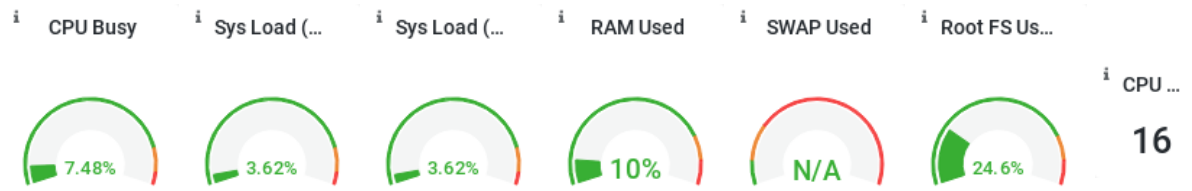
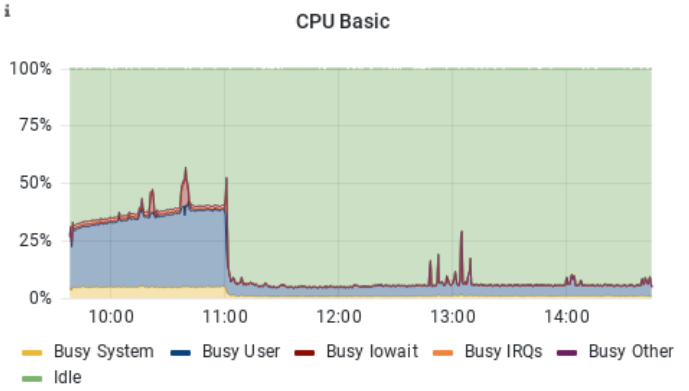
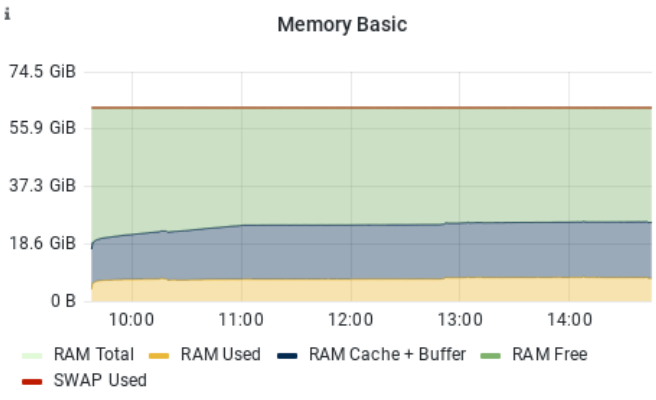
Host Metrics

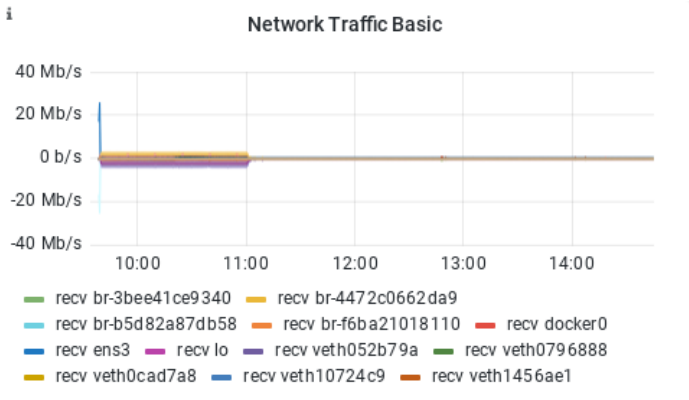
The dashboard visualizes host metrics collected by node_exporter. (based on: https://grafana.com/grafana/dashboards/1860)

Sun Feb 20 09:33:46 UTC 2022
to
Sun Feb 20 14:45:06 UTC 2022

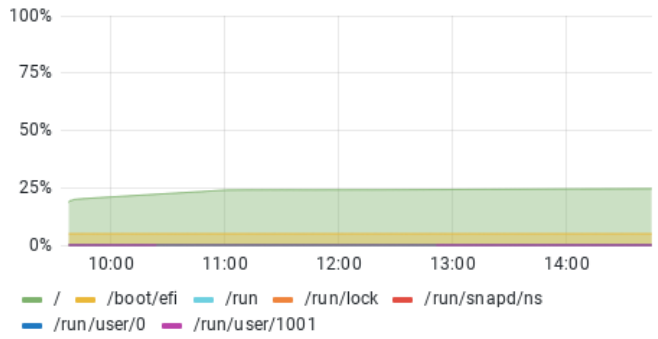




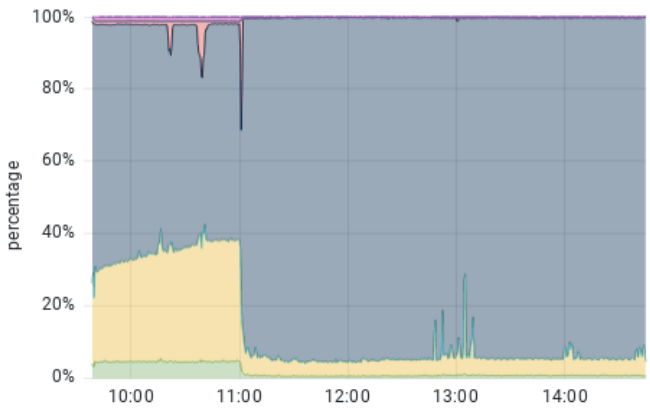




Disk Space Used Basic

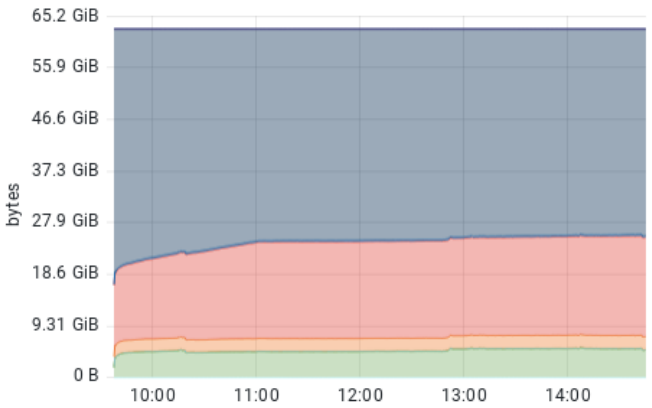


CPU



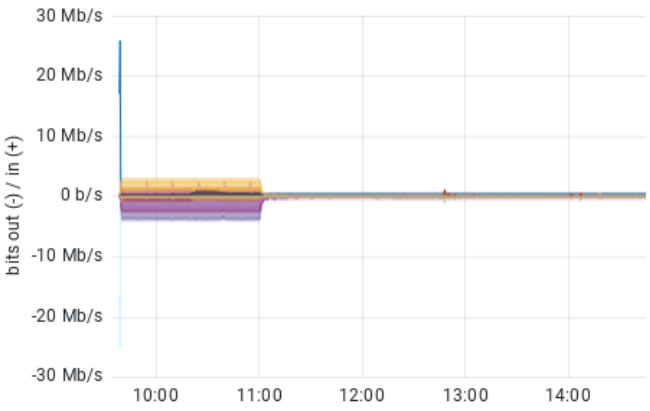
- System - Processes executing in kernel mode
- User - Normal processes executing in user mode
- Nice - Niced processes executing in user mode
- Idle - Waiting for something to happen
- Iowait - Waiting for I/O to complete

Memory Stack



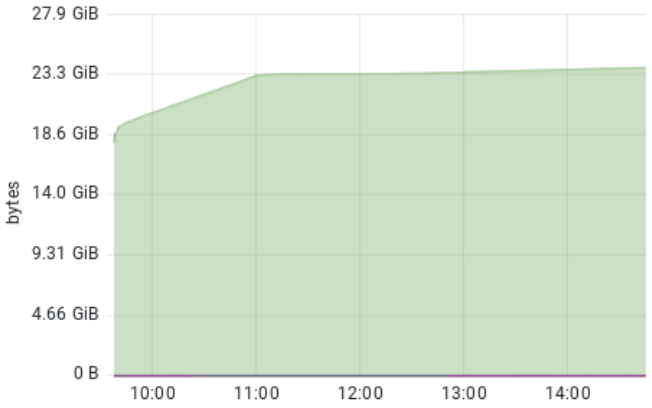
- Apps - Memory used by user-space applications
- PageTables - Memory used to map between virtual and physical memory addr
- SwapCache - Memory that keeps track of pages that have been fetched from s
- Slab - Memory used by the kernel to cache data structures for its own use (cacl
- Cache - Parked file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

Network Traffic



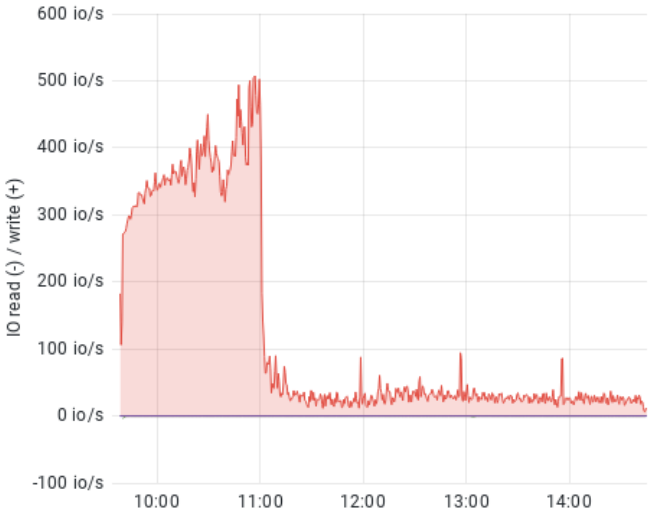
	min	max	avg	curren
br-3bee41ce9340 - Receive	9.72 kb/s	1.39 Mb/s	29.9 kb/s	11.5 kb
br-4472c0662da9 - Receive	18.1 kb/s	2.60 Mb/s	777 kb/s	18.1 kb
br-b5d82a87db58 - Receive	0 b/s	0 b/s	0 b/s	0 b
br-f6ba21018110 - Receive	816 b/s	1.62 Mb/s	453 kb/s	816 b
docker0 - Receive	0 b/s	146 kb/s	459 b/s	0 b

Disk Space Used



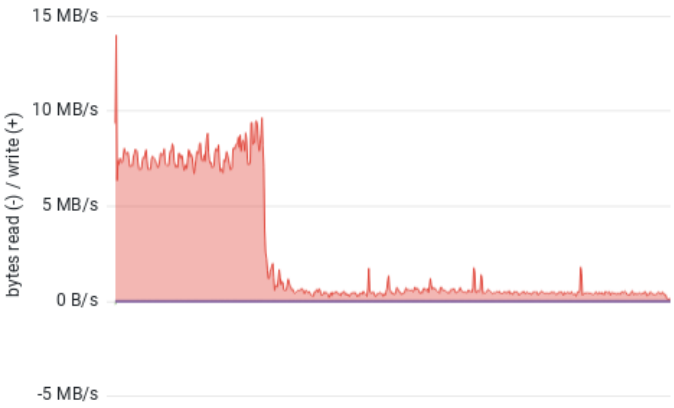
	min	max	avg	current
/run/lock	0 B	0 B	0 B	0 B
/run/user/0	0 B	0 B	0 B	0 B
/run/user/1001	0 B	0 B	0 B	0 B
/run	2.234 MiB	3.695 MiB	3.681 MiB	3.629 MiB
/run/snapd/ns	2.234 MiB	3.695 MiB	3.681 MiB	3.629 MiB

Disk IOps



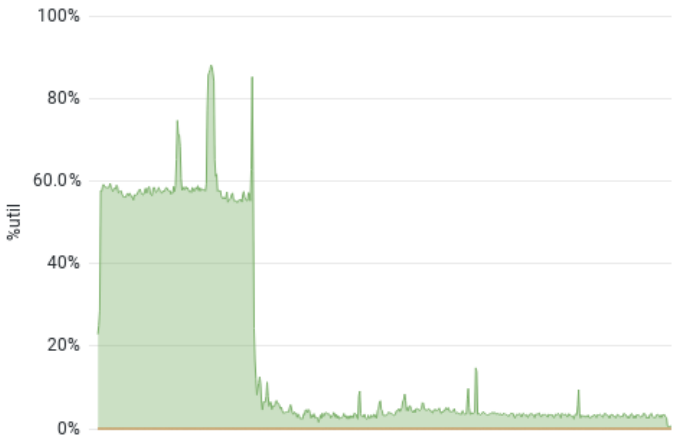
	min	max	avg	current
vda - Reads completed	0 io/s	3.87 io/s	0.0367 io/s	0 io/s
vda - Writes completed	6.27 io/s	507 io/s	121 io/s	10.4 io/s

I/O Usage Read / Write



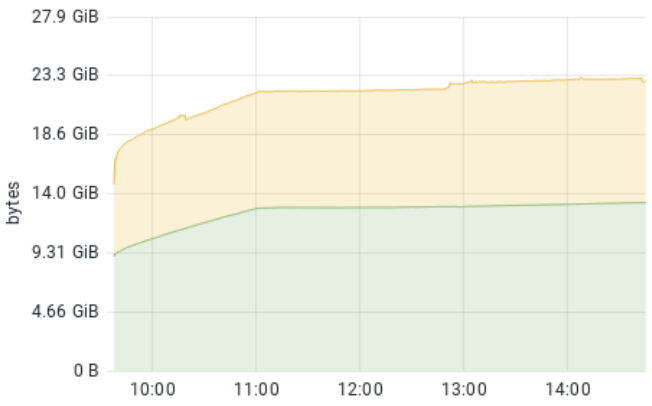
	min	max	avg
vda - Successfully read bytes	0 B/s	160.154 kB/s	377.653 B/
vdb - Successfully read bytes	0 B/s	0 B/s	0 B/
vdc - Successfully read bytes	0 B/s	0 B/s	0 B/
vdd - Successfully read bytes	0 B/s	0 B/s	0 B/
vda - Successfully written bytes	108.954 kB/s	13.977 MB/s	2.466 MB/

