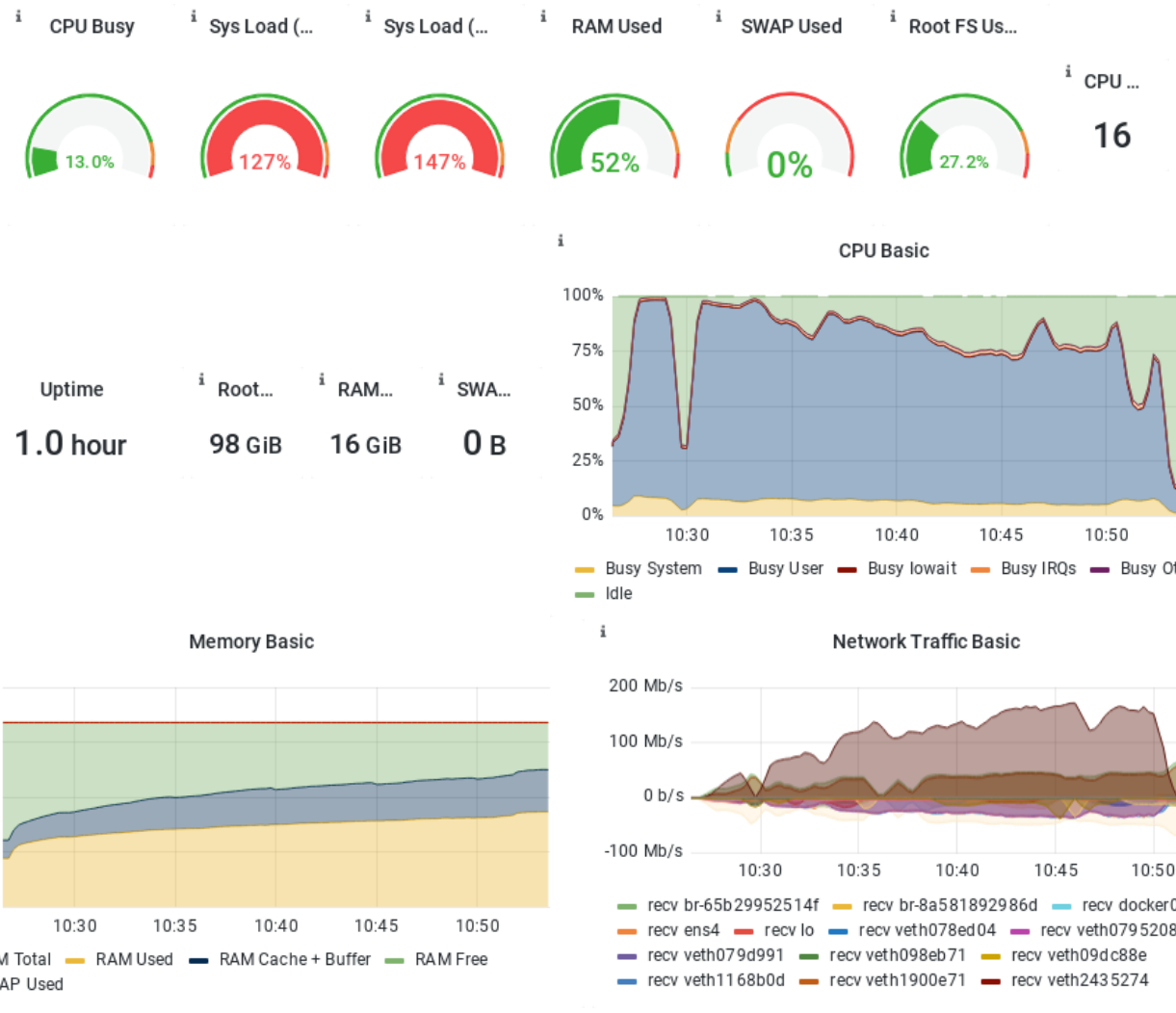
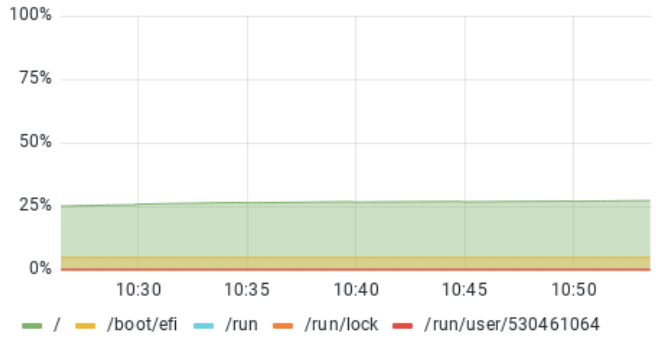
Host Metrics

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

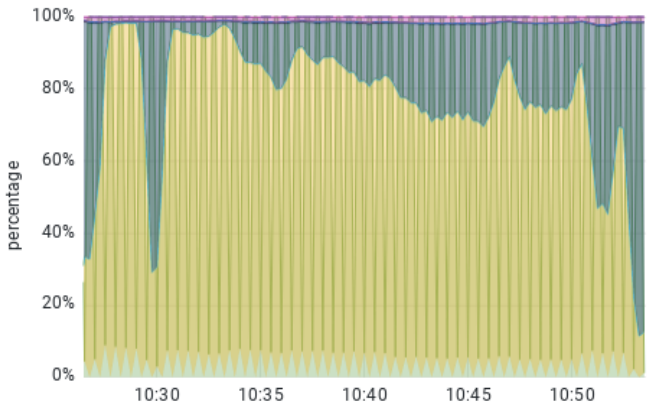
Wed Nov 16 10:26:27 UTC 2022
to
Wed Nov 16 10:53:35 UTC 2022



Disk Space Used Basic

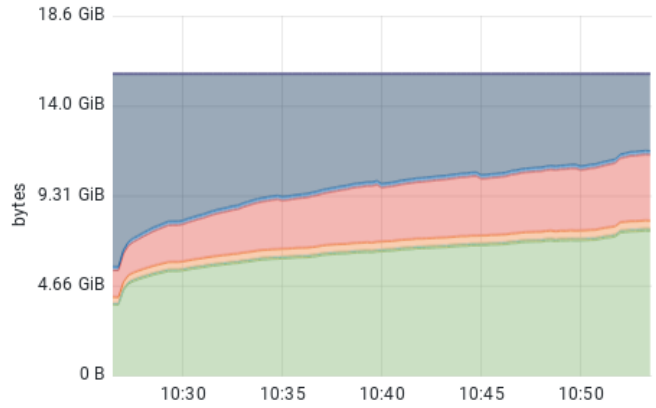


CPU



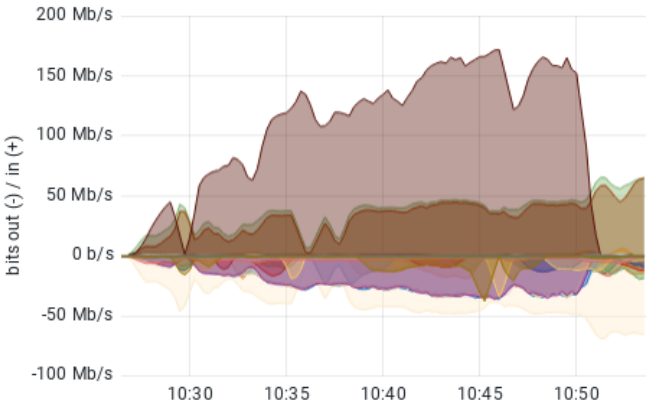
- System - Processes executing in kernel mode
- User - Normal processes executing in user mode
- Nice - Niced processes executing in user mode
- Idle - Waiting for something to happen
- Iowait - Waiting for I/O to complete

Memory Stack



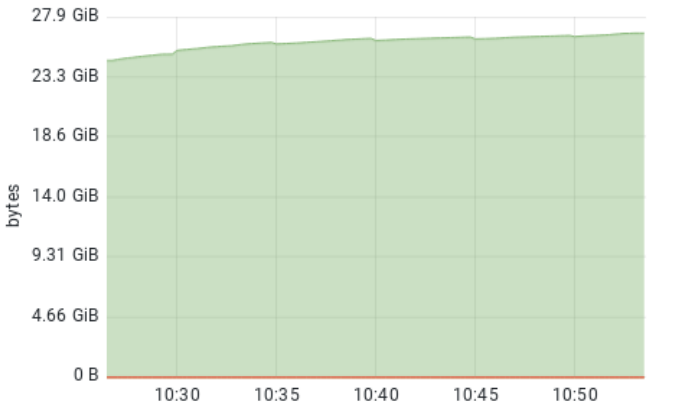
- Apps - Memory used by user-space applications
- PageTables - Memory used to map between virtual and physical memory addr
- SwapCache - Memory that keeps track of pages that have been fetched from s
- Slab - Memory used by the kernel to cache data structures for its own use (cacl
- Cache - Parked file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

Network Traffic



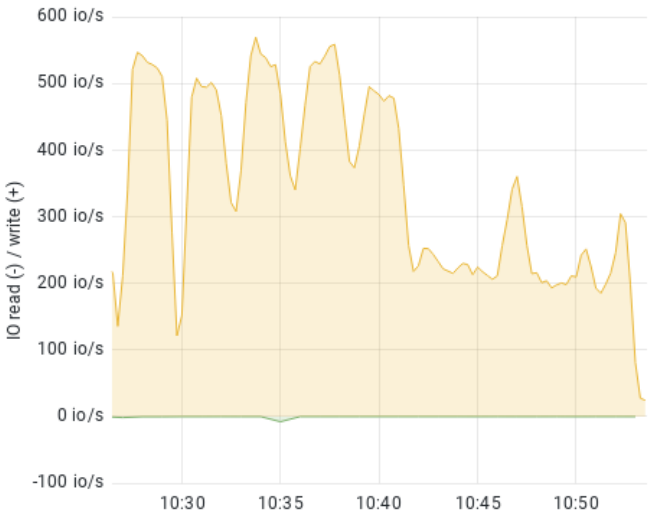
	min	max	avg	curre
br-65b29952514f - Receive	29.4 kb/s	65.5 Mb/s	36.0 Mb/s	65.0 M
br-8a581892986d - Receive	8.98 kb/s	6.12 Mb/s	1.26 Mb/s	9.20 k
docker0 - Receive	0 b/s	0 b/s	0 b/s	0
ens4 - Receive	2.81 kb/s	19.4 kb/s	4.34 kb/s	2.87 k
lo - Receive	0 b/s	464 b/s	166 b/s	201

Disk Space Used



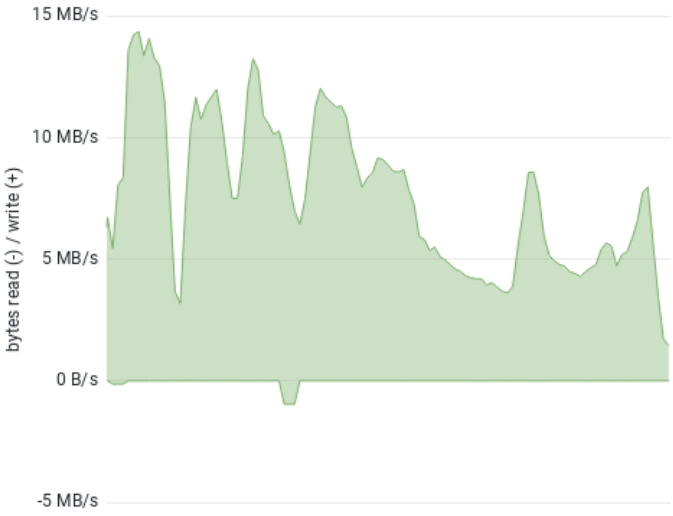
	min	max	avg	current
/run/lock	0.000 B	0.000 B	0.000 B	0.000 B
/run/user/530461064	0.000 B	0.000 B	0.000 B	0.000 B
/run	3.863 MiB	3.941 MiB	3.941 MiB	3.941 MiB
/boot/efi	5.898 MiB	5.898 MiB	5.898 MiB	5.898 MiB
/	24.540 GiB	26.670 GiB	25.965 GiB	26.670 GiB

Disk IOps



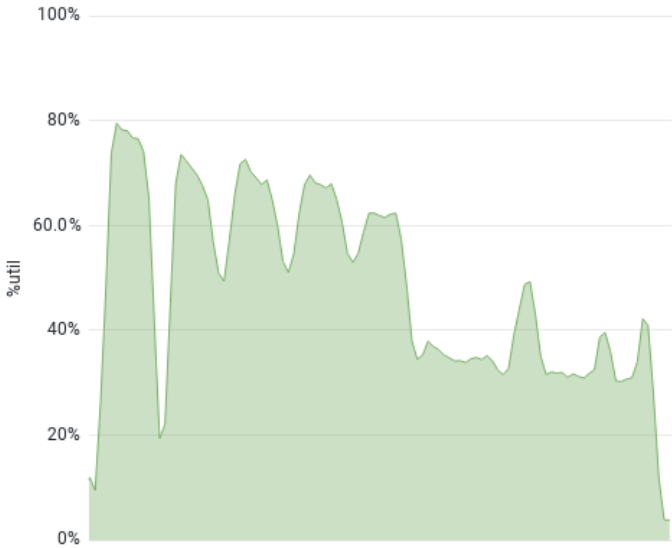
	min	max	avg	current
sda - Reads completed	0 io/s	7.68 io/s	0.345 io/s	0.0167 io/s
sda - Writes completed	24.5 io/s	569 io/s	341 io/s	24.5 io/s

