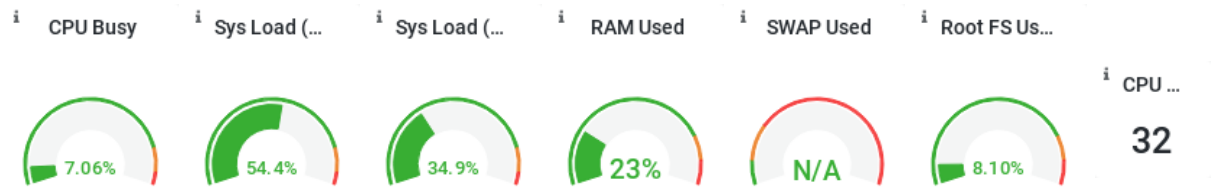
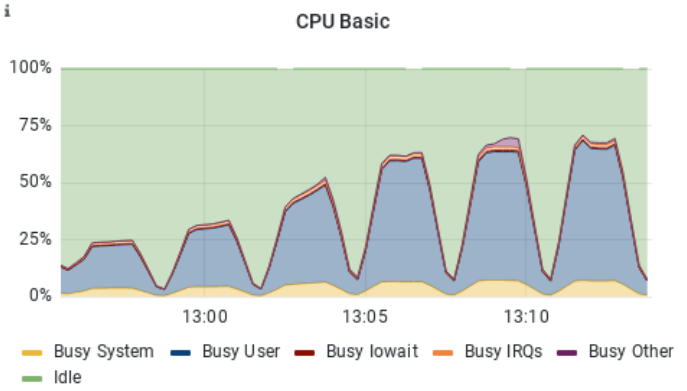
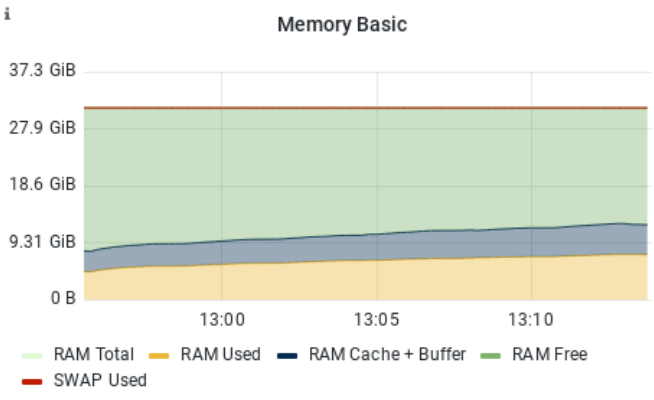
Host Metrics

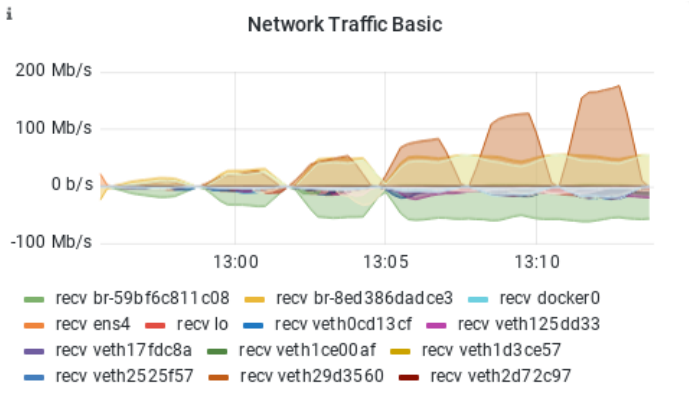
The dashboard visualizes host metrics collected by node_exporter. (based on: https://grafana.com/grafana/dashboards/1860)

Fri Nov 18 12:55:31 UTC 2022
to
Fri Nov 18 13:13:54 UTC 2022

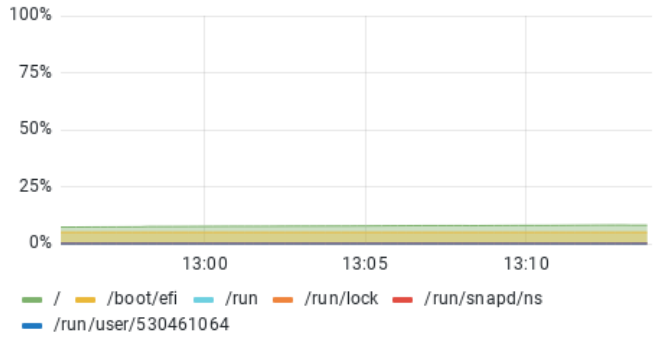




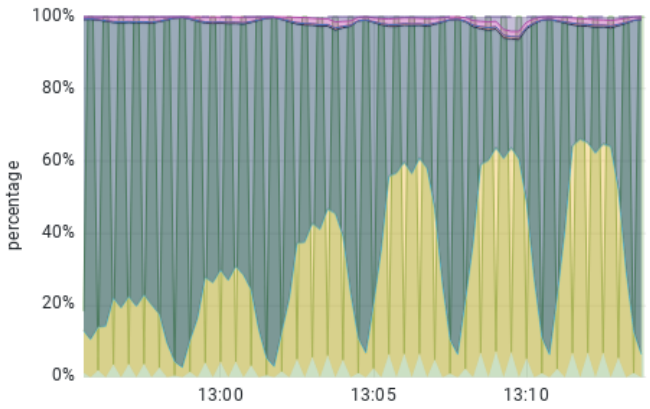




Disk Space Used Basic

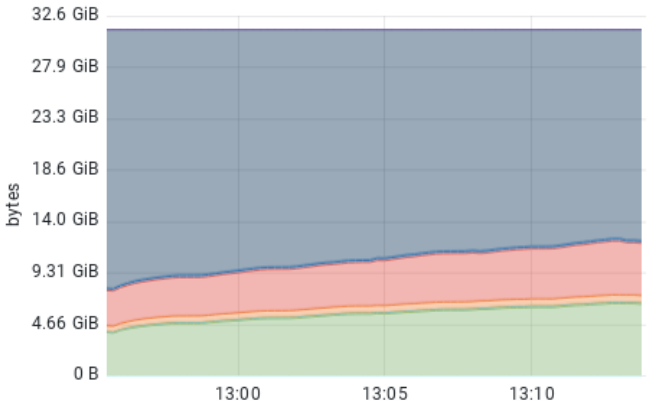


CPU



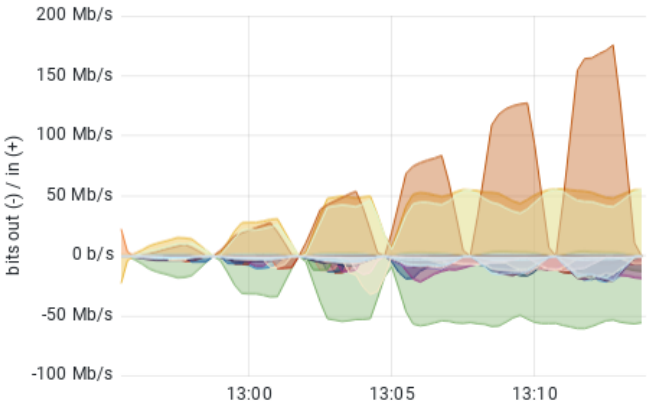
- System - Processes executing in kernel mode
- User - Normal processes executing in user mode
- Nice - Niced processes executing in user mode
- Idle - Waiting for something to happen
- Iowait - Waiting for I/O to complete

Memory Stack



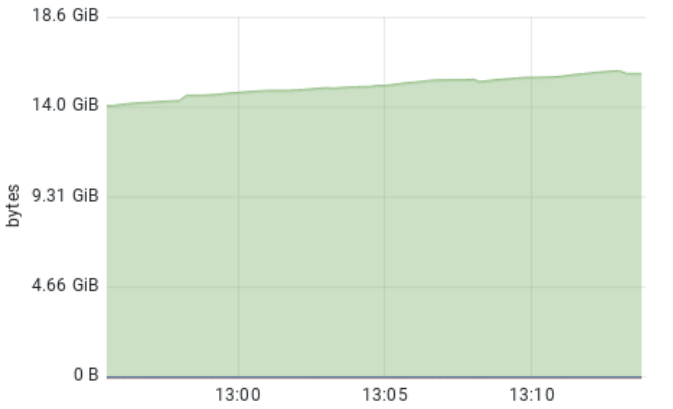
- Apps - Memory used by user-space applications
- PageTables - Memory used to map between virtual and physical memory addr
- SwapCache - Memory that keeps track of pages that have been fetched from s
- Slab - Memory used by the kernel to cache data structures for its own use (cacl
- Cache - Parked file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

Network Traffic



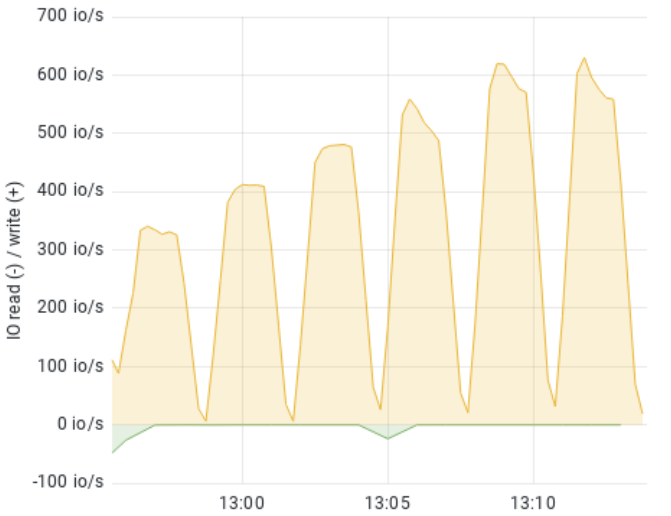
	min	max	avg	curre
br-59bf6c811c08 - Receive	4.64 kb/s	4.14 Mb/s	1.72 Mb/s	13.5 k
br-8ed386dadce3 - Receive	20.0 kb/s	56.0 Mb/s	35.1 Mb/s	55.1 M
docker0 - Receive	0 b/s	117 kb/s	1.99 kb/s	0
ens4 - Receive	2.74 kb/s	24.9 Mb/s	393 kb/s	8.30 k
lo - Receive	0 b/s	21.2 kb/s	2.38 kb/s	444

Disk Space Used



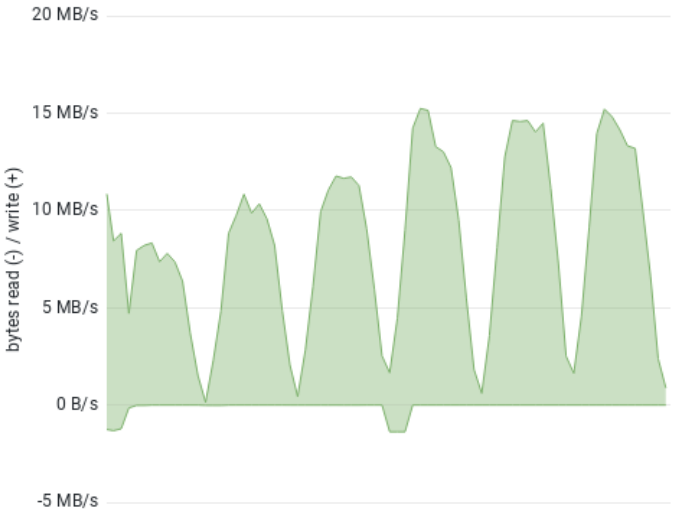
	min	max	avg	current
/run/lock	0 B	0 B	0 B	0 B
/run/user/530461064	0 B	0 B	0 B	0 B
/run	4.387 MiB	4.402 MiB	4.390 MiB	4.391 MiB
/run/snapd/ns	4.387 MiB	4.402 MiB	4.390 MiB	4.391 MiB
/boot/efi	5.196 MiB	5.196 MiB	5.196 MiB	5.196 MiB

Disk IOps



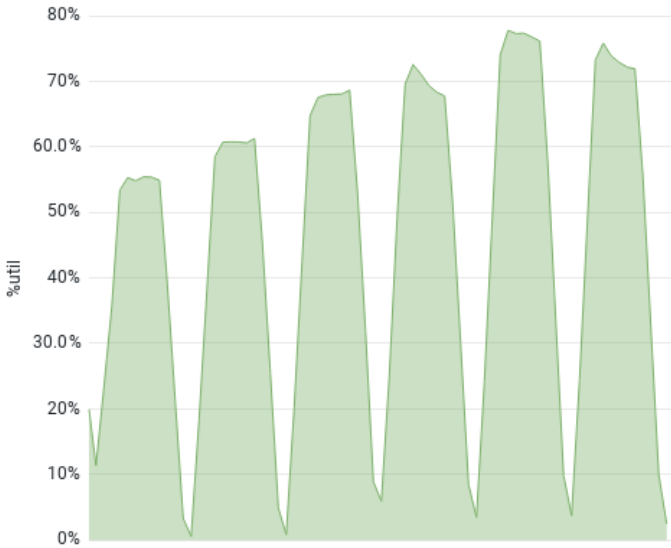
	min	max	avg	current
sda - Reads completed	0 io/s	72.6 io/s	6.49 io/s	0 io/s
sda - Writes completed	6.38 io/s	630 io/s	329 io/s	18.9 io/s