I/O Utilization



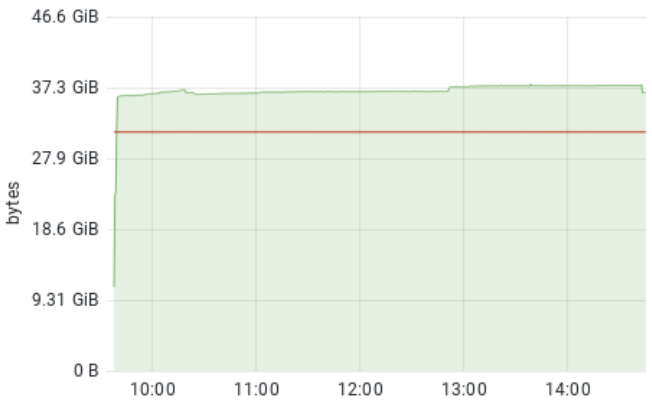
	min	max	avg	current
vda	0.471%	88.080%	18.827%	0.524%
vdb	0%	0%	0%	0%
vdc	0%	0%	0%	0%
vdd	0%	0%	0%	0%

Memory Active / Inactive



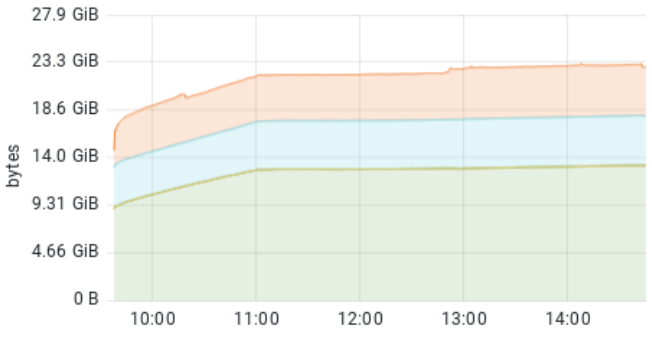
- Inactive - Memory which has been less recently used. It is more eligible to be re
- Active - Memory that has been used more recently and usually not reclaimed u

Memory Commited



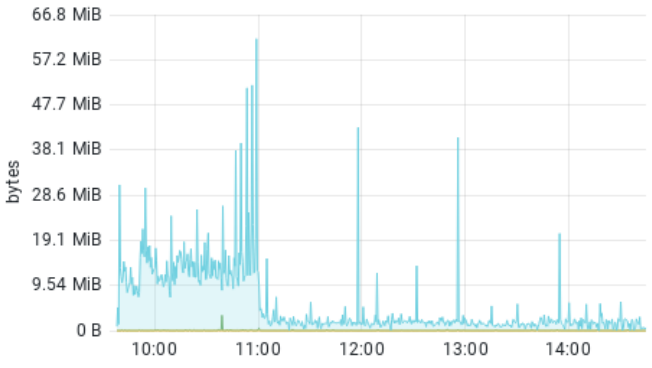
- Committed_AS - Amount of memory presently allocated on the system
- CommitLimit - Amount of memory currently available to be allocated on the sy

Memory Active / Inactive Detail



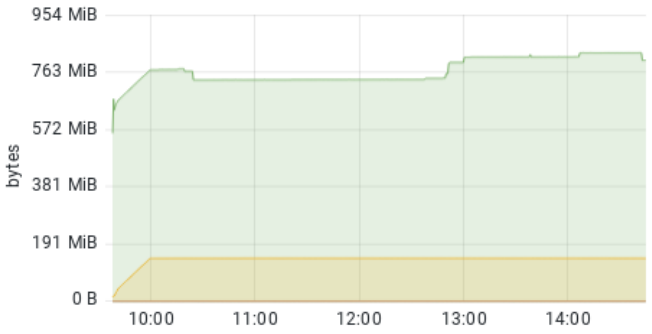
- Inactive_file - File-backed memory on inactive LRU list
- Inactive_anon - Anonymous and swap cache on inactive LRU list, including tmp
- Active_file - File-backed memory on active LRU list
- Active_anon - Anonymous and swap cache on active least-recently-used (LRU)

Memory Writeback and Dirty



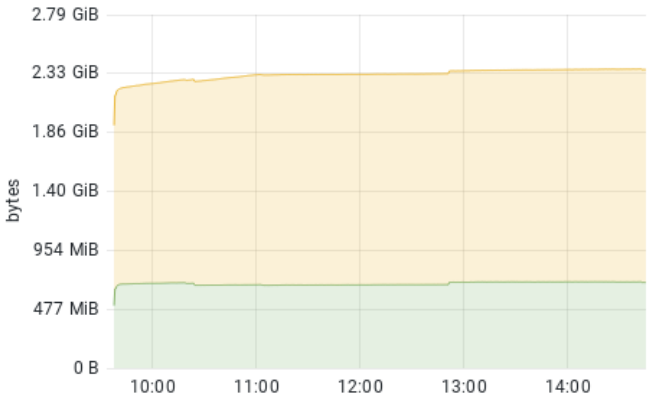
- Writeback - Memory which is actively being written back to disk
- WritebackTmp - Memory used by FUSE for temporary writeback buffers
- Dirty - Memory which is waiting to get written back to the disk 4.00

Memory Shared and Mapped



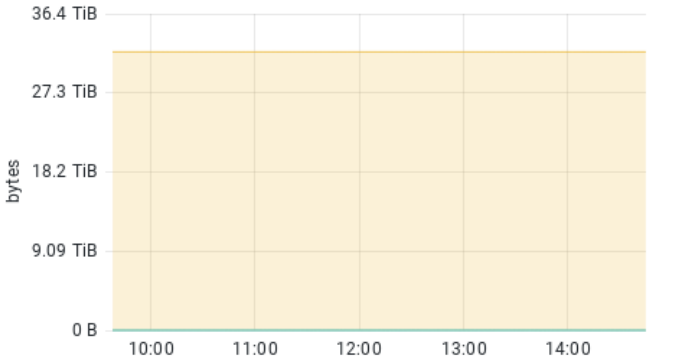
- Mapped - Used memory in mapped pages files which have been mmaped, such
- Shmem - Used shared memory (shared between several processes, thus includ
- ShmemHugePages - Memory used by shared memory (shmem) and tmpfs allc
- ShmemPmdMapped - Ammount of shared (shmem/tmpfs) memory backed by

Memory Slab



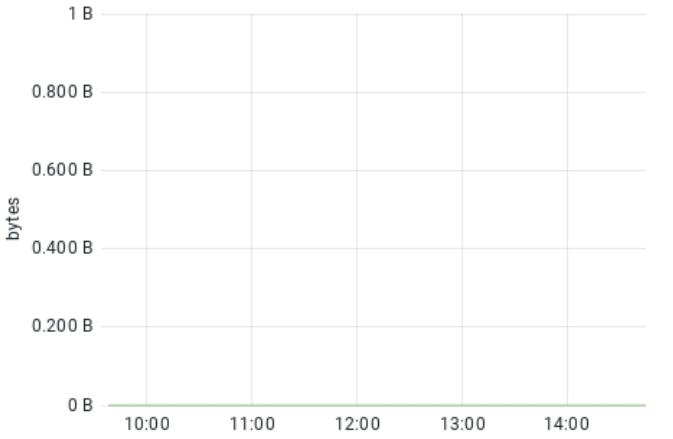
- SUnreclaim - Part of Slab, that cannot be reclaimed on memory pressure 50
- SReclaimable - Part of Slab, that might be reclaimed, such as caches

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		28.9

Memory Bounce

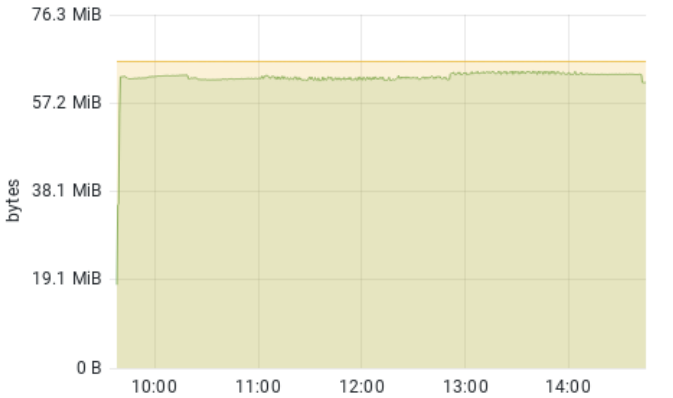


	min	max	avg	curr
Bounce - Memory used for block device bounce buffers	0 B	0 B	0 B	

Memory Anonymous

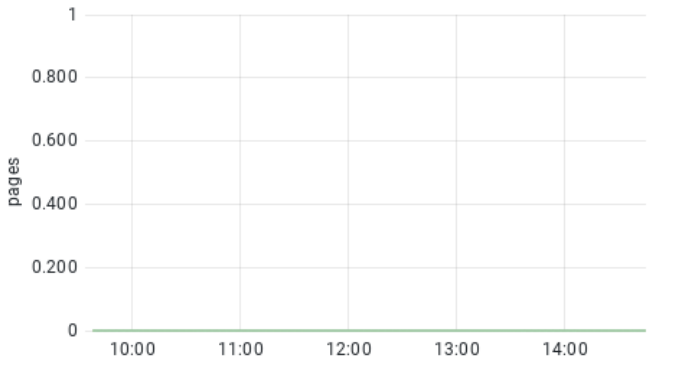
	min	m
AnonHugePages - Memory in anonymous huge pages	10.00 MiB	138.00
AnonPages - Memory in user pages not backed by files	1.71 GiB	5.17

Memory Kernel / CPU



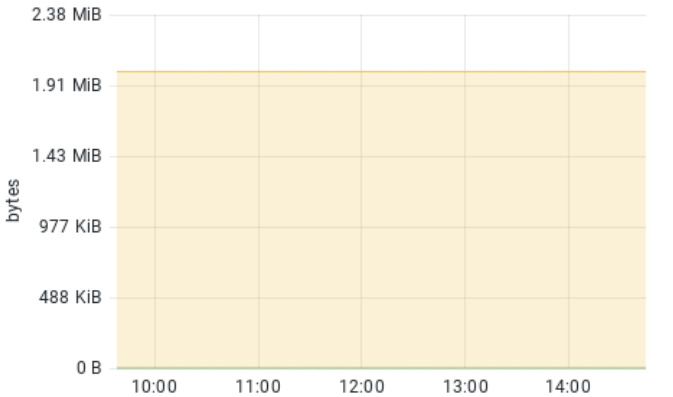
KernelStack - Kernel memory stack. This is not reclaimable		17.9
PerCPU - Per CPU memory allocated dynamically by loadable modules		66.1

Memory HugePages Counter



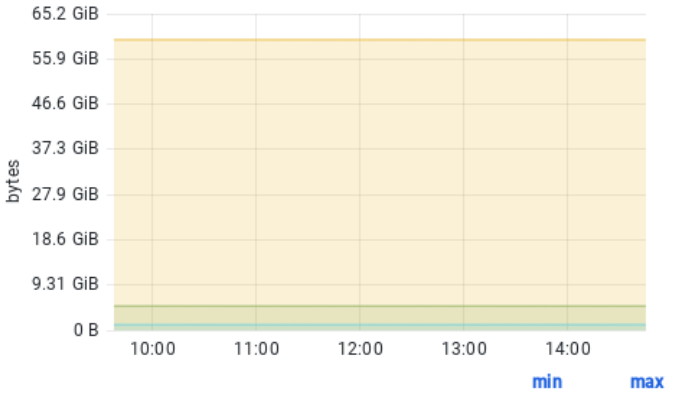
HugePages_Free - Huge pages in the pool that are not yet allocated	
HugePages_Rsvd - Huge pages for which a commitment to allocate from the p	
HugePages_Surp - Huge pages in the pool above the value in /proc/sys/vm/nr	

Memory HugePages Size



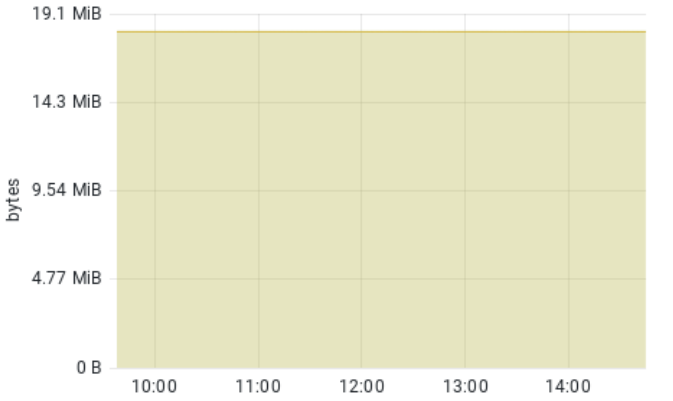
	min	max	cu
HugePages - Total size of the pool of huge pages	0 B	0 B	
Hugepagesize - Huge Page size	2.00 MiB	2.00 MiB	2.0