I/O Usage Read / Write



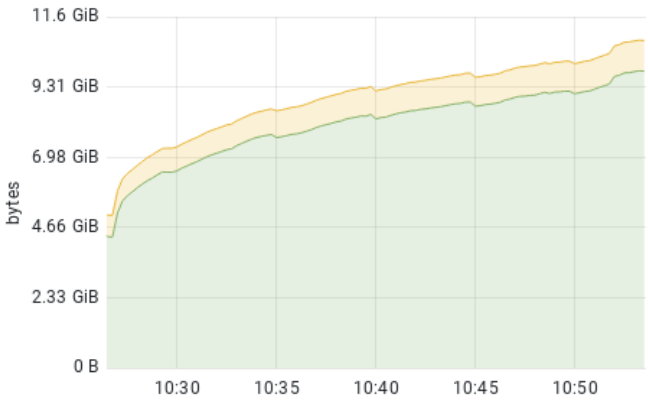
	min	max	avg
sda - Successfully read bytes	0.000 B/s	961.805 kB/s	30.448 kB/s
sda - Successfully written bytes	1.444 MB/s	14.348 MB/s	7.638 MB/s

I/O Utilization



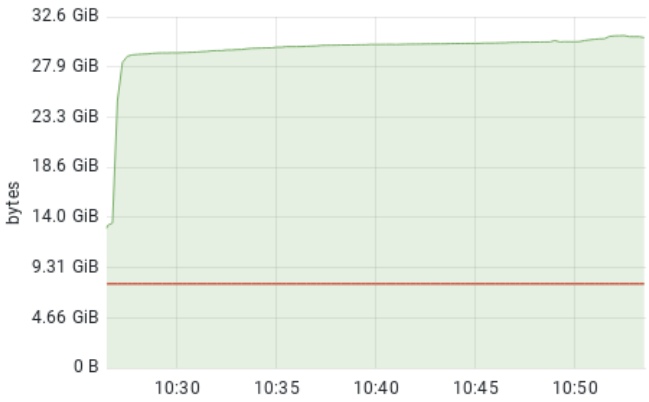
	min	max	avg	current
sda	3.804%	79.511%	47.635%	3.804%

Memory Active / Inactive



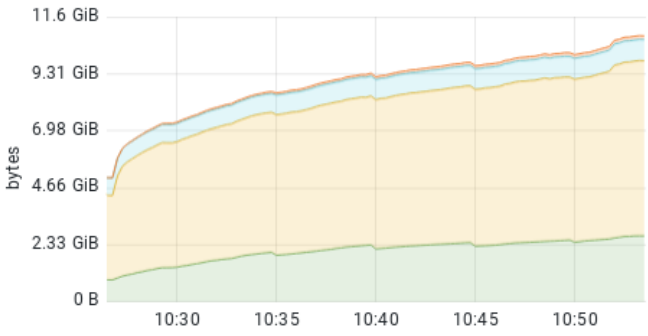
- Inactive - Memory which has been less recently used. It is more eligible to be re
- Active - Memory that has been used more recently and usually not reclaimed u

Memory Commited



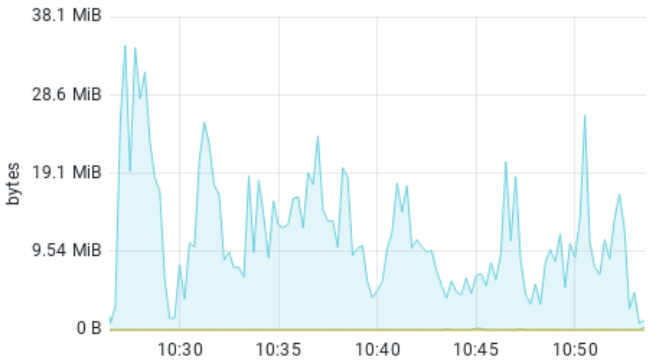
- Committed_AS - Amount of memory presently allocated on the system
- CommitLimit - Amount of memory currently available to be allocated on the sy

Memory Active / Inactive Detail



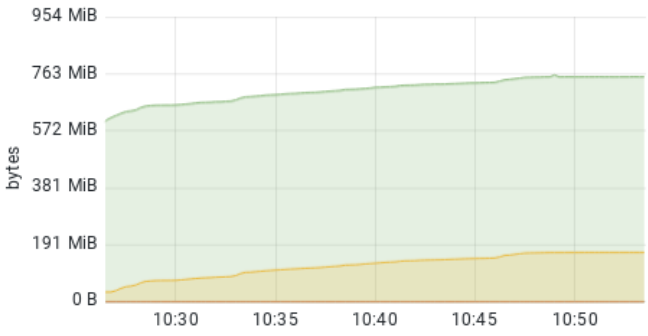
- Inactive_file - File-backed memory on inactive LRU list
- Inactive_anon - Anonymous and swap cache on inactive LRU list, including tmp
- Active_file - File-backed memory on active LRU list
- Active_anon - Anonymous and swap cache on active least-recently-used (LRU)

Memory Writeback and Dirty



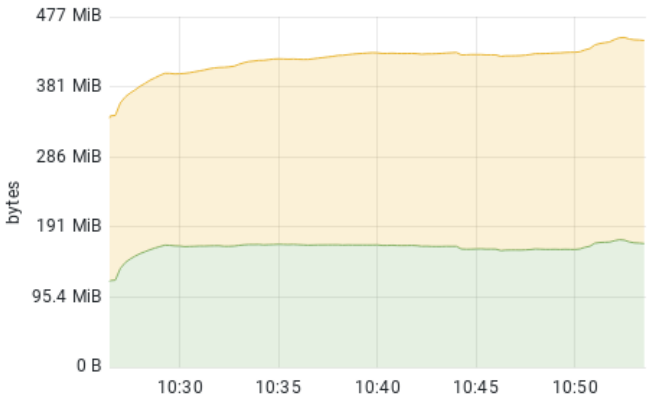
- Writeback - Memory which is actively being written back to disk
- WritebackTmp - Memory used by FUSE for temporary writeback buffers
- Dirty - Memory which is waiting to get written back to the disk 820.

Memory Shared and Mapped



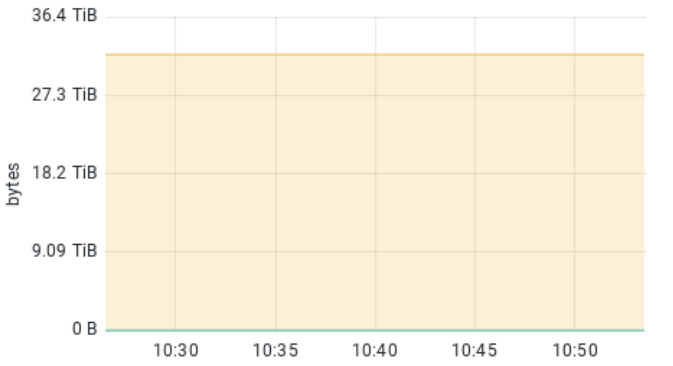
- Mapped - Used memory in mapped pages files which have been mmaped, such
- Shmem - Used shared memory (shared between several processes, thus includ
- ShmemHugePages - Memory used by shared memory (shmem) and tmpfs allc
- ShmemPmdMapped - Ammount of shared (shmem/tmpfs) memory backed by

Memory Slab



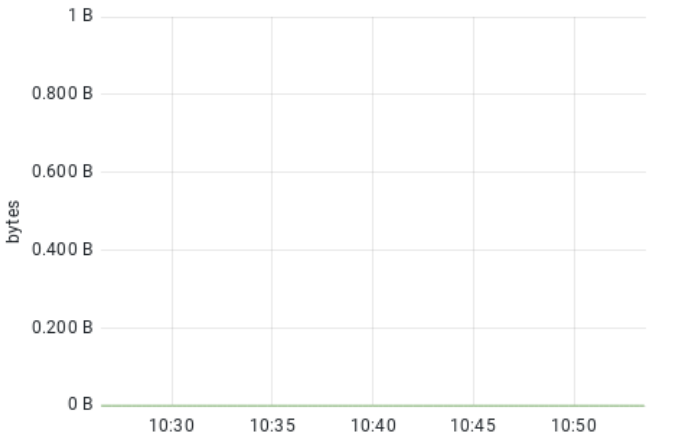
- SUnreclaim - Part of Slab, that cannot be reclaimed on memory pressure 11
- SReclaimable - Part of Slab, that might be reclaimed, such as caches 21

Memory Vmalloc



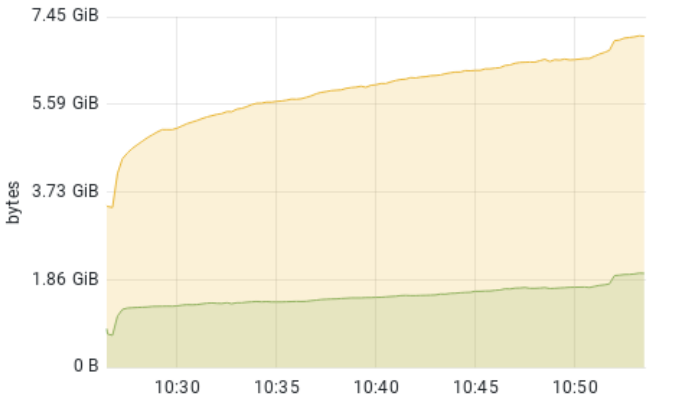
VmallocChunk - Largest contigious block of vmalloc area which is free		0
VmallocTotal - Total size of vmalloc memory area		32.0
VmallocUsed - Amount of vmalloc area which is used		34.6

Memory Bounce



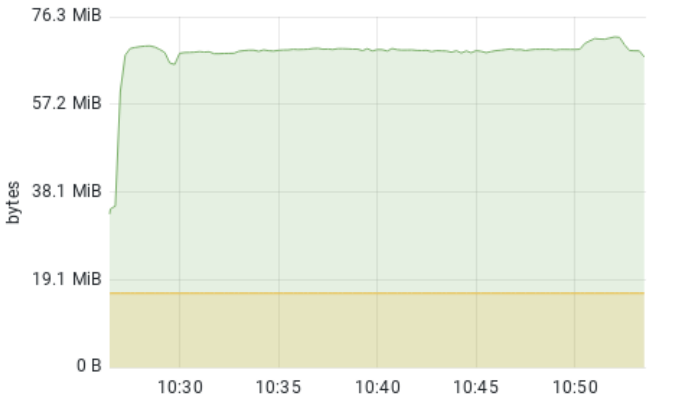
	min	max	a
Bounce - Memory used for block device bounce buffers	0.00 B	0.00 B	0.

Memory Anonymous



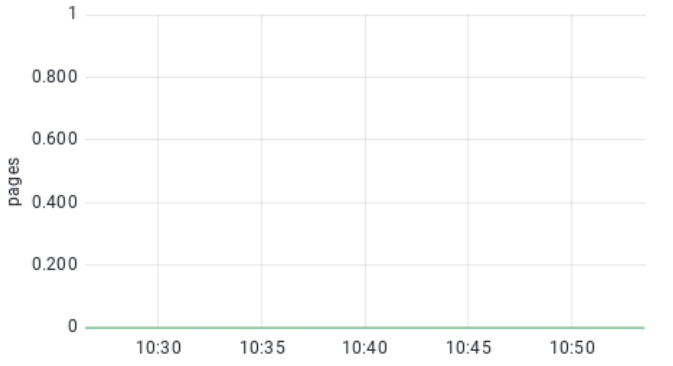
	min	ma
AnonHugePages - Memory in anonymous huge pages	698.00 MiB	2.00 G
AnonPages - Memory in user pages not backed by files	3.40 GiB	7.04 G

Memory Kernel / CPU



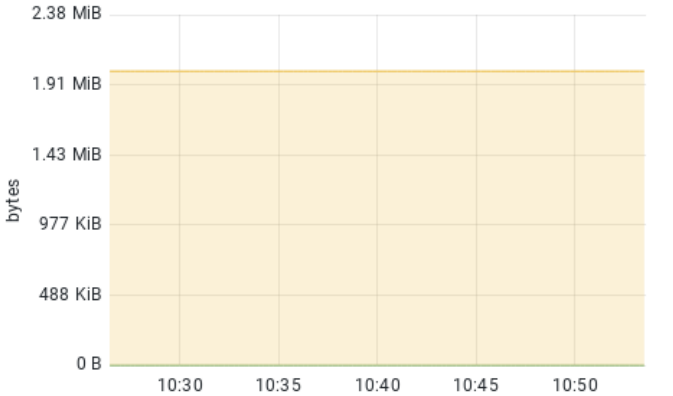
KernelStack - Kernel memory stack. This is not reclaimable		27.2
PerCPU - Per CPU memory allocated dynamically by loadable modules		15.8

