

REPORT 1562981458710

- [REPORT 1562981458710](#)
 - [1. 测试硬件](#)
 - [2. 服务器架构 & 拓扑](#)
 - [2.1 架构图](#)
 - [2.2 部署拓扑图](#)
 - [3. 测试变量](#)
 - [4. 压测客户端报表](#)
 - [5. 分析 & 结论](#)
 - [5.1 分析](#)
 - [5.2 结论](#)
 - [6. Elasticsearch数据](#)
 - [6.1 All Web requests](#)
 - [6.2 All Consumer requests](#)
 - [6.3 GetWork](#)
 - [6.4 UpdateViewed](#)
 - [6.5 GetAchievement](#)
 - [6.6 PlanWork](#)
 - [7. Jaeger数据](#)
 - [7.1 GetWork](#)
 - [7.2 UpdateViewed](#)

- [7.3 GetAchievement](#)
- [7.4 PlanWork](#)
- [7.5 Consumer](#)

- [8. Go App Profiling](#)

- [8.1 Web](#)
 - [Memory HEAP](#)
 - [CPU](#)
- [8.2 Service](#)
 - [Memory HEAP](#)
 - [CPU](#)
- [8.3 Consumer](#)
 - [Memory HEAP](#)
 - [CPU](#)

- [9. 监控指标](#)

- [Host: client](#)
 - [Service: node_client](#)
 - [Service: cadvisor_client](#)
- [Host: storage](#)
 - [Service: node_storage](#)
 - [Service: cadvisor_storage](#)
 - [Service: mysqld](#)
 - [Service: memcached_1](#)
 - [Service: memcached_2](#)

- [Service: memcached_3](#)
- [Host: kafka1](#)
 - [Service: node_kafka_1](#)
 - [Service: cAdvisor_kafka_1](#)
 - [Service: kafka_1](#)
 - [Service: kafka_2](#)
- [Host: kafka2](#)
 - [Service: node_kafka_2](#)
 - [Service: cAdvisor_kafka_2](#)
 - [Service: kafka_3](#)
 - [Service: kafka_4](#)
 - [Service: kafka_exporter](#)
- [Host: es1](#)
 - [Service: node_es_1](#)
 - [Service: cAdvisor_es_1](#)
 - [Service: es_1](#)
 - [Service: es_2](#)
- [Host: es2](#)
 - [Service: node_es_2](#)
 - [Service: cAdvisor_es_2](#)
 - [Service: es_3](#)
 - [Service: es_4](#)
- [Host: monitor](#)
 - [Service: node_monitor](#)

- [Service: cadvisor monitor](#)
- [Service: jcollector 1](#)
- [Service: jcollector 2](#)
- [Service: prometheus](#)
- [Host: service](#)
 - [Service: node service](#)
 - [Service: cadvisor service](#)
 - [Service: jagent service](#)
 - [Service: app service](#)
 - [Service: app consumer](#)
 - [Service: filebeat service](#)
- [Host: web](#)
 - [Service: node web](#)
 - [Service: cadvisor web](#)
 - [Service: jagent web](#)
 - [Service: app web](#)
 - [Service: filebeat web](#)

1. 测试硬件

```
1 | $ wget -qO- bench.sh | bash
2 |
3 | -----
4 | CPU model          : AMD EPYC 7601 32-Core Proc
5 | Number of cores    : 6
6 | CPU frequency      : 2199.996 MHz
7 | Total size of Disk : 315.0 GB (2.2 GB Used)
8 | Total amount of Mem : 16040 MB (120 MB Used)
9 | Total amount of Swap : 511 MB (0 MB Used)
10 | System uptime     : 0 days, 0 hour 2 min
11 | Load average       : 0.29, 0.22, 0.09
12 | OS                 : Ubuntu 18.04.2 LTS
13 | Arch               : x86\_64 (64 Bit)
14 | Kernel              : 4.15.0-50-generic
15 | -----
16 | I/O speed(1st run)   : 892 MB/s
17 | I/O speed(2nd run)   : 1.1 GB/s
18 | I/O speed(3rd run)   : 1.0 GB/s
19 | Average I/O speed    : 1014.1 MB/s
20 | -----
21 | Node Name           : IPv4 address
22 | CacheFly             : 205.234.175.175
23 | Linode, Tokyo, JP     : 106.187.96.148
24 | Linode, Singapore, SG  : 139.162.23.4
25 | Linode, London, UK      : 176.58.107.39
26 | Linode, Frankfurt, DE    : 139.162.130.8
27 | Linode, Fremont, CA      : 50.116.14.9
28 | Softlayer, Dallas, TX     : 173.192.68.18
29 | Softlayer, Seattle, WA     : 67.228.112.250
30 | Softlayer, Frankfurt, DE    : 159.122.69.4
31 | Softlayer, Singapore, SG  : 119.81.28.170
32 | Softlayer, HongKong, CN     : 119.81.130.170
33 | -----
34 | Node Name           : IPv6 address
35 | Linode, Atlanta, GA      : 2600:3c02::4b
```

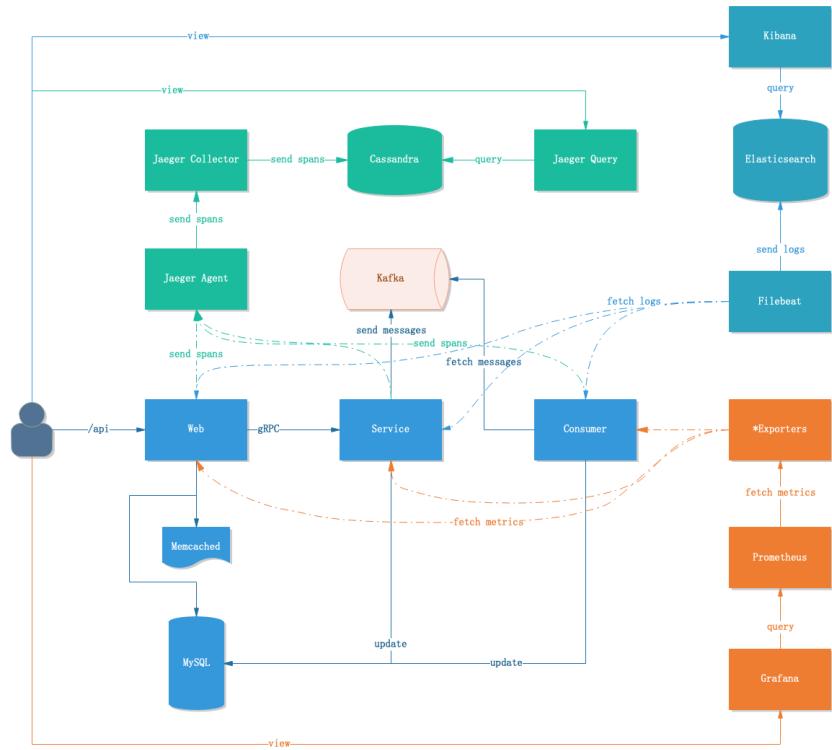
36	Linode, Dallas, TX	2600:3c00::4b
37	Linode, Newark, NJ	2600:3c03::4b
38	Linode, Singapore, SG	2400:8901::4b
39	Linode, Tokyo, JP	2400:8900::4b
40	Softlayer, San Jose, CA	2607:f0d0:2601:2a
41	...	
42	-----	

```
1 | $ (curl -s wget.racing/nench.sh | bash) 2>&1 | tee nench.log
2 |
3 | -----
4 | nench.sh v2019.06.29 -- https://git.io/nench.sh
5 | benchmark timestamp: 2019-07-12 05:48:17 UTC
6 |
7 |
8 | Processor: AMD EPYC 7601 32-Core Processor
9 | CPU cores: 6
10 | Frequency: 2199.996 MHz
11 | RAM: 15G
12 | Swap: 511M
13 | Kernel: Linux 4.15.0-50-generic x86\_64
14 |
15 | Disks:
16 | sda 319.5G HDD
17 | sdb 512M HDD
18 |
19 | CPU: SHA256-hashing 500 MB
20 | 2.962 seconds
21 | CPU: bzip2-compressing 500 MB
22 | 6.310 seconds
23 | CPU: AES-encrypting 500 MB
24 | 1.362 seconds
25 |
26 | ioping: seek rate
27 | min/avg/max/mdev = 62.2 us / 112.5 us / 2.94 ms /
28 | ioping: sequential read speed
29 | generated 16.5 k requests in 5.00 s, 4.03 GiB, 3.
30 |
31 | dd: sequential write speed
32 | 1st run: 855.45 MiB/s
33 | 2nd run: 1049.04 MiB/s
34 | 3rd run: 1049.04 MiB/s
35 | average: 984.51 MiB/s
```

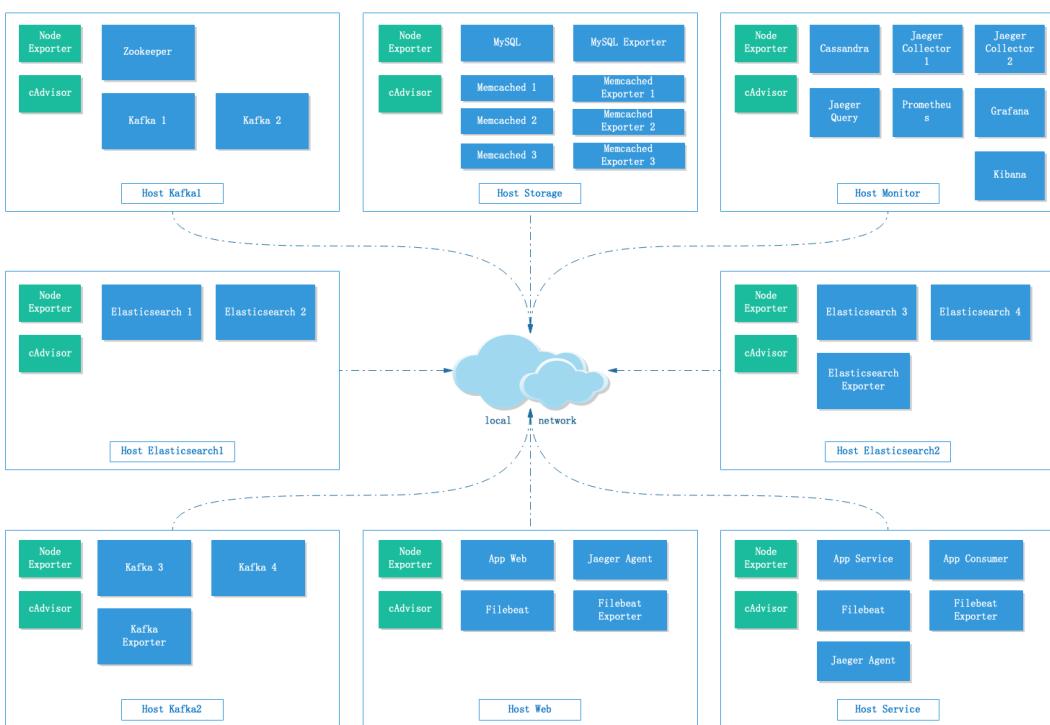
```
36
37 IPv4 speedtests
38 your IPv4:      173.255.252.xxxx
39
40 Cachefly CDN:          175.13 MiB/s
41 Leaseweb (NL):        13.85 MiB/s
42 Softlayer DAL (US):   38.74 MiB/s
43 Online.net (FR):      11.06 MiB/s
44 OVH BHS (CA):         16.75 MiB/s
45
46 IPv6 speedtests
47 your IPv6:      2600:3c01::xxxx
48
49 Leaseweb (NL):        7.77 MiB/s
50 Softlayer DAL (US):   0.00 MiB/s
51 Online.net (FR):      8.44 MiB/s
52 OVH BHS (CA):         17.60 MiB/s
53 -----
```

2. 服务器架构 & 拓扑

2.1 架构图



2.2 部署拓扑图



3. 测试变量

- 客户端连接数: 10000
- 客户端请求速率: 1000/s
- 数据库表量级: 5000000
- 数据库连接: 1000
- Kafka Topic的分片数量: 20
- 各服务的JVM设置:
 - Kafka: KAFKA_HEAP_OPTS="-Xms6G -Xmx6G"
 - Elasticsearch: ES_JAVA_OPTS="-Xms6G -Xmx6G"
 - Cassandra:
 - JAVA_OPTS="-Dfile.encoding=UTF-8 -Xms9G -Xmx9G"
 - MAX_HEAP_SIZE=8G
 - HEAP_NEWSIZE=600M
- 消费者计算因子: 1

4. 压测客户端报表

1	Requests	[total, rate]	1800000, 1
2	Duration	[total, attack, wait]	30m0.92426
3	Latencies	[mean, 50, 95, 99, max]	35.297112n
4	Bytes In	[total, mean]	124943725,
5	Bytes Out	[total, mean]	0, 0.00
6	Success	[ratio]	100.00%
7	Status Codes	[code:count]	200:179999
8	Error Set:		
9	500 Internal Server Error		

小结：30分钟，180万请求，请求速率为1000/s，报错500一次，成功率基本上100%，95%的请求耗时在61ms以内。

5. 分析 & 结论

5.1 分析

本次测试是为了验证上次测试 `Consumer CPU消耗过大` 问题的优化结果。测试的改动仅只有一处，就是将配置中的 `消费者计算因子: 37` 改为了 `1`。这样 `Consumer` 的 CPU 消费基本上就没有了。

测试后，重新观察 [Service: node service](#)，CPU 确实下来了。此外，[Service: cadvisor service](#) 显示该物理主机 CPU 的消费主要是 `app_service`，`app_consumer` 的消费基本上很小了。

[7.5 Consumer](#) 显示，绝大部分的 Kafka 消息消费都在 10ms 以内。

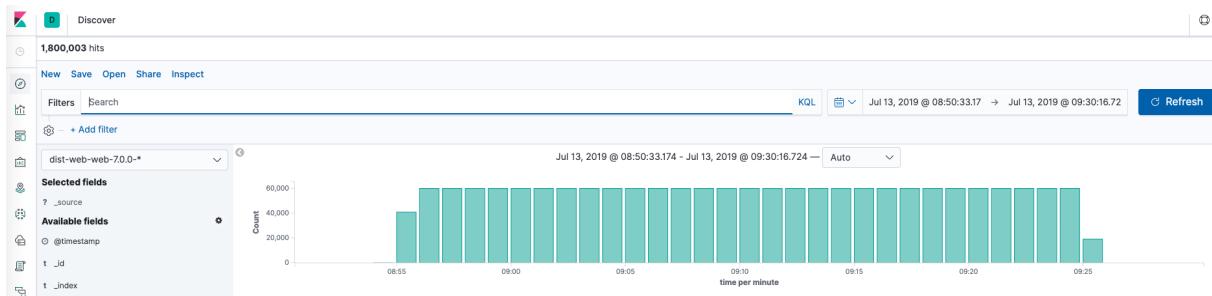
[Service: kafka exporter](#) 可以看到 Kafka 消息已经不存在堆积了，都能及时消费完成。

5.2 结论

容器 `app_consumer` 的 CPU 瓶颈问题顺利解决。

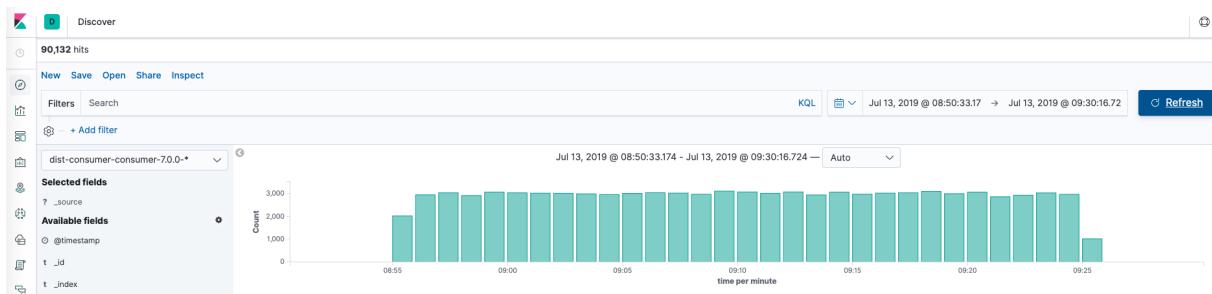
6. Elasticsearch 数据

6.1 All Web requests



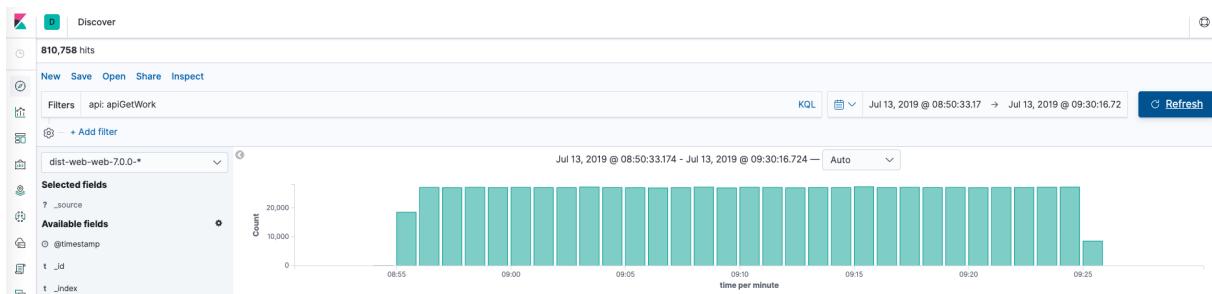
请求数量1800003符合压测客户端给出的数值；√

6.2 All Consumer requests



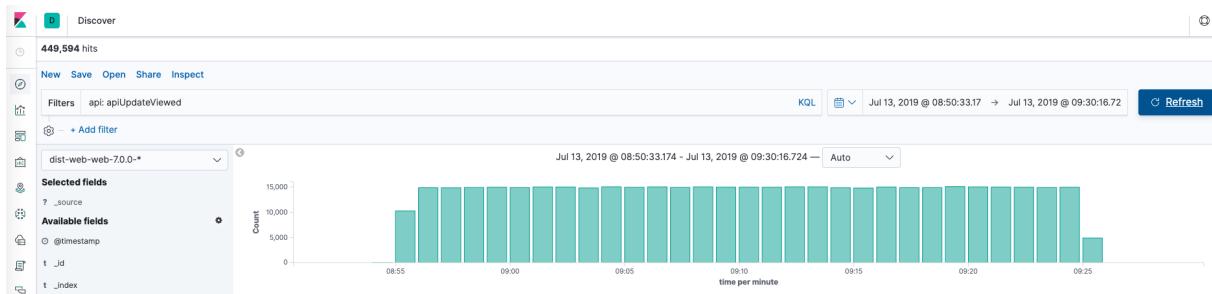
$$90132 / 1800003 = 5.00\%; \quad \checkmark$$

6.3 GetWork



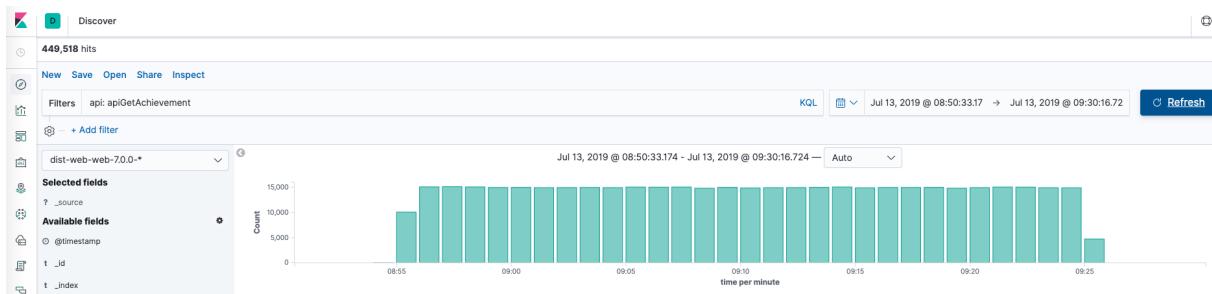
$$810758 / 1800003 = 45.04\%; \quad \checkmark$$

6.4 UpdateViewed



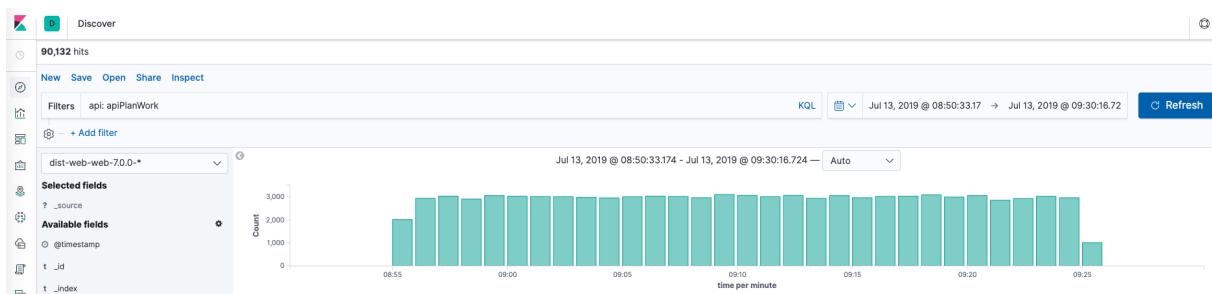
$$449594 / 1800003 = 24.97\%; \checkmark$$

6.5 GetAchievement



$$449518 / 1800003 = 24.97\%; \checkmark$$

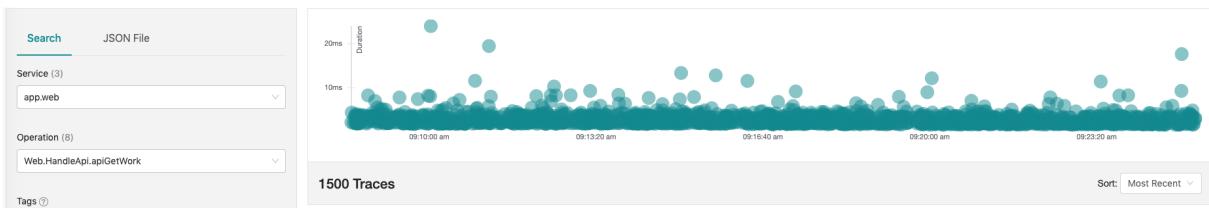
6.6 PlanWork



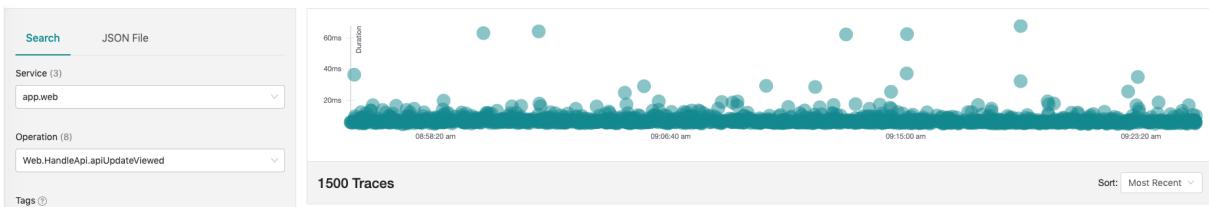
请求数量90132与Consumer消费计数匹配; \checkmark

7. Jaeger数据

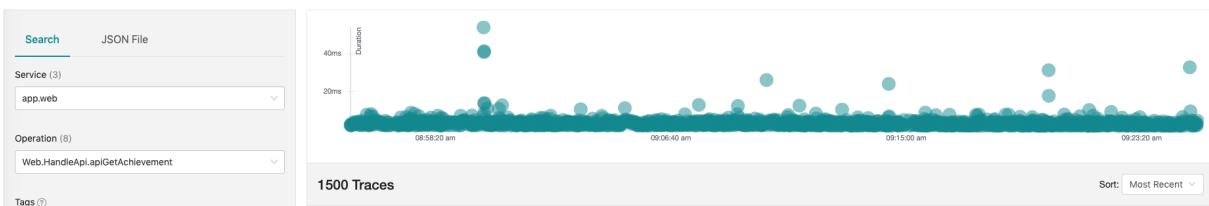
7.1 GetWork



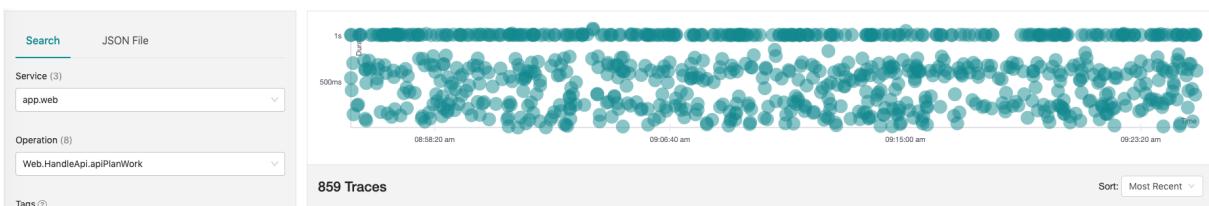
7.2 UpdateViewed



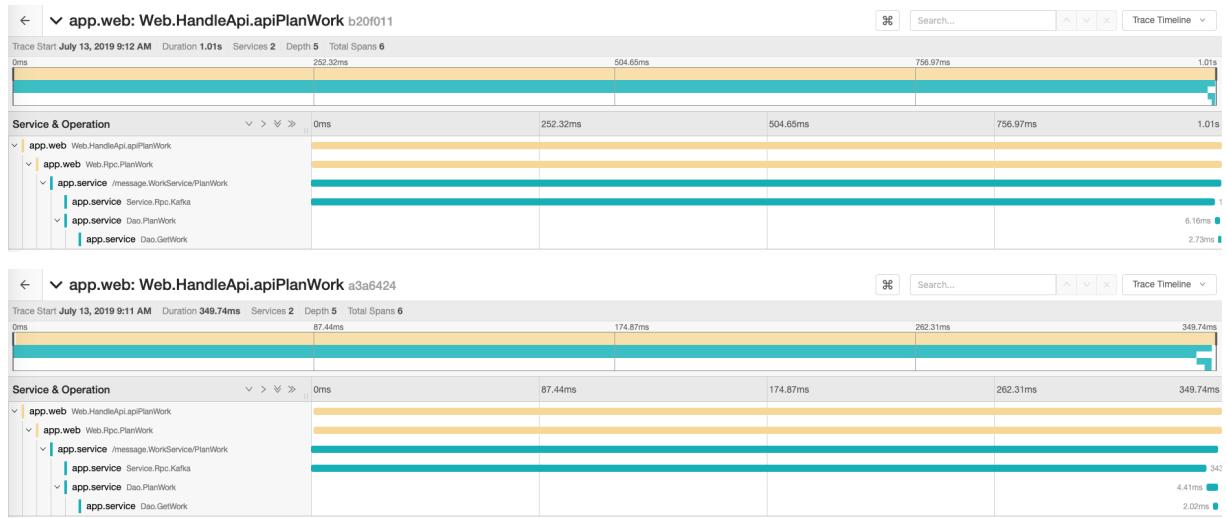
7.3 GetAchievement



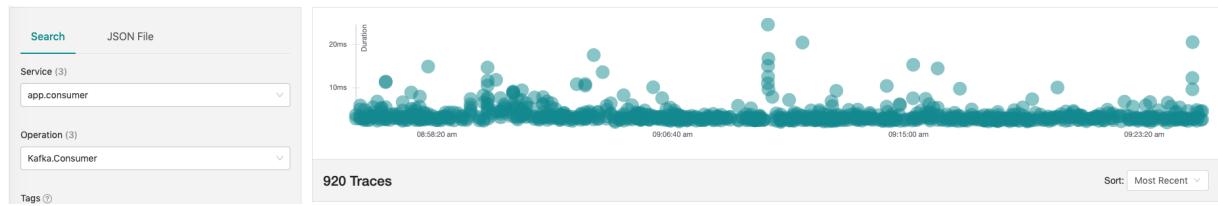
7.4 PlanWork



这里找了两个范例来展示下内部耗时，其中一个最大值，另一个则是中位数：



7.5 Consumer



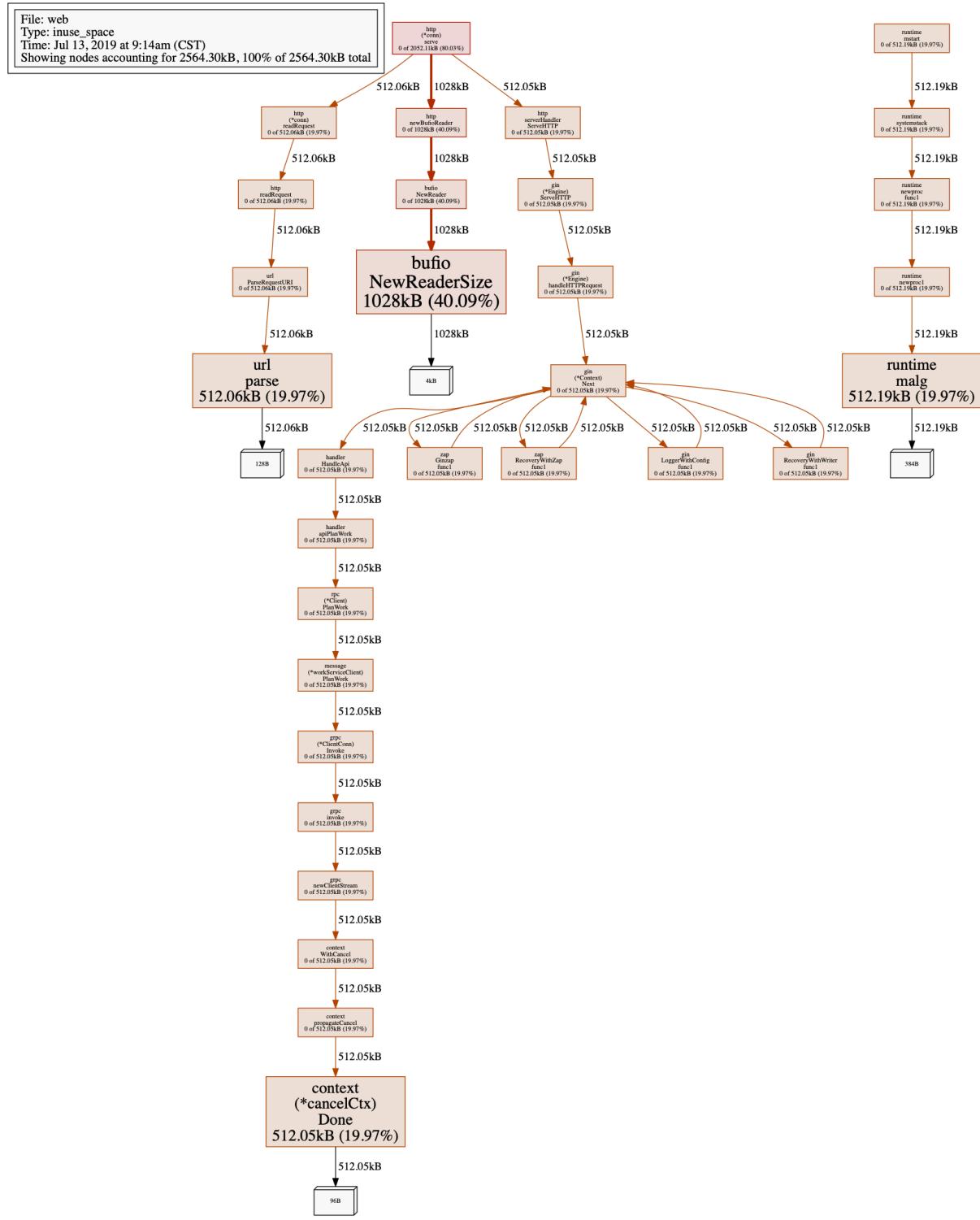
同样找了范例来展示内部耗时：



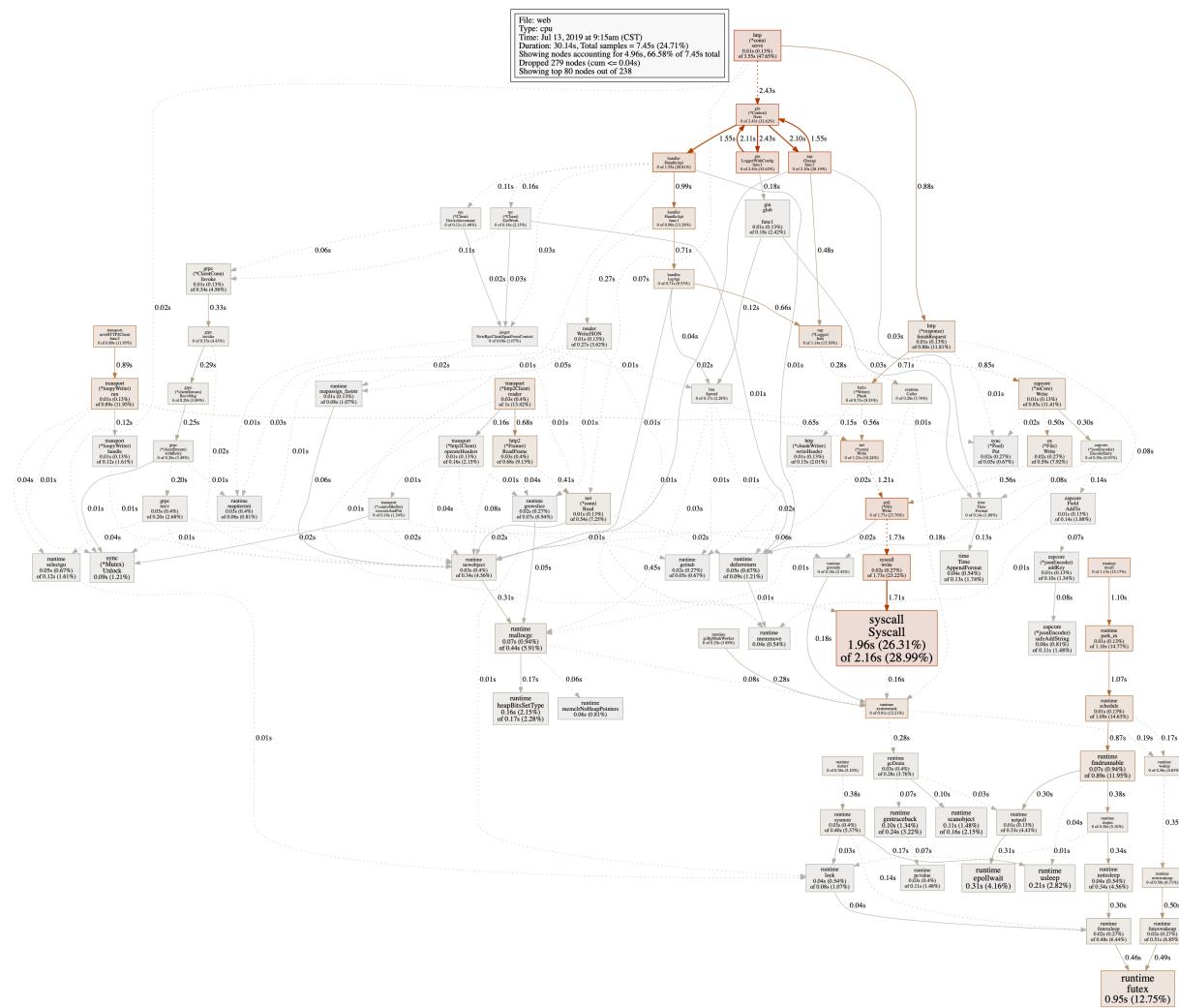
8. Go App Profiling

8.1 Web

Memory HEAP

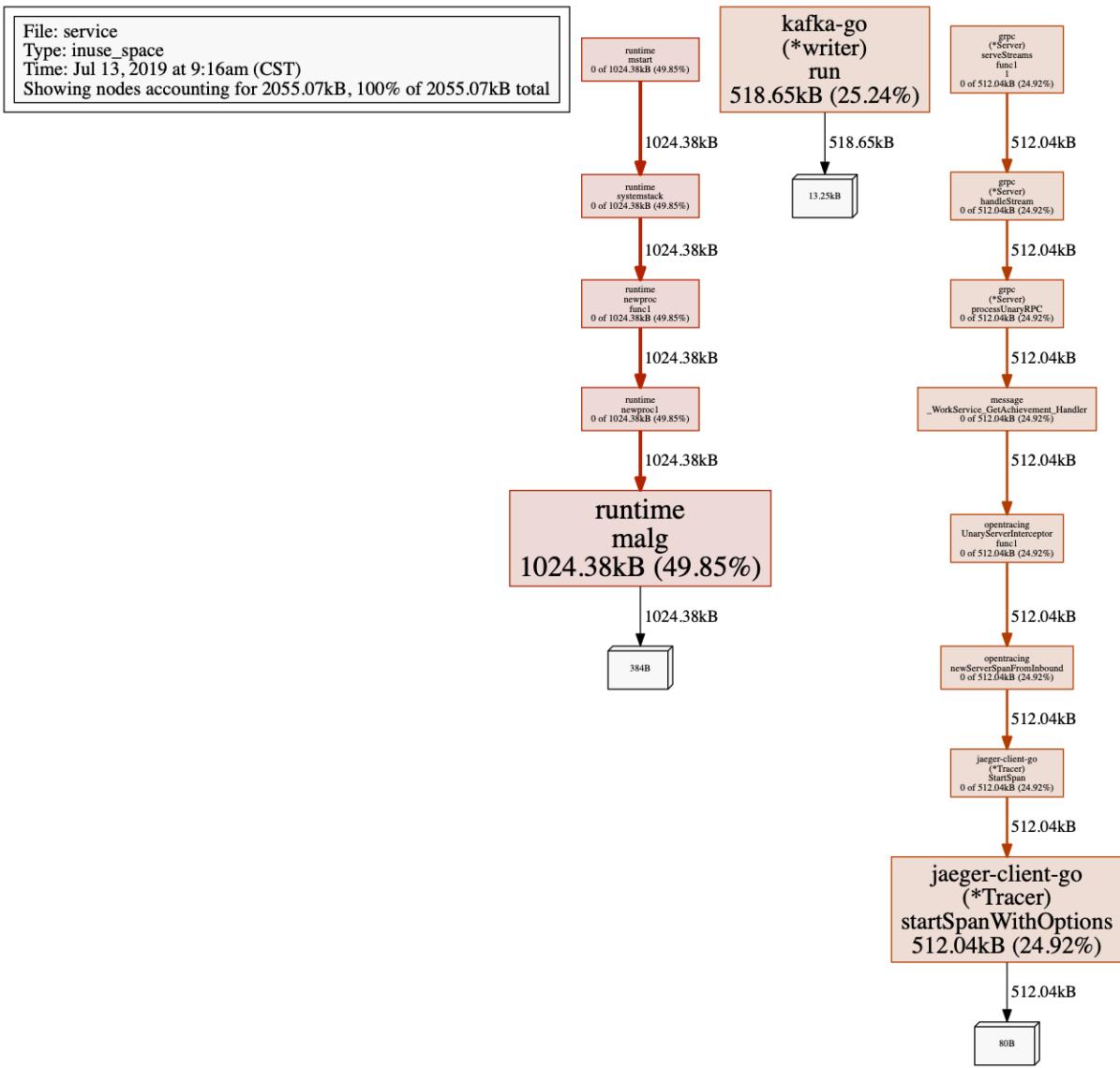


CPU

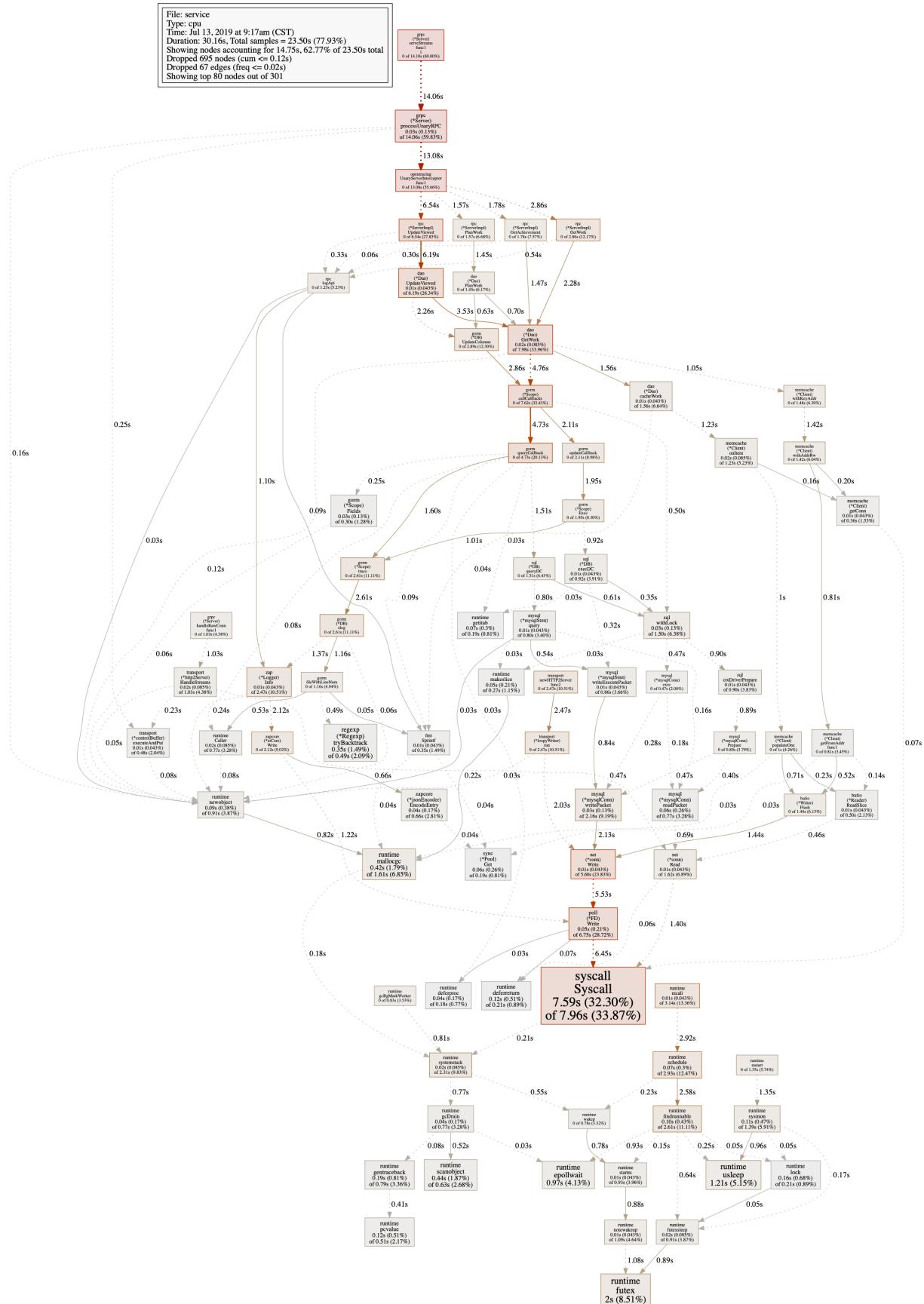


8.2 Service

Memory HEAP



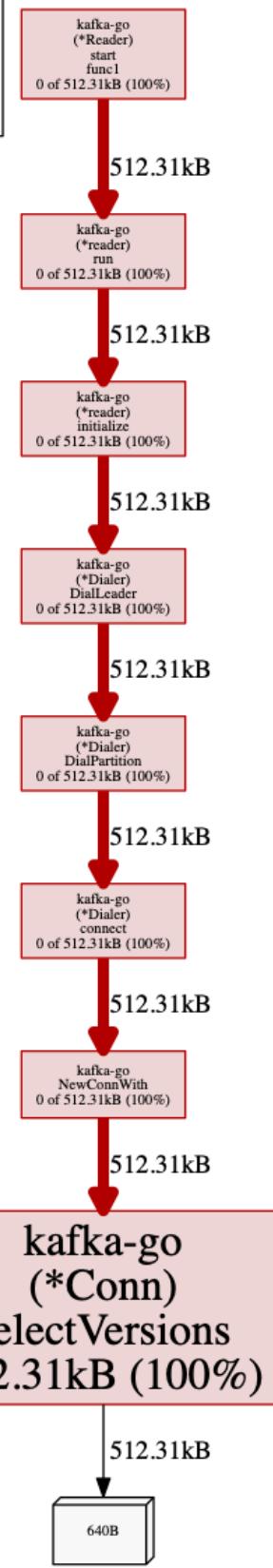
CPU



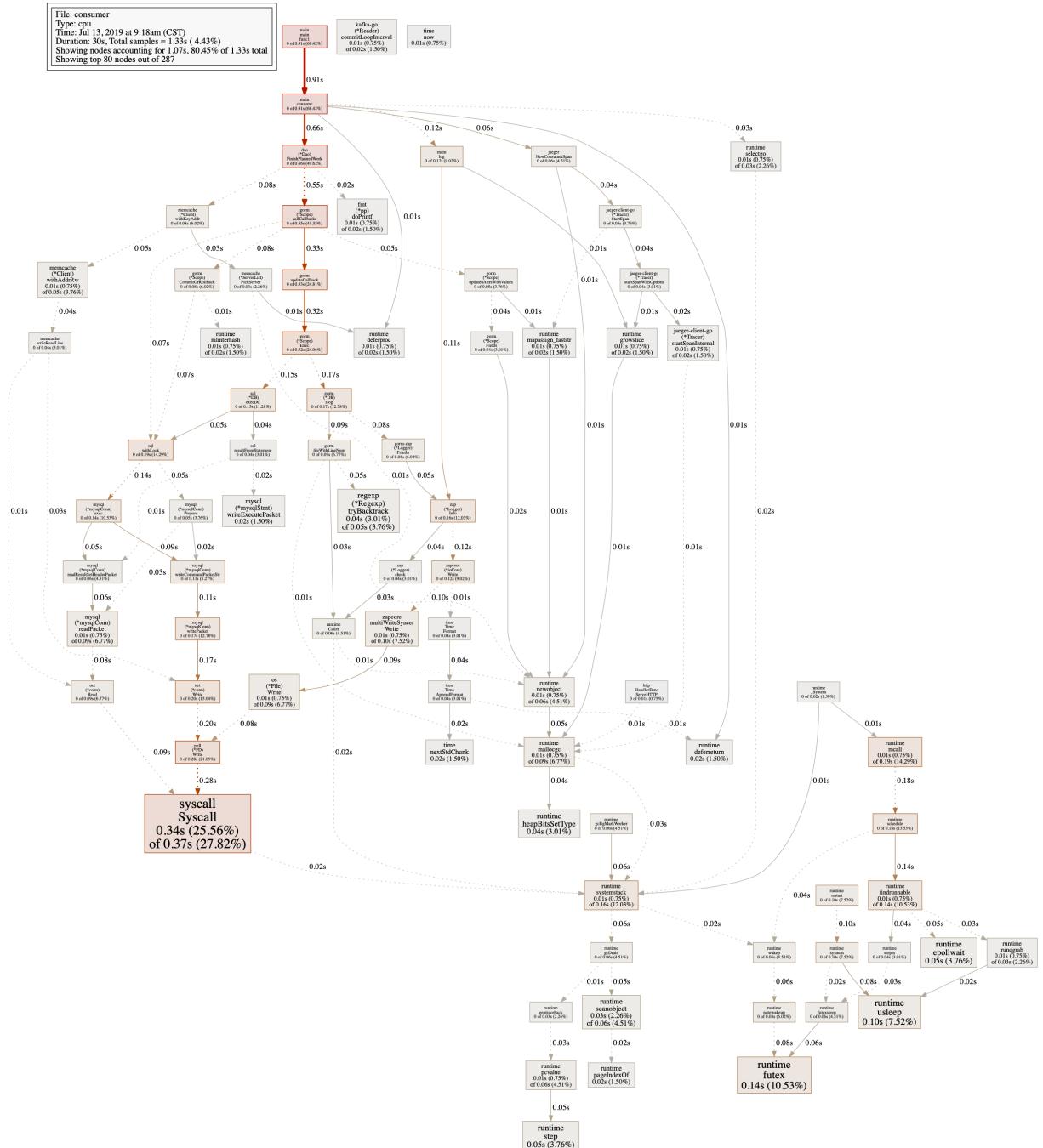
8.3 Consumer

Memory HEAP

File: consumer
Type: inuse_space
Time: Jul 13, 2019 at 9:19am (CST)
Showing nodes accounting for 512.31kB, 100% of 512.31kB total



CPU



9. 监控指标

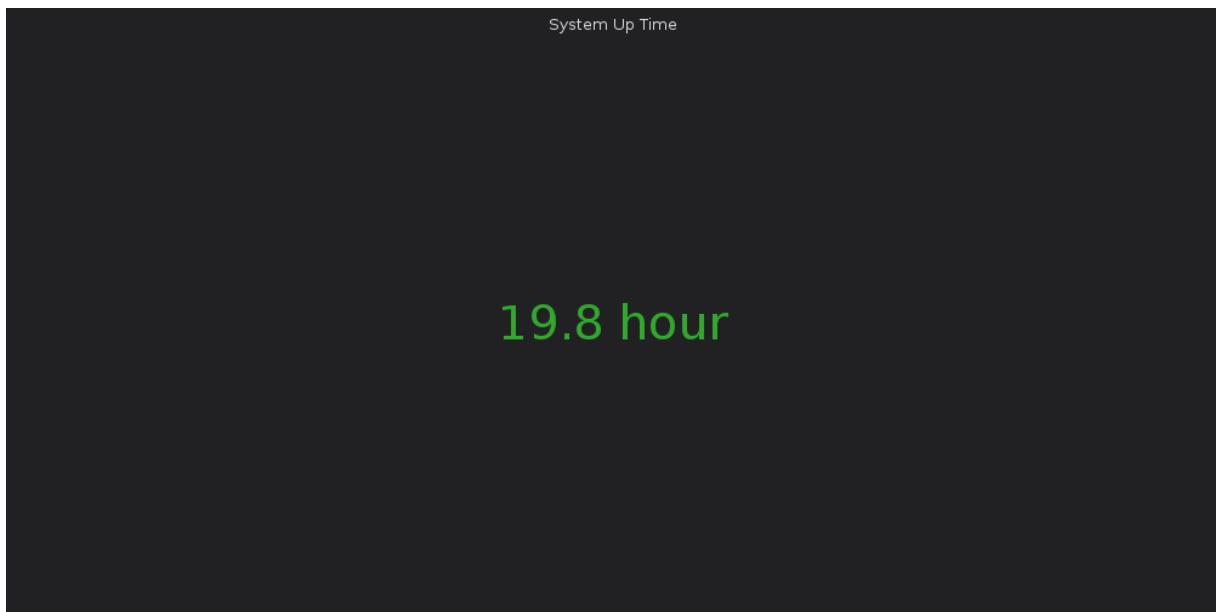
Host: client

- name: client
 - type: client

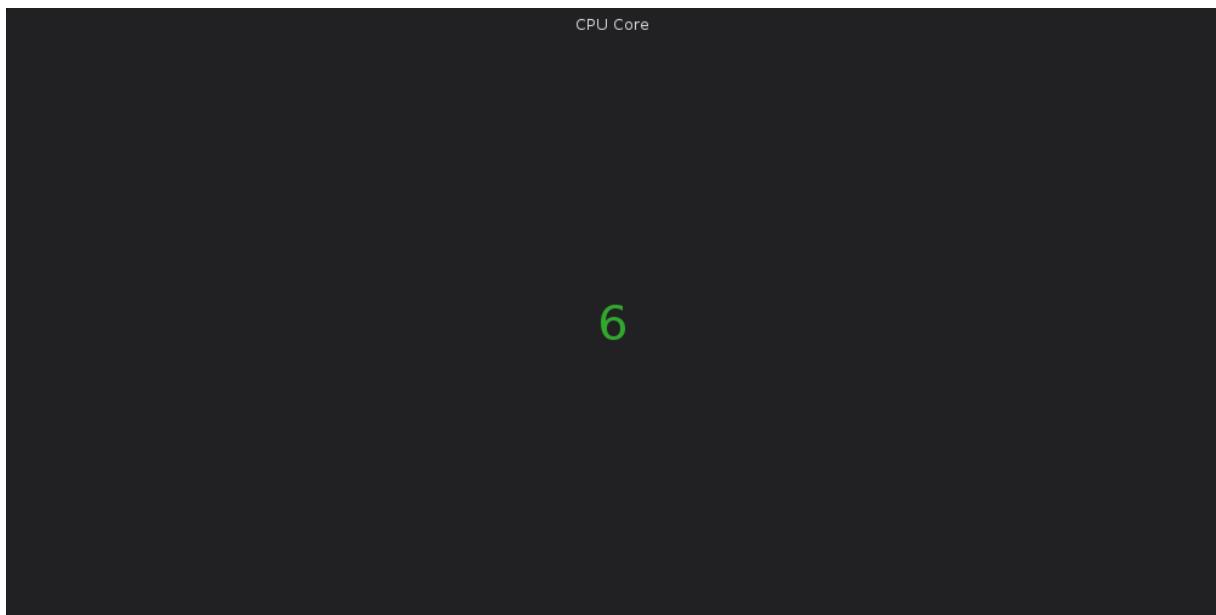
Service: node_client

- name: node_client
- type: node_exporter

系统运行时间



CPU 核数

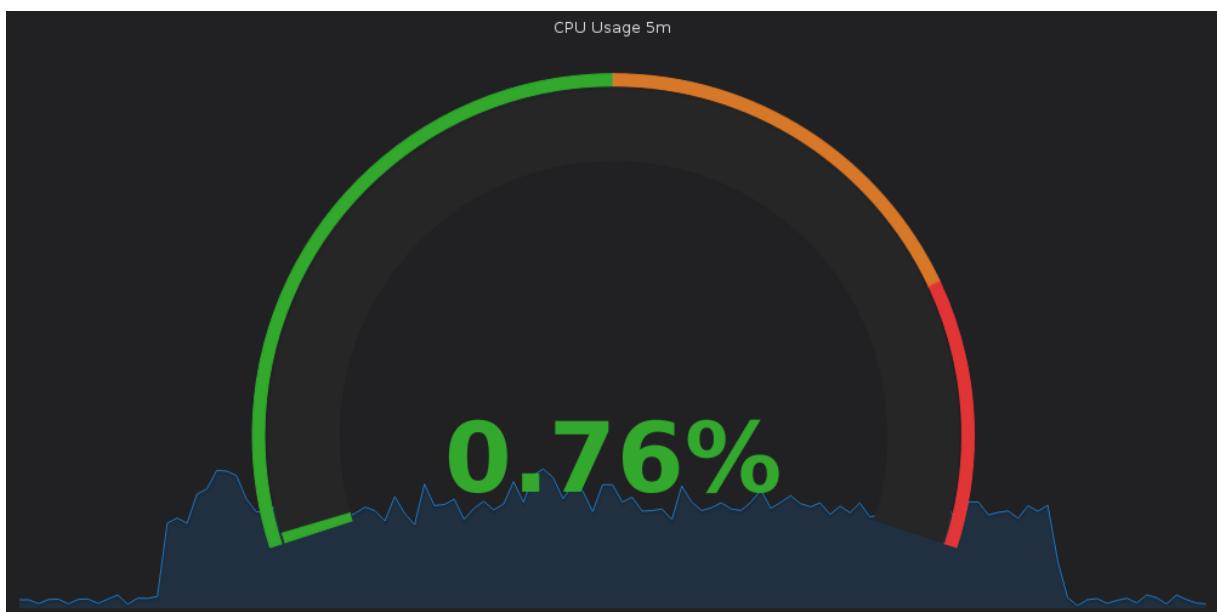


内存总量

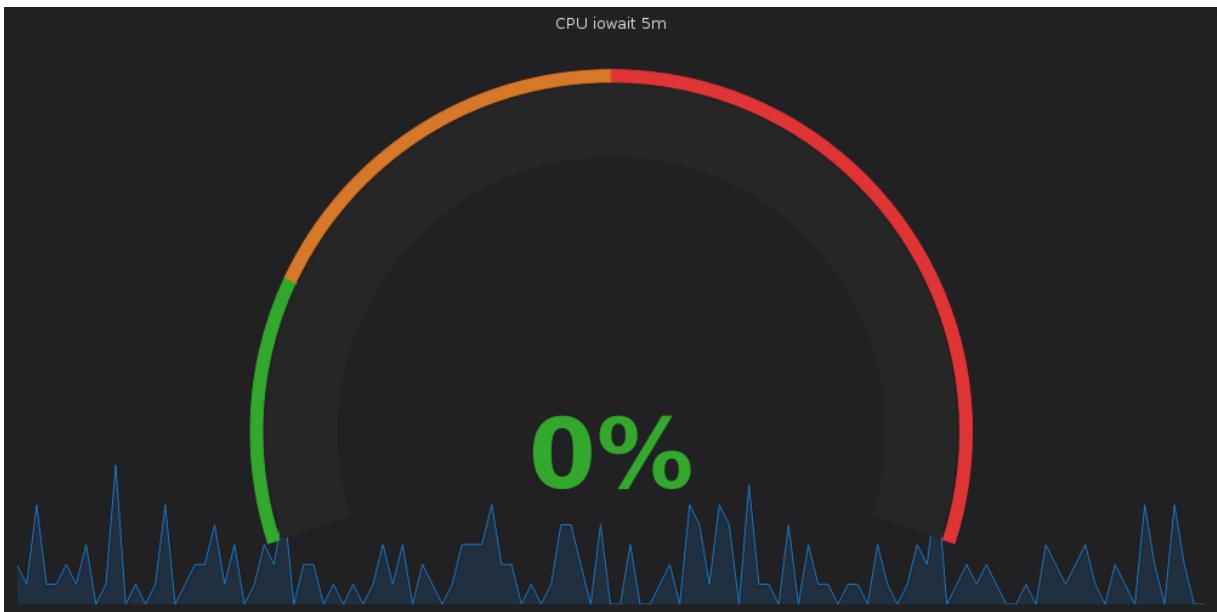
Total Memory

15.7 GiB

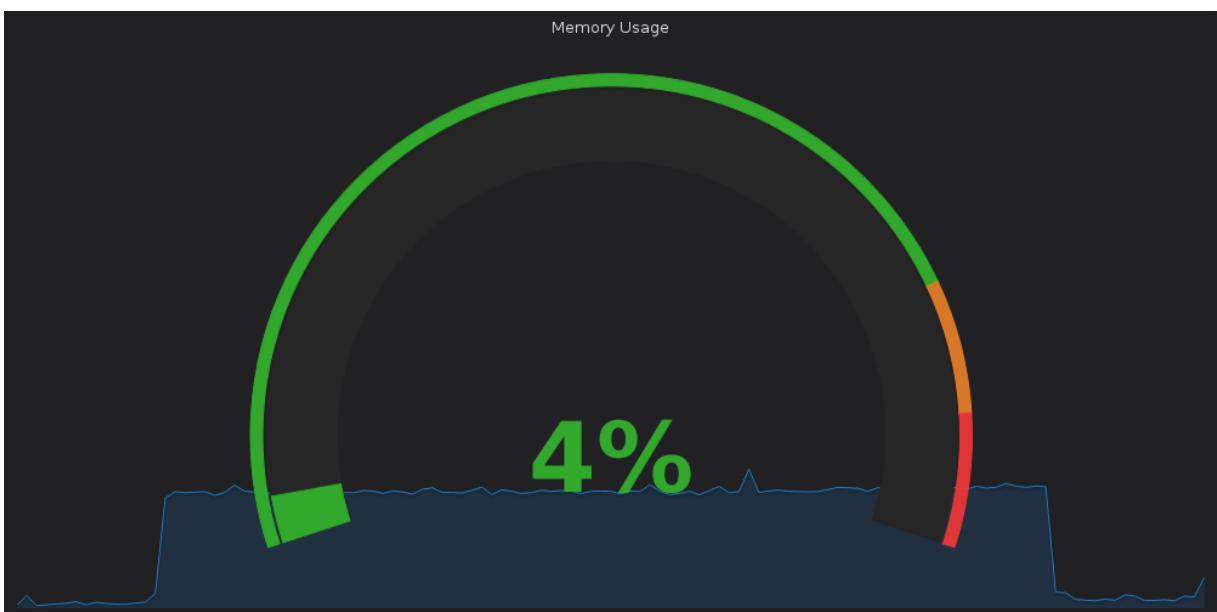
CPU使用率 (5m)