I/O Usage Read / Write



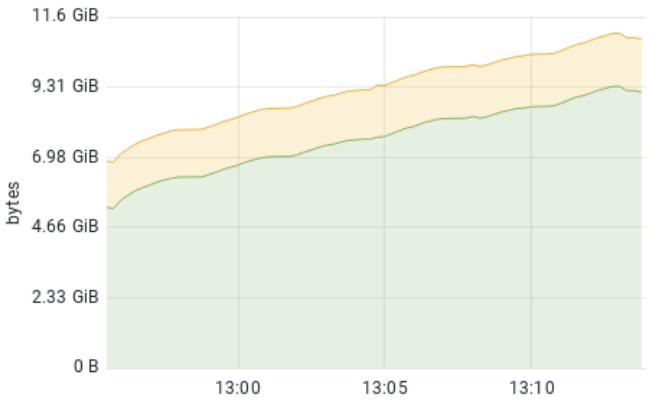
	min	max	avg
sda - Successfully read bytes	0 B/s	1.369 MB/s	109.797 kB
sda - Successfully written bytes	143.360 kB/s	15.236 MB/s	8.387 MB

I/O Utilization



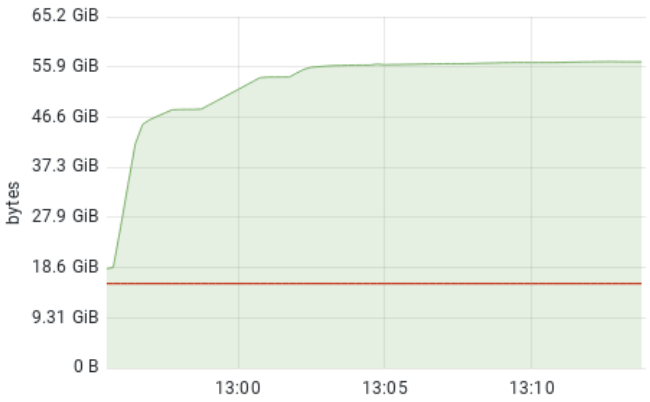
	min	max	avg	current
sda	0.551%	77.769%	45.747%	2.471%

Memory Active / Inactive



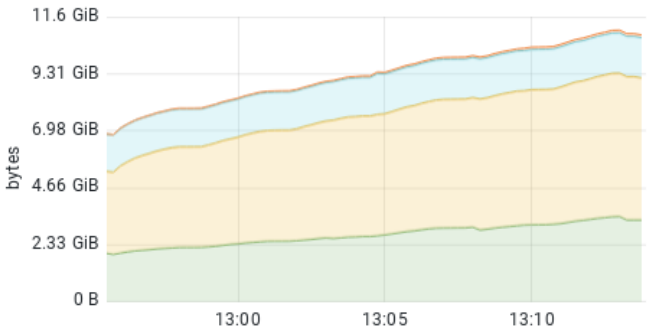
- Inactive - Memory which has been less recently used. It is more eligible to be re
- Active - Memory that has been used more recently and usually not reclaimed u

Memory Commited



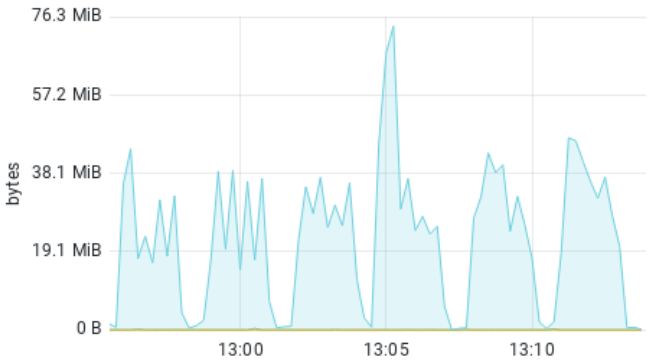
- Committed_AS - Amount of memory presently allocated on the system
- CommitLimit - Amount of memory currently available to be allocated on the sy

Memory Active / Inactive Detail



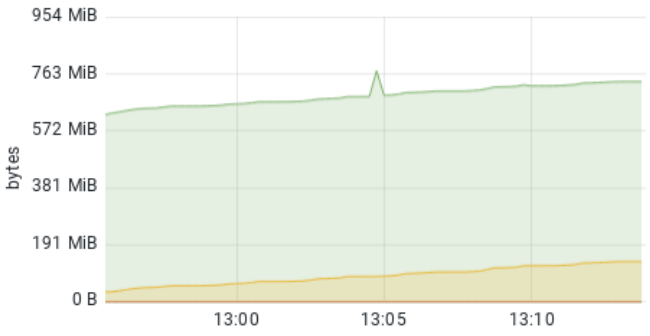
- Inactive_file - File-backed memory on inactive LRU list
- Inactive_anon - Anonymous and swap cache on inactive LRU list, including tmp
- Active_file - File-backed memory on active LRU list
- Active_anon - Anonymous and swap cache on active least-recently-used (LRU)

Memory Writeback and Dirty



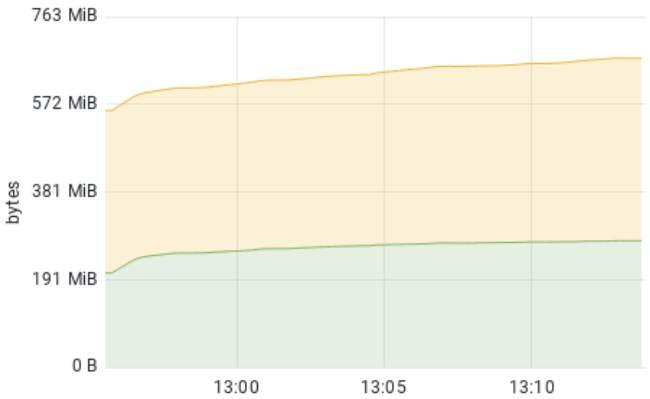
- Writeback - Memory which is actively being written back to disk
- WritebackTmp - Memory used by FUSE for temporary writeback buffers
- Dirty - Memory which is waiting to get written back to the disk 12.0

Memory Shared and Mapped



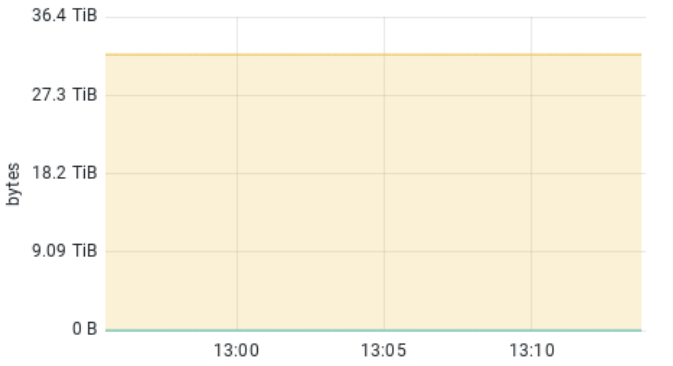
- Mapped - Used memory in mapped pages files which have been mmaped, such
- Shmem - Used shared memory (shared between several processes, thus includ
- ShmemHugePages - Memory used by shared memory (shmem) and tmpfs allc
- ShmemPmdMapped - Ammount of shared (shmem/tmpfs) memory backed by

Memory Slab



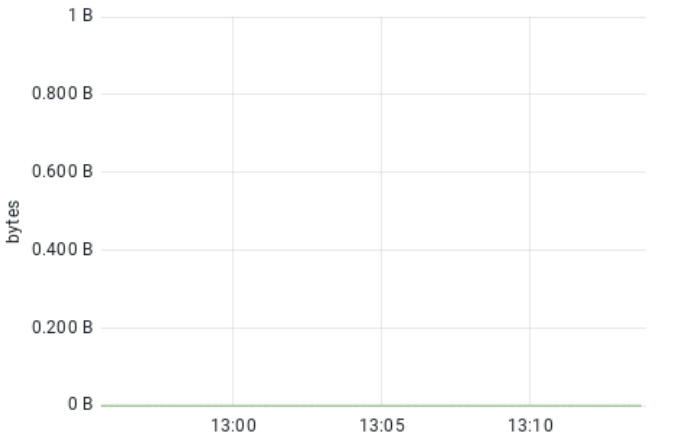
- SUnreclaim - Part of Slab, that cannot be reclaimed on memory pressure 20
- SReclaimable - Part of Slab, that might be reclaimed, such as caches 35

Memory Vmalloc



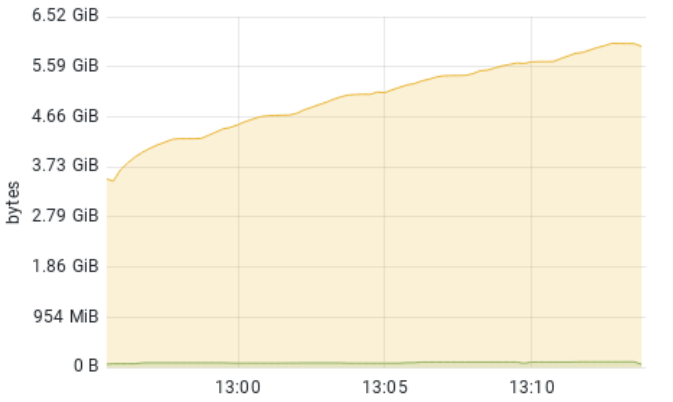
VmallocChunk - Largest contigious block of vmalloc area which is free		
VmallocTotal - Total size of vmalloc memory area		32.0
VmallocUsed - Amount of vmalloc area which is used		65.7

Memory Bounce



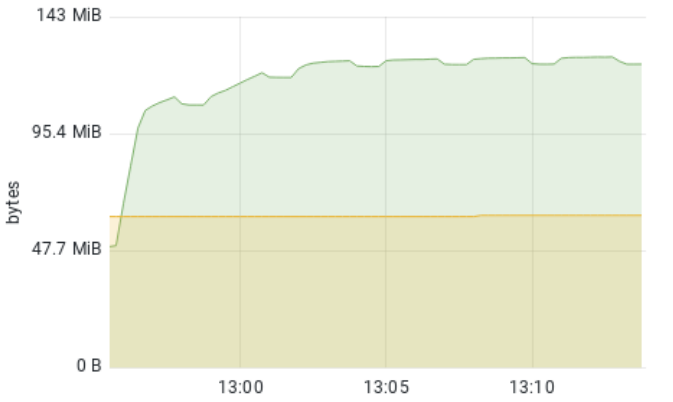
	min	max	avg	curr
Bounce - Memory used for block device bounce buffers	0 B	0 B	0 B	

Memory Anonymous



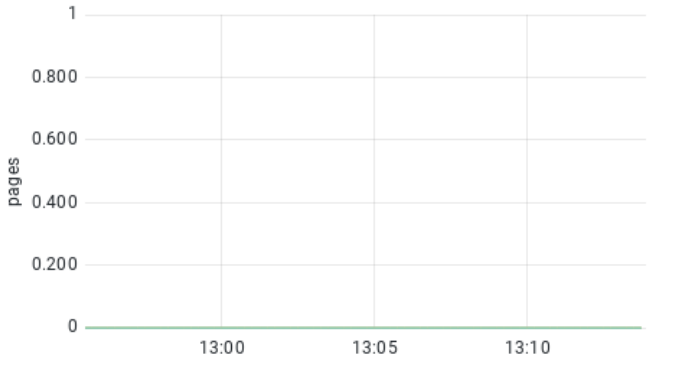
	min	m
AnonHugePages - Memory in anonymous huge pages	58.00 MiB	106.00
AnonPages - Memory in user pages not backed by files	3.46 GiB	6.02

Memory Kernel / CPU



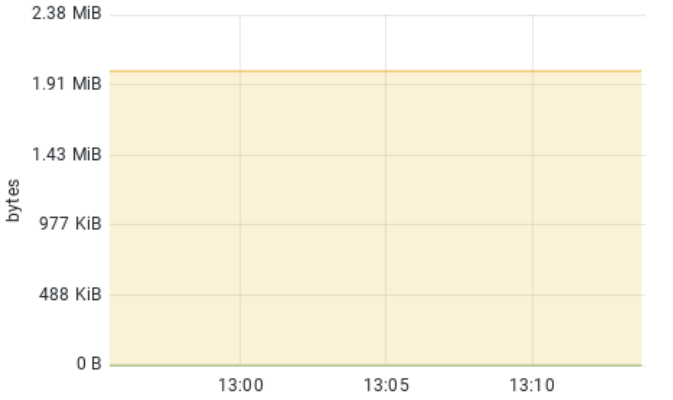
KernelStack - Kernel memory stack. This is not reclaimable		49.2
PerCPU - Per CPU memory allocated dynamically by loadable modules		61.5

Memory HugePages Counter



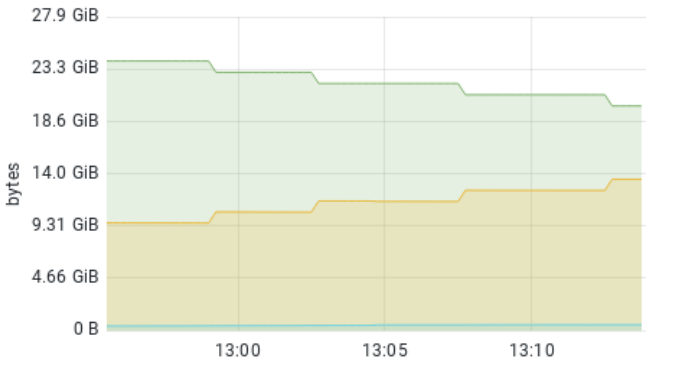
HugePages_Free - Huge pages in the pool that are not yet allocated		
HugePages_Rsvd - Huge pages for which a commitment to allocate from the p		
HugePages_Surp - Huge pages in the pool above the value in /proc/sys/vm/nr		