Memory HugePages Counter



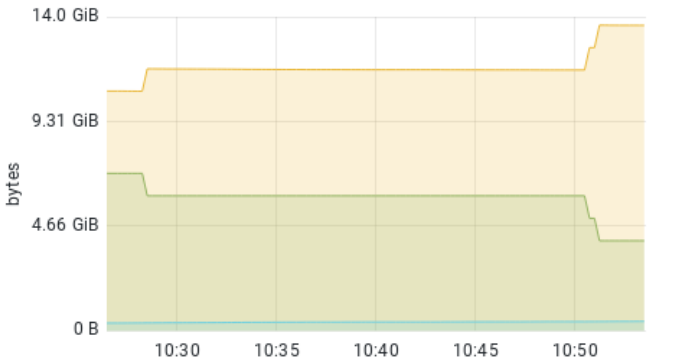
HugePages_Free - Huge pages in the pool that are not yet allocated
HugePages_Rsvd - Huge pages for which a commitment to allocate from the p
HugePages_Surp - Huge pages in the pool above the value in /proc/sys/vm/nr

Memory HugePages Size



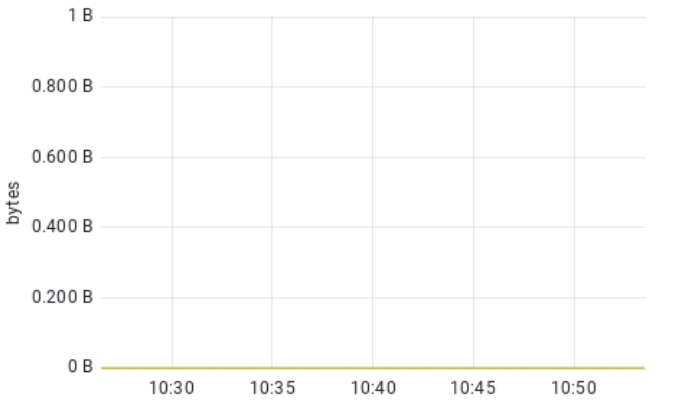
	min	max	cu
HugePages - Total size of the pool of huge pages	0.00 B	0.00 B	
Hugepagesize - Huge Page size	2.00 MiB	2.00 MiB	2.0

Memory DirectMap



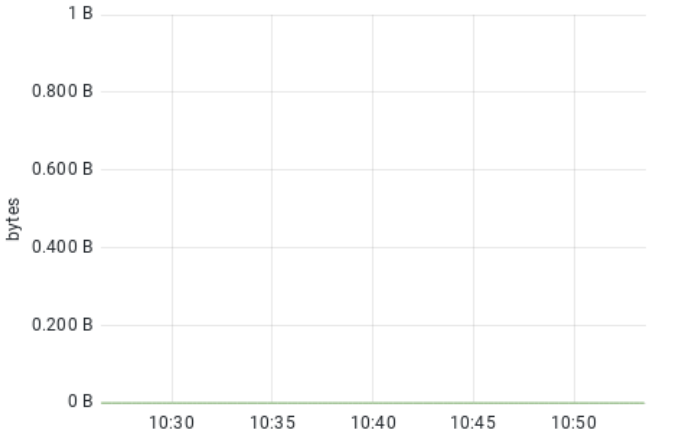
	min	m
DirectMap1G - Amount of pages mapped as this size	4.00 GiB	7.00
DirectMap2M - Amount of pages mapped as this size	10.66 GiB	13.60
DirectMap4K - Amount of pages mapped as this size	338.81 MiB	418.81

Memory Unevictable and MLocked



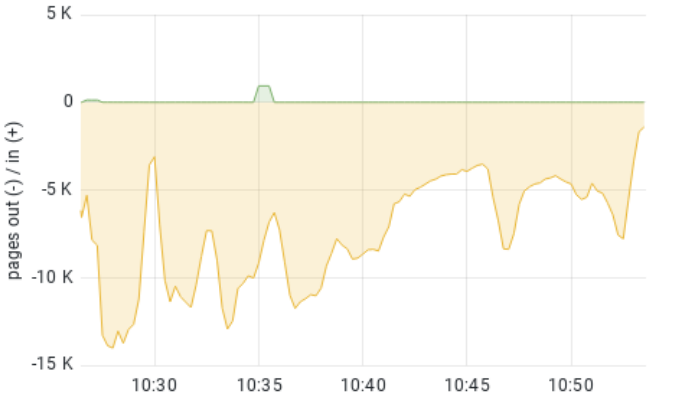
- Unevictable - Amount of unevictable memory that can't be swapped out for a v
- MLocked - Size of pages locked to memory using the mlock() system call

Memory NFS



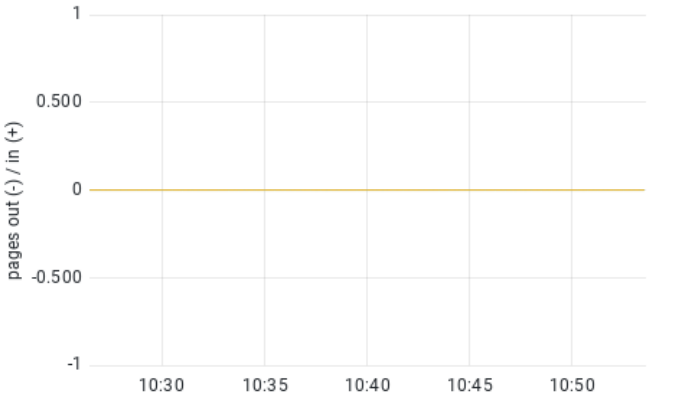
- NFS Unstable - Memory in NFS pages sent to the server, but not yet commited t

Memory Pages In / Out



	min	max	avg	current
Pagesin - Page in operations	0	939	29.7	0
Pagesout - Page out operations	1.41 K	14.0 K	7.46 K	1.41 K

Memory Pages Swap In / Out

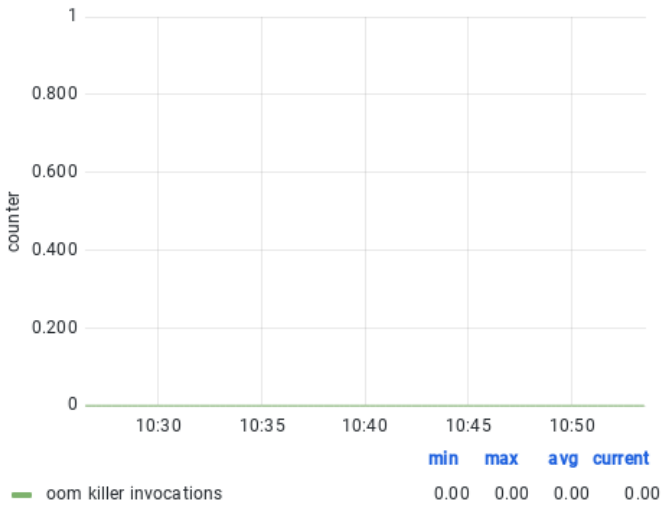


	min	max	avg	current
Pswpin - Pages swapped in	0	0	0	0
Pswpout - Pages swapped out	0	0	0	0

Memory Page Faults

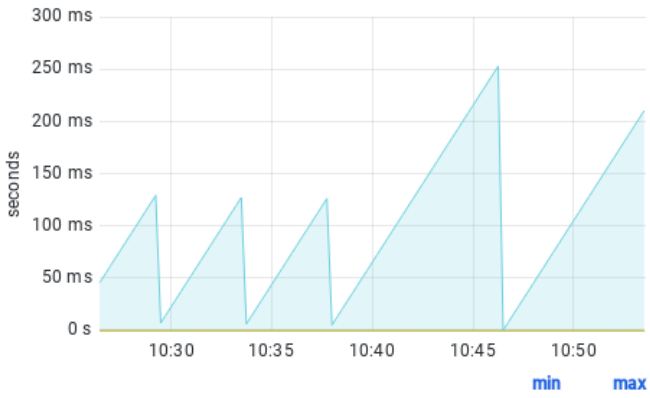
	min	max	avg
Pgfault - Page major and minor fault operations	2.33 K	50.53 K	20.58
Pgmajfault - Major page fault operations	0.00	1.00	0.0
Pgminfault - Minor page fault operations	2.33 K	50.53 K	20.58

OOM Killer



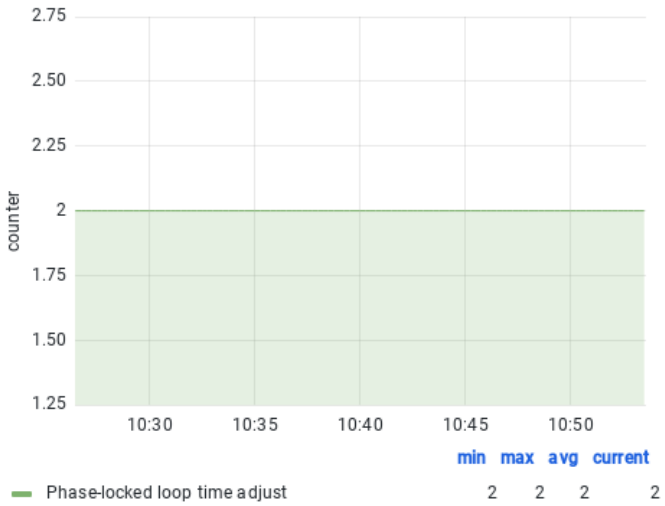
	min	max	avg	current
oom killer invocations	0.00	0.00	0.00	0.00

Time Syncronized Drift



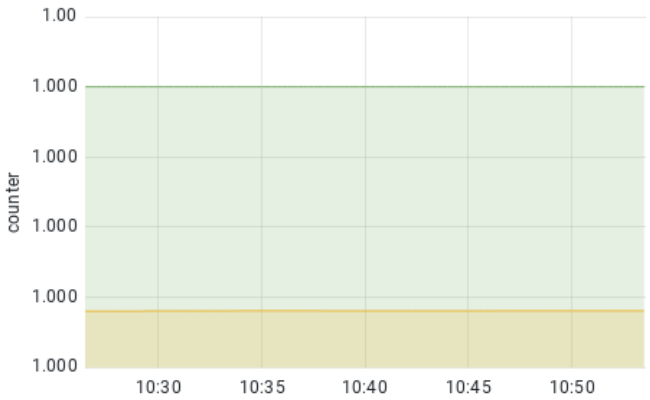
	min	max
Estimated error in seconds	18 µs	20 µs
Time offset in between local system and reference clock	0 s	0 s
Maximum error in seconds	267 µs	253 ms

Time PLL Adjust



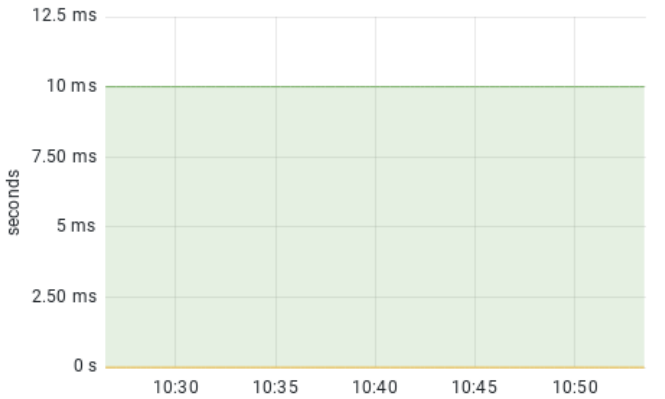
	min	max	avg	current
Phase-locked loop time adjust	2	2	2	2

Time Syncronized Status



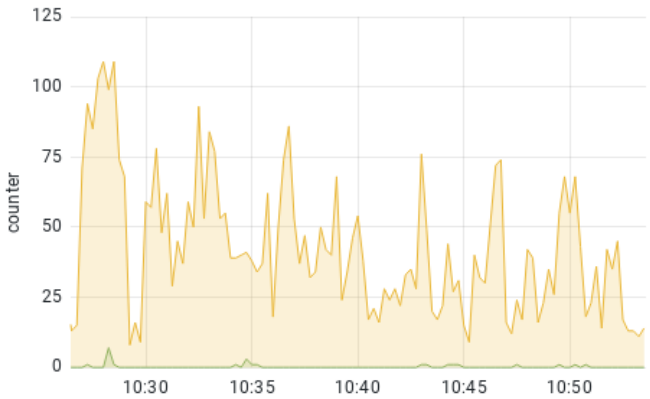
	min	max
Is clock synchronized to a reliable server (1 = yes, 0 = no)	1	1
Local clock frequency adjustment	1.000	1.000

Time Misc



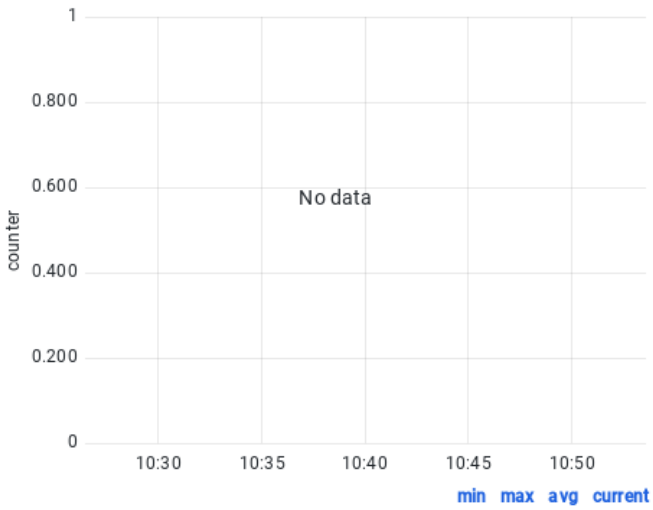
	min	max	avg	cur
Seconds between clock ticks	10.0 ms	10.0 ms	10.0 ms	10.
International Atomic Time (TAI) offset	0 s	0 s	0 s	

