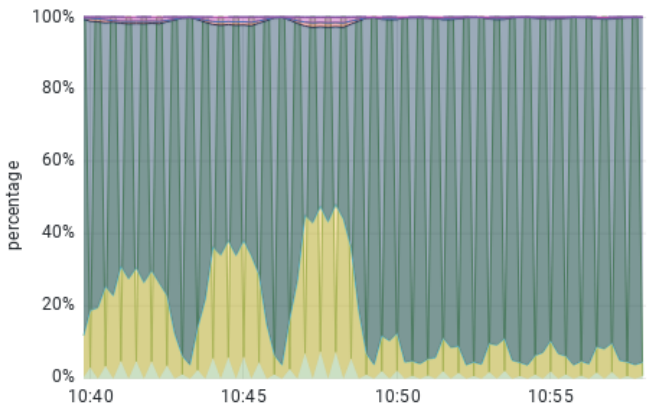
Tue Mar 22 10:39:47 UTC 2022
to
Tue Mar 22 10:58:06 UTC 2022



Disk Space Used Basic

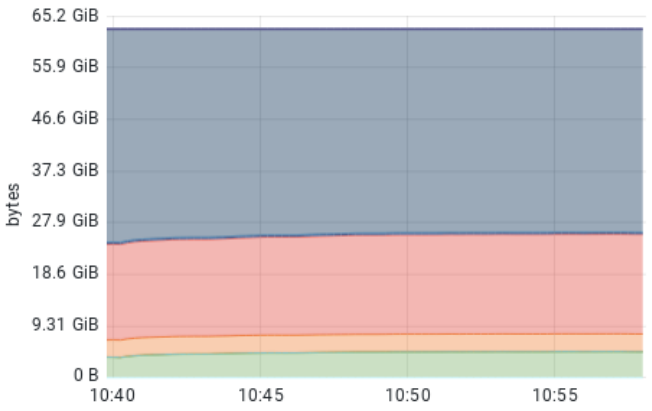


CPU



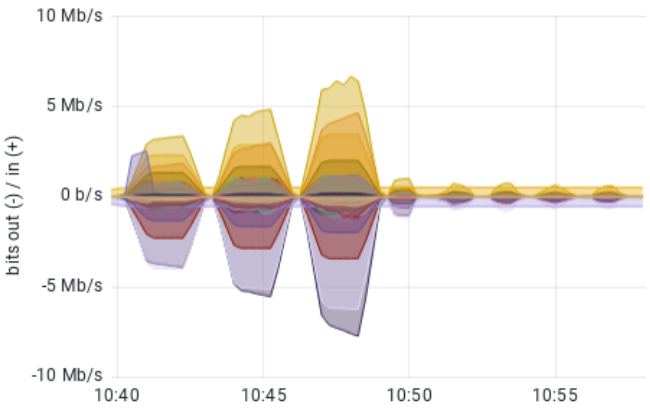
- System - Processes executing in kernel mode
- User - Normal processes executing in user mode
- Nice - Niced processes executing in user mode
- Idle - Waiting for something to happen
- Iowait - Waiting for I/O to complete

Memory Stack



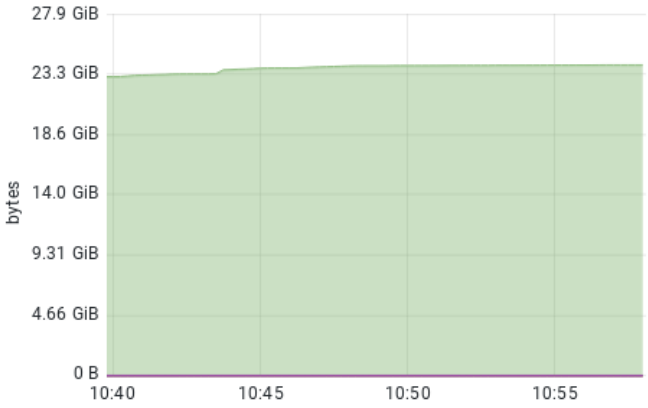
- Apps - Memory used by user-space applications
- PageTables - Memory used to map between virtual and physical memory addr
- SwapCache - Memory that keeps track of pages that have been fetched from s
- Slab - Memory used by the kernel to cache data structures for its own use (cacl
- Cache - Parked file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

Network Traffic



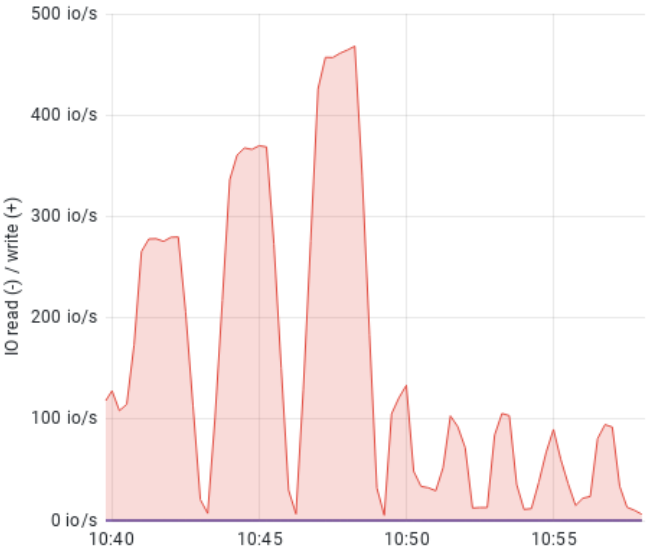
	min	max	avg	curren
br-3bee41ce9340 - Receive	0 b/s	0 b/s	0 b/s	0 b
br-7098de4b671c - Receive	14.4 kb/s	3.44 Mb/s	1.02 Mb/s	41.3 kb
br-b5d82a87db58 - Receive	0 b/s	0 b/s	0 b/s	0 b
br-c048a289c1dc - Receive	806 b/s	4.63 Mb/s	998 kb/s	816 b
br-e80c0fa915ee - Receive	0 b/s	0 b/s	0 b/s	0 b

Disk Space Used



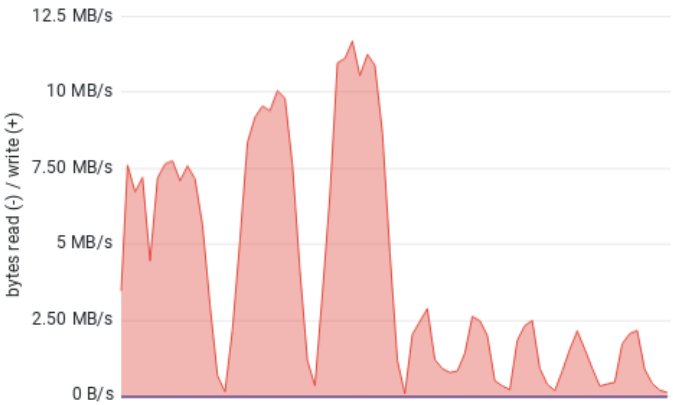
	min	max	avg	current
/run/lock	0 B	0 B	0 B	0 B
/run/user/0	0 B	0 B	0 B	0 B
/run/user/1001	0 B	0 B	0 B	0 B
/run	3.652 MiB	3.719 MiB	3.718 MiB	3.719 MiB
/run/snapd/ns	3.652 MiB	3.719 MiB	3.718 MiB	3.719 MiB

Disk IOps



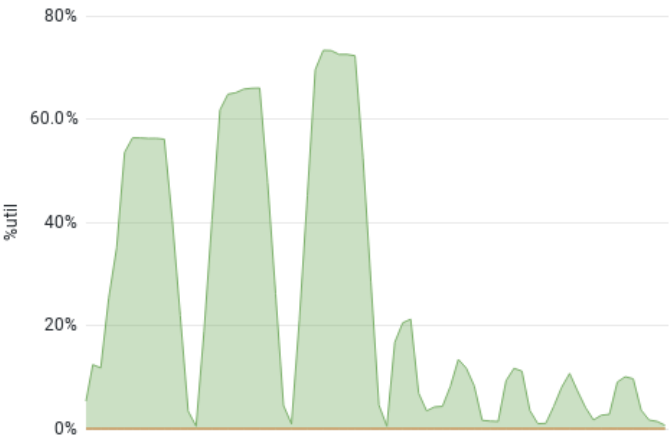
	min	max	avg	current
vda - Writes completed	5.18 io/s	468 io/s	151 io/s	6.16 io/s

I/O Usage Read / Write



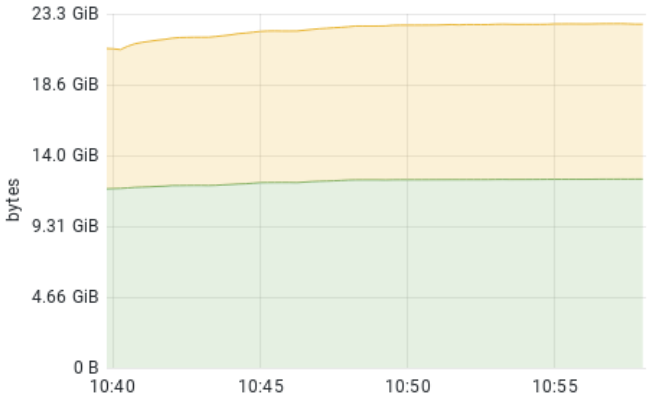
	min	max	avg
vda - Successfully read bytes	0 B/s	0 B/s	0 B/s
vdb - Successfully read bytes	0 B/s	0 B/s	0 B/s
vdc - Successfully read bytes	0 B/s	0 B/s	0 B/s
vdd - Successfully read bytes	0 B/s	0 B/s	0 B/s
vda - Successfully written bytes	100.762 kB/s	11.669 MB/s	3.993 MB/s

I/O Utilization



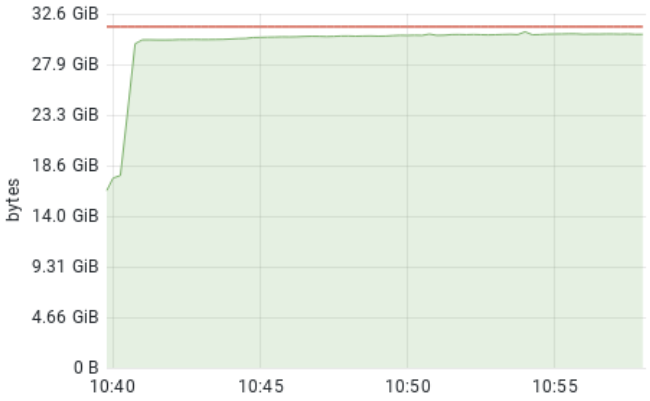
	min	max	avg	current
vda	0.471%	73.298%	24.888%	0.649%
vdb	0%	0%	0%	0%
vdc	0%	0%	0%	0%
vdd	0%	0%	0%	0%

Memory Active / Inactive



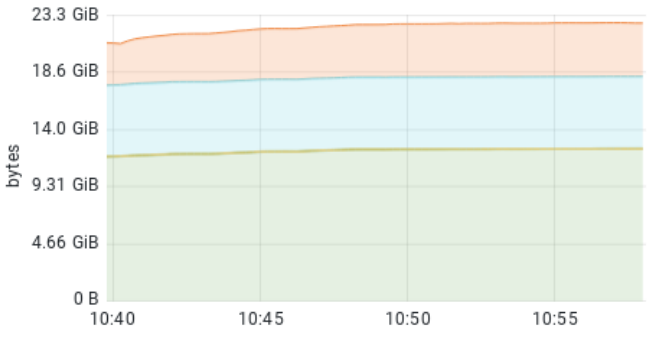
- Inactive - Memory which has been less recently used. It is more eligible to be re
- Active - Memory that has been used more recently and usually not reclaimed u

Memory Commited



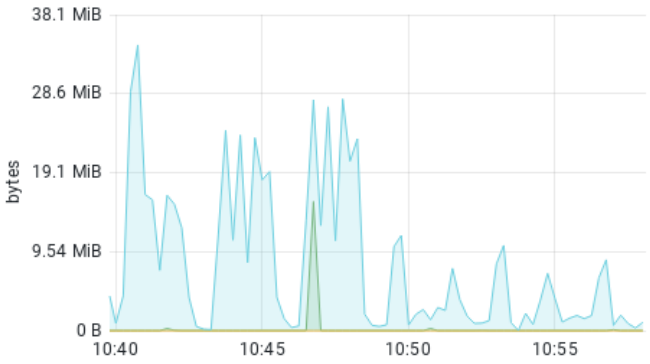
- Committed_AS - Amount of memory presently allocated on the system
- CommitLimit - Amount of memory currently available to be allocated on the sy