Memory HugePages Size



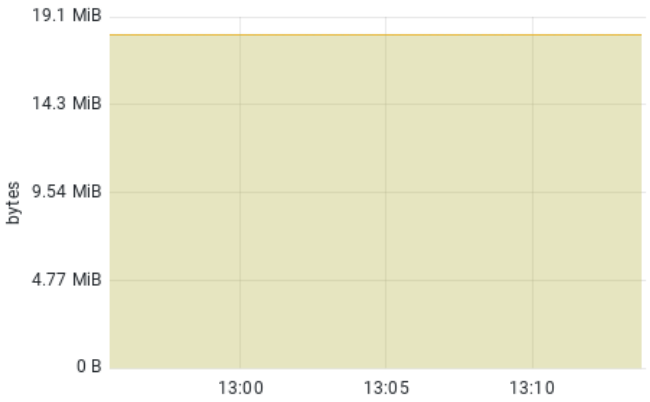
	min	max	cu
HugePages - Total size of the pool of huge pages	0 B	0 B	
Hugepagesize - Huge Page size	2.00 MiB	2.00 MiB	2.0

Memory DirectMap



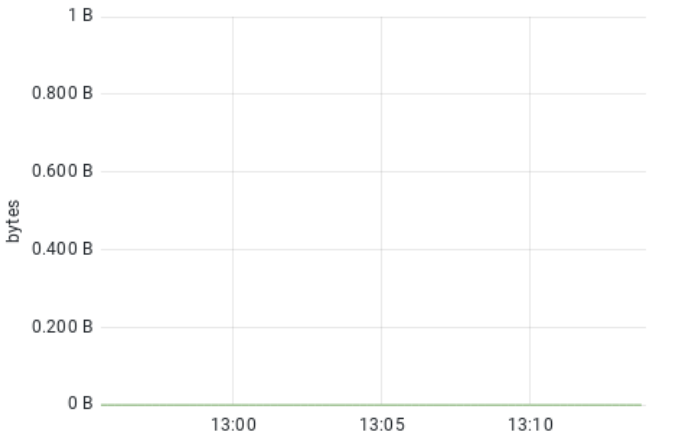
	min	m
DirectMap1G - Amount of pages mapped as this size	20.00 GiB	24.00
DirectMap2M - Amount of pages mapped as this size	9.57 GiB	13.48
DirectMap4K - Amount of pages mapped as this size	414.81 MiB	532.81

Memory Unevictable and MLocked



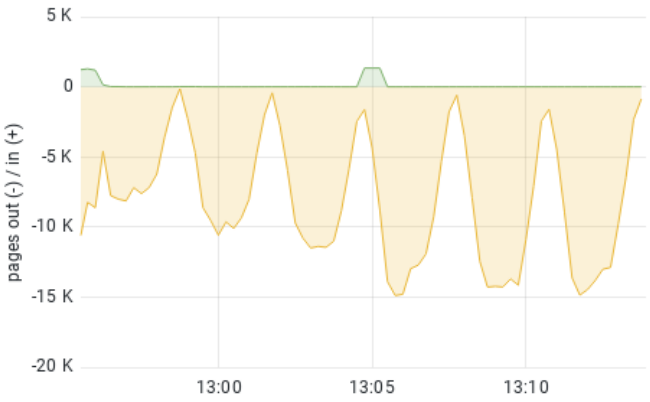
- Unevictable - Amount of unevictable memory that can't be swapped out for a v
- MLocked - Size of pages locked to memory using the mlock() system call

Memory NFS



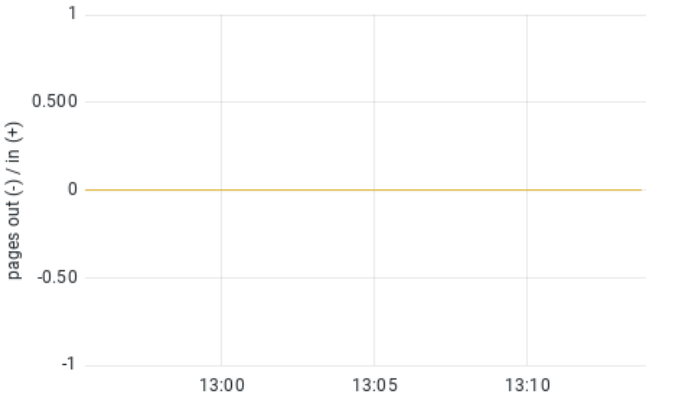
- NFS Unstable - Memory in NFS pages sent to the server, but not yet commited t

Memory Pages In / Out



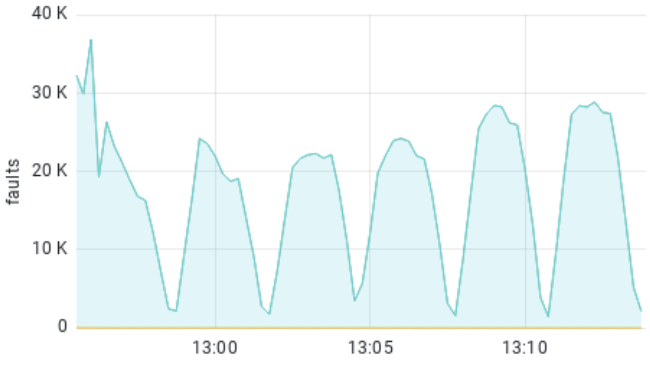
	min	max	avg	current
Pagesin - Page in operations	0	1.34 K	107	0
Pagesout - Page out operations	140	14.9 K	8.19 K	866

Memory Pages Swap In / Out



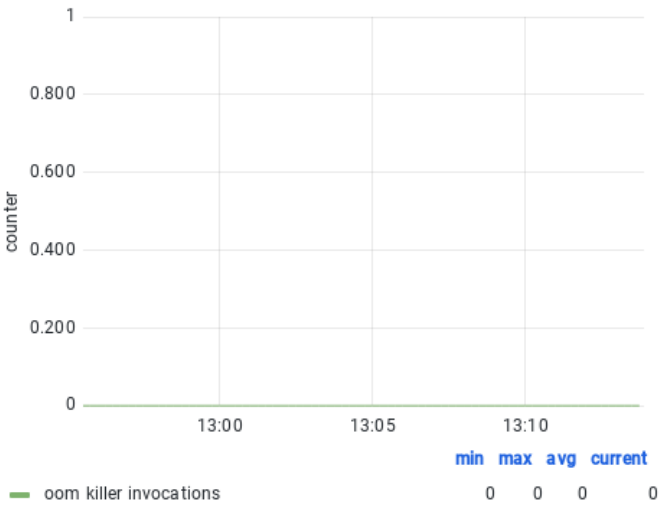
	min	max	avg	current
Pswpin - Pages swapped in	0	0	0	0
Pswpout - Pages swapped out	0	0	0	0

Memory Page Faults



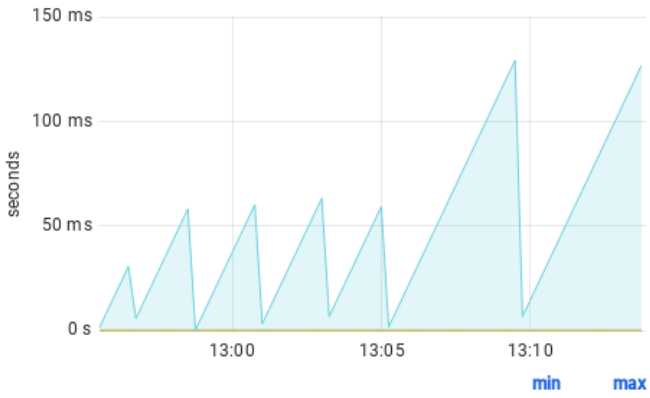
	min	max	avg
Pgfault - Page major and minor fault operations	1.44 K	36.86 K	17.59
Pgmajfault - Major page fault operations	0	7.40	0.3
Pgminfault - Minor page fault operations	1.44 K	36.85 K	17.59

OOM Killer



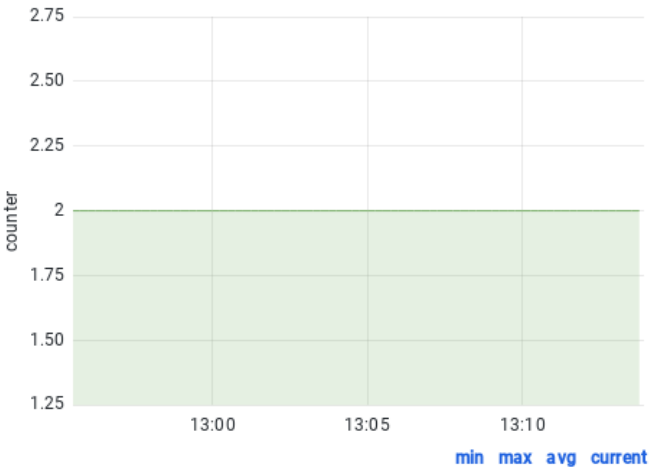
	min	max	avg	current
oom killer invocations	0	0	0	0

Time Syncronized Drift



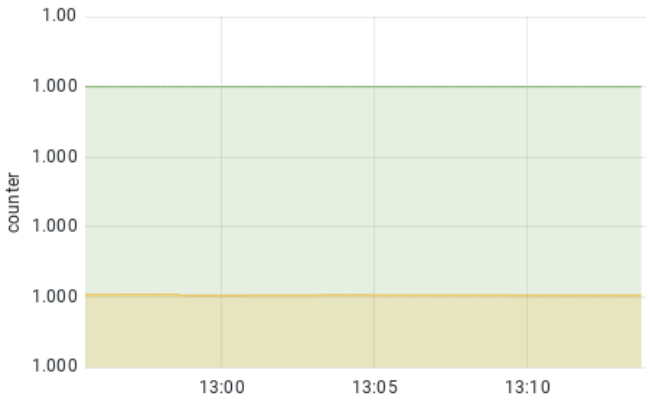
	min	max
Estimated error in seconds	16 µs	20 µs
Time offset in between local system and reference clock	0 s	0 s
Maximum error in seconds	190 µs	129 ms

Time PLL Adjust



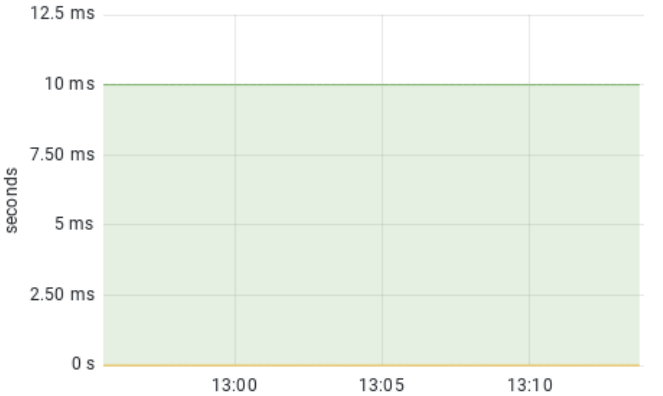
	min	max	avg	current
Phase-locked loop time adjust	2	2	2	2

Time Syncronized Status



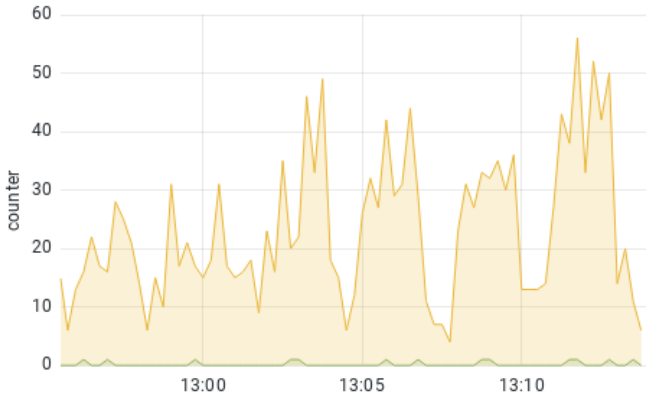
	min	max
Is clock synchronized to a reliable server (1 = yes, 0 = no)	1	1
Local clock frequency adjustment	1.000	1.000

Time Misc



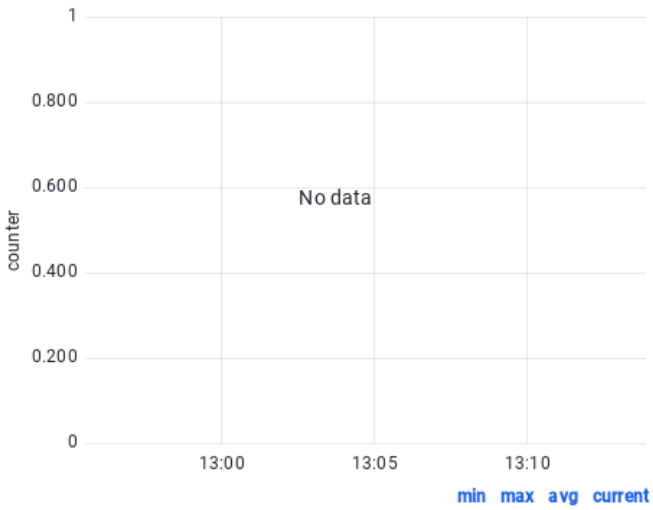
	min	max	avg	cur
Seconds between clock ticks	10.0 ms	10.0 ms	10.0 ms	10.
International Atomic Time (TAI) offset	0 s	0 s	0 s	