Processes Status

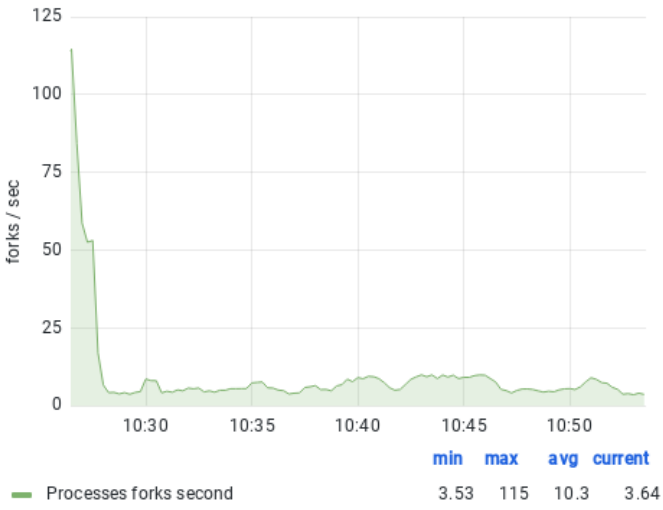


	min	max	avg	current
Processes blocked waiting for I/O to complete	0	7	0.218	0
Processes in runnable state	8	109	42.5	14

Processes State

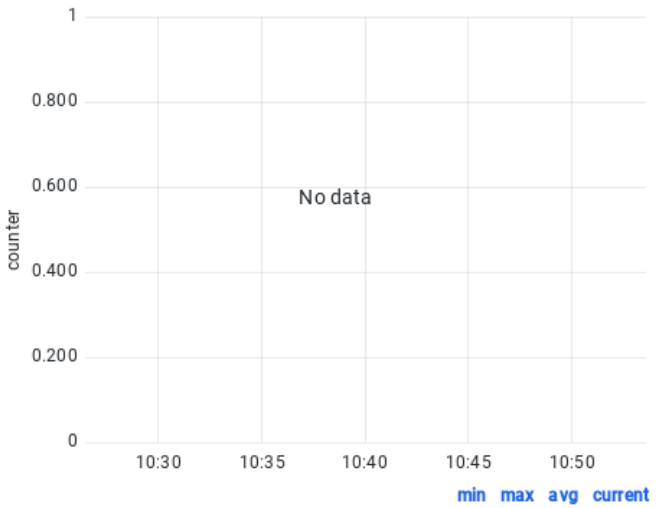


Processes Forks

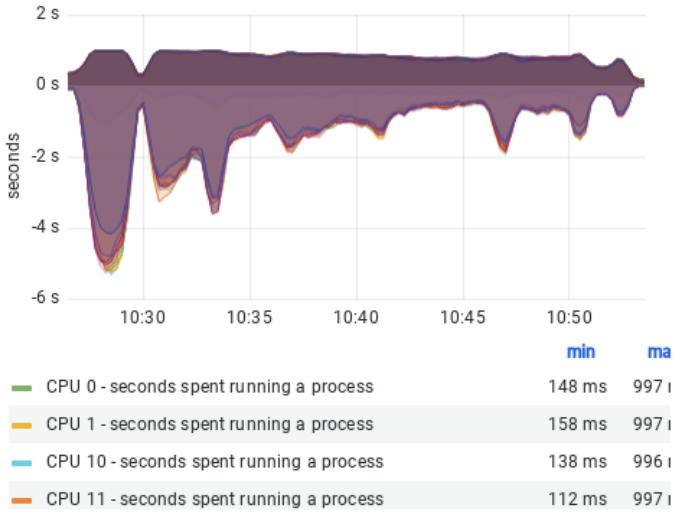


Processes Memory

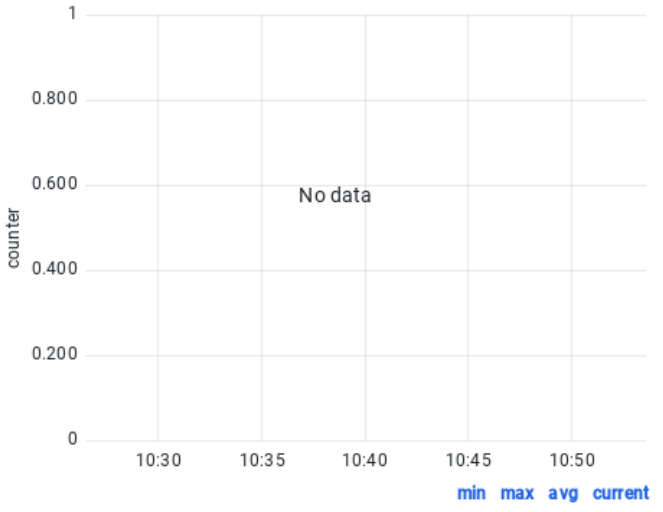
PIDs Number and Limit



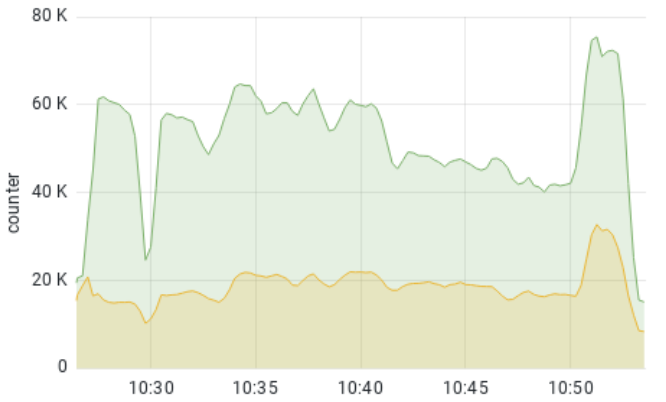
Process schedule stats Running / Waiting



Threads Number and Limit

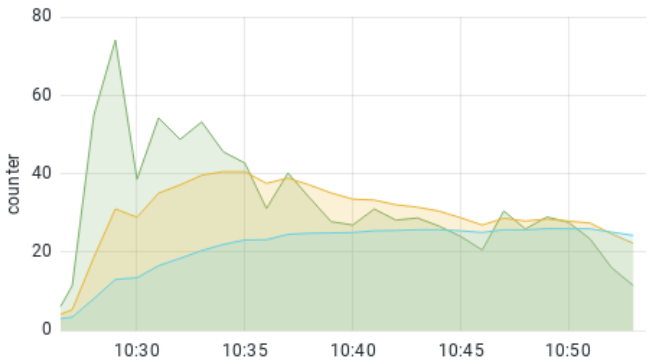


Context Switches / Interrupts



	min	max	avg	current
Context switches	13.1 K	75.4 K	51.3 K	15.1 K
Interrupts	8.33 K	32.7 K	18.6 K	8.33 K

System Load

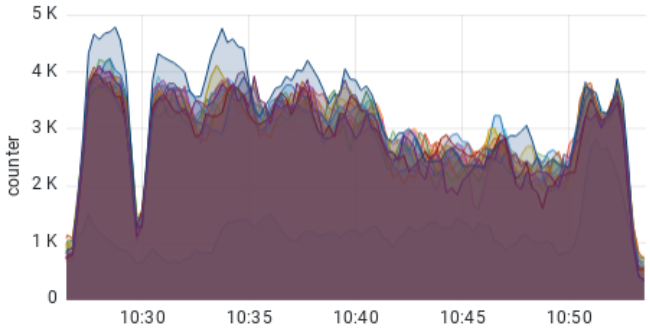


	min	max	avg	current
Load 1m	1.64	74.1	32.4	11.5
Load 5m	3.22	40.5	29.7	22.3
Load 15m	2.69	26.0	21.2	24.3

Interrupts Detail

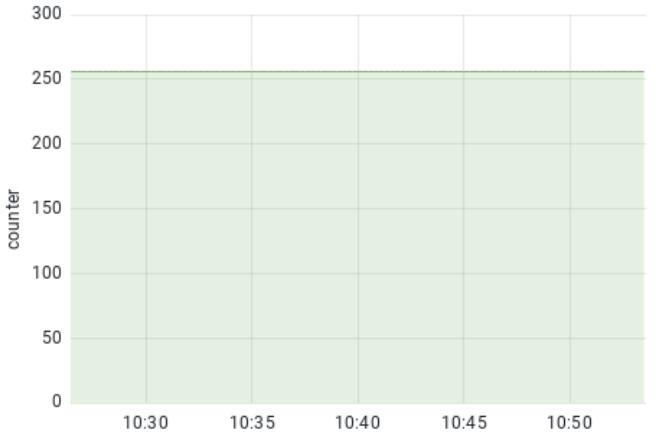
min max avg current

Schedule timeslices executed by each cpu



	min	max	avg	current
CPU 0	576	4.24 K	2.85 K	753
CPU 1	526	4.01 K	2.80 K	635
CPU 10	630	3.92 K	2.85 K	672
CPU 11	389	3.96 K	2.85 K	509

Entropy

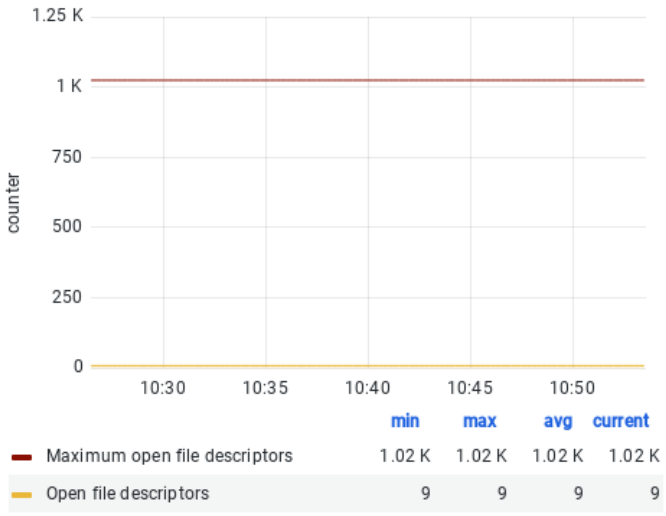


	min	max	avg	current
Entropy available to random number generators	256	256	256	256

CPU time spent in user and system contexts

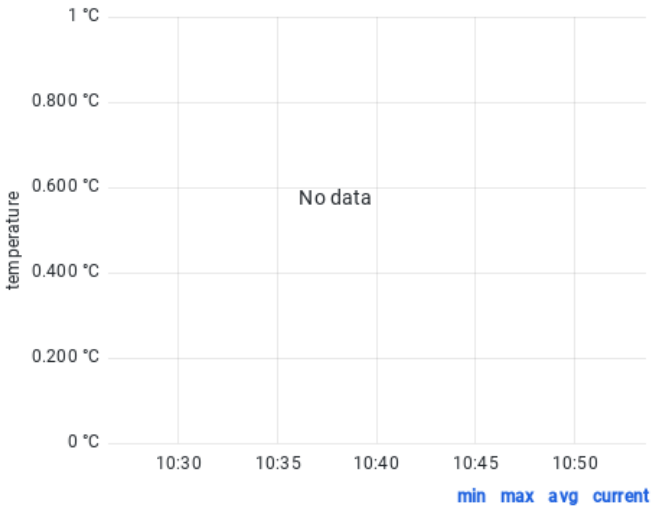
	min	max	avg	current
Time spent	8.22 ms	22.4 ms	10.1 ms	8.89 ms

File Descriptors

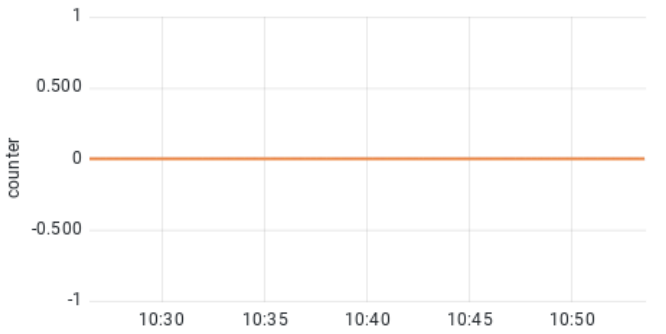


	min	max	avg	current
Maximum open file descriptors	1.02 K	1.02 K	1.02 K	1.02 K
Open file descriptors	9	9	9	9