CPU iowait (5m)

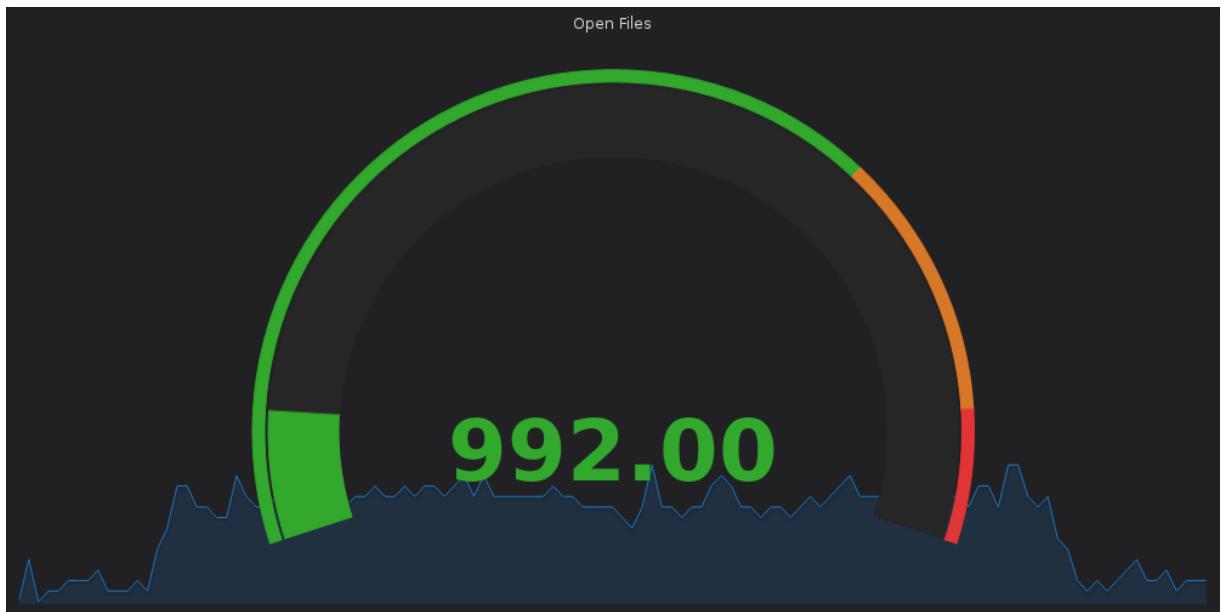


内存使用率



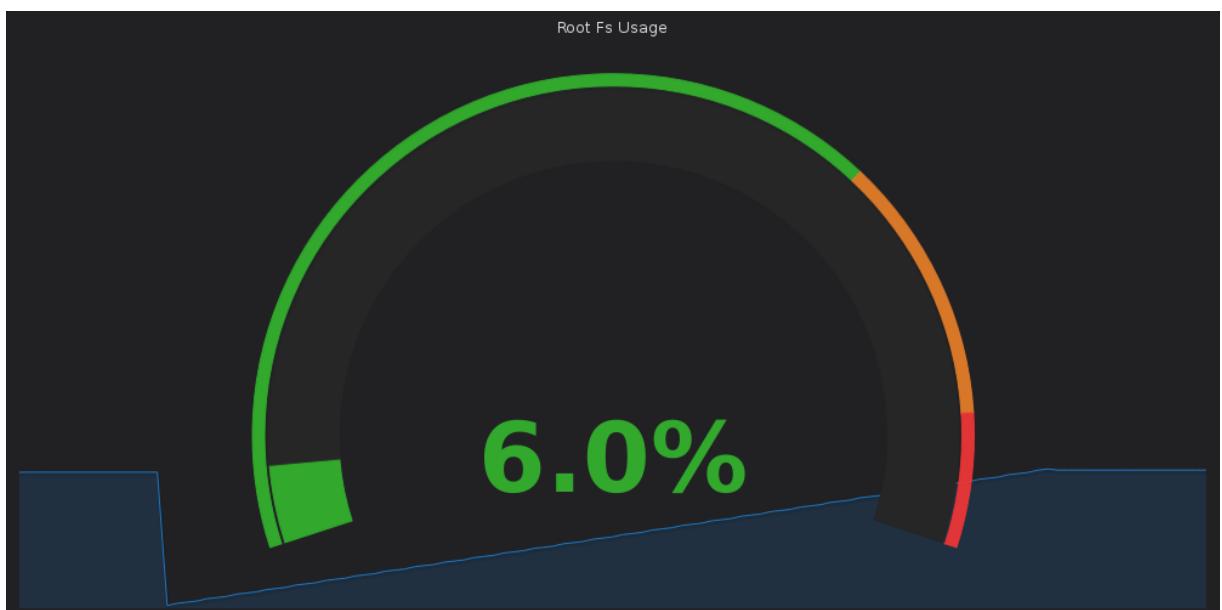
当前打开的文件描述符

Open Files

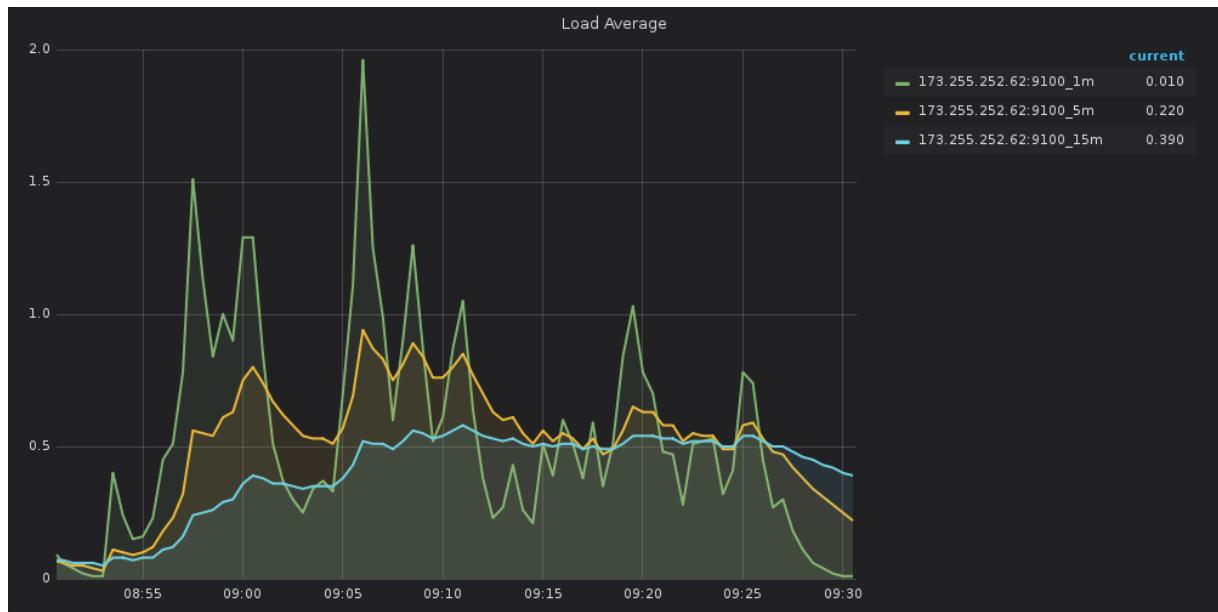


根分区使用率

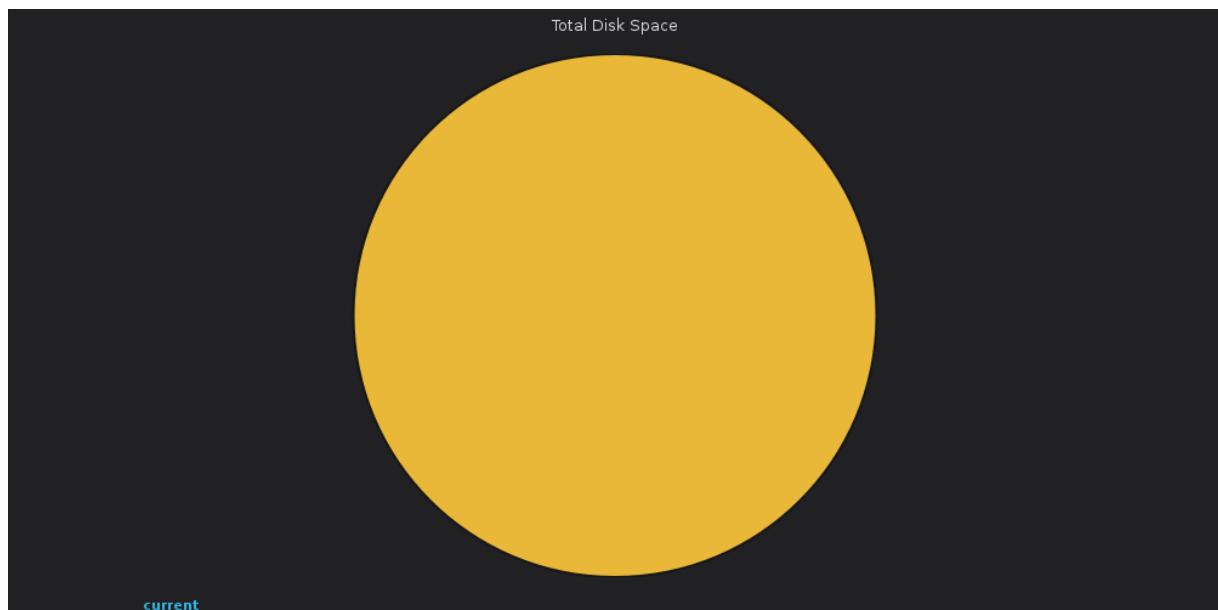
Root Fs Usage



系统平均负载



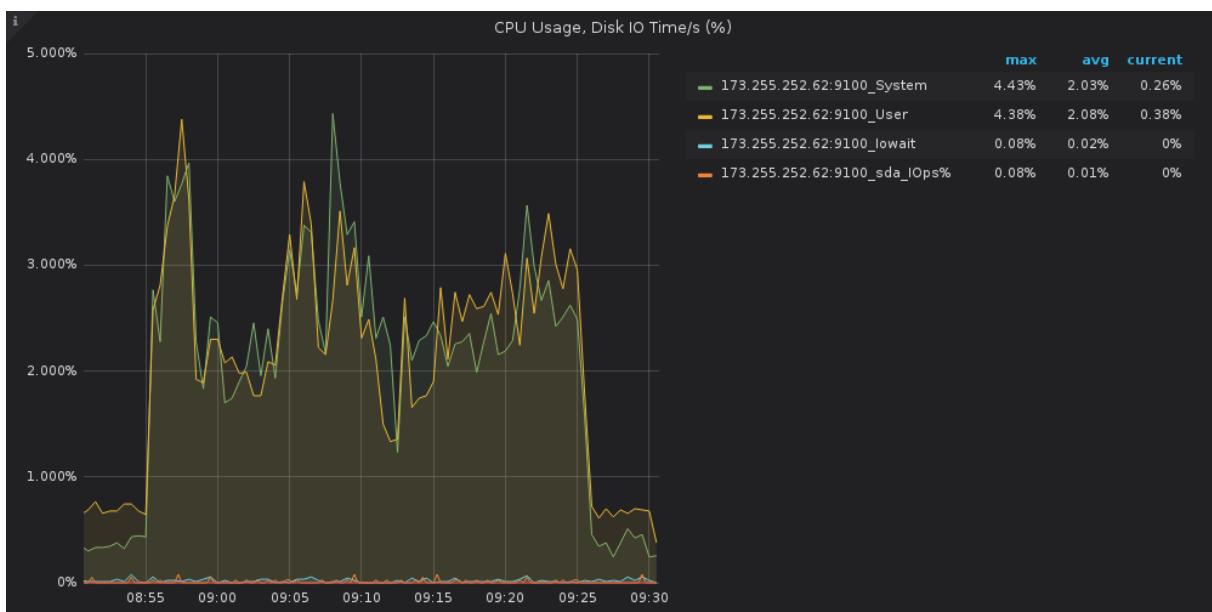
磁盘总空间



各分区可用空间

Volumes Available				
File System	IP	Mount ▲	Available	Usage
ext4	173.255.252.62:9100	/	295.78 GiB	0.88%

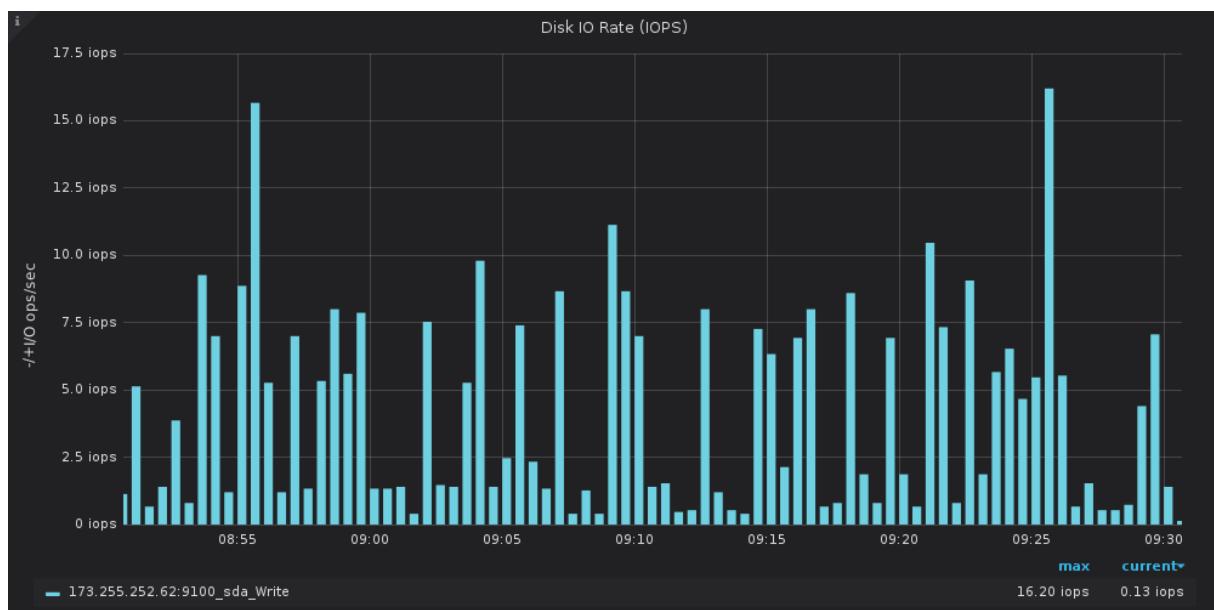
CPU使用率、磁盘每秒的I/O操作耗费时间 (%)



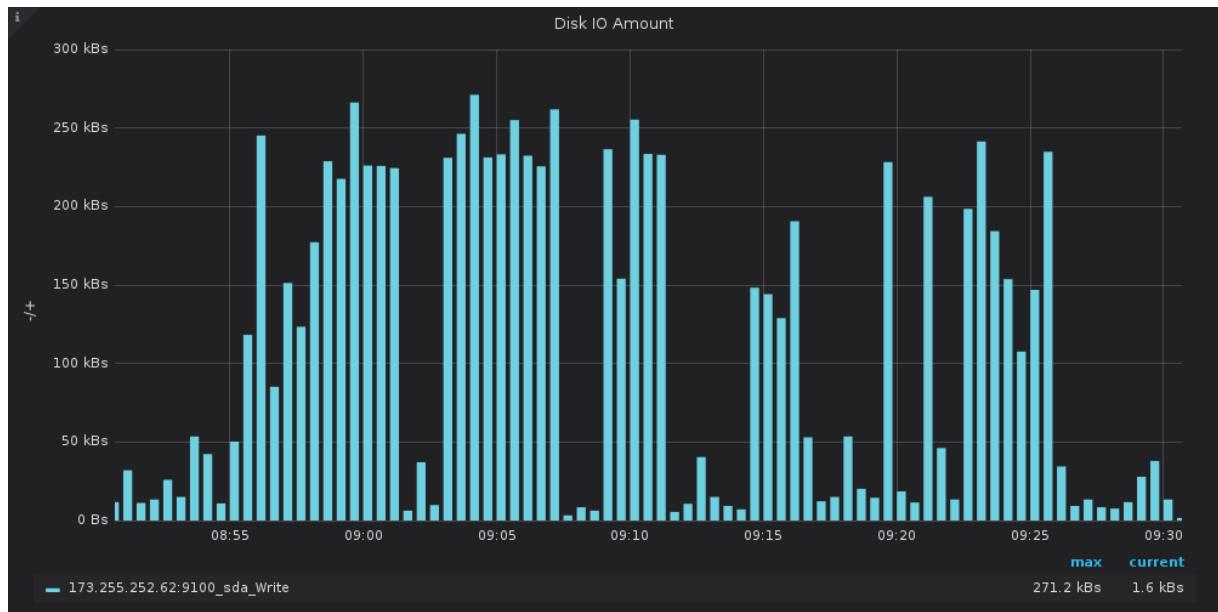
内存信息



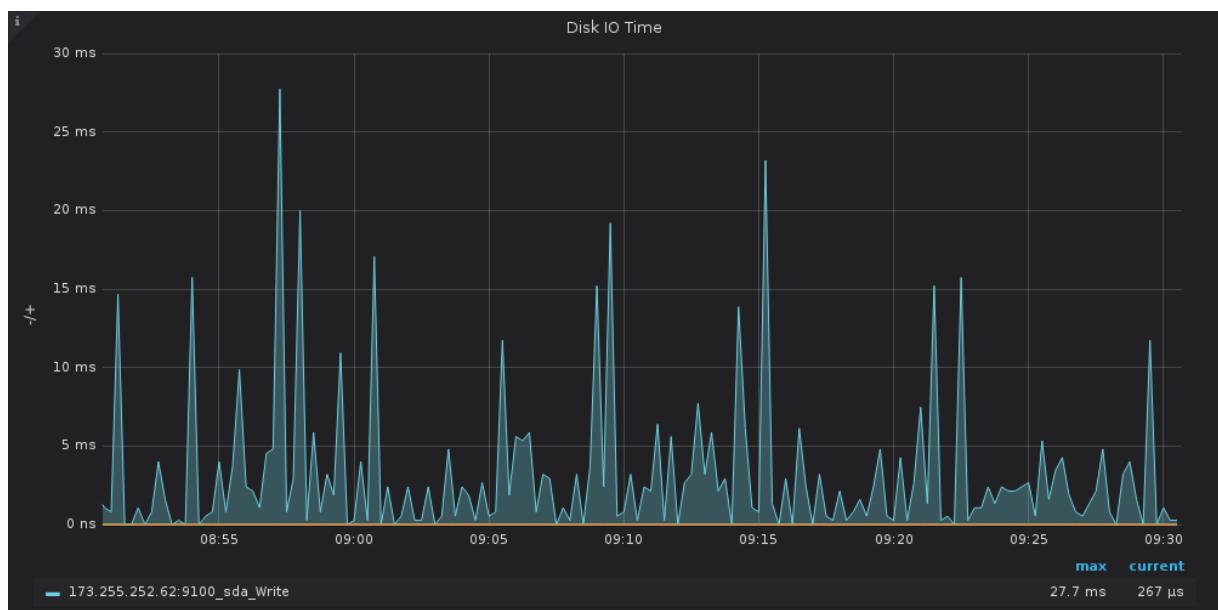
磁盘读写速率 (IOPS)



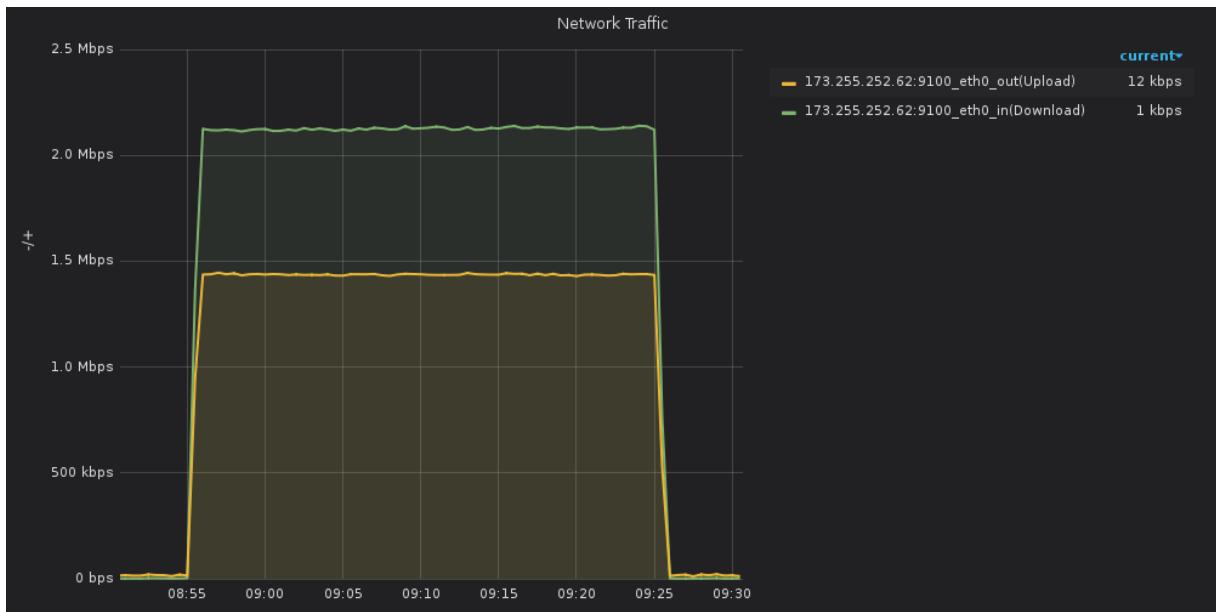
磁盘读写容量大小



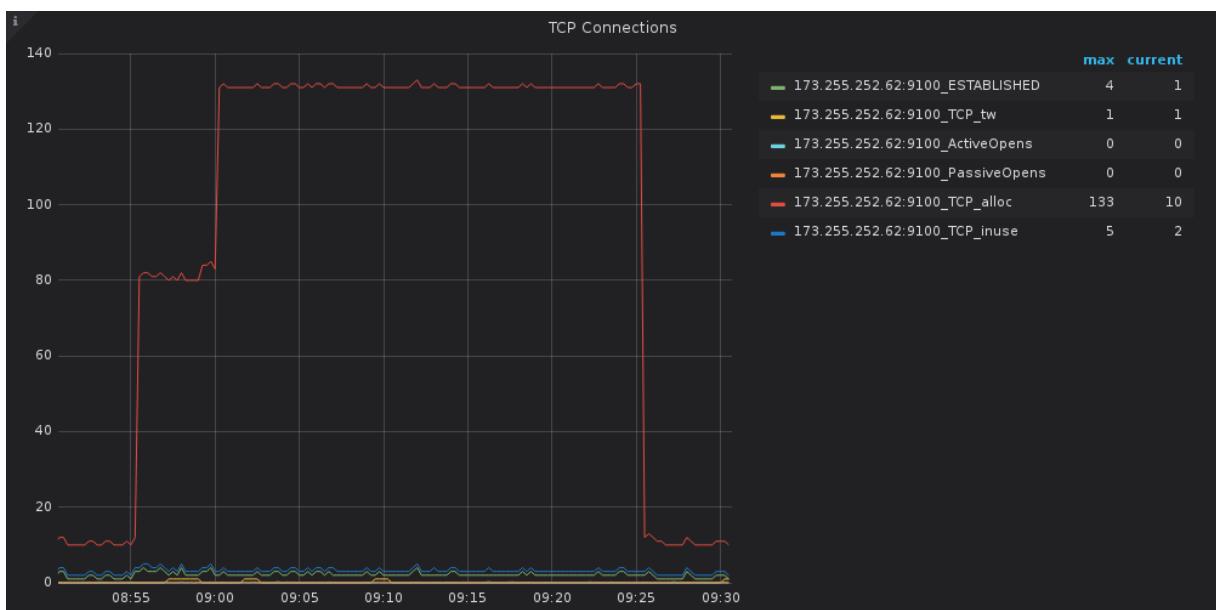
磁盘IO读写时间



网络流量



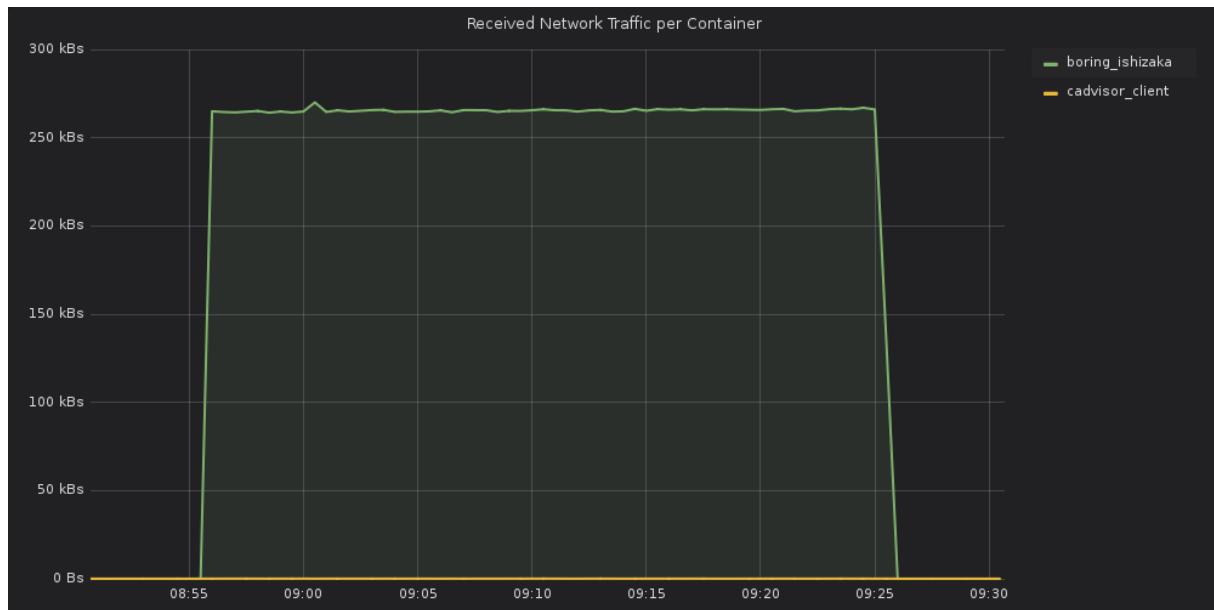
TCP 连接情况



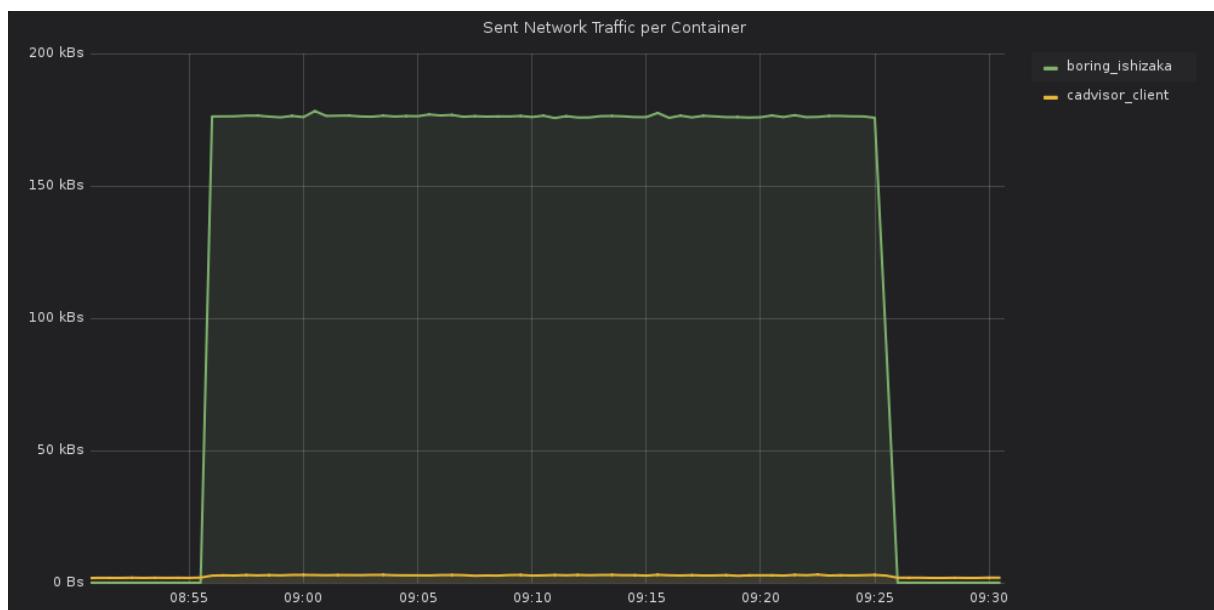
Service: cAdvisor_client

- name: cadvisor_client
- type: cadvisor

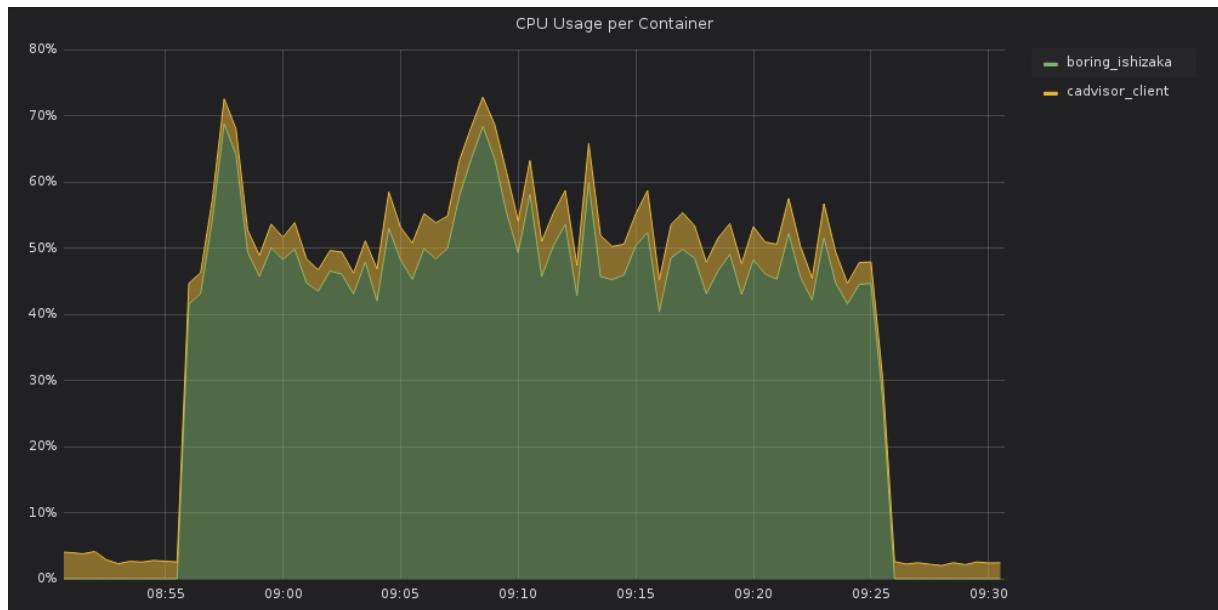
Received Network Traffic per Container



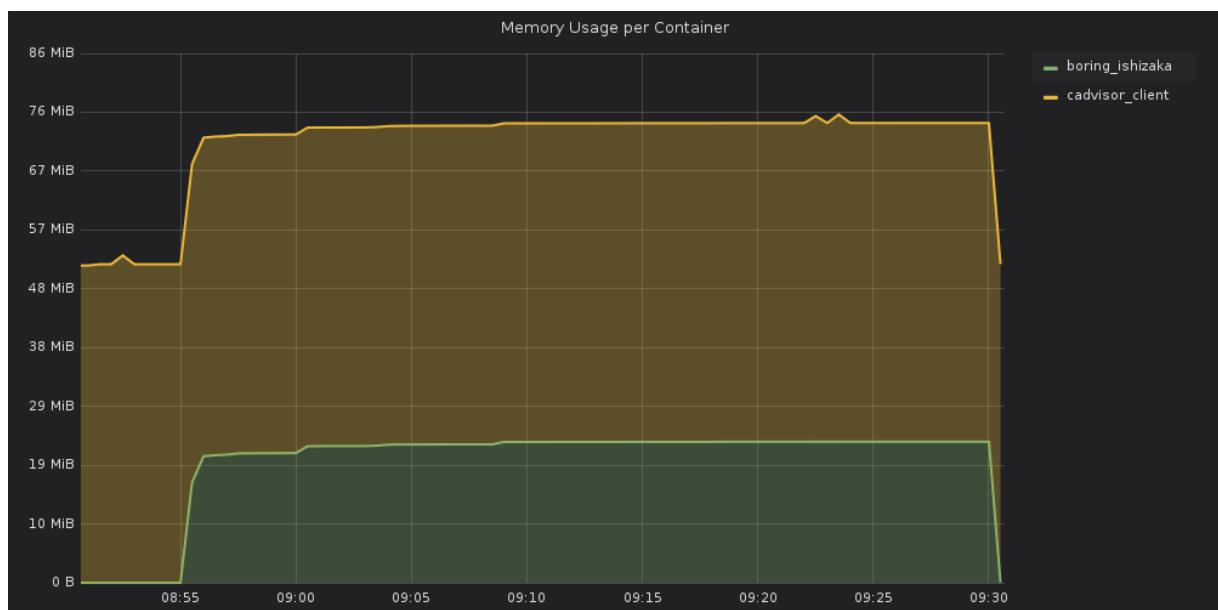
Sent Network Traffic per Container



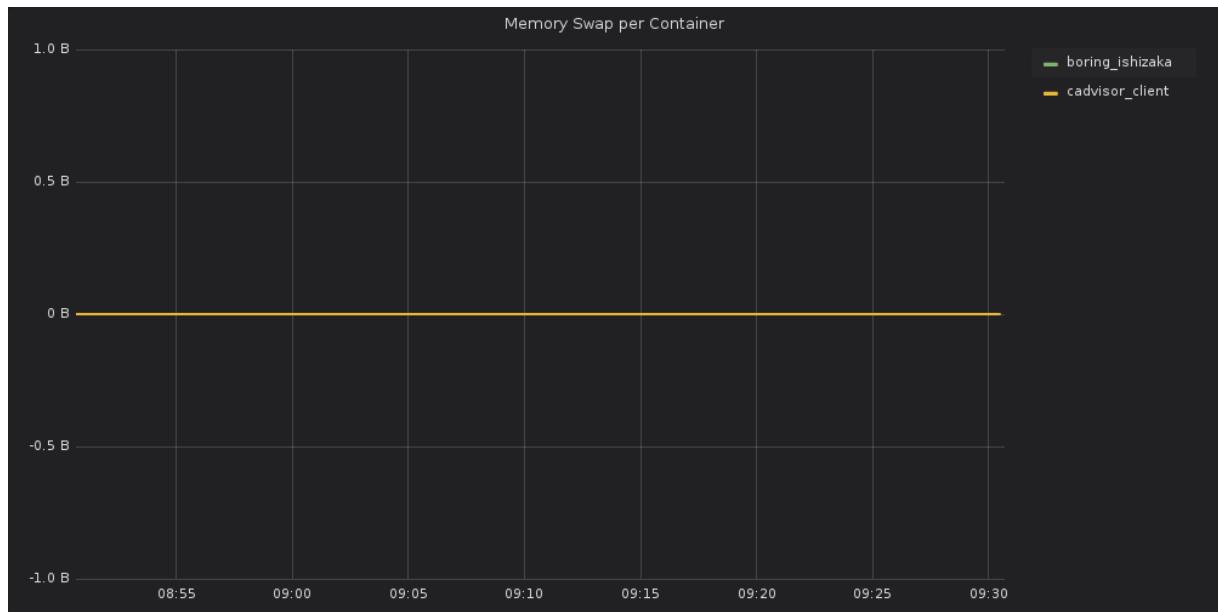
CPU Usage per Container



Memory Usage per Container



Memory Swap per Container



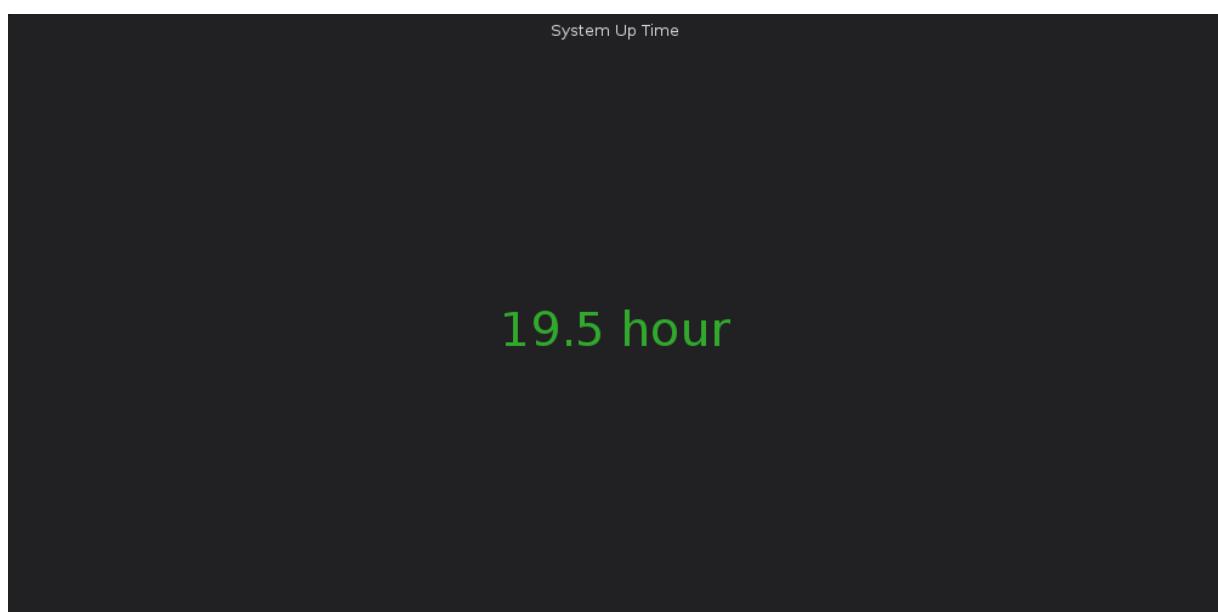
Host: storage

- name: storage
- type: storage

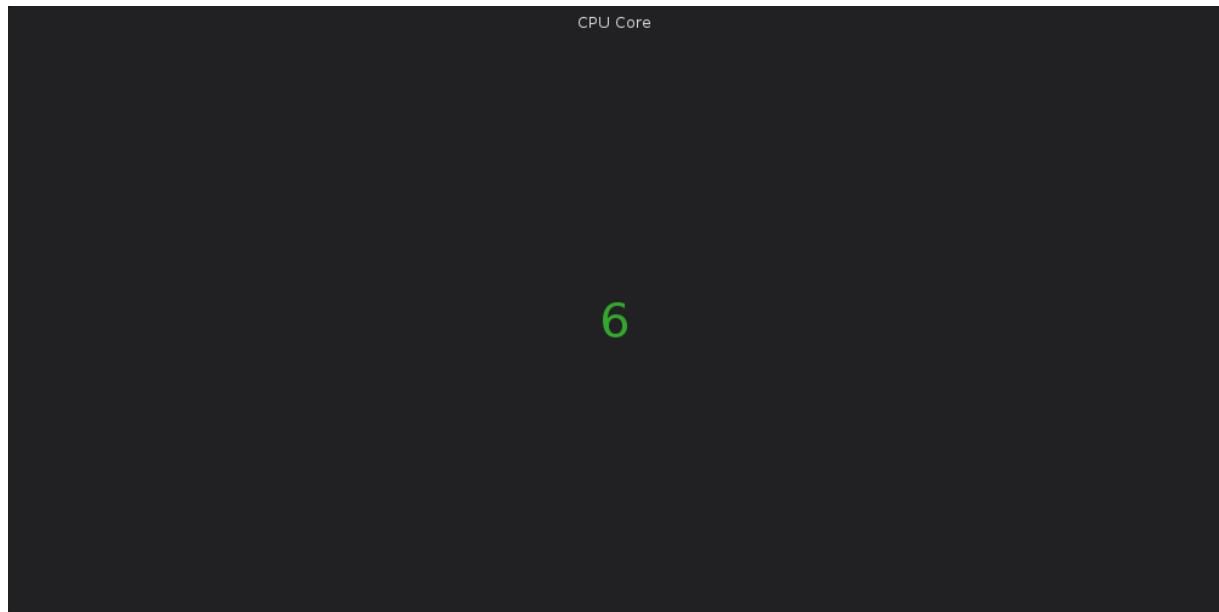
Service: node_storage

- name: node_storage
- type: node_exporter

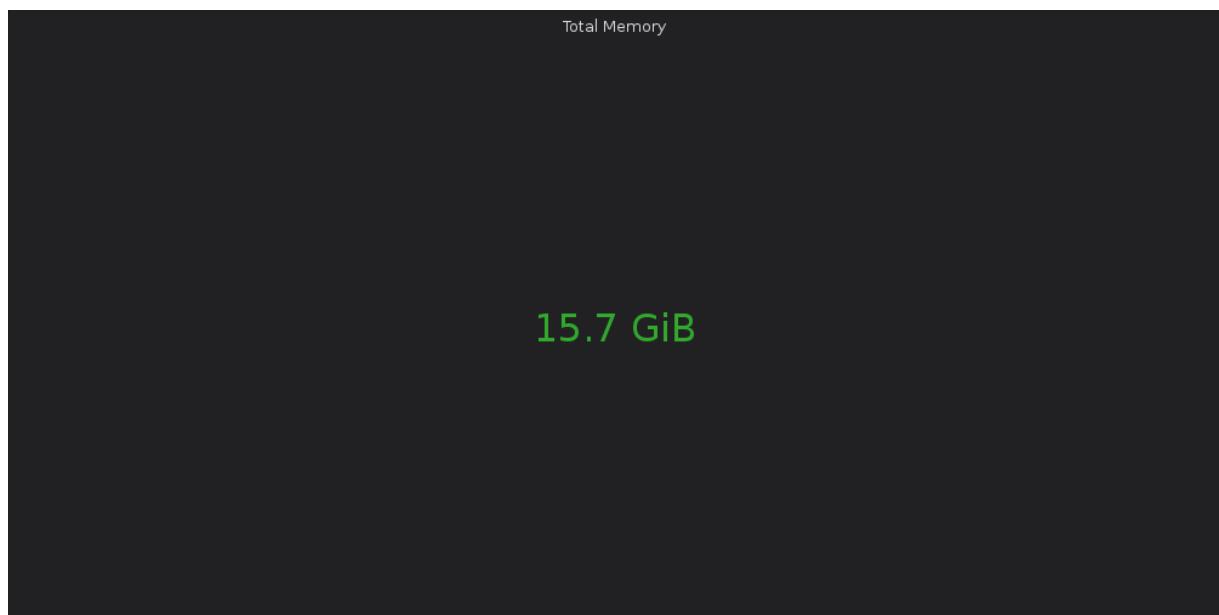
系统运行时间



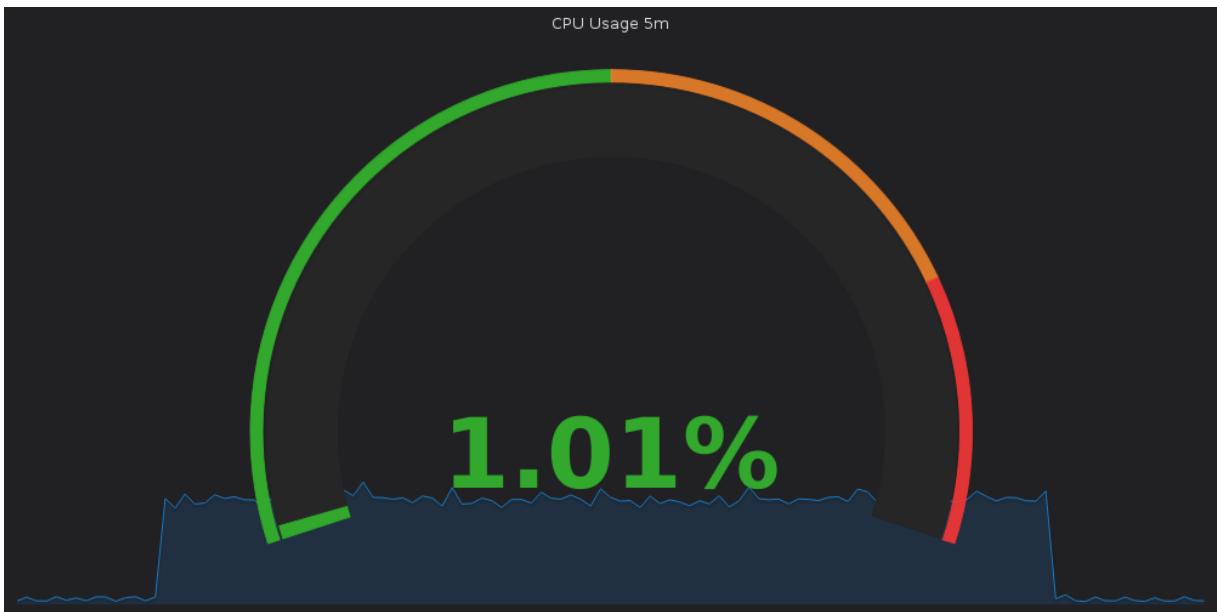
CPU 核数



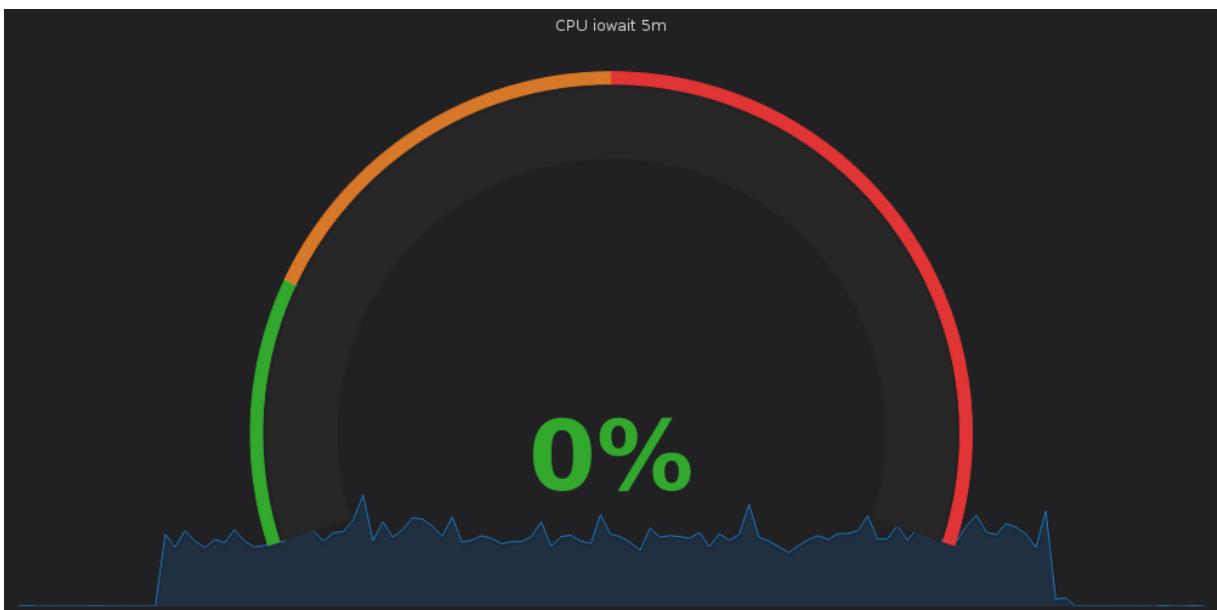
内存总量



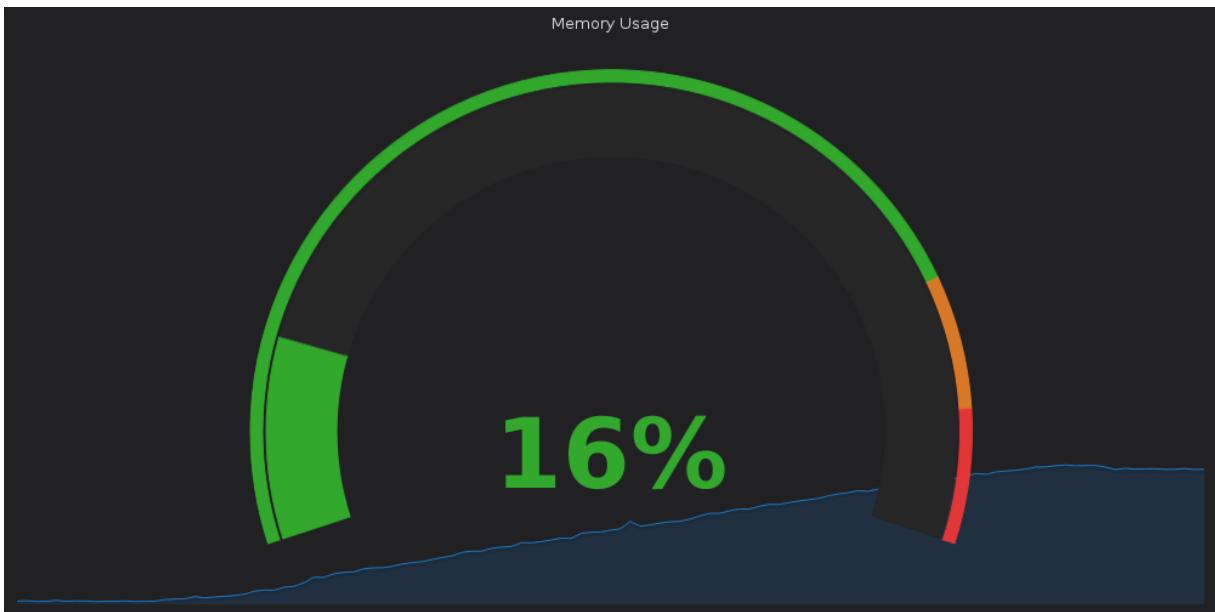
CPU使用率 (5m)



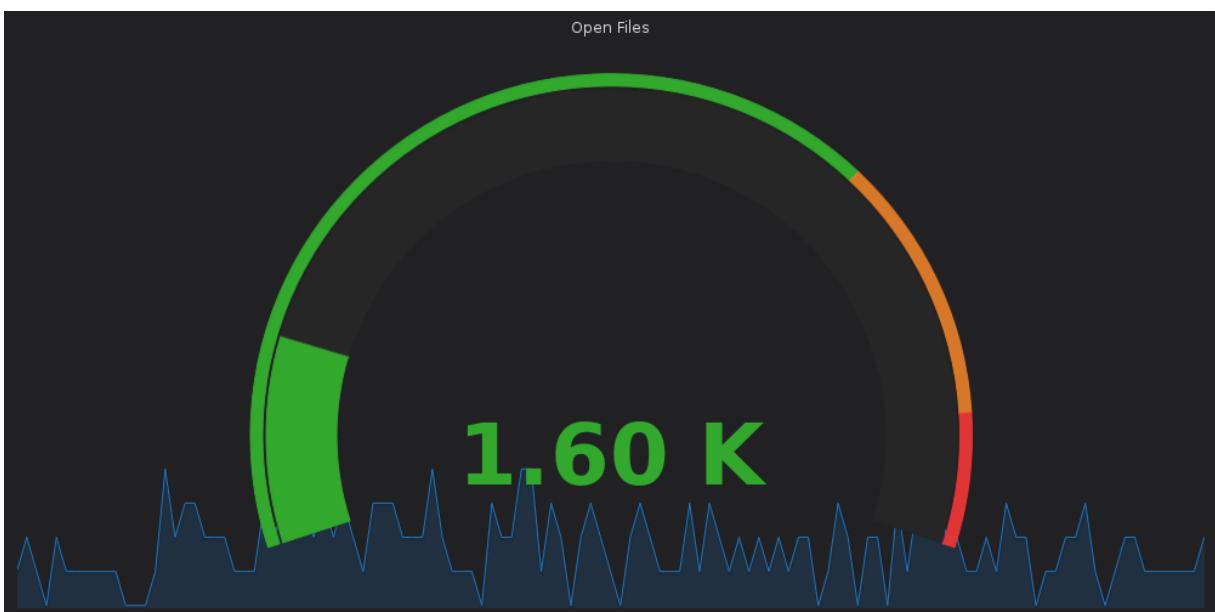
CPU iowait (5m)