Processes Status

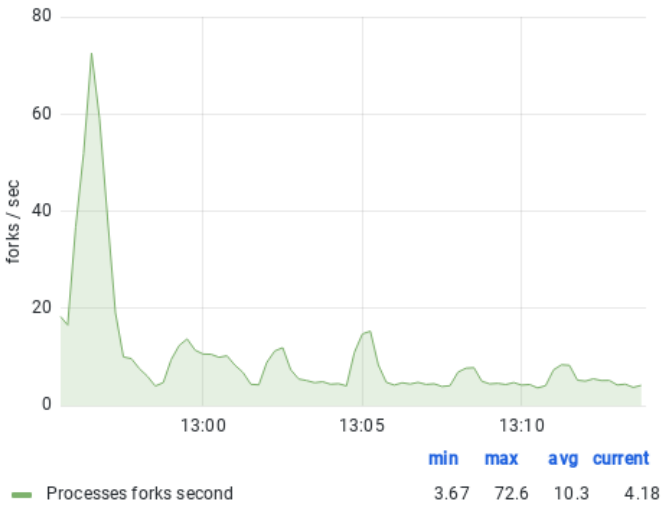


	min	max	avg	current
Processes blocked waiting for I/O to complete	0	1	0.176	0
Processes in runnable state	4	56	23.3	6

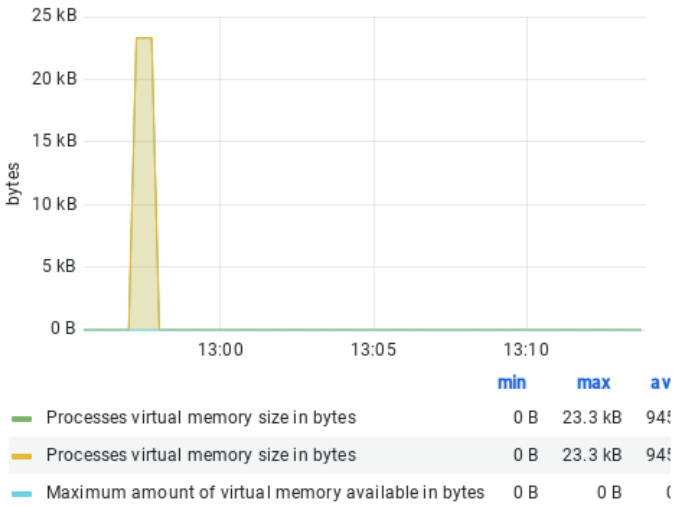
Processes State



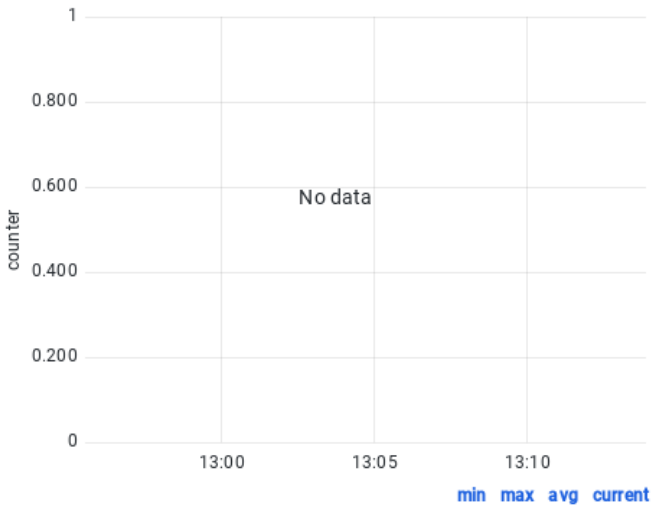
Processes Forks



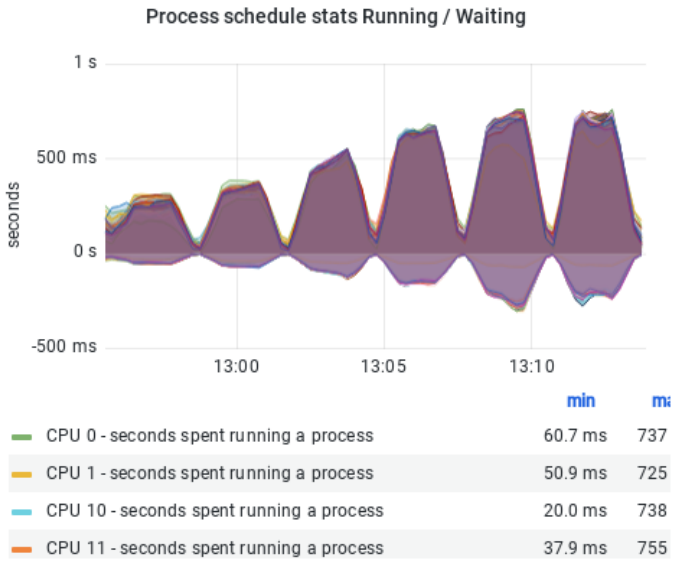
Processes Memory



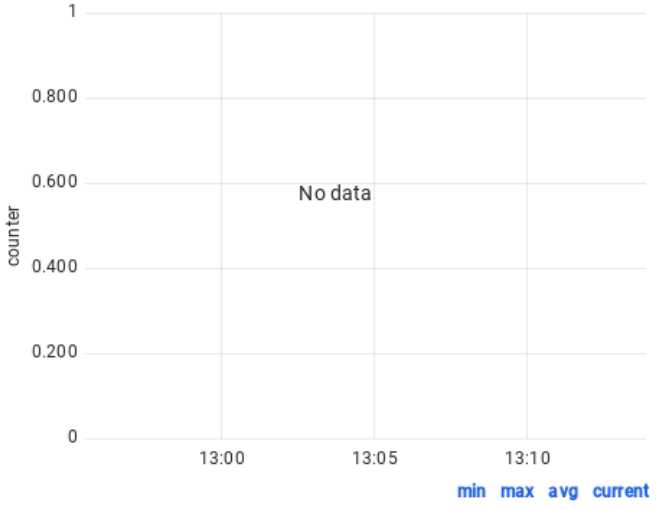
PIDs Number and Limit



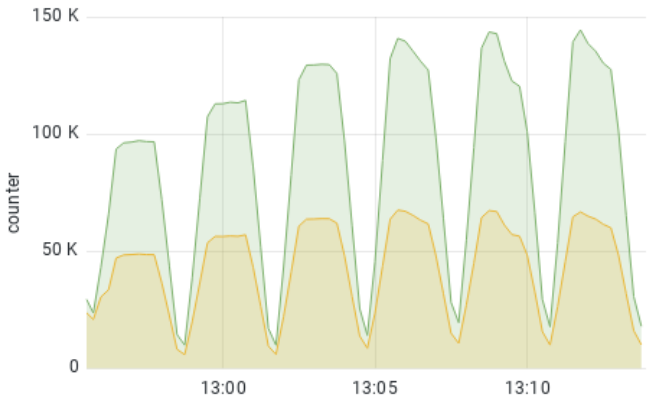
Process schedule stats Running / Waiting



Threads Number and Limit

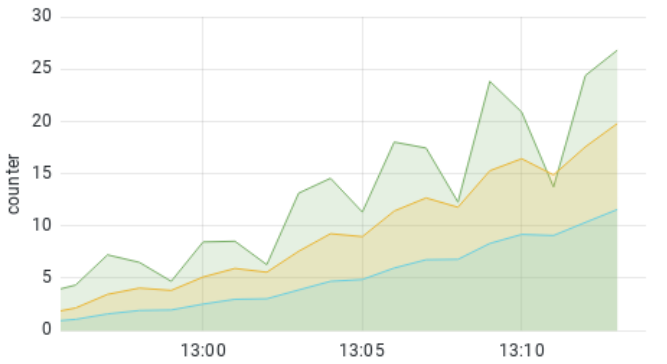


Context Switches / Interrupts



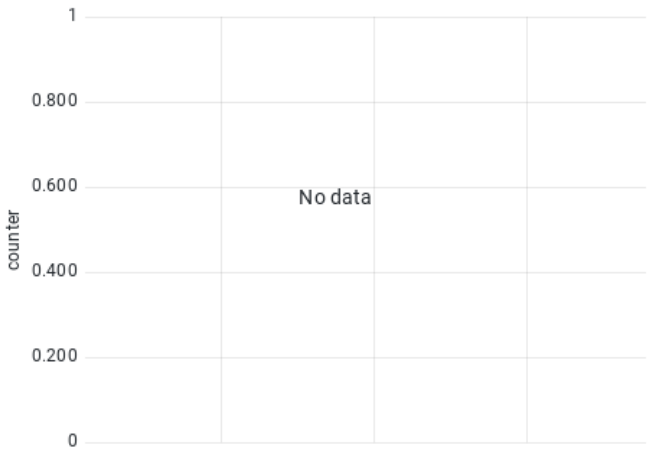
	min	max	avg	current
Context switches	9.80 K	144 K	86.6 K	17.8 K
Interrupts	5.76 K	67.5 K	42.7 K	9.96 K

System Load



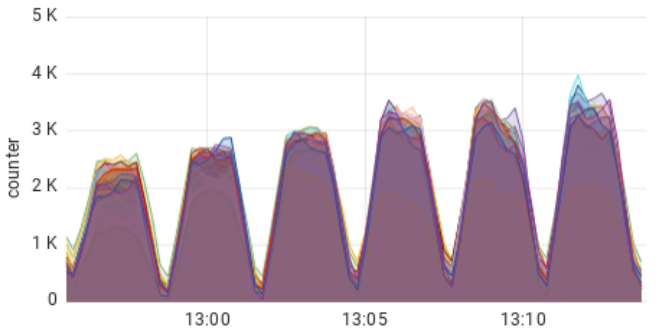
	min	max	avg	current
Load 1m	3.58	26.8	13.0	26.8
Load 5m	1.58	19.8	9.34	19.8
Load 15m	0.820	11.6	5.13	11.6

Interrupts Detail



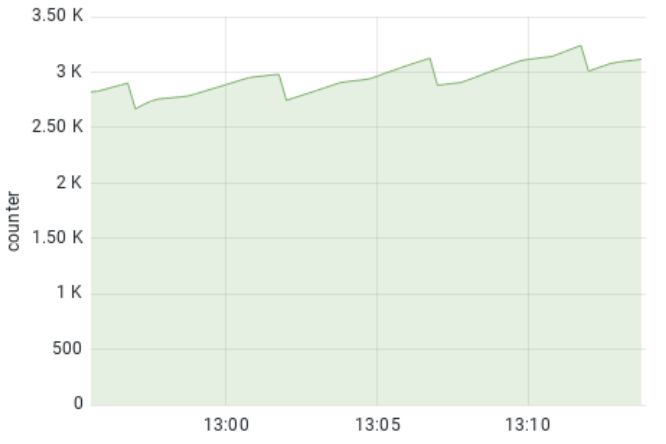
min	max	avg	current

Schedule timeslices executed by each cpu



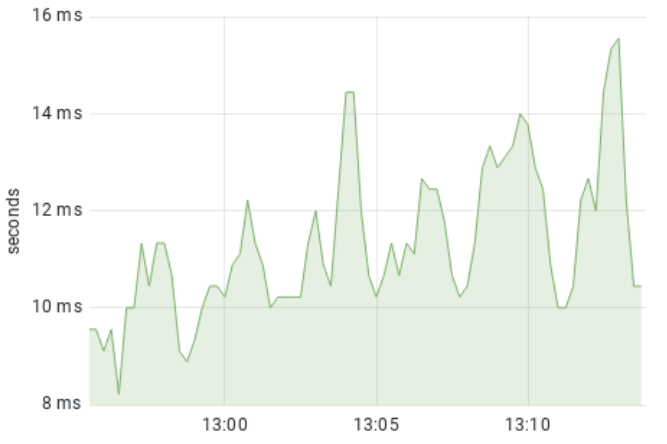
	min	max	avg	current
CPU 0	441	3.29 K	2.10 K	704
CPU 1	238	3.35 K	2.07 K	483
CPU 10	139	3.19 K	1.93 K	229
CPU 11	119	3.44 K	1.88 K	277

Entropy



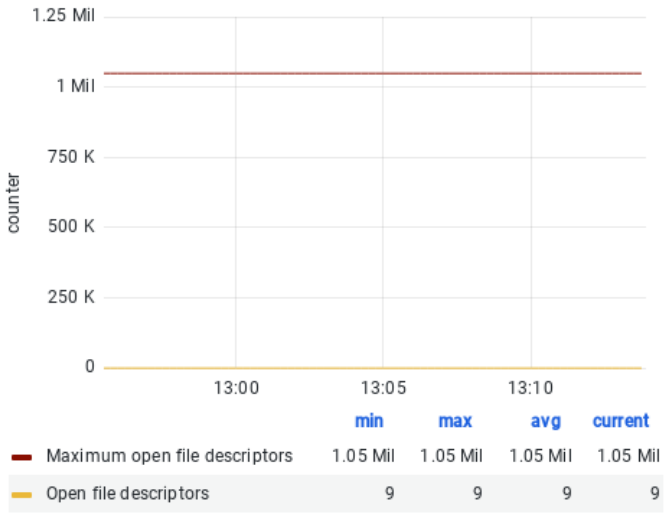
	min	max	avg
Entropy available to random number generators	2.67 K	3.24 K	2.95 K

CPU time spent in user and system contexts



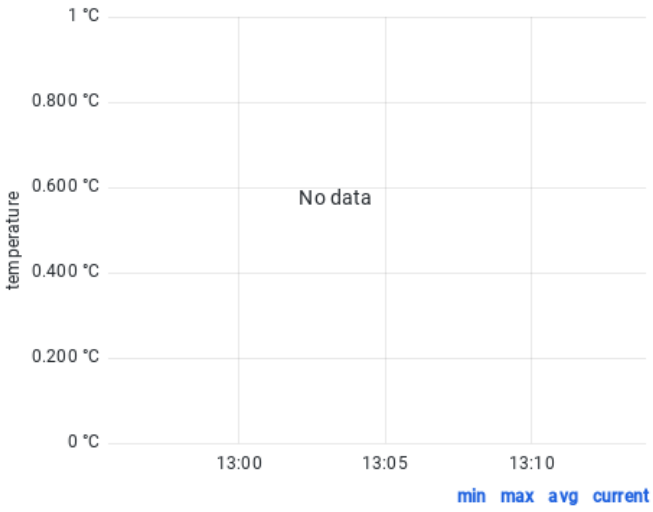
	min	max	avg	current
Time spent	8.22 ms	15.6 ms	11.3 ms	10.4 ms