Memory Active / Inactive Detail



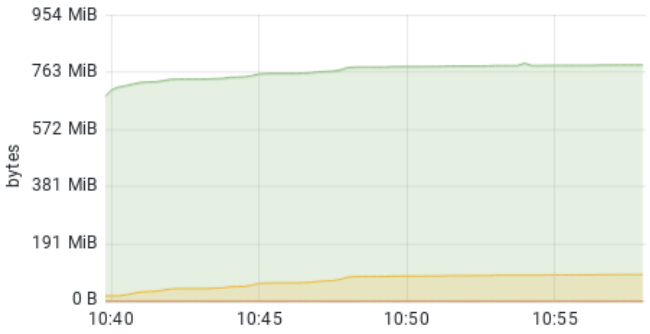
- Inactive_file - File-backed memory on inactive LRU list
- Inactive_anon - Anonymous and swap cache on inactive LRU list, including tmp
- Active_file - File-backed memory on active LRU list
- Active_anon - Anonymous and swap cache on active least-recently-used (LRU)

Memory Writeback and Dirty



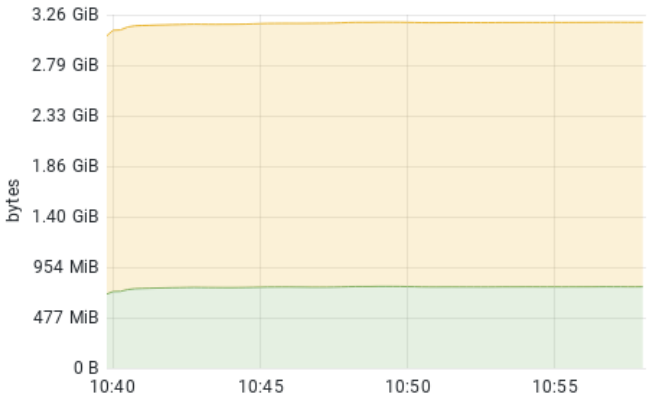
- Writeback - Memory which is actively being written back to disk
- WritebackTmp - Memory used by FUSE for temporary writeback buffers
- Dirty - Memory which is waiting to get written back to the disk 4.00

Memory Shared and Mapped



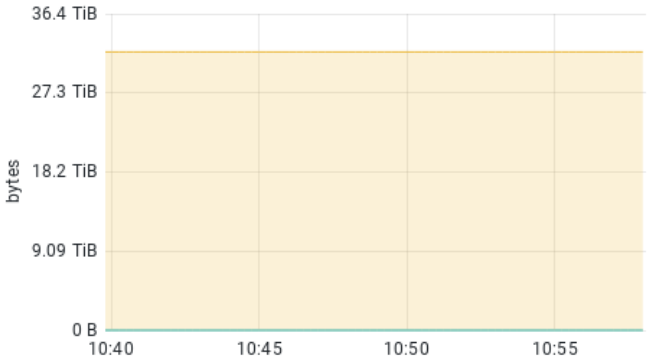
- Mapped - Used memory in mapped pages files which have been mmaped, such
- Shmem - Used shared memory (shared between several processes, thus includ
- ShmemHugePages - Memory used by shared memory (shmem) and tmpfs allc
- ShmemPmdMapped - Ammount of shared (shmem/tmpfs) memory backed by

Memory Slab



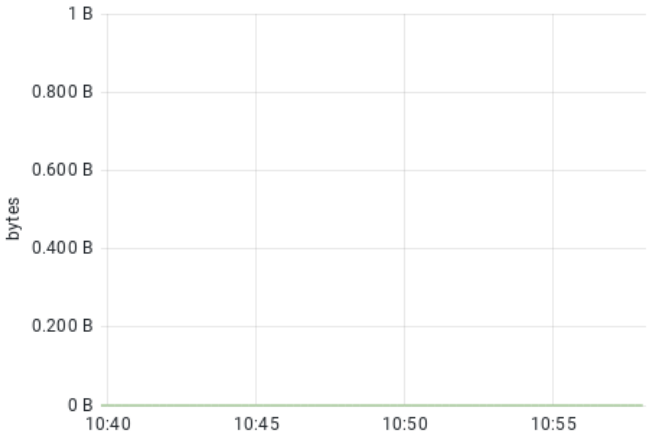
- SUnreclaim - Part of Slab, that cannot be reclaimed on memory pressure 69
- SReclaimable - Part of Slab, that might be reclaimed, such as caches

Memory Vmalloc



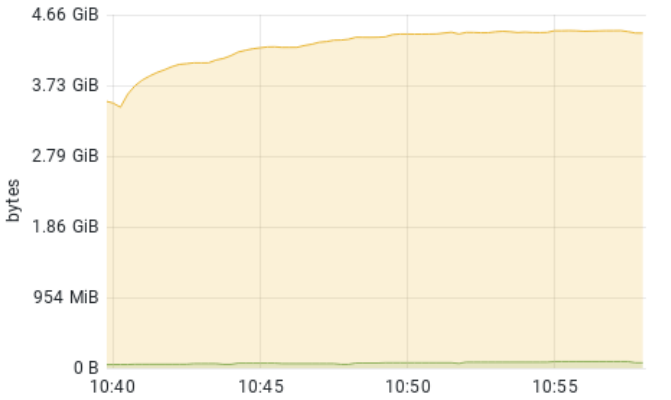
VmallocChunk - Largest contigious block of vmalloc area which is free	
VmallocTotal - Total size of vmalloc memory area	32.0
VmallocUsed - Amount of vmalloc area which is used	41.0

Memory Bounce



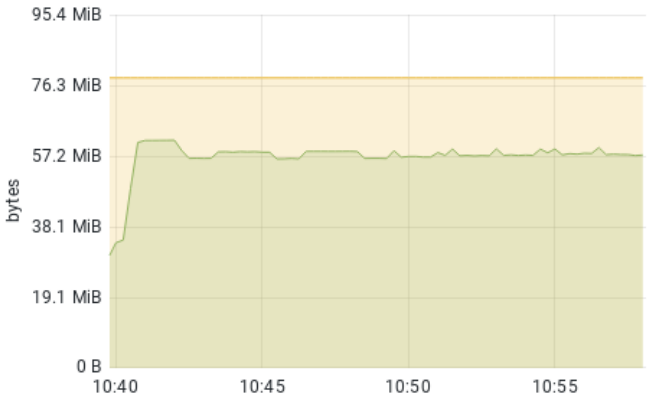
	min	max	avg	curr
Bounce - Memory used for block device bounce buffers	0 B	0 B	0 B	

Memory Anonymous



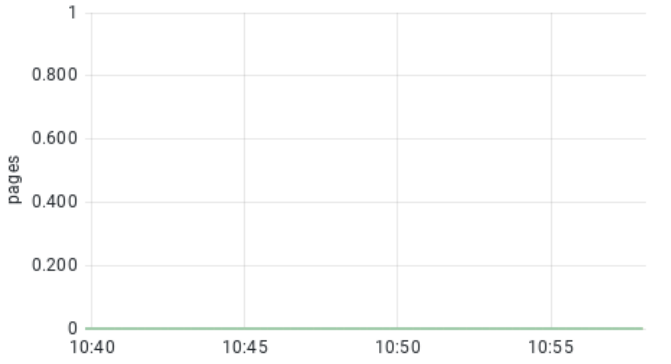
	min	ma
AnonHugePages - Memory in anonymous huge pages	46.00 MiB	88.00 M
AnonPages - Memory in user pages not backed by files	3.44 GiB	4.45 G

Memory Kernel / CPU



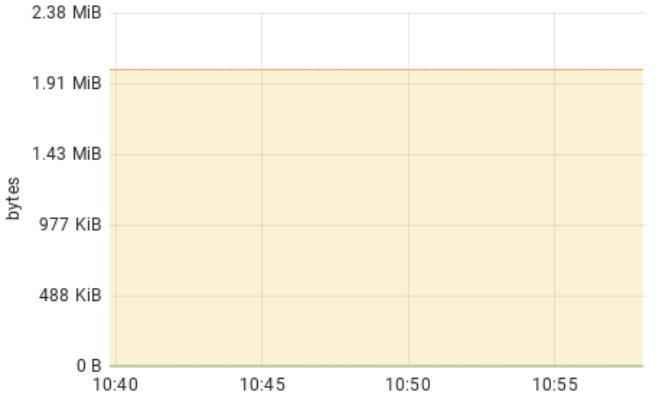
KernelStack - Kernel memory stack. This is not reclaimable	29.8
PerCPU - Per CPU memory allocated dynamically by loadable modules	78.3

Memory HugePages Counter



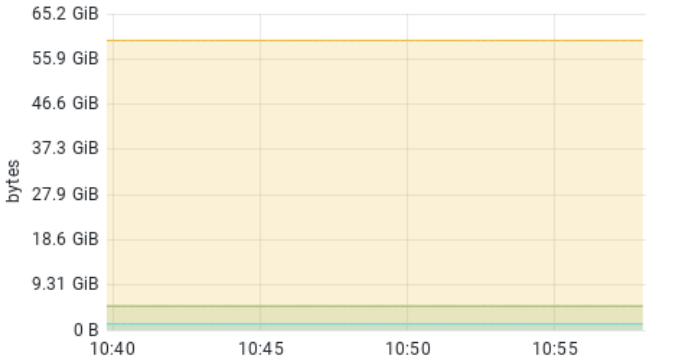
HugePages_Free - Huge pages in the pool that are not yet allocated
HugePages_Rsvd - Huge pages for which a commitment to allocate from the p
HugePages_Surp - Huge pages in the pool above the value in /proc/sys/vm/nr

Memory HugePages Size



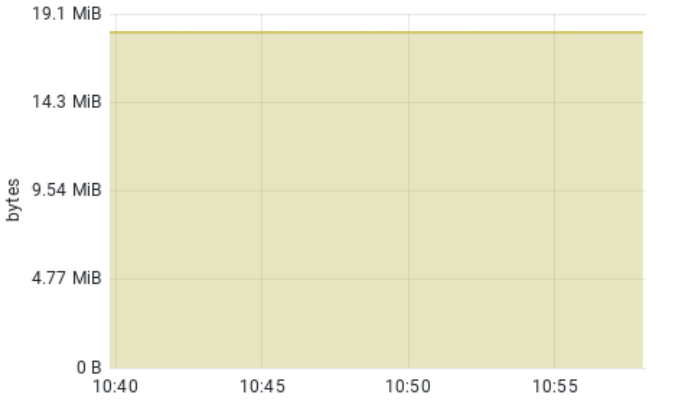
	min	max	cu
HugePages - Total size of the pool of huge pages	0 B	0 B	
Hugepagesize - Huge Page size	2.00 MiB	2.00 MiB	2.0

Memory DirectMap



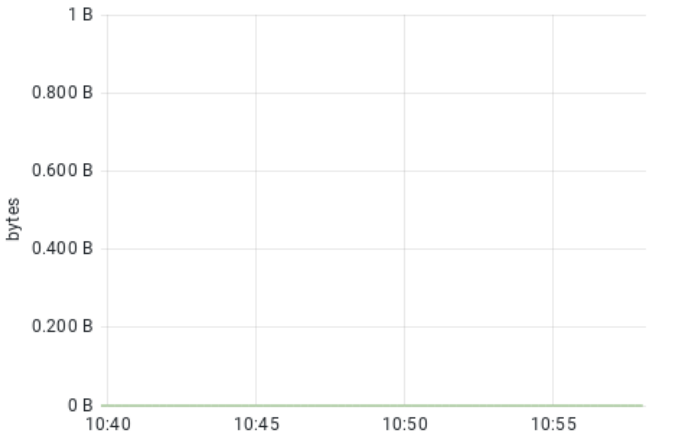
	min	max
DirectMap1G - Amount of pages mapped as this size	5.00 GiB	5.00 GiB
DirectMap2M - Amount of pages mapped as this size	59.71 GiB	59.71 GiB
DirectMap4K - Amount of pages mapped as this size	1.29 GiB	1.29 GiB

Memory Unevictable and MLocked



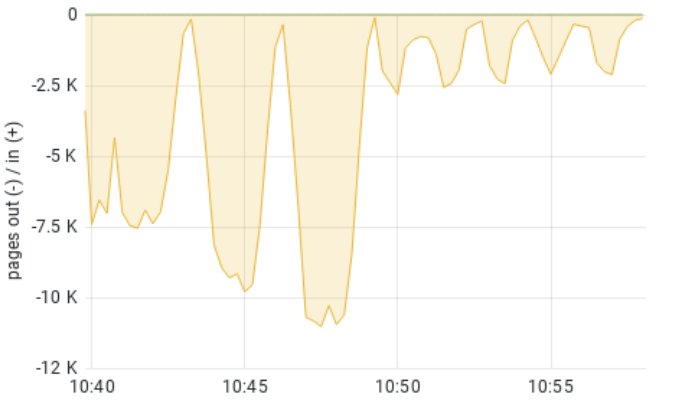
- Unevictable - Amount of unevictable memory that can't be swapped out for a v
- MLocked - Size of pages locked to memory using the mlock() system call