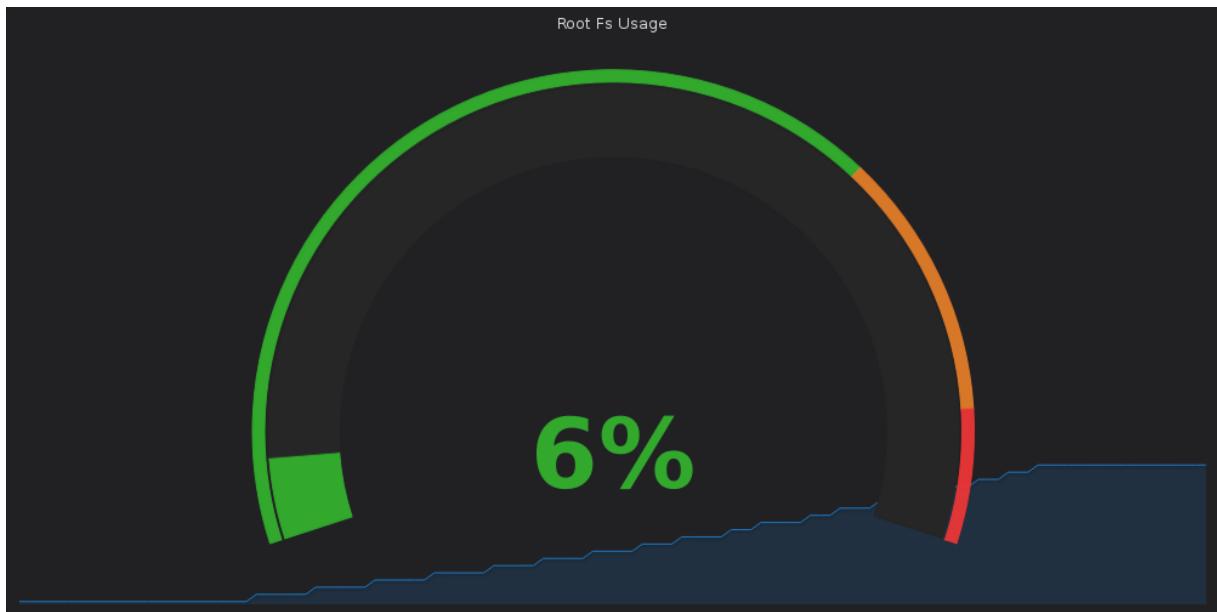
内存使用率



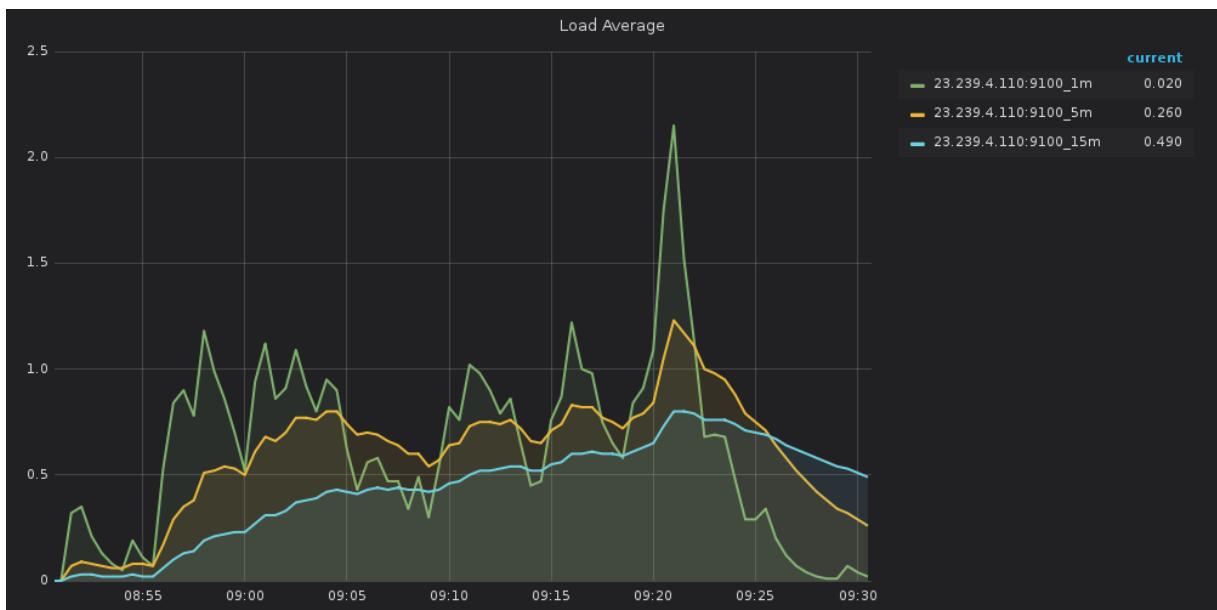
当前打开的文件描述符



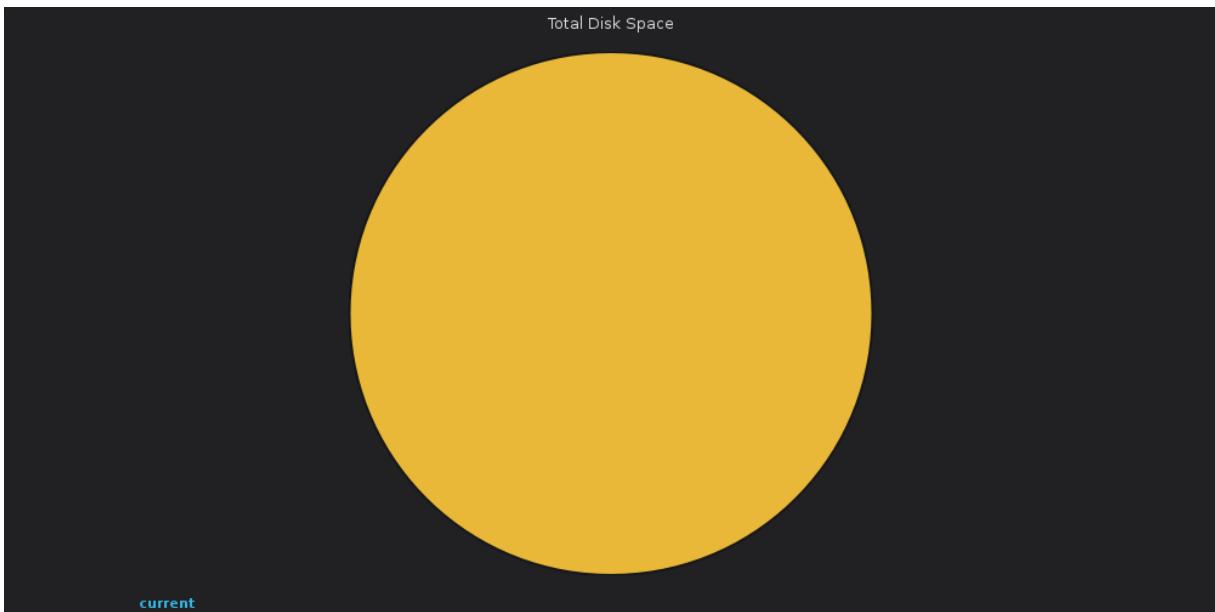
根分区使用率



系统平均负载



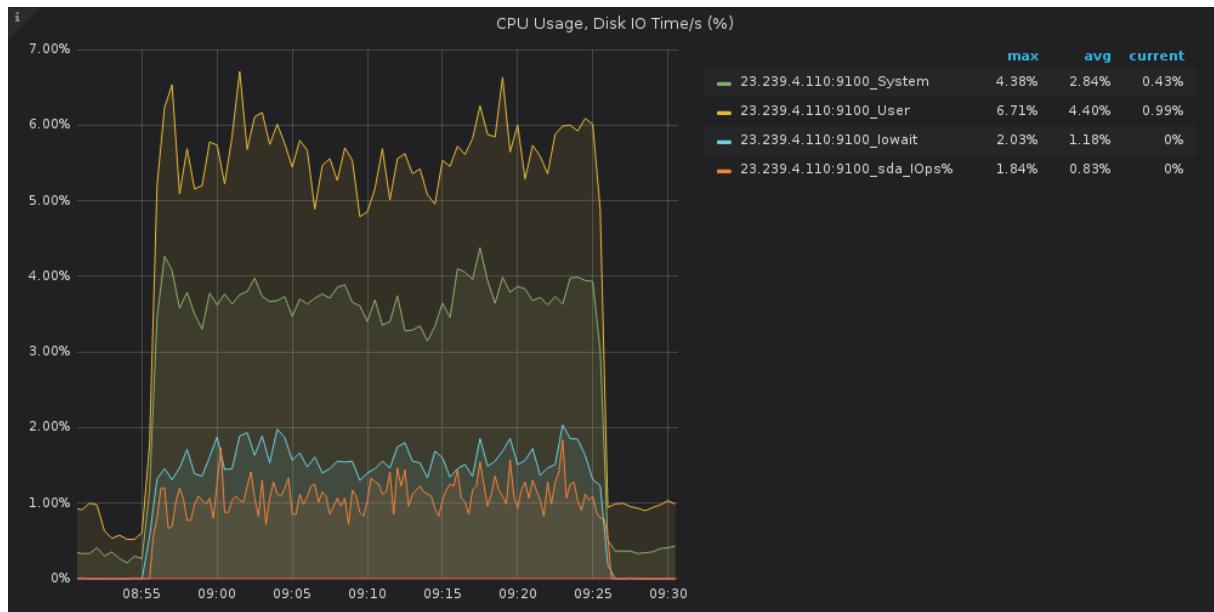
磁盘总空间



各分区可用空间

Volumes Available				
File System	IP	Mount ▲	Available	Usage
ext4	23.239.4.110:9100	/	294.91 GiB	1.16%

CPU使用率、磁盘每秒的I/O操作耗费时间 (%)



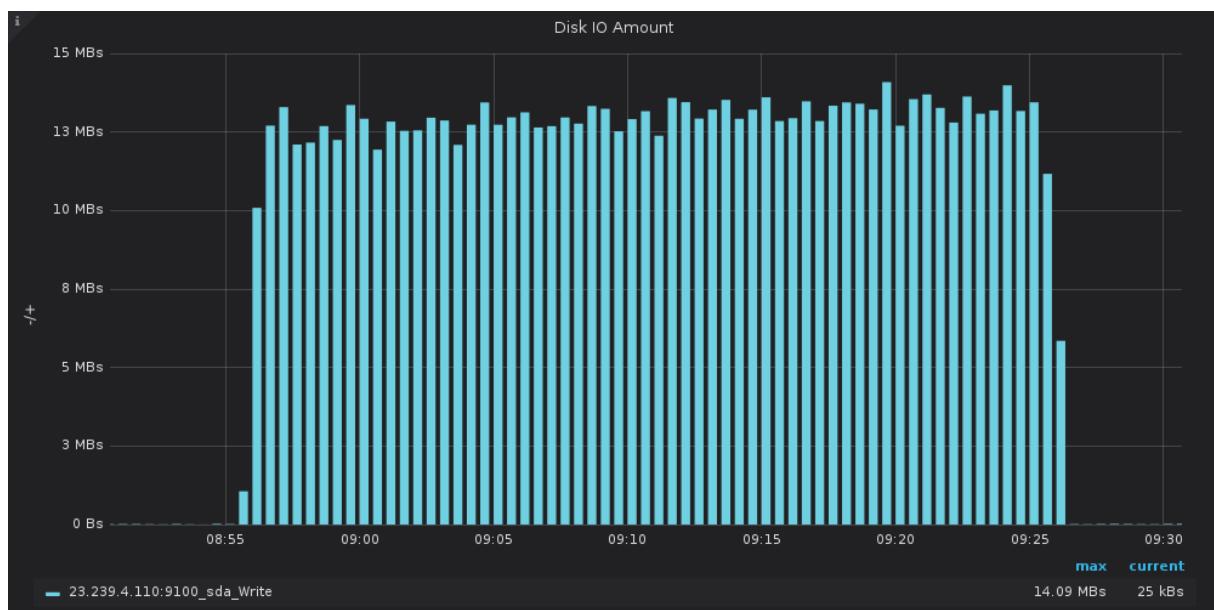
内存信息



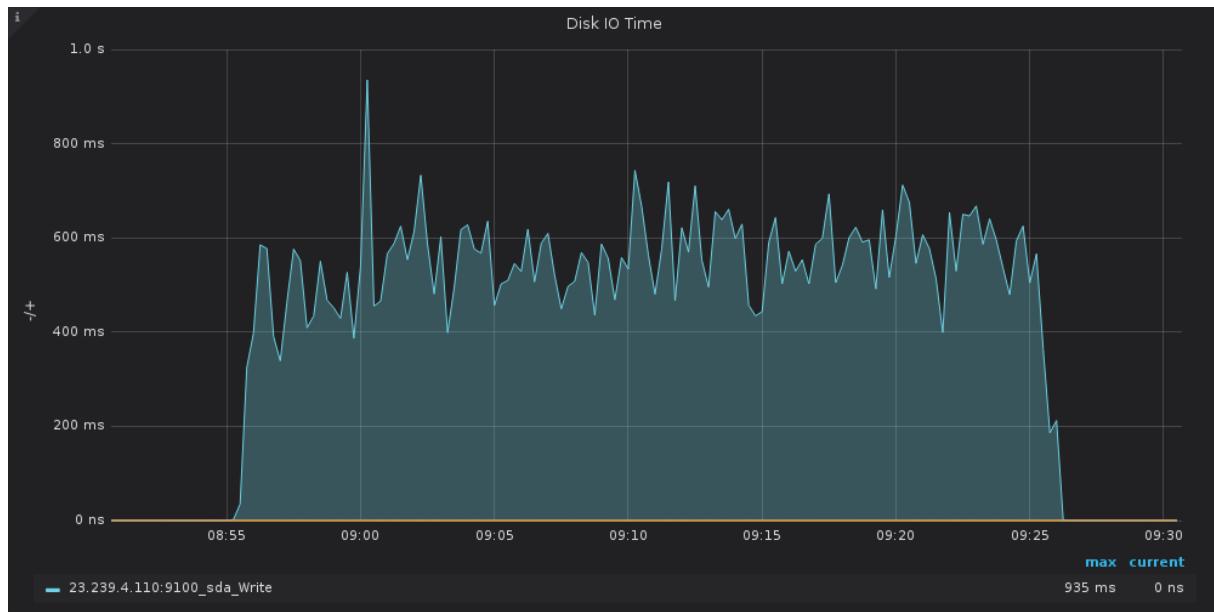
磁盘读写速率 (IOPS)