Memory DirectMap



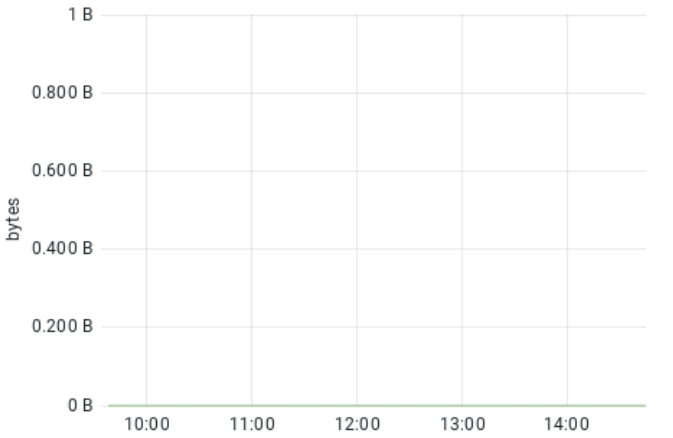
	min	max
DirectMap1G - Amount of pages mapped as this size	5.00 GiB	5.00 GiB
DirectMap2M - Amount of pages mapped as this size	59.85 GiB	59.85 GiB
DirectMap4K - Amount of pages mapped as this size	1.15 GiB	1.15 GiB

Memory Unevictable and MLocked



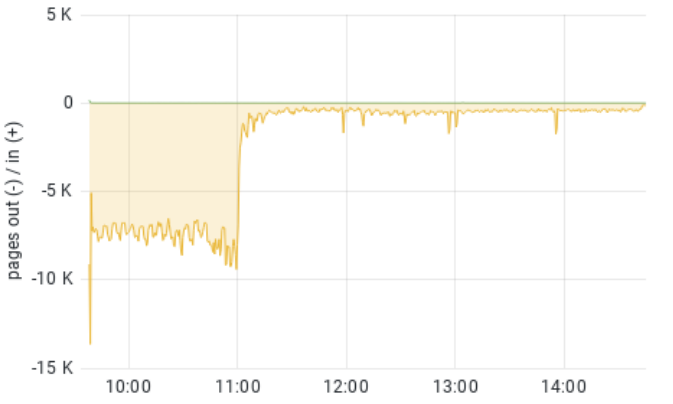
- Unevictable - Amount of unevictable memory that can't be swapped out for a v
- MLocked - Size of pages locked to memory using the mlock() system call

Memory NFS



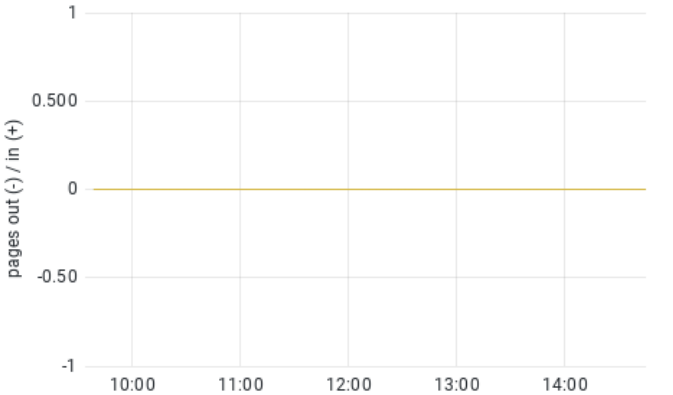
- NFS Unstable - Memory in NFS pages sent to the server, but not yet commited t

Memory Pages In / Out



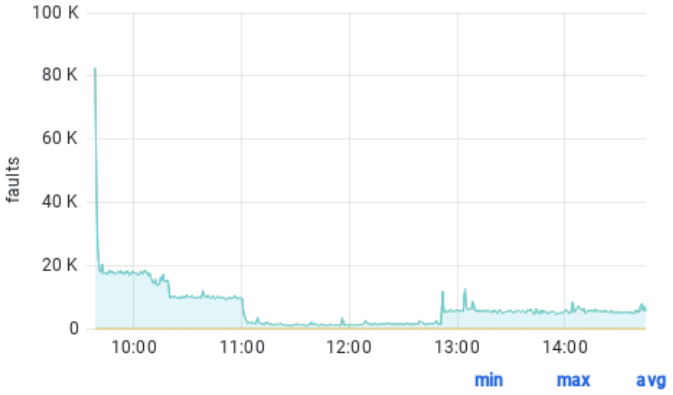
	min	max	avg	current
Pagesin - Page in operations	0	156	0.369	0
Pagesout - Page out operations	106	13.6 K	2.41 K	118

Memory Pages Swap In / Out



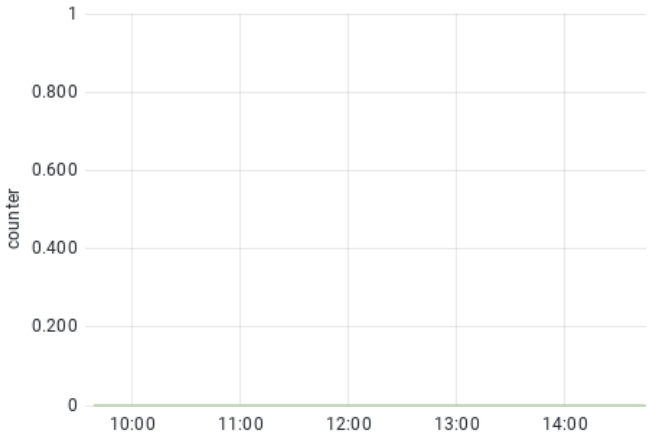
	min	max	avg	current
Pswpin - Pages swapped in	0	0	0	0
Pswpout - Pages swapped out	0	0	0	0

Memory Page Faults



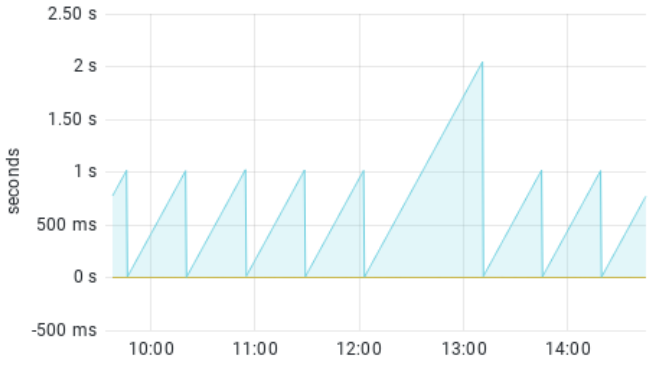
	min	max	avg
Pgfault - Page major and minor fault operations	878.11	82.54 K	6.47 K
Pgmajfault - Major page fault operations	0	0.04	0.0
Pgminfault - Minor page fault operations	878.11	82.54 K	6.47 K

OOM Killer



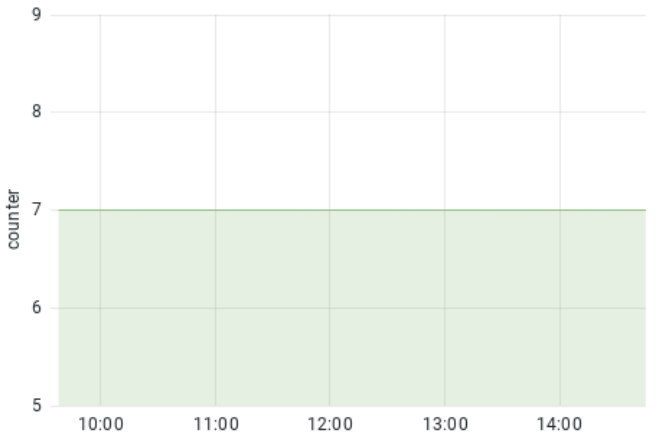
	min	max	avg	current
oom killer invocations	0	0	0	0

Time Syncronized Drift



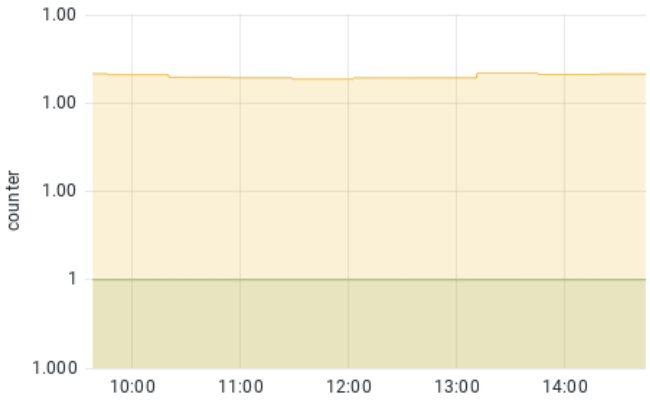
	min	max
Estimated error in seconds	0 s	0 s
Time offset in between local system and reference clock	-549 µs	860 µs
Maximum error in seconds	2.50 ms	2.05 s

Time PLL Adjust



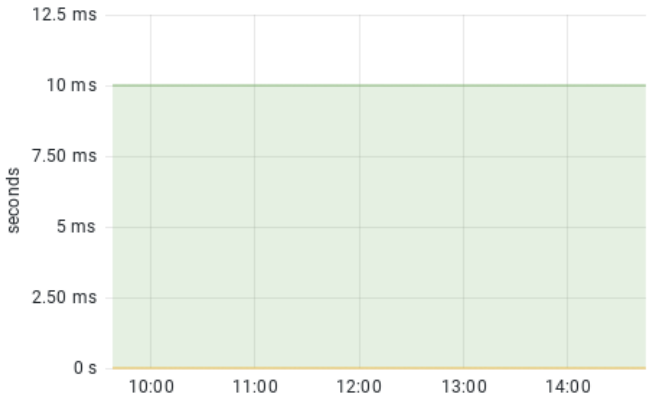
	min	max	avg	current
Phase-locked loop time adjust	7	7	7	7

Time Syncronized Status



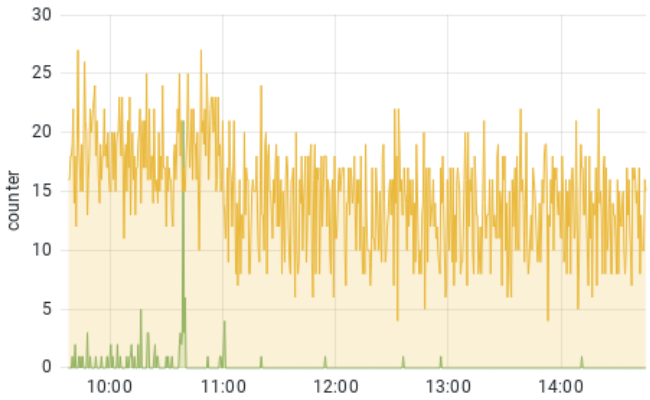
	min	max	avg
Is clock synchronized to a reliable server (1 = yes, 0 = no)	1	1	
Local clock frequency adjustment	1.00	1.00	1.0

Time Misc



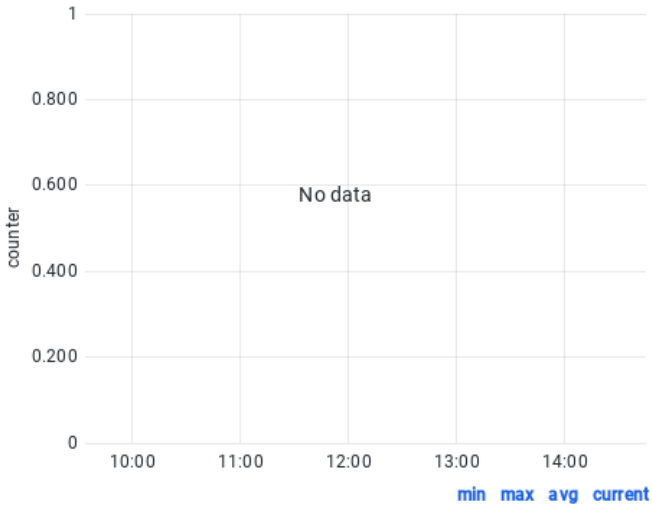
	min	max	avg	current
Seconds between clock ticks	10 ms	10 ms	10.00 ms	10 ms
International Atomic Time (TAI) offset	0 s	0 s	0 s	0 s

Processes Status

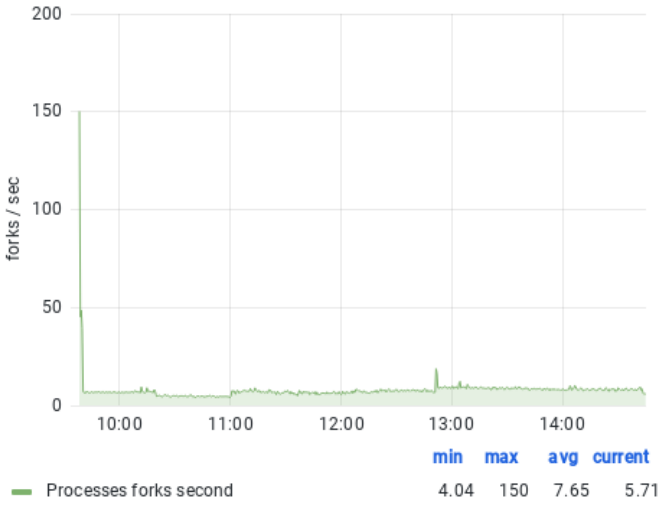


	min	max	avg	current
Processes blocked waiting for I/O to complete	0	21	0.164	0
Processes in runnable state	4	27	14.8	15