Hardware temperature monitor

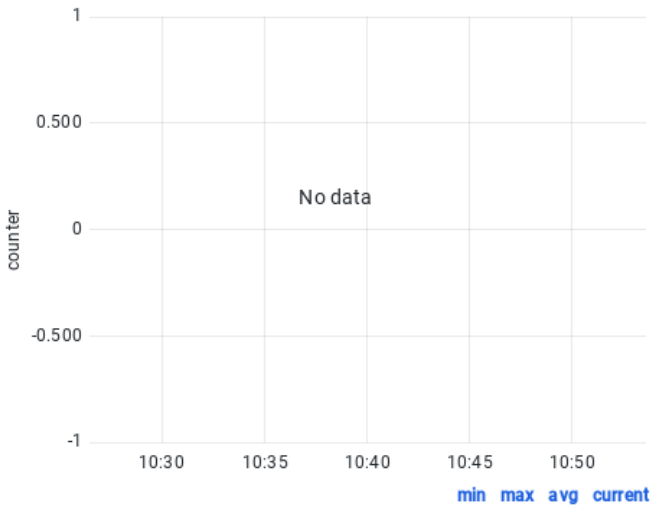


Throttle cooling device

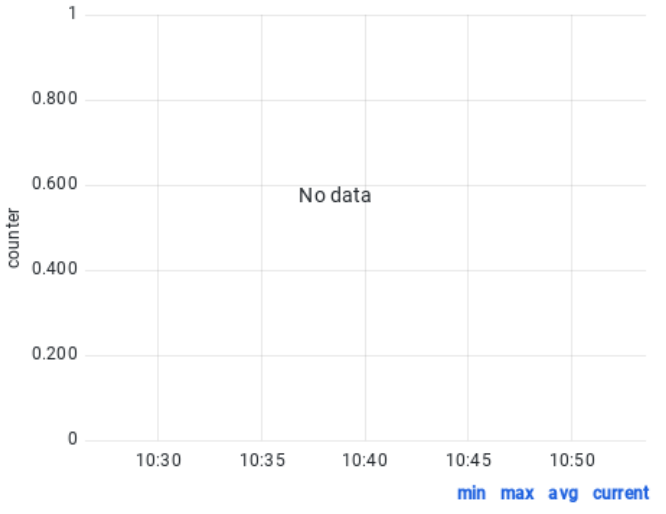


	min	max	avg	current
Current 0 in Processor	0	0	0	0
Current 1 in Processor	0	0	0	0
Current 10 in Processor	0	0	0	0
Current 11 in Processor	0	0	0	0

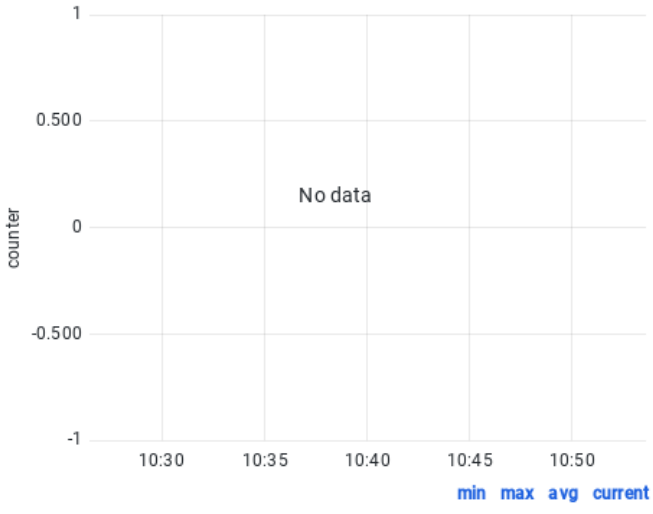
Power supply



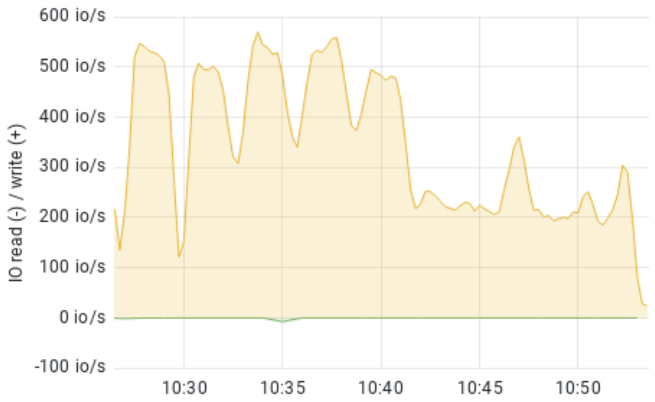
Systemd Sockets



Systemd Units State

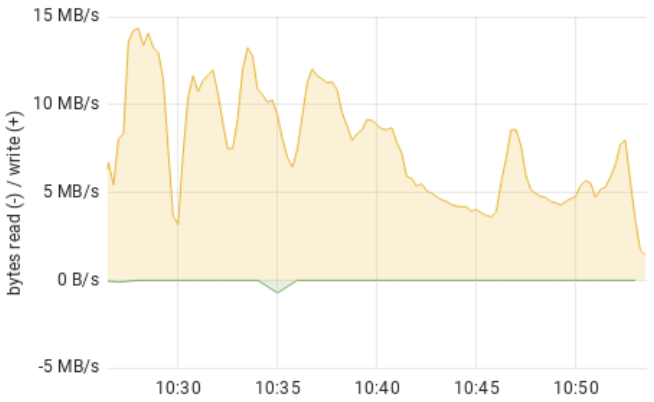


Disk IOps Completed



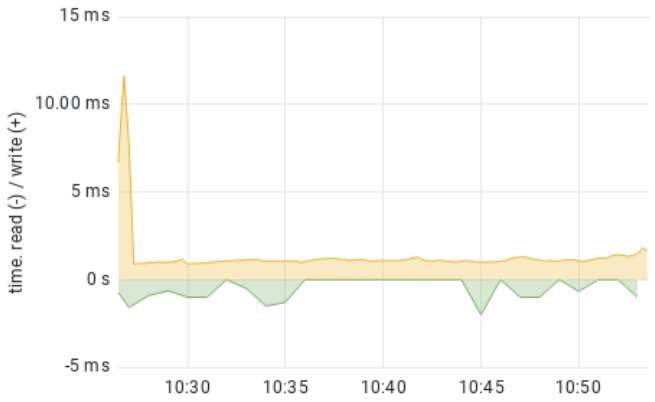
	min	max	avg	current
sda - Reads completed	0 io/s	7.68 io/s	0.345 io/s	0.0167 io/s
sda - Writes completed	24.5 io/s	569 io/s	341 io/s	24.5 io/s

Disk R/W Data



	min	max	avg	current
sda - Read bytes	0 B/s	721 kB/s	29.9 kB/s	410 B/s
sda - Written bytes	1.44 MB/s	14.3 MB/s	7.64 MB/s	1.44 MB/s

Disk Average Wait Time

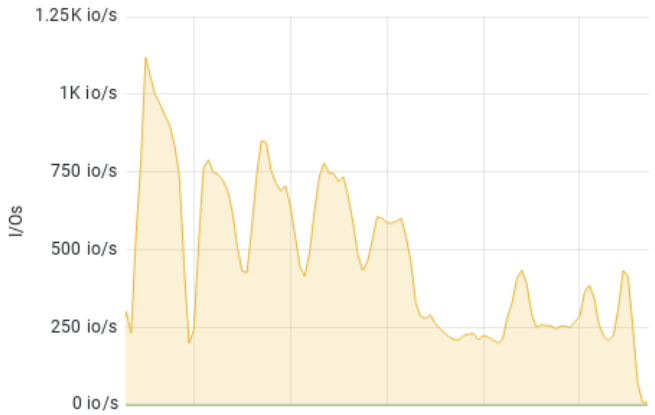


	min	max	avg	current
sda - Write wait time avg	870 µs	11.6 ms	1.33 ms	1.65 ms
sda - Read wait time avg	0 s	2.00 ms	503 µs	1000 µs

Average Queue Size

	min	max	avg	current
sda	0.168	1.29	0.418	0.222

Disk R/W Merged

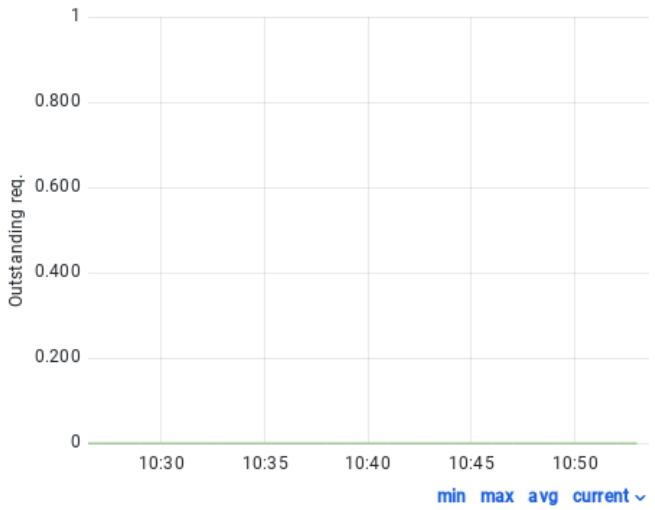


	min	max	avg	current
sda - Write merged	6.84 io/s	1.12K io/s	467 io/s	6.84 io/s

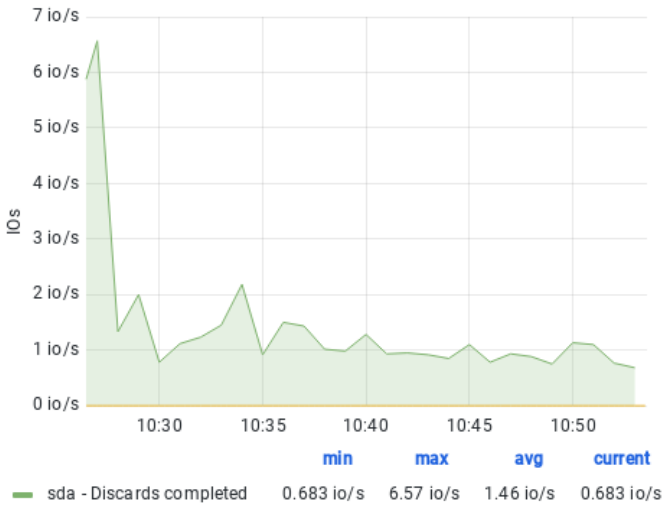
Time Spent Doing I/Os

	min	max	avg	current
sda - IO	4.14%	78.9%	46.8%	21.9%
sda - discard	0.0500%	0.615%	0.107%	0.0517%

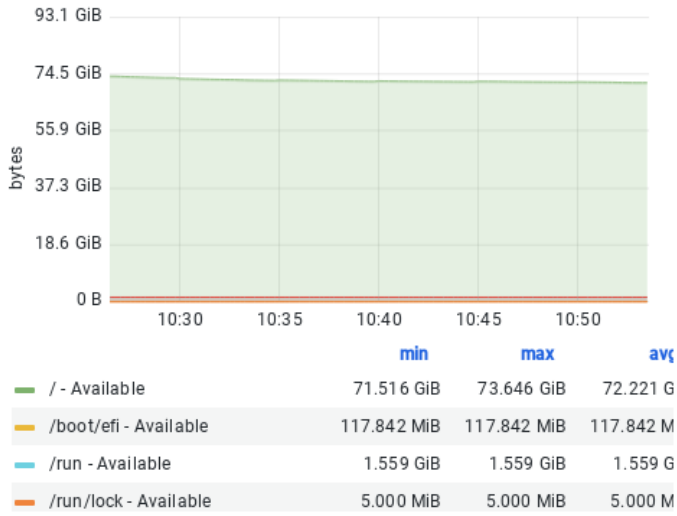
Instantaneous Queue Size



Disk IOps Discards completed / merged

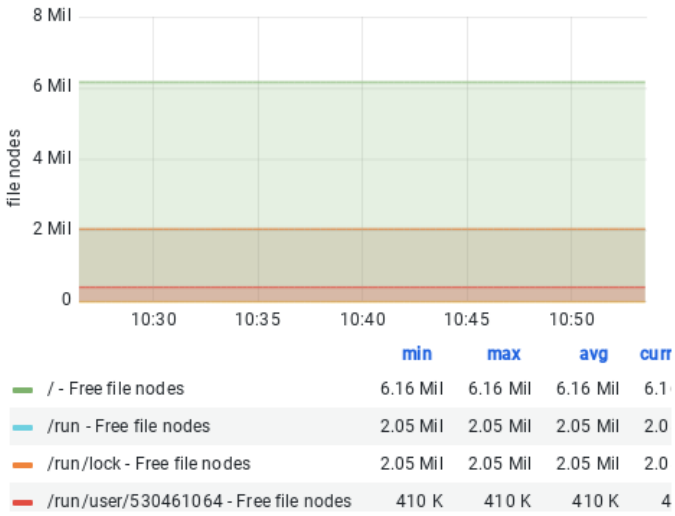


Filesystem space available



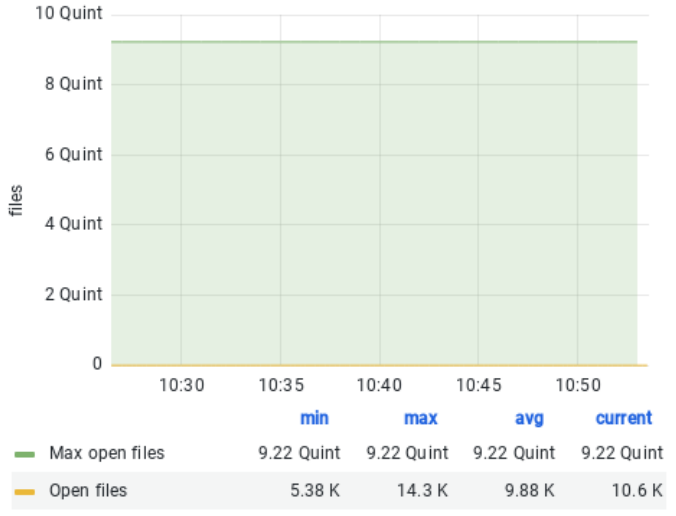
	min	max	avg
/ - Available	71.516 GiB	73.646 GiB	72.221 G
/boot/efi - Available	117.842 MiB	117.842 MiB	117.842 M
/run - Available	1.559 GiB	1.559 GiB	1.559 G
/run/lock - Available	5.000 MiB	5.000 MiB	5.000 M