File Descriptors

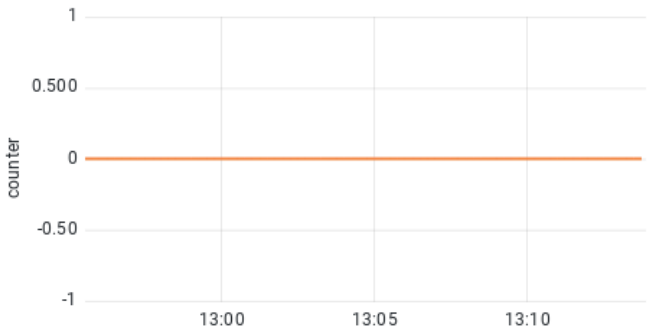


	min	max	avg	current
Maximum open file descriptors	1.05 Mil	1.05 Mil	1.05 Mil	1.05 Mil
Open file descriptors	9	9	9	9

Hardware temperature monitor

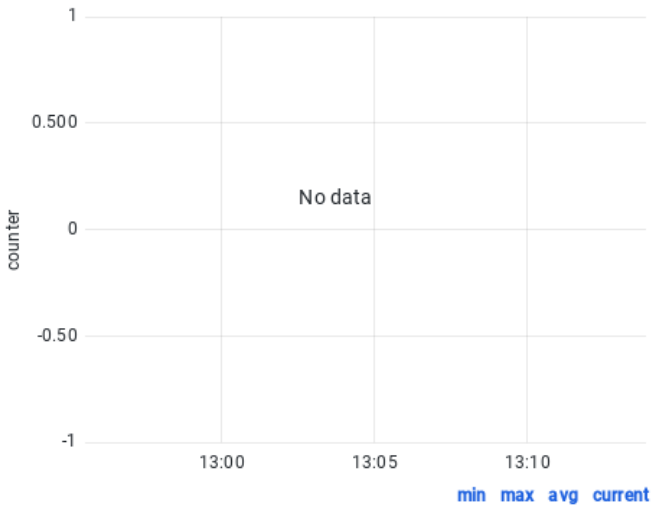


Throttle cooling device

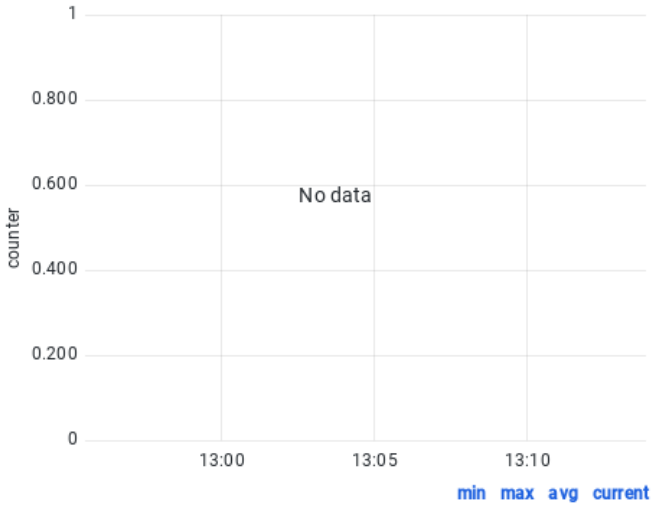


	min	max	avg	current
Current 0 in Processor	0	0	0	0
Current 1 in Processor	0	0	0	0
Current 10 in Processor	0	0	0	0
Current 11 in Processor	0	0	0	0

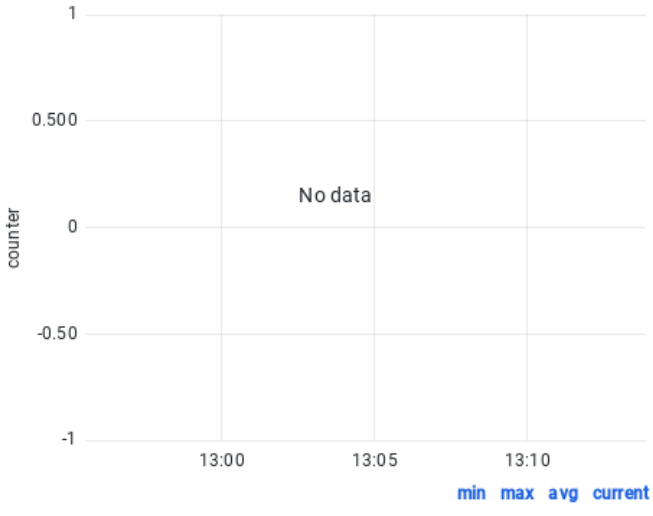
Power supply



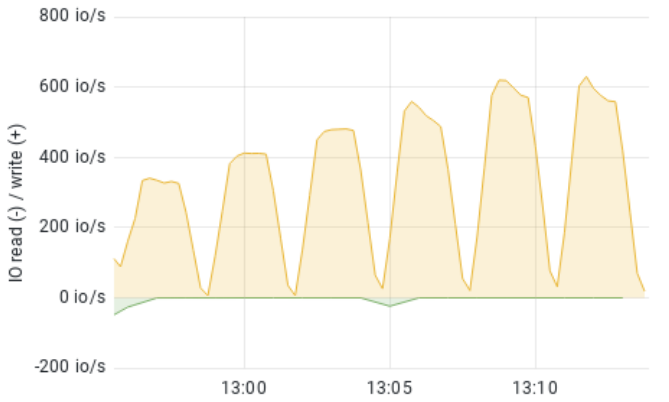
Systemd Sockets



Systemd Units State

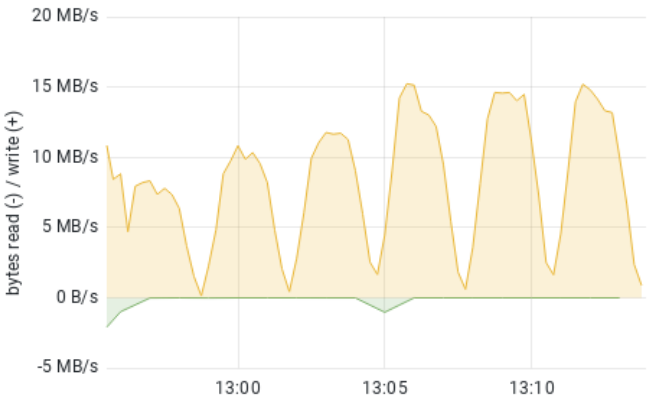


Disk IOps Completed



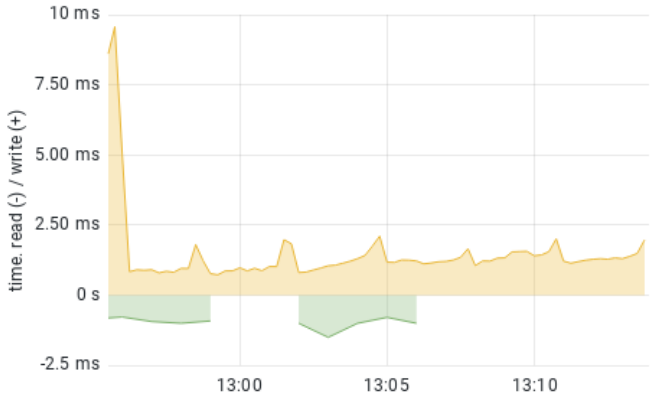
	min	max	avg	current
sda - Reads completed	0 io/s	72.6 io/s	6.49 io/s	0 io/s
sda - Writes completed	6.38 io/s	630 io/s	329 io/s	18.9 io/s

Disk R/W Data



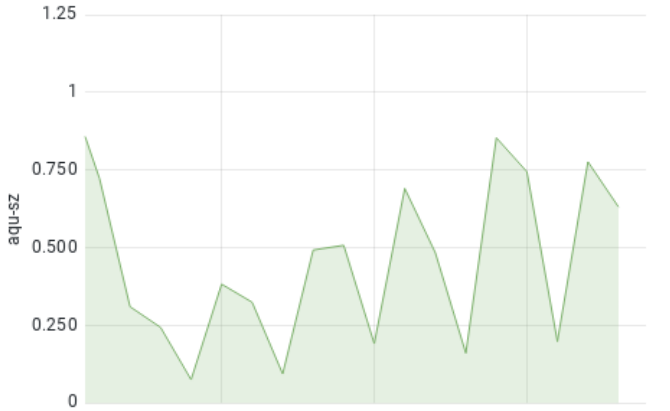
	min	max	avg	current
sda - Read bytes	0 B/s	3.31 MB/s	282 kB/s	0 B/s
sda - Written bytes	143 kB/s	15.2 MB/s	8.39 MB/s	887 kB/s

Disk Average Wait Time



	min	max	avg	current
sda - Write wait time avg	729 µs	9.57 ms	1.48 ms	1.97 ms
sda - Read wait time avg	776 µs	1.50 ms	977 µs	

Average Queue Size

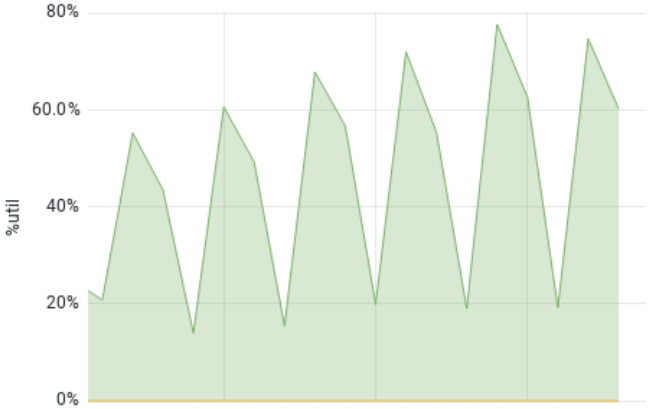


	min	max	avg	current
sda	0.0747	1.01	0.468	0.631

Disk R/W Merged

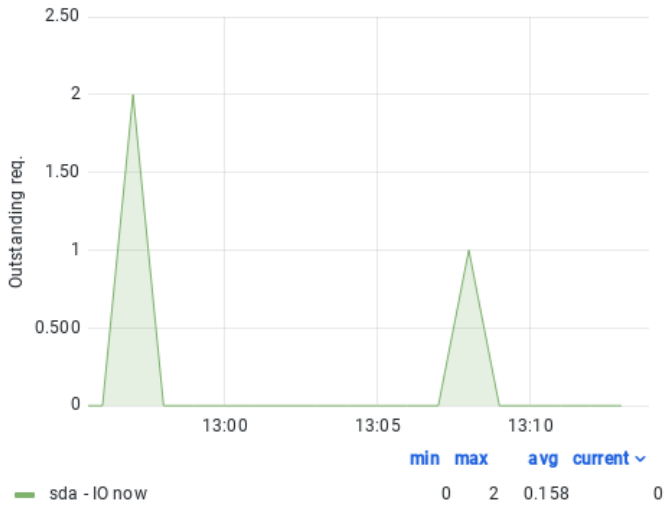
	min	max	avg	current
sda - Write merged	6.58 io/s	1.28K io/s	648 io/s	11.4 io/s
sda - Read merged	0 io/s	1.98 io/s	0.107 io/s	0 io/s

Time Spent Doing I/Os



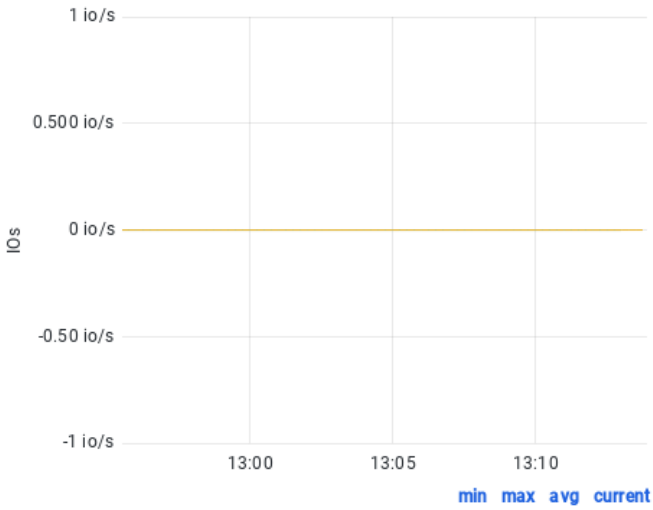
	min	max	avg	current
sda - IO	13.9%	77.6%	45.7%	60.2%

Instantaneous Queue Size



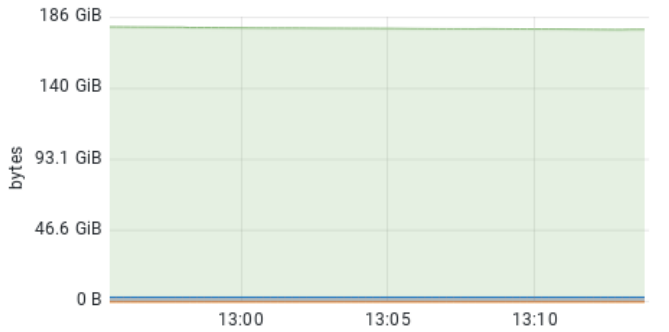
	min	max	avg	current
sda - IO now	0	2	0.158	0