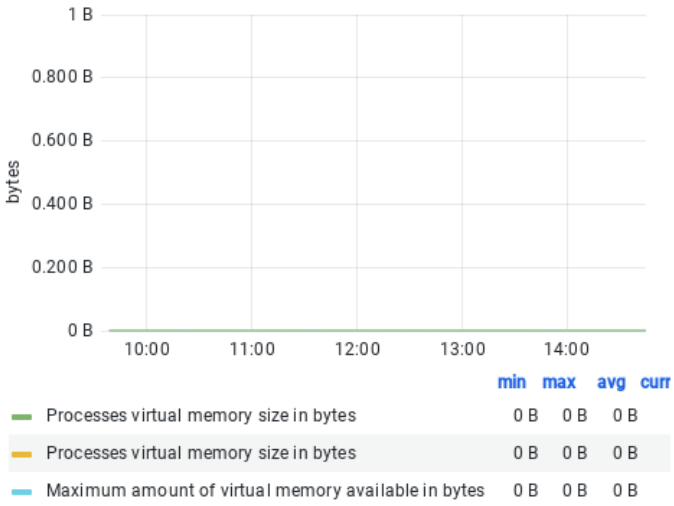
Processes State



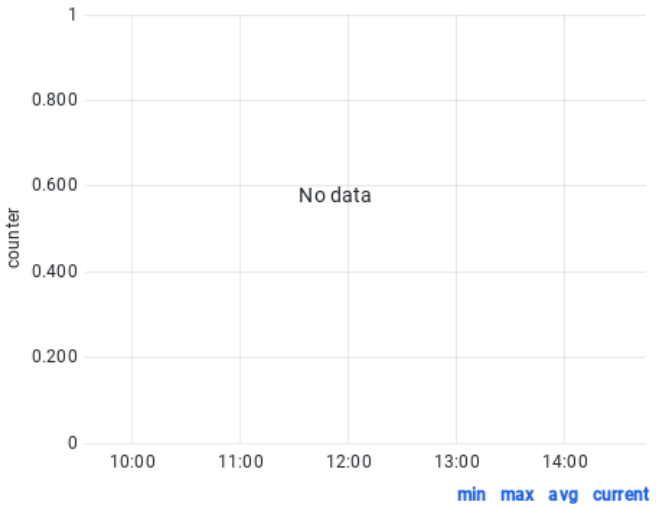
Processes Forks



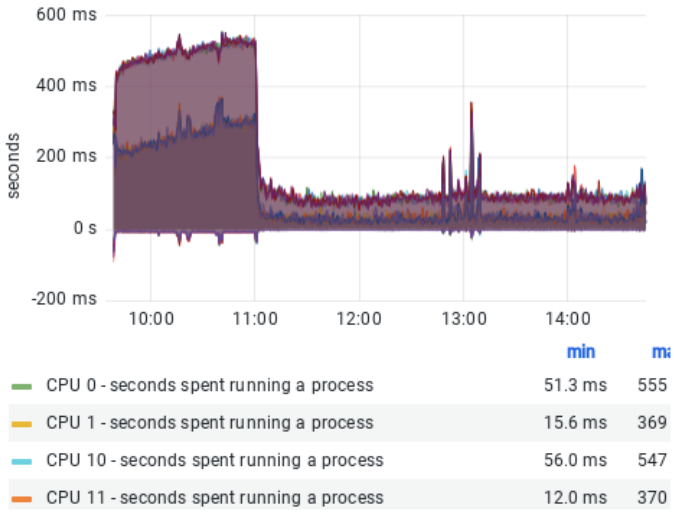
Processes Memory



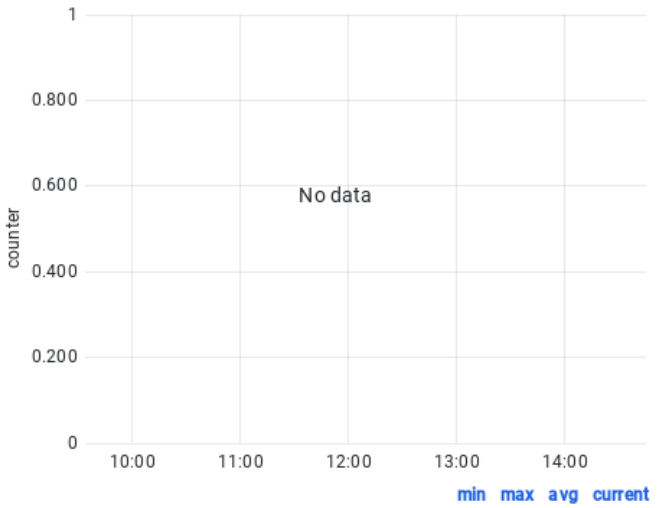
PIDs Number and Limit



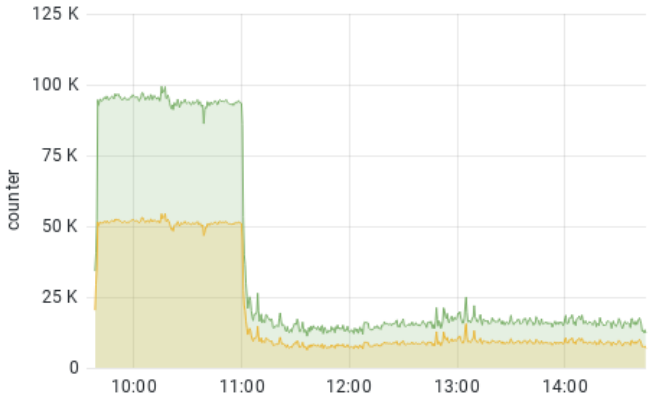
Process schedule stats Running / Waiting



Threads Number and Limit

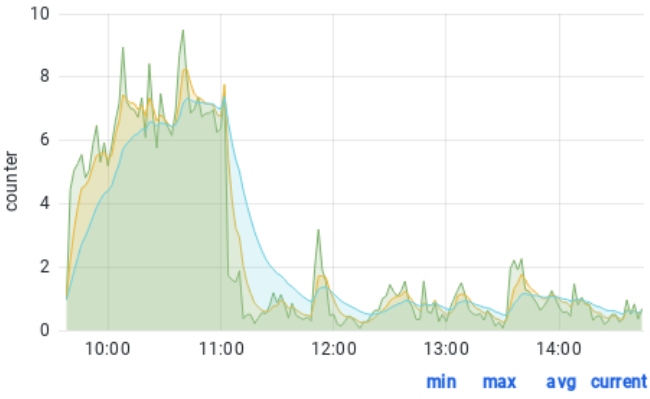


Context Switches / Interrupts



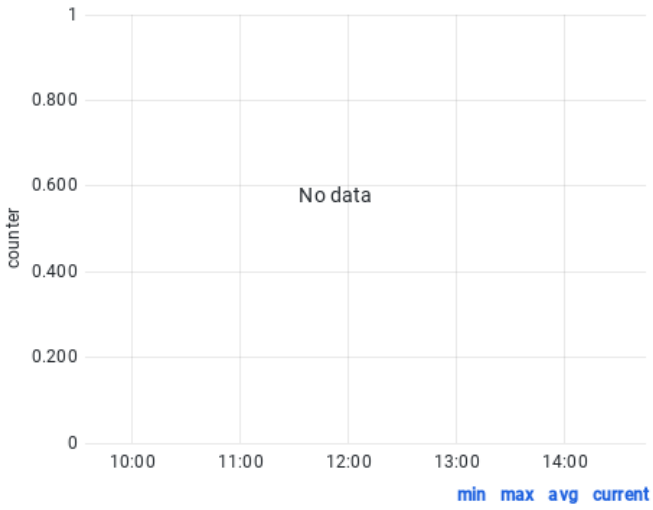
	min	max	avg	current
Context switches	11.2 K	99.4 K	36.8 K	12.2 K
Interrupts	6.27 K	54.5 K	20.2 K	6.90 K

System Load



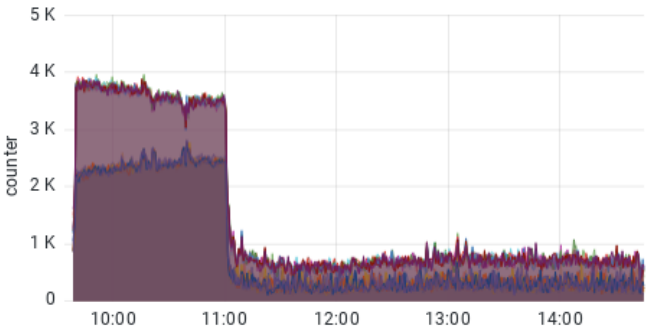
	min	max	avg	current
Load 1m	0.0600	9.49	2.39	0.680
Load 5m	0.250	8.25	2.41	0.580
Load 15m	0.480	7.38	2.42	0.580

Interrupts Detail



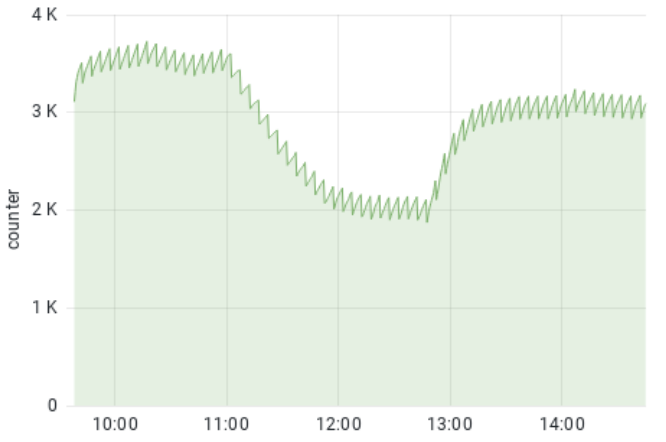
	min	max	avg	current

Schedule timeslices executed by each cpu



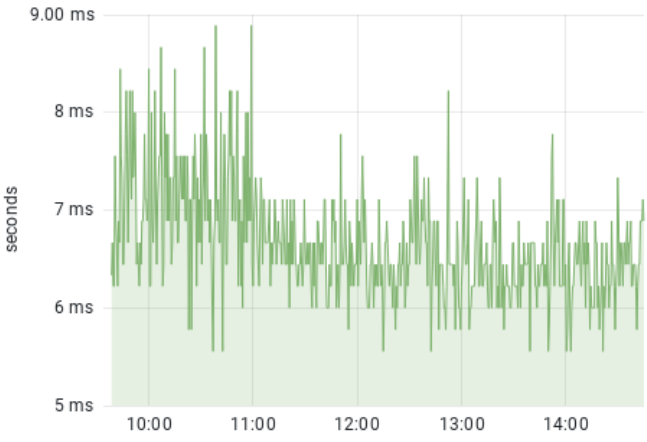
	min	max	avg	current
CPU 0	418	3.96 K	1.48 K	418
CPU 1	110	2.74 K	866	164
CPU 10	363	3.91 K	1.47 K	633
CPU 11	125	2.72 K	862	230

Entropy



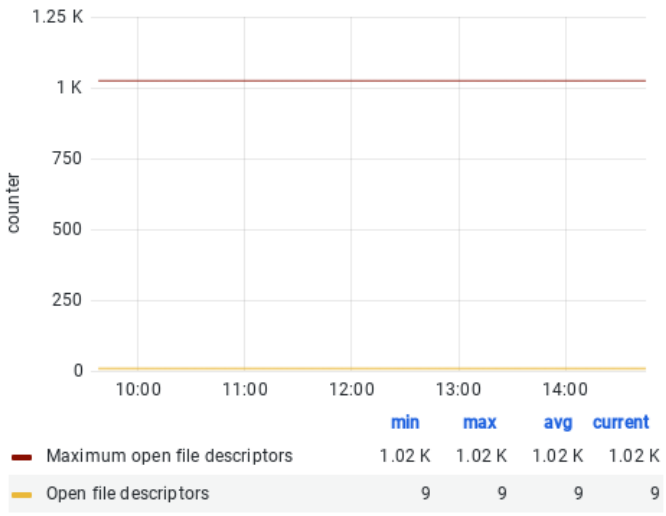
	min	max	avg
Entropy available to random number generators	1.87 K	3.73 K	2.92 K

CPU time spent in user and system contexts



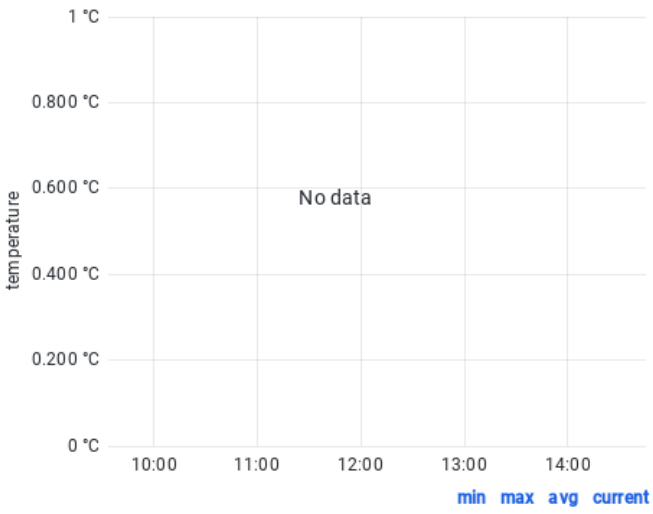
	min	max	avg	current
Time spent	5.56 ms	8.89 ms	6.67 ms	6.89 ms