Memory NFS



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

Memory Pages In / Out

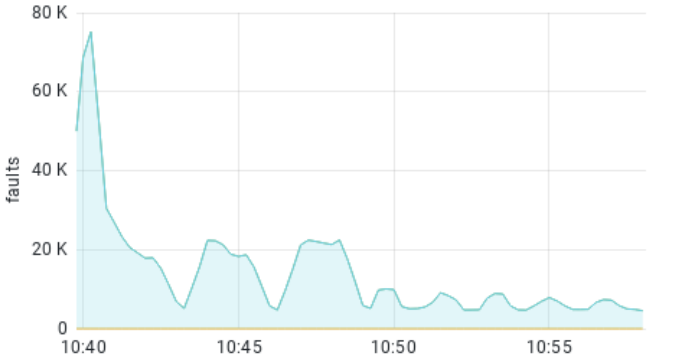


	min	max	avg	current
Pagesin - Page in operations	0	0	0	0
Pagesout - Page out operations	98.4	11.0 K	3.90 K	135

Memory Pages Swap In / Out

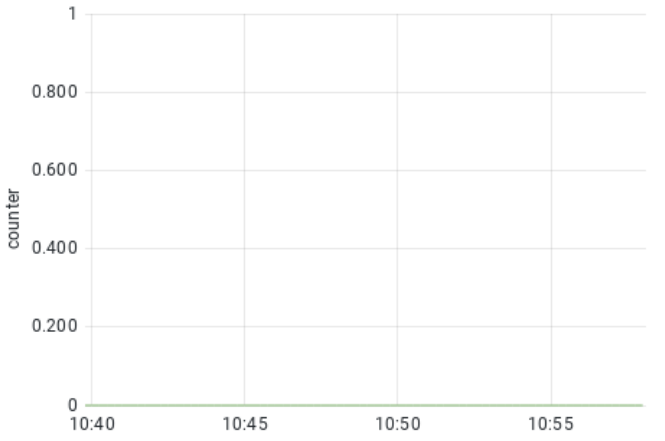
	min	max	avg	current
Pswpin - Pages swapped in	0	0	0	0
Pswpout - Pages swapped out	0	0	0	0

Memory Page Faults



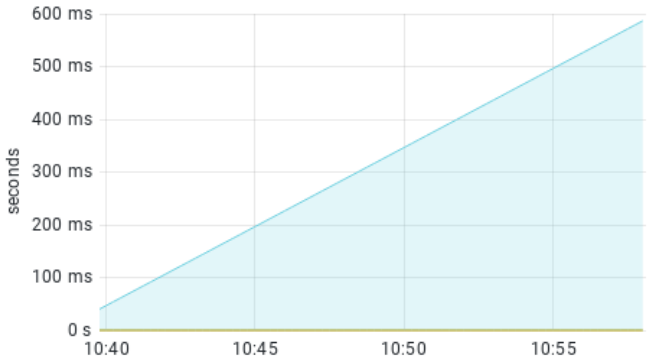
	min	max	avg
Pgfault - Page major and minor fault operations	4.51 K	75.13 K	14.12
Pgmajfault - Major page fault operations	0	0	
Pgminfault - Minor page fault operations	4.51 K	75.13 K	14.12

OOM Killer



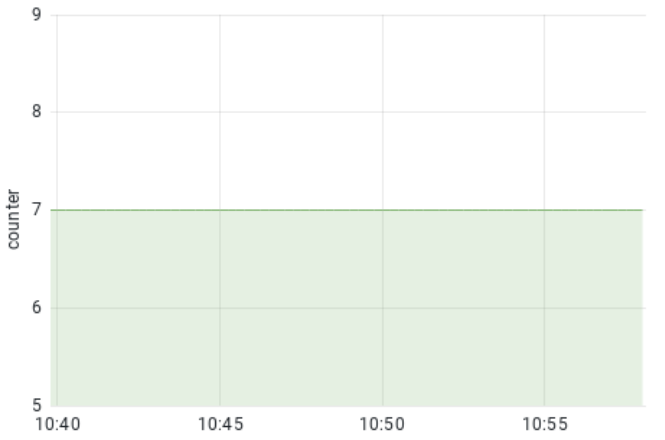
	min	max	avg	current
oom killer invocations	0	0	0	0

Time Syncronized Drift



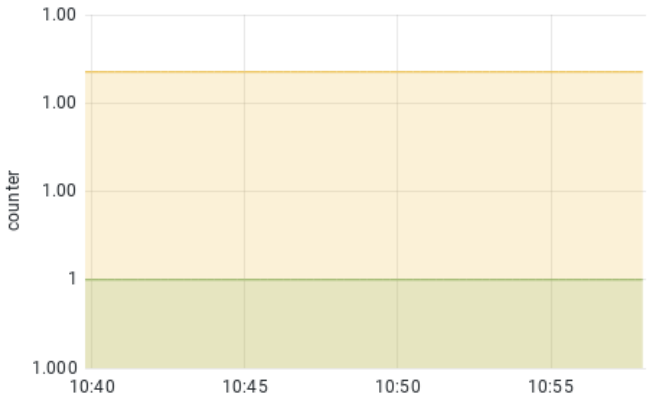
	min	max
Estimated error in seconds	0 s	0 s
Time offset in between local system and reference clock	12.9 µs	110 µs
Maximum error in seconds	39 ms	587 ms

Time PLL Adjust



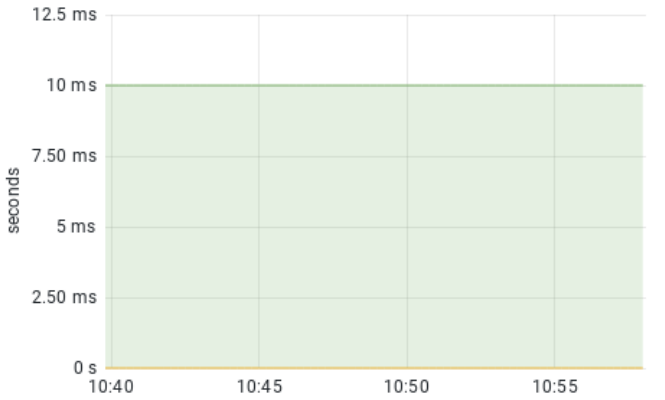
	min	max	avg	current
Phase-locked loop time adjust	7	7	7	7

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

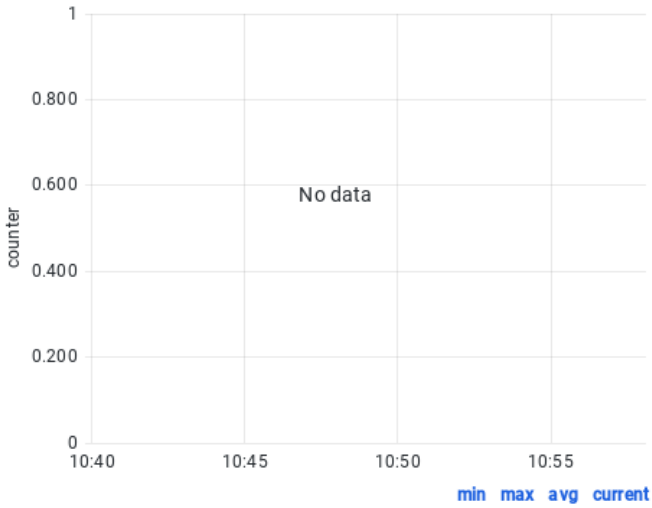


	min	max	avg	current
Seconds between clock ticks	10 ms	10 ms	10.0 ms	10 ms
International Atomic Time (TAI) offset	0 s	0 s	0 s	0 s

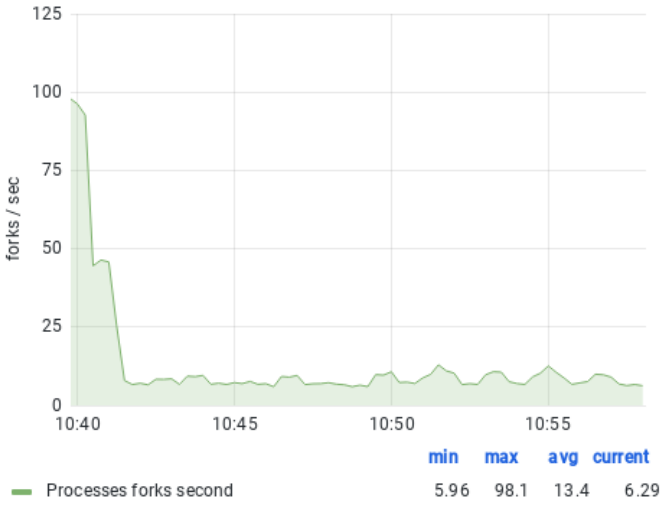
Processes Status

	min	max	avg	current
Processes blocked waiting for I/O to complete	0	9	0.162	0
Processes in runnable state	4	29	15.3	14

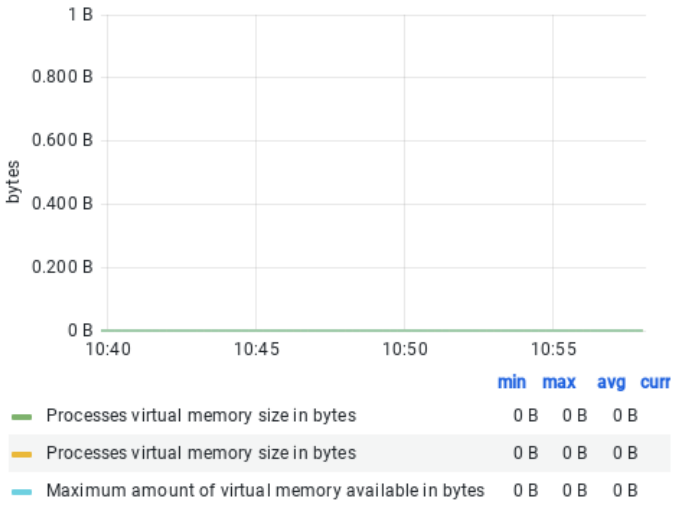
Processes State



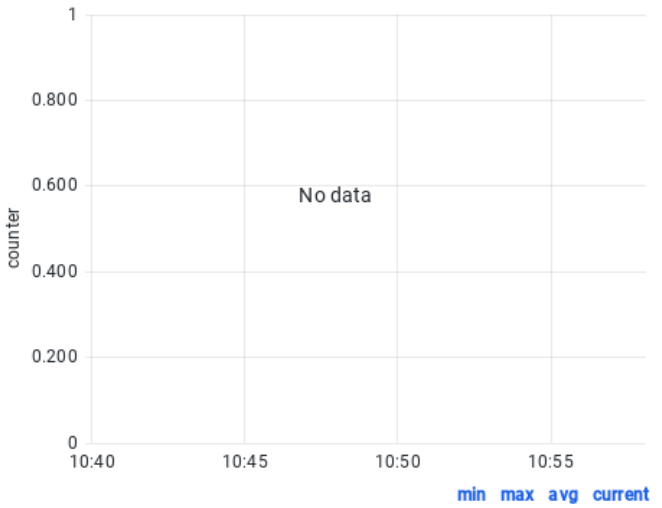
Processes Forks



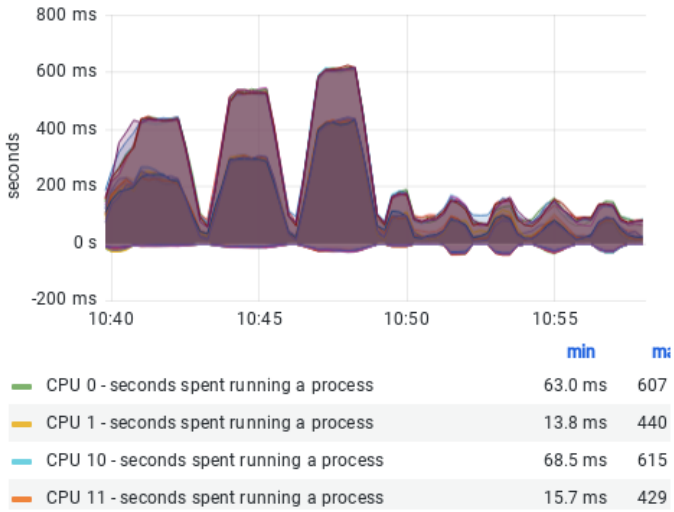
Processes Memory



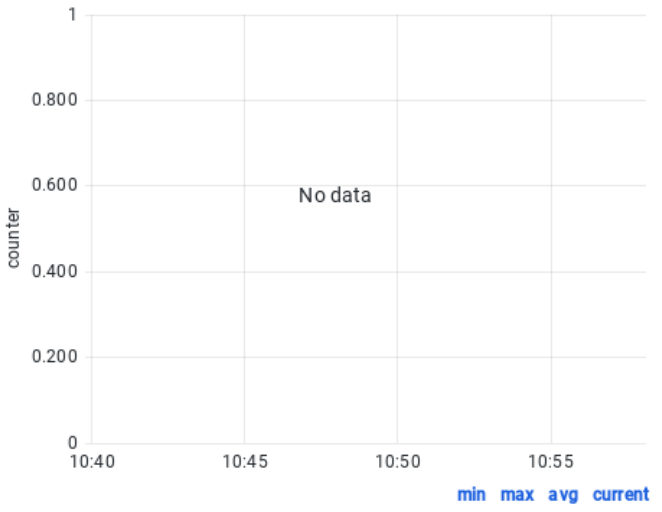
PIDs Number and Limit



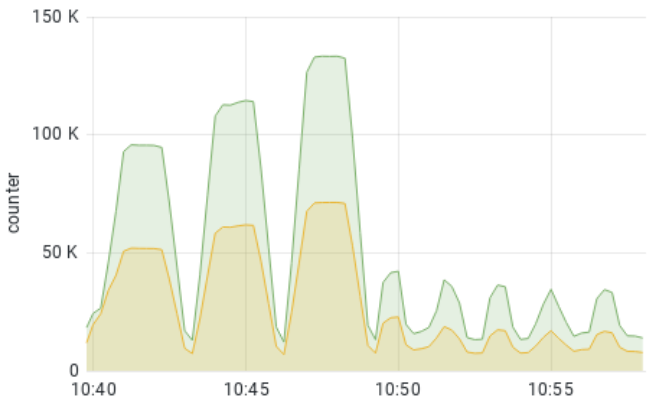
Process schedule stats Running / Waiting