Disk IOps Discards completed / merged



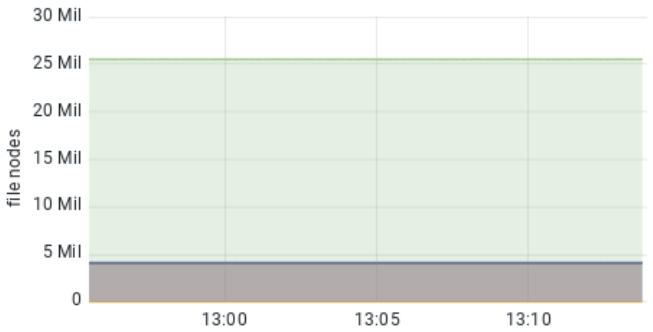
	min	max	avg	current

Filesystem space available



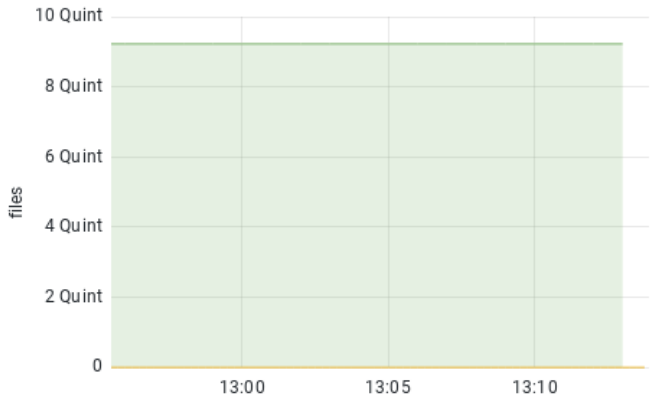
	min	max	avg
/ - Available	177.836 GiB	179.637 GiB	178.632 Gil
/boot/efi - Available	99.157 MiB	99.157 MiB	99.157 Mil
/run - Available	3.130 GiB	3.130 GiB	3.130 Gil
/run/lock - Available	5.000 MiB	5.000 MiB	5.000 Mil

File Nodes Free



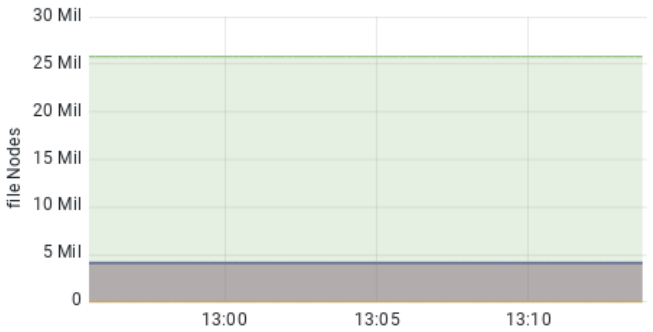
	min	max	avg	curr
/ - Free file nodes	25.5 Mil	25.5 Mil	25.5 Mil	25.
/run - Free file nodes	4.11 Mil	4.11 Mil	4.11 Mil	4.1
/run/lock - Free file nodes	4.11 Mil	4.11 Mil	4.11 Mil	4.1
/run/snapd/ns - Free file nodes	4.11 Mil	4.11 Mil	4.11 Mil	4.1

File Descriptor



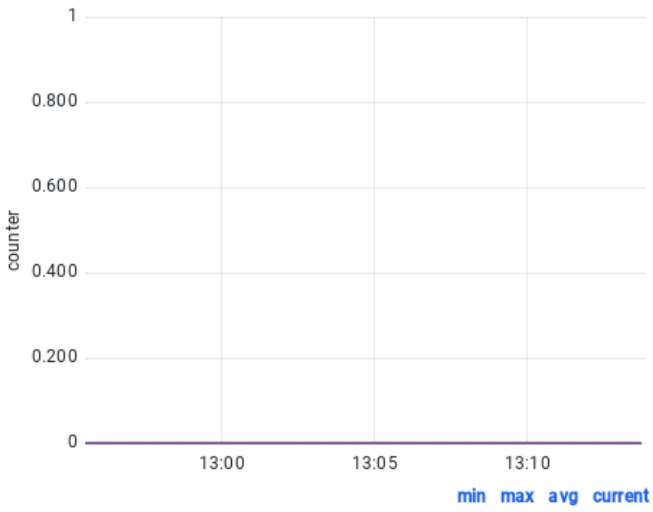
	min	max	avg	current
Max open files	9.22 Quint	9.22 Quint	9.22 Quint	9.22 Quint
Open files	7.17 K	10.6 K	9.29 K	9.02 K

File Nodes Size

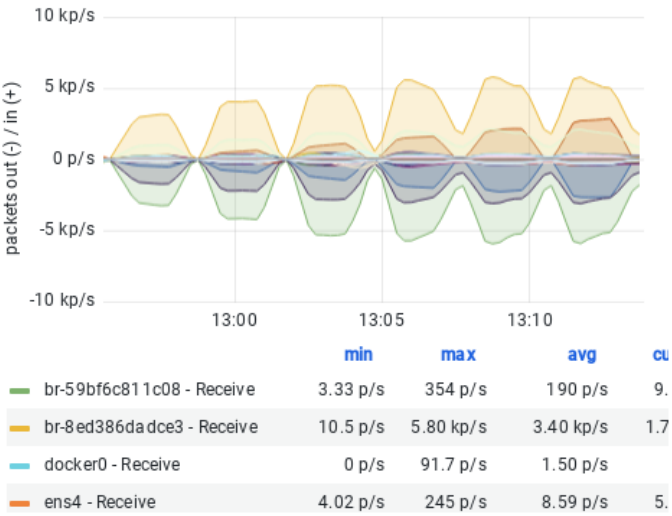


	min	max	avg	cu
/ - File nodes total	25.8 Mil	25.8 Mil	25.8 Mil	25
/run - File nodes total	4.11 Mil	4.11 Mil	4.11 Mil	4.
/run/lock - File nodes total	4.11 Mil	4.11 Mil	4.11 Mil	4.
/run/snapd/ns - File nodes total	4.11 Mil	4.11 Mil	4.11 Mil	4.

Filesystem in ReadOnly / Error

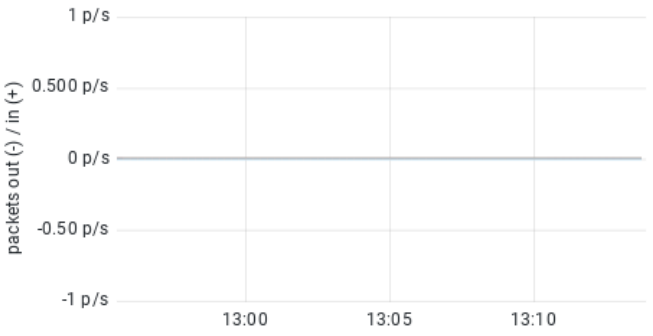


Network Traffic by Packets



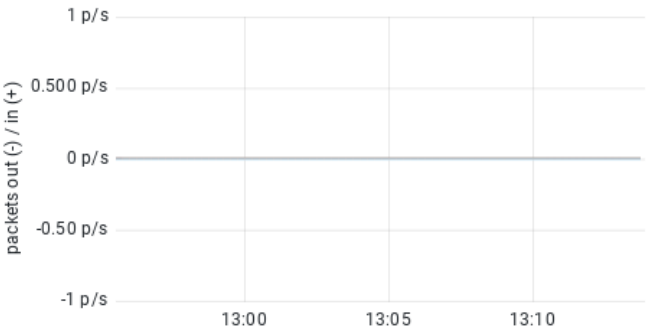
	min	max	avg	cu
br-59bf6c811c08 - Receive	3.33 p/s	354 p/s	190 p/s	9.
br-8ed386dadce3 - Receive	10.5 p/s	5.80 kp/s	3.40 kp/s	1.7
docker0 - Receive	0 p/s	91.7 p/s	1.50 p/s	
ens4 - Receive	4.02 p/s	245 p/s	8.59 p/s	5.

Network Traffic Errors



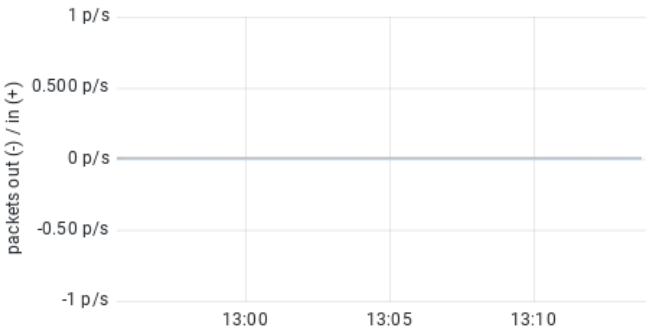
	min	max	avg	current
vethf93d489 - Rransmit errors	0 p/s	0 p/s	0 p/s	0 p/s
vethf86f18b - Rransmit errors	0 p/s	0 p/s	0 p/s	0 p/s
vethf7aa4f0 - Rransmit errors	0 p/s	0 p/s	0 p/s	0 p/s
vethf41355e - Rransmit errors	0 p/s	0 p/s	0 p/s	0 p/s

Network Traffic Drop



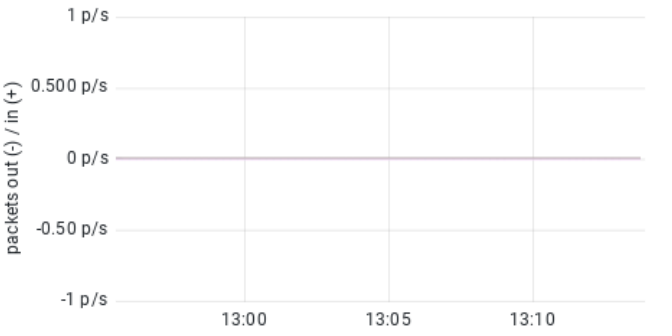
	min	max	avg	current
vethf93d489 - Transmit drop	0 p/s	0 p/s	0 p/s	0 p/s
vethf86f18b - Transmit drop	0 p/s	0 p/s	0 p/s	0 p/s
vethf7aa4f0 - Transmit drop	0 p/s	0 p/s	0 p/s	0 p/s
vethf41355e - Transmit drop	0 p/s	0 p/s	0 p/s	0 p/s

Network Traffic Compressed



	min	max	avg	current
vethf93d489 - Transmit compressed	0 p/s	0 p/s	0 p/s	0 p/s
vethf86f18b - Transmit compressed	0 p/s	0 p/s	0 p/s	0 p/s
vethf7aa4f0 - Transmit compressed	0 p/s	0 p/s	0 p/s	0 p/s
vethf41355e - Transmit compressed	0 p/s	0 p/s	0 p/s	0 p/s

Network Traffic Multicast

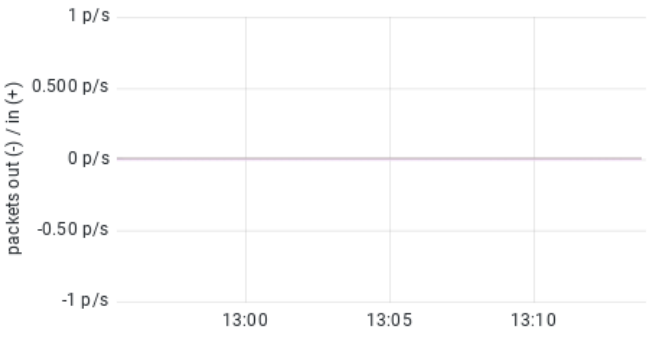


	min	max	avg	current
vethf93d489 - Receive multicast	0 p/s	0 p/s	0 p/s	0 p/s
vethf86f18b - Receive multicast	0 p/s	0 p/s	0 p/s	0 p/s
vethf7aa4f0 - Receive multicast	0 p/s	0 p/s	0 p/s	0 p/s
vethf41355e - Receive multicast	0 p/s	0 p/s	0 p/s	0 p/s

Network Traffic Fifo

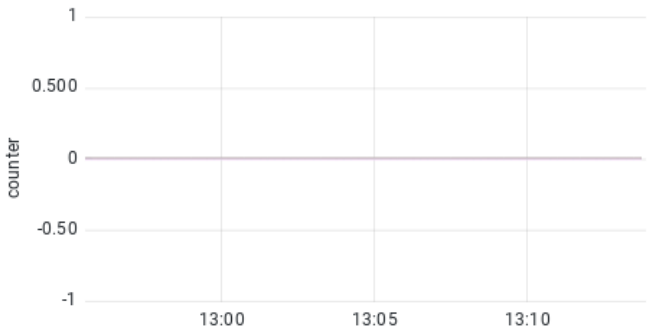
	min	max	avg	current
vethf93d489 - Transmit fifo	0 p/s	0 p/s	0 p/s	0 p/s
vethf86f18b - Transmit fifo	0 p/s	0 p/s	0 p/s	0 p/s
vethf7aa4f0 - Transmit fifo	0 p/s	0 p/s	0 p/s	0 p/s
vethf41355e - Transmit fifo	0 p/s	0 p/s	0 p/s	0 p/s

Network Traffic Frame



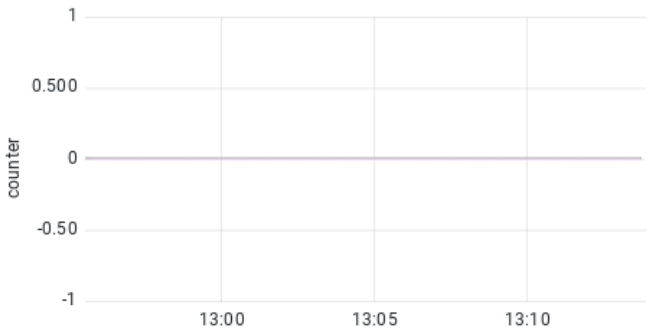
	min	max	avg	current
vethf93d489 - Receive frame	0 p/s	0 p/s	0 p/s	0 p/s
vethf86f18b - Receive frame	0 p/s	0 p/s	0 p/s	0 p/s
vethf7aa4f0 - Receive frame	0 p/s	0 p/s	0 p/s	0 p/s
vethf41355e - Receive frame	0 p/s	0 p/s	0 p/s	0 p/s