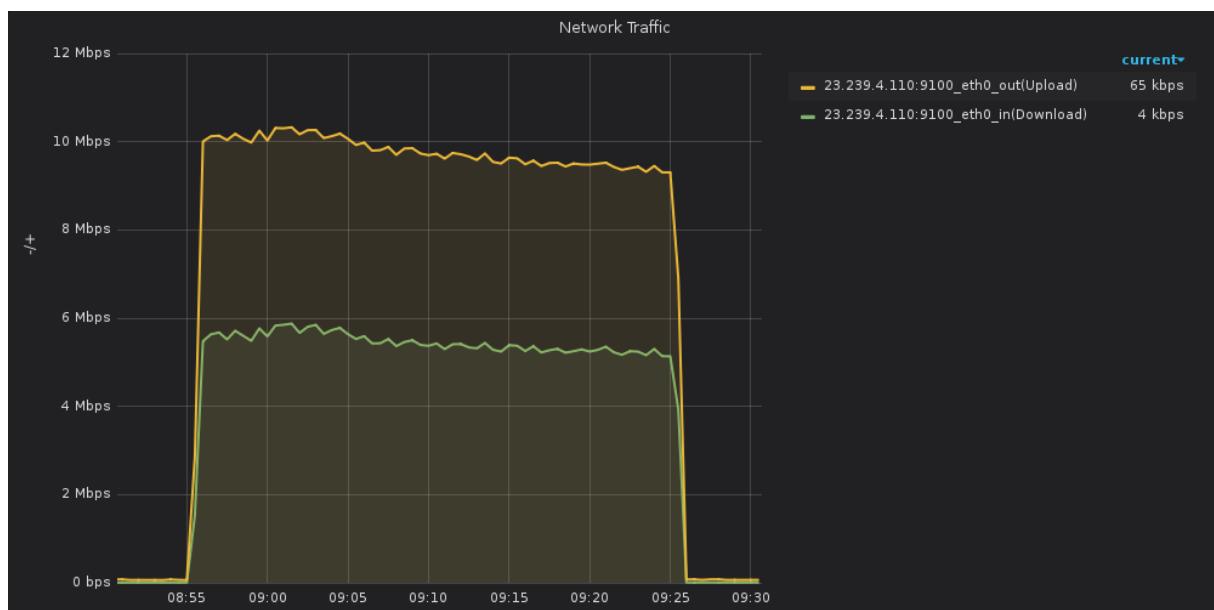
磁盘读写容量大小



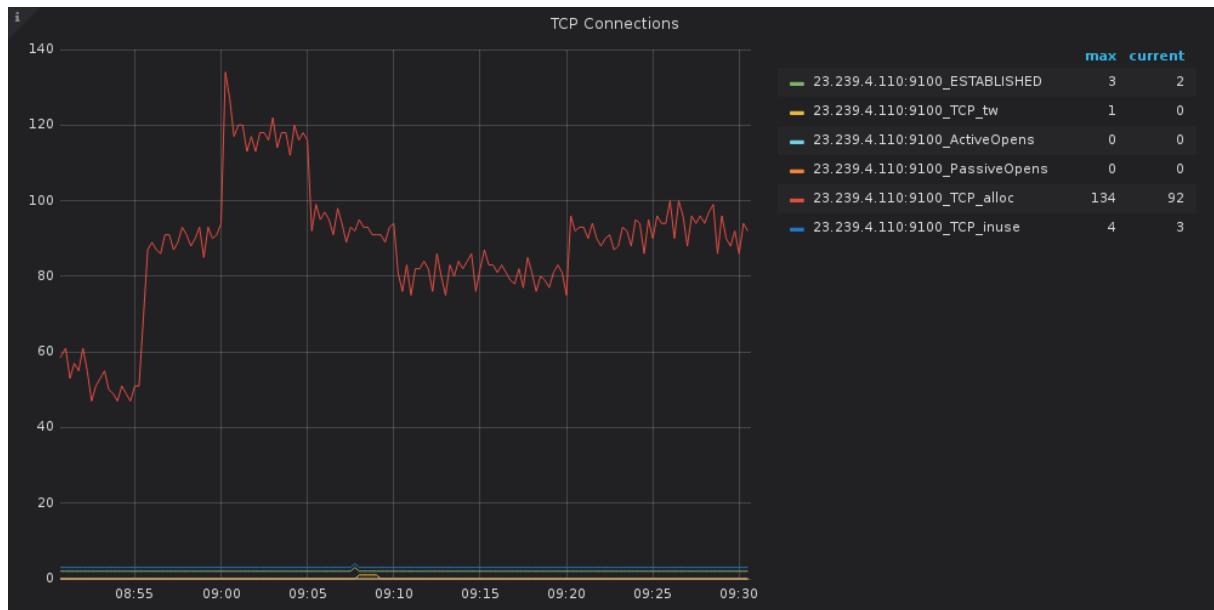
磁盘IO读写时间



网络流量



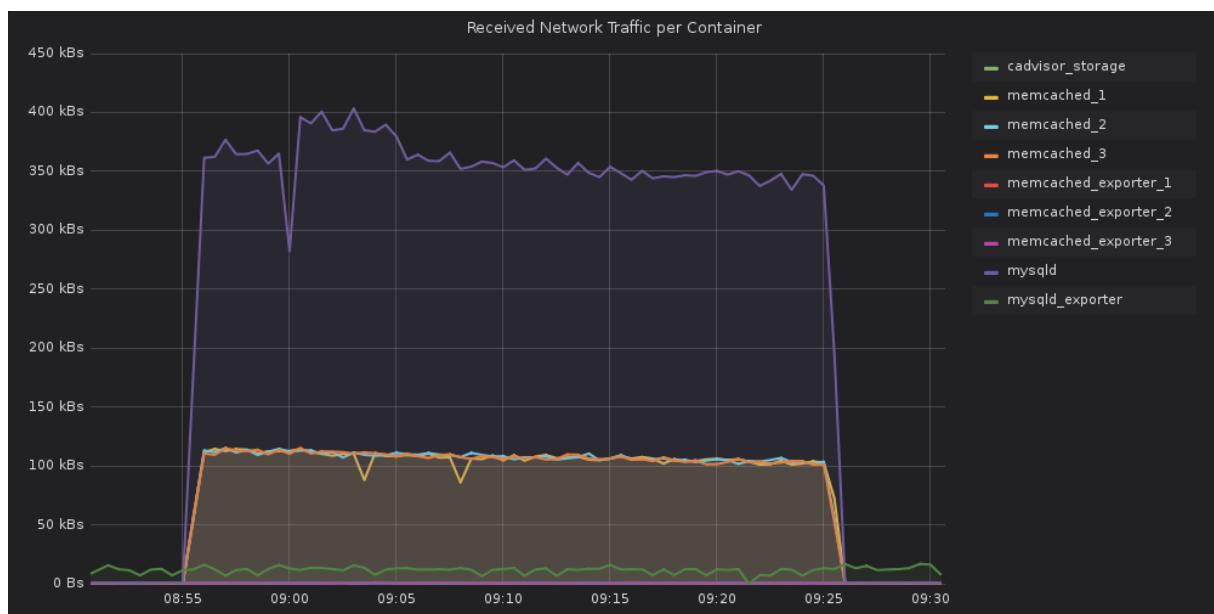
TCP 连接情况



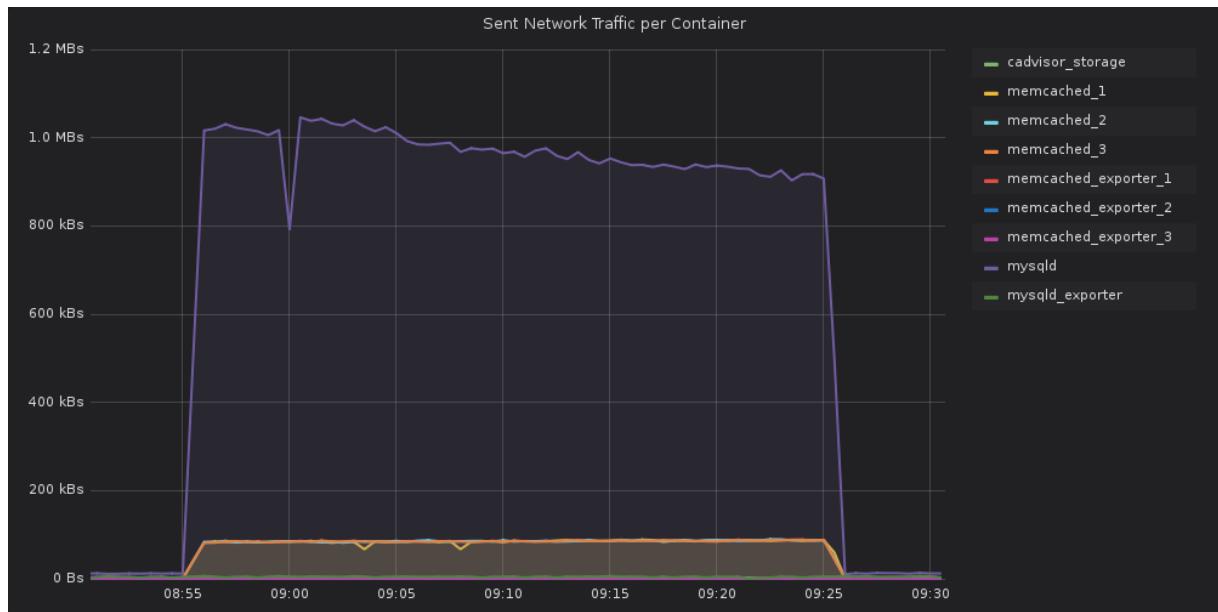
Service: cadvisor_storage

- name: cadvisor_storage
 - type: cadvisor

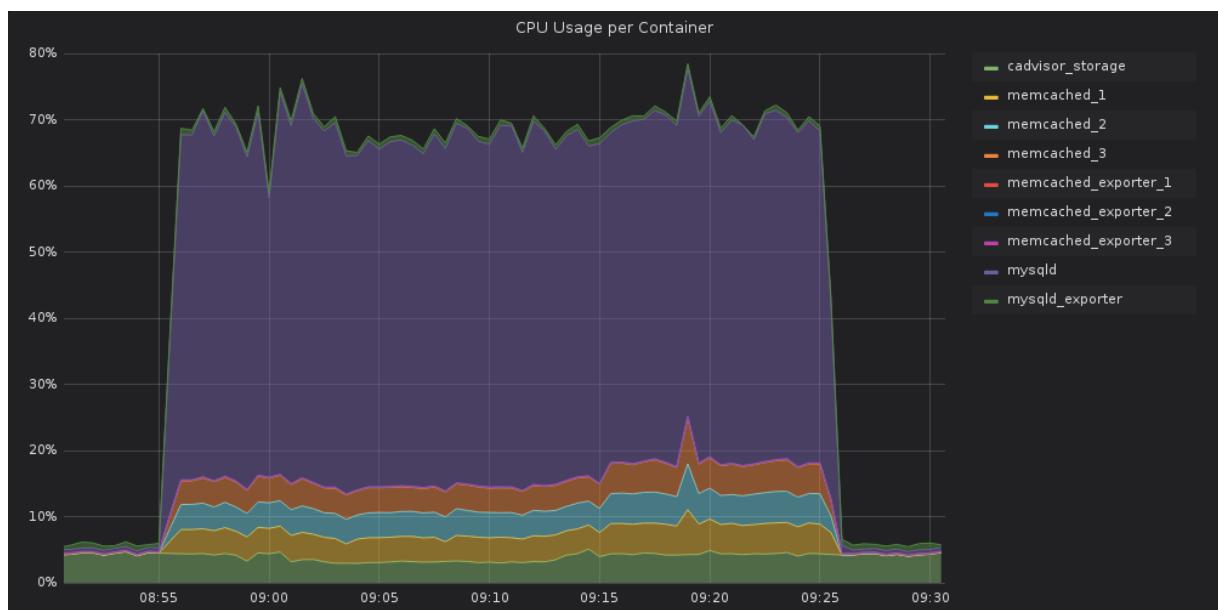
Received Network Traffic per Container



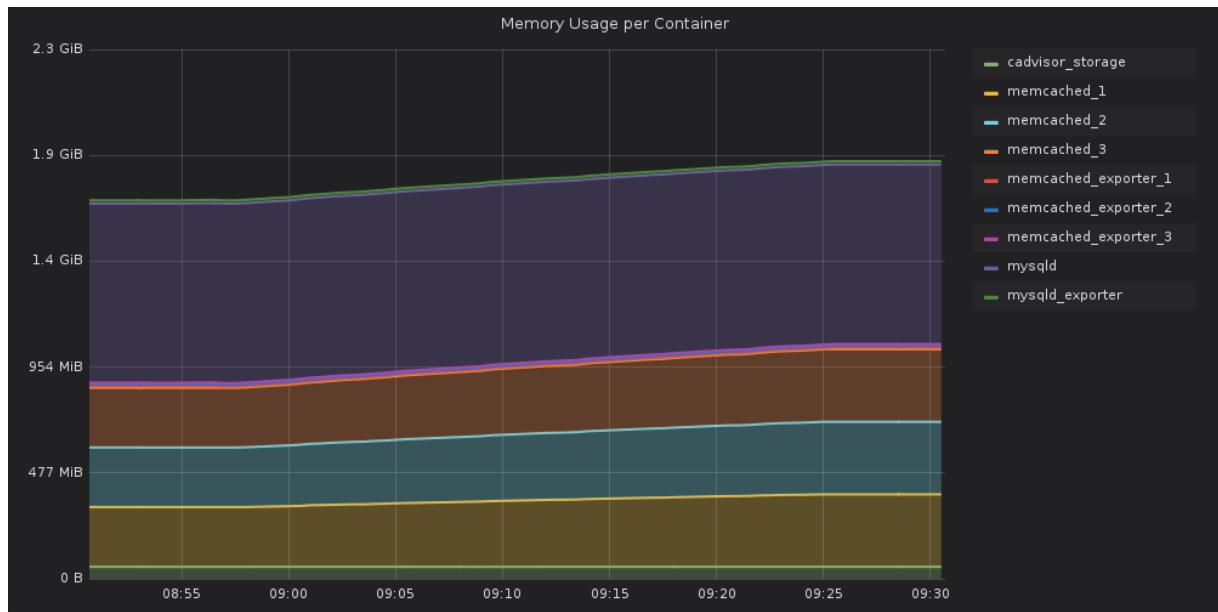
Sent Network Traffic per Container



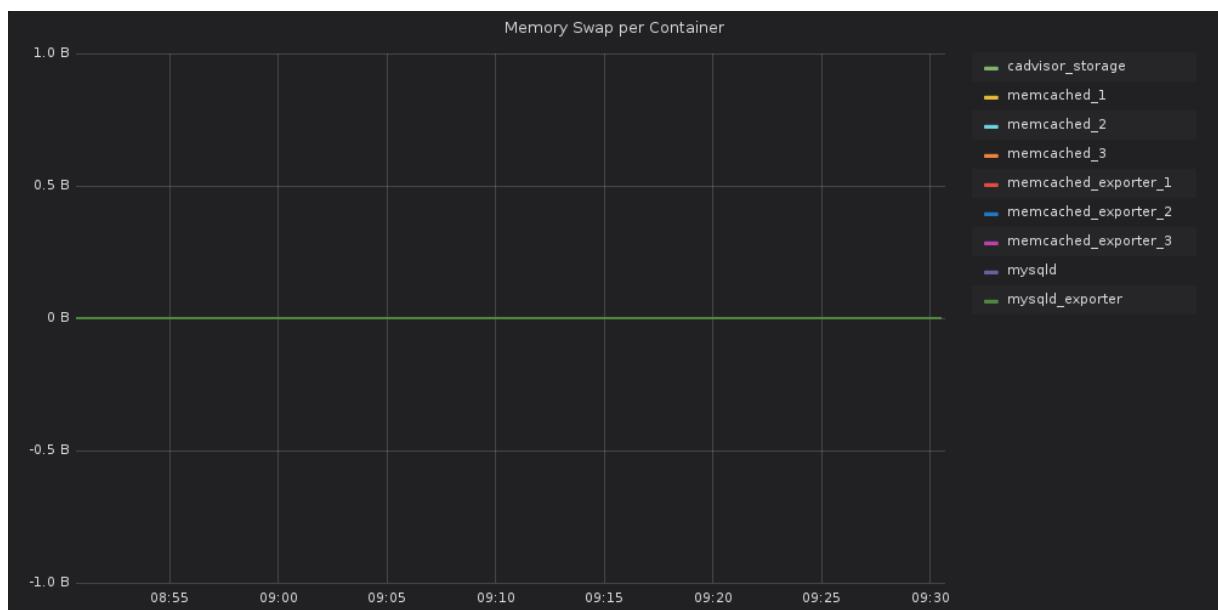
CPU Usage per Container



Memory Usage per Container



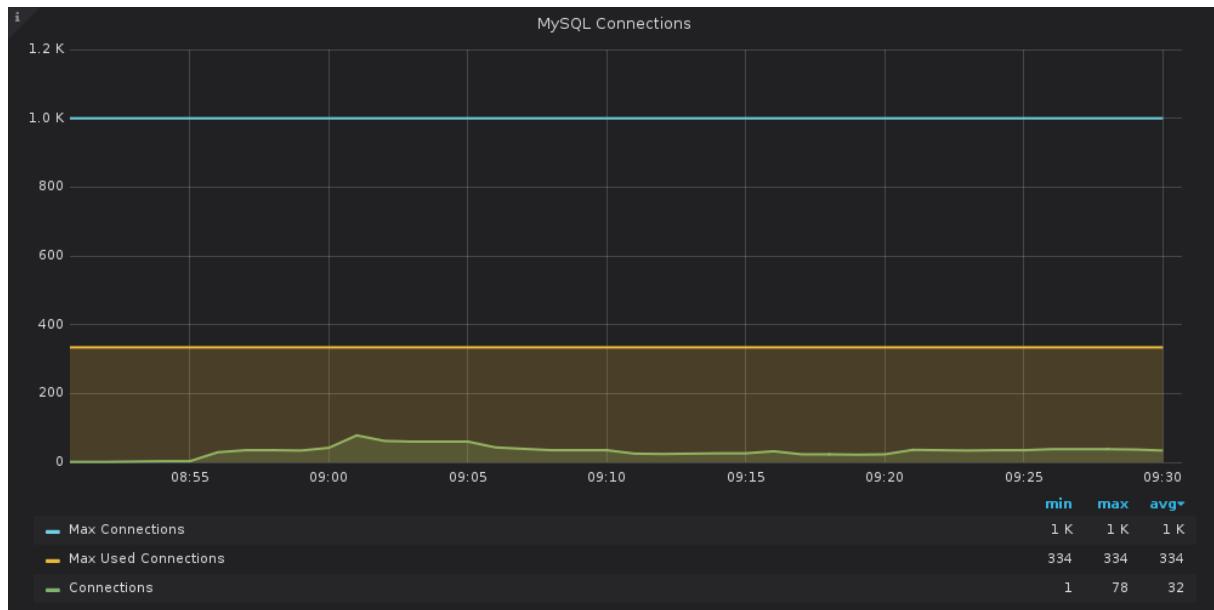
Memory Swap per Container



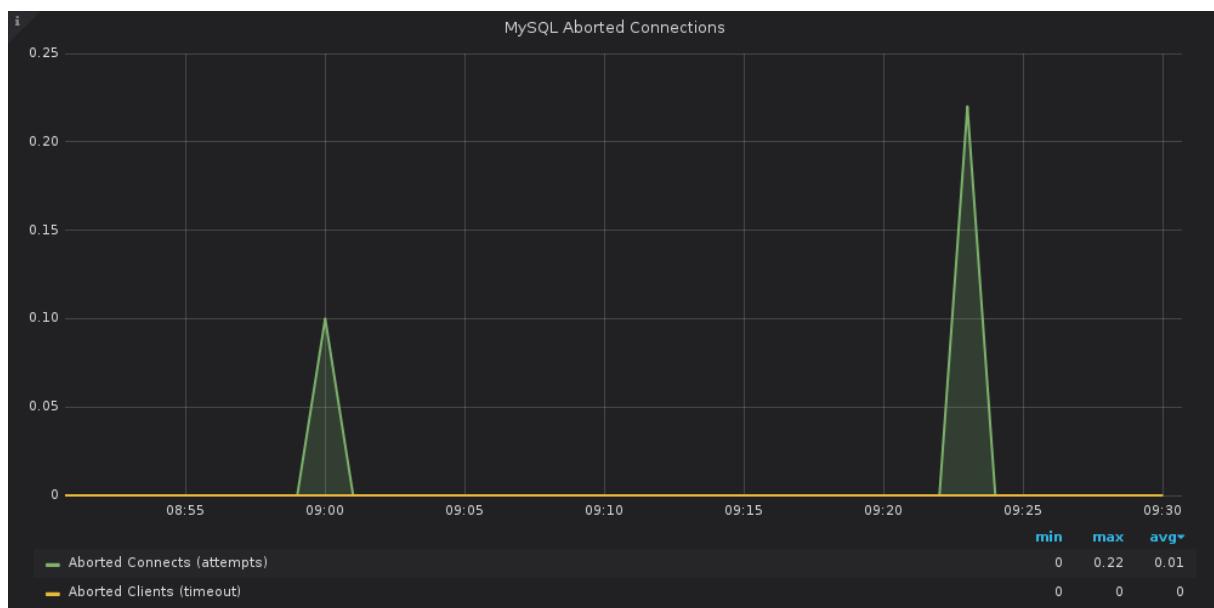
Service: mysqld

- name: mysqld
- type: mysqld

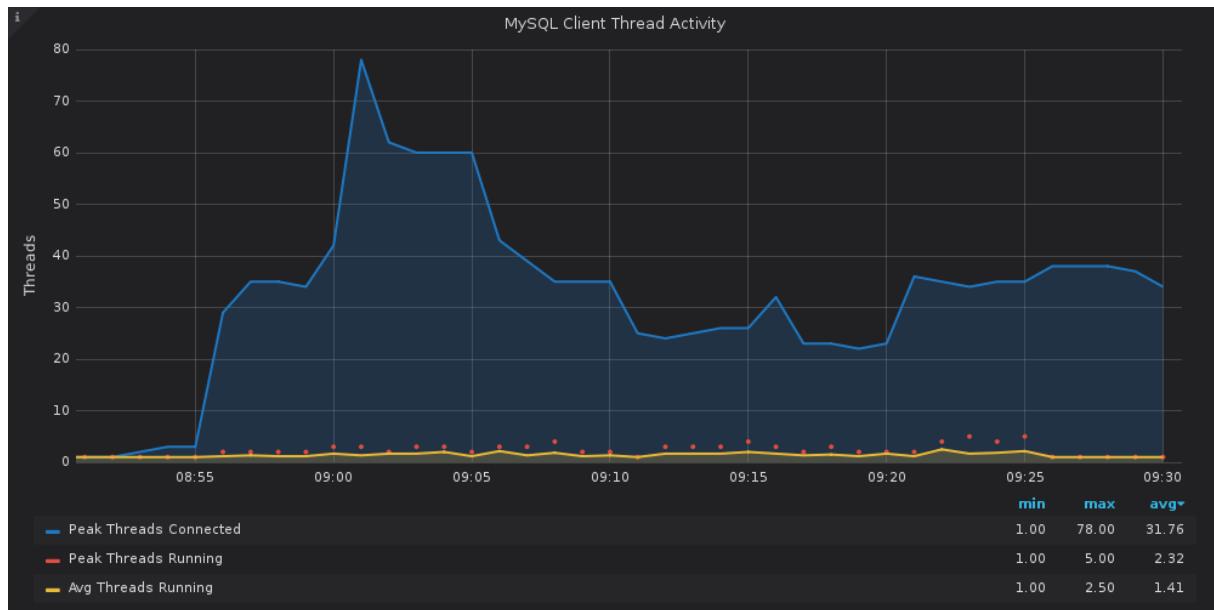
MySQL Connections



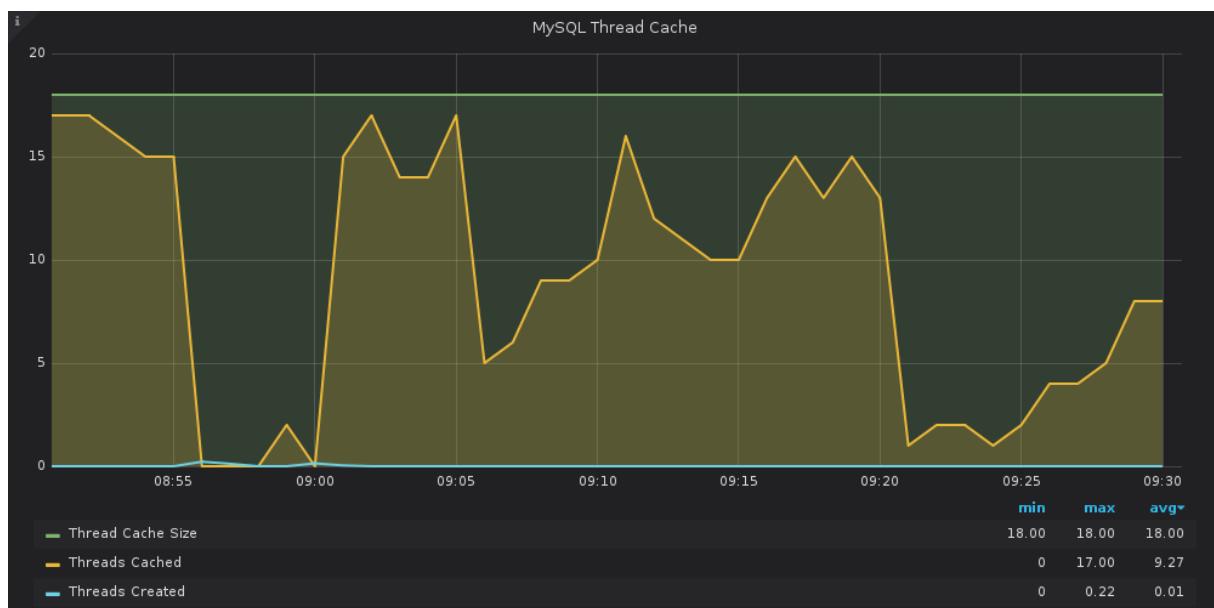
MySQL Aborted Connections



MySQL Client Thread Activity



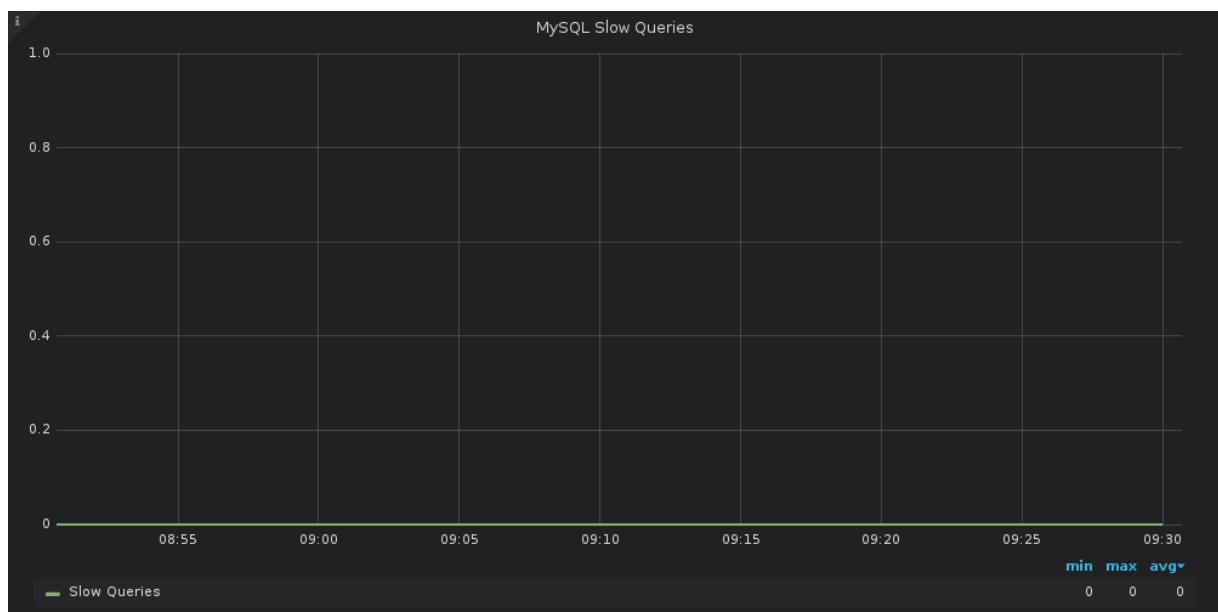
MySQL Thread Cache



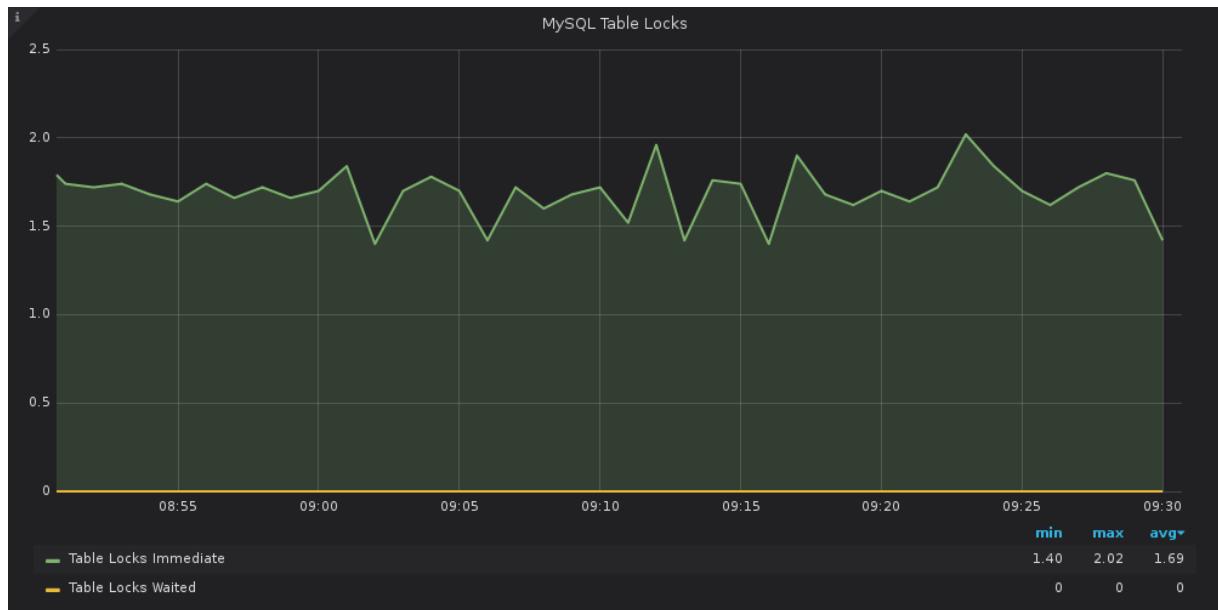
MySQL Questions



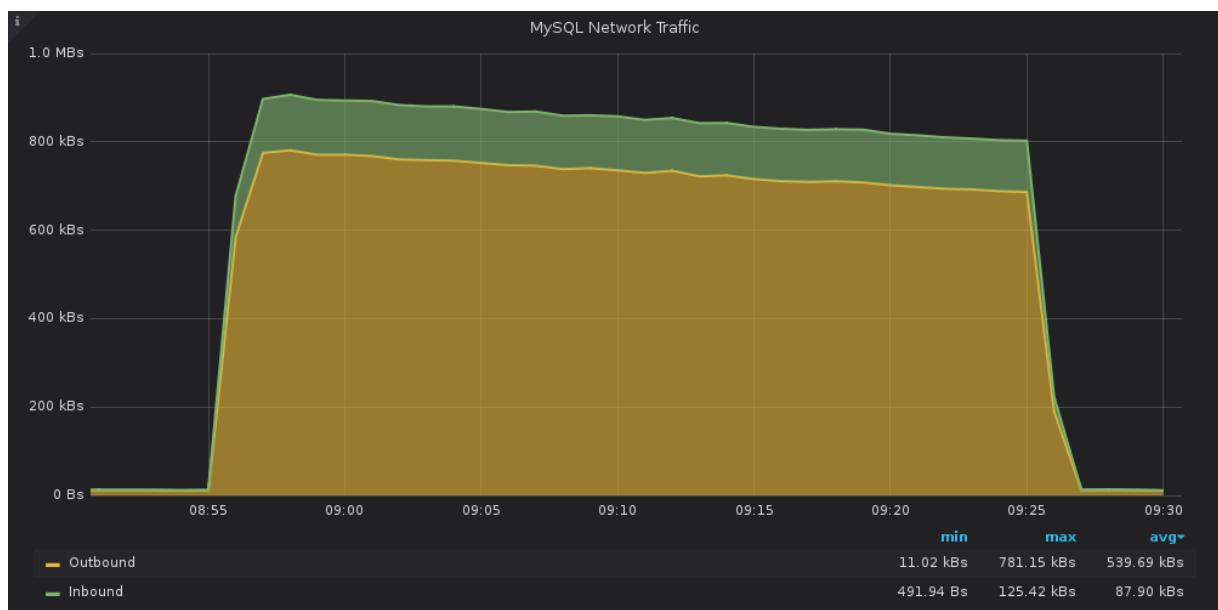
MySQL Slow Queries



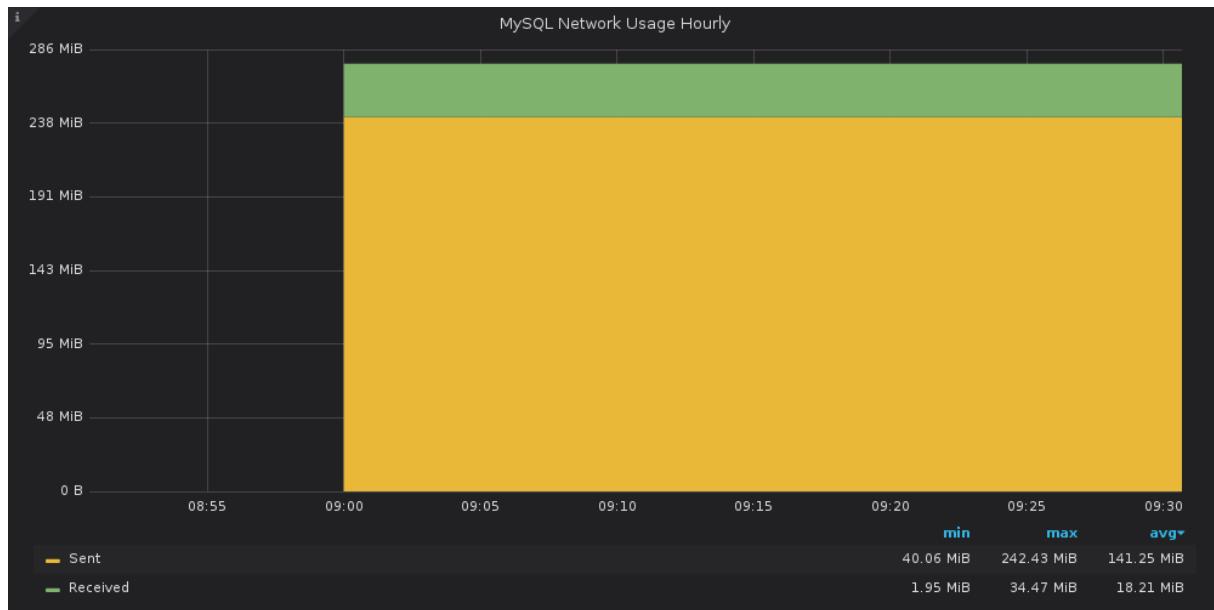
MySQL Table Locks



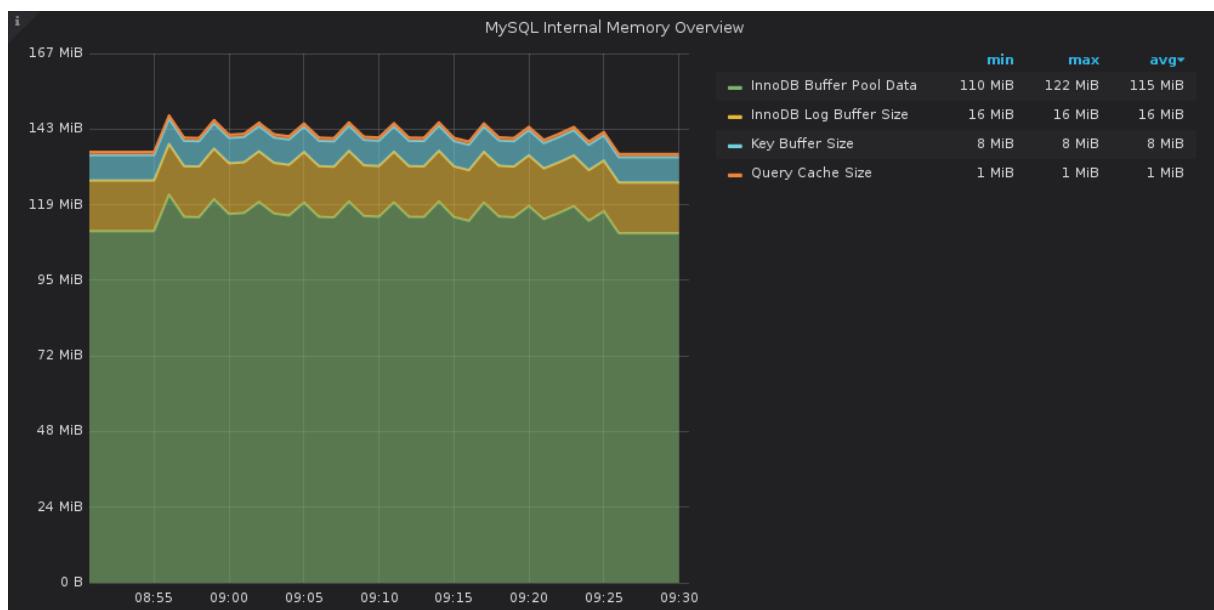
MySQL Network Traffic



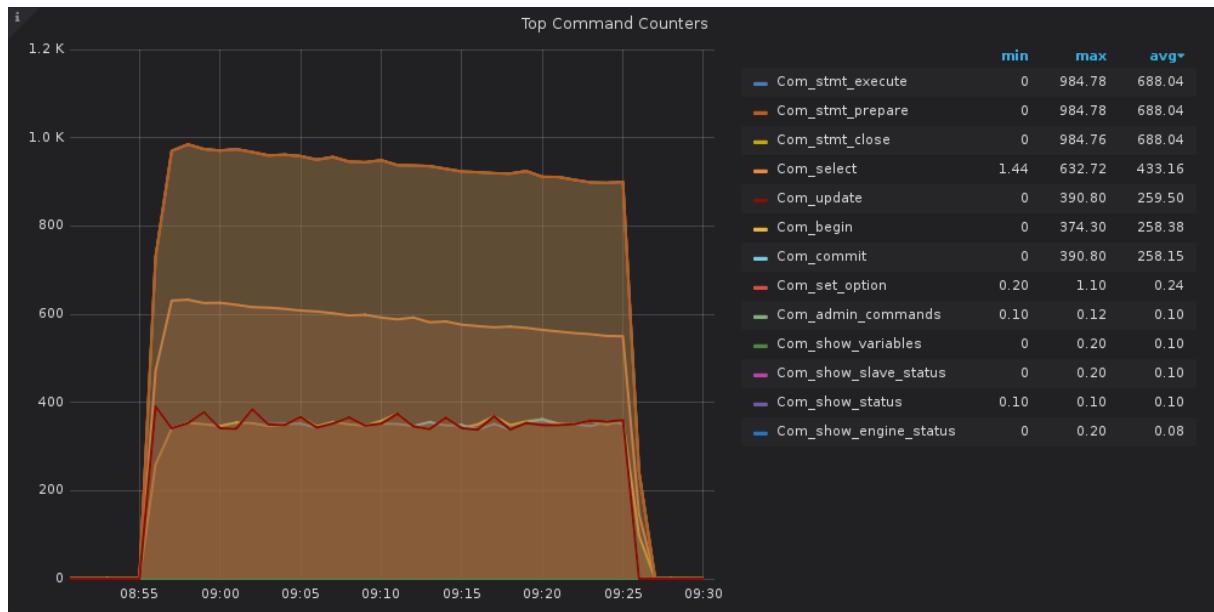
MySQL Network Usage Hourly



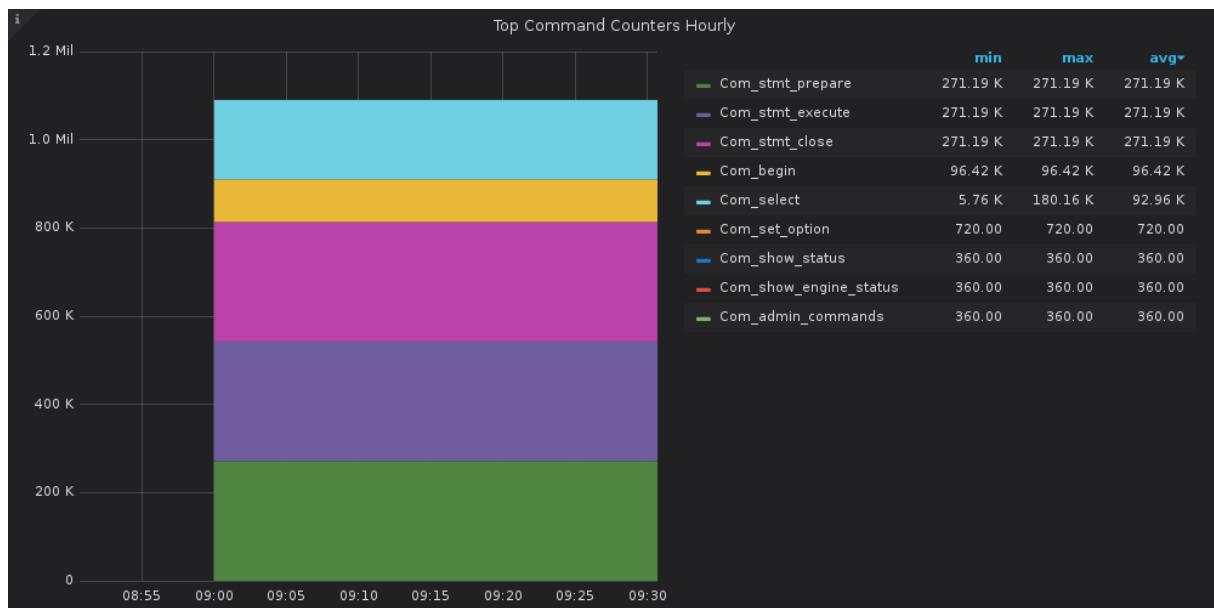
MySQL Internal Memory Overview



Top Command Counters



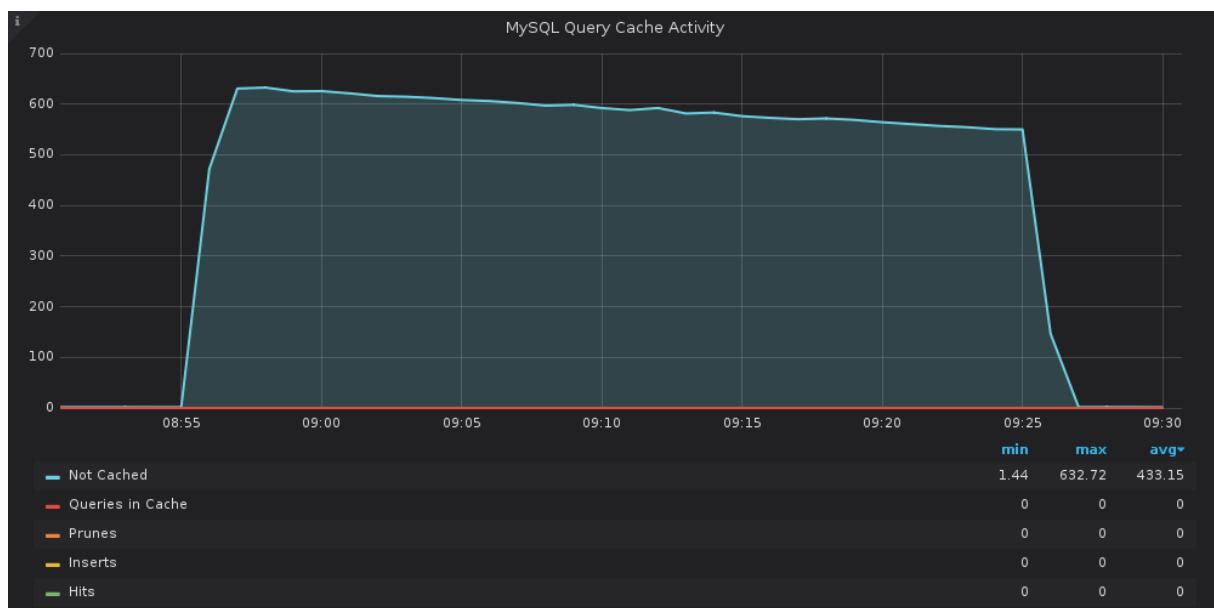
Top Command Counters Hourly



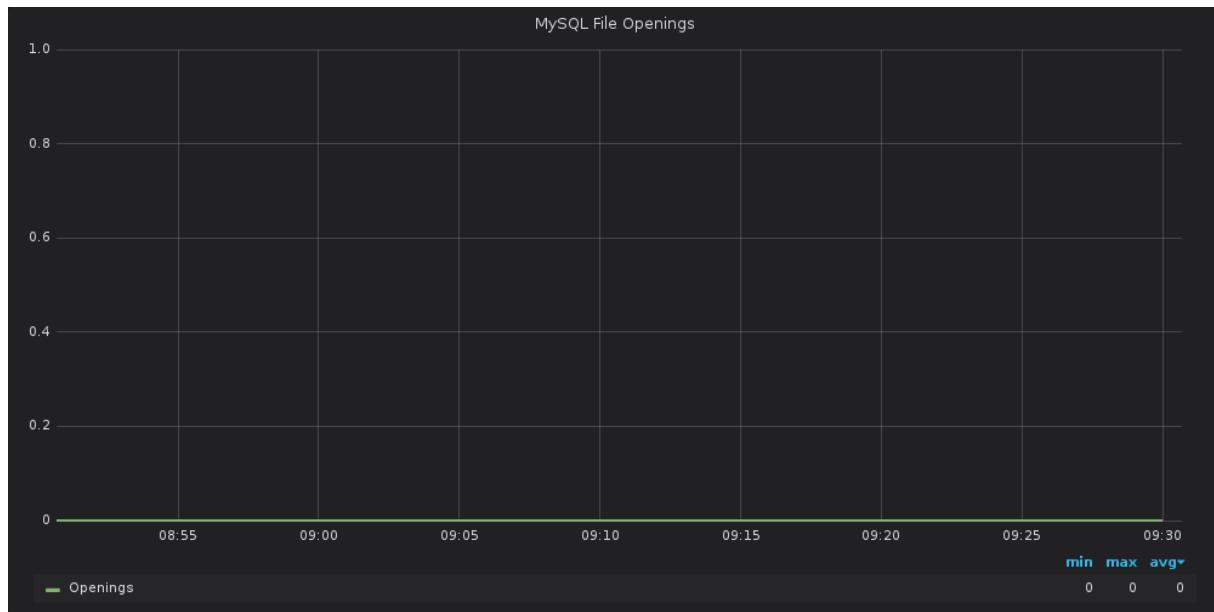
MySQL Query Cache Memory



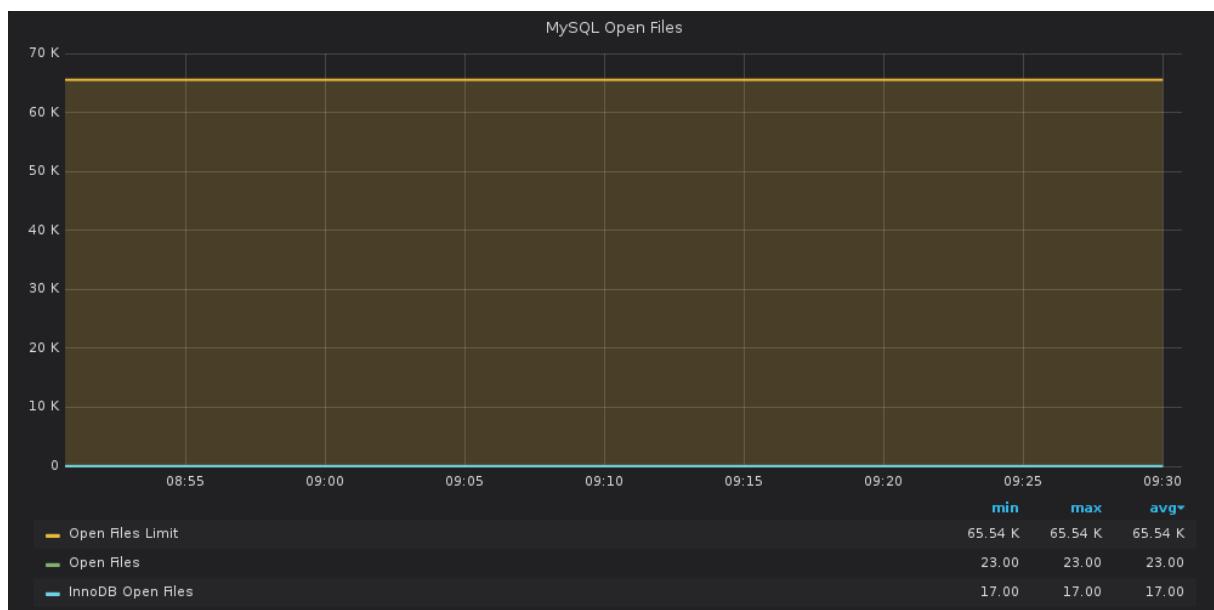
MySQL Query Cache Activity



MySQL File Openings



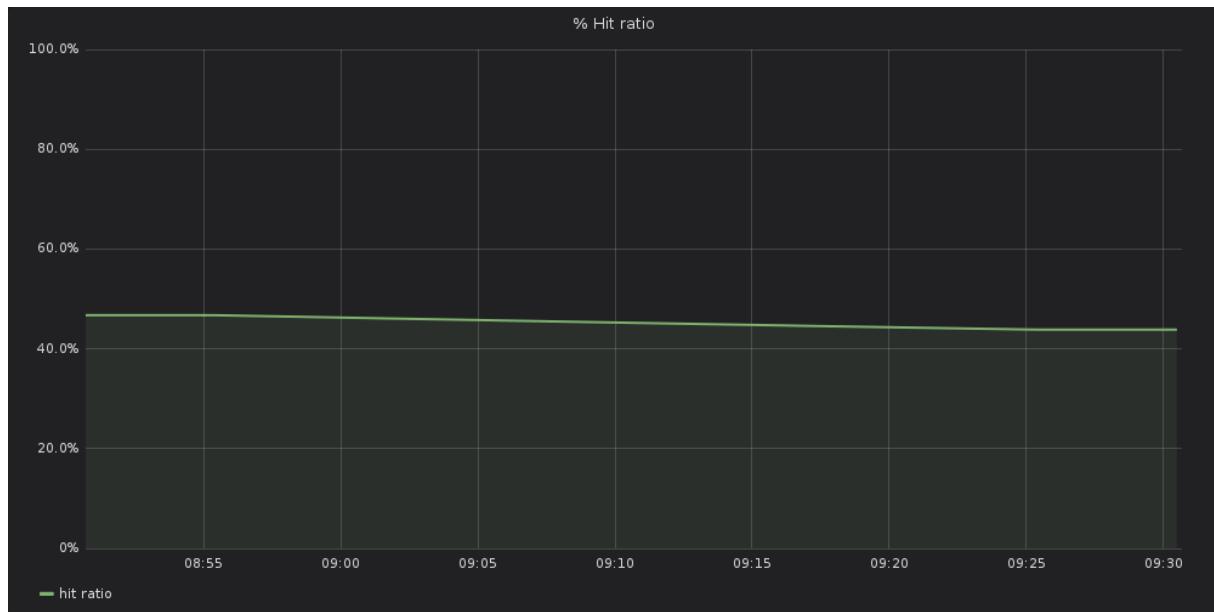
MySQL Open Files



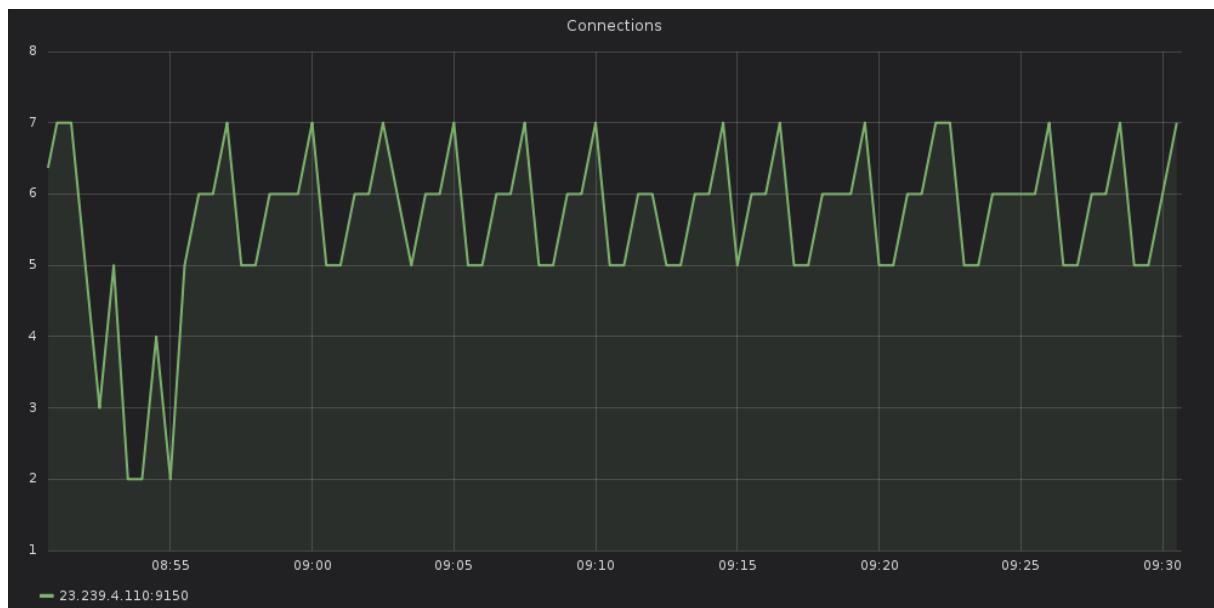
Service: memcached_1

- name: memcached_1
- type: memcached

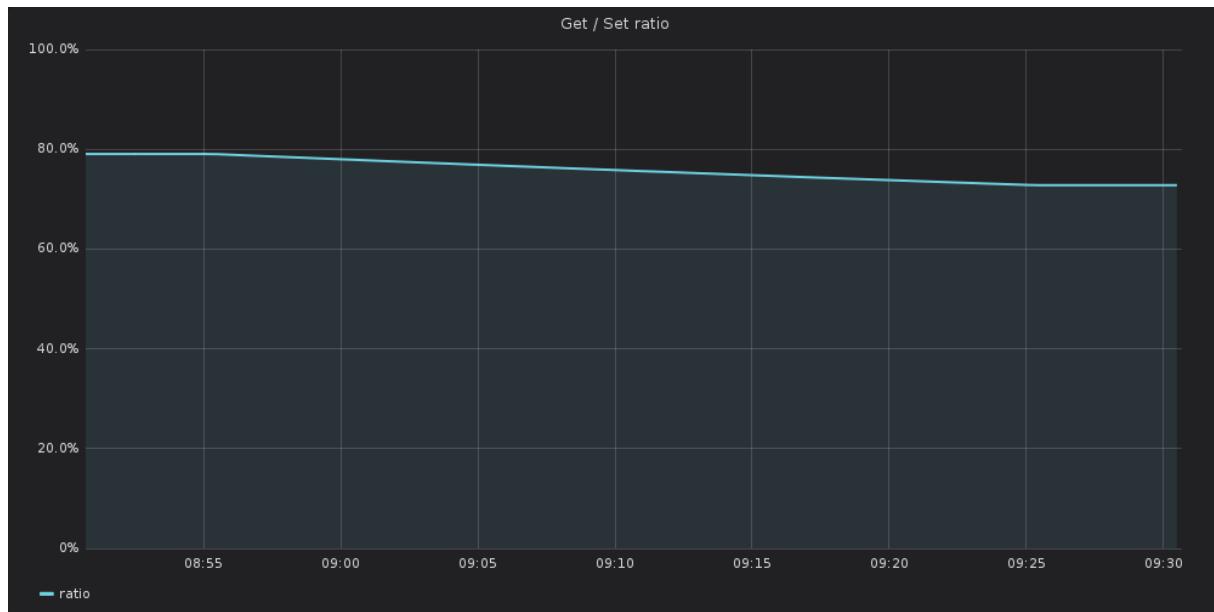
% Hit ratio



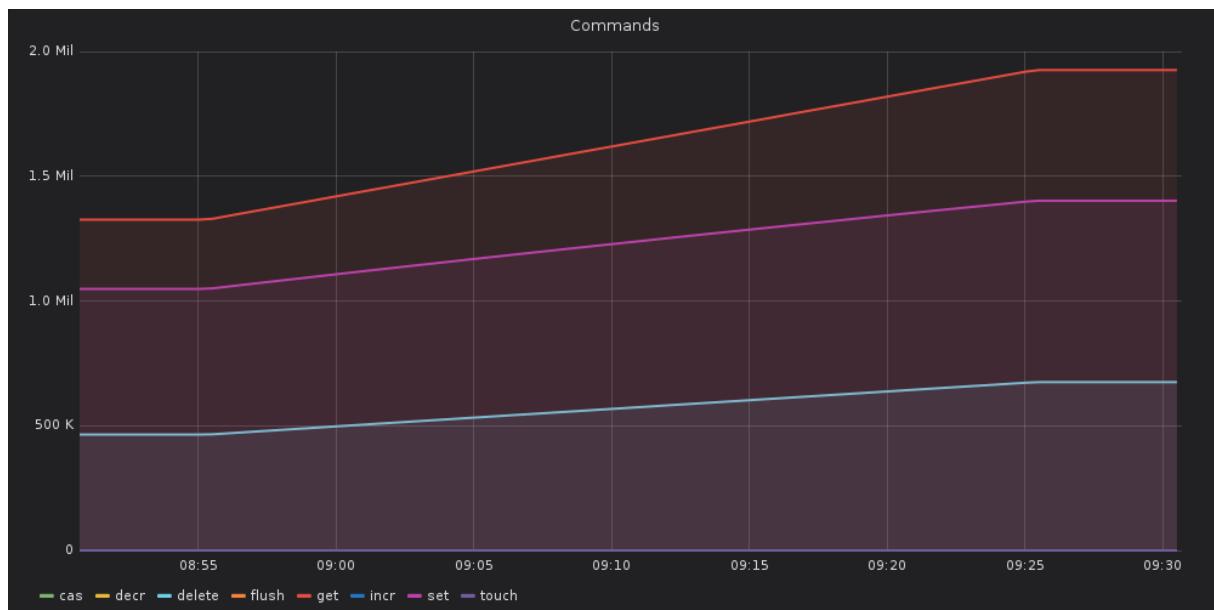
Connections



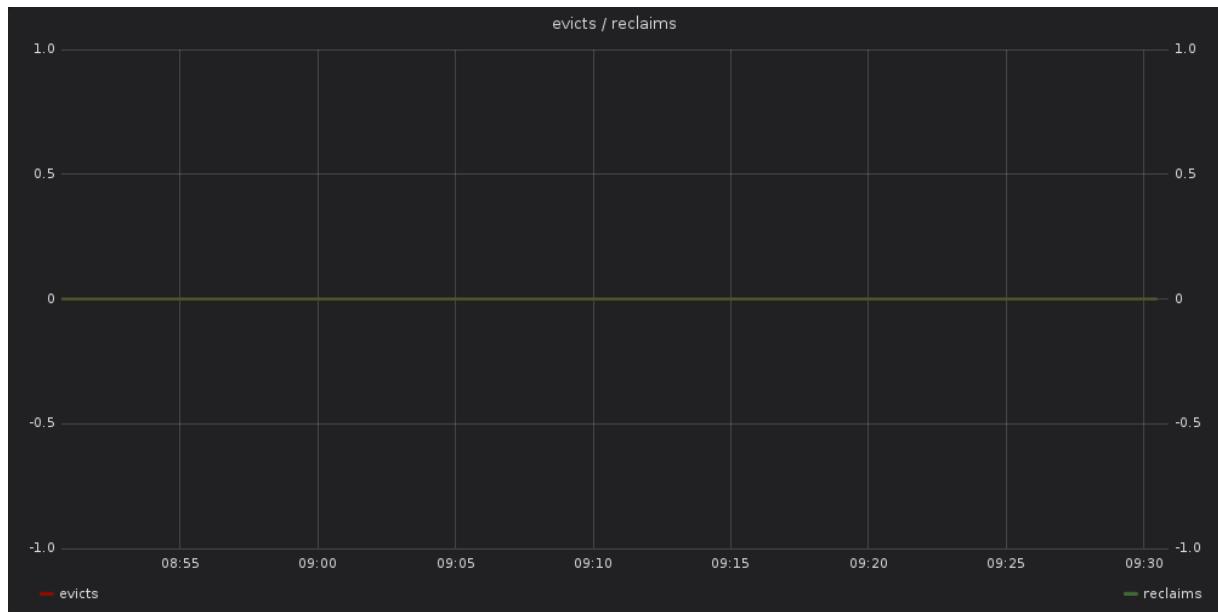
Get / Set ratio



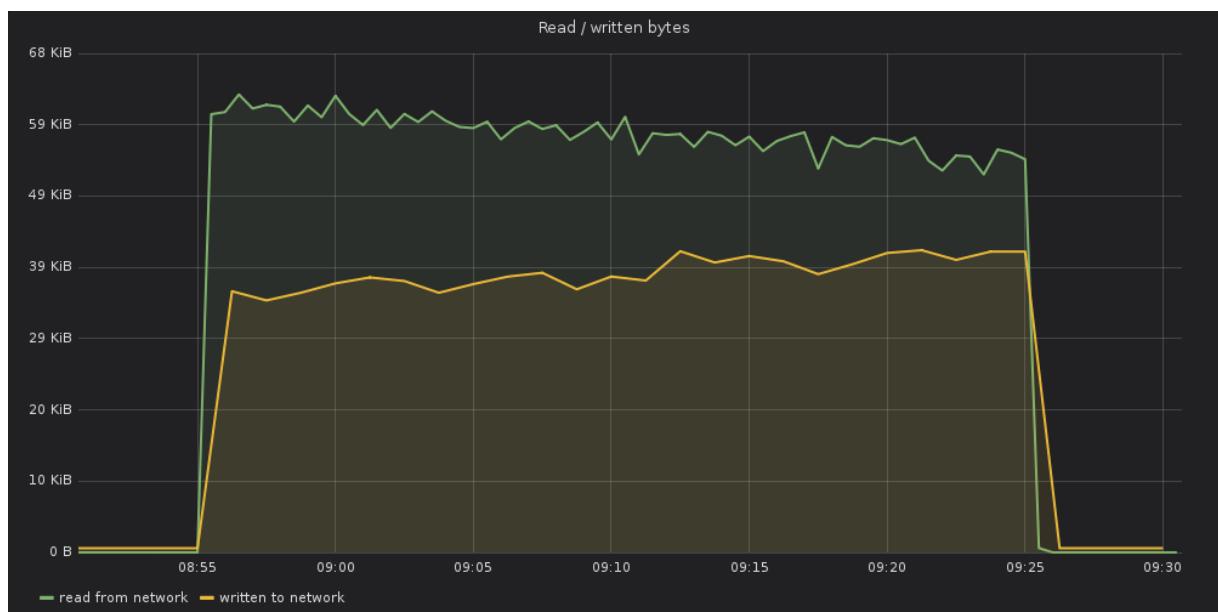
Commands



evicts / reclaims



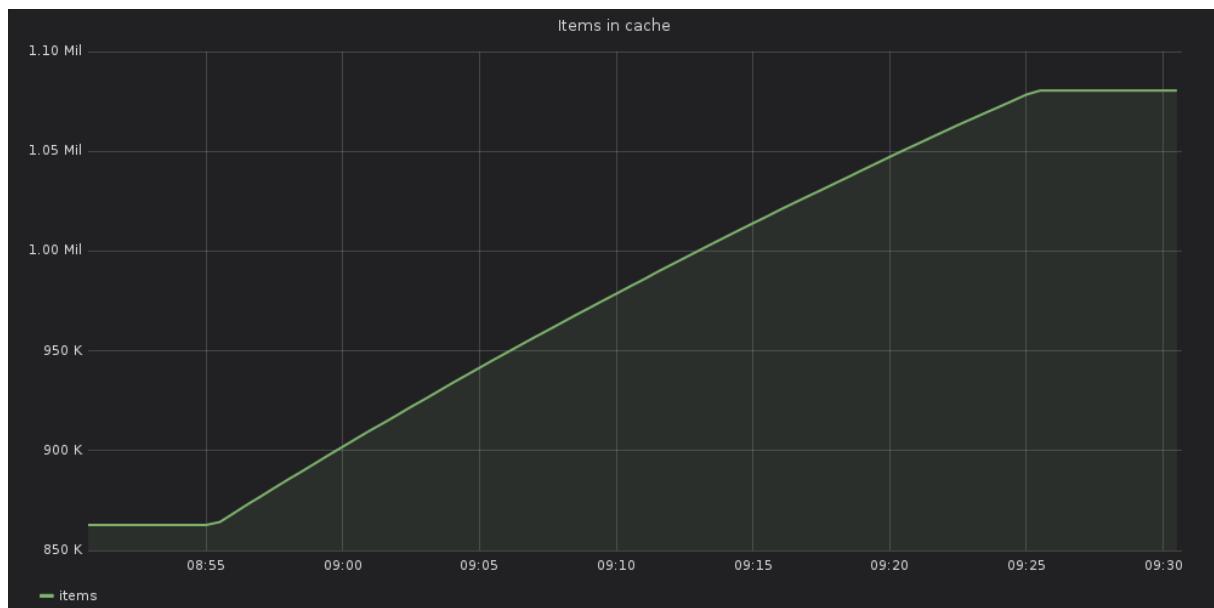
Read / written bytes



Total memory usage



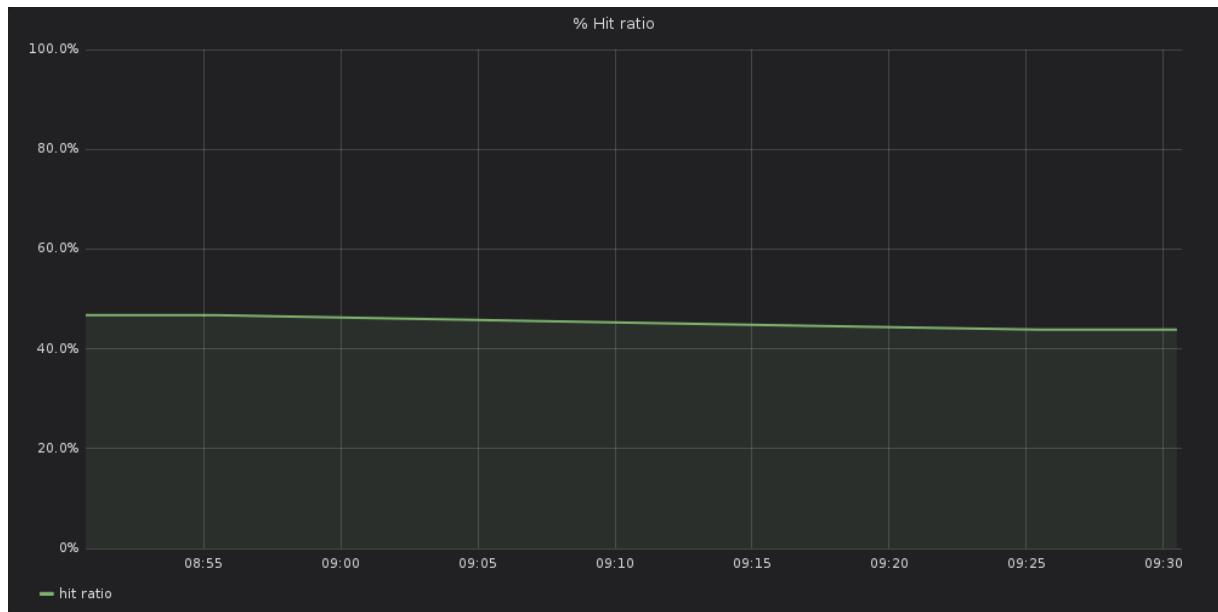
Items in cache



Service: memcached_2

- name: memcached_2
- type: memcached

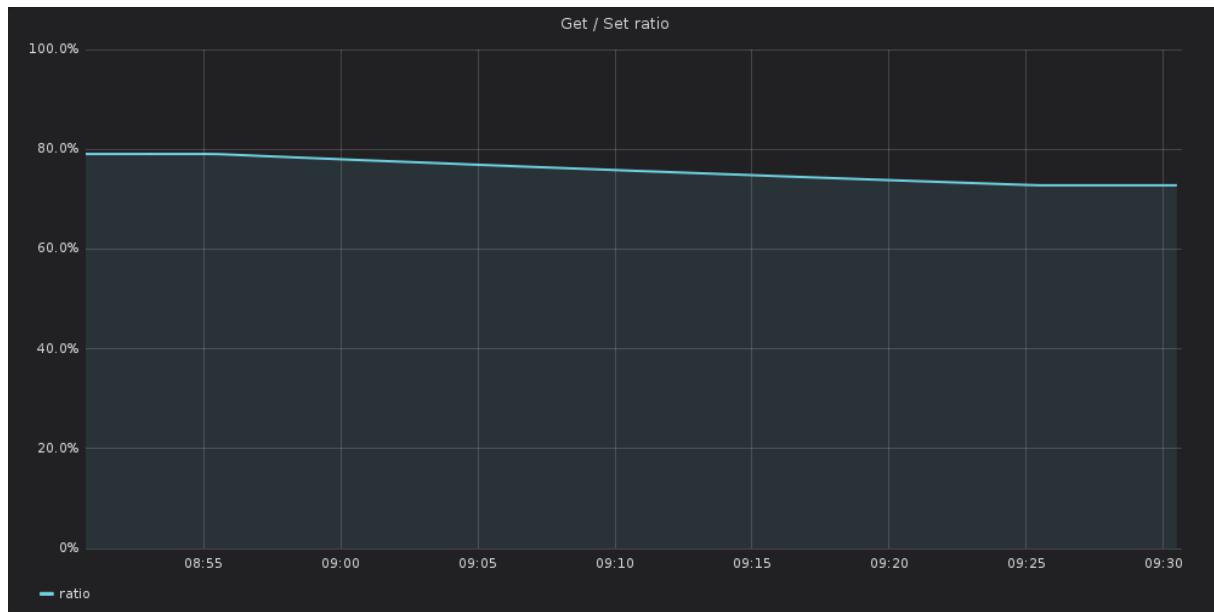
% Hit ratio



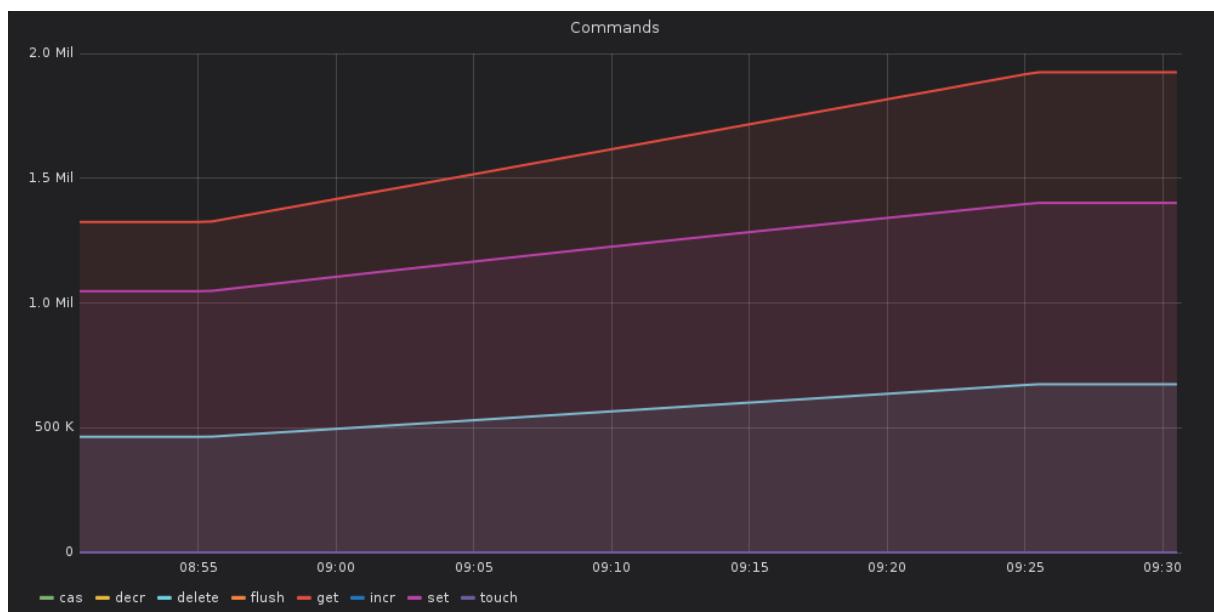
Connections



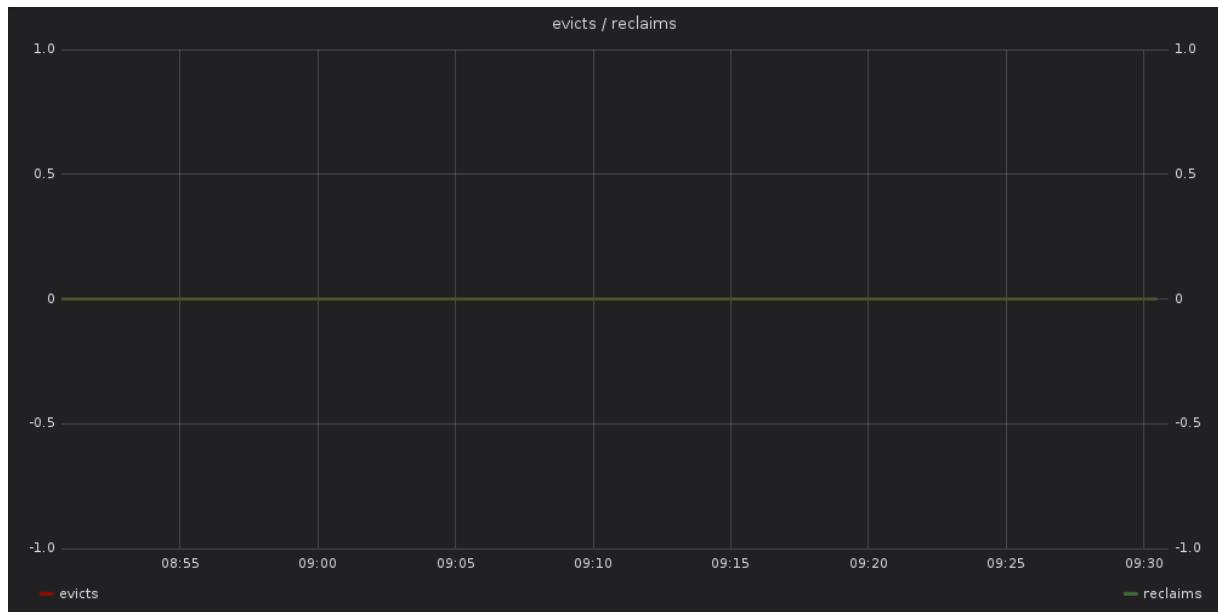
Get / Set ratio



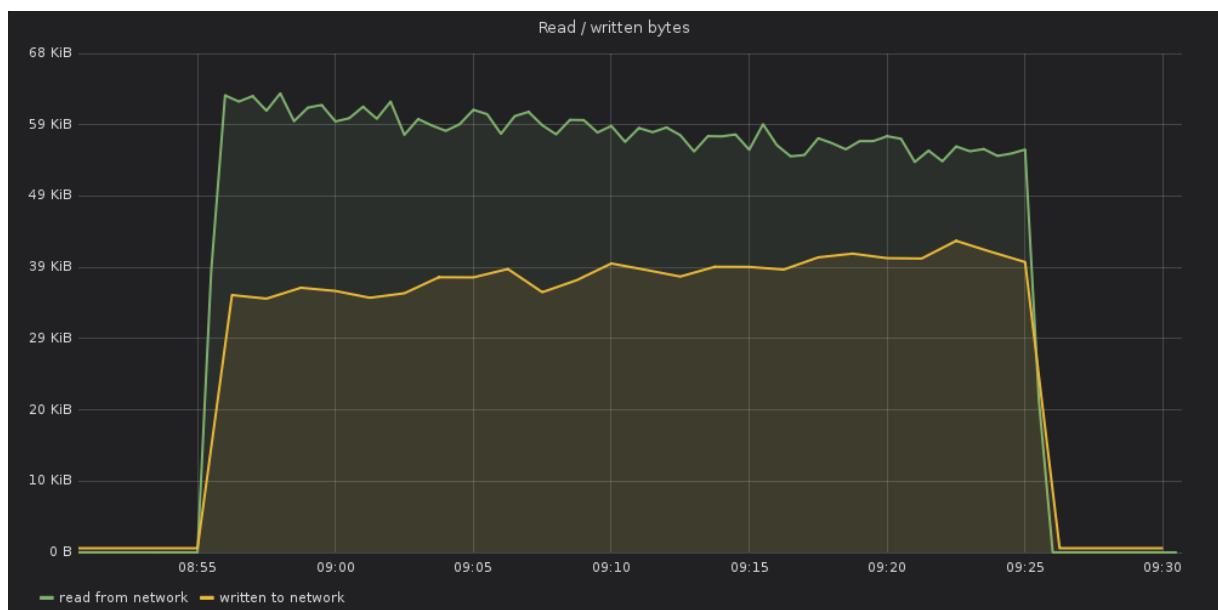
Commands