Threads Number and Limit

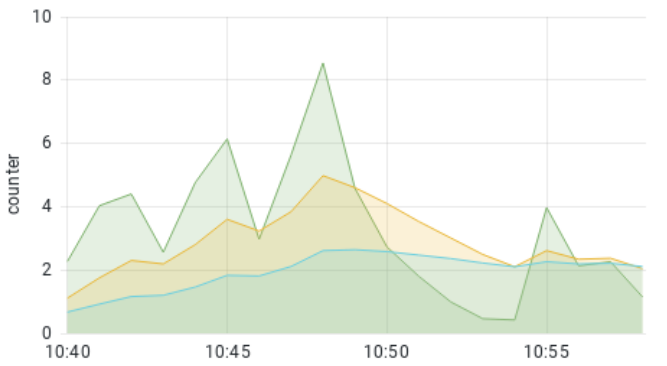


Context Switches / Interrupts



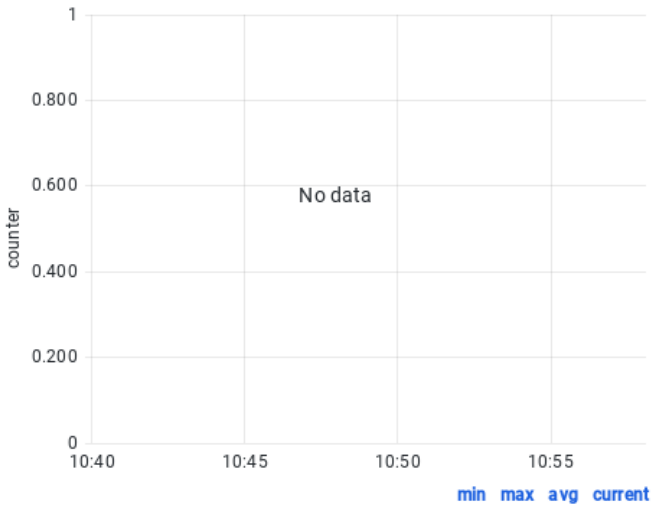
	min	max	avg	current
Context switches	12.2 K	133 K	51.6 K	13.9 K
Interrupts	6.89 K	71.3 K	28.0 K	7.78 K

System Load



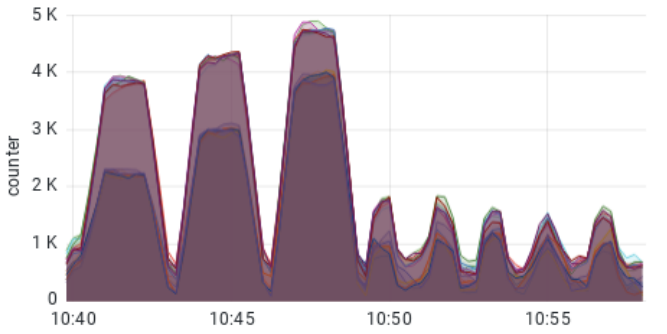
	min	max	avg	current
Load 1m	0.420	8.54	3.25	1.15
Load 5m	1.11	4.98	2.89	2.04
Load 15m	0.670	2.64	1.94	2.11

Interrupts Detail



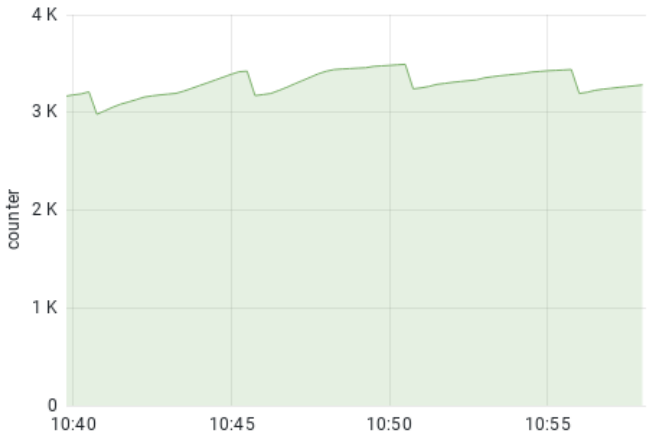
min max avg current

Schedule timeslices executed by each cpu



	min	max	avg	current
CPU 0	456	4.89 K	2.02 K	614
CPU 1	170	4.01 K	1.33 K	170
CPU 10	422	4.75 K	2.01 K	678
CPU 11	152	3.95 K	1.36 K	152

Entropy

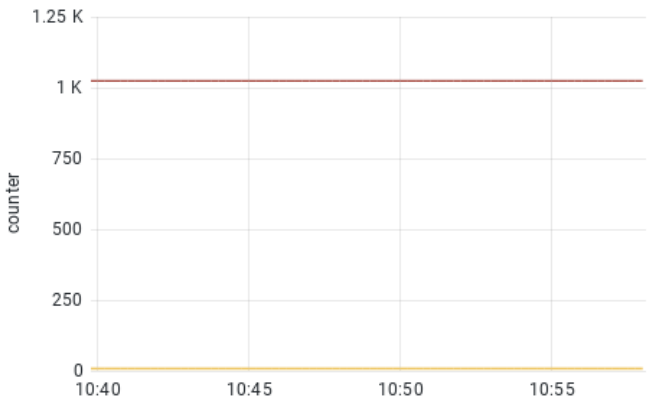


	min	max	avg
Entropy available to random number generators	2.98 K	3.49 K	3.30 K

CPU time spent in user and system contexts

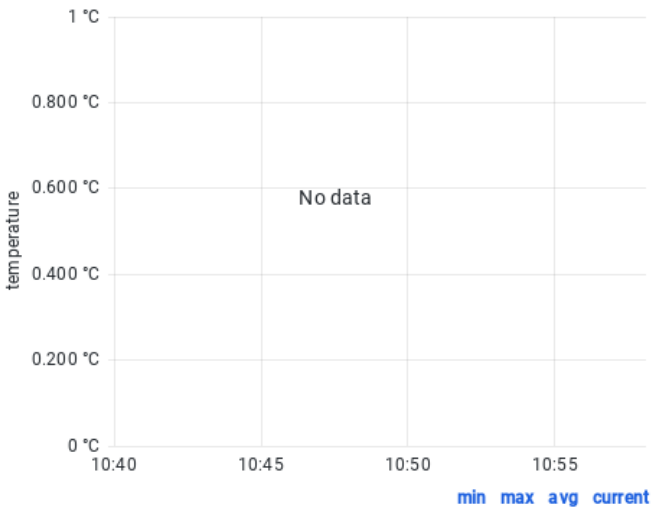
	min	max	avg	current
Time spent	4.18 ms	8.22 ms	6.76 ms	6.44 ms

File Descriptors

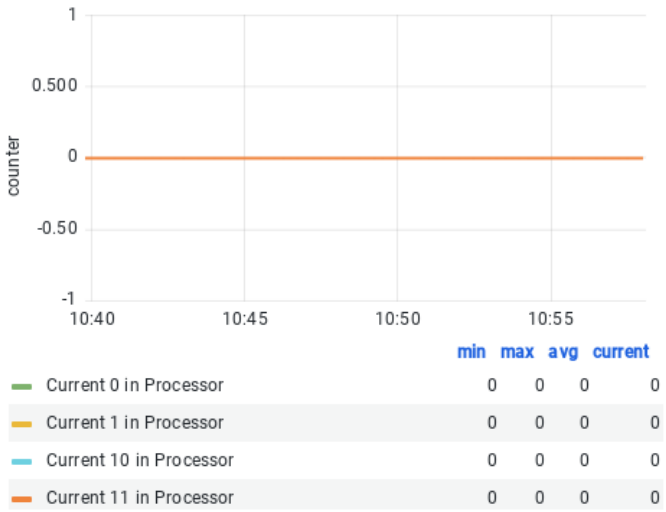


	min	max	avg	current
Maximum open file descriptors	1.02 K	1.02 K	1.02 K	1.02 K
Open file descriptors	9	9	9	9

Hardware temperature monitor

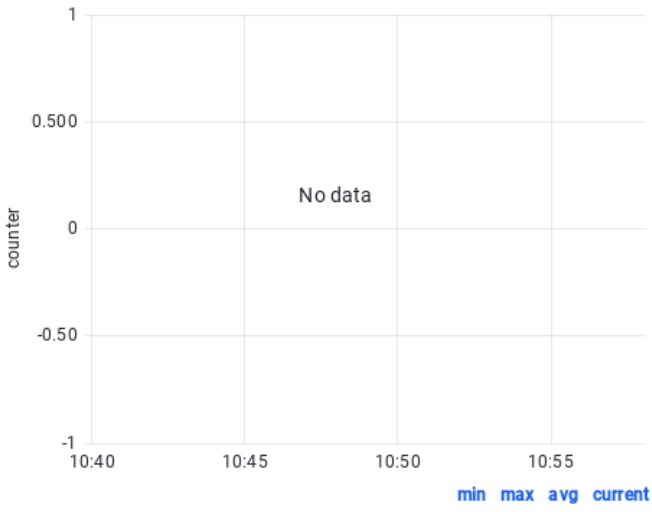


Throttle cooling device

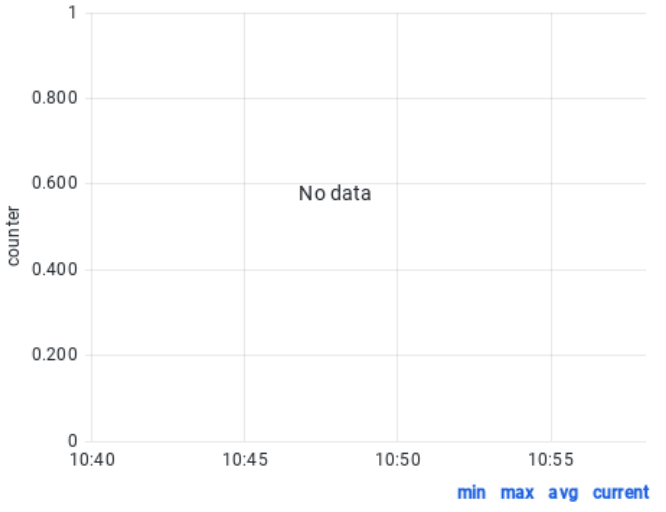


	min	max	avg	current
Current 0 in Processor	0	0	0	0
Current 1 in Processor	0	0	0	0
Current 10 in Processor	0	0	0	0
Current 11 in Processor	0	0	0	0