Network Traffic Carrier



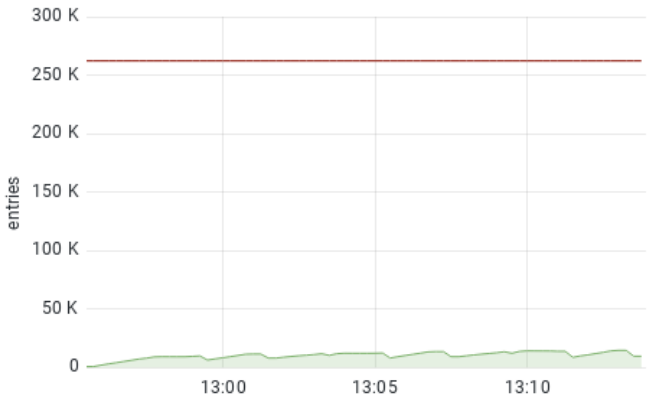
	min	max	avg	current
vethf93d489 - Statistic transmit_carrier	0	0	0	0
vethf86f18b - Statistic transmit_carrier	0	0	0	0
vethf7aa4f0 - Statistic transmit_carrier	0	0	0	0
vethf41355e - Statistic transmit_carrier	0	0	0	0

Network Traffic Colls



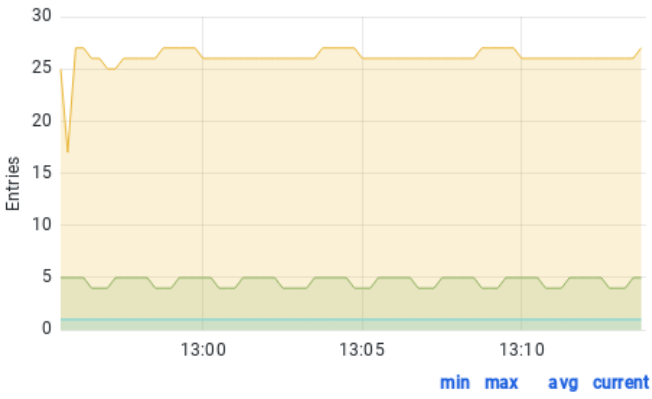
	min	max	avg	current
vethf93d489 - Transmit colls	0	0	0	0
vethf86f18b - Transmit colls	0	0	0	0
vethf7aa4f0 - Transmit colls	0	0	0	0
vethf41355e - Transmit colls	0	0	0	0

NF Contrack



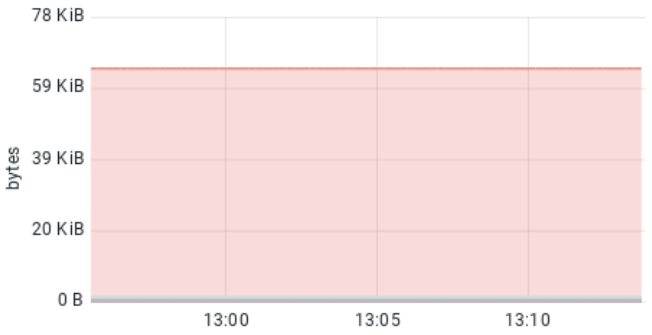
	min	max	avg	current
NF conntrack entries	685	14.6 K	10.2 K	9.57 K
NF conntrack limit	262 K	262 K	262 K	262 K

ARP Entries



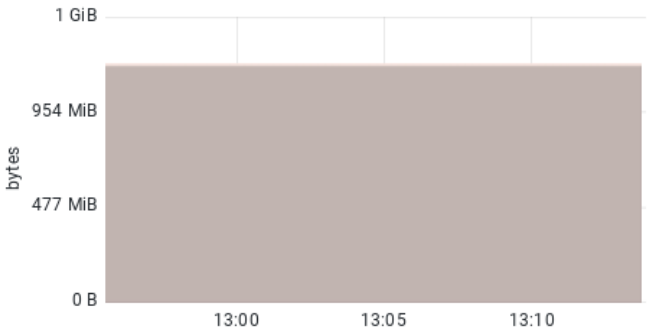
	min	max	avg	current
br-59bf6c811c08 - ARP entries	4	5	4.62	5
br-8ed386dadce3 - ARP entries	17	27	26.1	27
ens4 - ARP entries	1	1	1	1

MTU



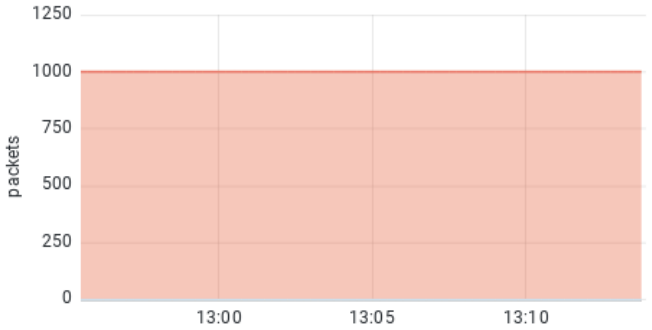
	min	max	avg	current
br-59bf6c811c08 - Bytes	1.5 KiB	1.5 KiB	1.5 KiB	1.5 KiB
br-8ed386dadce3 - Bytes	1.5 KiB	1.5 KiB	1.5 KiB	1.5 KiB
docker0 - Bytes	1.5 KiB	1.5 KiB	1.5 KiB	1.5 KiB
ens4 - Bytes	1.4 KiB	1.4 KiB	1.4 KiB	1.4 KiB

Speed



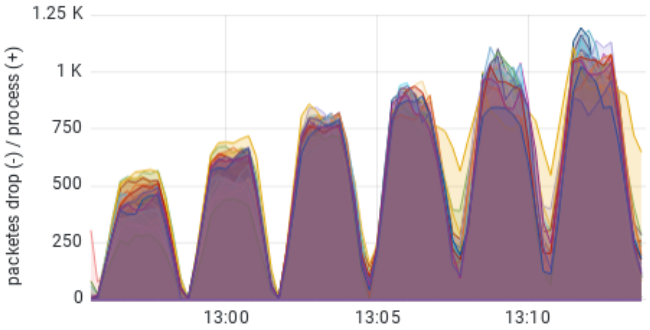
	min	max	avg	current
br-59bf6c811c08 - Speed	1.2 GiB	1.2 GiB	1.2 GiB	1.2 GiB
br-8ed386dadce3 - Speed	1.2 GiB	1.2 GiB	1.2 GiB	1.2 GiB
docker0 - Speed	-122.1 KiB	-122.1 KiB	-122.1 KiB	-122.1 KiB
ens4 - Speed	-122.1 KiB	-122.1 KiB	-122.1 KiB	-122.1 KiB

Queue Length



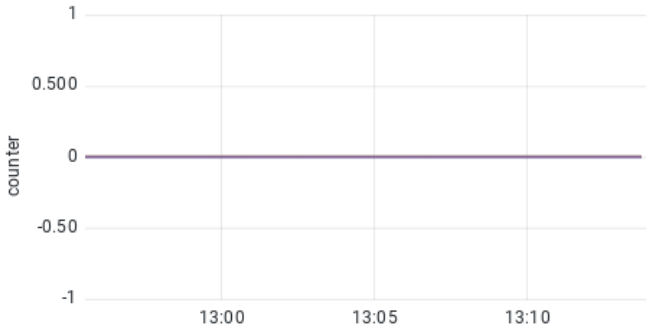
	min	max	av
br-59bf6c811c08 - Interface transmit queue length	0	0	
br-8ed386dadce3 - Interface transmit queue length	0	0	
docker0 - Interface transmit queue length	0	0	
ens4 - Interface transmit queue length	1000.0	1000.0	100

Softnet Packets



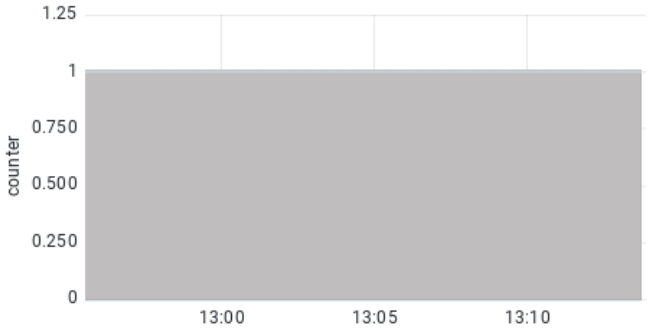
	min	max	avg	current
CPU 31 - Processed	2.20	1.11 K	616	648
CPU 15 - Processed	4.67	1.07 K	517	286
CPU 0 - Processed	6.47	1.02 K	564	284
CPU 2 - Processed	5.22	1.01 K	545	259

Softnet Out of Quota



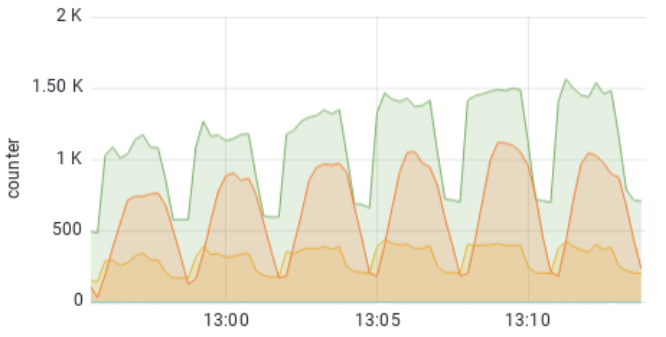
	min	max	avg	current
CPU 9 - Squeezed	0	0	0	0
CPU 8 - Squeezed	0	0	0	0
CPU 7 - Squeezed	0	0	0	0
CPU 6 - Squeezed	0	0	0	0

Network Operational Status



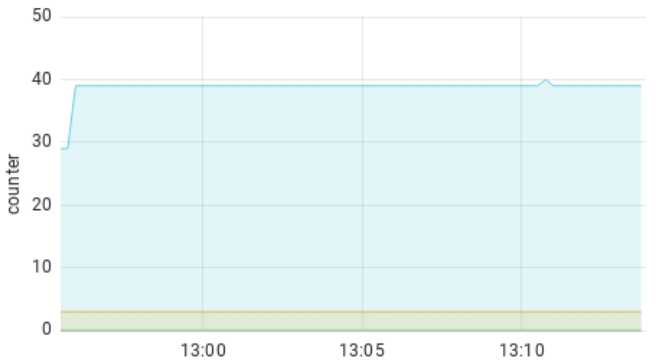
	min	max	avg	current
vethf93d489 - Physical link state	1	1	1	1
vethf86f18b - Physical link state	1	1	1	1
vethf7aa4f0 - Physical link state	1	1	1	1
vethf41355e - Physical link state	1	1	1	1

Sockstat TCP



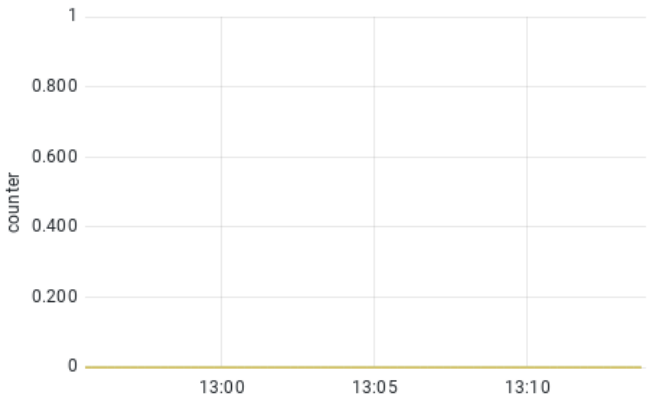
	min	max	avg	current
TCP_alloc - Allocated sockets	487	1.57 K	1.11 K	710
TCP_inuse - Tcp sockets currently in use	147	438	310	205
TCP_orphan - Orphan sockets	0	2	0.162	0
TCP_tw - Sockets wating close	36	1.12 K	646	236

Sockstat UDP



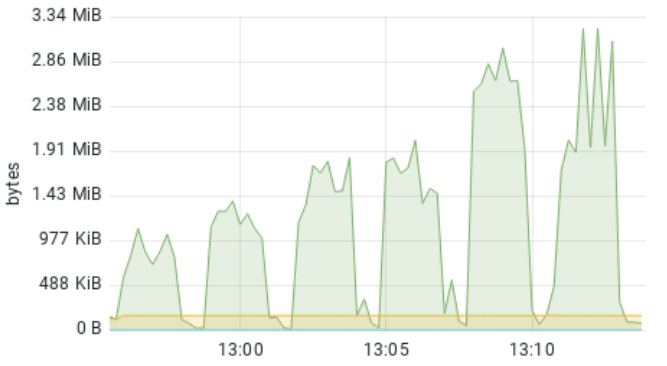
	min	max	avg	current
UDPLITE_inuse - Udplite sockets currently in use	0	0	0	0
UDP_inuse - Udp sockets currently in use	3	3	3	3
UDP_mem - Used memory for udp	29	40	38.7	39