File Descriptors

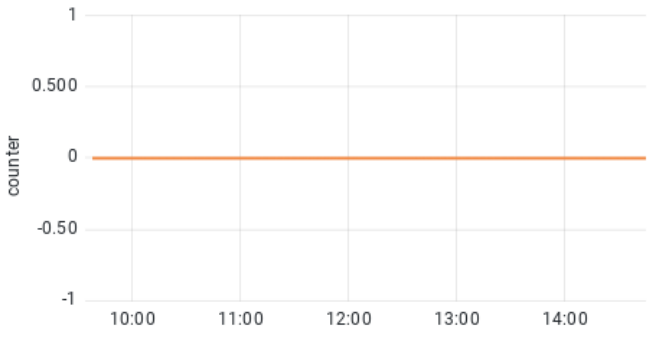


	min	max	avg	current
Maximum open file descriptors	1.02 K	1.02 K	1.02 K	1.02 K
Open file descriptors	9	9	9	9

Hardware temperature monitor

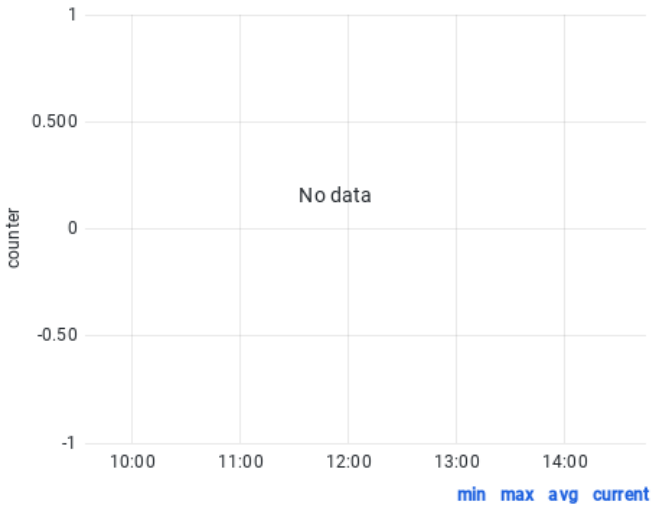


Throttle cooling device

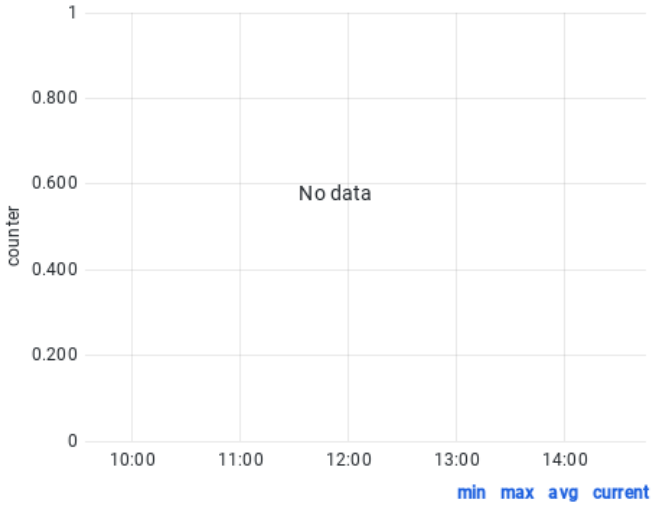


	min	max	avg	current
Current 0 in Processor	0	0	0	0
Current 1 in Processor	0	0	0	0
Current 10 in Processor	0	0	0	0
Current 11 in Processor	0	0	0	0

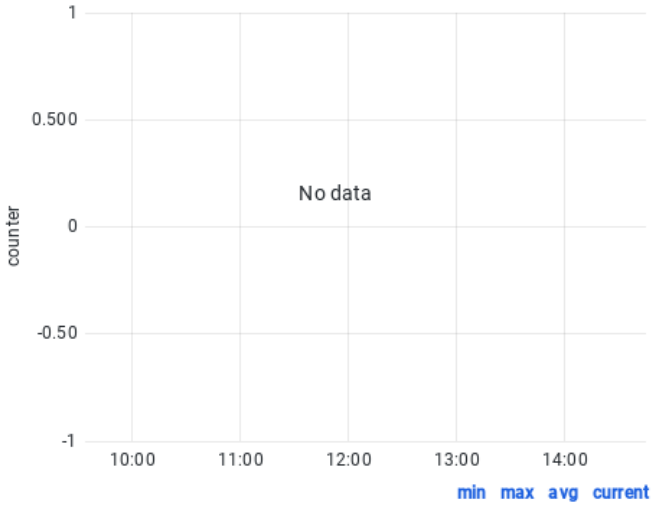
Power supply



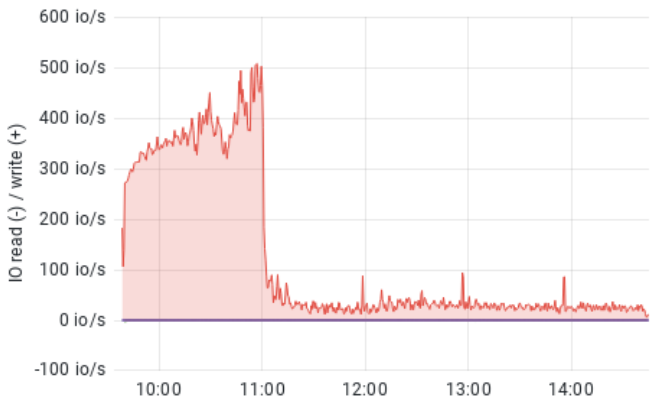
Systemd Sockets



Systemd Units State

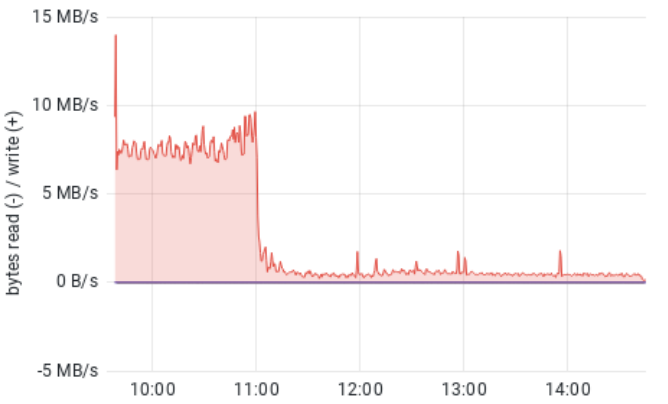


Disk IOps Completed



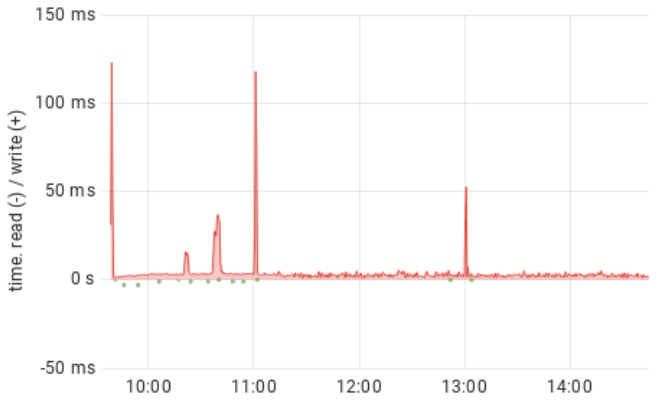
	min	max	avg	current
vda - Reads completed	0 io/s	3.87 io/s	0.0367 io/s	0 io/s
vda - Writes completed	6.27 io/s	507 io/s	121 io/s	10.4 io/s

Disk R/W Data



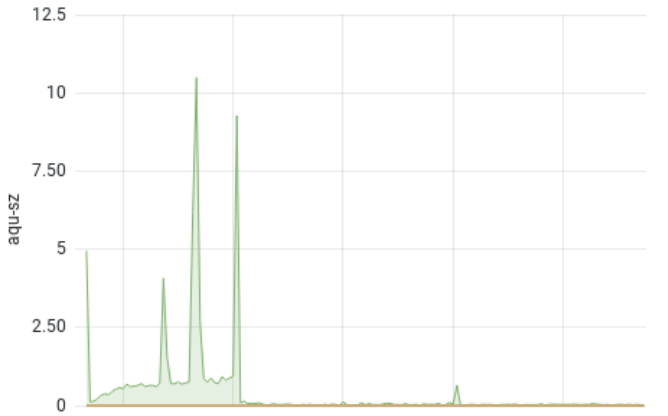
	min	max	avg	current
vda - Read bytes	0 B/s	44.6 kB/s	340 B/s	0 B/s
vda - Written bytes	109 kB/s	14.0 MB/s	2.47 MB/s	121 kB/s

Disk Average Wait Time



	min	max	avg	current
vda - Write wait time avg	896 µs	123 ms	3.88 ms	1.91 ms
vda - Read wait time avg	0 s	3.00 ms	877 µs	

Average Queue Size

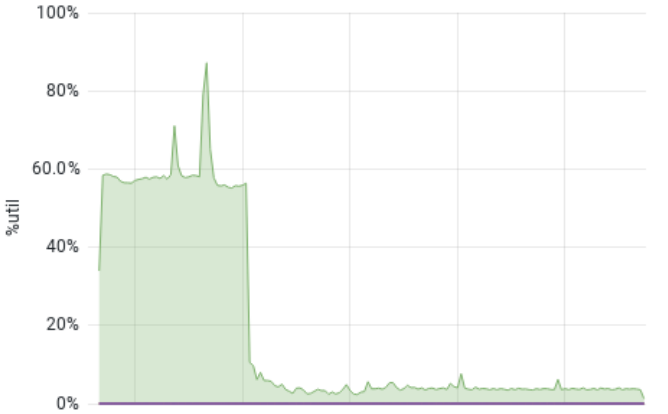


	min	max	avg	current
vda	0.00310	10.5	0.431	0.00310

Disk R/W Merged

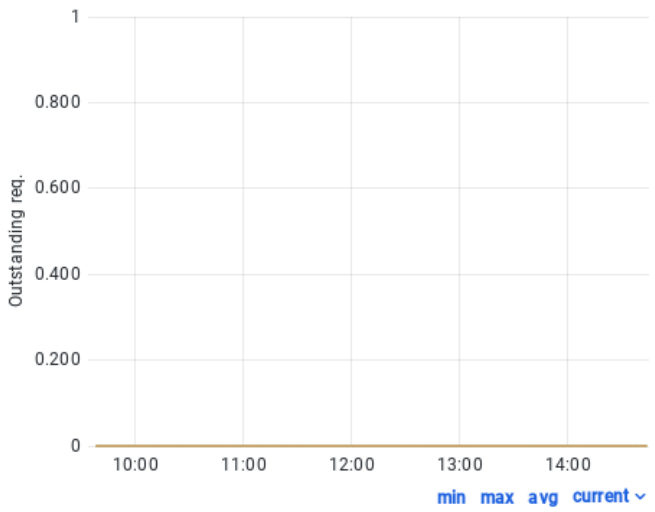
	min	max	avg	current
vda - Write merged	2.24 io/s	502 io/s	116 io/s	2.24 io/s
vda - Read merged	0 io/s	24.2 io/s	0.0498 io/s	0 io/s

Time Spent Doing I/Os

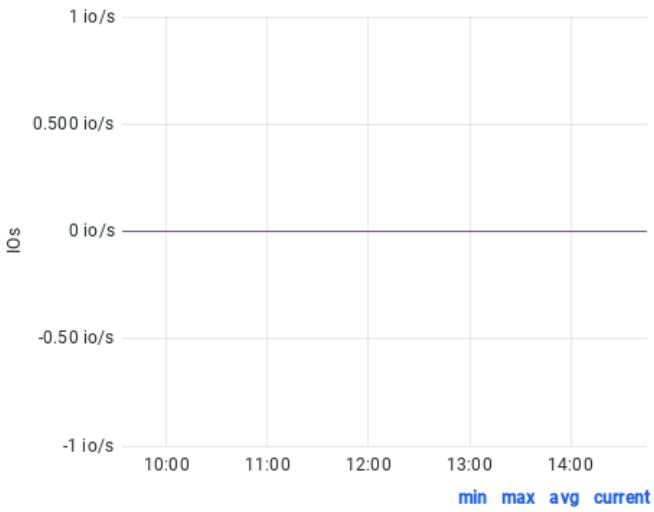


	min	max	avg	current
vda - IO	1.27%	87.2%	19.0%	1.27%

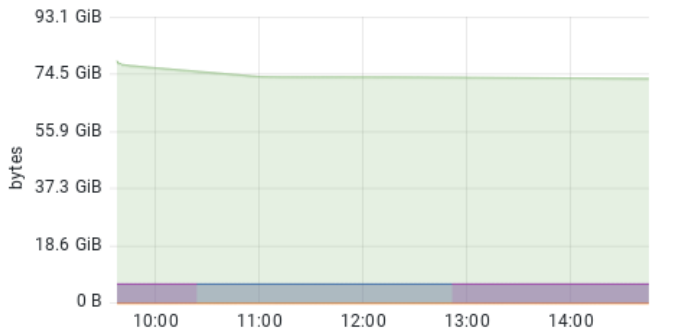
Instantaneous Queue Size



Disk IOps Discards completed / merged

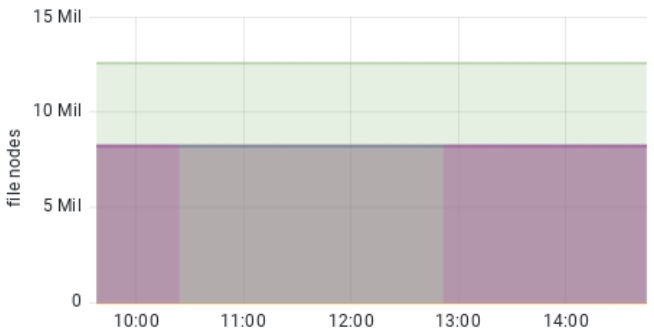


Filesystem space available



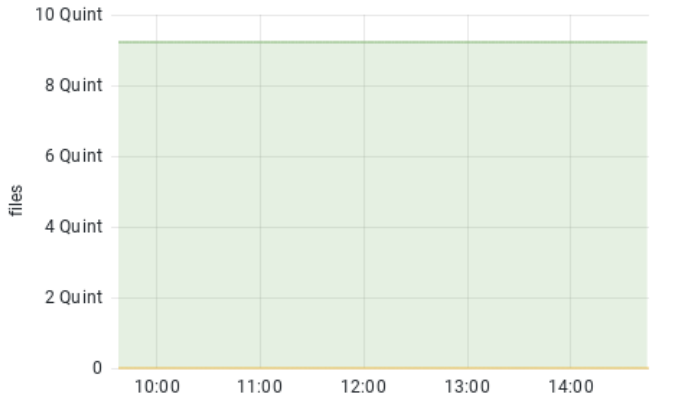
	min	max	avg	cu
/ - Available	72.974 GiB	78.743 GiB	73.912 GiB	72.9
/boot/efi - Available	99.157 MiB	99.157 MiB	99.157 MiB	99.15
/run - Available	6.278 GiB	6.279 GiB	6.278 GiB	6.2
/run/lock - Available	5.000 MiB	5.000 MiB	5.000 MiB	5.00