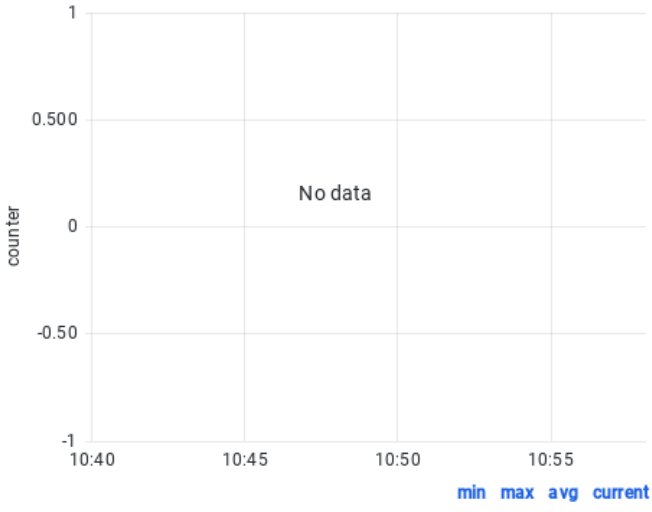
Power supply



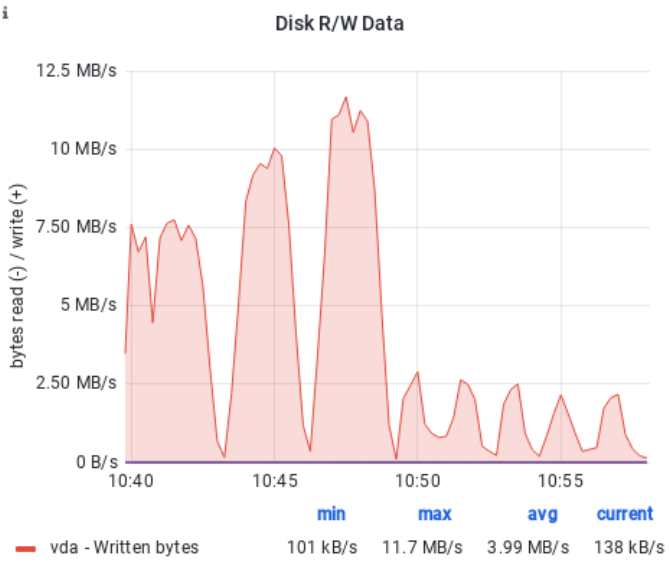
Systemd Sockets

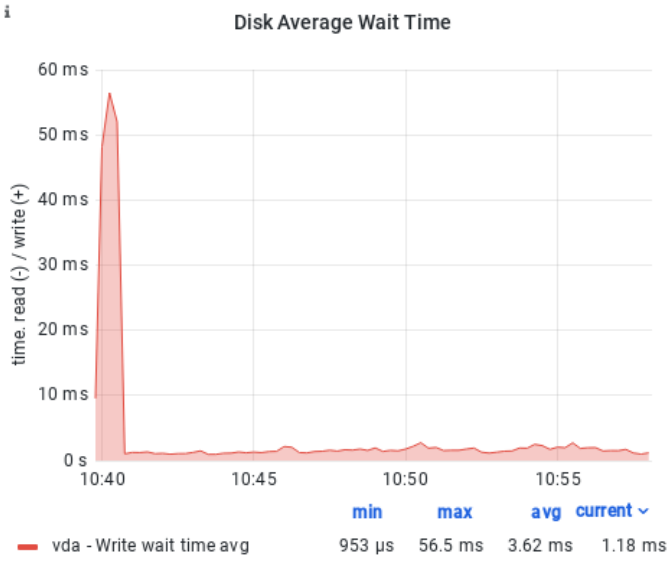


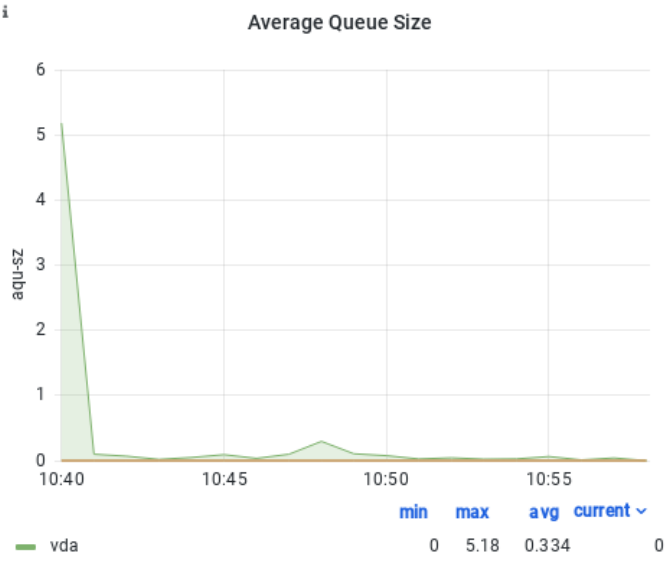
Systemd Units State

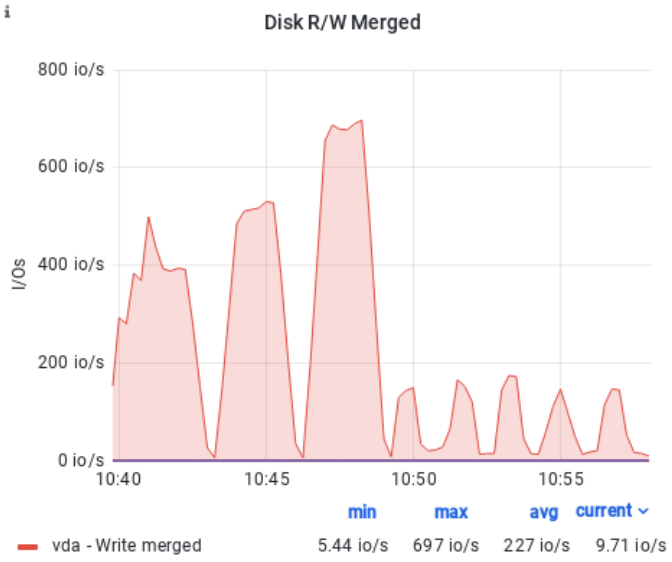


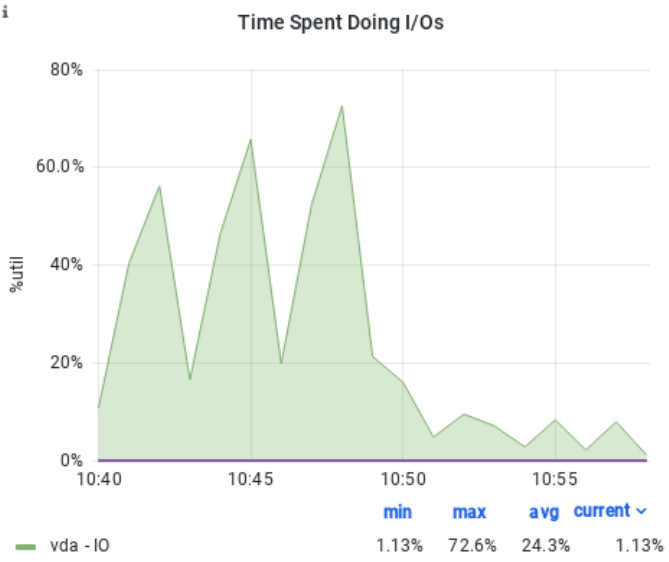
Disk IOps Completed
500 io/s
400 io/s
300 io/s
200 io/s
100 io/s
0 io/s
IO read (-) / write (+)
10:40
10:45
10:50
10:55
min max avg current
vda - Writes completed 5.18 io/s 468 io/s 151 io/s 6.16 io/s


Disk R/W Data
12.5 MB/s
10 MB/s
7.50 MB/s
5 MB/s
2.50 MB/s
0 B/s
bytes read (-) / write (+)
10:40
10:45
10:50
10:55
min max avg current
vda - Written bytes 101 kB/s 11.7 MB/s 3.99 MB/s 138 kB/s

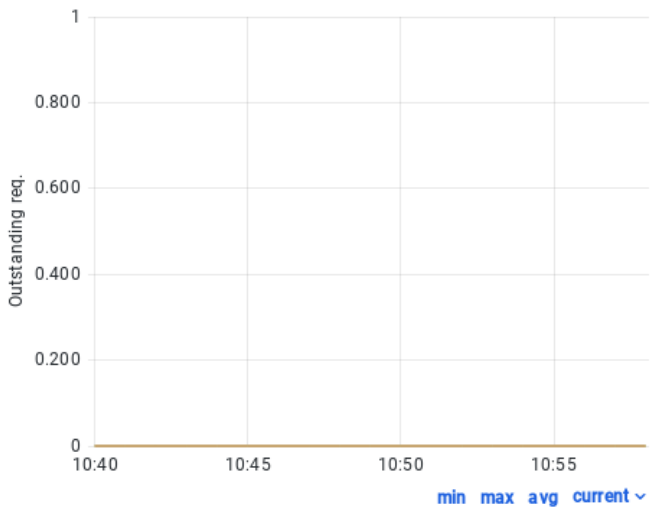

Disk Average Wait Time
60 ms
50 ms
40 ms
30 ms
20 ms
10 ms
0 s
time. read (-) / write (+)
10:40
10:45
10:50
10:55
min max avg current
vda - Write wait time avg 953 µs 56.5 ms 3.62 ms 1.18 ms


Average Queue Size
6
5
4
3
2
1
0
aqu-sz
10:40
10:45
10:50
10:55
min max avg current
vda 0 5.18 0.334 0

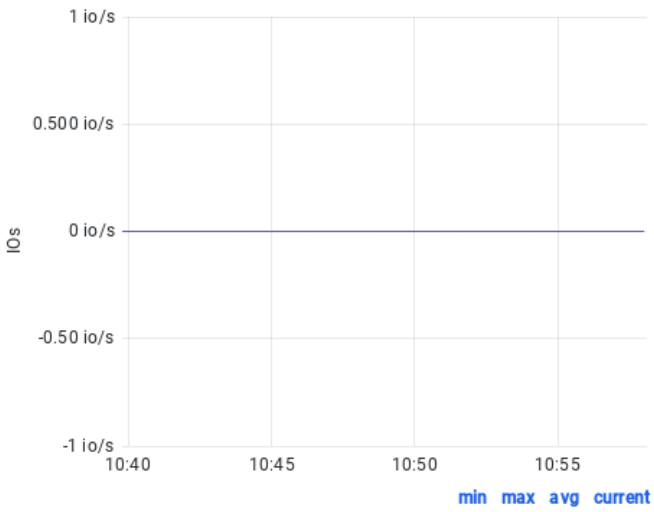

Disk R/W Merged
800 io/s
600 io/s
400 io/s
200 io/s
0 io/s
I/Os
10:40
10:45
10:50
10:55
min max avg current
vda - Write merged 5.44 io/s 697 io/s 227 io/s 9.71 io/s


Time Spent Doing I/Os
80%
60.0%
40%
20%
0%
%util
10:40
10:45
10:50
10:55
min max avg current
vda - IO 1.13% 72.6% 24.3% 1.13%

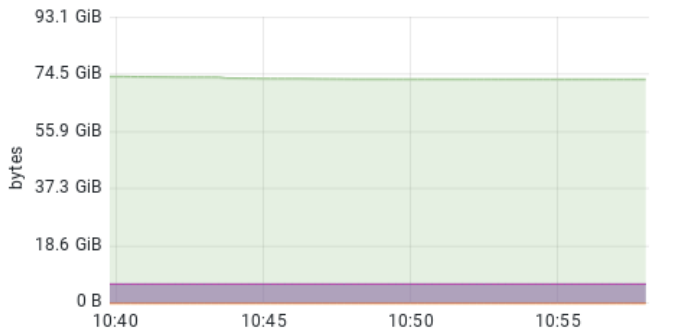
Instantaneous Queue Size



Disk IOps Discards completed / merged

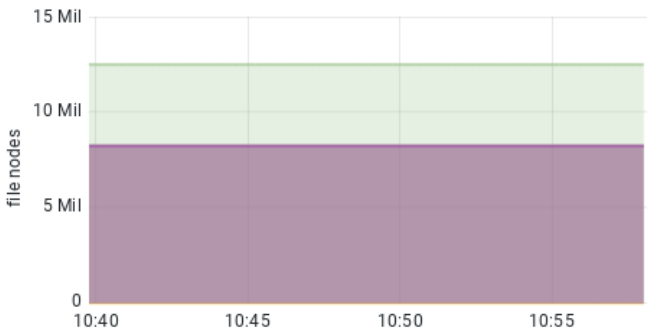


Filesystem space available



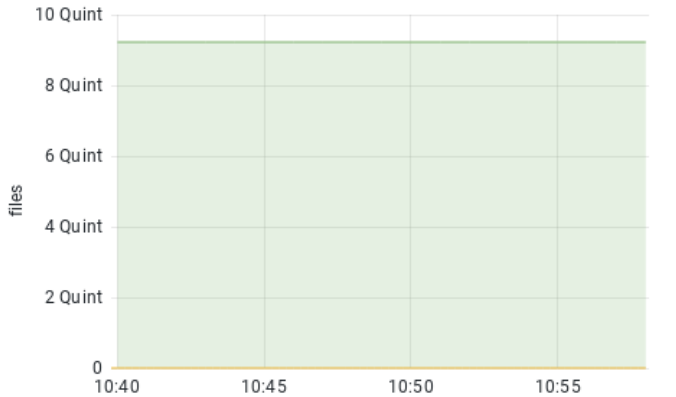
	min	max	avg	cu
/ - Available	72.767 GiB	73.674 GiB	73.005 GiB	72.7
/boot/efi - Available	99.157 MiB	99.157 MiB	99.157 MiB	99.15
/run - Available	6.278 GiB	6.278 GiB	6.278 GiB	6.2
/run/lock - Available	5.000 MiB	5.000 MiB	5.000 MiB	5.00