evicts / reclaims



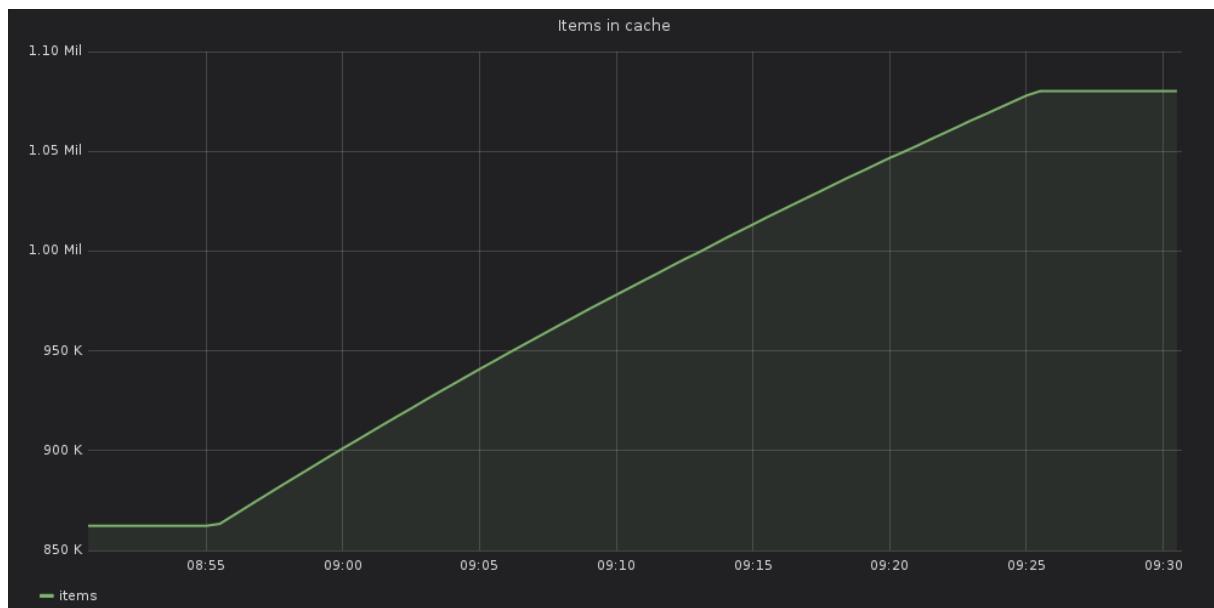
Read / written bytes



Total memory usage



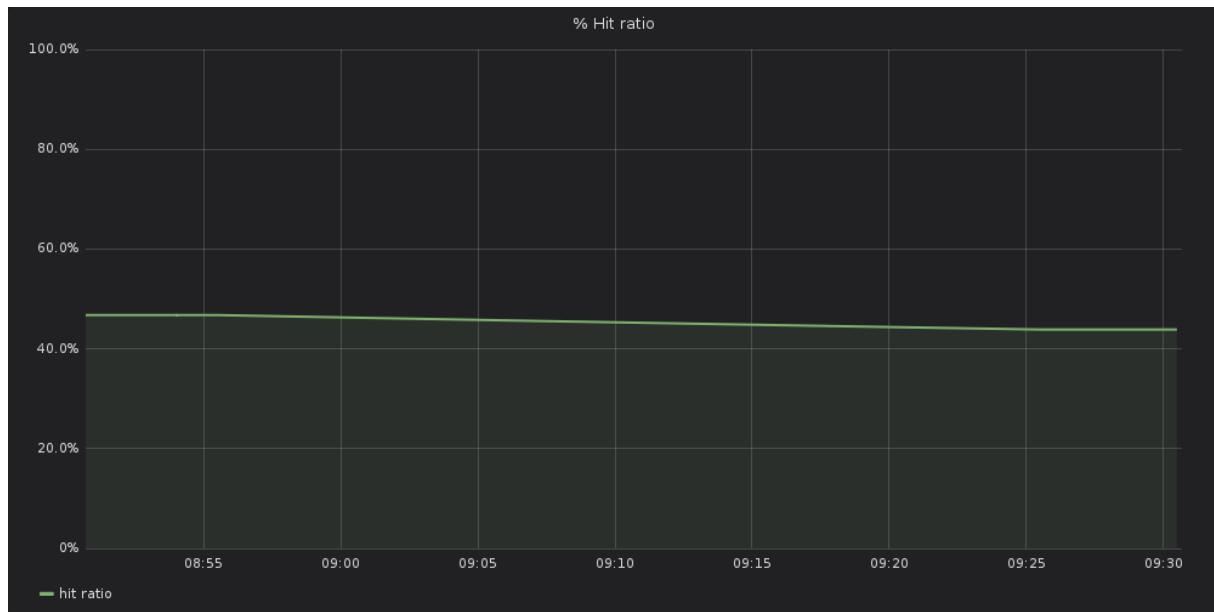
Items in cache



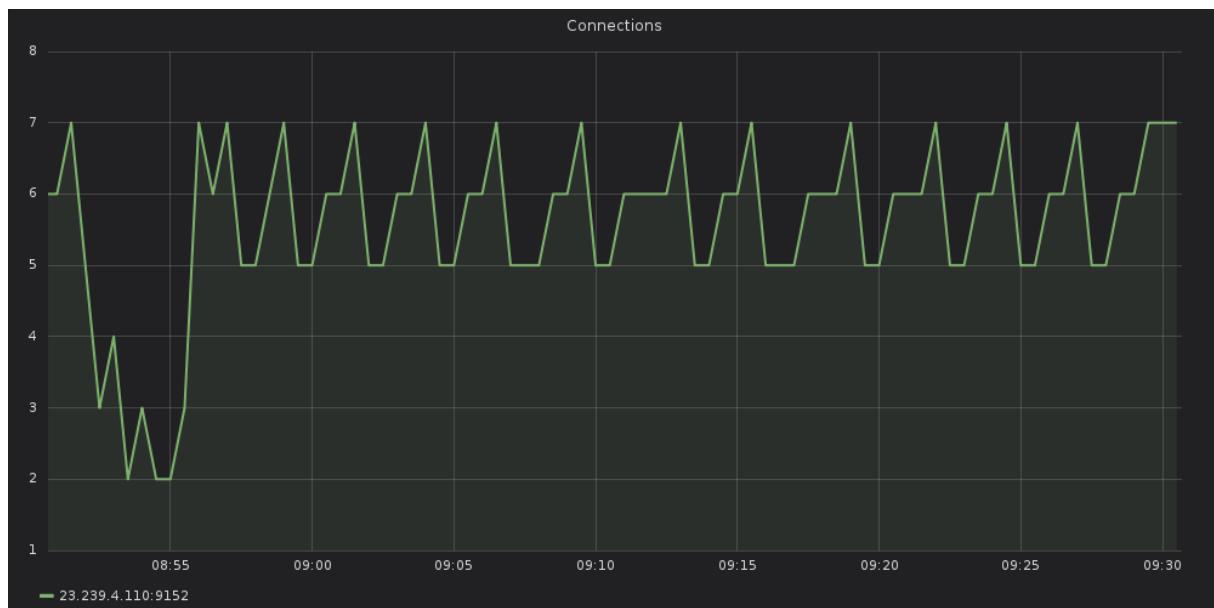
Service: memcached_3

- name: memcached_3
- type: memcached

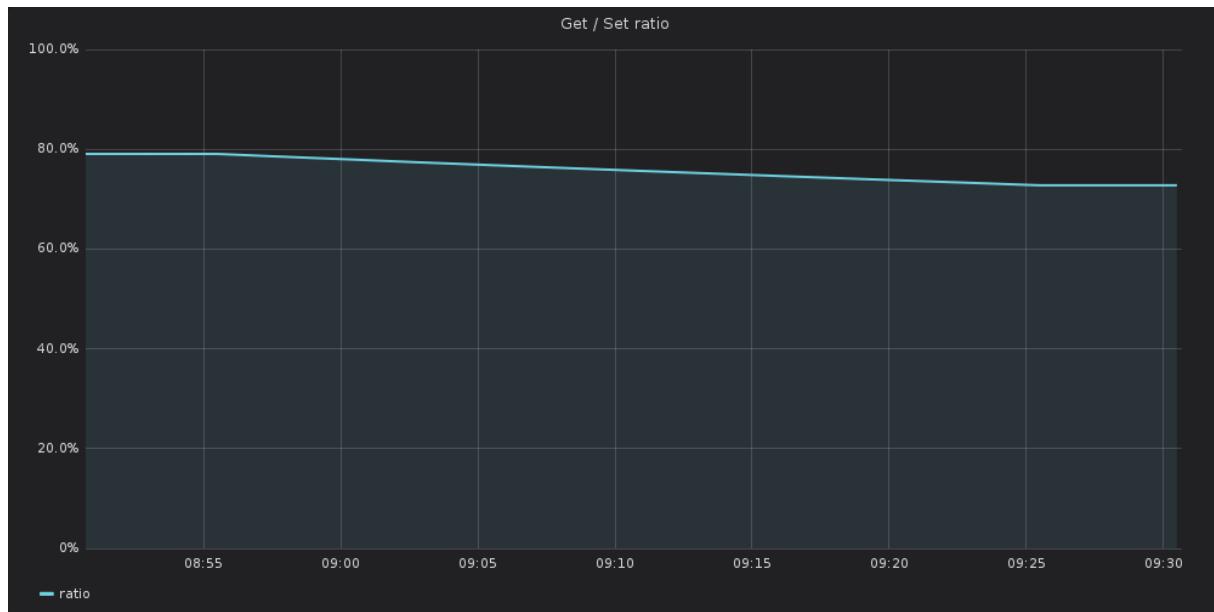
% Hit ratio



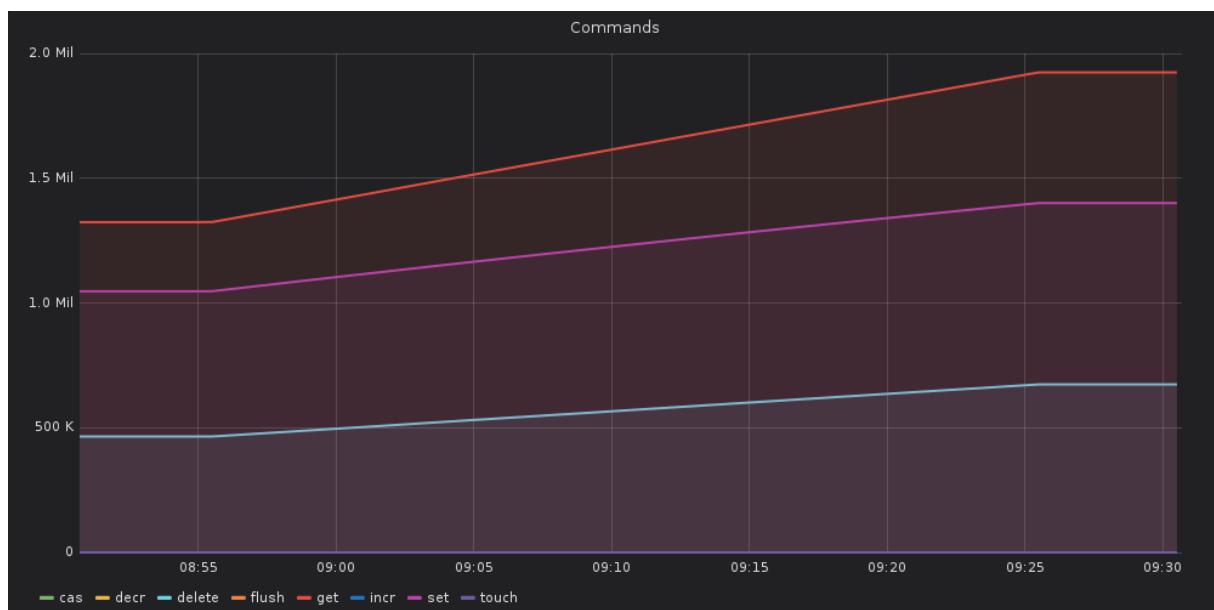
Connections



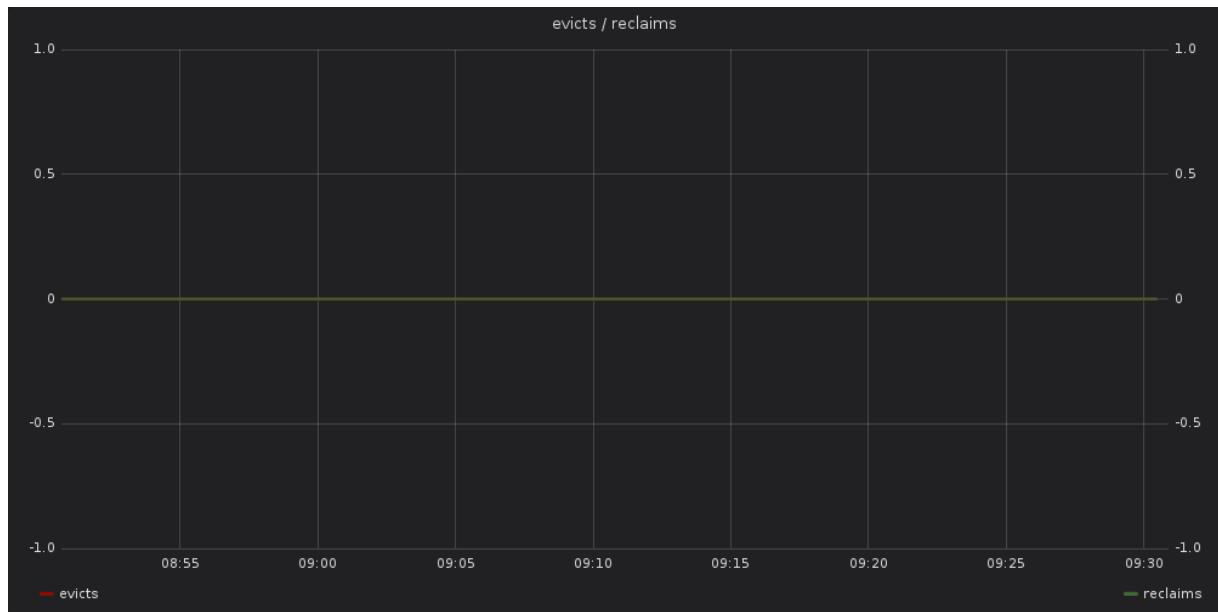
Get / Set ratio



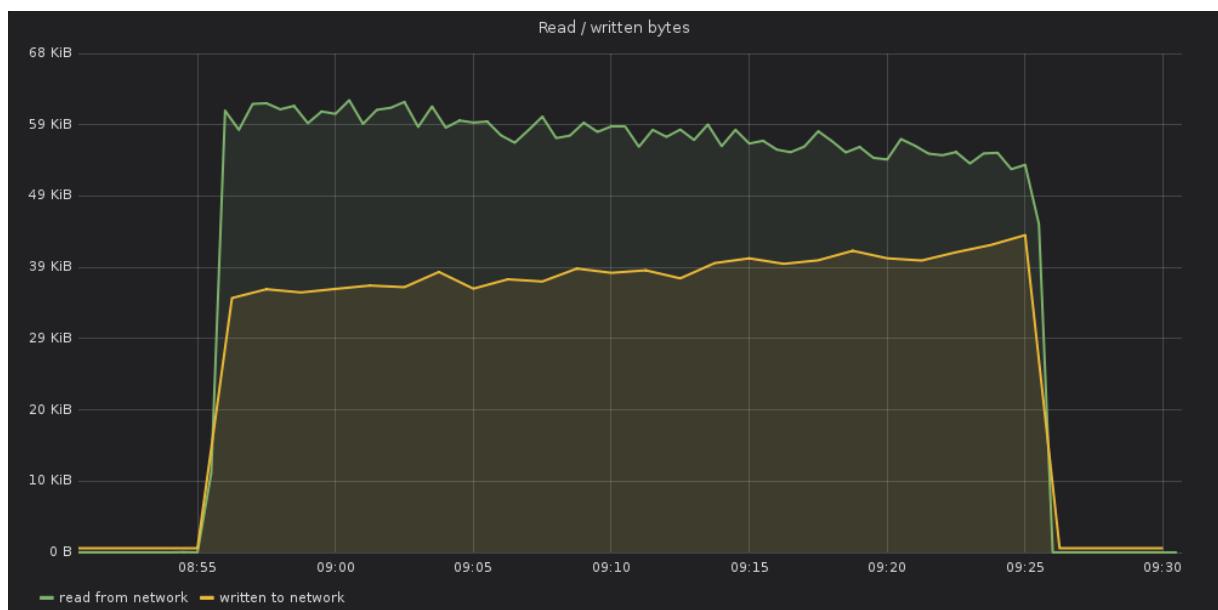
Commands



evicts / reclaims



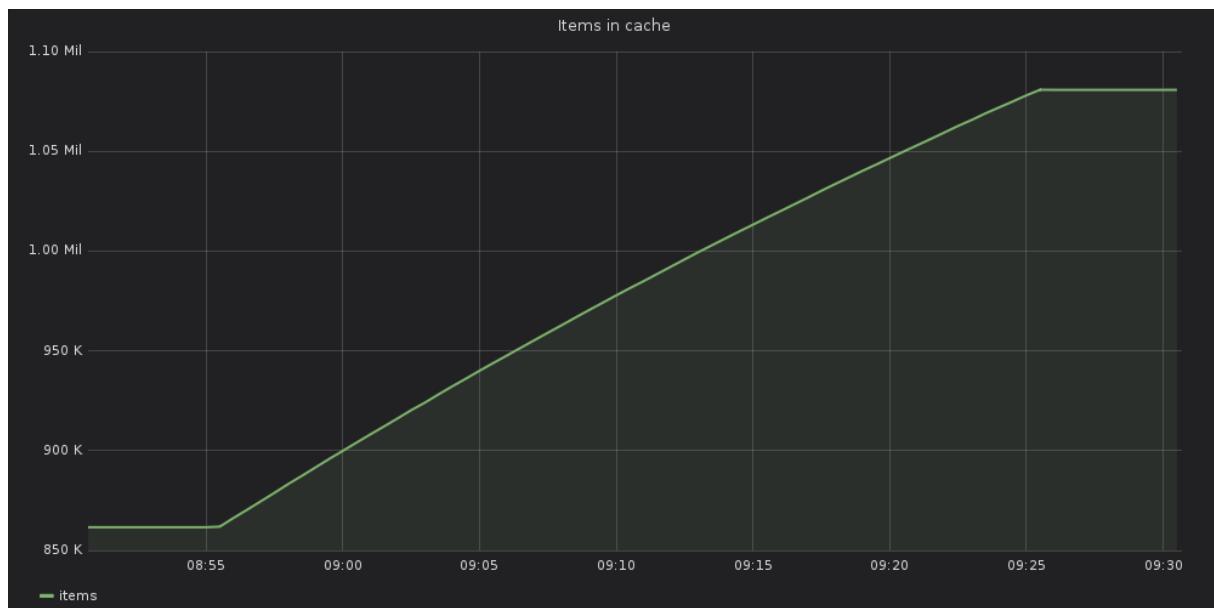
Read / written bytes



Total memory usage



Items in cache



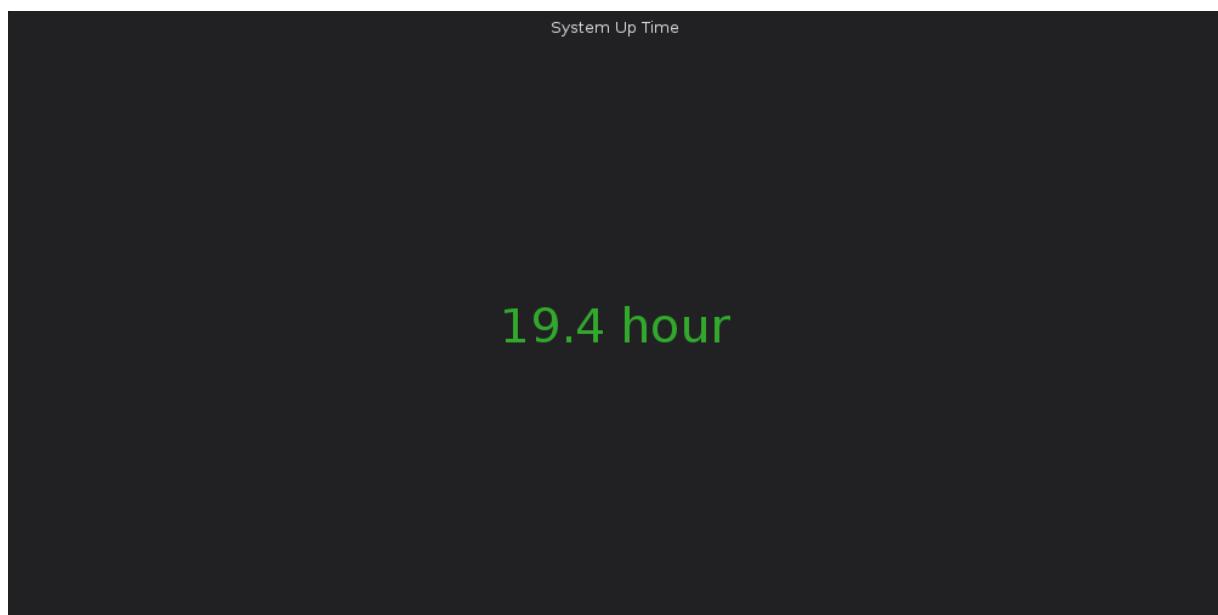
Host: kafka1

- name: kafka1
- type: kafka

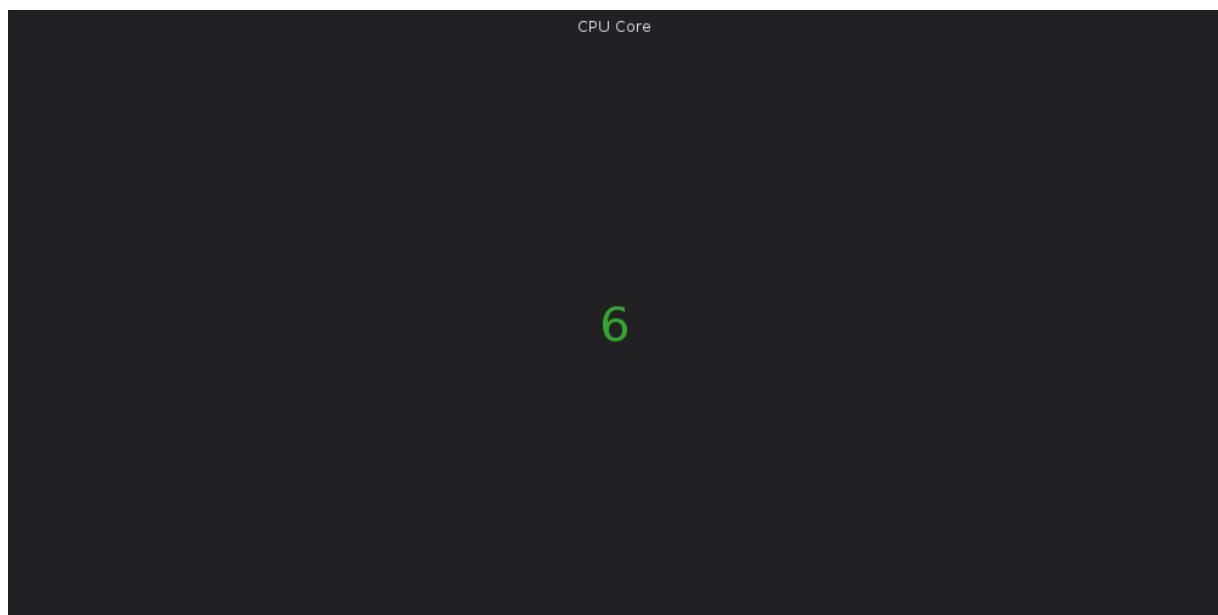
Service: node_kafka_1

- name: node_kafka_1
- type: node_exporter

系统运行时间



CPU 核数

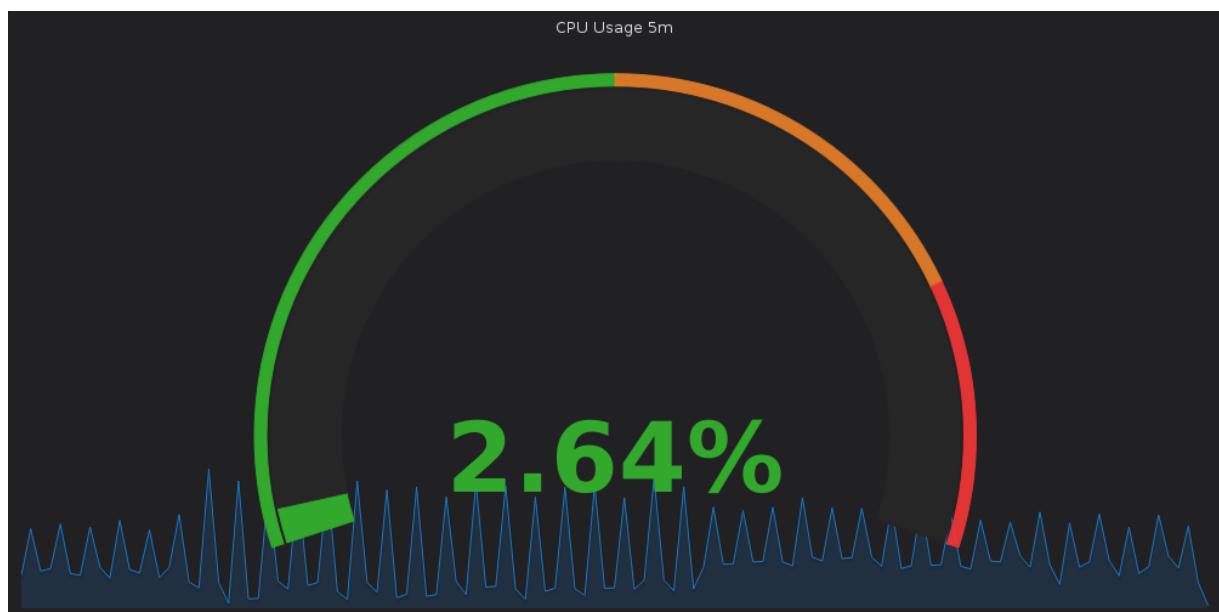


内存总量

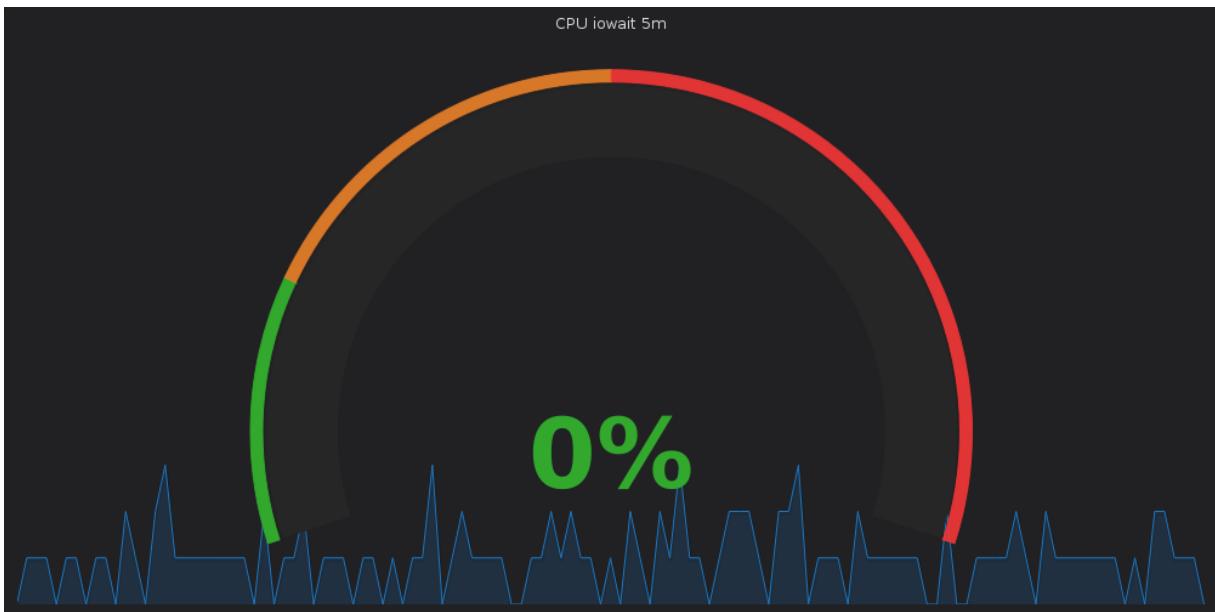
Total Memory

15.7 GiB

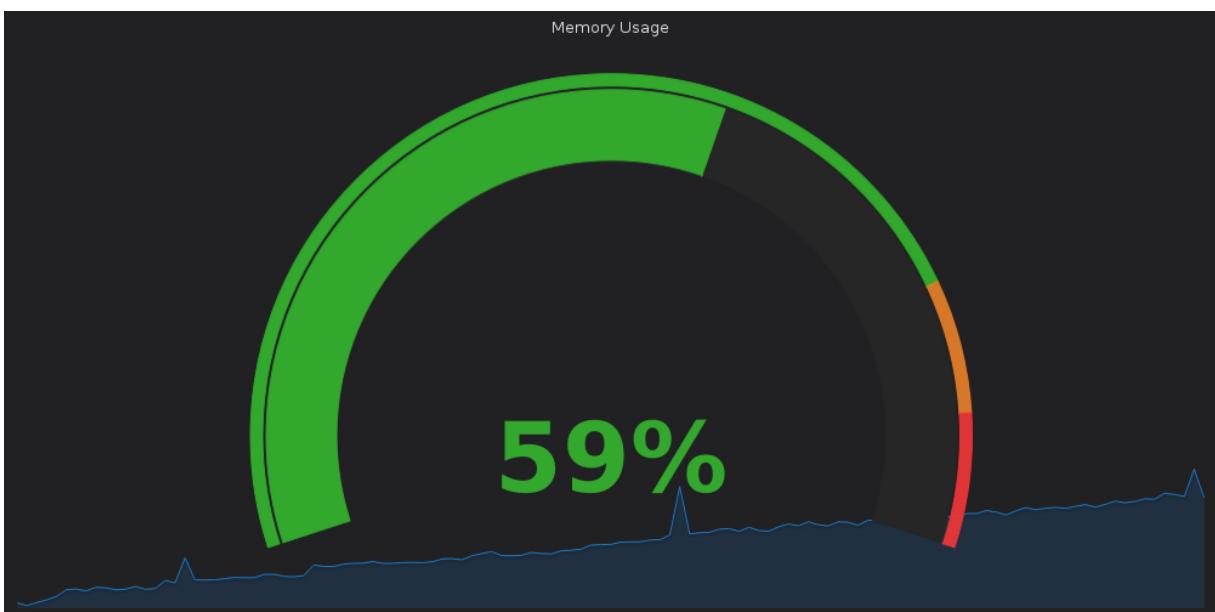
CPU使用率 (5m)



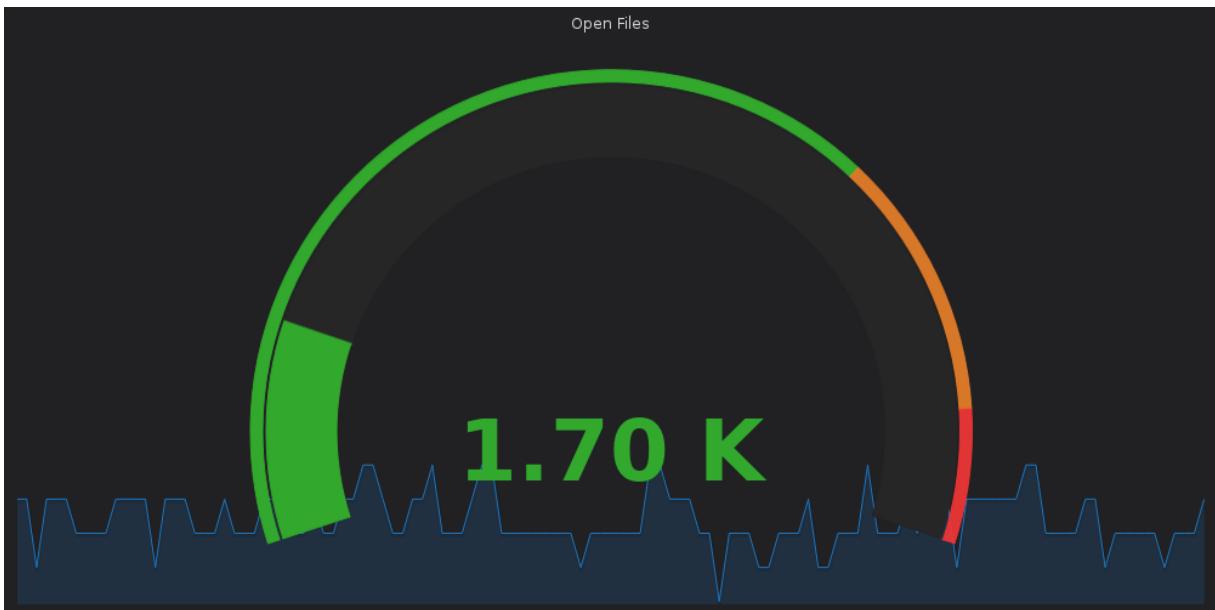
CPU iowait (5m)



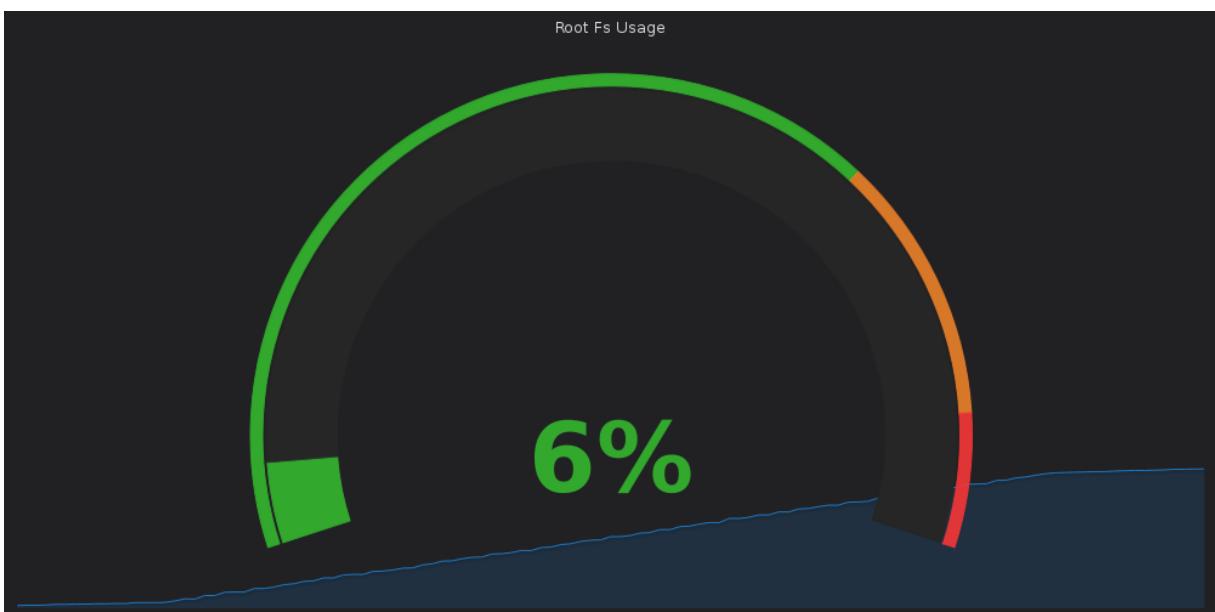
内存使用率



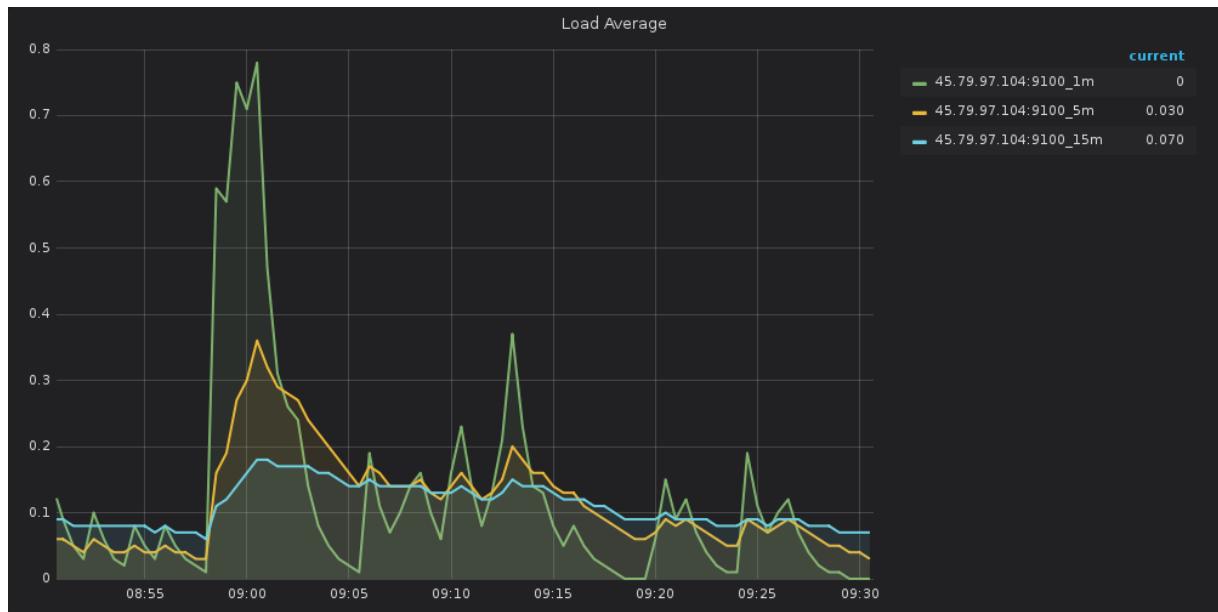
当前打开的文件描述符



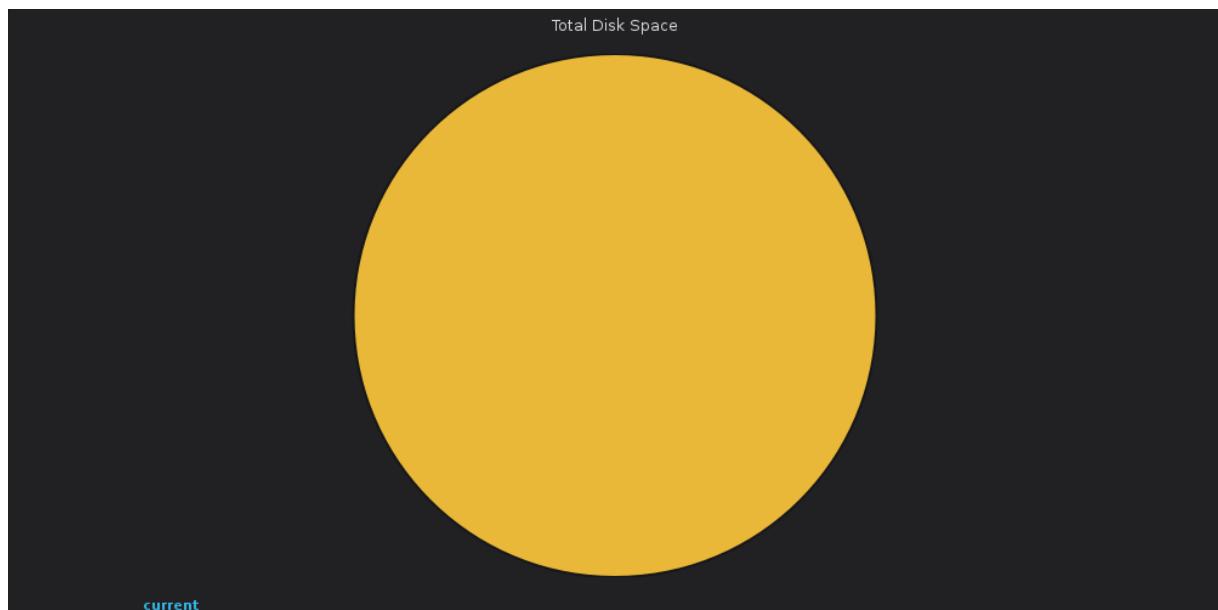
根分区使用率



系统平均负载



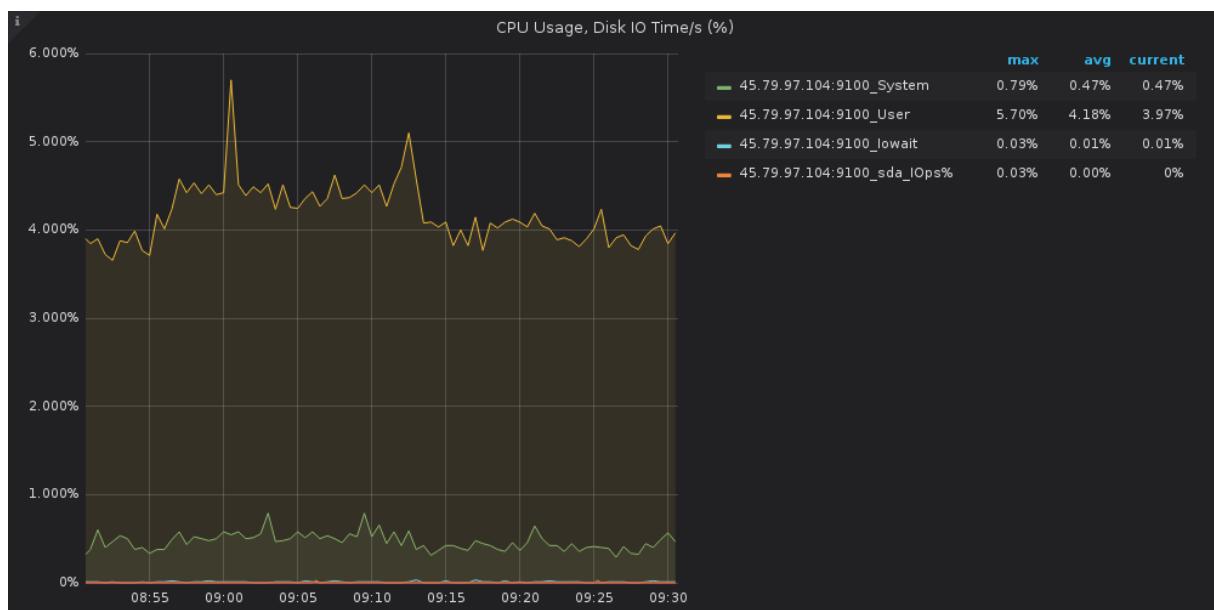
磁盘总空间



各分区可用空间

Volumes Available				
File System	IP	Mount ▲	Available	Usage
ext4	45.79.97.104:9100	/	295.03 GiB	1.12%

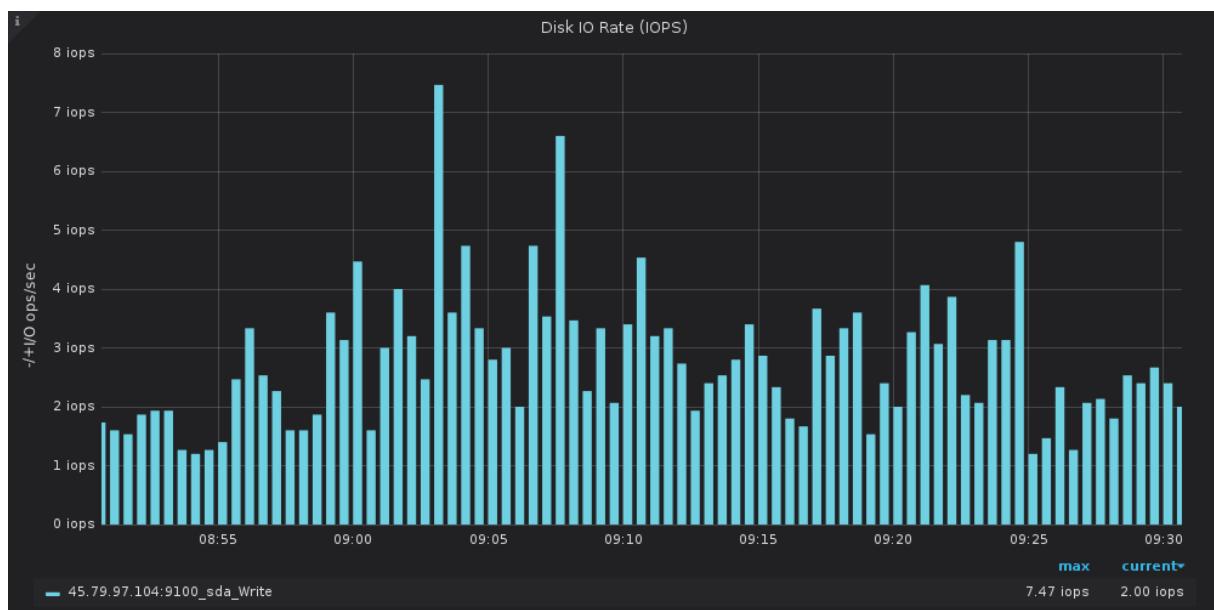
CPU使用率、磁盘每秒的I/O操作耗费时间 (%)



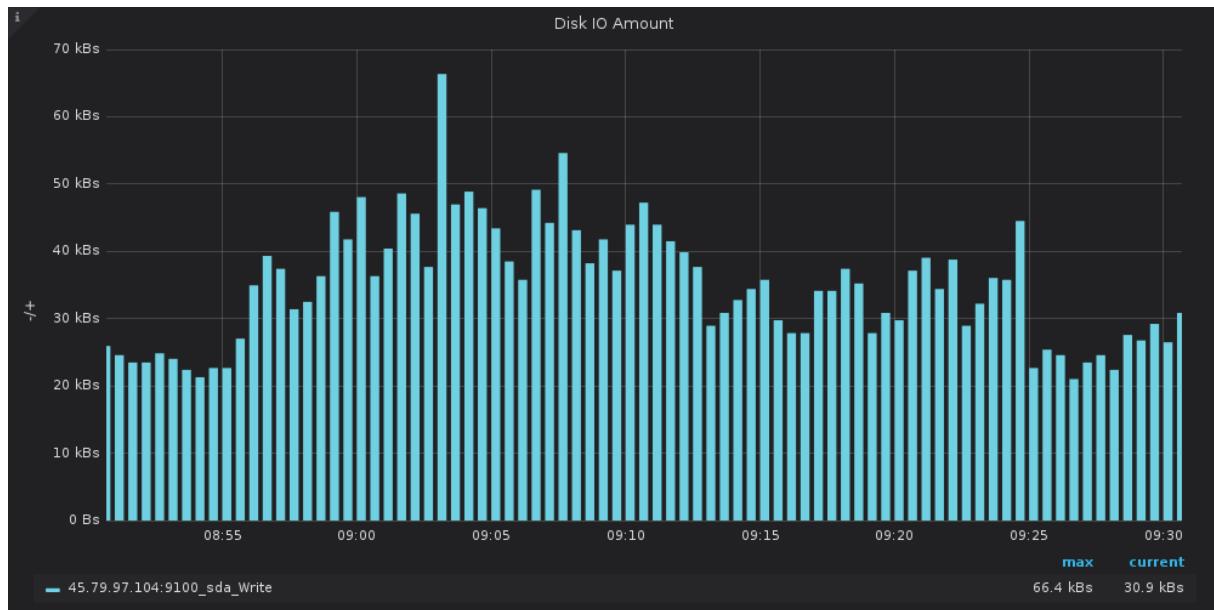
内存信息



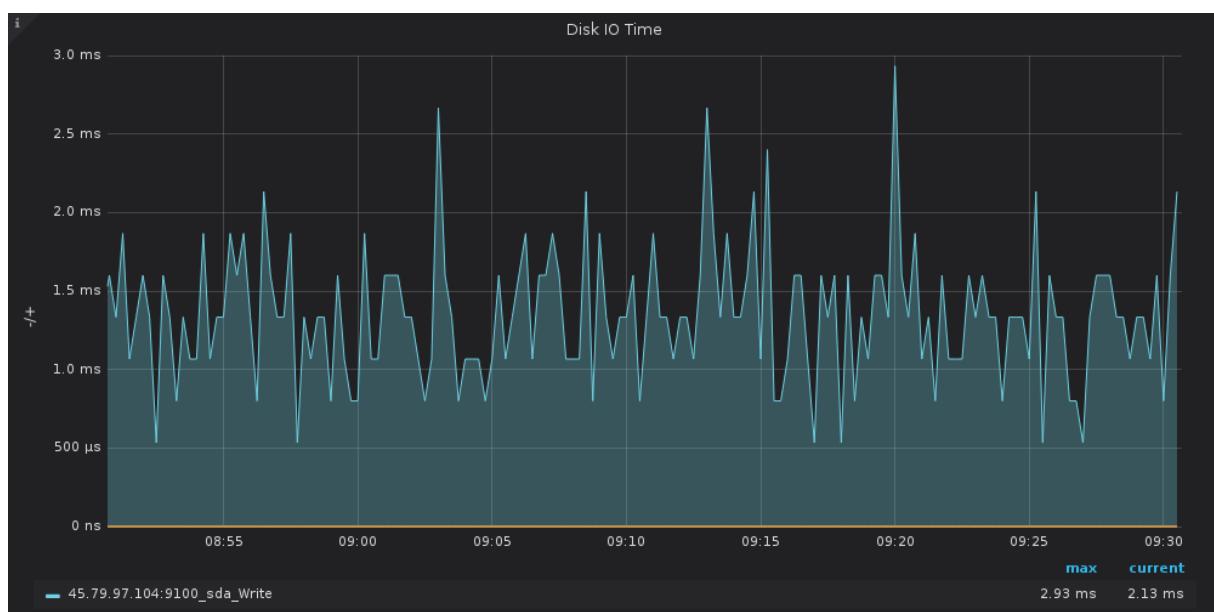
磁盘读写速率 (IOPS)



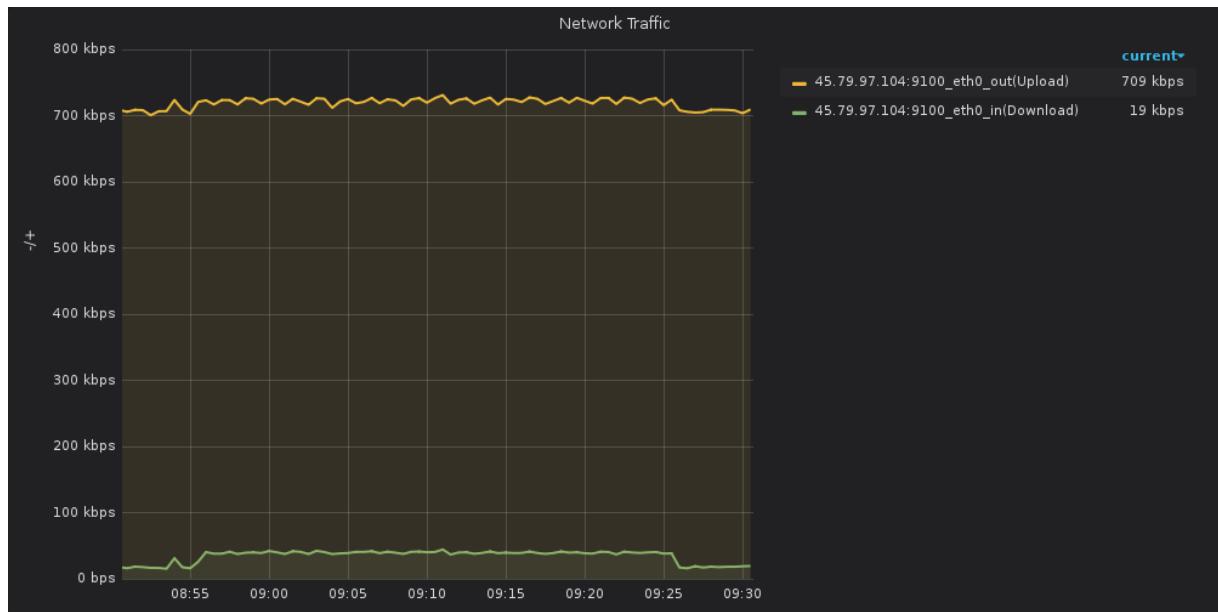
磁盘读写容量大小



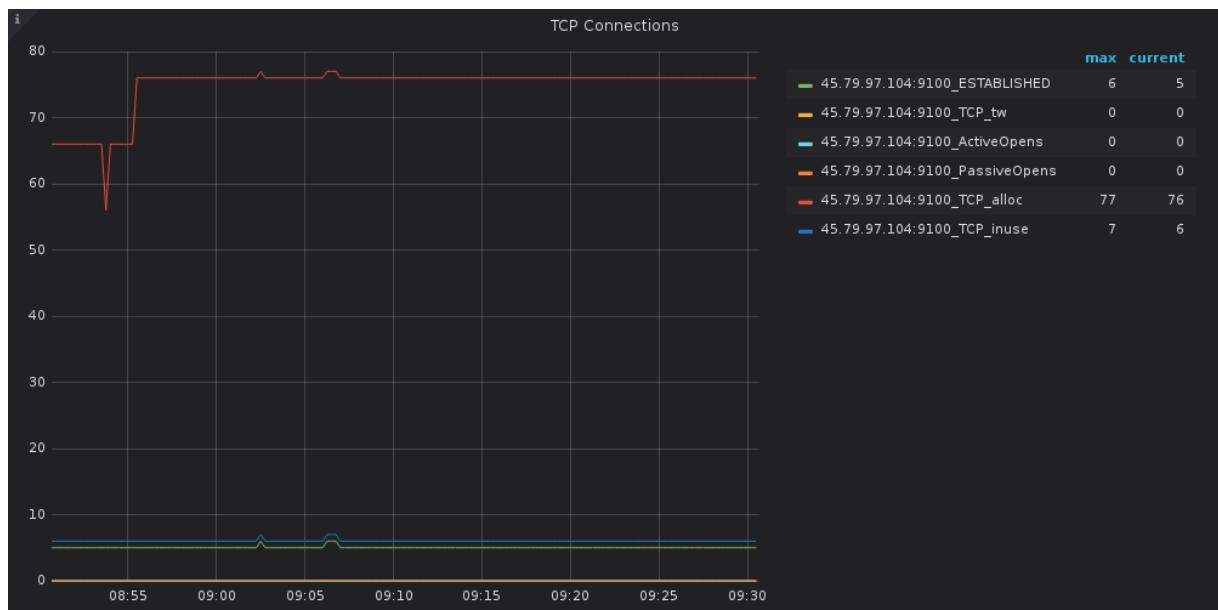
磁盘IO读写时间



网络流量



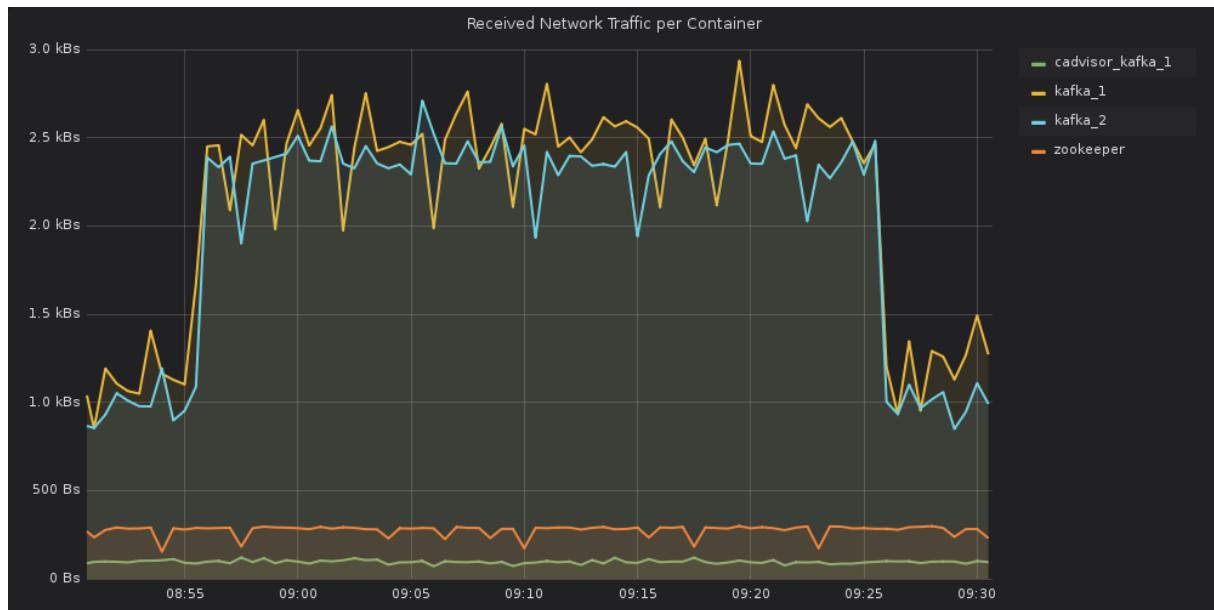
TCP 连接情况



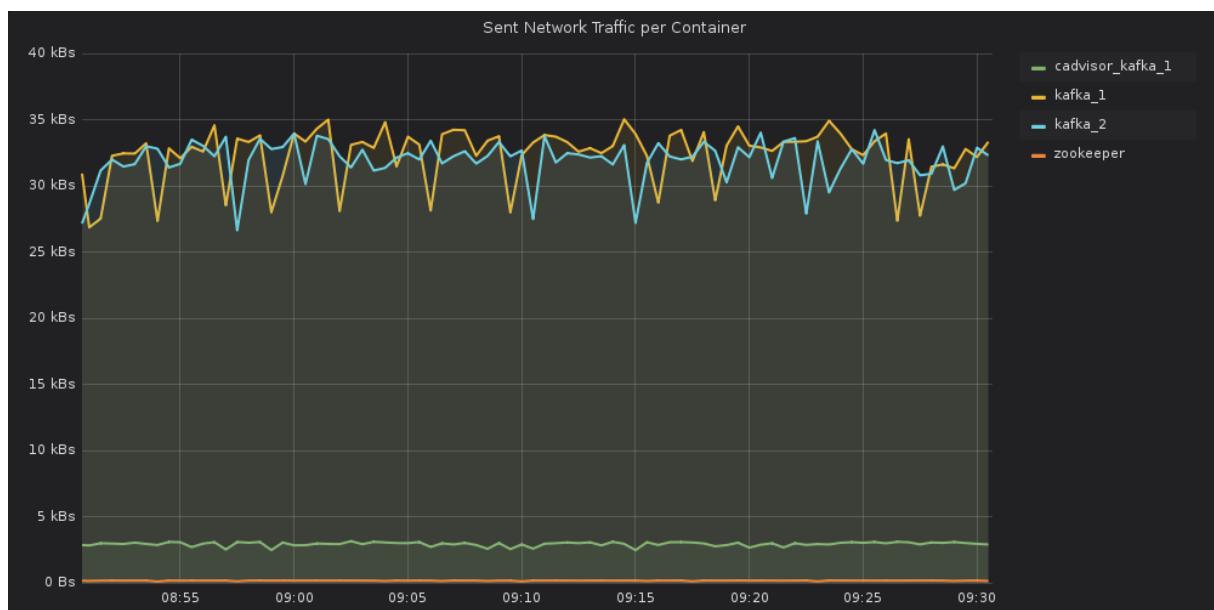
Service: cAdvisor_kafka_1

- name: cadvisor_kafka_1
- type: cAdvisor

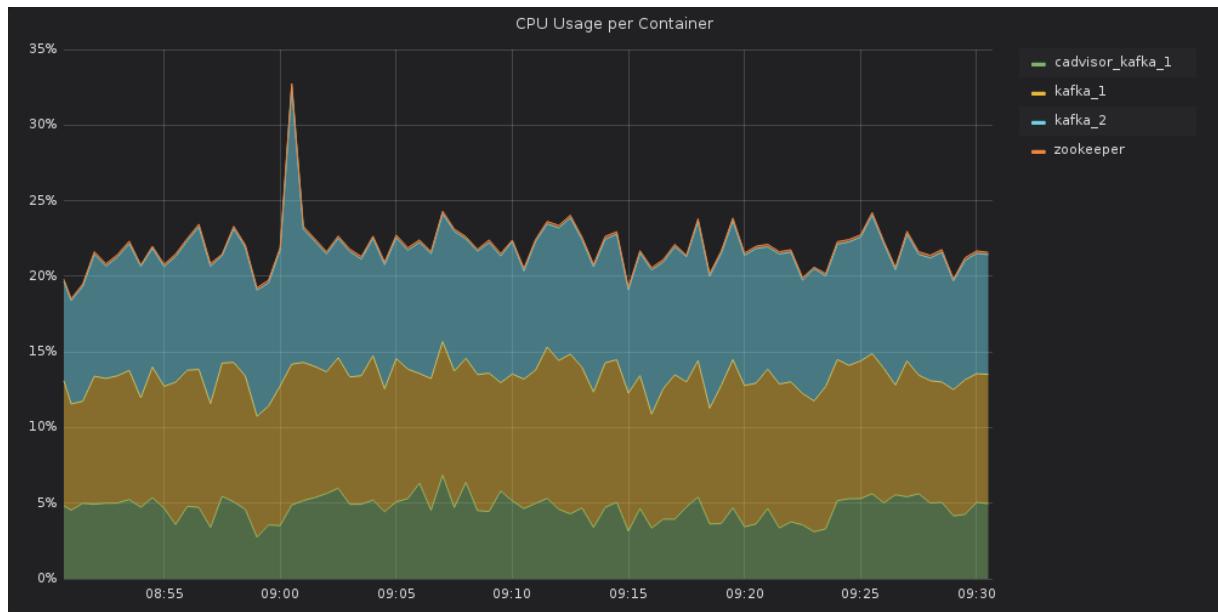
Received Network Traffic per Container



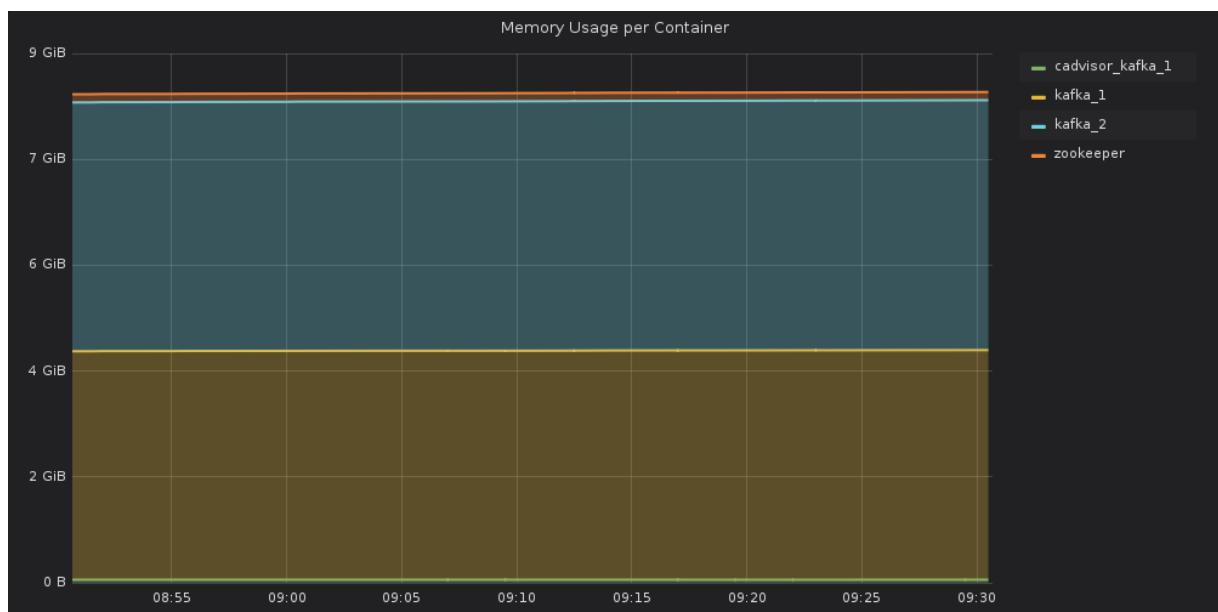
Sent Network Traffic per Container



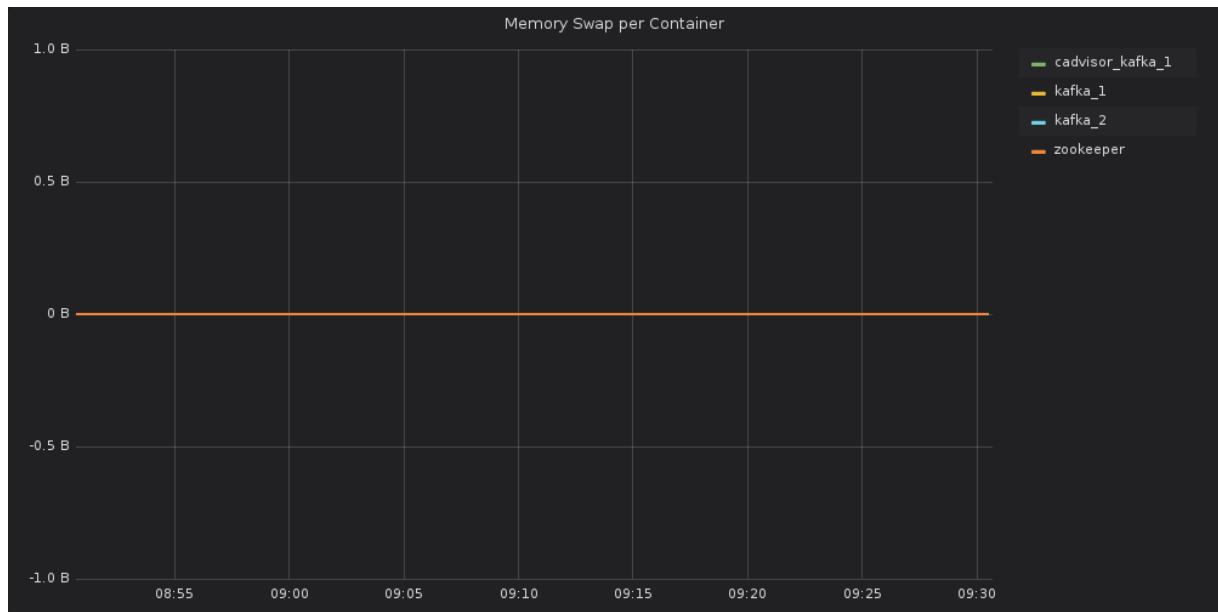
CPU Usage per Container



Memory Usage per Container



Memory Swap per Container



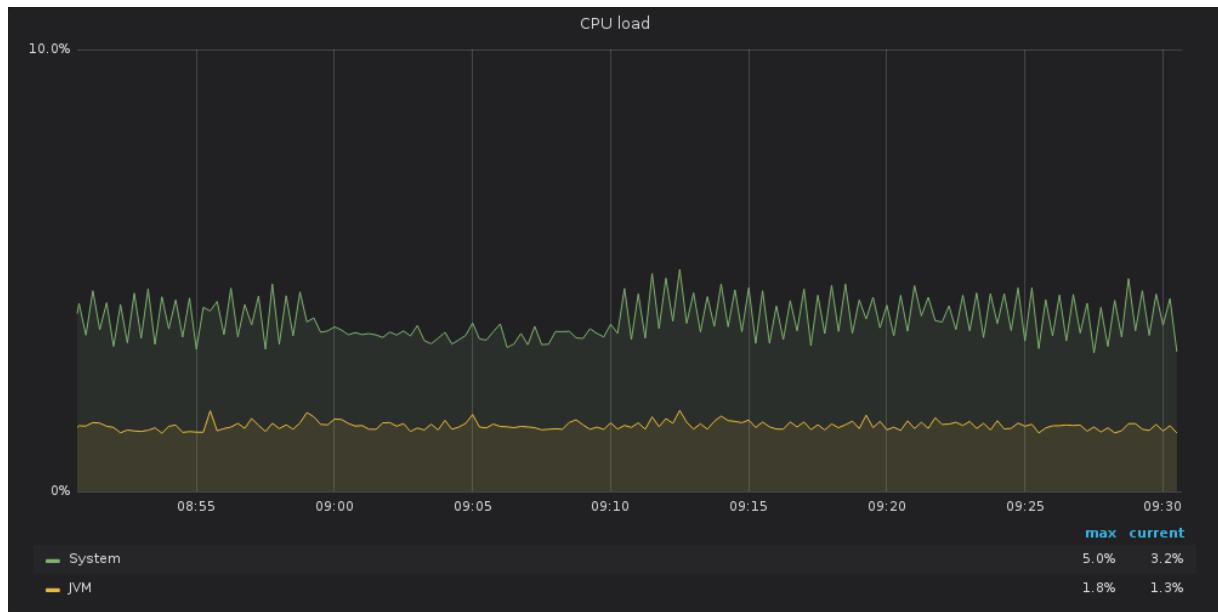
Service: kafka_1

- name: kafka_1
- type: kafka

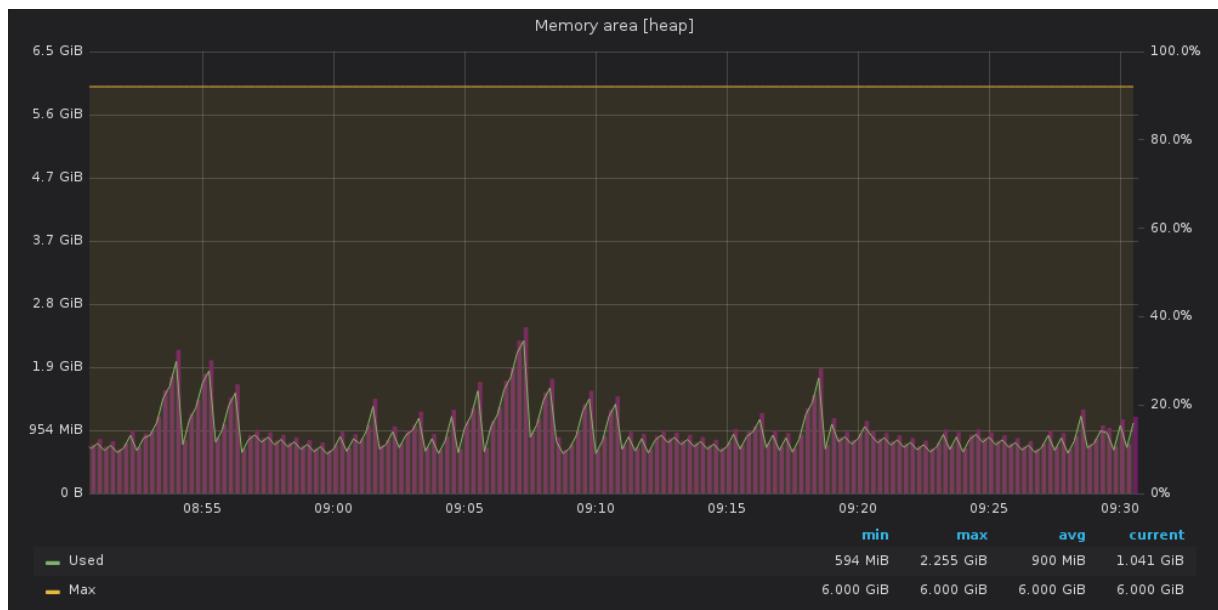
Open file descriptors



CPU load



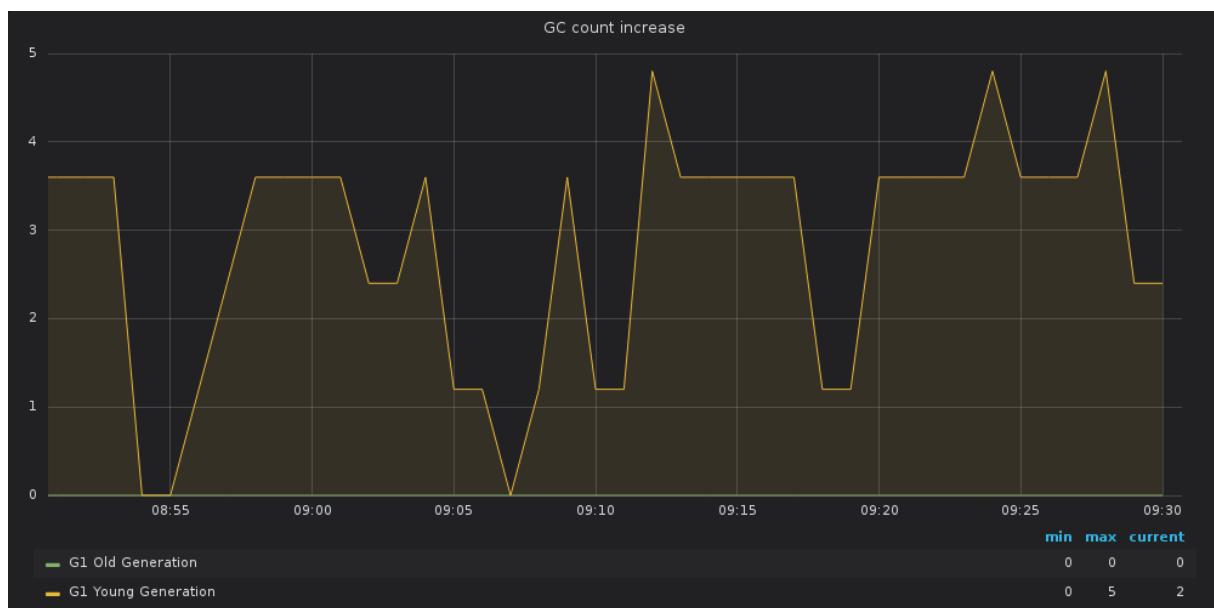
Memory area [heap]



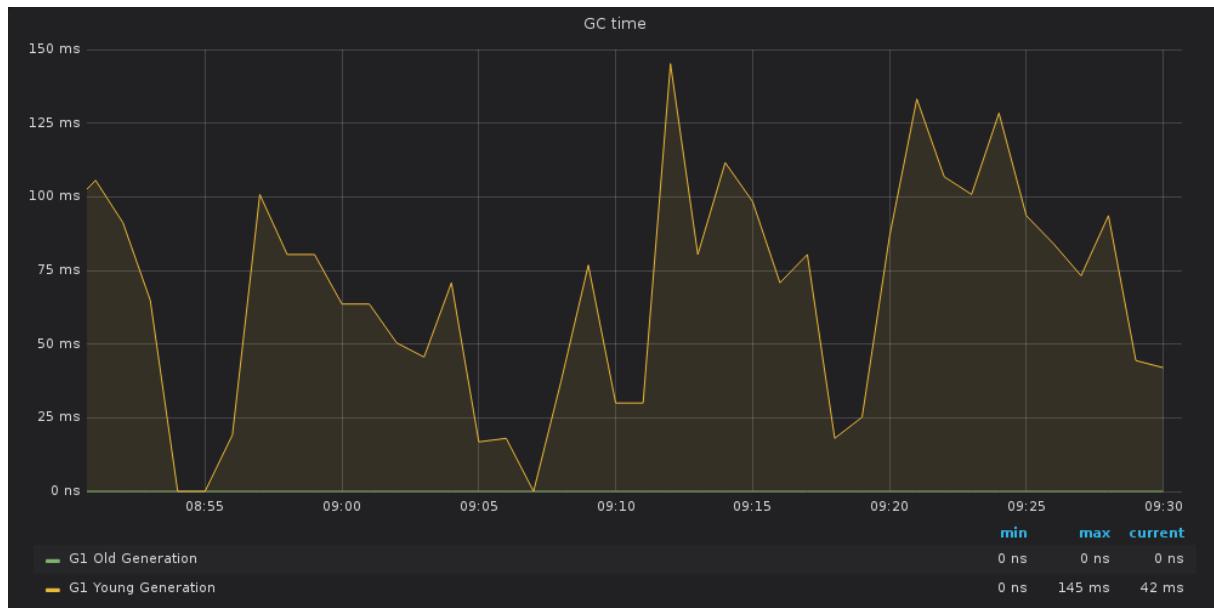
Memory area [nonheap]