File Nodes Free



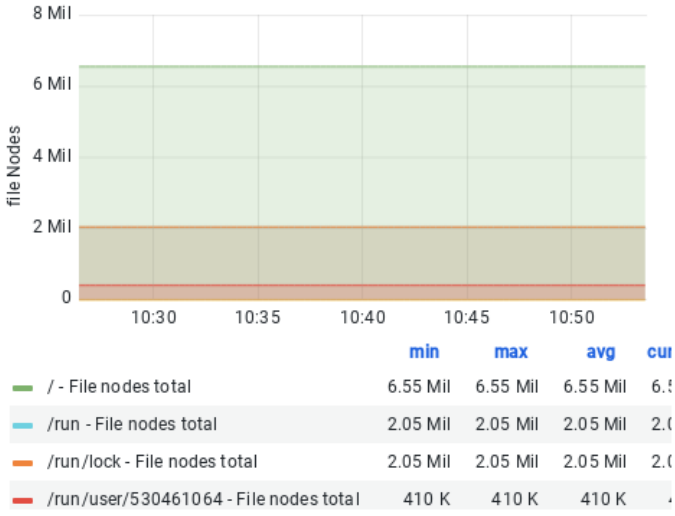
	min	max	avg	curr
/ - Free file nodes	6.16 Mil	6.16 Mil	6.16 Mil	6.1
/run - Free file nodes	2.05 Mil	2.05 Mil	2.05 Mil	2.0
/run/lock - Free file nodes	2.05 Mil	2.05 Mil	2.05 Mil	2.0
/run/user/530461064 - Free file nodes	410 K	410 K	410 K	4

File Descriptor



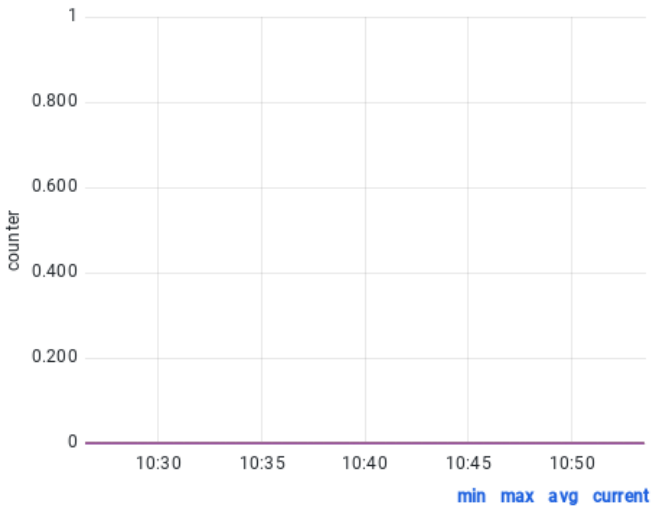
	min	max	avg	current
Max open files	9.22 Quint	9.22 Quint	9.22 Quint	9.22 Quint
Open files	5.38 K	14.3 K	9.88 K	10.6 K

File Nodes Size

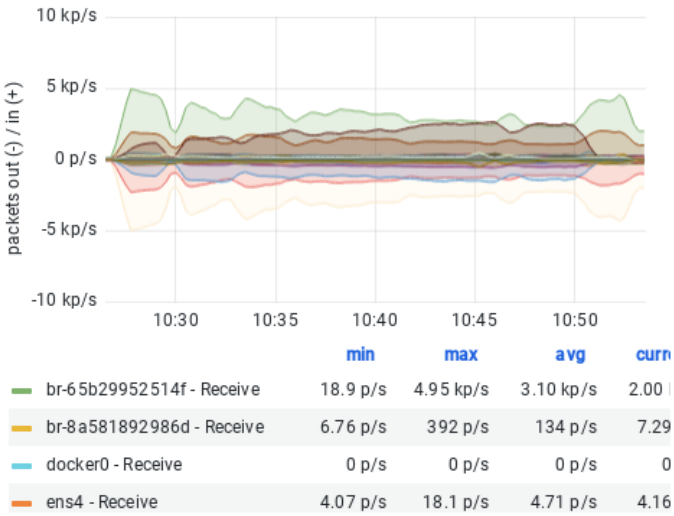


	min	max	avg	cur
/ - File nodes total	6.55 Mil	6.55 Mil	6.55 Mil	6.5
/run - File nodes total	2.05 Mil	2.05 Mil	2.05 Mil	2.0
/run/lock - File nodes total	2.05 Mil	2.05 Mil	2.05 Mil	2.0
/run/user/530461064 - File nodes total	410 K	410 K	410 K	4

Filesystem in ReadOnly / Error

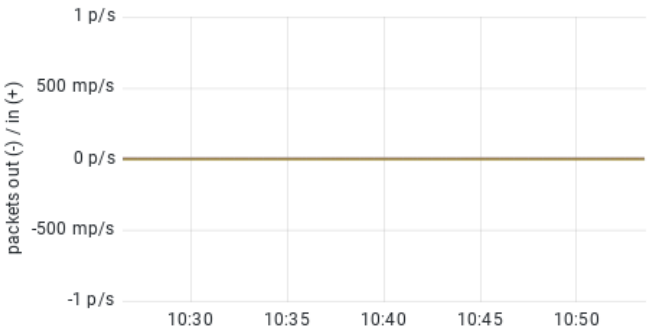


Network Traffic by Packets



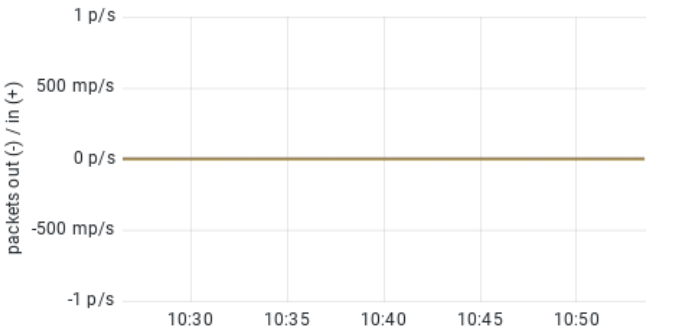
	min	max	avg	curr
br-65b29952514f - Receive	18.9 p/s	4.95 kp/s	3.10 kp/s	2.00
br-8a581892986d - Receive	6.76 p/s	392 p/s	134 p/s	7.29
docker0 - Receive	0 p/s	0 p/s	0 p/s	0
ens4 - Receive	4.07 p/s	18.1 p/s	4.71 p/s	4.16

Network Traffic Errors



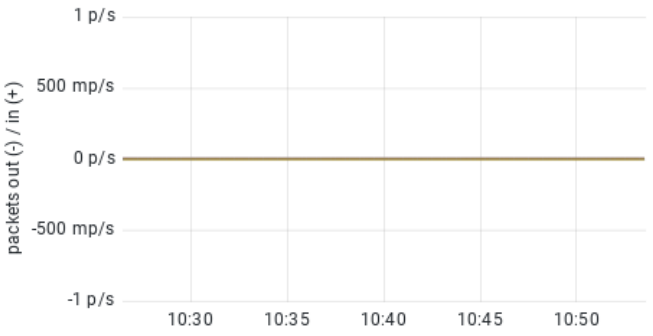
	min	max	avg	current
vethf053c53 - Rransmit errors	0 p/s	0 p/s	0 p/s	0 p/s
vethee1c2ed - Rransmit errors	0 p/s	0 p/s	0 p/s	0 p/s
vethe542248 - Rransmit errors	0 p/s	0 p/s	0 p/s	0 p/s
vethe186e3e - Rransmit errors	0 p/s	0 p/s	0 p/s	0 p/s

Network Traffic Drop



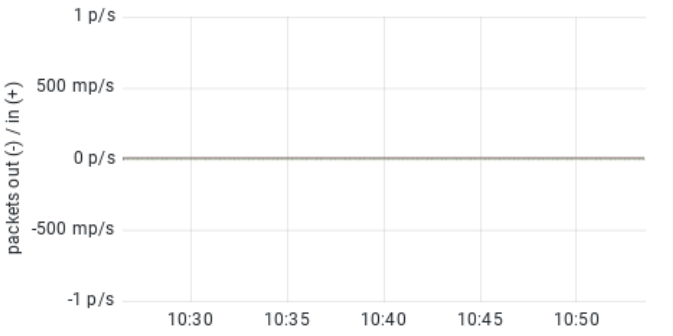
	min	max	avg	current
vethf053c53 - Transmit drop	0 p/s	0 p/s	0 p/s	0 p/s
vethee1c2ed - Transmit drop	0 p/s	0 p/s	0 p/s	0 p/s
vethe542248 - Transmit drop	0 p/s	0 p/s	0 p/s	0 p/s
vethe186e3e - Transmit drop	0 p/s	0 p/s	0 p/s	0 p/s

Network Traffic Compressed



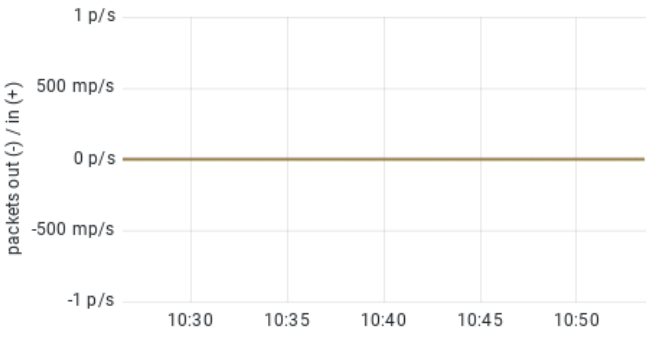
	min	max	avg	current
vethf053c53 - Transmit compressed	0 p/s	0 p/s	0 p/s	0 p/s
vethee1c2ed - Transmit compressed	0 p/s	0 p/s	0 p/s	0 p/s
vethe542248 - Transmit compressed	0 p/s	0 p/s	0 p/s	0 p/s
vethe186e3e - Transmit compressed	0 p/s	0 p/s	0 p/s	0 p/s

Network Traffic Multicast



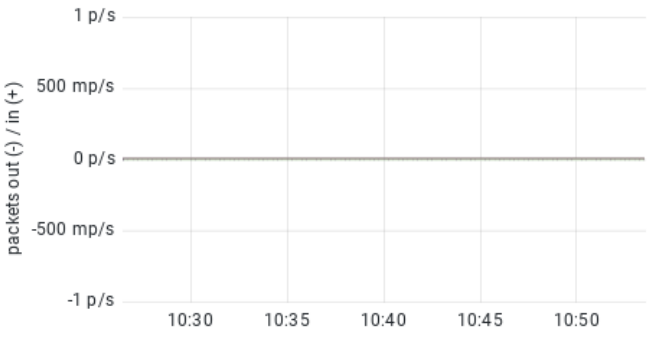
	min	max	avg	current
vethf053c53 - Receive multicast	0 p/s	0 p/s	0 p/s	0 p/s
vethee1c2ed - Receive multicast	0 p/s	0 p/s	0 p/s	0 p/s
vethe542248 - Receive multicast	0 p/s	0 p/s	0 p/s	0 p/s
vethe186e3e - Receive multicast	0 p/s	0 p/s	0 p/s	0 p/s

Network Traffic Fifo



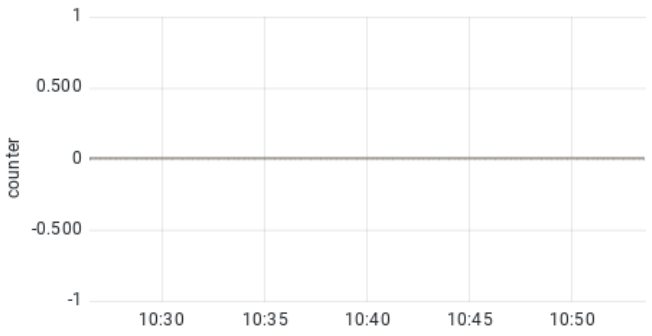
	min	max	avg	current
vethf053c53 - Transmit fifo	0 p/s	0 p/s	0 p/s	0 p/s
vethee1c2ed - Transmit fifo	0 p/s	0 p/s	0 p/s	0 p/s
vethe542248 - Transmit fifo	0 p/s	0 p/s	0 p/s	0 p/s
vethe186e3e - Transmit fifo	0 p/s	0 p/s	0 p/s	0 p/s

Network Traffic Frame



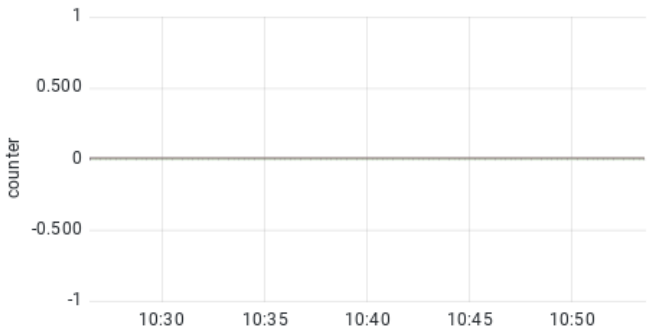
	min	max	avg	current
vethf053c53 - Receive frame	0 p/s	0 p/s	0 p/s	0 p/s
vethee1c2ed - Receive frame	0 p/s	0 p/s	0 p/s	0 p/s
vethe542248 - Receive frame	0 p/s	0 p/s	0 p/s	0 p/s
vethe186e3e - Receive frame	0 p/s	0 p/s	0 p/s	0 p/s