File Nodes Free



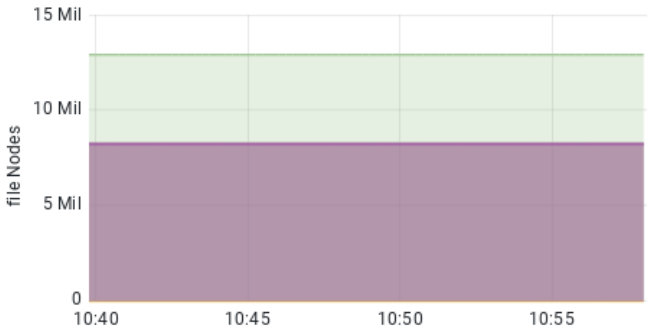
	min	max	avg	current
/ - Free file nodes	12.5 Mil	12.5 Mil	12.5 Mil	12.5 Mil
/run - Free file nodes	8.23 Mil	8.23 Mil	8.23 Mil	8.23 Mil
/run/lock - Free file nodes	8.23 Mil	8.23 Mil	8.23 Mil	8.23 Mil
/run/snapd/ns - Free file nodes	8.23 Mil	8.23 Mil	8.23 Mil	8.23 Mil

File Descriptor



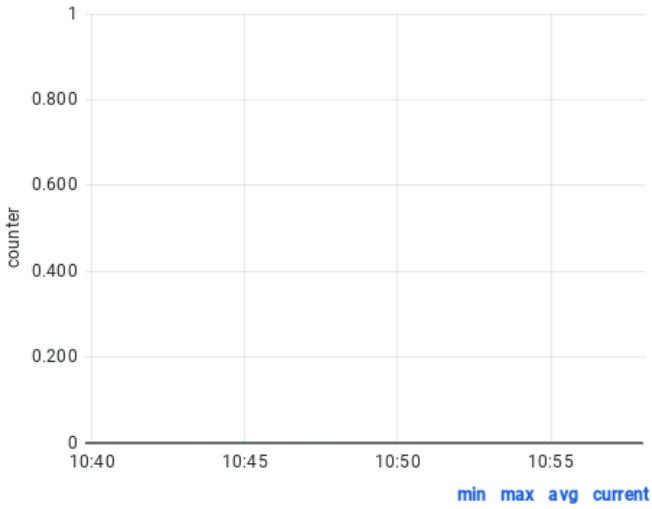
	min	max	avg	current
Max open files	9.22 Quint	9.22 Quint	9.22 Quint	9.22 Quint
Open files	8.06 K	11.3 K	10.3 K	9.73 K

File Nodes Size

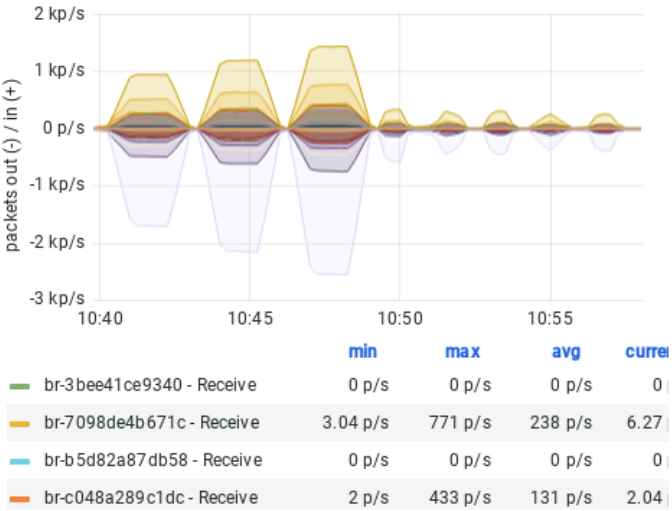


	min	max	avg	current
/ - File nodes total	12.9 Mil	12.9 Mil	12.9 Mil	12.9 Mil
/run - File nodes total	8.23 Mil	8.23 Mil	8.23 Mil	8.23 Mil
/run/lock - File nodes total	8.23 Mil	8.23 Mil	8.23 Mil	8.23 Mil
/run/snapd/ns - File nodes total	8.23 Mil	8.23 Mil	8.23 Mil	8.23 Mil

Filesystem in ReadOnly / Error

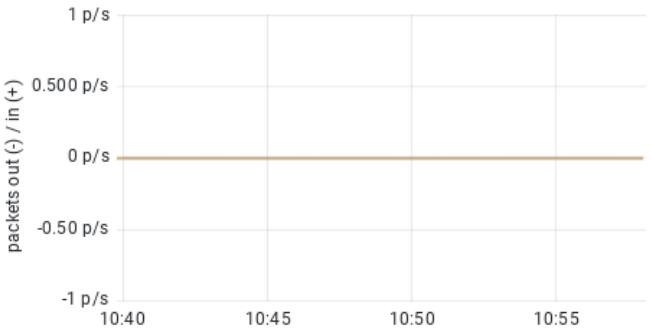


Network Traffic by Packets



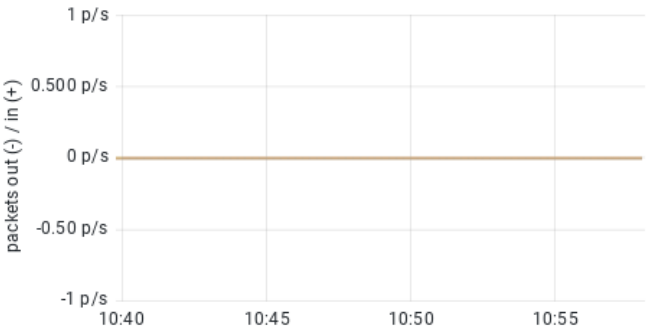
	min	max	avg	curre
br-3bee41ce9340 - Receive	0 p/s	0 p/s	0 p/s	0
br-7098de4b671c - Receive	3.04 p/s	771 p/s	238 p/s	6.27
br-b5d82a87db58 - Receive	0 p/s	0 p/s	0 p/s	0
br-c048a289c1dc - Receive	2 p/s	433 p/s	131 p/s	2.04

Network Traffic Errors



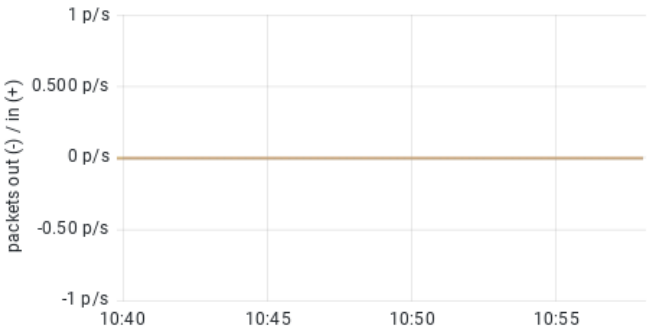
	min	max	avg	current
vethf2030d9 - Rransmit errors	0 p/s	0 p/s	0 p/s	0 p/s
vethef2eefc - Rransmit errors	0 p/s	0 p/s	0 p/s	0 p/s
vethe7bf8ab - Rransmit errors	0 p/s	0 p/s	0 p/s	0 p/s
vethde71ecf - Rransmit errors	0 p/s	0 p/s	0 p/s	0 p/s

Network Traffic Drop



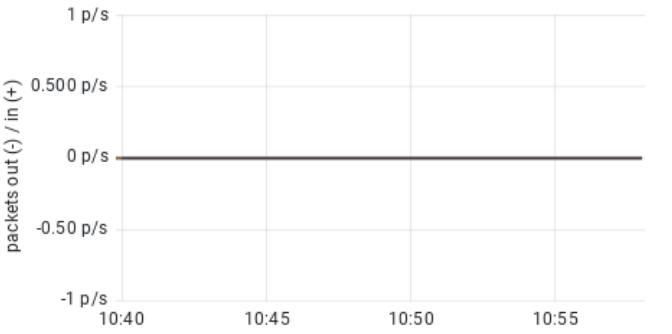
	min	max	avg	current
vethf2030d9 - Transmit drop	0 p/s	0 p/s	0 p/s	0 p/s
vethef2eefc - Transmit drop	0 p/s	0 p/s	0 p/s	0 p/s
vethe7bf8ab - Transmit drop	0 p/s	0 p/s	0 p/s	0 p/s
vethde71ecf - Transmit drop	0 p/s	0 p/s	0 p/s	0 p/s

Network Traffic Compressed



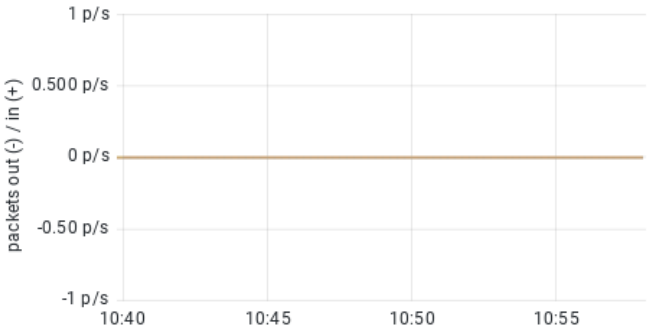
	min	max	avg	current
vethf2030d9 - Transmit compressed	0 p/s	0 p/s	0 p/s	0 p/s
vethef2eefc - Transmit compressed	0 p/s	0 p/s	0 p/s	0 p/s
vethe7bf8ab - Transmit compressed	0 p/s	0 p/s	0 p/s	0 p/s
vethde71ecf - Transmit compressed	0 p/s	0 p/s	0 p/s	0 p/s

Network Traffic Multicast



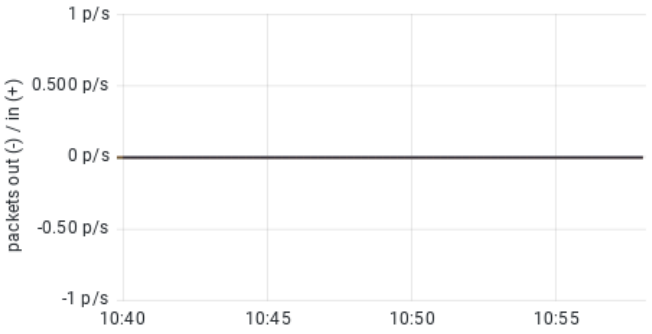
	min	max	avg	current
vethf2030d9 - Receive multicast	0 p/s	0 p/s	0 p/s	0 p/s
vethef2eefc - Receive multicast	0 p/s	0 p/s	0 p/s	0 p/s
vethe7bf8ab - Receive multicast	0 p/s	0 p/s	0 p/s	0 p/s
vethde71ecf - Receive multicast	0 p/s	0 p/s	0 p/s	0 p/s

Network Traffic Fifo



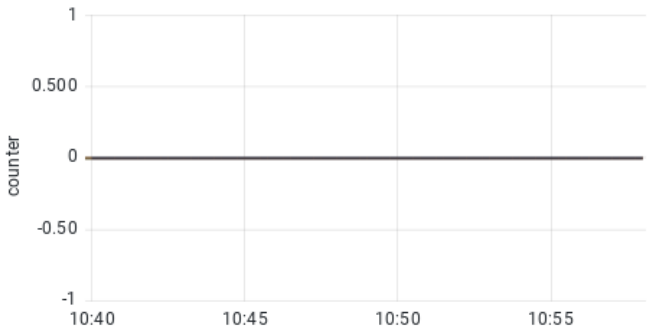
	min	max	avg	current
vethf2030d9 - Transmit fifo	0 p/s	0 p/s	0 p/s	0 p/s
vethef2eefc - Transmit fifo	0 p/s	0 p/s	0 p/s	0 p/s
vethe7bf8ab - Transmit fifo	0 p/s	0 p/s	0 p/s	0 p/s
vethde71ecf - Transmit fifo	0 p/s	0 p/s	0 p/s	0 p/s