GC count increase



GC time



Threads used



Physical memory



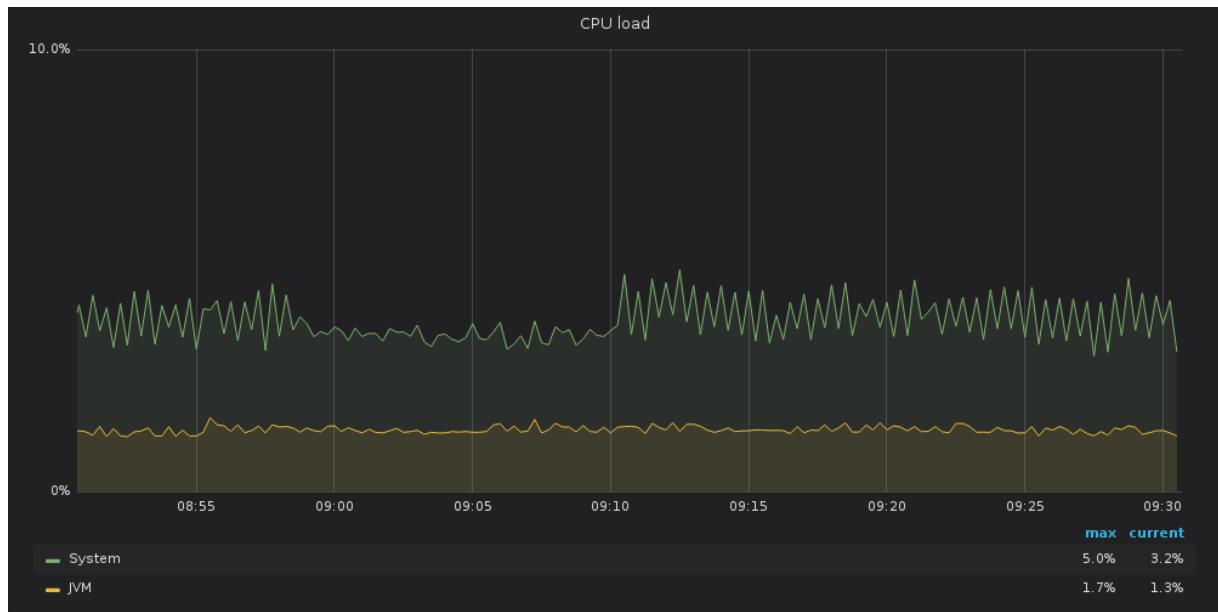
Service: kafka_2

- name: kafka_2
- type: kafka

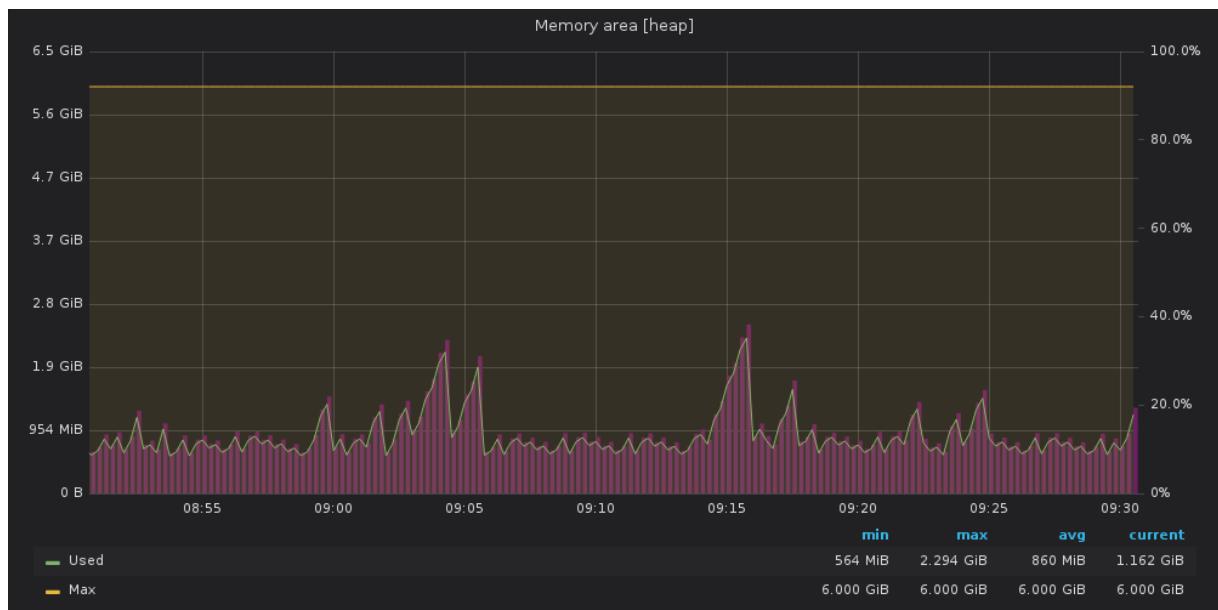
Open file descriptors



CPU load



Memory area [heap]



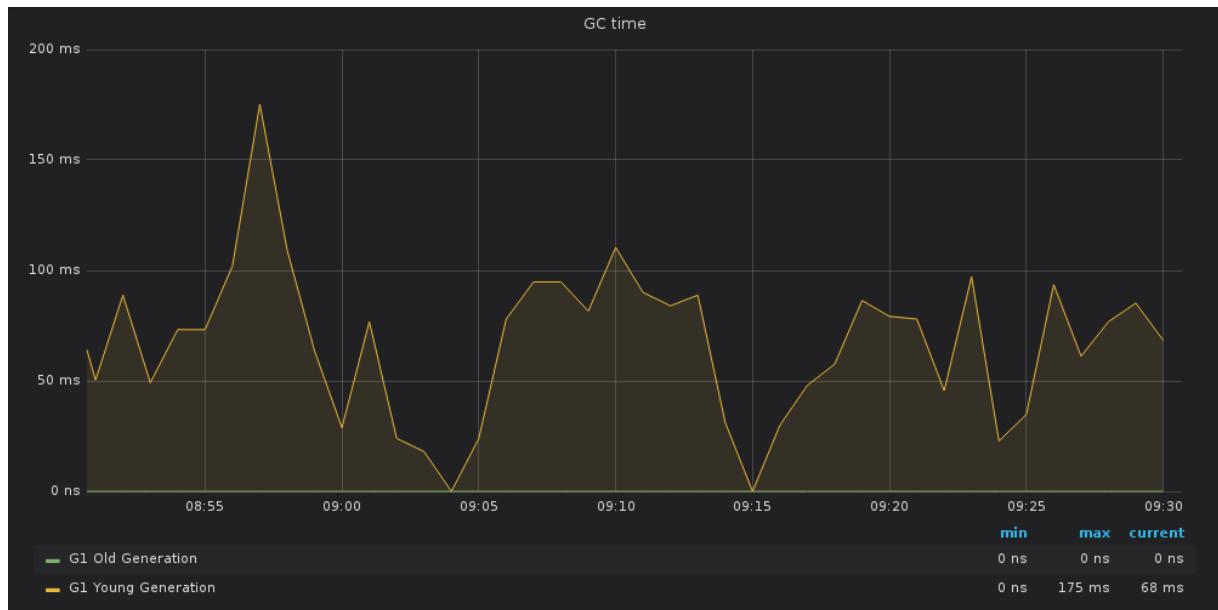
Memory area [nonheap]



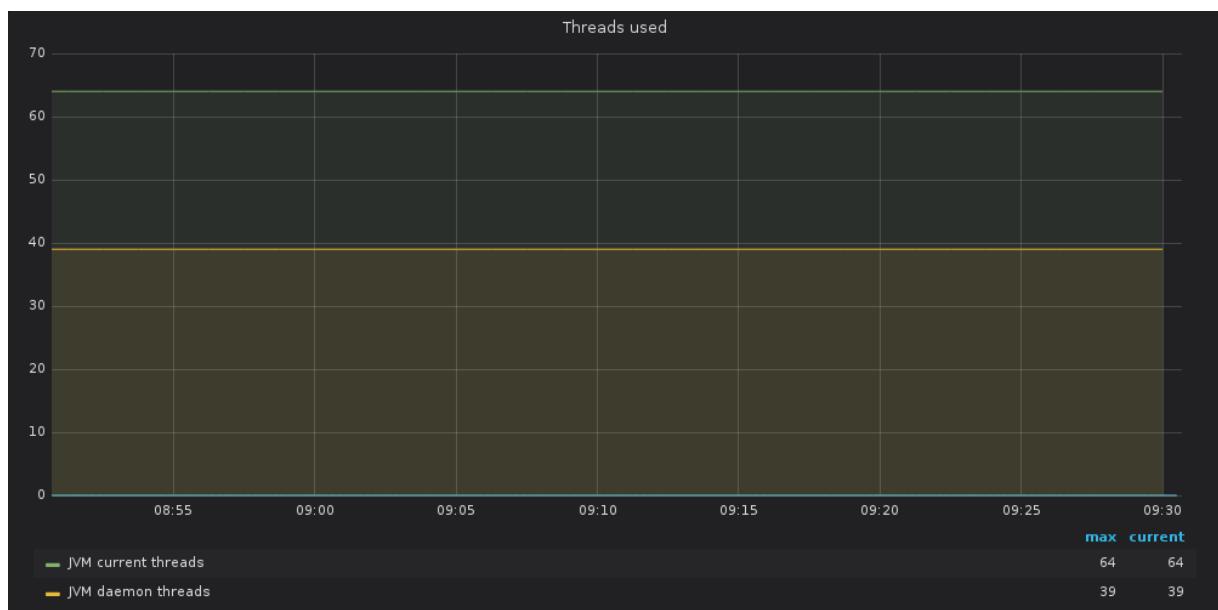
GC count increase



GC time



Threads used



Physical memory



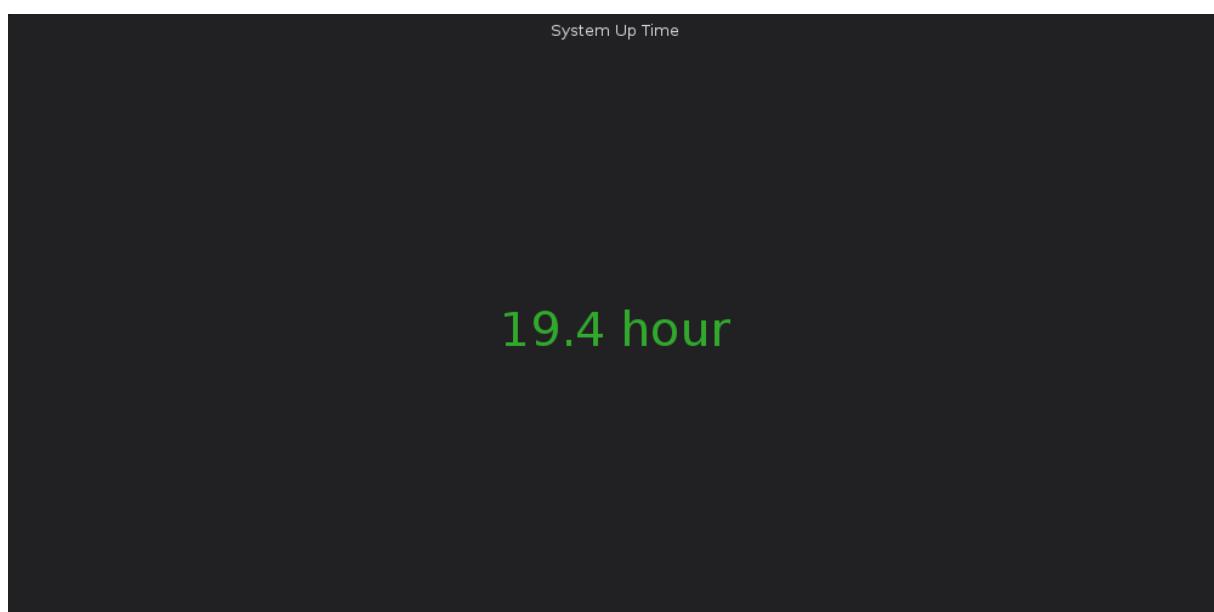
Host: kafka2

- name: kafka2
- type: kafka

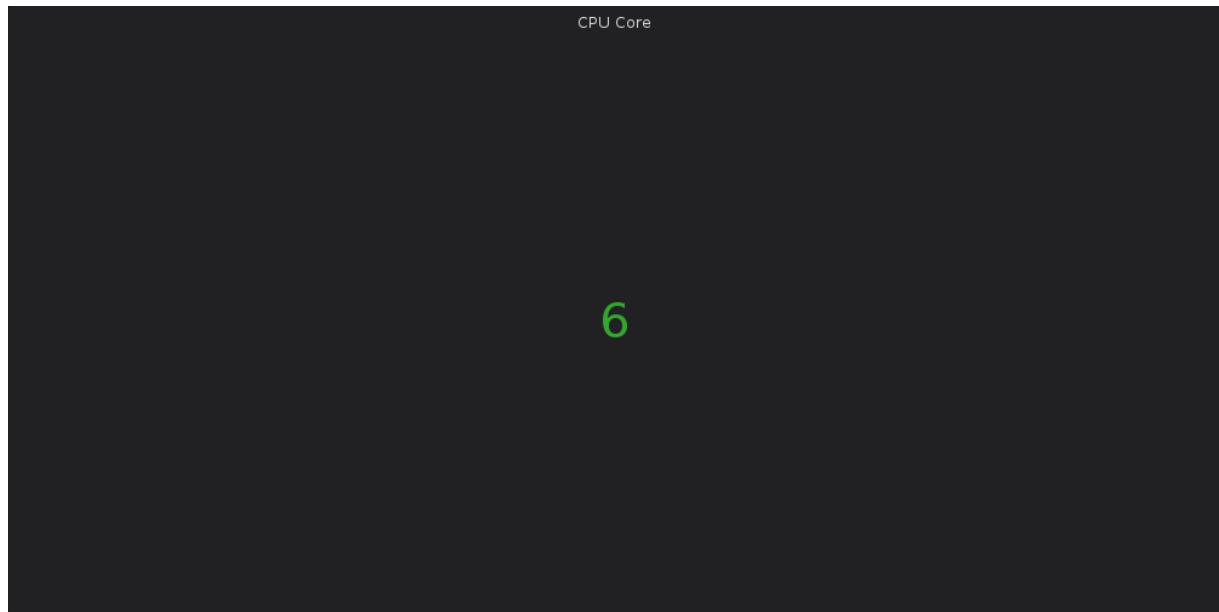
Service: node_kafka_2

- name: node_kafka_2
- type: node_exporter

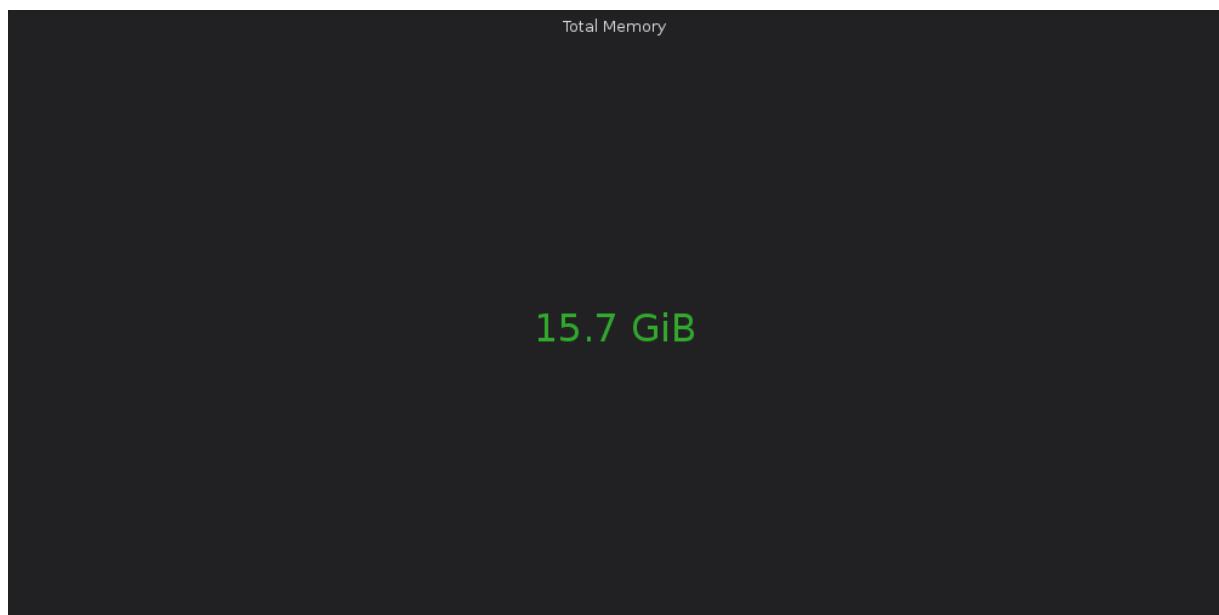
系统运行时间



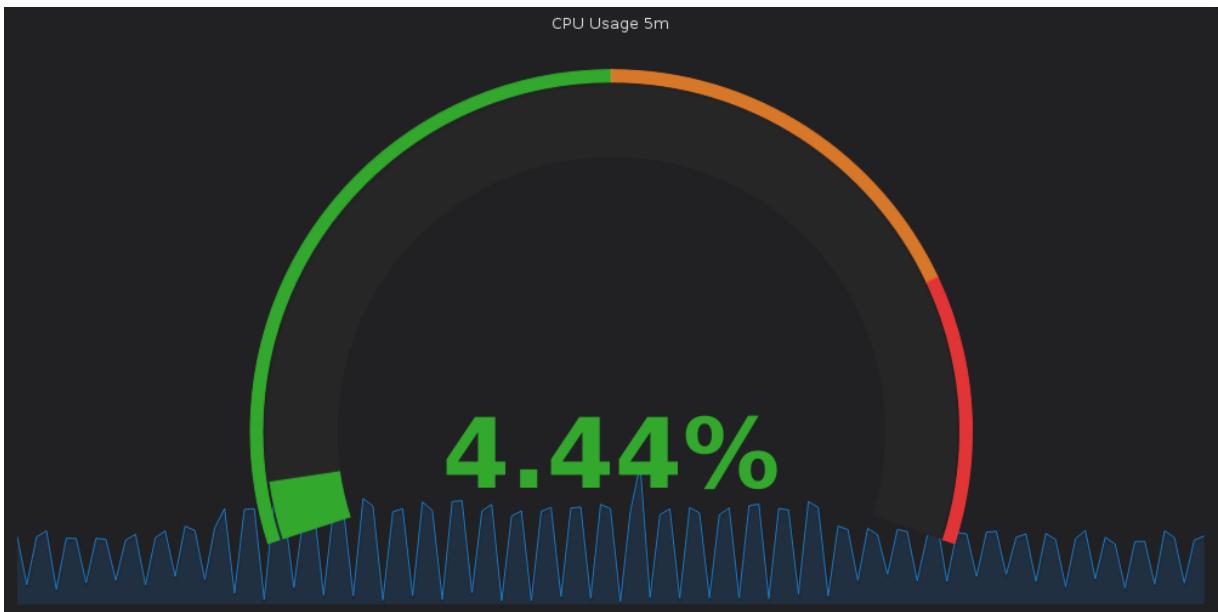
CPU 核数



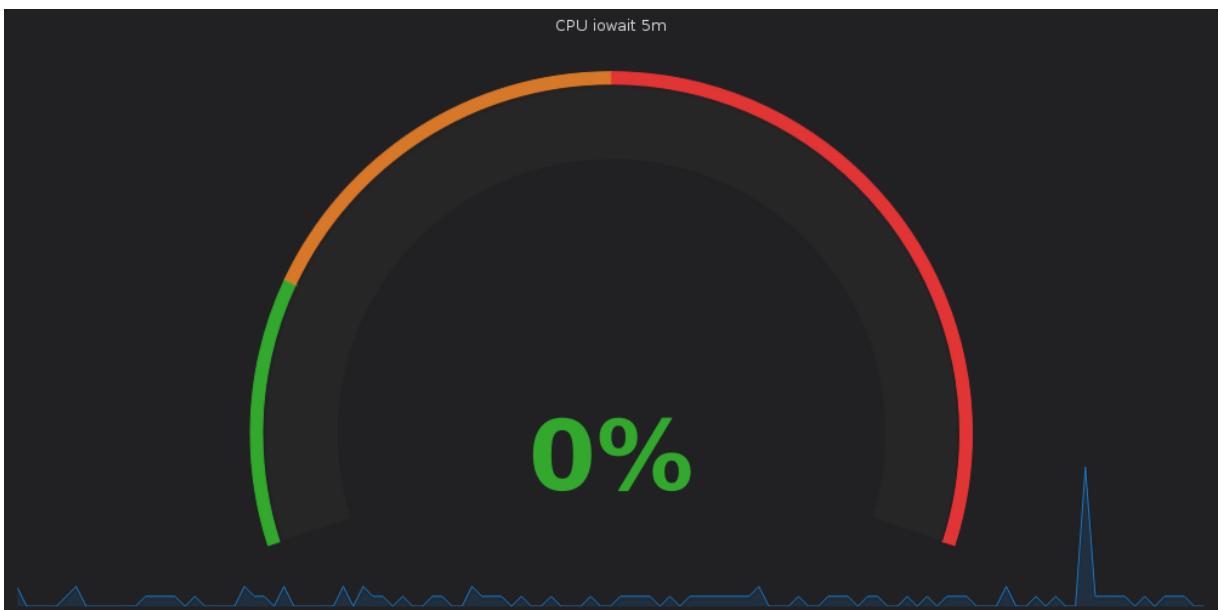
内存总量



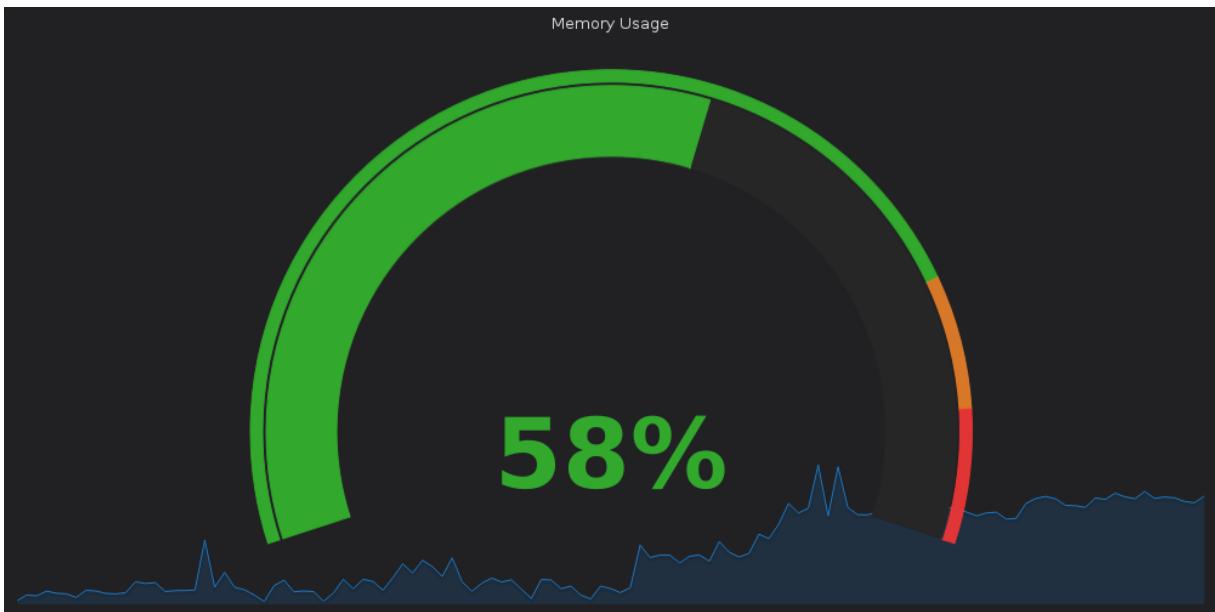
CPU使用率 (5m)



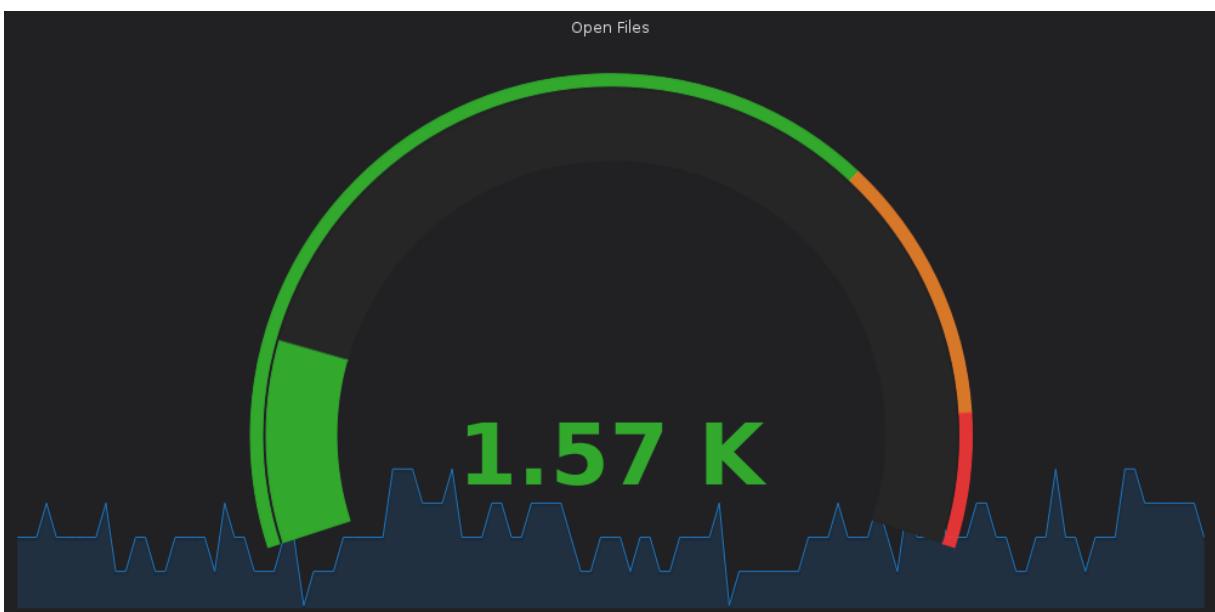
CPU iowait (5m)



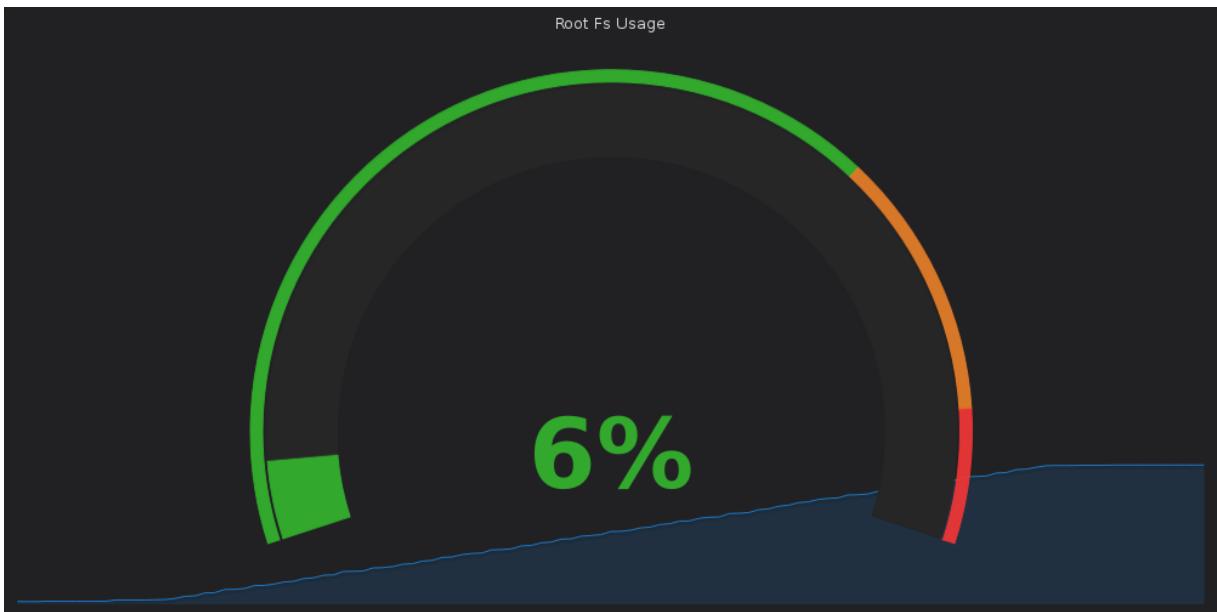
内存使用率



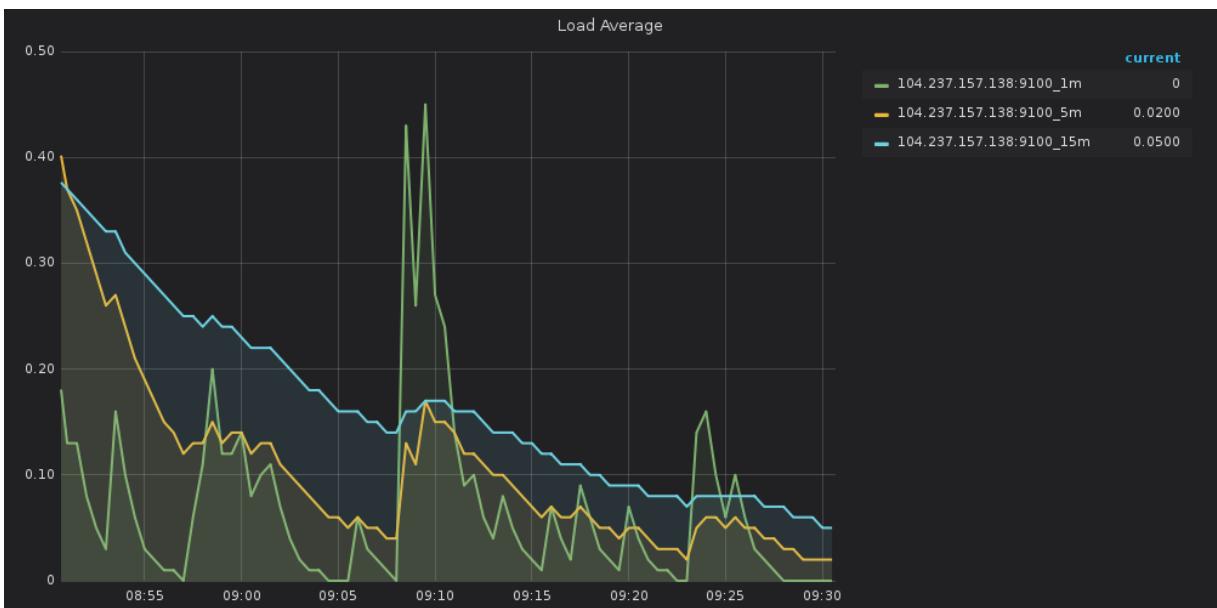
当前打开的文件描述符



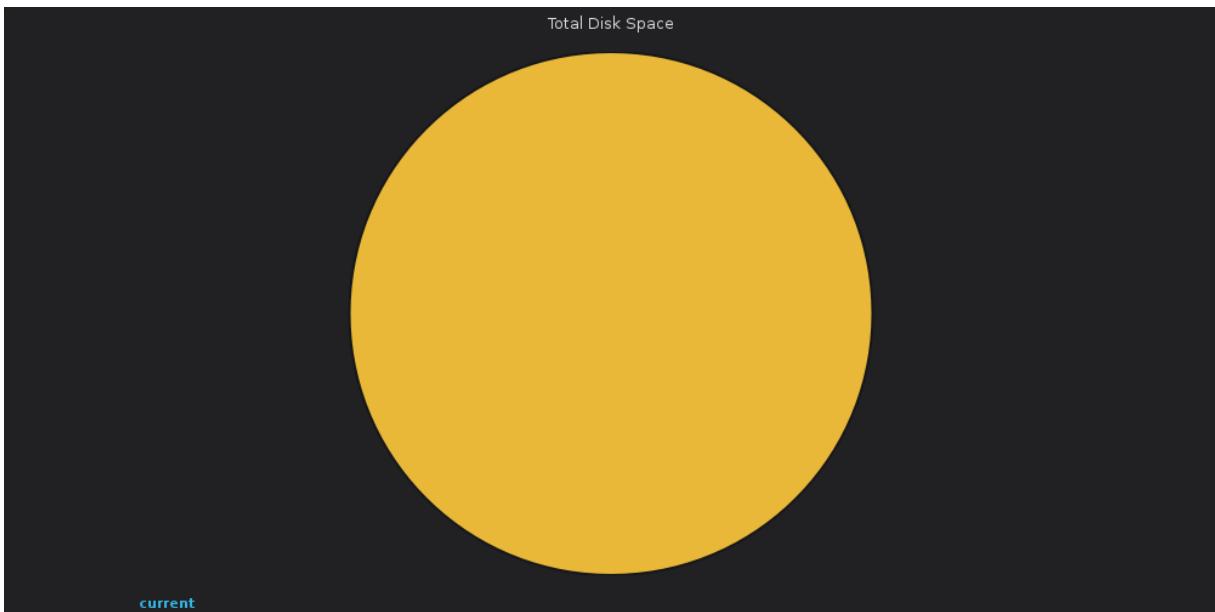
根分区使用率



系统平均负载



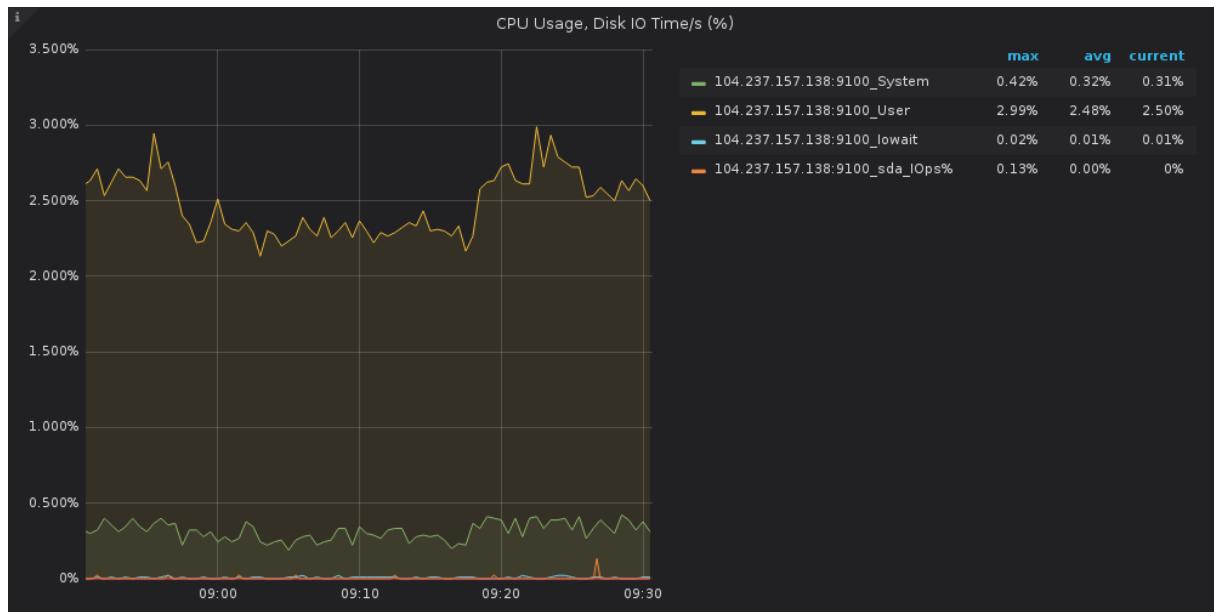
磁盘总空间



各分区可用空间

Volumes Available					
File System	IP	Mount ▲	Available	Usage	
ext4	104.237.157.138:9100	/	295.53 GiB	0.96%	

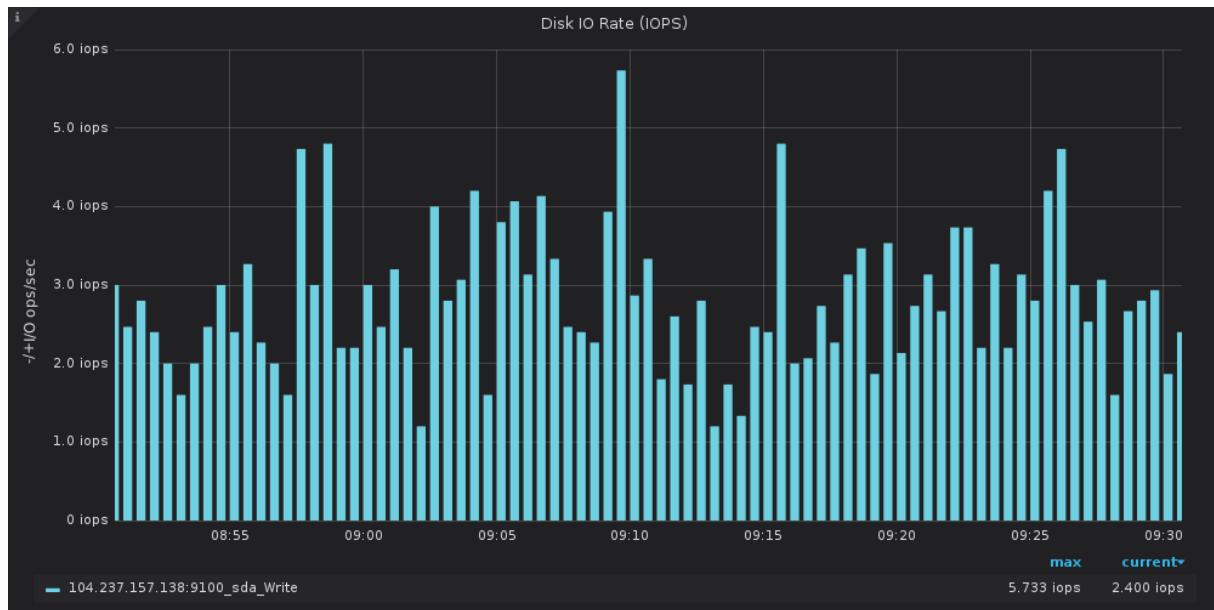
CPU使用率、磁盘每秒的I/O操作耗费时间 (%)



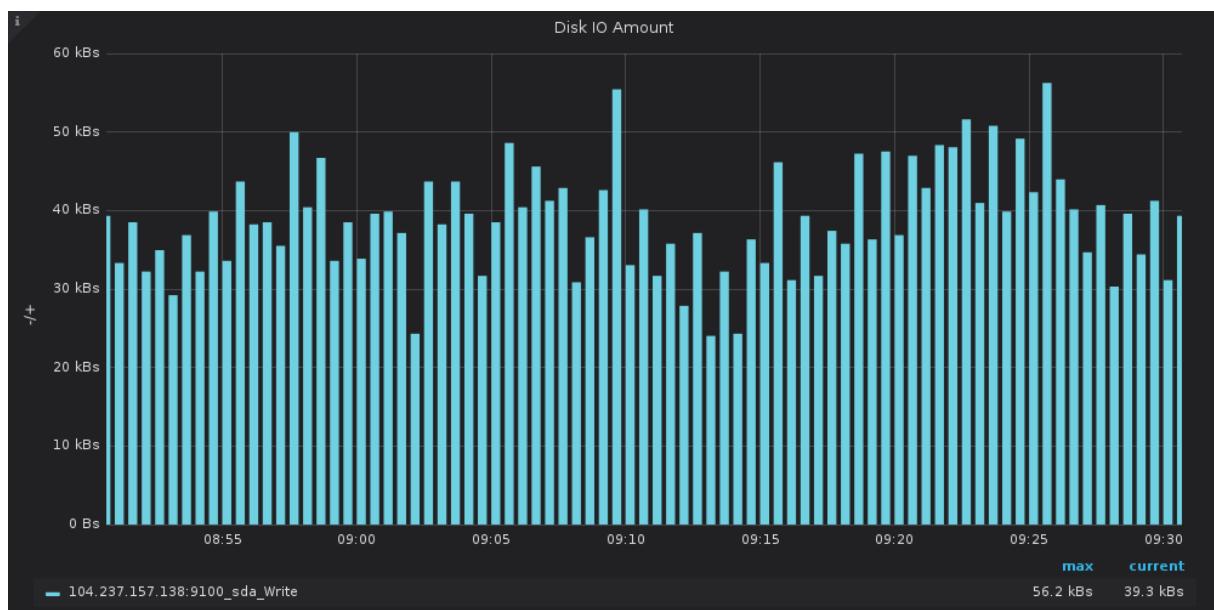
内存信息



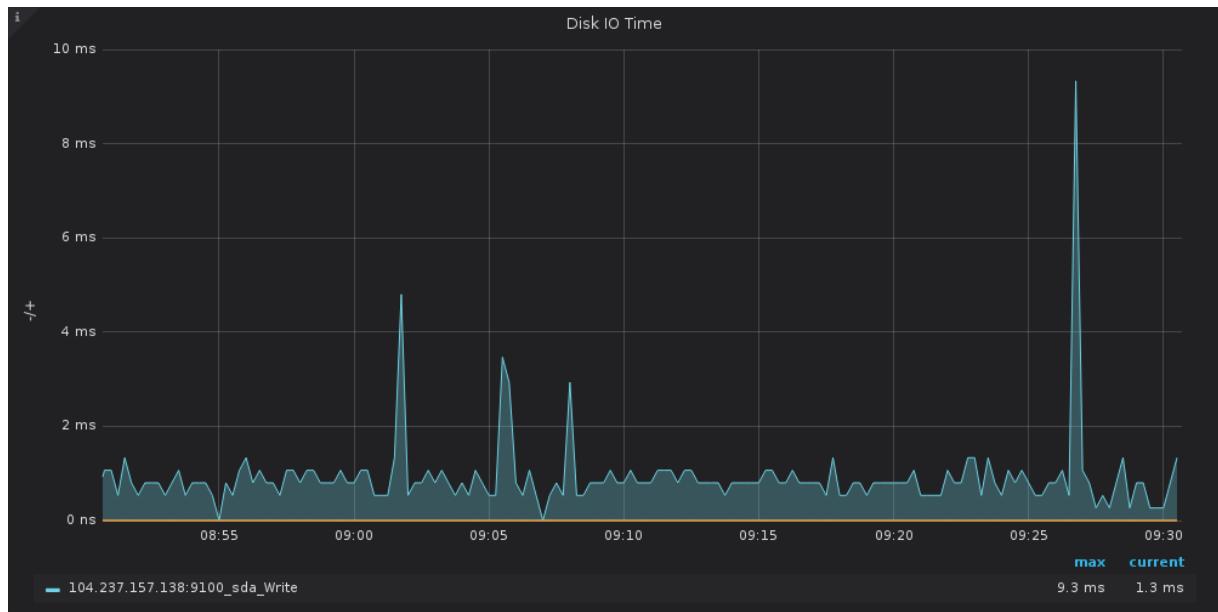
磁盘读写速率 (IOPS)