File Nodes Free



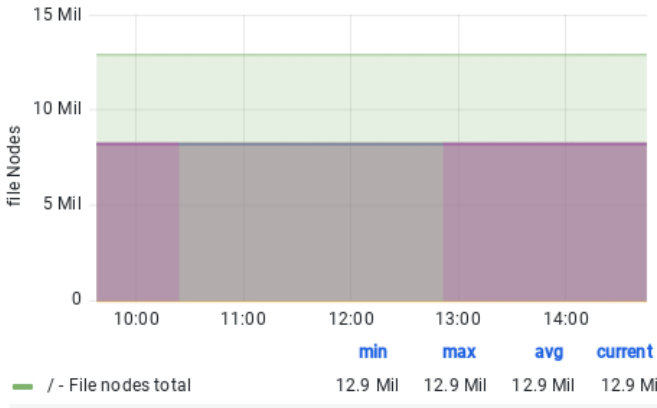
	min	max	avg	current
/ - Free file nodes	12.6 Mil	12.6 Mil	12.6 Mil	12.6 Mil
/run - Free file nodes	8.23 Mil	8.23 Mil	8.23 Mil	8.23 Mil
/run/lock - Free file nodes	8.23 Mil	8.23 Mil	8.23 Mil	8.23 Mil
/run/snapd/ns - Free file nodes	8.23 Mil	8.23 Mil	8.23 Mil	8.23 Mil

File Descriptor



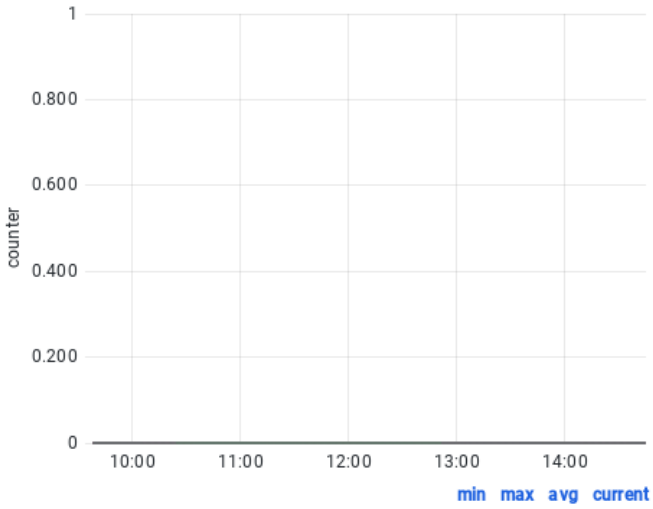
	min	max	avg	current
Max open files	9.22 Quint	9.22 Quint	9.22 Quint	9.22 Quint
Open files	4.86 K	11.3 K	10.5 K	10.1 K

File Nodes Size

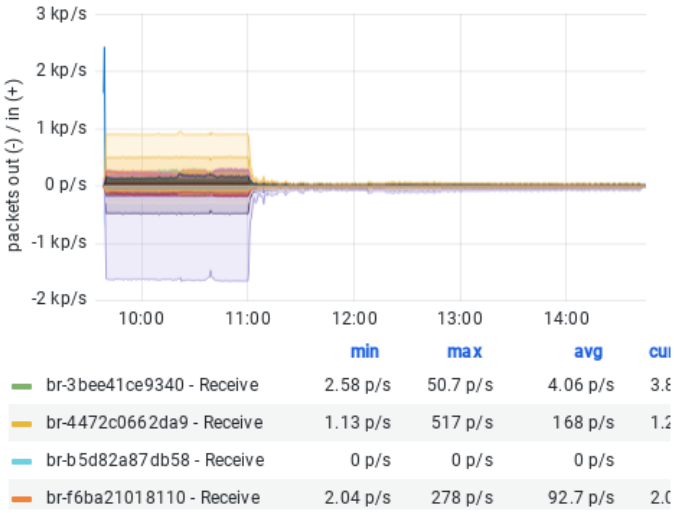


	min	max	avg	current
/ - File nodes total	12.9 Mil	12.9 Mil	12.9 Mil	12.9 Mil
/run - File nodes total	8.23 Mil	8.23 Mil	8.23 Mil	8.23 Mil
/run/lock - File nodes total	8.23 Mil	8.23 Mil	8.23 Mil	8.23 Mil
/run/snapd/ns - File nodes total	8.23 Mil	8.23 Mil	8.23 Mil	8.23 Mil

Filesystem in ReadOnly / Error

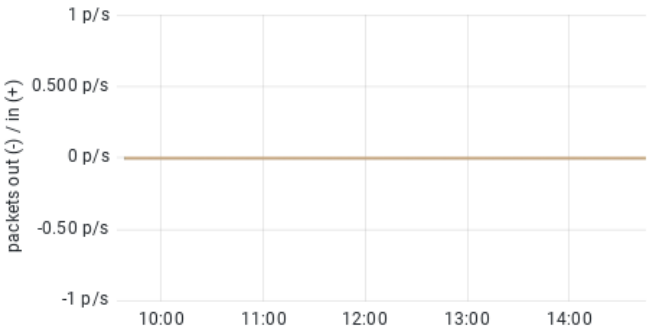


Network Traffic by Packets



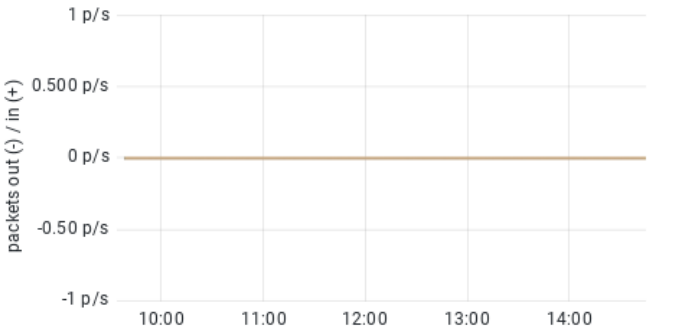
	min	max	avg	cu
br-3bee41ce9340 - Receive	2.58 p/s	50.7 p/s	4.06 p/s	3.8
br-4472c0662da9 - Receive	1.13 p/s	517 p/s	168 p/s	1.2
br-b5d82a87db58 - Receive	0 p/s	0 p/s	0 p/s	
br-f6ba21018110 - Receive	2.04 p/s	278 p/s	92.7 p/s	2.0

Network Traffic Errors



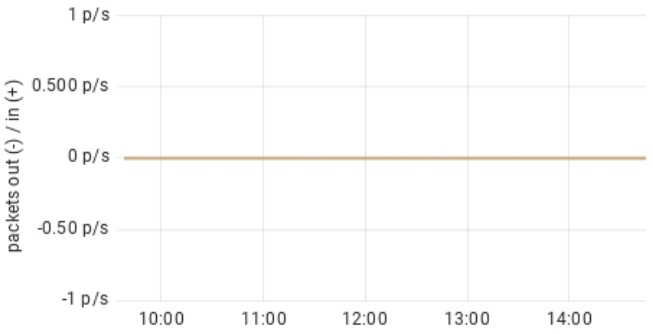
	min	max	avg	current
vethfde3c2a - Rransmit errors	0 p/s	0 p/s	0 p/s	0 p/s
vethf6669ba - Rransmit errors	0 p/s	0 p/s	0 p/s	0 p/s
vethed605e5 - Rransmit errors	0 p/s	0 p/s	0 p/s	0 p/s
vethed383cf - Rransmit errors	0 p/s	0 p/s	0 p/s	0 p/s

Network Traffic Drop



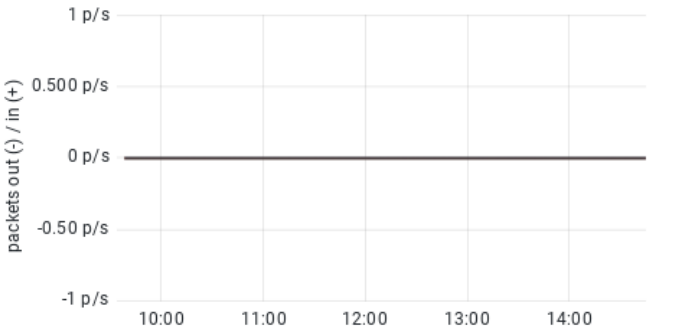
	min	max	avg	current
vethfde3c2a - Transmit drop	0 p/s	0 p/s	0 p/s	0 p/s
vethf6669ba - Transmit drop	0 p/s	0 p/s	0 p/s	0 p/s
vethed605e5 - Transmit drop	0 p/s	0 p/s	0 p/s	0 p/s
vethed383cf - Transmit drop	0 p/s	0 p/s	0 p/s	0 p/s

Network Traffic Compressed



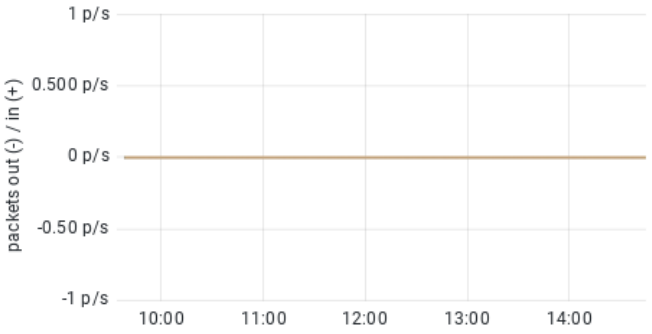
	min	max	avg	current
vethfde3c2a - Transmit compressed	0 p/s	0 p/s	0 p/s	0 p/s
vethf6669ba - Transmit compressed	0 p/s	0 p/s	0 p/s	0 p/s
vethed605e5 - Transmit compressed	0 p/s	0 p/s	0 p/s	0 p/s
vethed383cf - Transmit compressed	0 p/s	0 p/s	0 p/s	0 p/s

Network Traffic Multicast



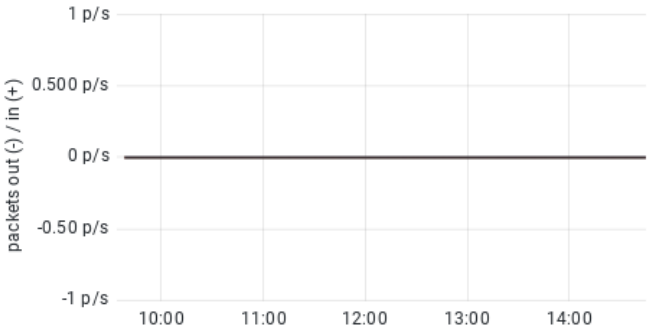
	min	max	avg	current
vethfde3c2a - Receive multicast	0 p/s	0 p/s	0 p/s	0 p/s
vethf6669ba - Receive multicast	0 p/s	0 p/s	0 p/s	0 p/s
vethed605e5 - Receive multicast	0 p/s	0 p/s	0 p/s	0 p/s
vethed383cf - Receive multicast	0 p/s	0 p/s	0 p/s	0 p/s

Network Traffic Fifo



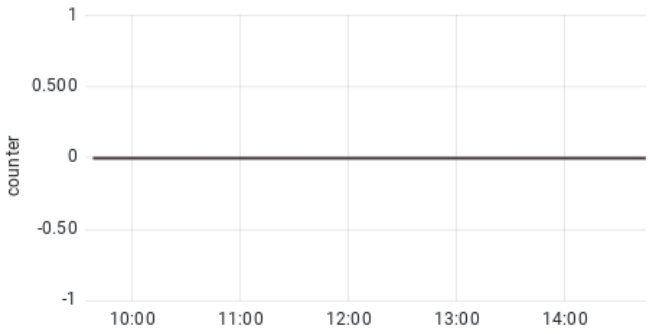
	min	max	avg	current
vethfde3c2a - Transmit fifo	0 p/s	0 p/s	0 p/s	0 p/s
vethf6669ba - Transmit fifo	0 p/s	0 p/s	0 p/s	0 p/s
vethed605e5 - Transmit fifo	0 p/s	0 p/s	0 p/s	0 p/s
vethed383cf - Transmit fifo	0 p/s	0 p/s	0 p/s	0 p/s