Network Traffic Carrier



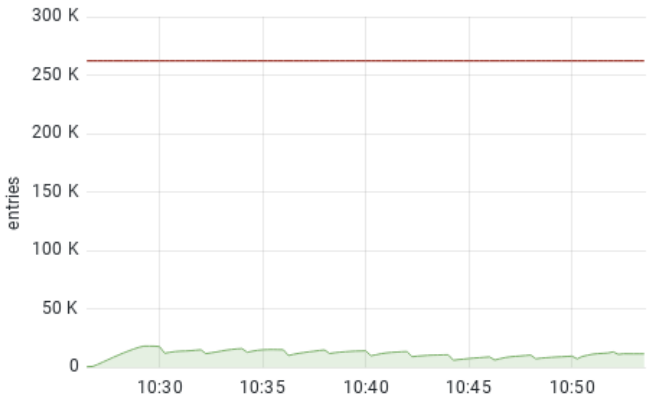
	min	max	avg	current
vethf053c53 - Statistic transmit_carrier	0	0	0	0
vethee1c2ed - Statistic transmit_carrier	0	0	0	0
vethe542248 - Statistic transmit_carrier	0	0	0	0
vethe186e3e - Statistic transmit_carrier	0	0	0	0

Network Traffic Colls



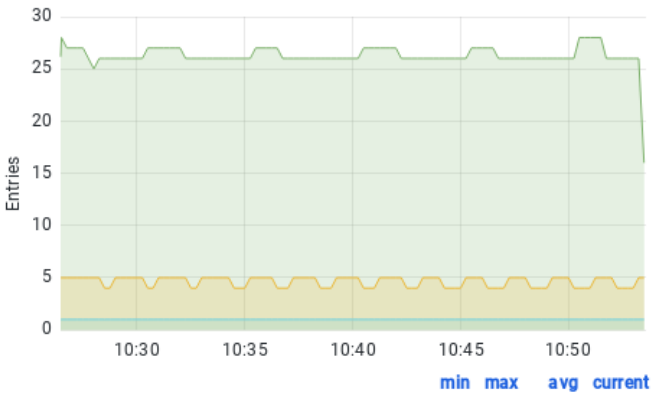
	min	max	avg	current
vethf053c53 - Transmit colls	0	0	0	0
vethee1c2ed - Transmit colls	0	0	0	0
vethe542248 - Transmit colls	0	0	0	0
vethe186e3e - Transmit colls	0	0	0	0

NF Contrack



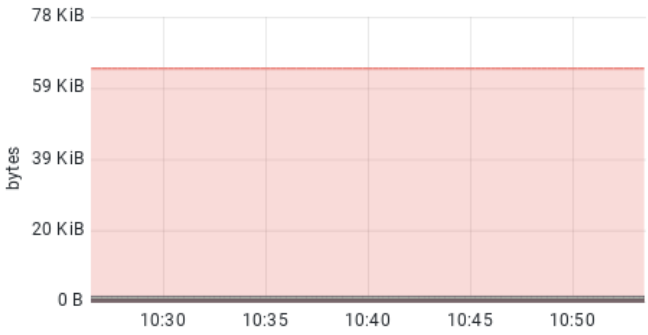
	min	max	avg	current
NF conntrack entries	350	18.2 K	11.4 K	11.6 K
NF conntrack limit	262 K	262 K	262 K	262 K

ARP Entries



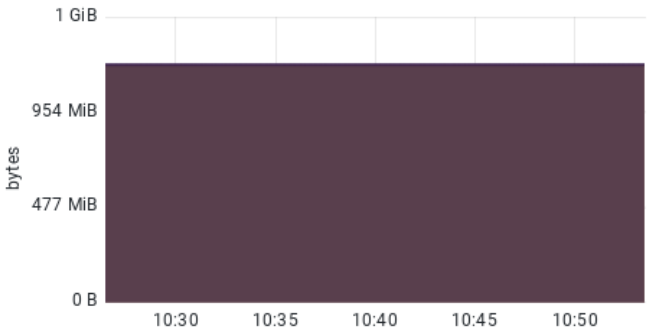
	min	max	avg	current
br-65b29952514f - ARP entries	16	28	26.2	16
br-8a581892986d - ARP entries	4	5	4.63	5
ens4 - ARP entries	1	1	1	1

MTU



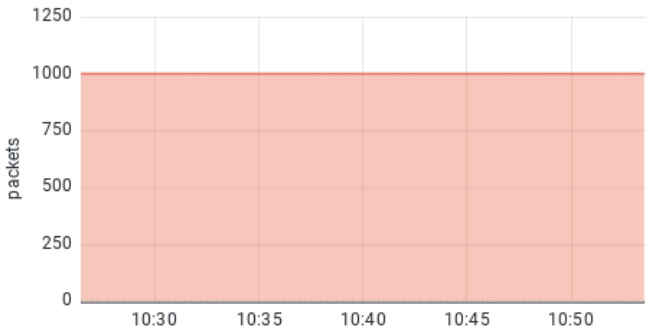
	min	max	avg	current
br-65b29952514f - Bytes	1.5 KiB	1.5 KiB	1.5 KiB	1.5 KiB
br-8a581892986d - Bytes	1.5 KiB	1.5 KiB	1.5 KiB	1.5 KiB
docker0 - Bytes	1.5 KiB	1.5 KiB	1.5 KiB	1.5 KiB
ens4 - Bytes	1.4 KiB	1.4 KiB	1.4 KiB	1.4 KiB

Speed



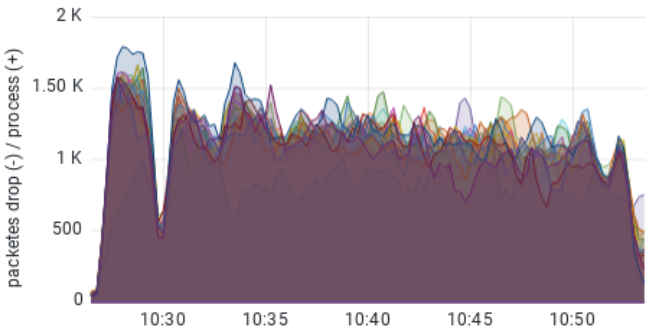
	min	max	avg	current
br-65b29952514f - Speed	1.2 GiB	1.2 GiB	1.2 GiB	1.2 Gi
br-8a581892986d - Speed	1.2 GiB	1.2 GiB	1.2 GiB	1.2 Gi
docker0 - Speed	-122.1 KiB	-122.1 KiB	-122.1 KiB	-122.1 Ki
ens4 - Speed	-122.1 KiB	-122.1 KiB	-122.1 KiB	-122.1 Ki

Queue Length



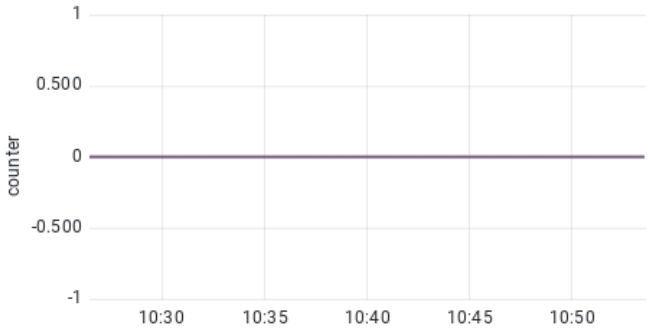
	min	max	a
br-65b29952514f - Interface transmit queue length	0.0	0.0	
br-8a581892986d - Interface transmit queue length	0.0	0.0	
docker0 - Interface transmit queue length	0.0	0.0	
ens4 - Interface transmit queue length	1000.0	1000.0	100

Softnet Packets



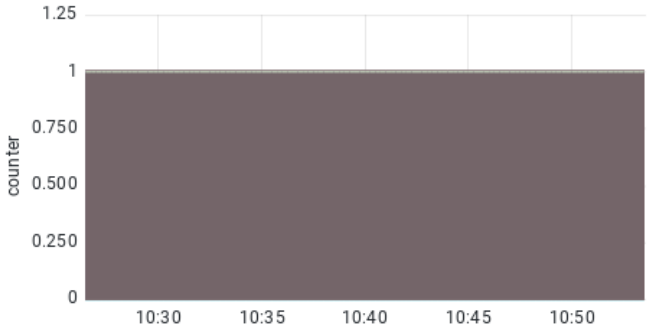
	min	max	avg	current
CPU 15 - Processed	16.0	1.43 K	848	752
CPU 5 - Processed	23.0	1.50 K	1.07 K	493
CPU 1 - Processed	15.1	1.58 K	1.06 K	492
CPU 0 - Processed	19.3	1.61 K	1.09 K	484

Softnet Out of Quota



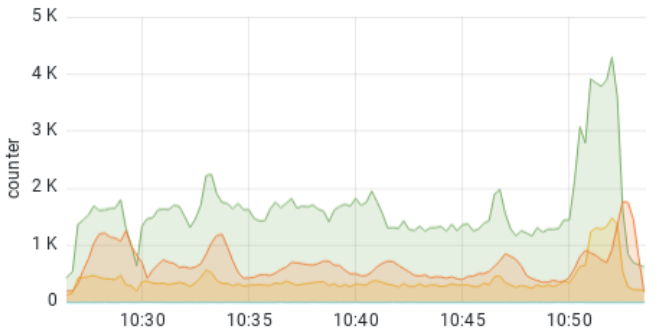
	min	max	avg	current
CPU 9 - Squeezed	0	0	0	0
CPU 8 - Squeezed	0	0	0	0
CPU 7 - Squeezed	0	0	0	0
CPU 6 - Squeezed	0	0	0	0

Network Operational Status



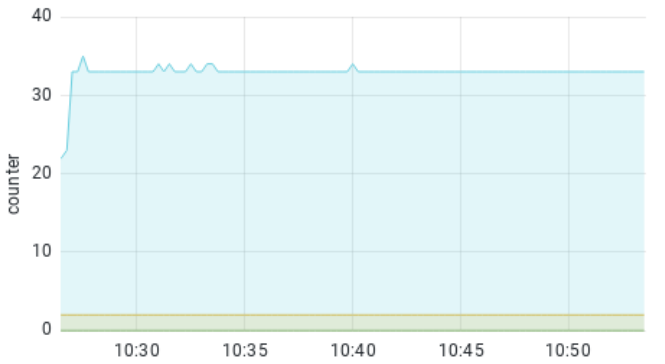
	min	max	avg	current
vethf053c53 - Physical link state	1	1	1	1
vethee1c2ed - Physical link state	1	1	1	1
vethe542248 - Physical link state	1	1	1	1
vethe186e3e - Physical link state	1	1	1	1

Sockstat TCP



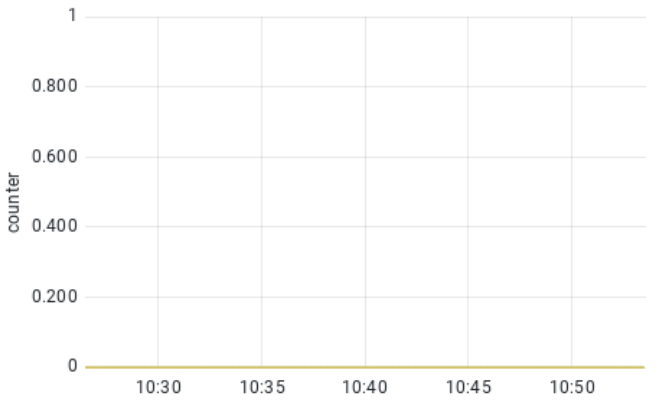
	min	max	avg	current
TCP_alloc - Allocated sockets	282	4.30 K	1.62 K	624
TCP_inuse - Tcp sockets currently in use	87	1.48 K	391	210
TCP_orphan - Orphan sockets	0	4	0.409	0
TCP_tw - Sockets wating close	143	1.77 K	671	179

Sockstat UDP



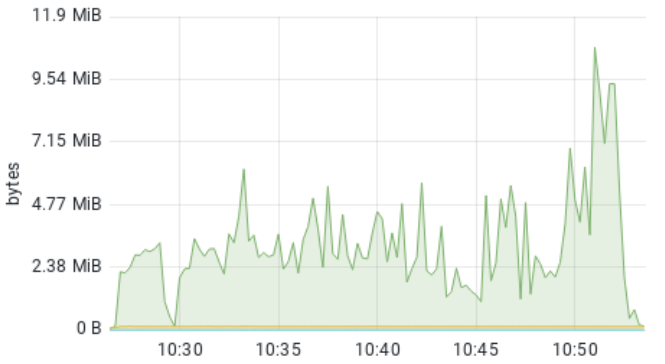
	min	max	avg	current
UDPLITE_inuse - Udplite sockets currently in use	0	0	0	0
UDP_inuse - Udp sockets currently in use	2	2	2	2
UDP_mem - Used memory for udp	22	35	32.8	33