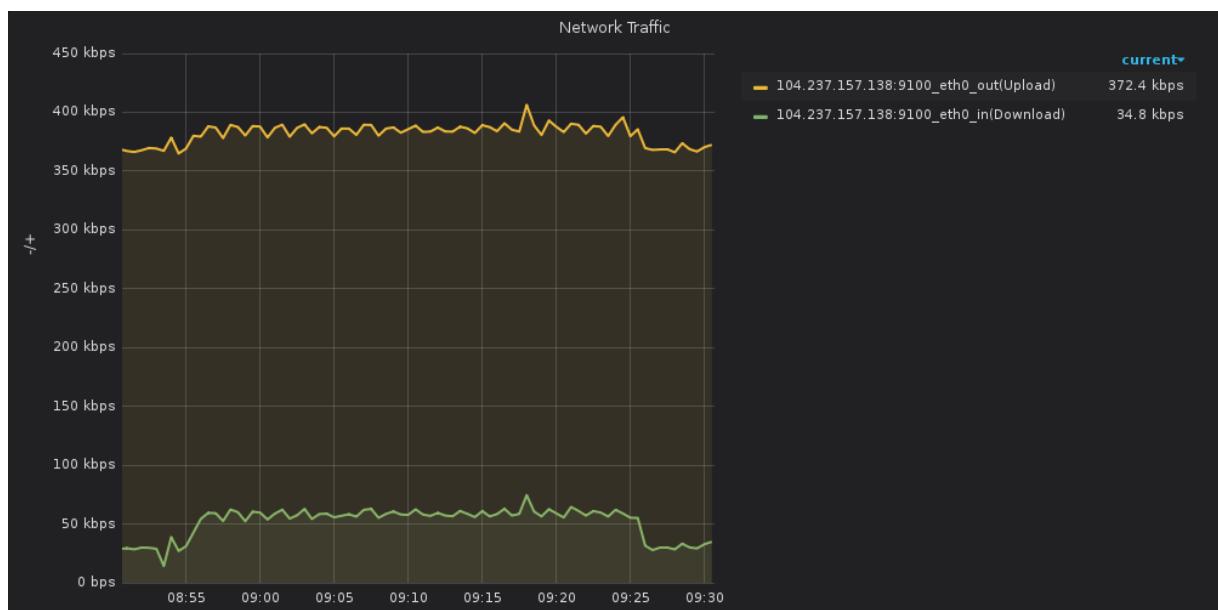
磁盘读写容量大小



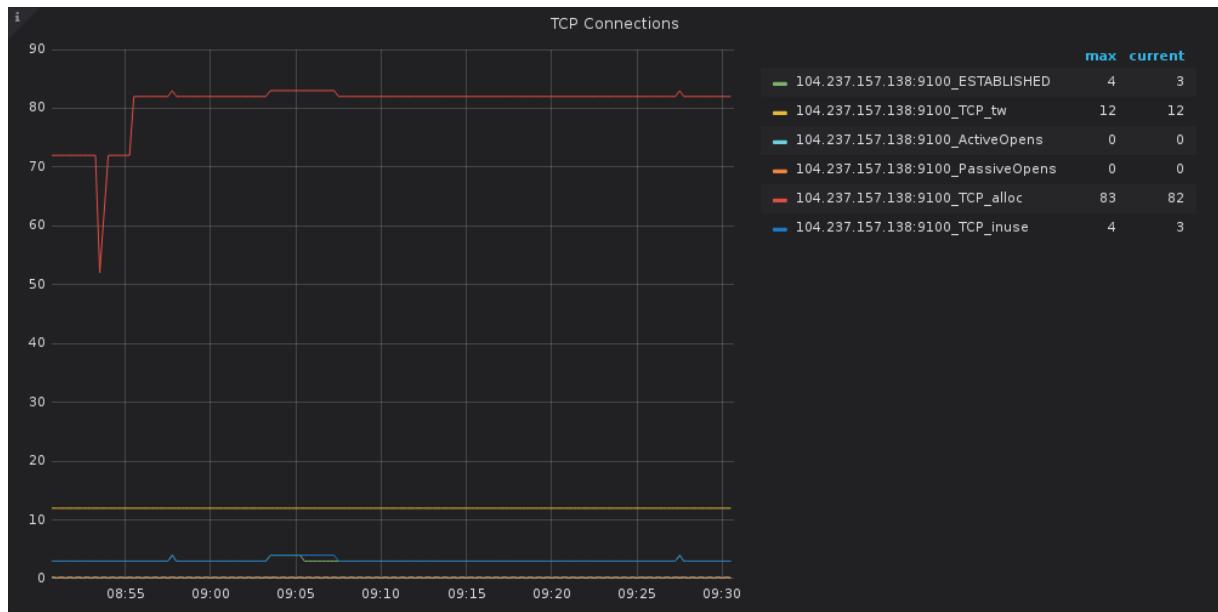
磁盘IO读写时间



网络流量



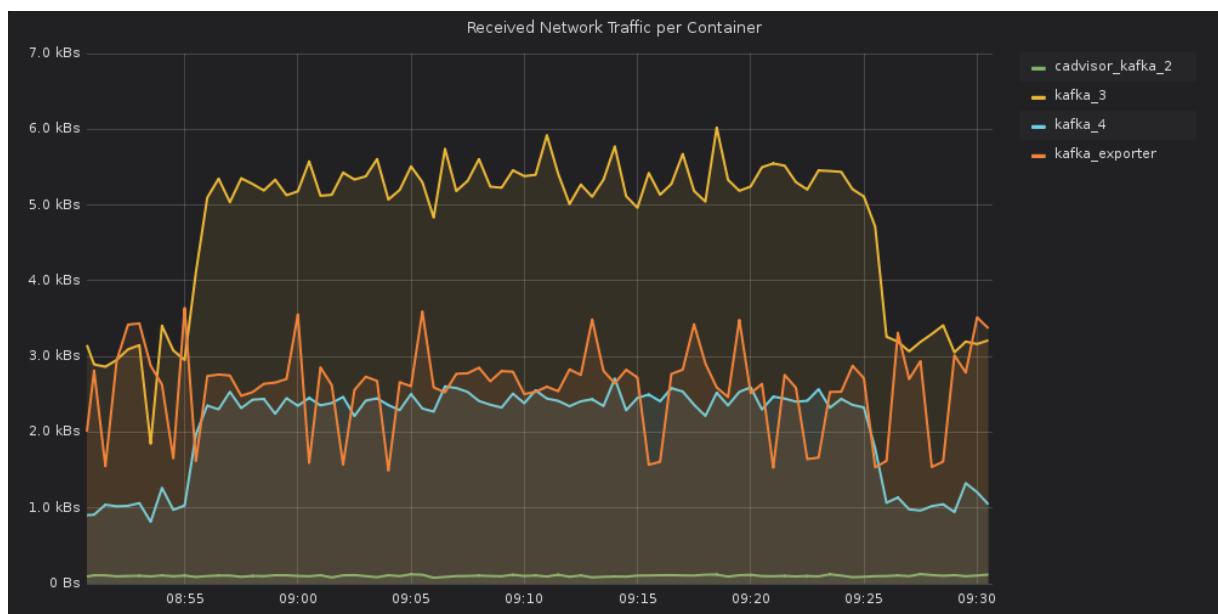
TCP 连接情况



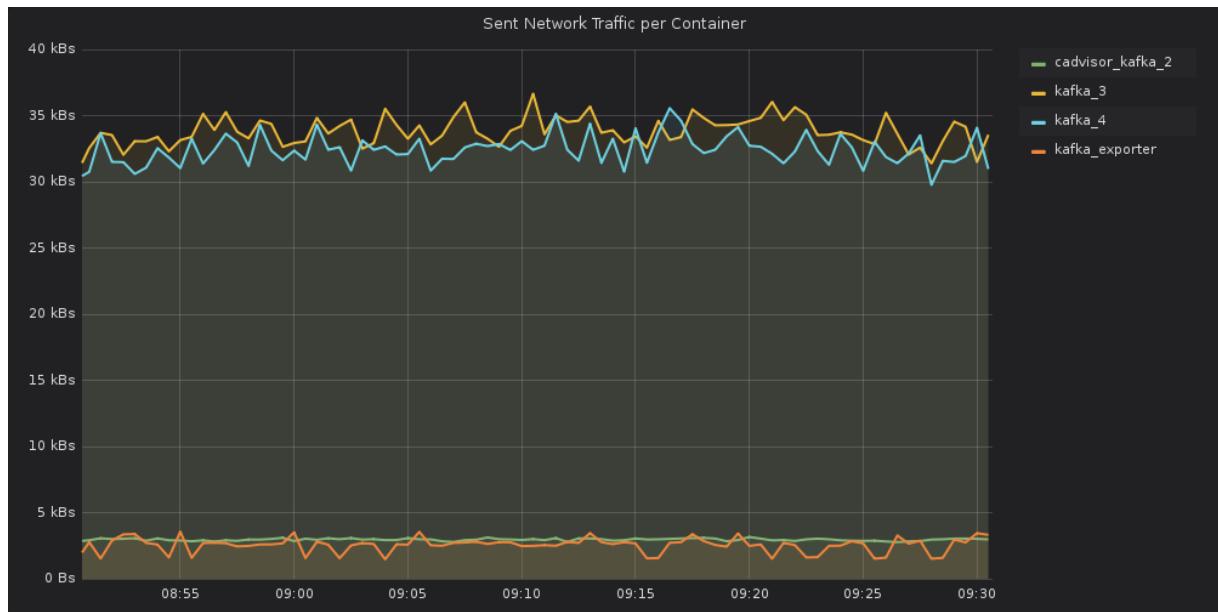
Service: cAdvisor_kafka_2

- name: cAdvisor_kafka_2
- type: cAdvisor

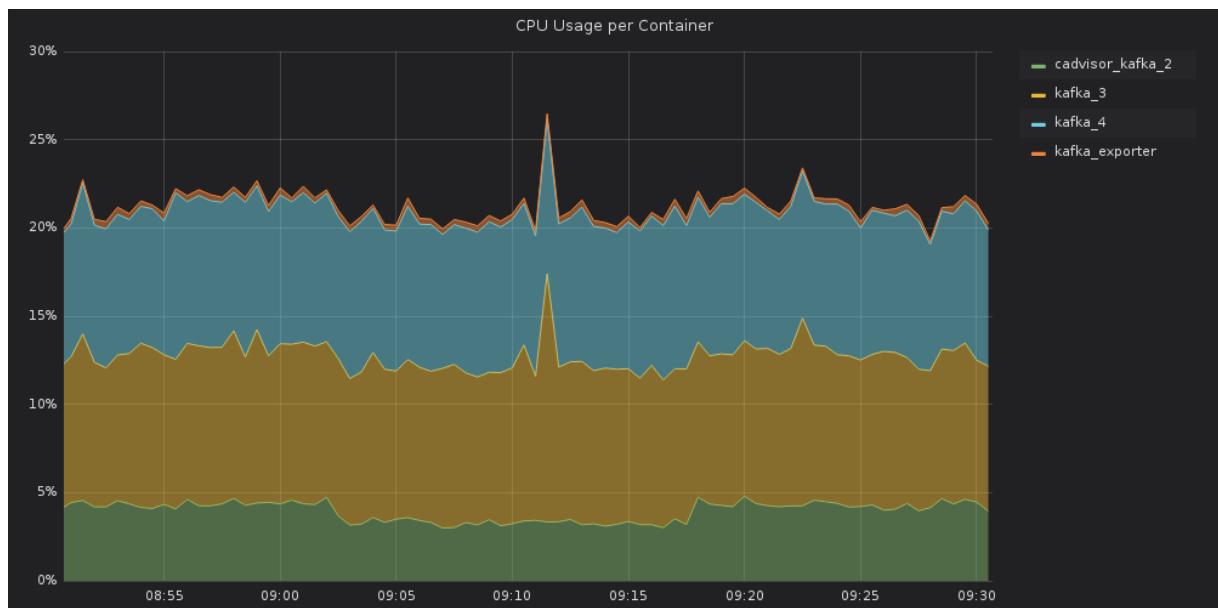
Received Network Traffic per Container



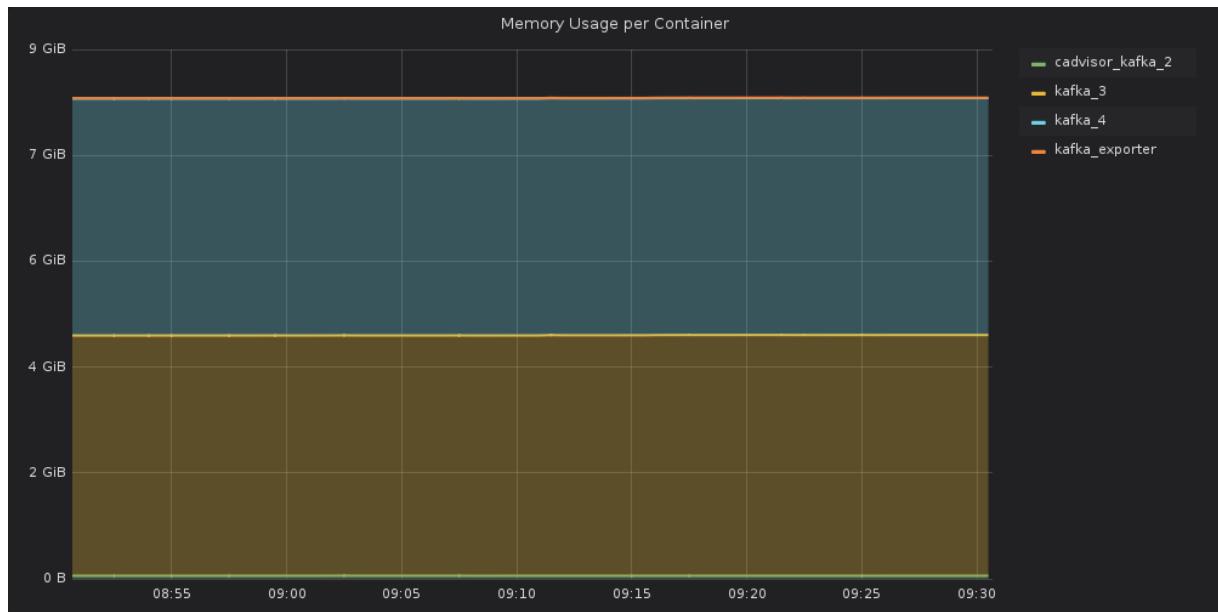
Sent Network Traffic per Container



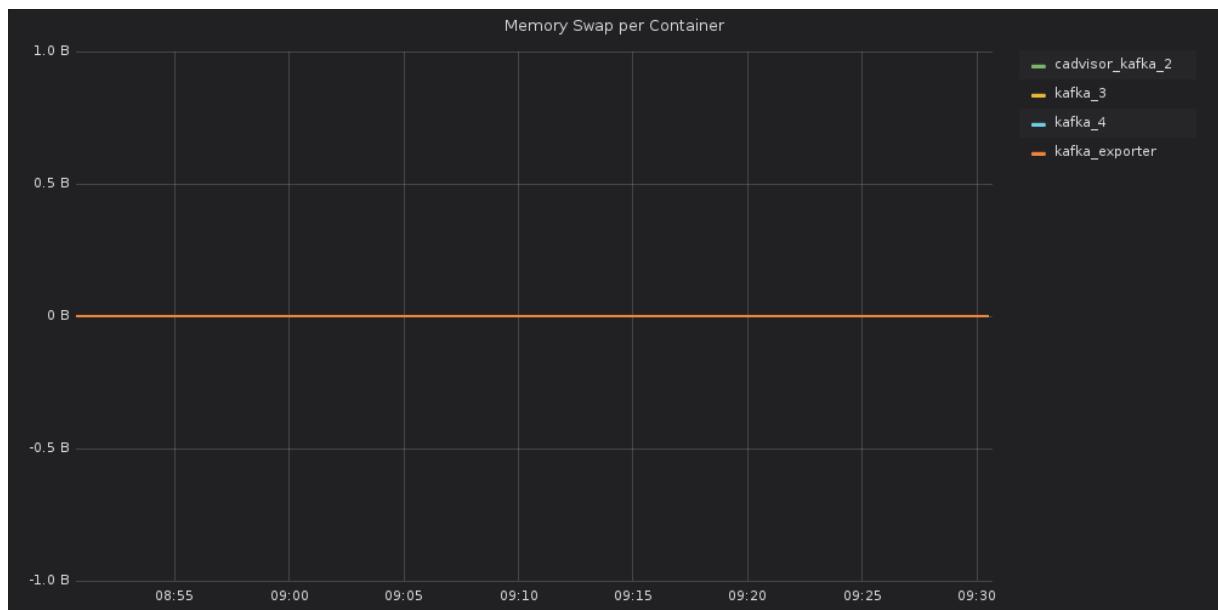
CPU Usage per Container



Memory Usage per Container



Memory Swap per Container



Service: kafka_3

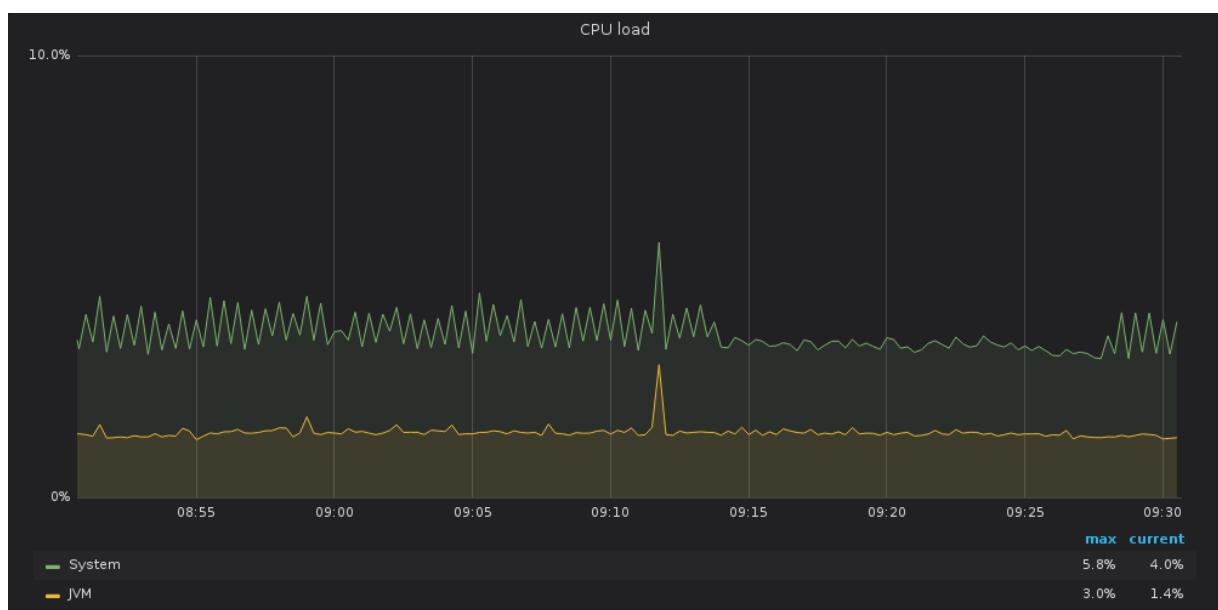
- name: kafka_3
- type: kafka

Open file descriptors

Open file descriptors

185

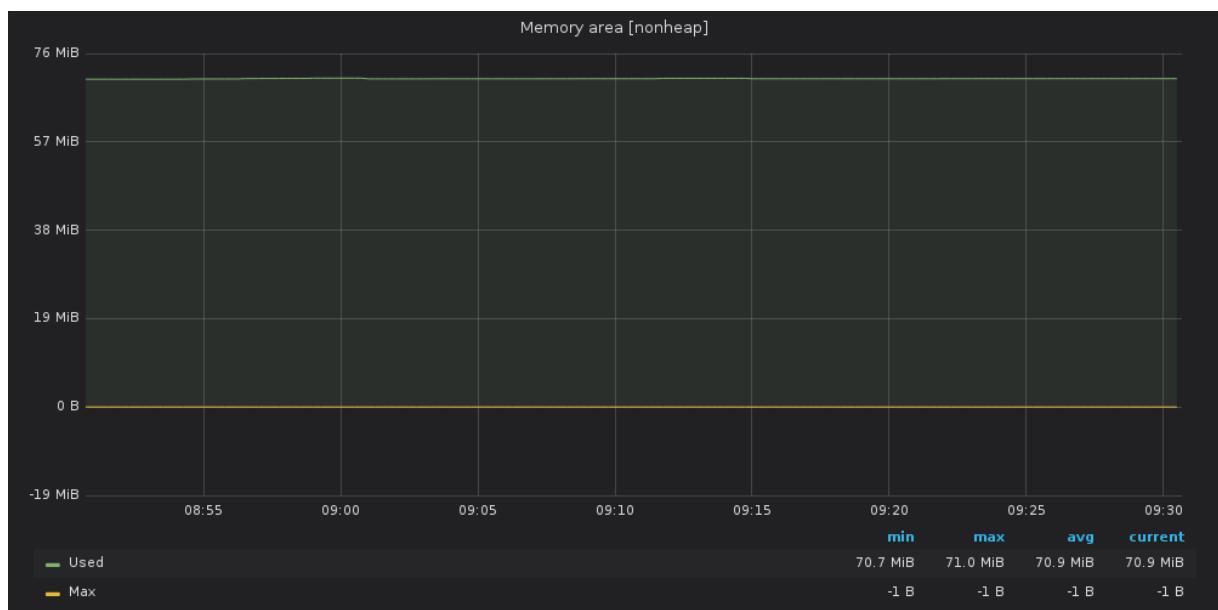
CPU load



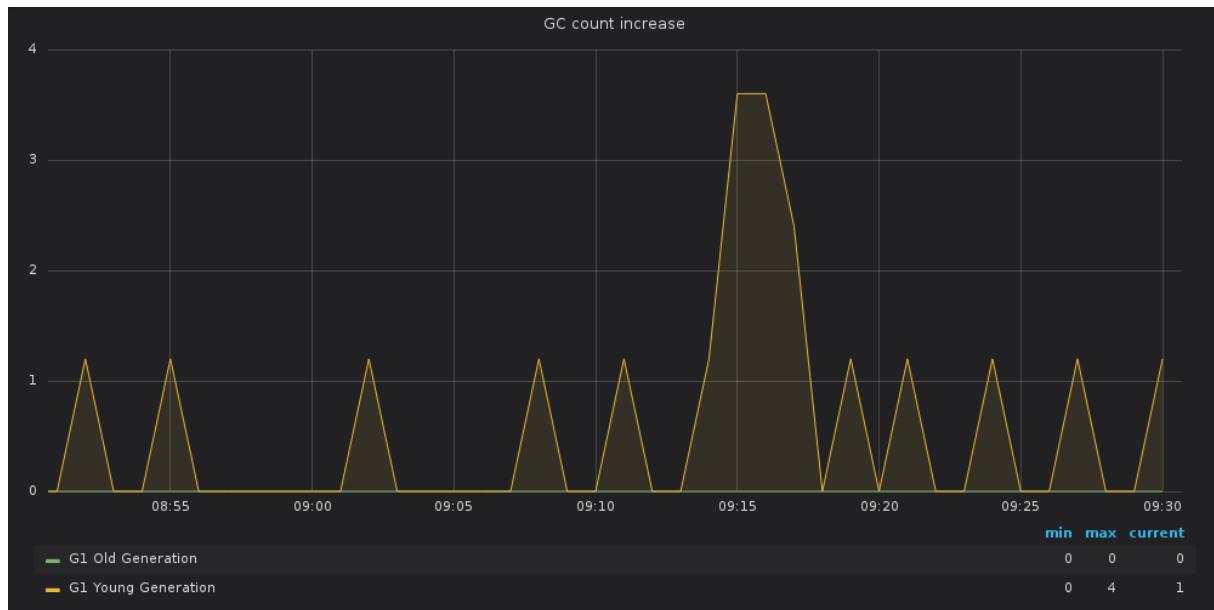
Memory area [heap]



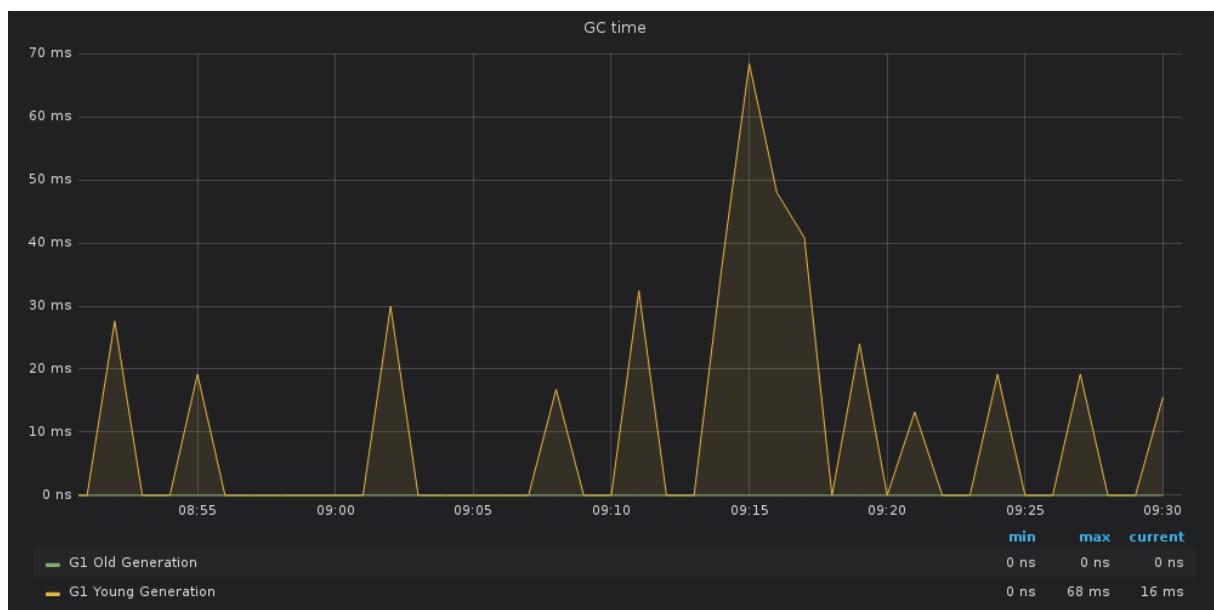
Memory area [nonheap]



GC count increase



GC time



Threads used



Physical memory



Service: kafka_4

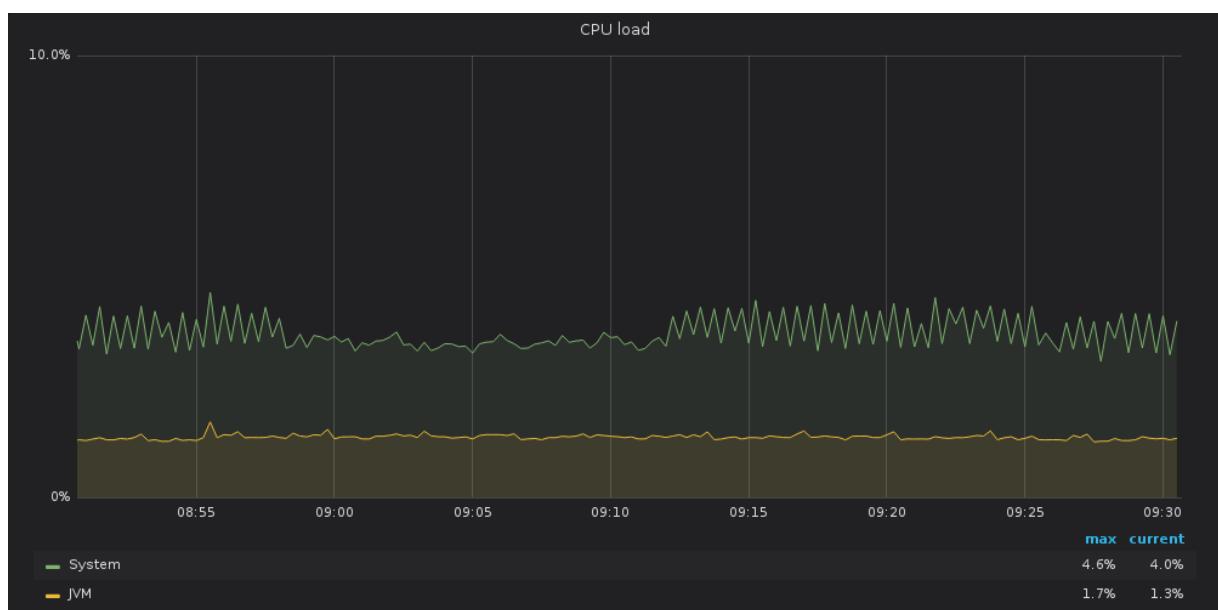
- name: kafka_4
- type: kafka

Open file descriptors

Open file descriptors

165

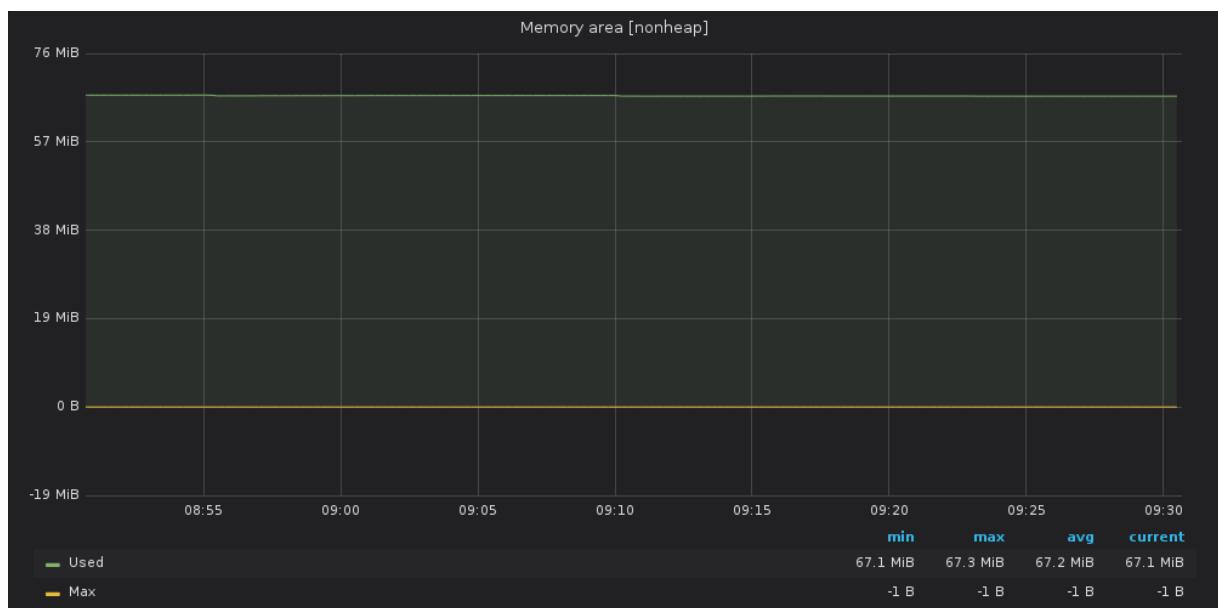
CPU load



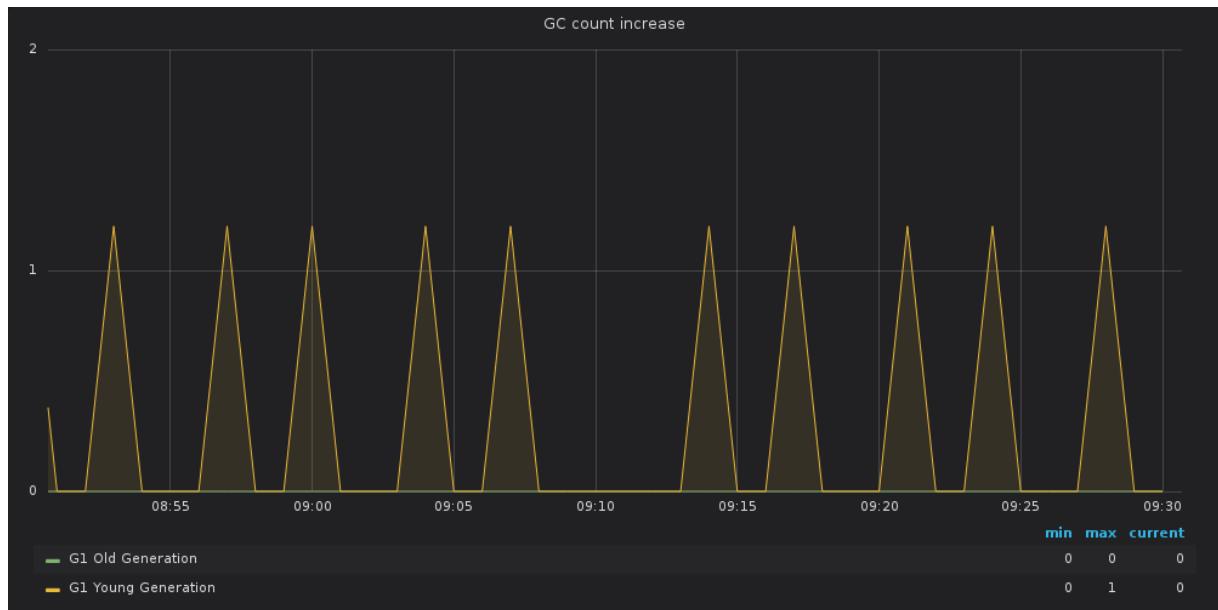
Memory area [heap]



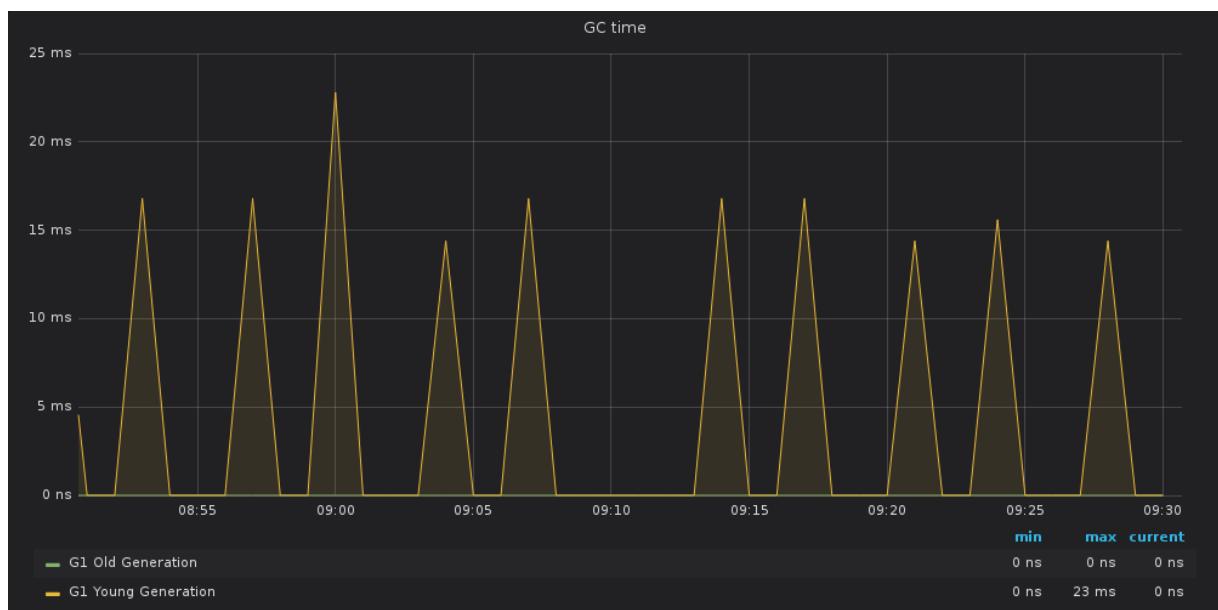
Memory area [nonheap]



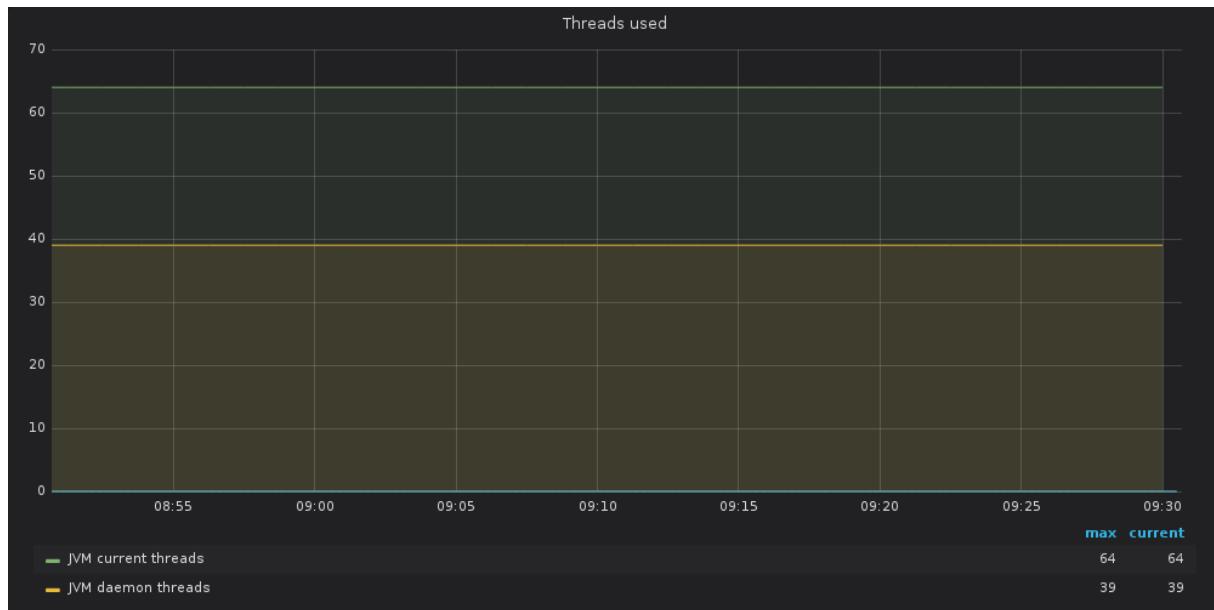
GC count increase



GC time



Threads used



Physical memory



Service: kafka_exporter

- name: kafka_exporter
- type: kafka_exporter

Message in per second



Lag by Consumer Group



Message in per minute



Message consume per minute



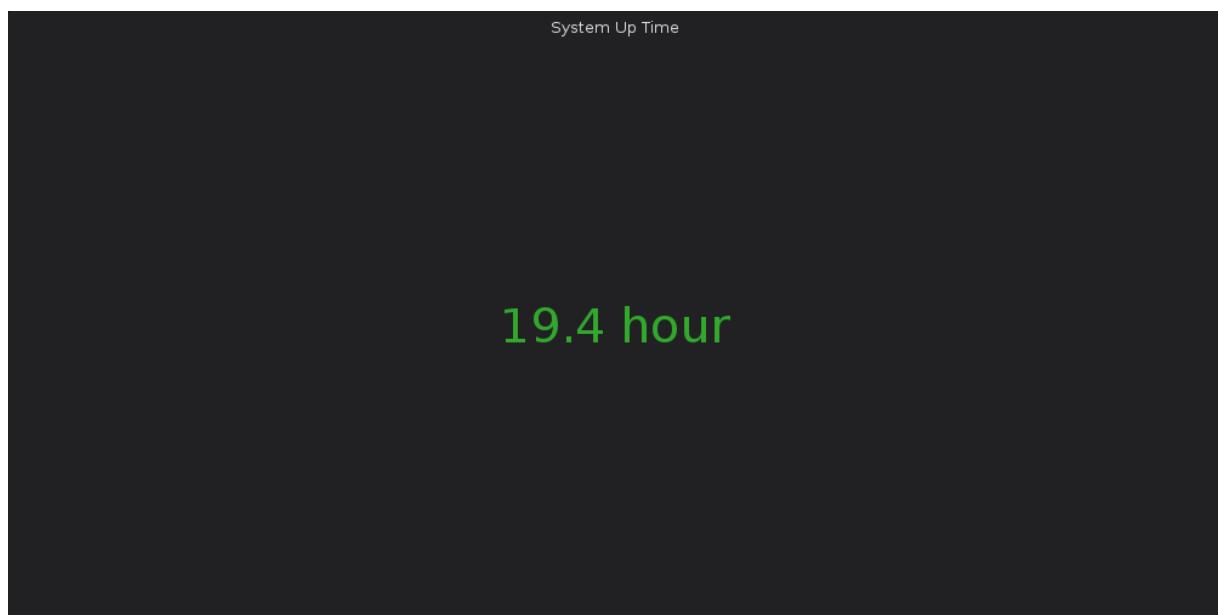
Host: es1

- name: es1
- type: elasticsearch

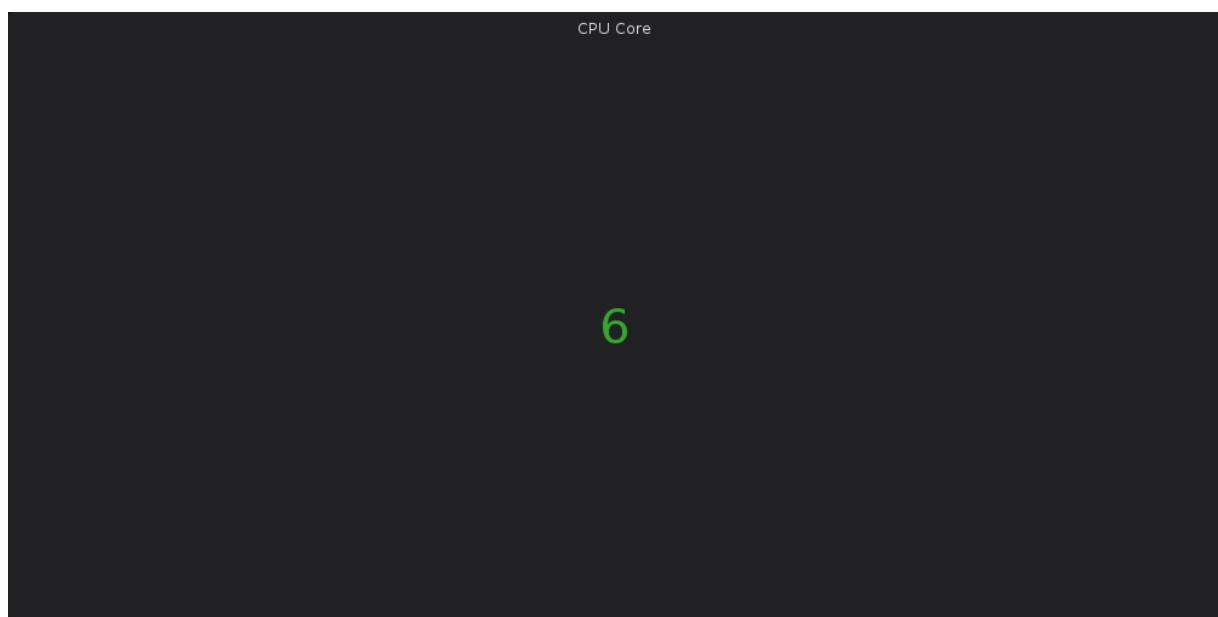
Service: node_es_1

- name: node_es_1
- type: node_exporter

系统运行时间



CPU 核数

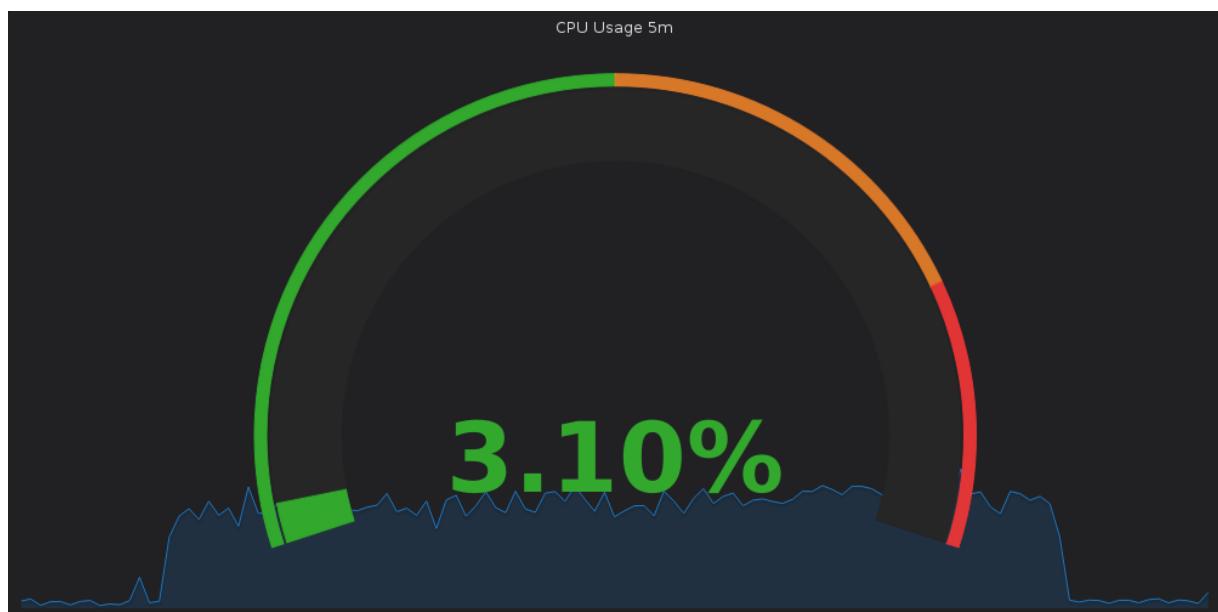


内存总量

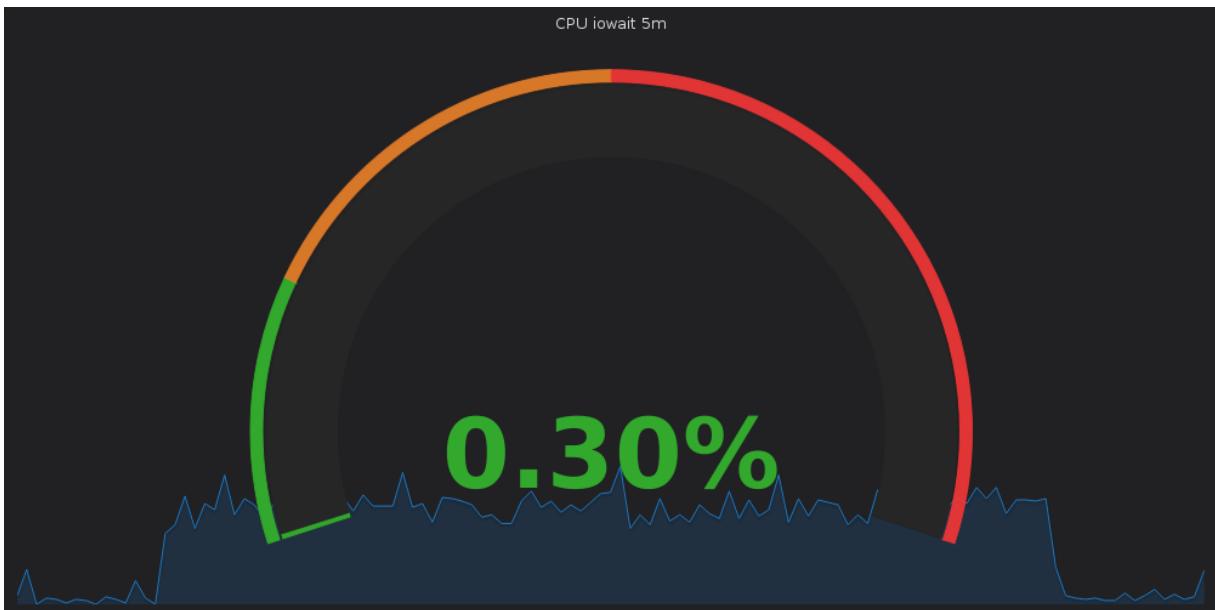
Total Memory

15.7 GiB

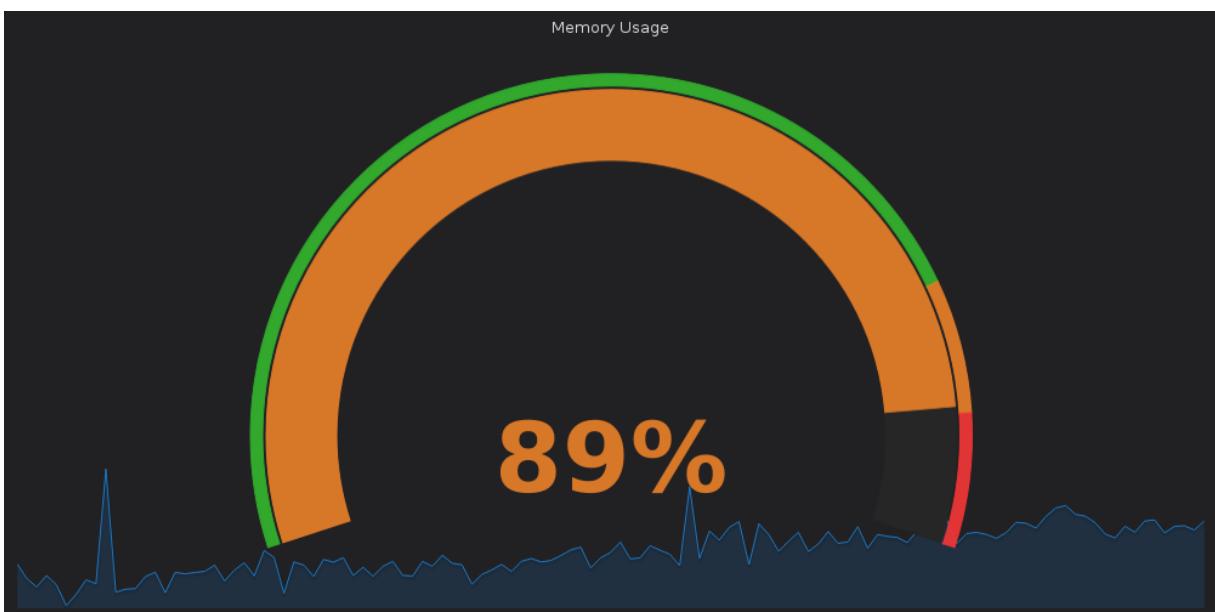
CPU使用率 (5m)



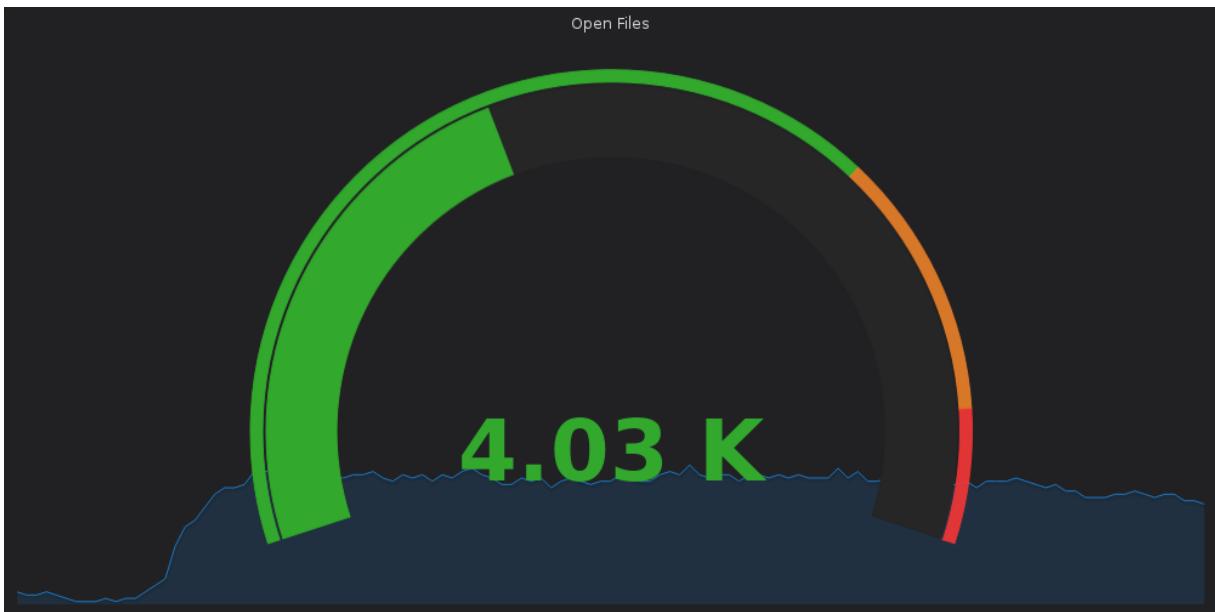
CPU iowait (5m)



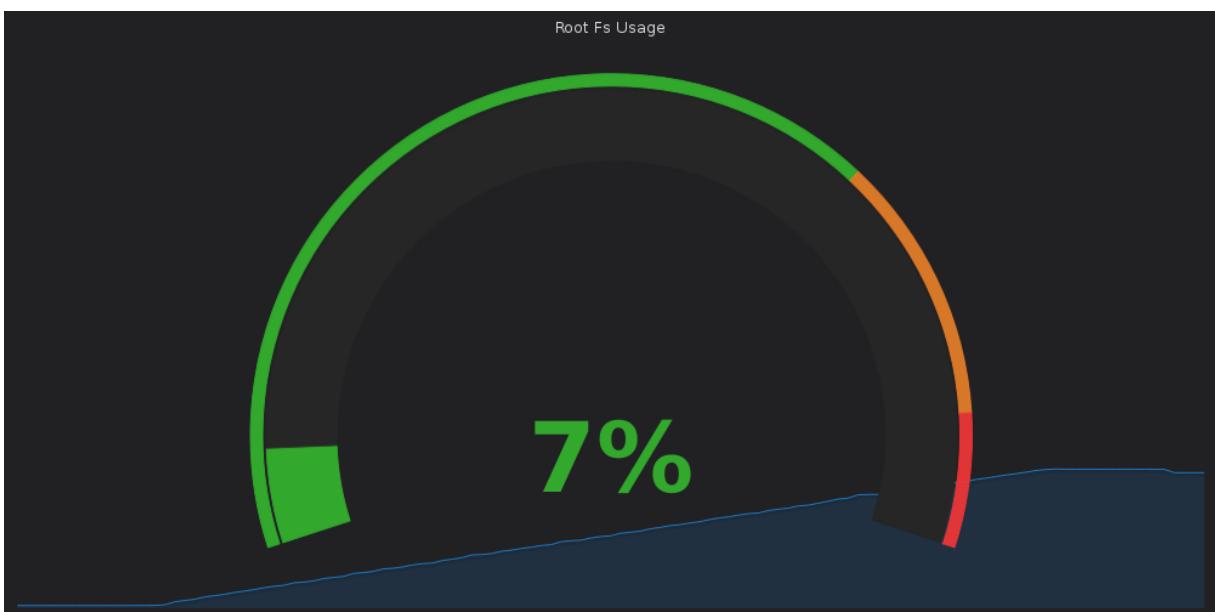
内存使用率



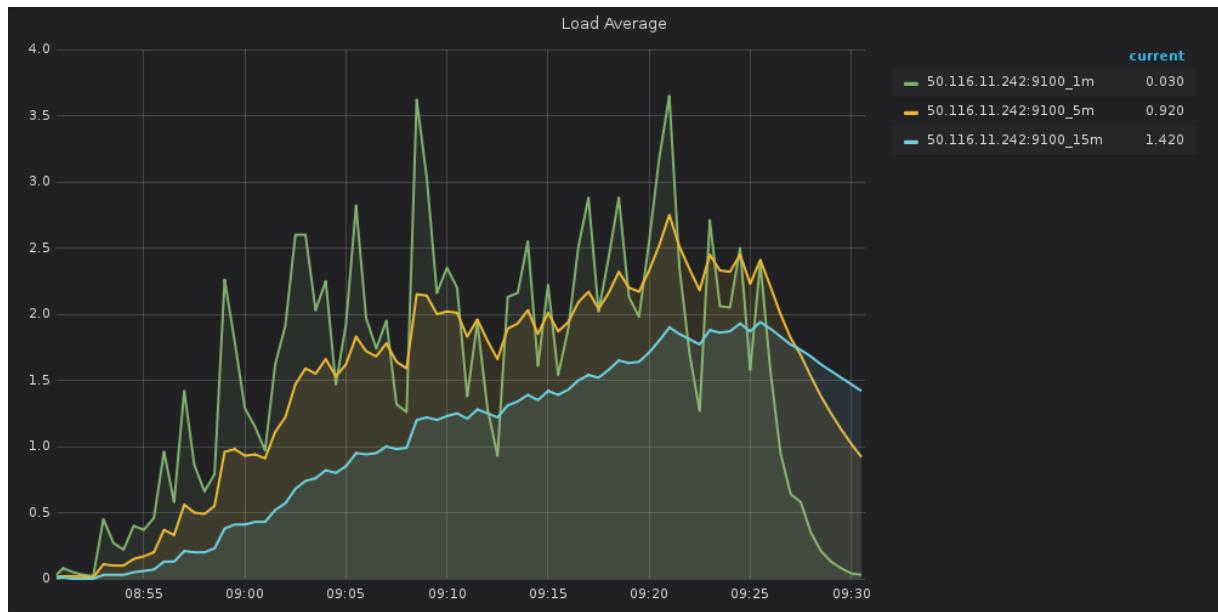
当前打开的文件描述符



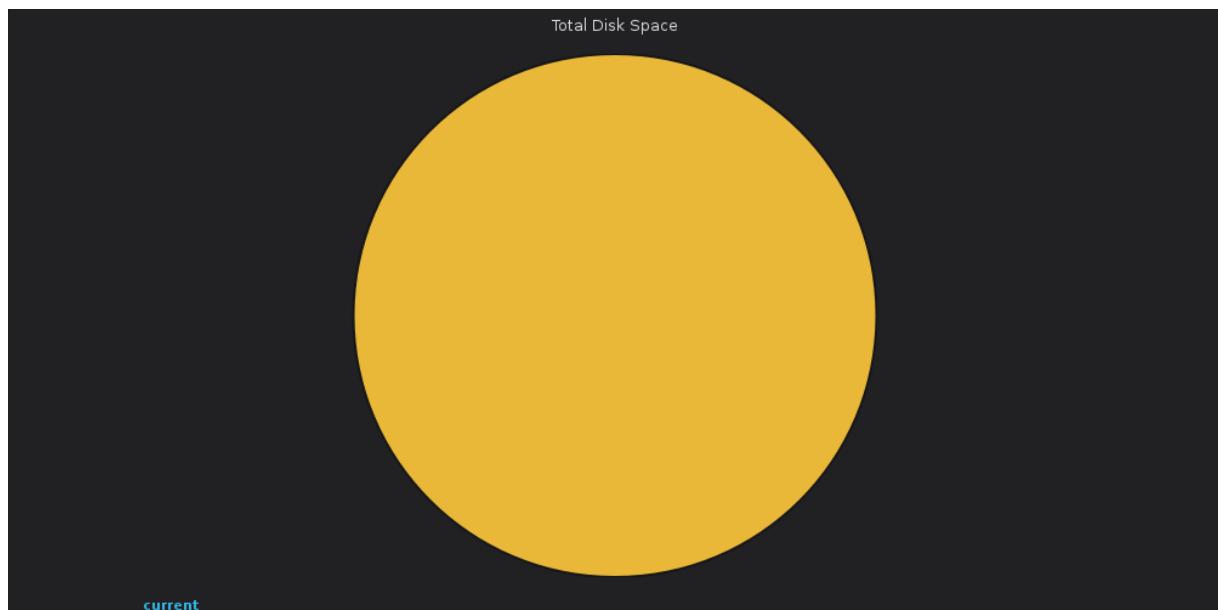
根分区使用率



系统平均负载



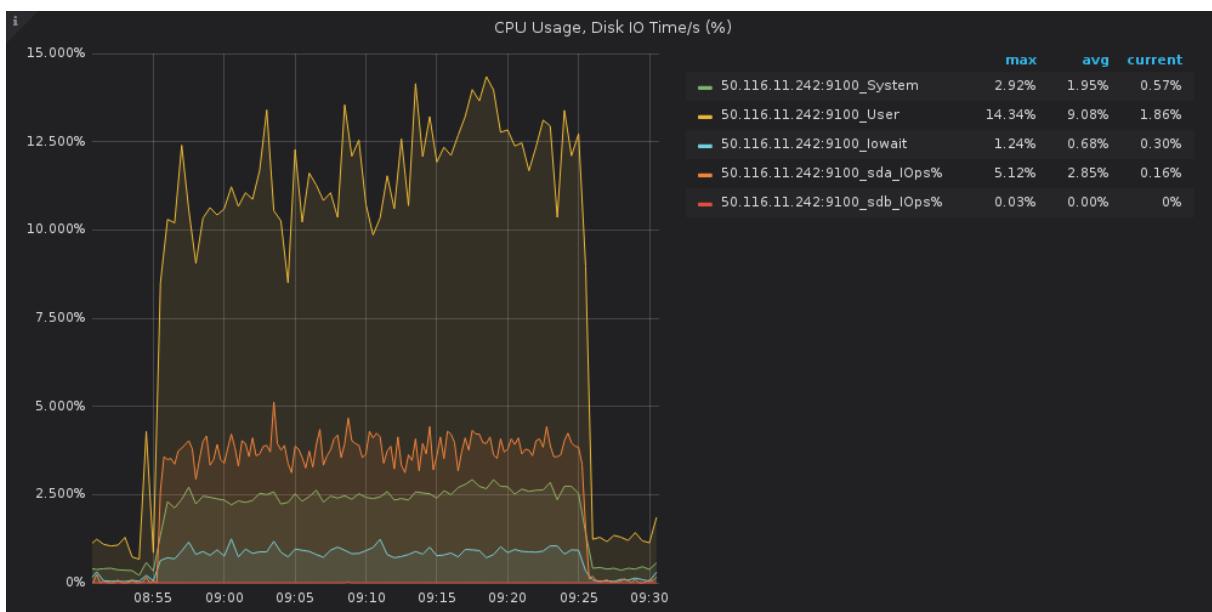
磁盘总空间



各分区可用空间

Volumes Available				
File System	IP	Mount ▲	Available	Usage
ext4	50.116.11.242:9100	/	291.63 GB	2.20%

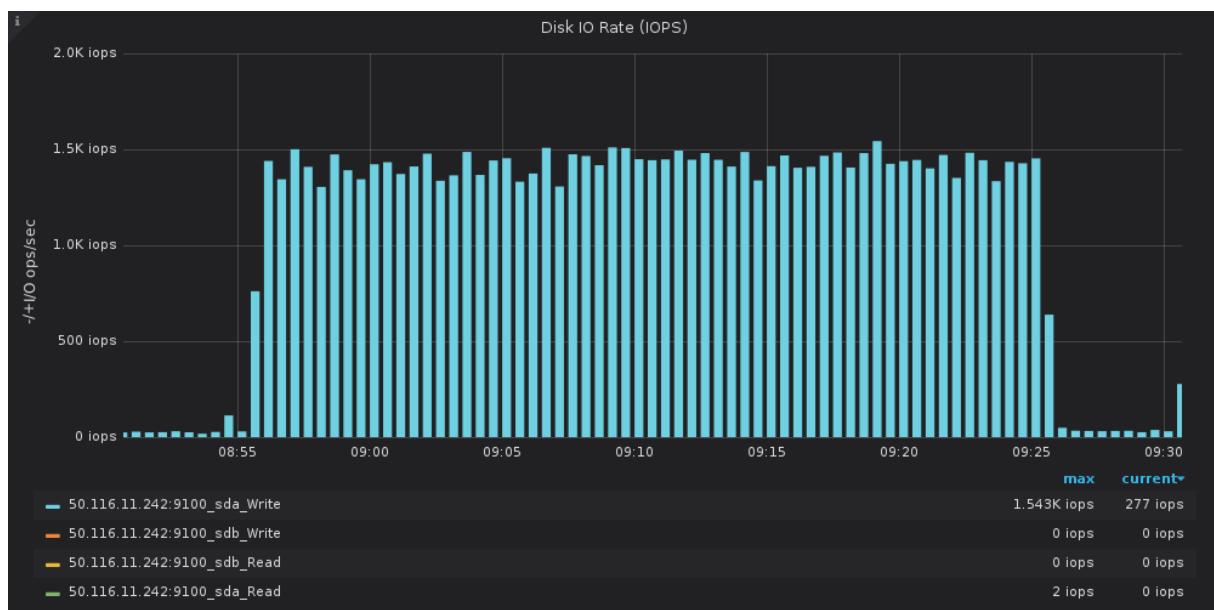
CPU使用率、磁盘每秒的I/O操作耗费时间 (%)



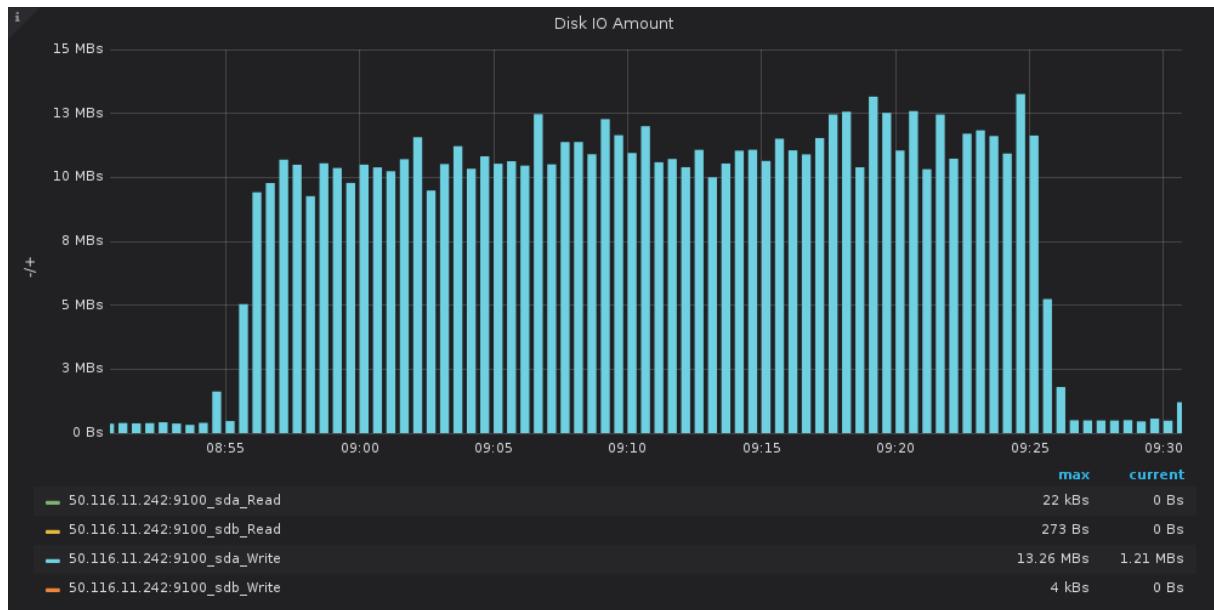
内存信息



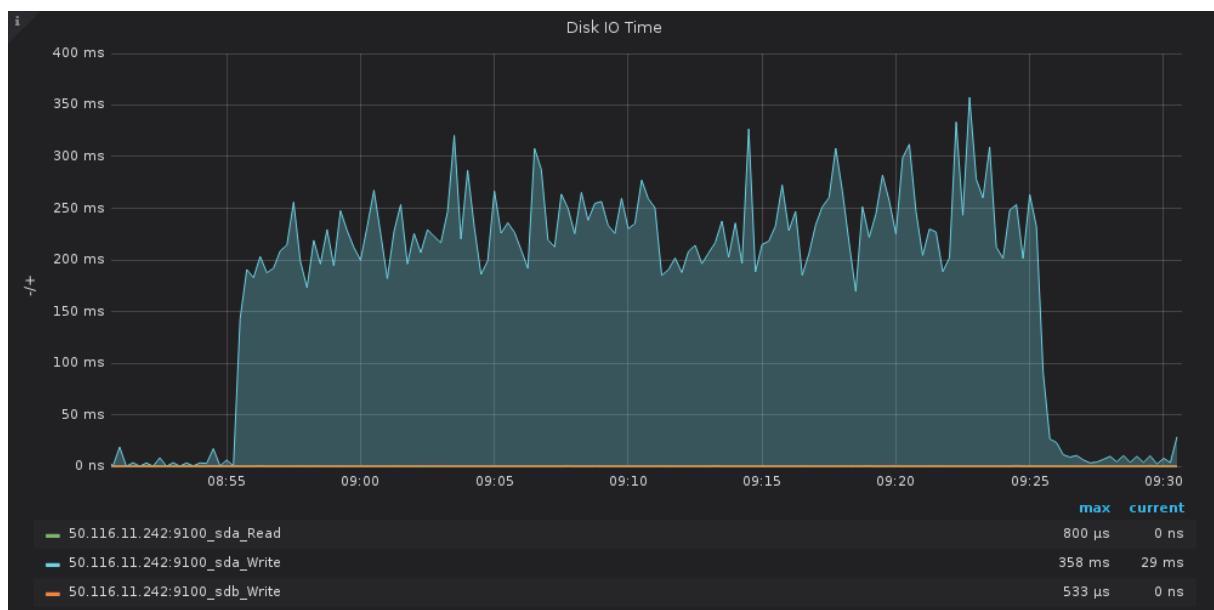
磁盘读写速率 (IOPS)