Network Traffic Frame



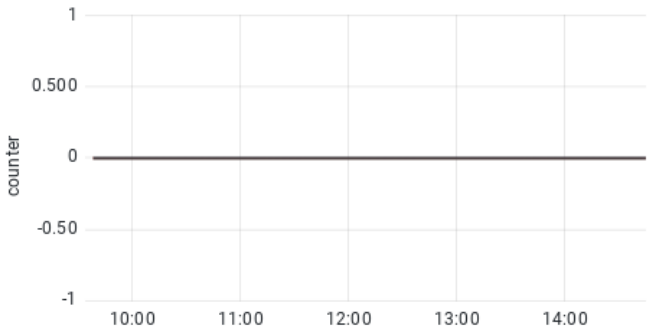
	min	max	avg	current
vethfde3c2a - Receive frame	0 p/s	0 p/s	0 p/s	0 p/s
vethf6669ba - Receive frame	0 p/s	0 p/s	0 p/s	0 p/s
vethed605e5 - Receive frame	0 p/s	0 p/s	0 p/s	0 p/s
vethed383cf - Receive frame	0 p/s	0 p/s	0 p/s	0 p/s

Network Traffic Carrier



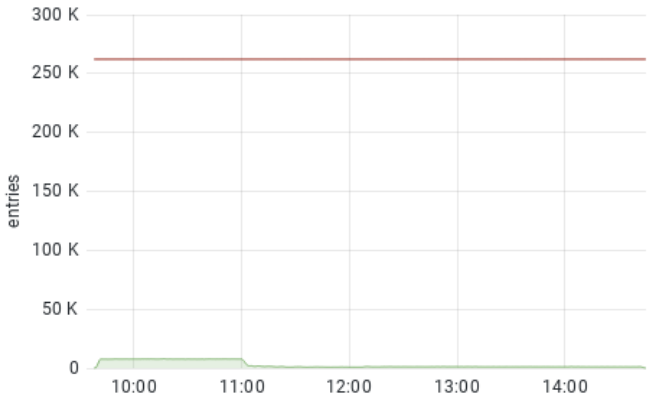
	min	max	avg	current
vethfde3c2a - Statistic transmit_carrier	0	0	0	0
vethf6669ba - Statistic transmit_carrier	0	0	0	0
vethed605e5 - Statistic transmit_carrier	0	0	0	0
vethed383cf - Statistic transmit_carrier	0	0	0	0

Network Traffic Colls



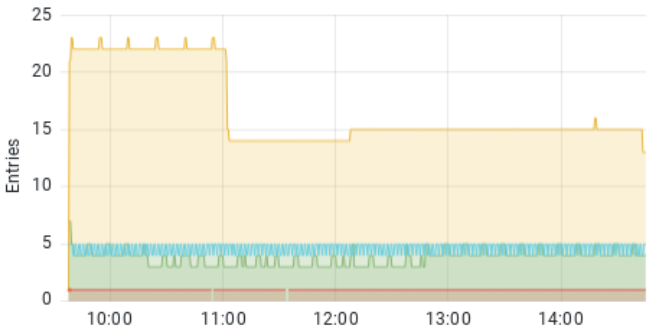
	min	max	avg	current
vethfde3c2a - Transmit colls	0	0	0	0
vethf6669ba - Transmit colls	0	0	0	0
vethed605e5 - Transmit colls	0	0	0	0
vethed383cf - Transmit colls	0	0	0	0

NF Contrack



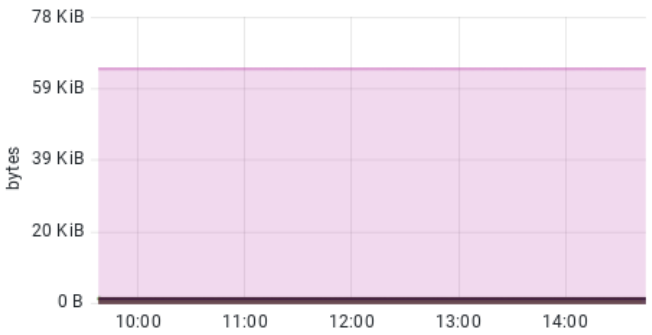
	min	max	avg	current
NF conntrack entries	103	7.91 K	2.82 K	134
NF conntrack limit	262 K	262 K	262 K	262 K

ARP Entries



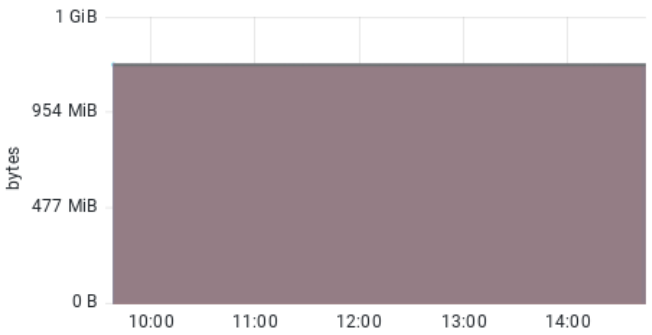
	min	max	avg	current
br-3bee41ce9340 - ARP entries	3	7	3.81	4
br-4472c0662da9 - ARP entries	1	23	16.7	13
br-f6ba21018110 - ARP entries	4	5	4.65	5
docker0 - ARP entries	1	1	1	

MTU



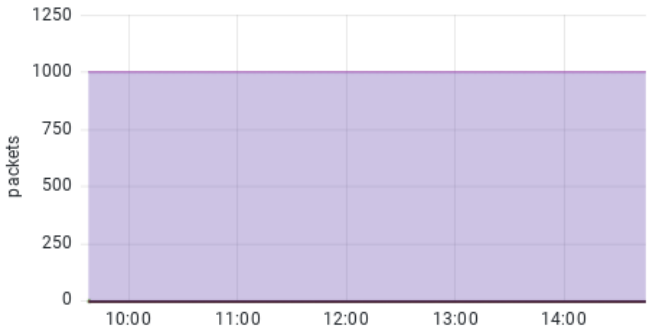
	min	max	avg	current
br-3bee41ce9340 - Bytes	1.5 KiB	1.5 KiB	1.5 KiB	1.5 KiB
br-4472c0662da9 - Bytes	1.5 KiB	1.5 KiB	1.5 KiB	1.5 KiB
br-b5d82a87db58 - Bytes	1.5 KiB	1.5 KiB	1.5 KiB	1.5 KiB
br-f6ba21018110 - Bytes	1.5 KiB	1.5 KiB	1.5 KiB	1.5 KiB

Speed



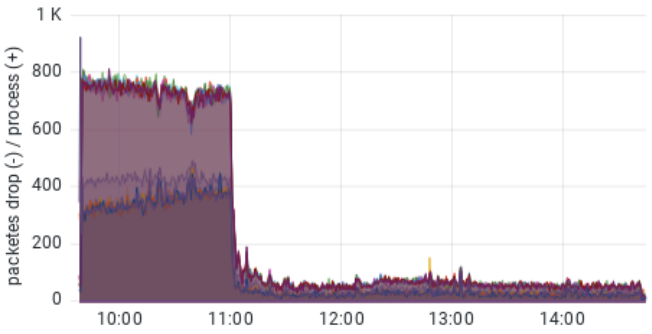
	min	max	avg	current
ens3 - Speed	-122.1 KiB	-122.1 KiB	-122.1 KiB	-122.1 KiB
veth052b79a - Speed	1.2 GiB	1.2 GiB	1.2 GiB	1.2 GiB
veth0796888 - Speed	1.2 GiB	1.2 GiB	1.2 GiB	1.2 GiB
veth0cad7a8 - Speed	1.2 GiB	1.2 GiB	1.2 GiB	1.2 GiB

Queue Length



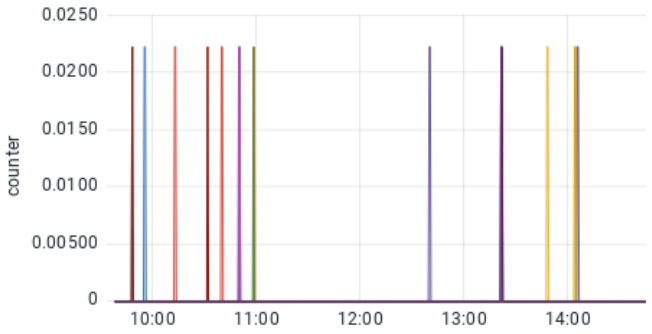
	min	max	a
br-3bee41ce9340 - Interface transmit queue length	0	0	
br-4472c0662da9 - Interface transmit queue length	0	0	
br-b5d82a87db58 - Interface transmit queue length	0	0	
br-f6ba21018110 - Interface transmit queue length	0	0	

Softnet Packets



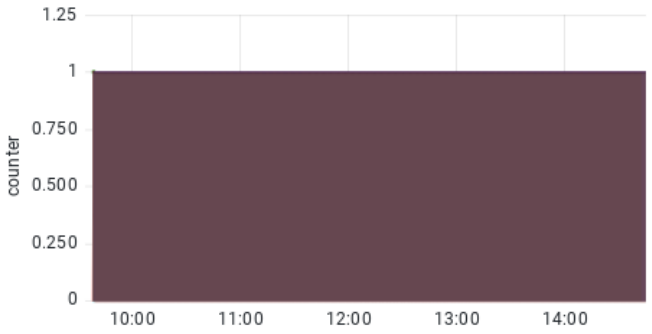
	min	max	avg	current
CPU 12 - Processed	12.4	804	240	17.1
CPU 10 - Processed	5.98	790	239	16.0
CPU 8 - Processed	11	813	239	15.0
CPU 2 - Processed	7.11	809	241	11

Softnet Out of Quota



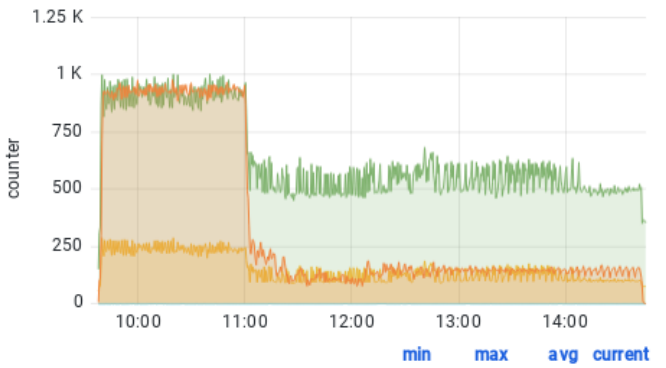
	min	max	avg	current
CPU 9 - Squeezed	0	0	0	0
CPU 8 - Squeezed	0	0.0222	0.0000724	0
CPU 7 - Squeezed	0	0.0222	0.0000724	0
CPU 6 - Squeezed	0	0.0222	0.0000724	0

Network Operational Status



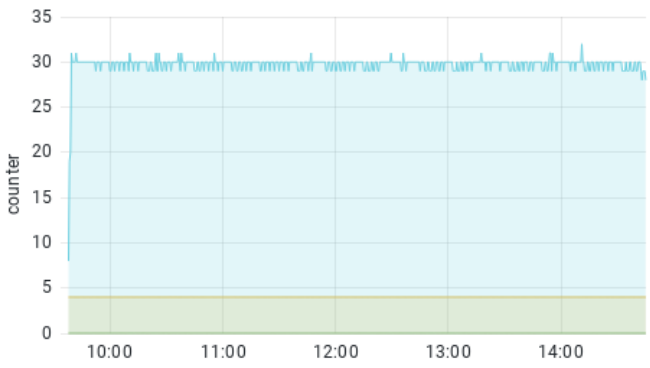
	min	max	avg	current
vethfde3c2a - Physical link state	1	1	1	1
vethf6669ba - Physical link state	1	1	1	1
vethed605e5 - Physical link state	1	1	1	1
vethed383cf - Physical link state	1	1	1	1

Sockstat TCP



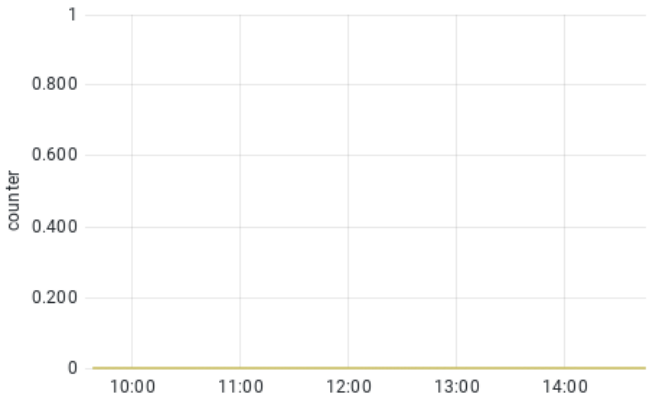
	min	max	avg	current
TCP_alloc - Allocated sockets	151	1.00 K	633	354
TCP_inuse - Tcp sockets currently in use	55	287	152	77
TCP_orphan - Orphan sockets	0	4	0.117	0
TCP_tw - Sockets wating close	0	976	352	0

Sockstat UDP



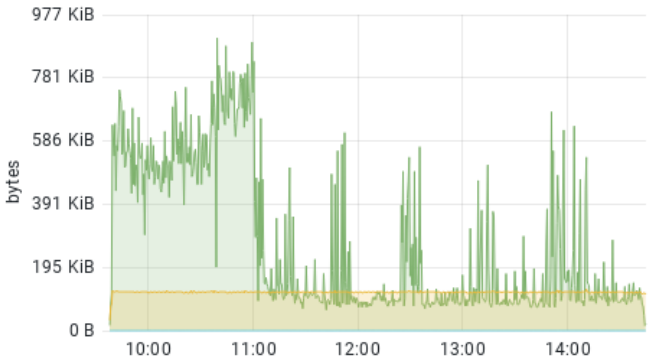
	min	max	avg	current
UDPLITE_inuse - Udplite sockets currently in use	0	0	0	0
UDP_inuse - Udp sockets currently in use	4	4	4	4
UDP_mem - Used memory for udp	8	32	29.7	28