Network Traffic Frame



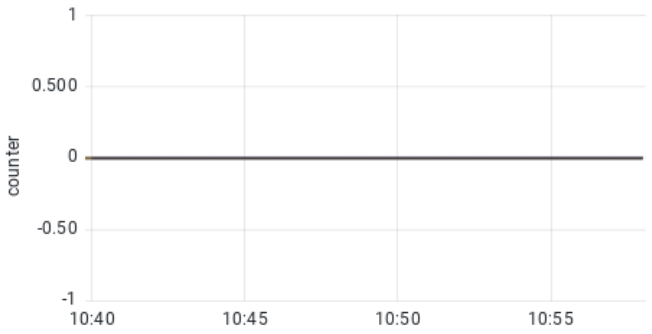
	min	max	avg	current
vethf2030d9 - Receive frame	0 p/s	0 p/s	0 p/s	0 p/s
vethef2eefc - Receive frame	0 p/s	0 p/s	0 p/s	0 p/s
vethe7bf8ab - Receive frame	0 p/s	0 p/s	0 p/s	0 p/s
vethde71ecf - Receive frame	0 p/s	0 p/s	0 p/s	0 p/s

Network Traffic Carrier



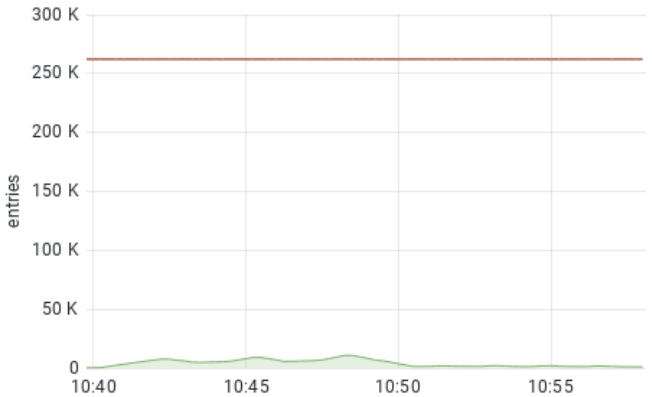
	min	max	avg	current
vethf2030d9 - Statistic transmit_carrier	0	0	0	0
vethef2eefc - Statistic transmit_carrier	0	0	0	0
vethe7bf8ab - Statistic transmit_carrier	0	0	0	0
vethde71ecf - Statistic transmit_carrier	0	0	0	0

Network Traffic Colls



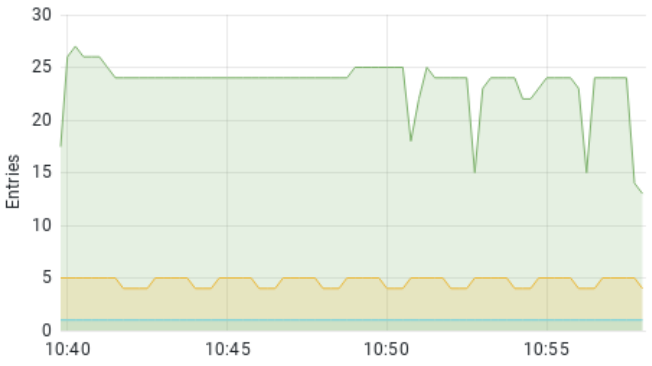
	min	max	avg	current
vethf2030d9 - Transmit colls	0	0	0	0
vethef2eefc - Transmit colls	0	0	0	0
vethe7bf8ab - Transmit colls	0	0	0	0
vethde71ecf - Transmit colls	0	0	0	0

NF Contrack



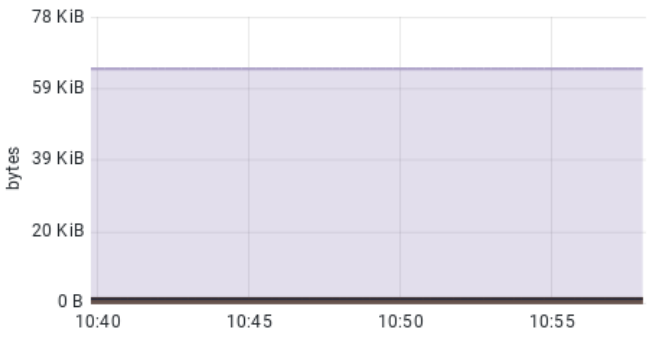
	min	max	avg	current
NF conntrack entries	152	10.8 K	4.10 K	1.05 K
NF conntrack limit	262 K	262 K	262 K	262 K

ARP Entries



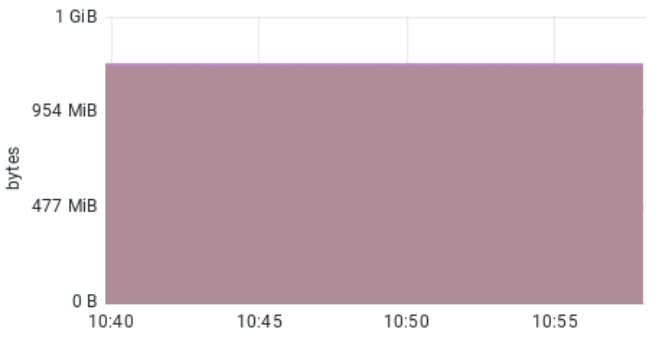
	min	max	avg	current
br-7098de4b671c - ARP entries	13	27	23.4	13
br-c048a289c1dc - ARP entries	4	5	4.65	4
ens3 - ARP entries	1	1	1	1

MTU



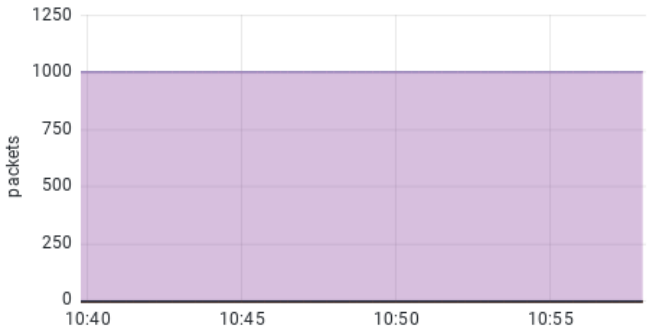
	min	max	avg	current
br-3bee41ce9340 - Bytes	1.5 KiB	1.5 KiB	1.5 KiB	1.5 KiB
br-7098de4b671c - Bytes	1.5 KiB	1.5 KiB	1.5 KiB	1.5 KiB
br-b5d82a87db58 - Bytes	1.5 KiB	1.5 KiB	1.5 KiB	1.5 KiB
br-c048a289c1dc - Bytes	1.5 KiB	1.5 KiB	1.5 KiB	1.5 KiB

Speed



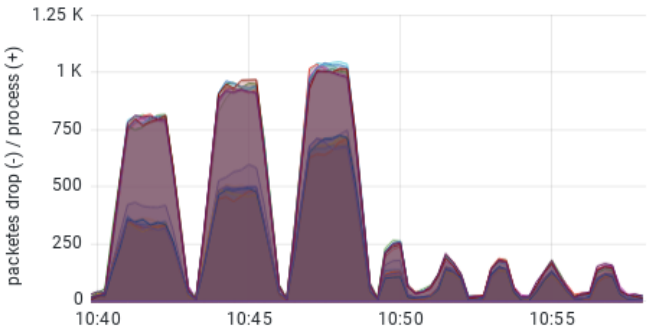
	min	max	avg	current
ens3 - Speed	-122.1 KiB	-122.1 KiB	-122.1 KiB	-122.1 KiB
veth027eba3 - Speed	1.2 GiB	1.2 GiB	1.2 GiB	1.2 GiB
veth03c7162 - Speed	1.2 GiB	1.2 GiB	1.2 GiB	1.2 GiB
veth06cd811 - Speed	1.2 GiB	1.2 GiB	1.2 GiB	1.2 GiB

Queue Length



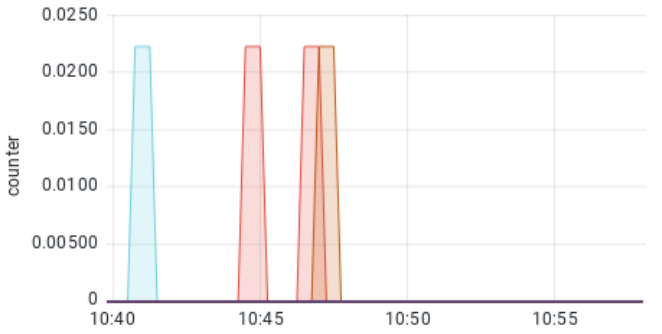
	min	max	a
br-3bee41ce9340 - Interface transmit queue length	0	0	
br-7098de4b671c - Interface transmit queue length	0	0	
br-b5d82a87db58 - Interface transmit queue length	0	0	
br-c048a289c1dc - Interface transmit queue length	0	0	

Softnet Packets



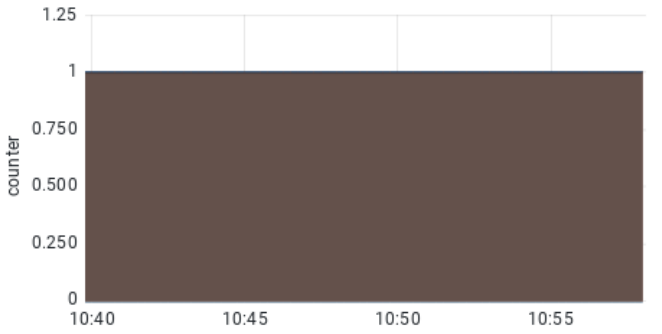
	min	max	avg	current
CPU 4 - Processed	5.09	1.04 K	347	25.2
CPU 8 - Processed	4.91	1.00 K	345	24.3
CPU 2 - Processed	11.6	1.01 K	348	24.0
CPU 14 - Processed	10.9	1.02 K	342	15.5

Softnet Out of Quota



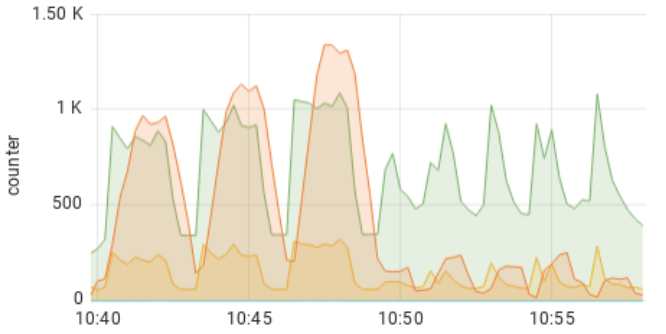
	min	max	avg	current
CPU 9 - Squeezed	0	0	0	0
CPU 8 - Squeezed	0	0	0	0
CPU 7 - Squeezed	0	0	0	0
CPU 6 - Squeezed	0	0	0	0

Network Operational Status



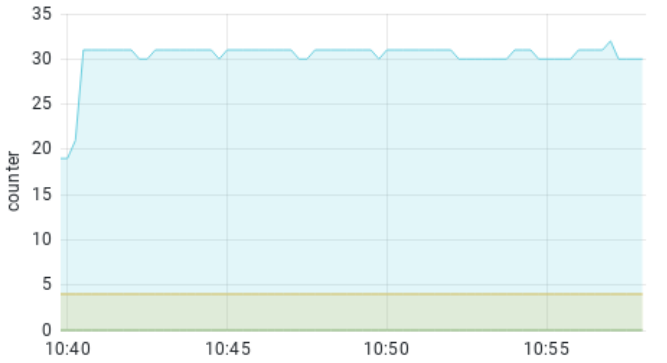
	min	max	avg	current
vethf2030d9 - Physical link state	1	1	1	1
vethef2eefc - Physical link state	1	1	1	1
vethe7bf8ab - Physical link state	1	1	1	1
vethde71ecf - Physical link state	1	1	1	1

Sockstat TCP



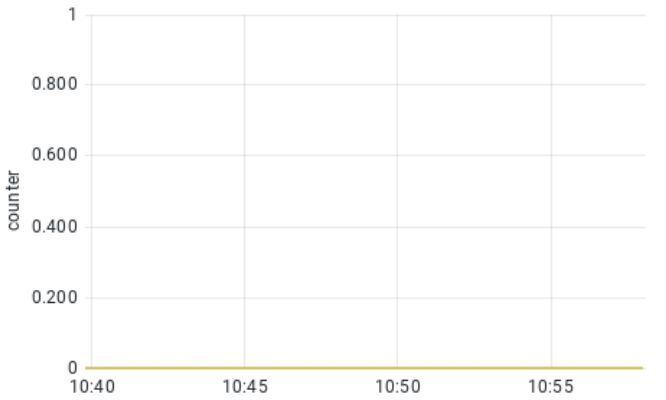
	min	max	avg	current
TCP_alloc - Allocated sockets	247	1.09 K	681	395
TCP_inuse - Tcp sockets currently in use	59	323	147	63
TCP_orphan - Orphan sockets	0	1	0.0405	0
TCP_tw - Sockets wating close	18	1.34 K	444	33