Sockstat FRAG / RAW



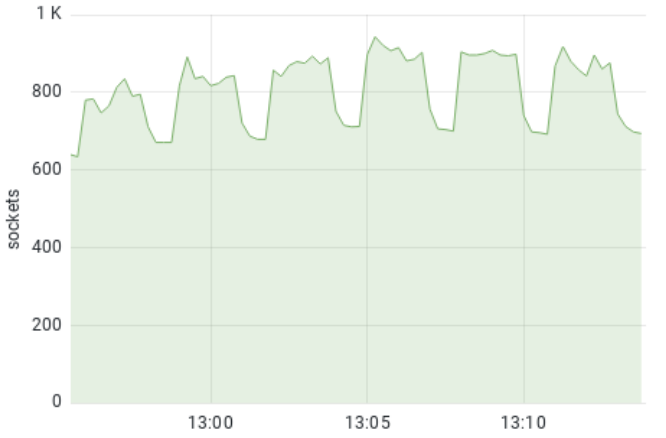
	min	max	avg	current
FRAG_inuse - Frag sockets currently in use	0	0	0	0
RAW_inuse - Raw sockets currently in use	0	0	0	0

Sockstat Memory Size



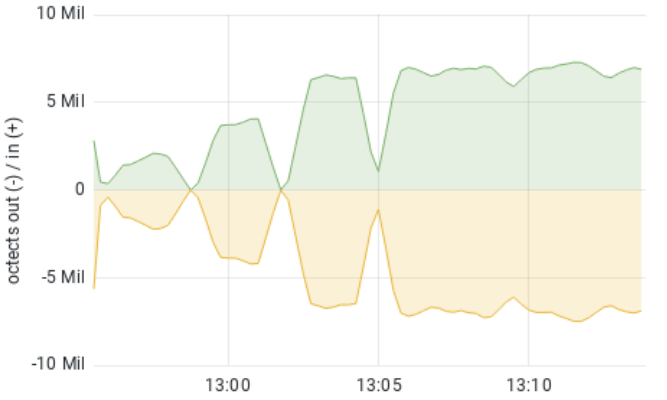
	min	max	avg	cu
mem_bytes - TCP sockets in that state	12 KiB	3.21 MiB	1.15 MiB	7
mem_bytes - UDP sockets in that state	116 KiB	160 KiB	155 KiB	15
FRAG_memory - Used memory for frag	0 B	0 B	0 B	

Sockstat Used



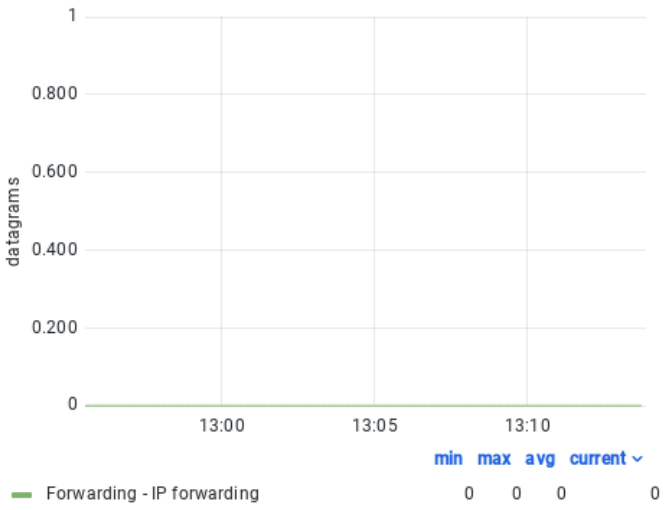
	min	max	avg	current
Sockets_used - Sockets currently in use	634	943	806	694

Netstat IP In / Out Octets



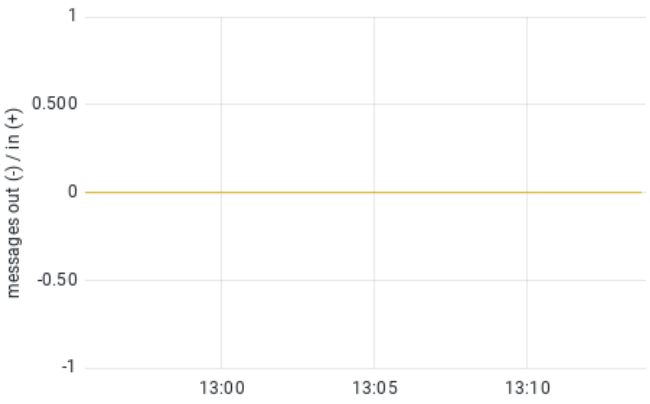
	min	max	avg	current
OutOctets - Sent octets	5.14 K	7.49 Mil	4.83 Mil	6.89 Mil
InOctets - Received octets	3.75 K	7.28 Mil	4.66 Mil	6.89 Mil

Netstat IP Forwarding



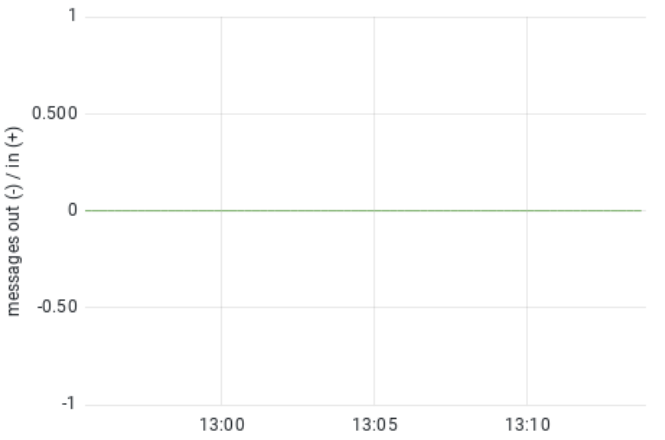
	min	max	avg	current
Forwarding - IP forwarding	0	0	0	0

ICMP In / Out



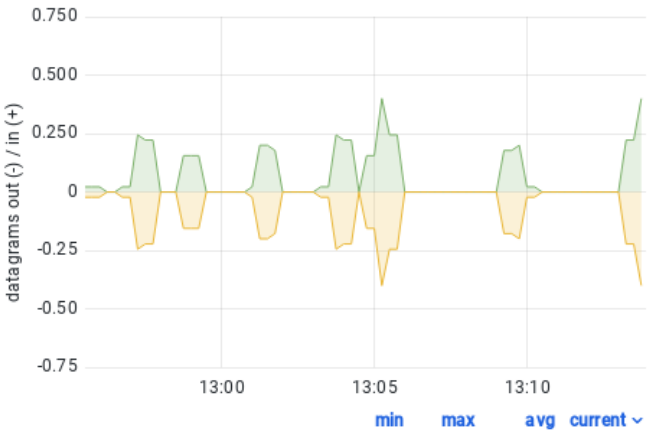
- OutMsgs - Messages which this entity attempted to send. Note that this counte
- InMsgs - Messages which the entity received. Note that this counter includes al

ICMP Errors



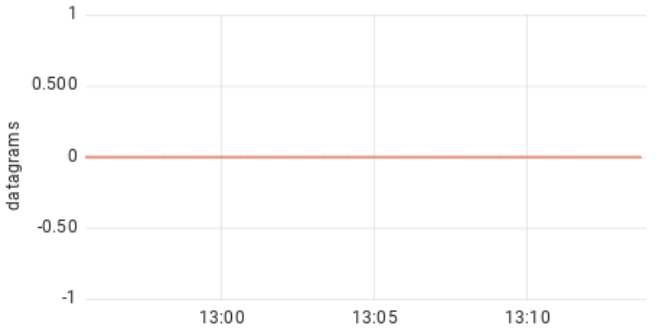
- InErrors - Messages which the entity received but determined as having ICMP-s

UDP In / Out



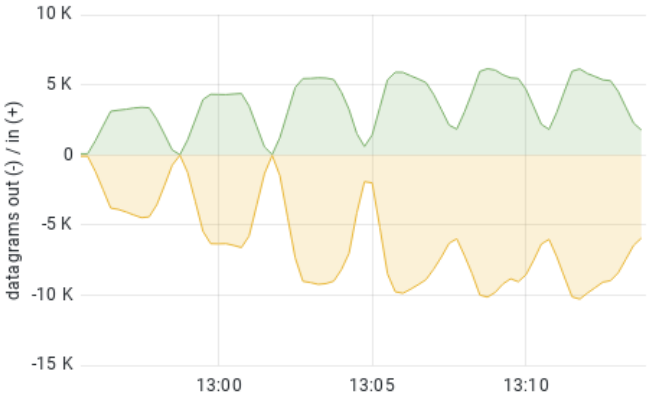
	min	max	avg	current
OutDatagrams - Datagrams sent	0	0.400	0.0709	0.400
InDatagrams - Datagrams received	0	0.400	0.0709	0.400

UDP Errors



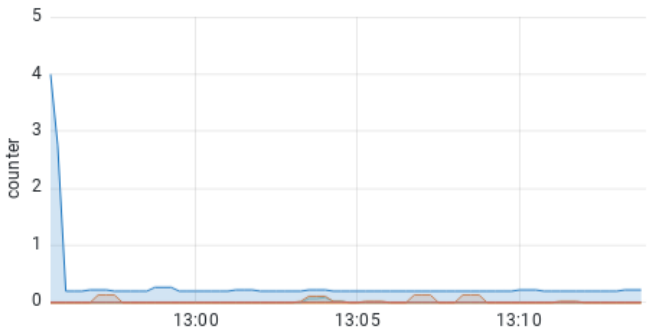
- SndbufErrors - UDP buffer errors send
- RcvbufErrors - UDP buffer errors received
- InErrors Lite - UDPLite Datagrams that could not be delivered to an application
- NoPorts - UDP Datagrams received on a port with no listener

TCP In / Out



- OutSegs - Segments sent, including those on current connections but excluding
- InSegs - Segments received, including those received in error. This count includ

TCP Errors



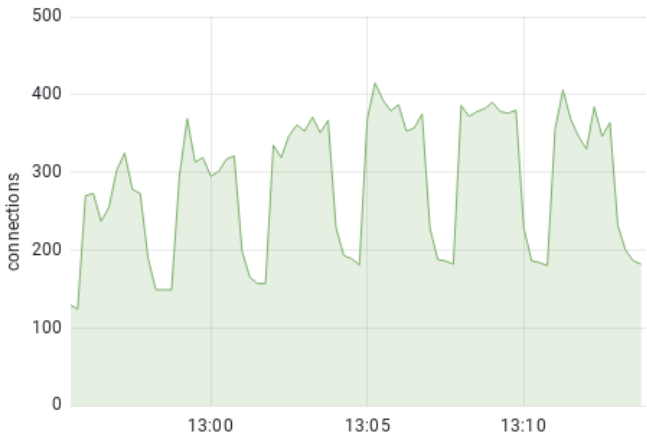
OutRsts - Segments sent with RST flag

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

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

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

TCP Connections

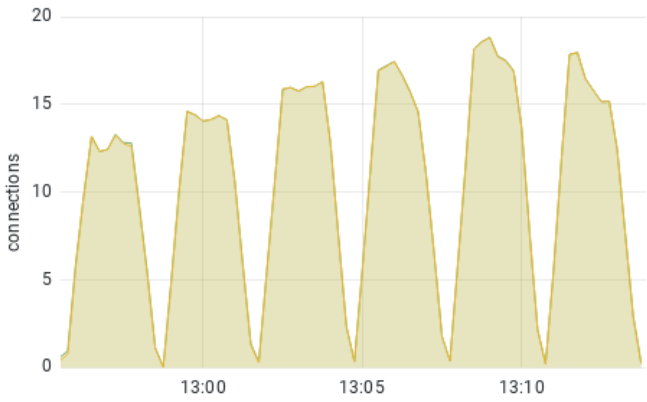


CurrEstab - TCP connections for which the current state is either ESTABLISHED

TCP SynCookie

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

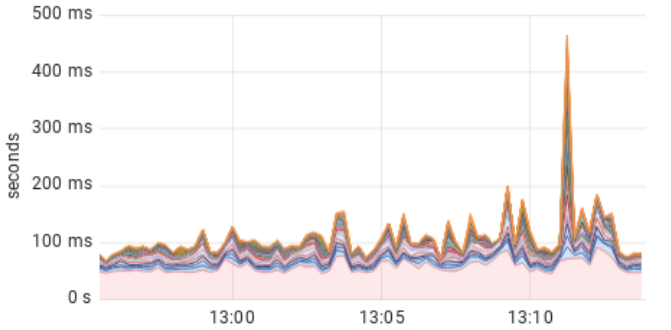
TCP Direct Transition



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

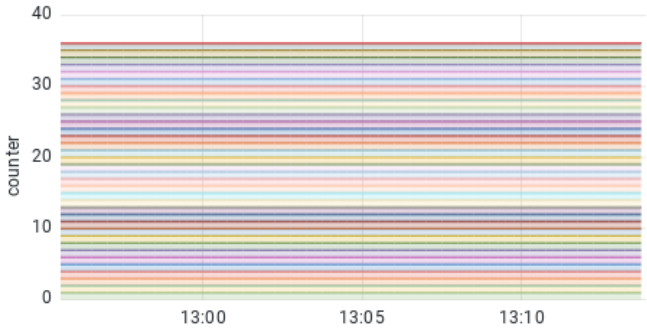
PassiveOpens - TCP connections that have made a direct transition to the SYN

Node Exporter Scrape Time



	min	max	avg	current
netclass - Scrape duration	46.6 ms	92.4 ms	58.5 ms	48.8
cpu - Scrape duration	3.44 ms	21.3 ms	6.62 ms	5.05
diskstats - Scrape duration	1000 µs	19.5 ms	3.85 ms	3.64
filesystem - Scrape duration	2.31 ms	20.8 ms	4.82 ms	3.37

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