Sockstat FRAG / RAW



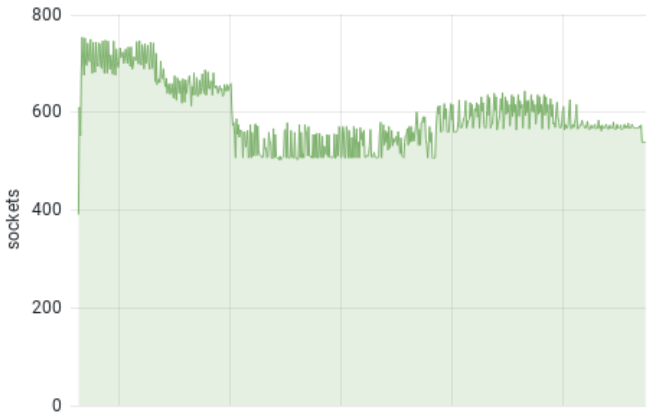
	min	max	avg	current
FRAG_inuse - Frag sockets currently in use	0	0	0	0
RAW_inuse - Raw sockets currently in use	0	0	0	0

Sockstat Memory Size



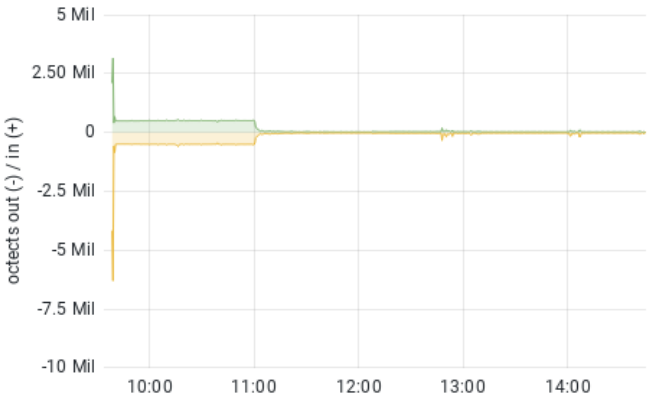
	min	max	avg	current
mem_bytes - TCP sockets in that state	16 KiB	904 KiB	264 KiB	20 K
mem_bytes - UDP sockets in that state	32 KiB	128 KiB	119 KiB	112 K
FRAG_memory - Used memory for frag	0 B	0 B	0 B	0

Sockstat Used



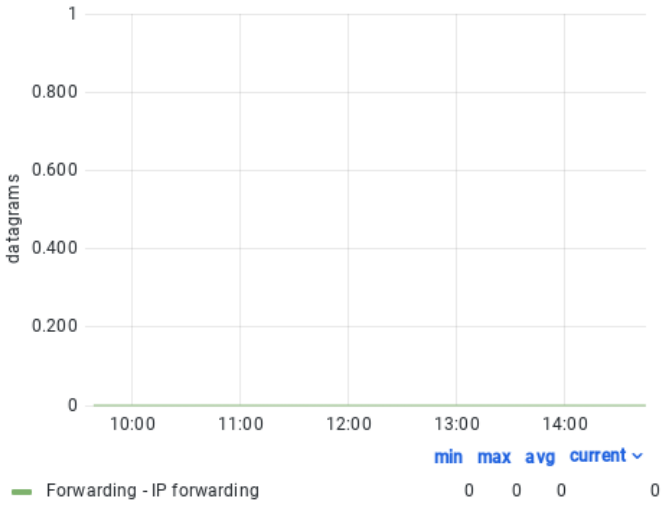
	min	max	avg	current
Sockets_used - Sockets currently in use	391	754	593	539

Netstat IP In / Out Octets



	min	max	avg	current
OutOctets - Sent octets	6.27 K	6.29 Mil	179 K	6.27 K
InOctets - Received octets	4.54 K	3.16 Mil	167 K	4.54 K

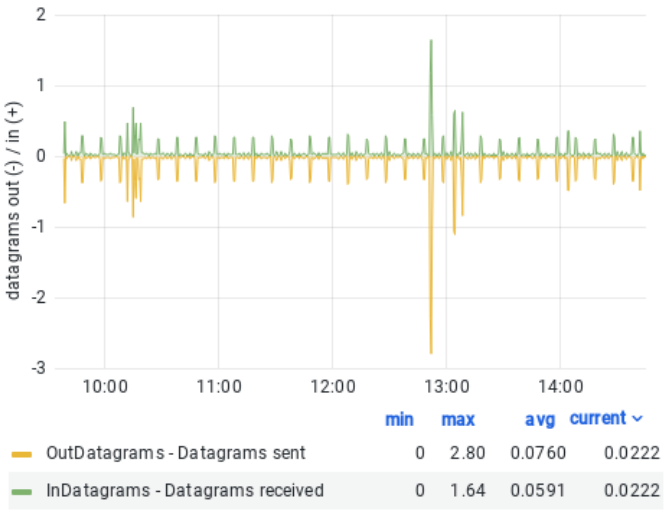
Netstat IP Forwarding



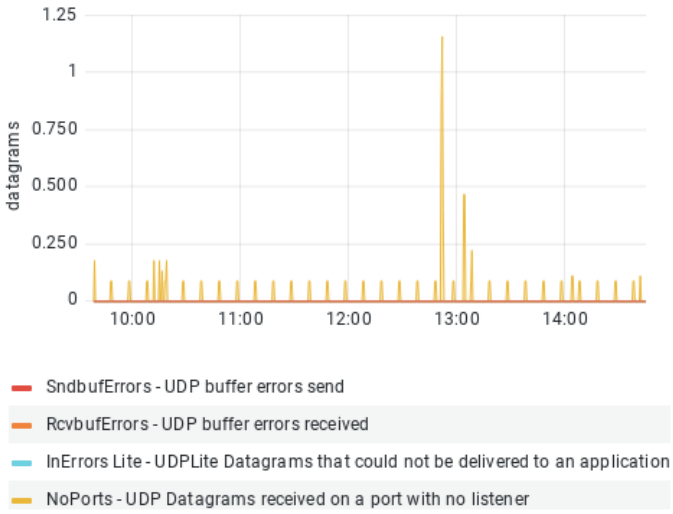
ICMP In / Out

ICMP Errors

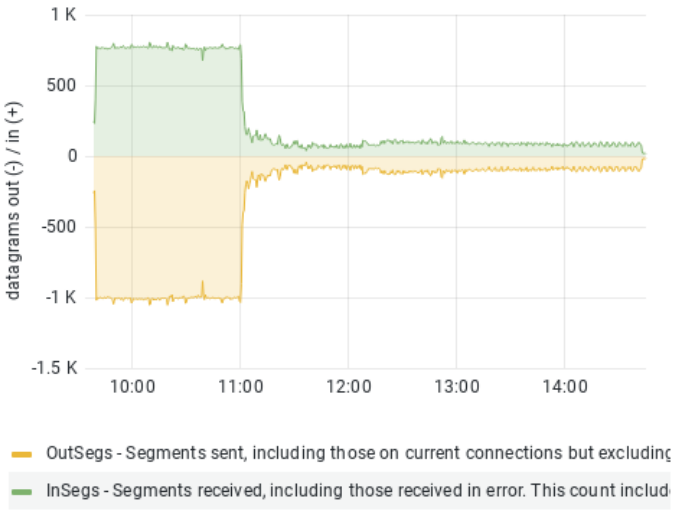
UDP In / Out



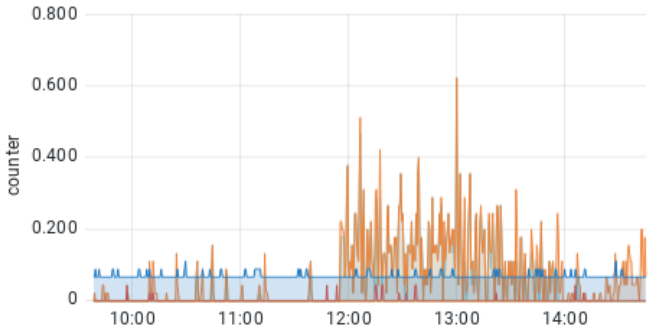
UDP Errors



TCP In / Out

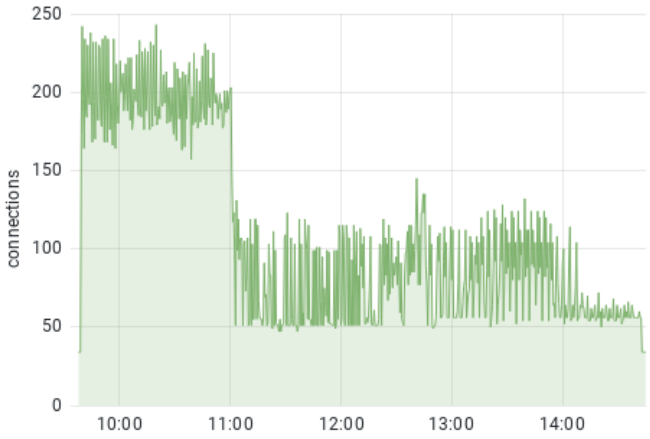


TCP Errors



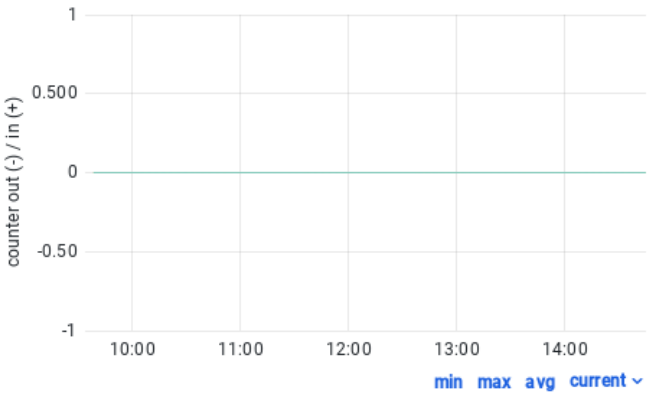
- OutRsts - Segments sent with RST flag
- RetransSegs - Segments retransmitted - that is, the number of TCP segments tr
- InErrs - Segments received in error (e.g., bad TCP checksums)
- TCPSynRetrans - SYN-SYN/ACK retransmits to break down retransmissions in

TCP Connections



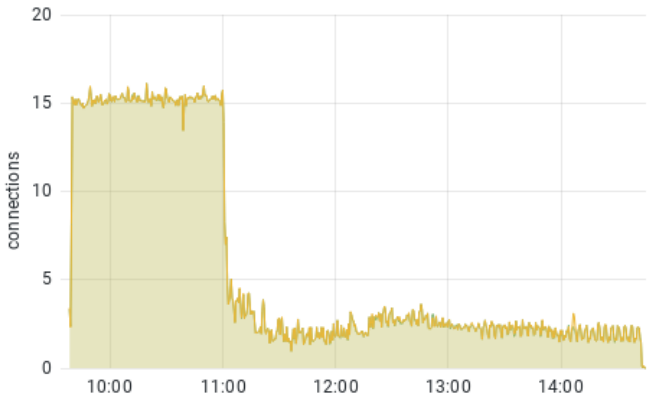
- CurrEstab - TCP connections for which the current state is either ESTABLISHED

TCP SynCookie



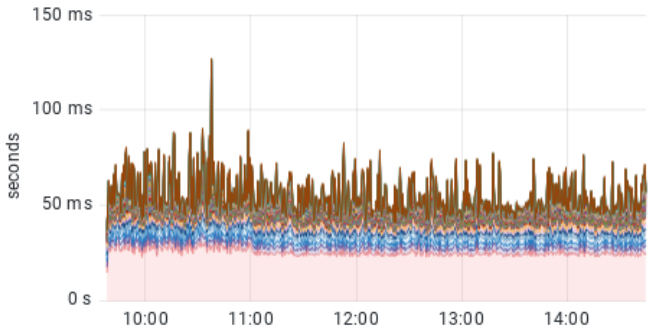
	min	max	avg	current
SyncookiesSent - SYN cookies sent	0	0	0	0
SyncookiesRecv - SYN cookies received	0	0	0	0
SyncookiesFailed - Invalid SYN cookies received	0	0	0	0

TCP Direct Transition



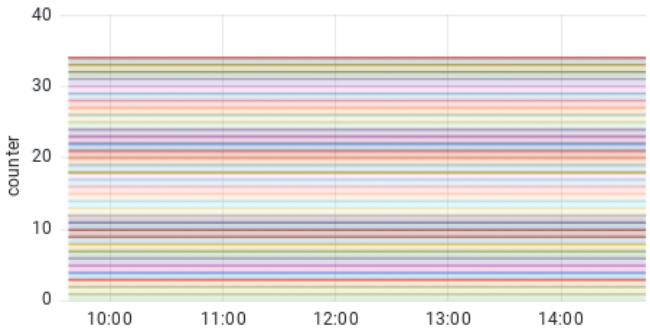
- ActiveOpens - TCP connections that have made a direct transition to the SYN-S
- PassiveOpens - TCP connections that have made a direct transition to the SYN

Node Exporter Scrape Time



	min	max	avg	current
netclass - Scrape duration	15.0 ms	48.0 ms	25.9 ms	25.4
diskstats - Scrape duration	1.26 ms	7.51 ms	3.20 ms	4.20
cpu - Scrape duration	865 µs	6.89 ms	2.80 ms	2.89
netdev - Scrape duration	1.26 ms	11.7 ms	3.18 ms	2.69

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