Sockstat UDP



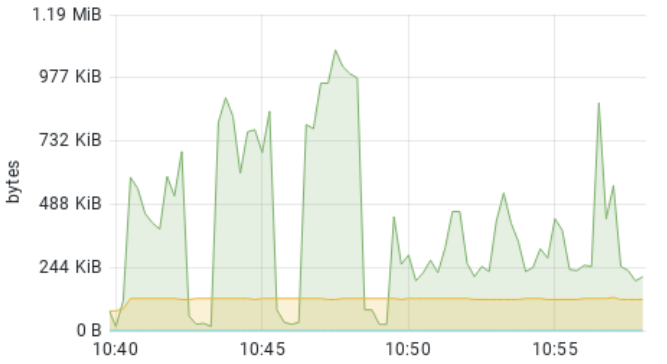
	min	max	avg	current
UDPLITE_inuse - Udplite sockets currently in use	0	0	0	0
UDP_inuse - Udp sockets currently in use	4	4	4	4
UDP_mem - Used memory for udp	19	32	30.3	30

Sockstat FRAG / RAW



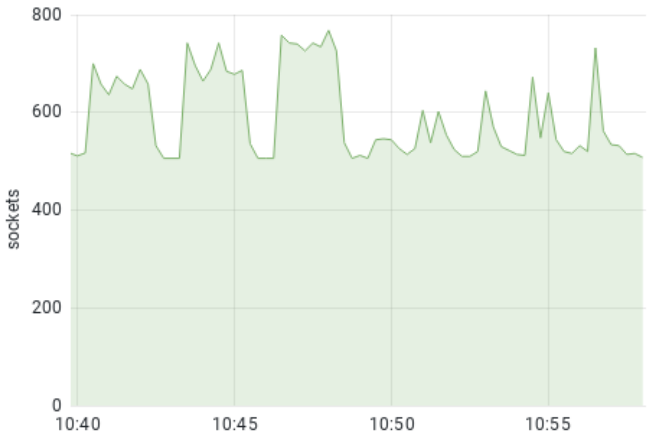
	min	max	avg	current
FRAG_inuse - Frag sockets currently in use	0	0	0	0
RAW_inuse - Raw sockets currently in use	0	0	0	0

Sockstat Memory Size



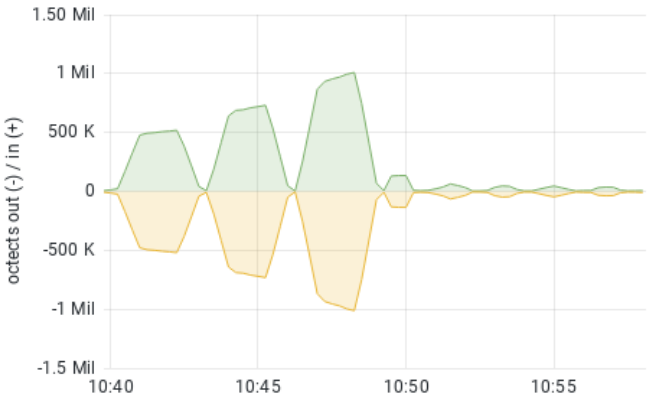
	min	max	avg	curre
mem_bytes - TCP sockets in that state	16 KiB	1.06 MiB	407 KiB	208
mem_bytes - UDP sockets in that state	76 KiB	128 KiB	121 KiB	120
FRAG_memory - Used memory for frag	0 B	0 B	0 B	

Sockstat Used



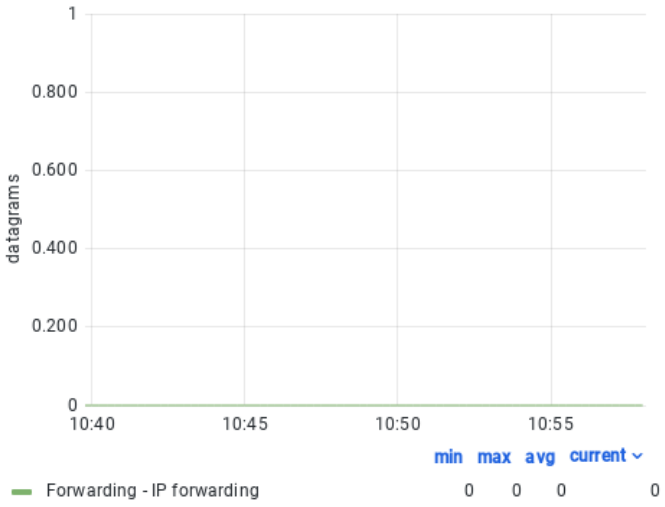
	min	max	avg	current
Sockets_used - Sockets currently in use	506	768	592	508

Netstat IP In / Out Octets



	min	max	avg	current
OutOctets - Sent octets	4.36 K	1.01 Mil	254 K	9.99 K
InOctets - Received octets	2.92 K	1.01 Mil	253 K	7.23 K

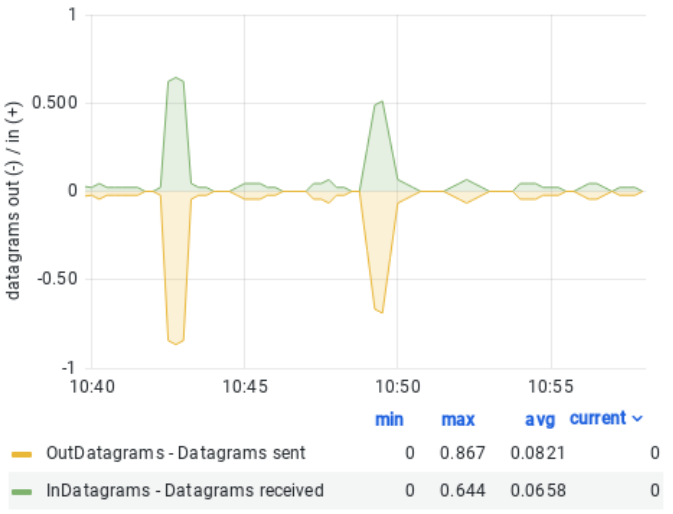
Netstat IP Forwarding



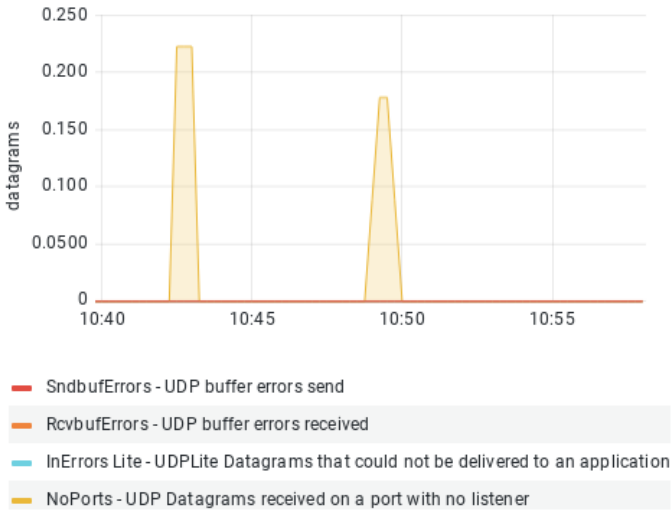
ICMP In / Out

ICMP Errors

UDP In / Out

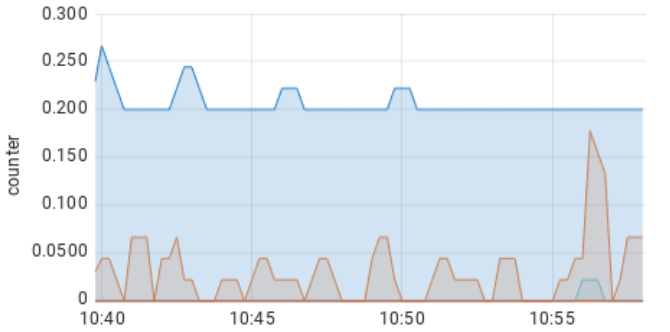


UDP Errors



TCP In / Out

TCP Errors



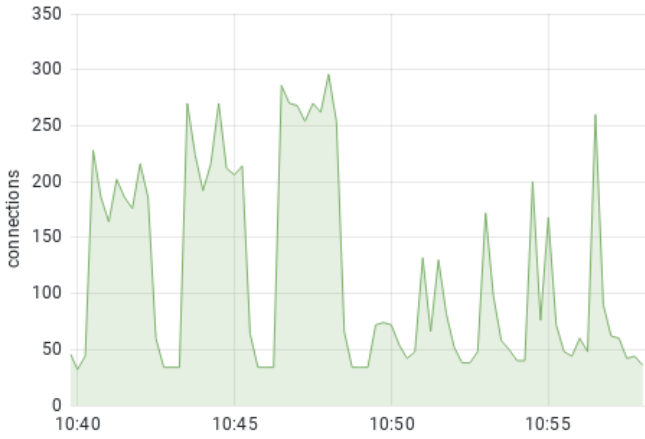
OutRsts - Segments sent with RST flag

RetransSegs - Segments retransmitted - that is, the number of TCP segments tr

InErrs - Segments received in error (e.g., bad TCP checksums)

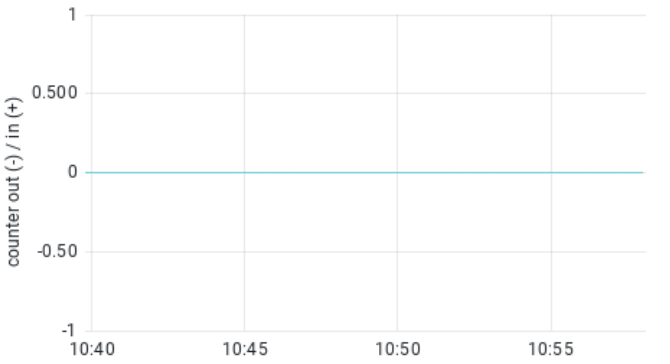
TCPSynRetrans - SYN-SYN/ACK retransmits to break down retransmissions in

TCP Connections



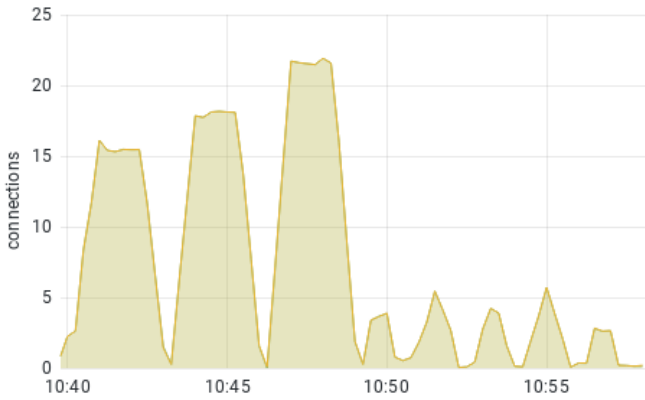
CurrEstab - TCP connections for which the current state is either ESTABLISHED

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

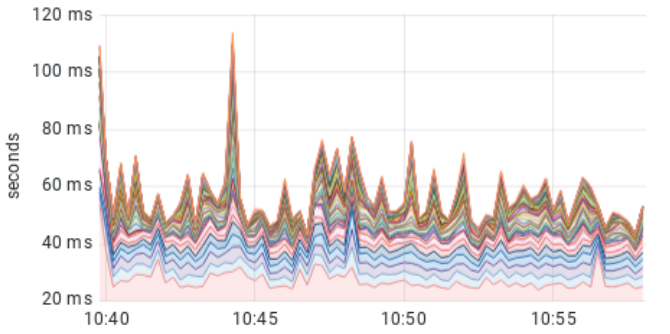
TCP Direct Transition



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

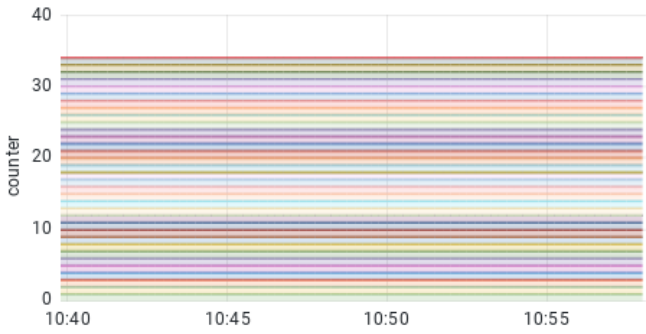
PassiveOpens - TCP connections that have made a direct transition to the SYN

Node Exporter Scrape Time



	min	max	avg	current
netclass - Scrape duration	24.0 ms	56.4 ms	27.6 ms	25.1
netdev - Scrape duration	1.94 ms	7.21 ms	3.38 ms	3.51
diskstats - Scrape duration	1.17 ms	6.18 ms	3.24 ms	3.12
cpu - Scrape duration	1.16 ms	6.84 ms	2.88 ms	2.81

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