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

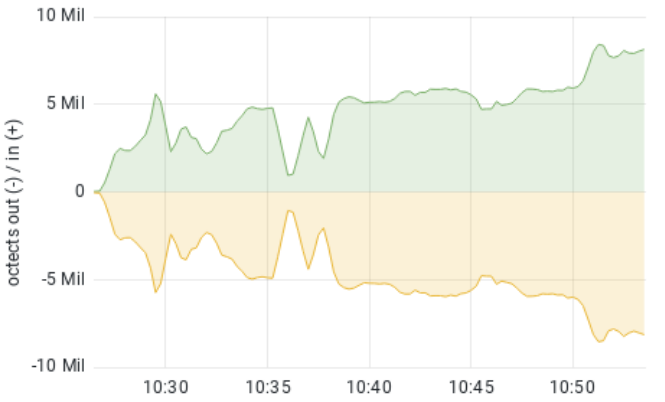


	min	max	avg	curr
mem_bytes - TCP sockets in that state	40 KiB	10.8 MiB	3.16 MiB	144
mem_bytes - UDP sockets in that state	88 KiB	140 KiB	131 KiB	132
FRAG_memory - Used memory for frag	0 B	0 B	0 B	

Sockstat Used

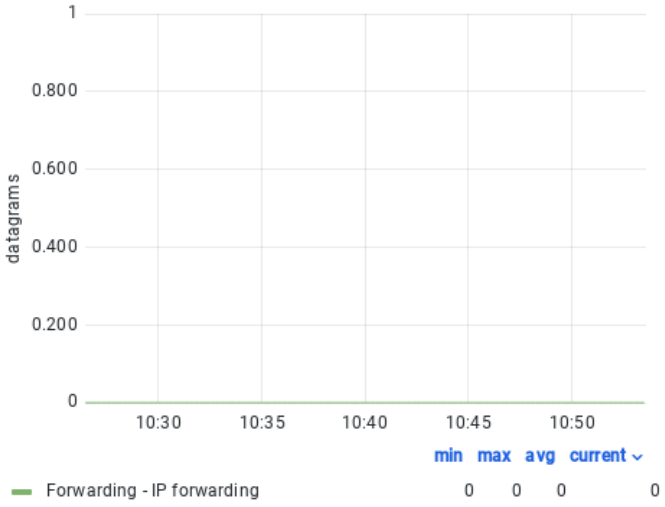
	min	max	avg	current
Sockets_used - Sockets currently in use	498	1.90 K	810	629

Netstat IP In / Out Octets



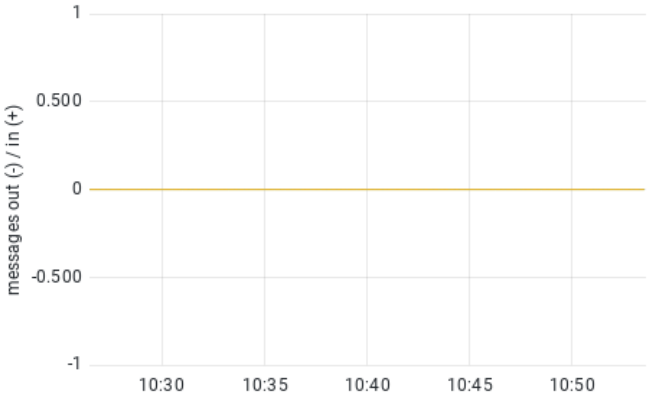
	min	max	avg	current
OutOctets - Sent octets	9.30 K	8.54 Mil	4.77 Mil	8.13 Mil
InOctets - Received octets	7.94 K	8.41 Mil	4.66 Mil	8.13 Mil

Netstat IP Forwarding



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

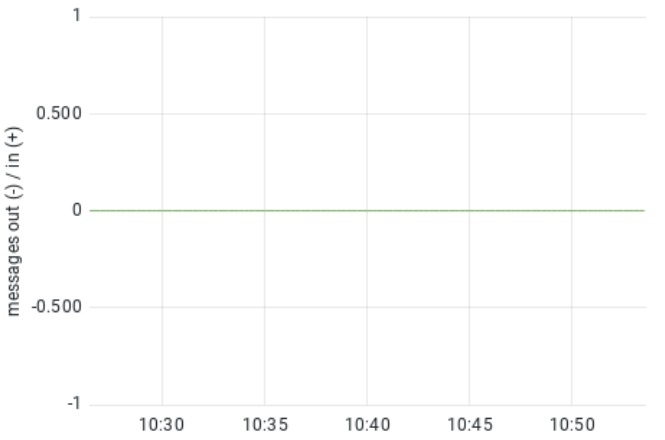
ICMP In / Out



OutMsgs - Messages which this entity attempted to send. Note that this counte

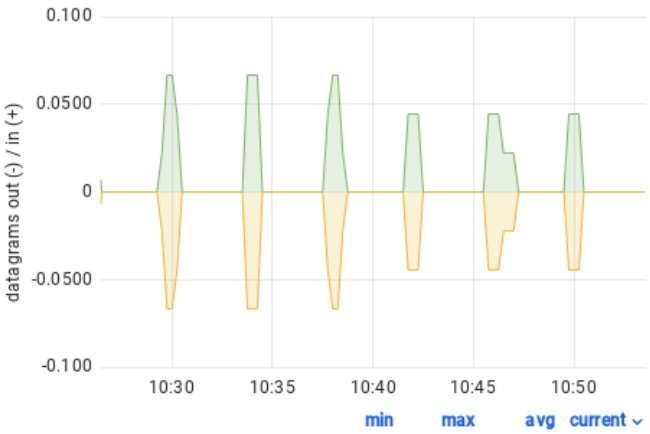
InMsgs - Messages which the entity received. Note that this counter includes al

ICMP Errors



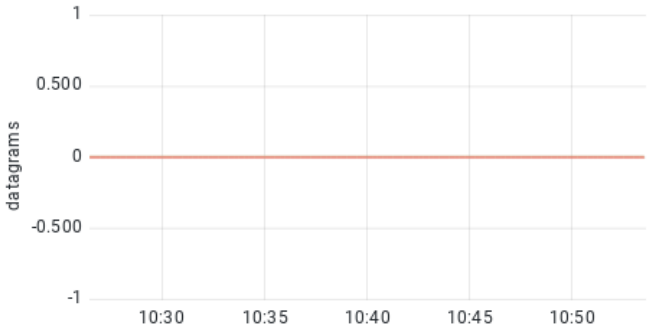
InErrors - Messages which the entity received but determined as having ICMP-s

UDP In / Out



	min	max	avg	current
OutDatagrams - Datagrams sent	0	0.0667	0.0101	0
InDatagrams - Datagrams received	0	0.0667	0.0101	0

UDP Errors



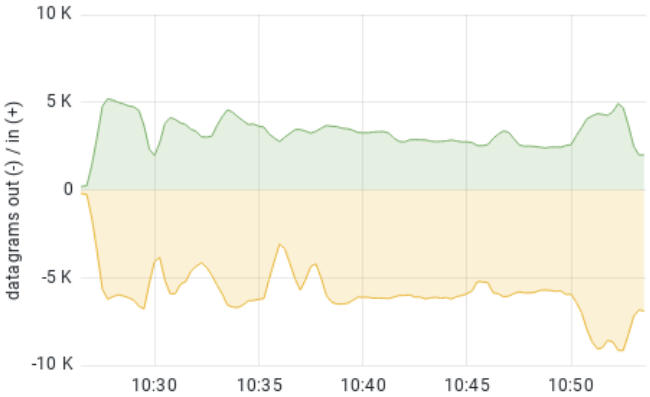
SndbufErrors - UDP buffer errors send

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

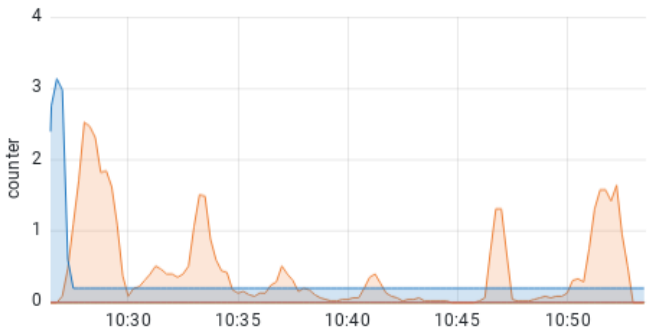
TCP In / Out



OutSegs - Segments sent, including those on current connections but excluding

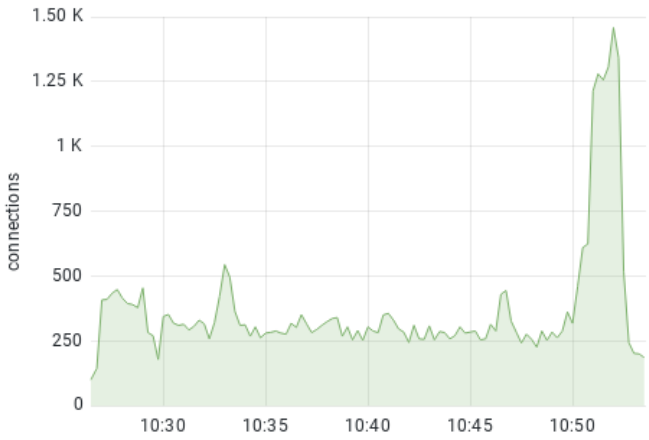
InSegs - Segments received, including those received in error. This count includ

TCP Errors



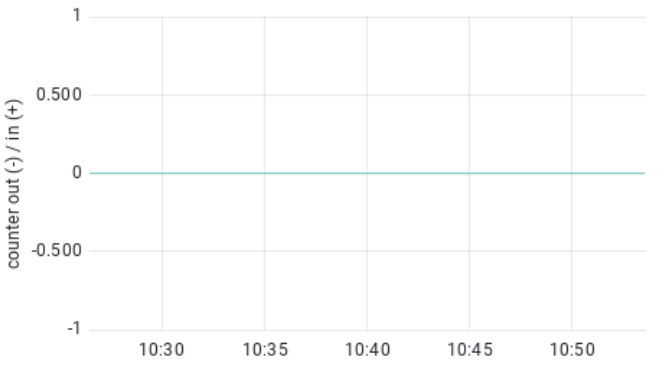
- OutRsts - Segments sent with RST flag
- InErrs - Segments received in error (e.g., bad TCP checksums)
- RetransSegs - Segments retransmitted - that is, the number of TCP segments tr
- TCPSynRetrans - SYN-SYN/ACK retransmits to break down retransmissions in

TCP Connections



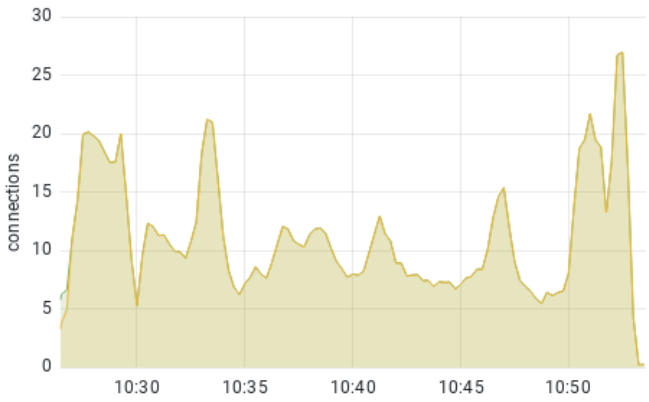
- CurrEstab - TCP connections for which the current state is either ESTABLISHED

TCP SynCookie



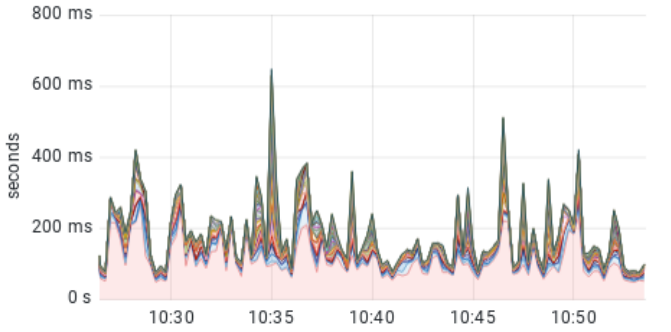
	min	max	avg	current
SyncookiesSent - SYN cookies sent	0	0	0	0
SyncookiesRecv - SYN cookies received	0	0	0	0
SyncookiesFailed - Invalid SYN cookies received	0	0	0	0

TCP Direct Transition



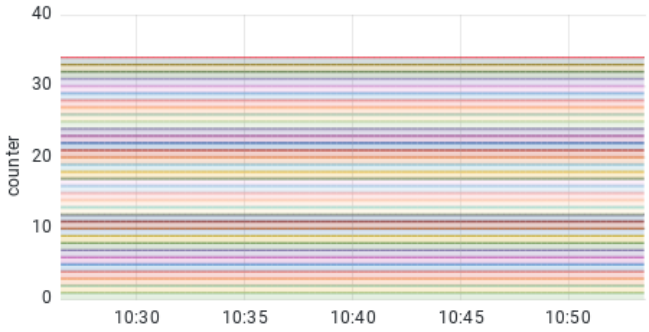
- ActiveOpens - TCP connections that have made a direct transition to the SYN-S
- PassiveOpens - TCP connections that have made a direct transition to the SYN

Node Exporter Scrape Time



	min	max	avg	current
netclass - Scrape duration	50.2 ms	269 ms	113 ms	53.0
netdev - Scrape duration	1.41 ms	60.9 ms	9.28 ms	6.55
cpu - Scrape duration	1.42 ms	45.0 ms	7.37 ms	4.94
diskstats - Scrape duration	1.00 ms	39.2 ms	4.72 ms	4.46

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