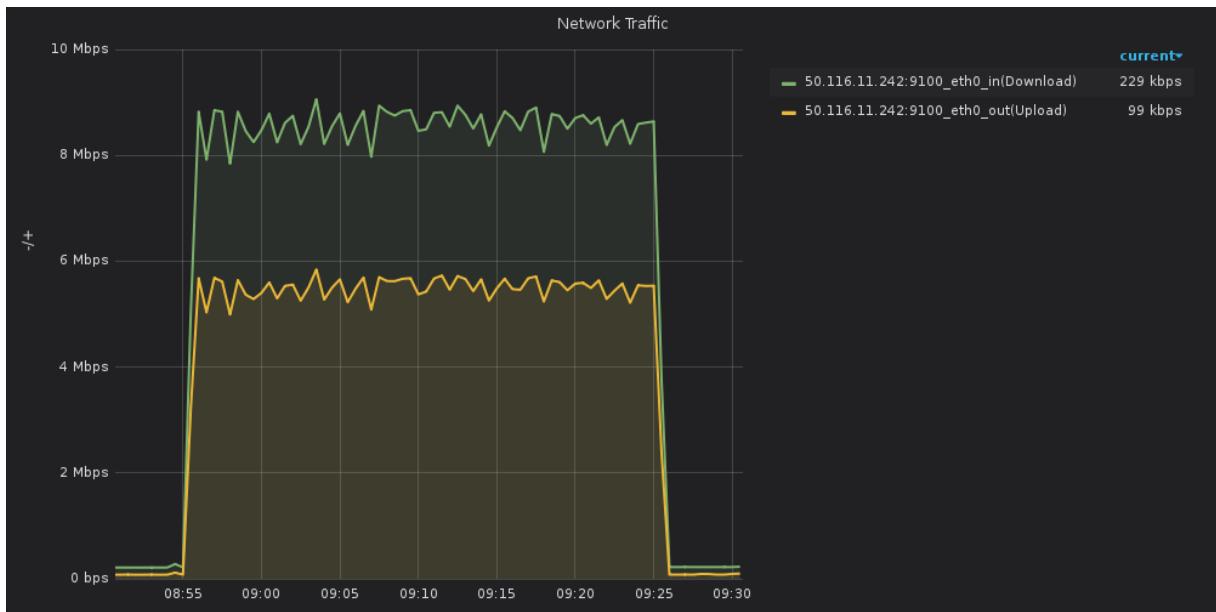
磁盘读写容量大小



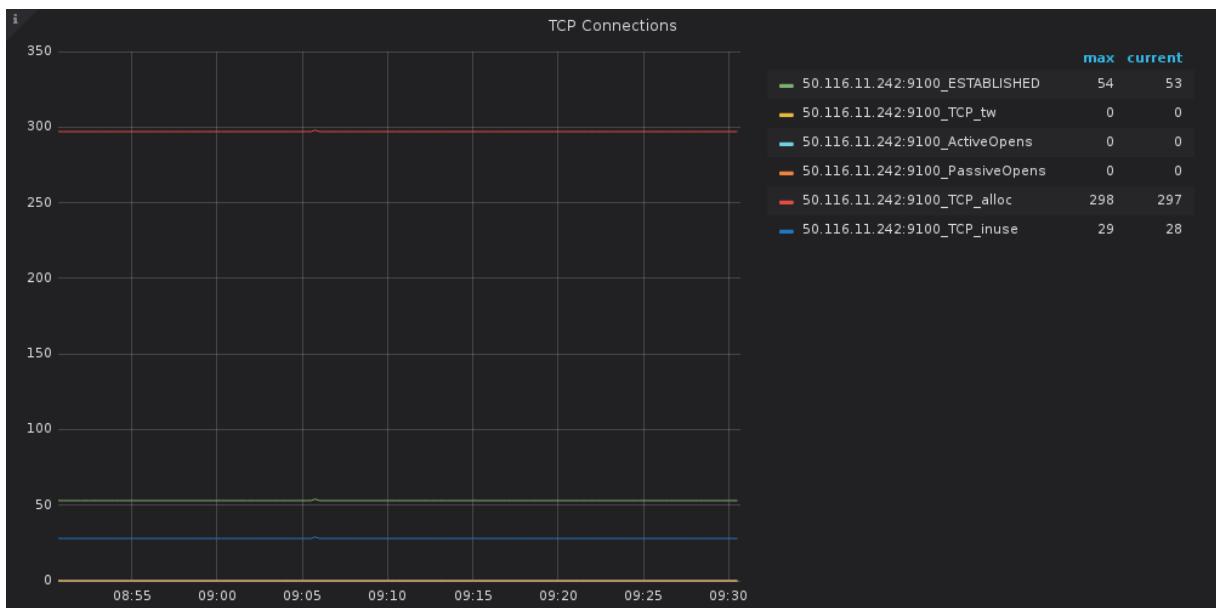
磁盘IO读写时间



网络流量



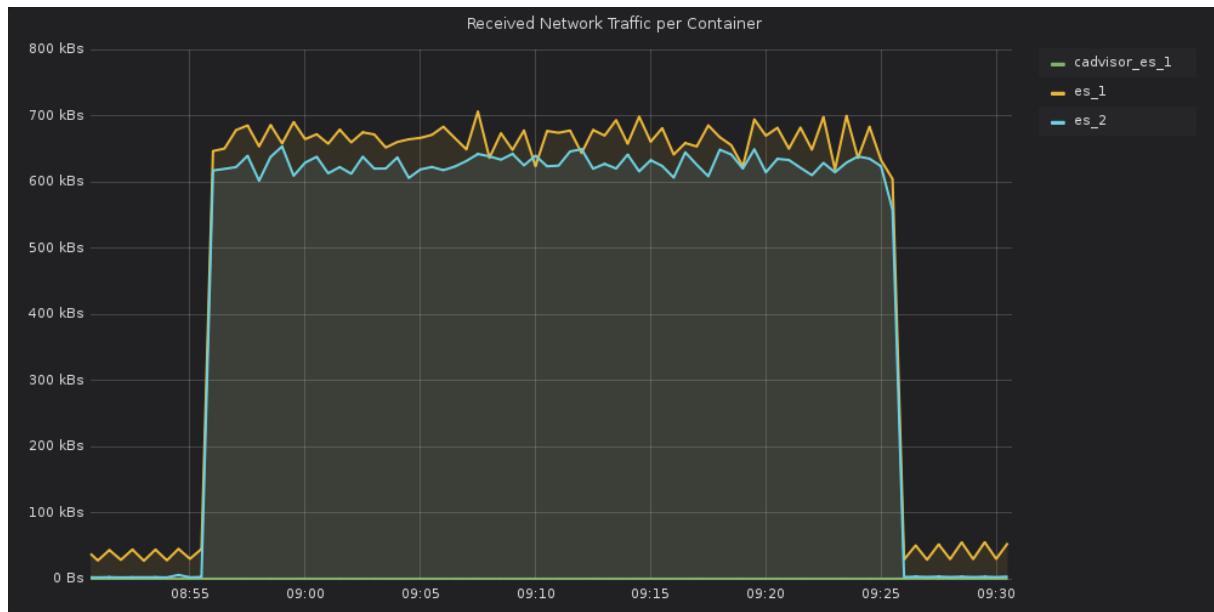
TCP 连接情况



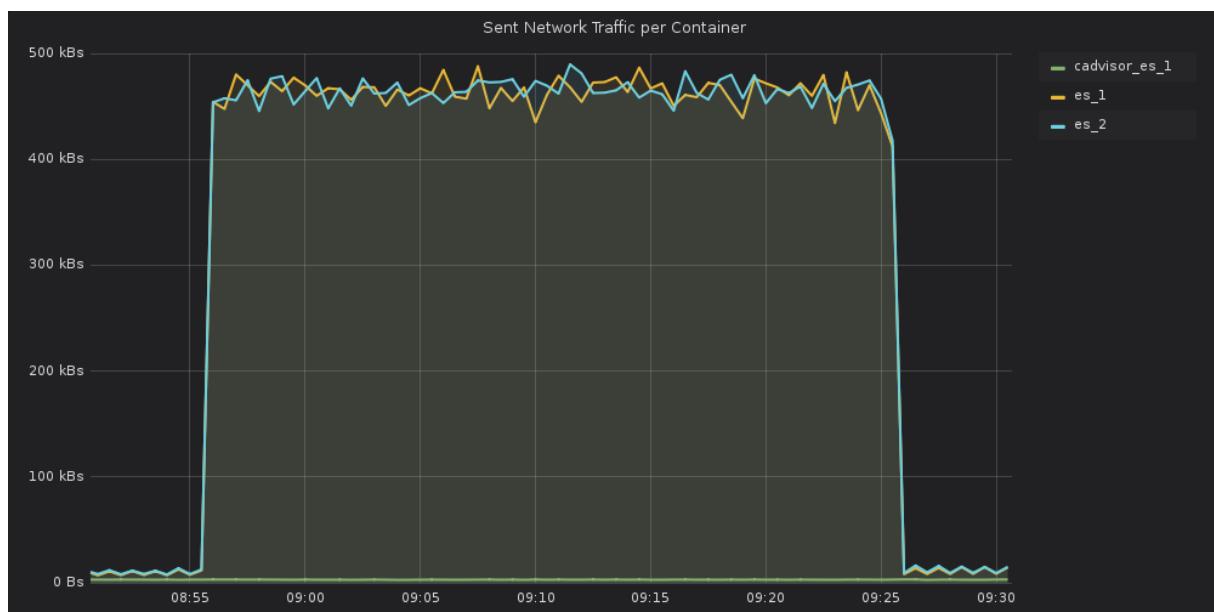
Service: cAdvisor_es_1

- name: cadvisor_es_1
- type: cAdvisor

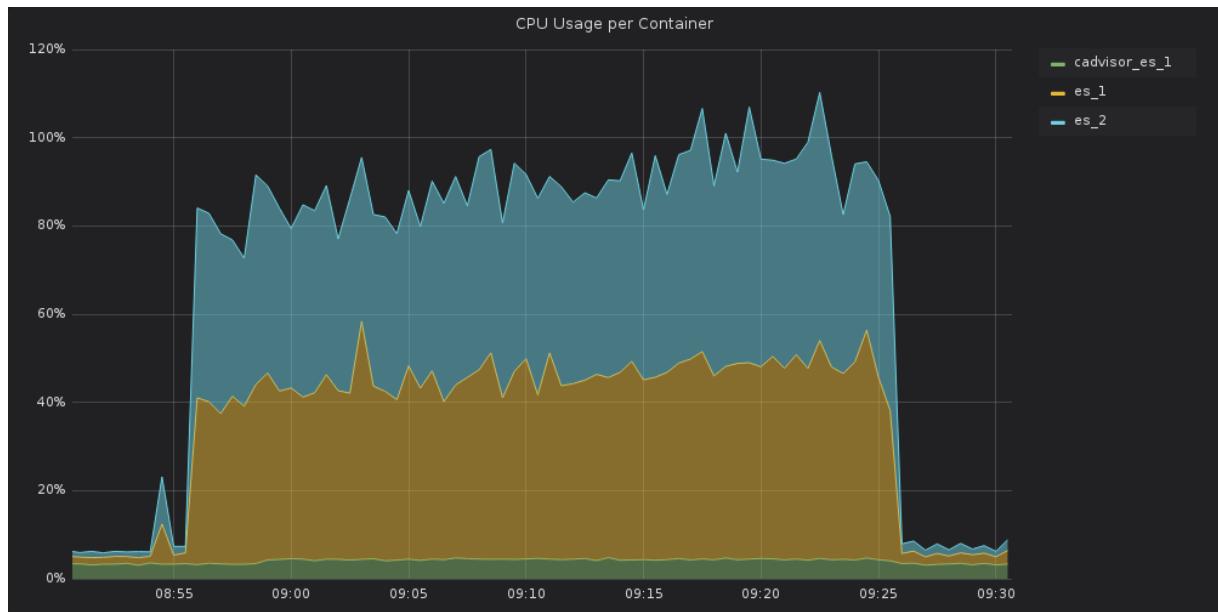
Received Network Traffic per Container



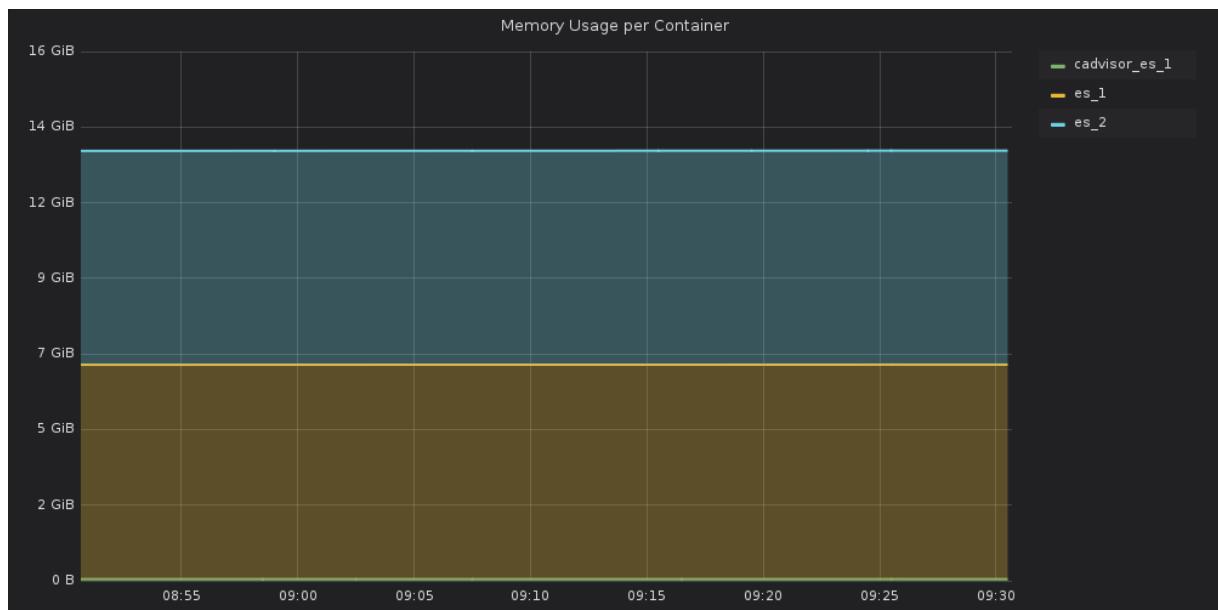
Sent Network Traffic per Container



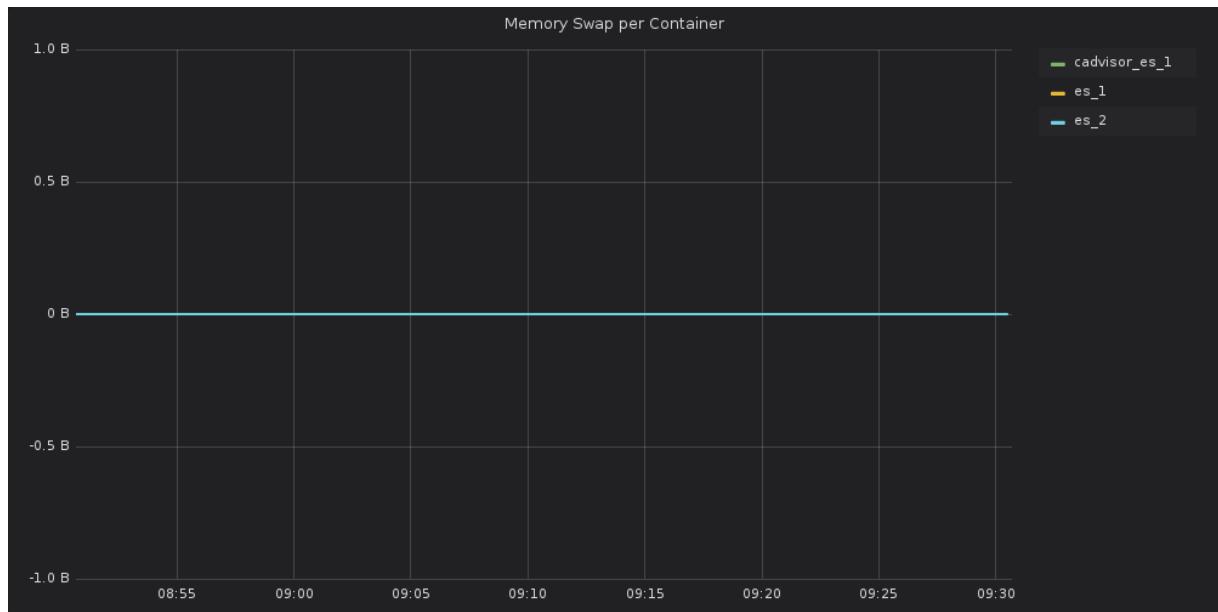
CPU Usage per Container



Memory Usage per Container



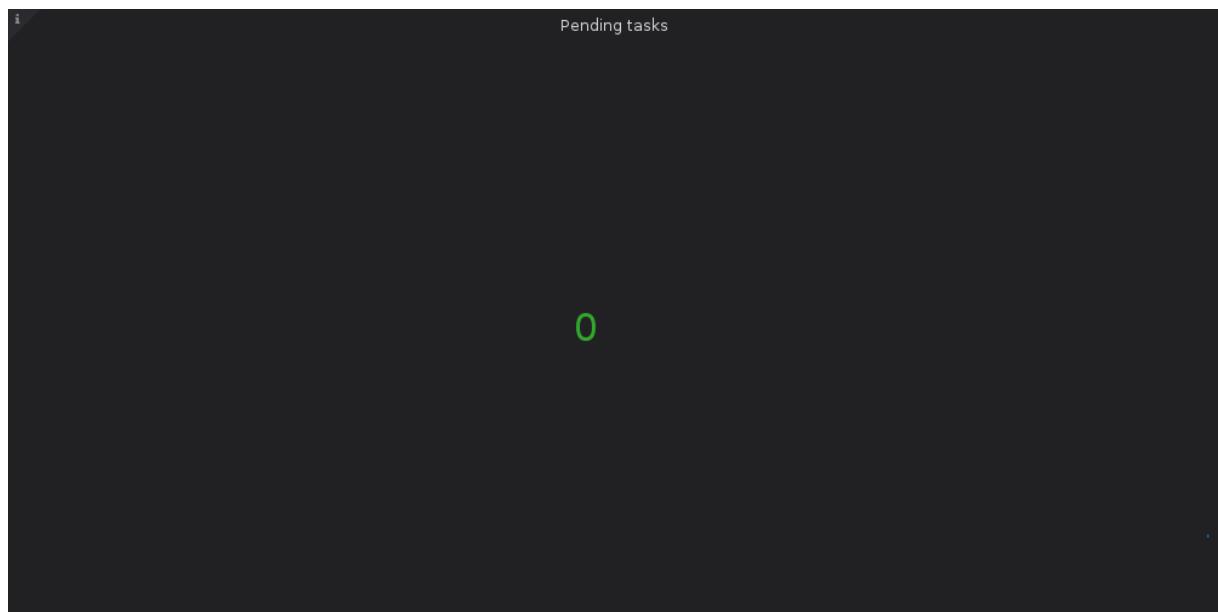
Memory Swap per Container



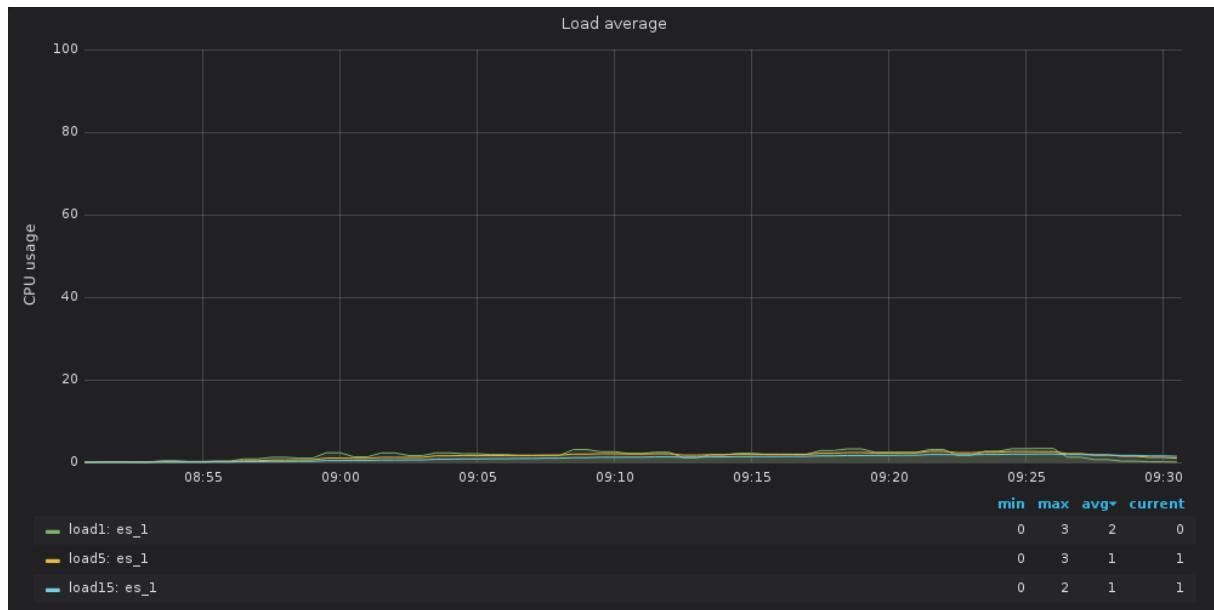
Service: es_1

- name: es_1
- type: elasticsearch

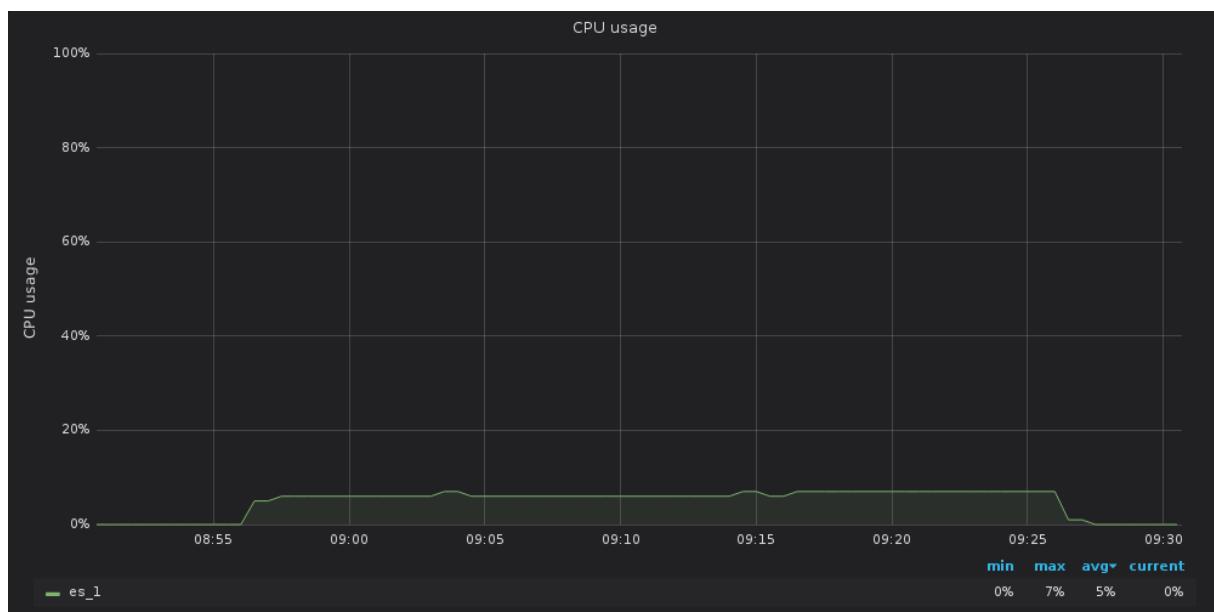
Pending tasks



Load average



CPU usage



JVM memory usage



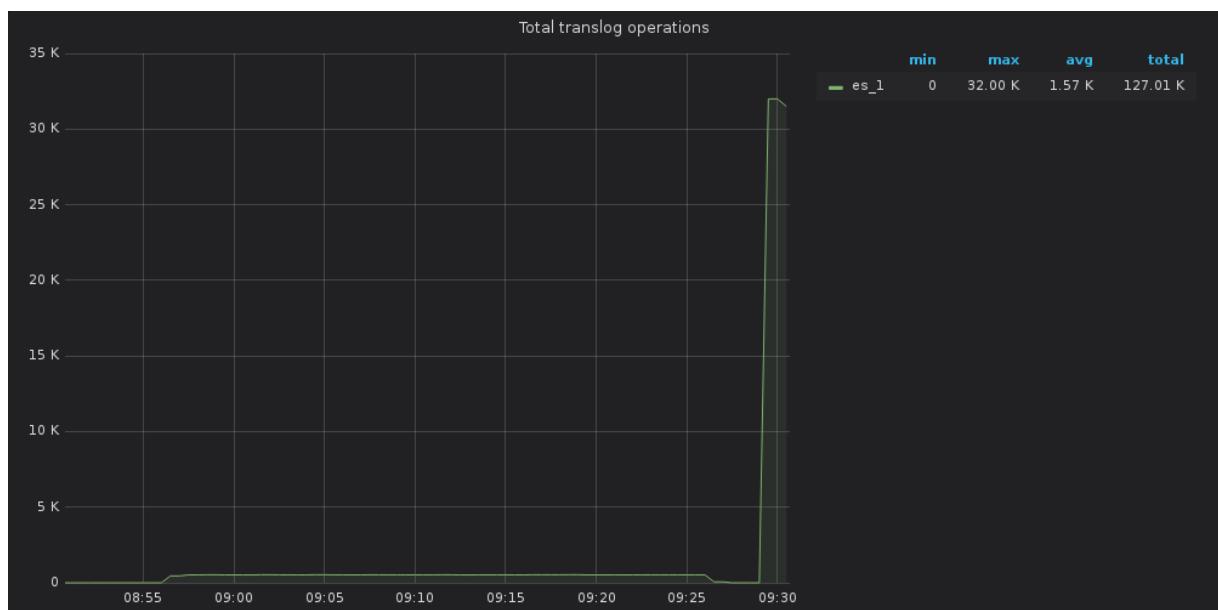
GC count



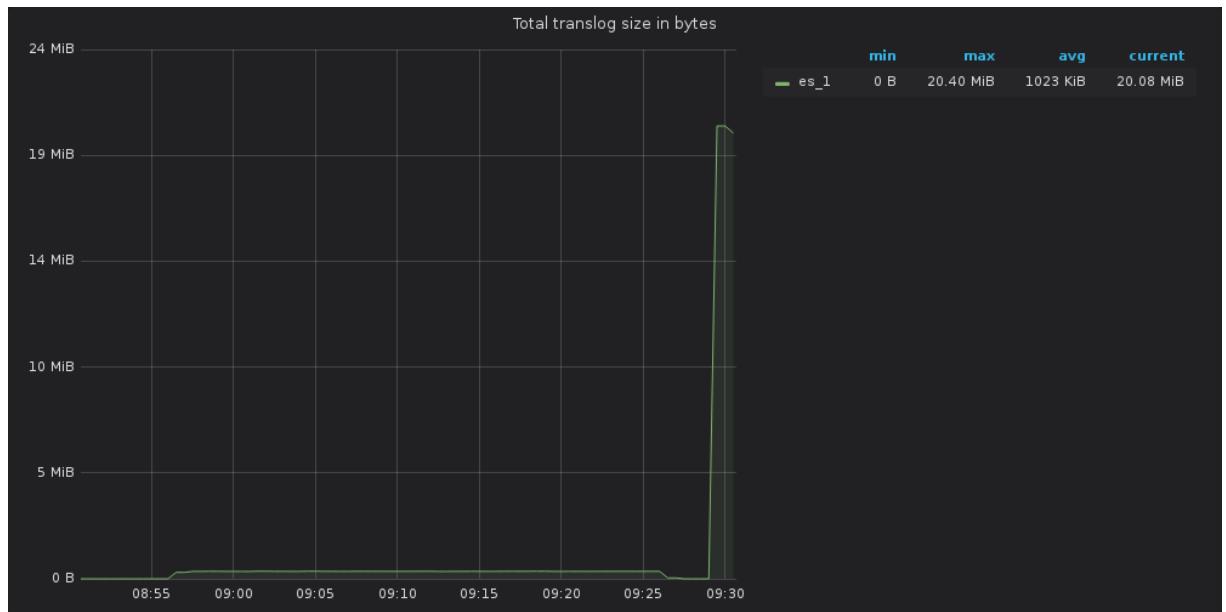
GC time



Total translog operations



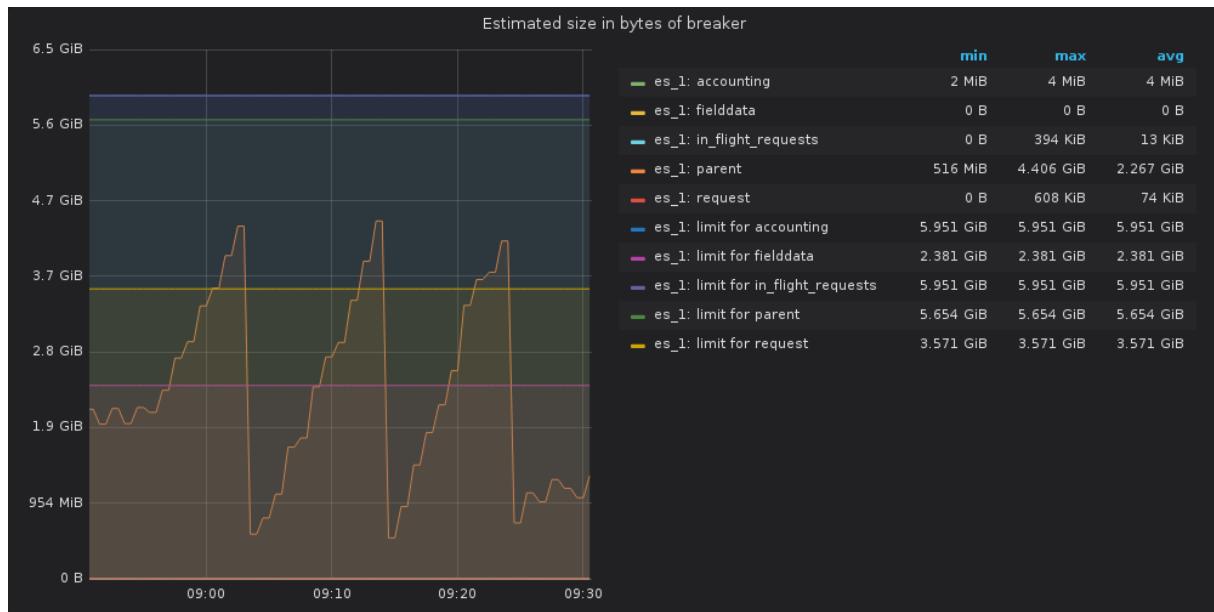
Total translog size in bytes



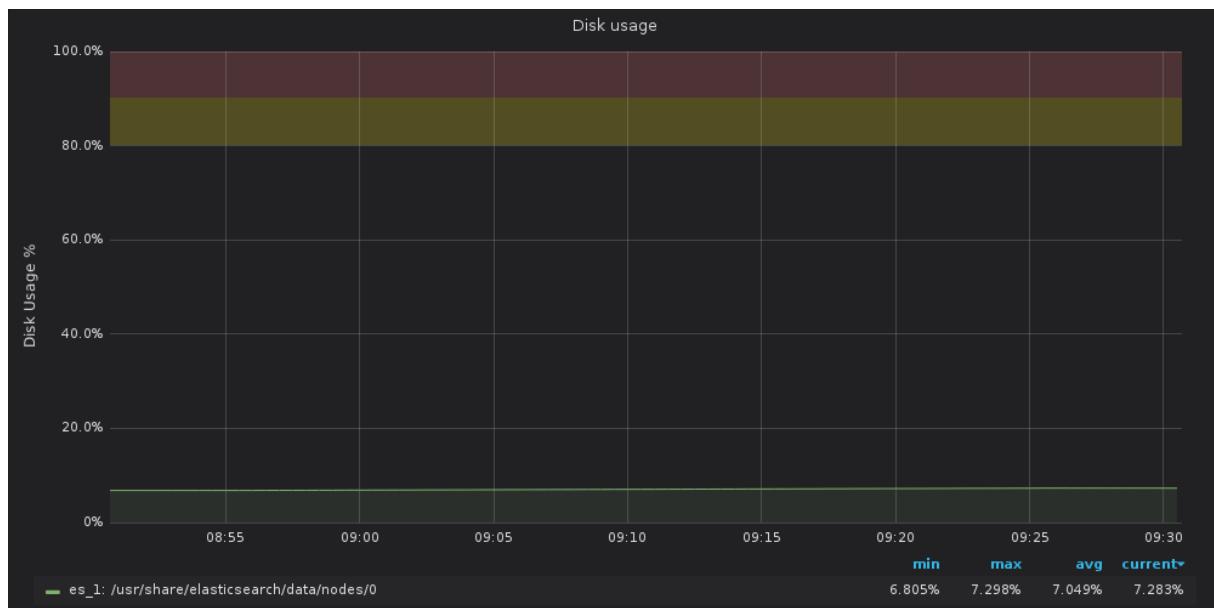
Tripped for breakers



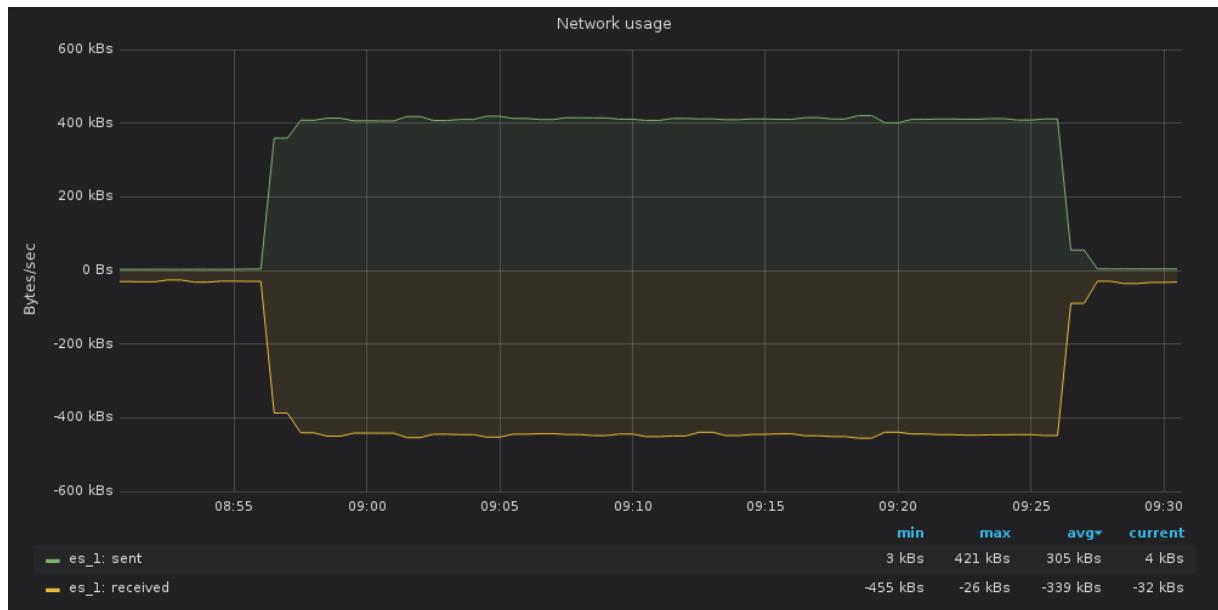
Estimated size in bytes of breaker



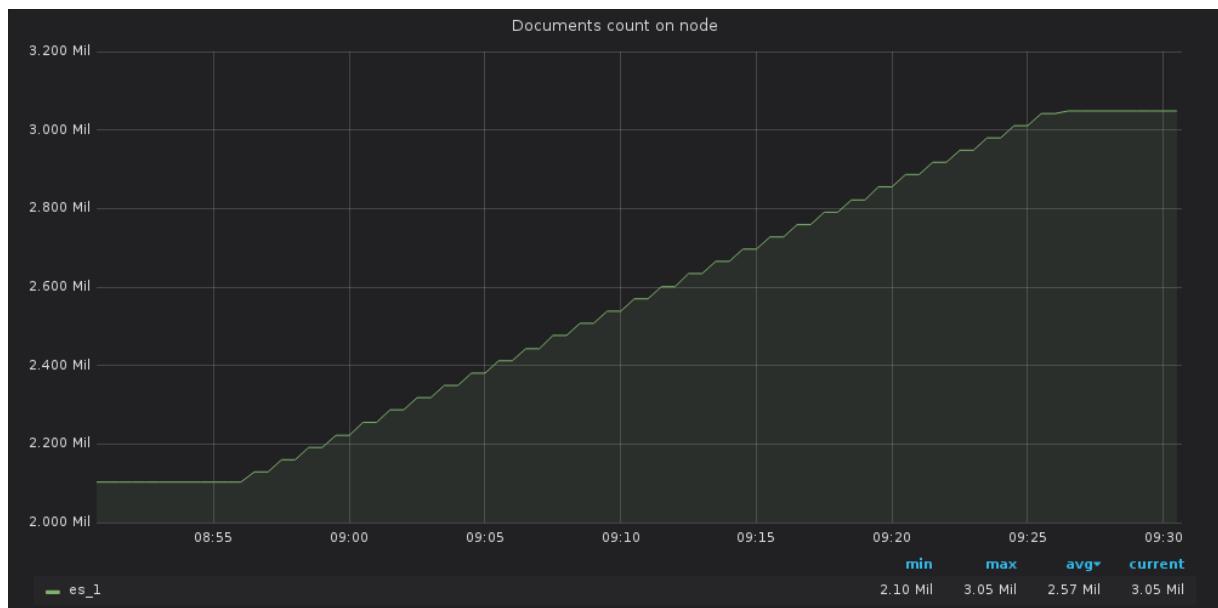
Disk usage



Network usage



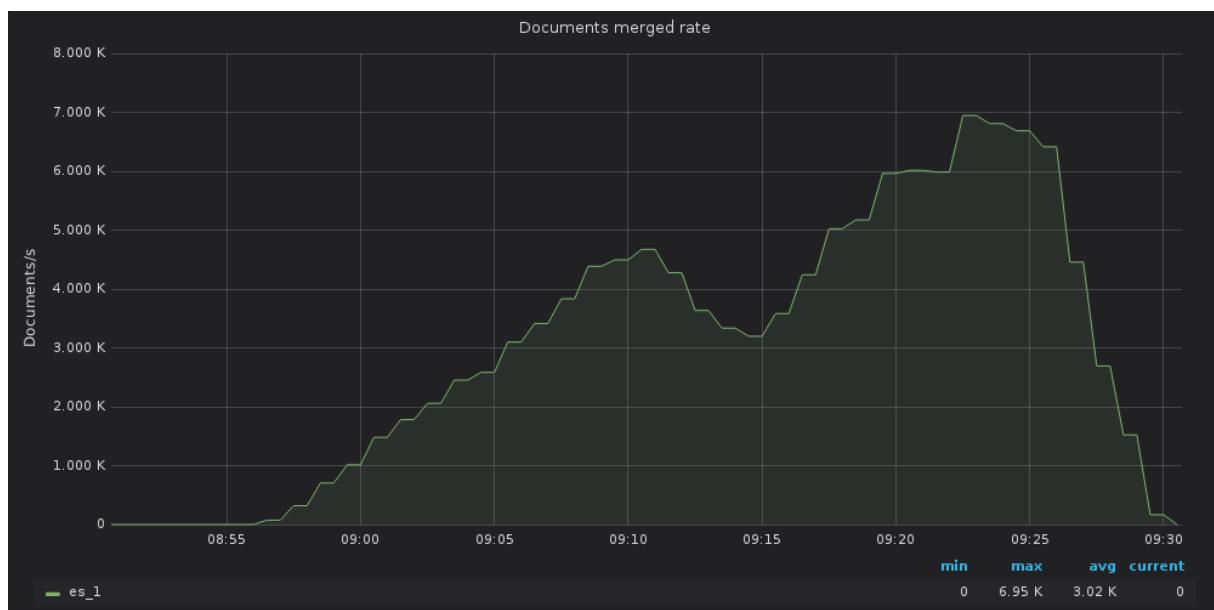
Documents count on node



Documents indexed rate



Documents merged rate



Documents merged bytes



Query time



Indexing time



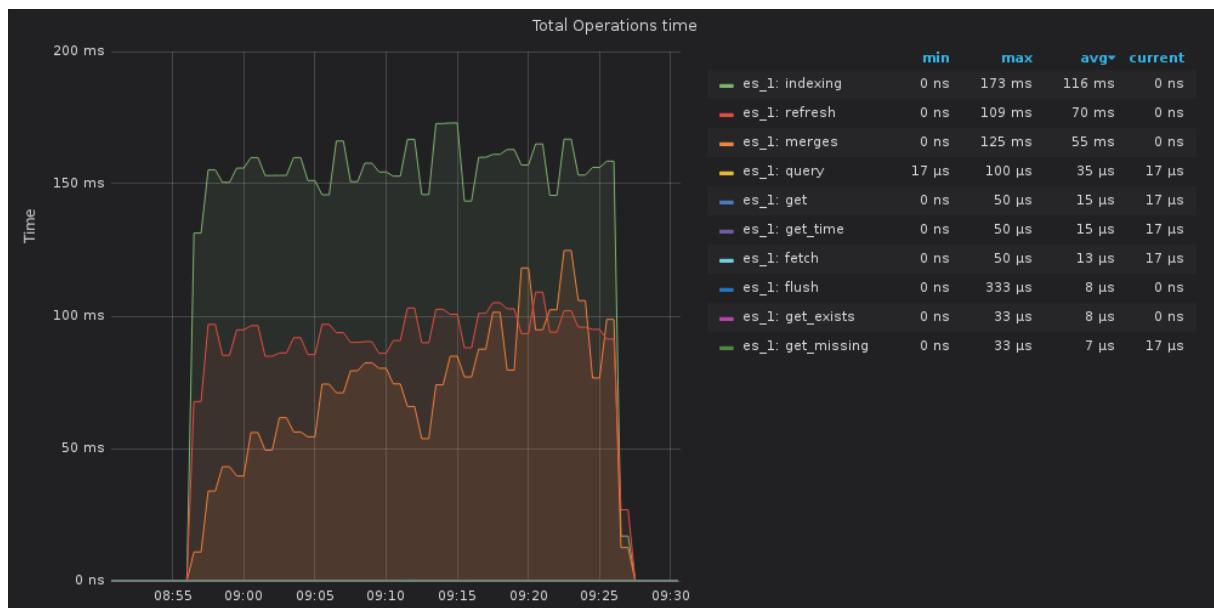
Merging time



Total Operations rate



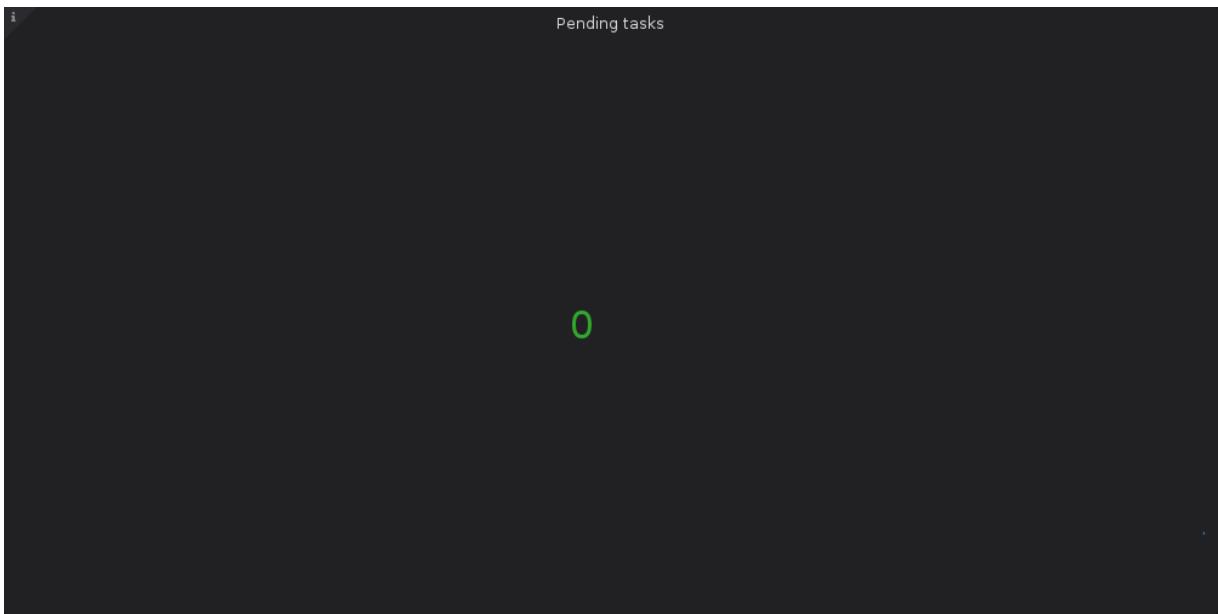
Total Operations time



Service: es_2

- name: es_2
- type: elasticsearch

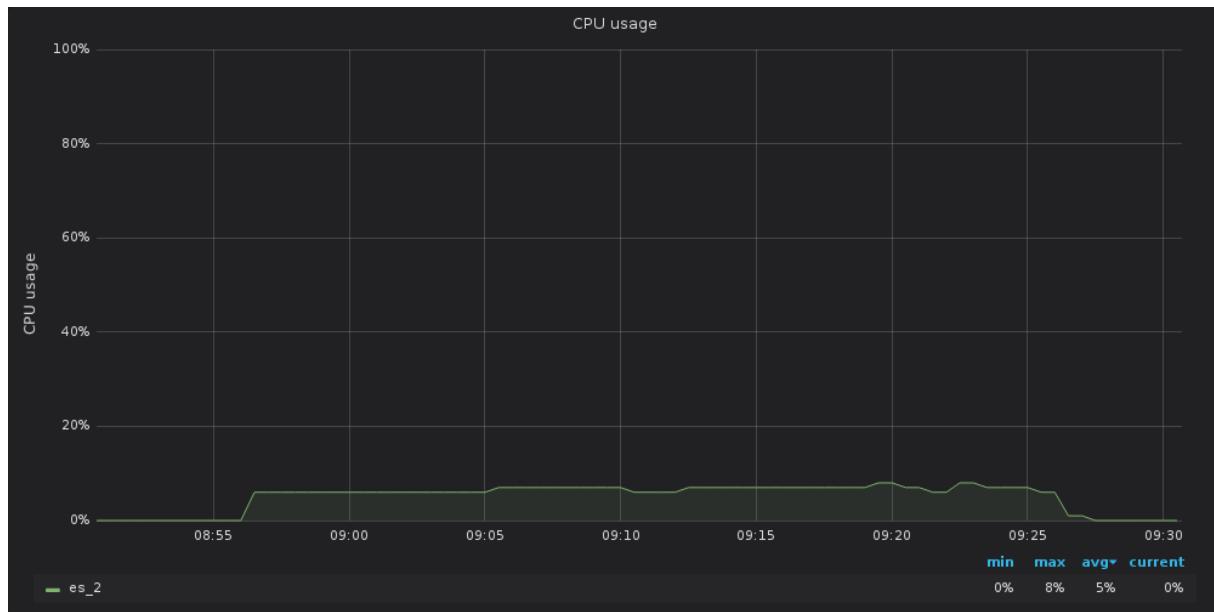
Pending tasks



Load average



CPU usage



JVM memory usage



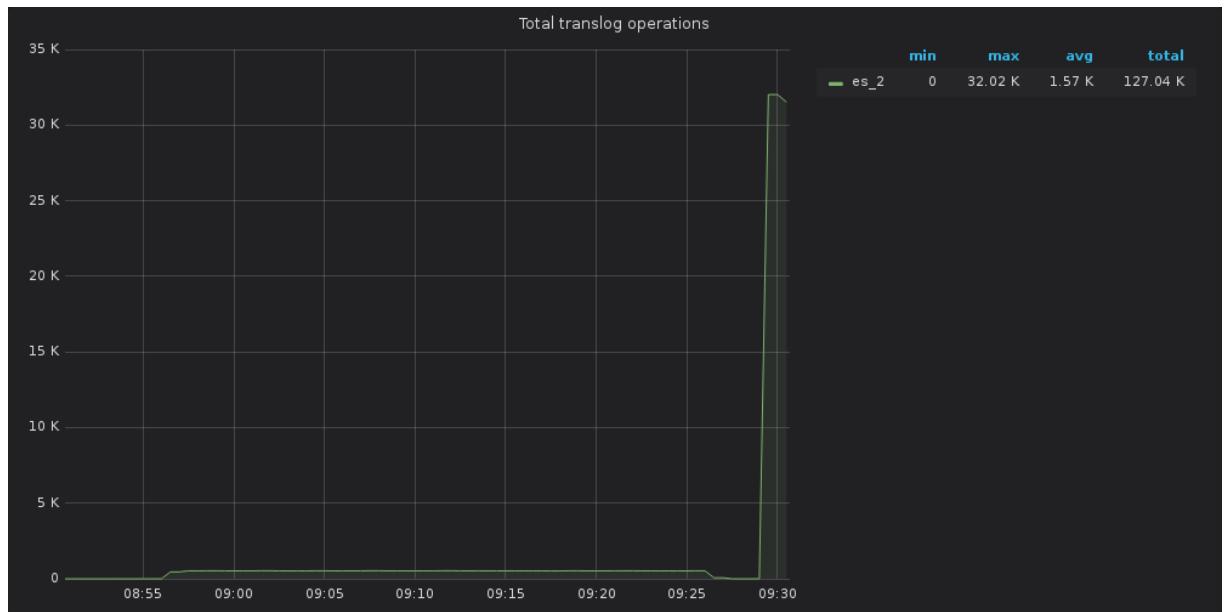
GC count



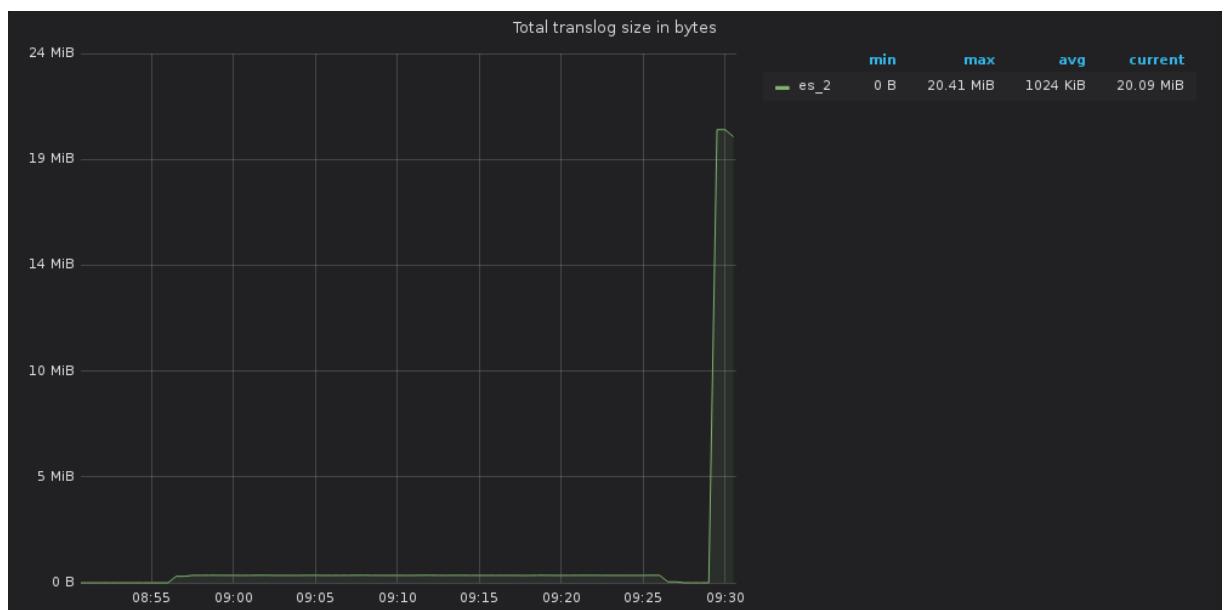
GC time



Total translog operations



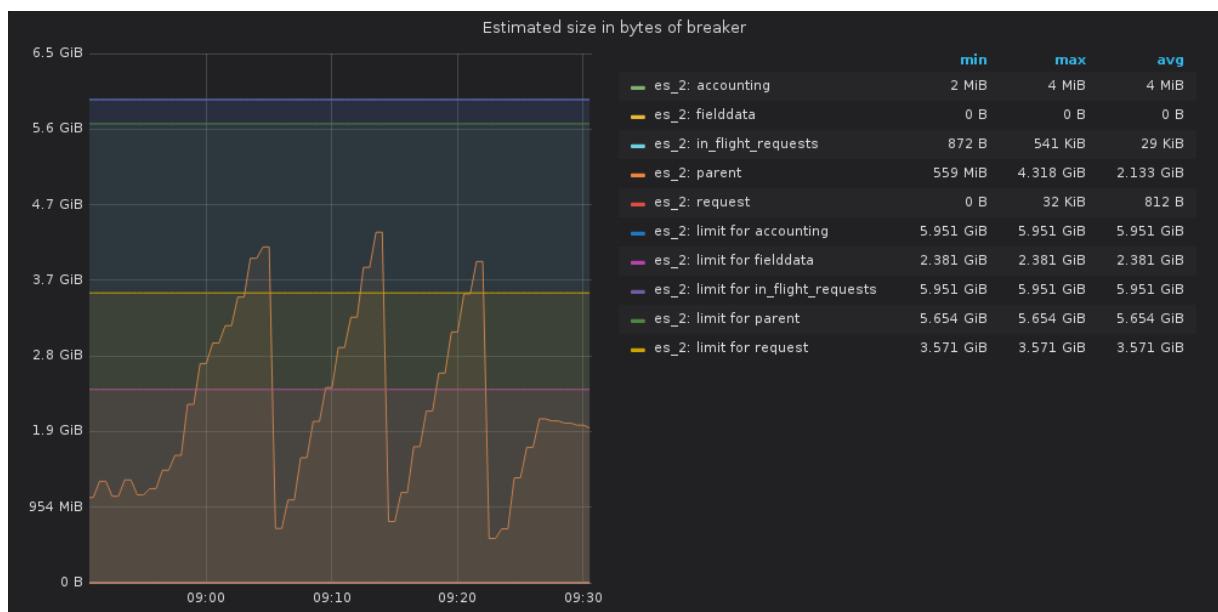
Total translog size in bytes



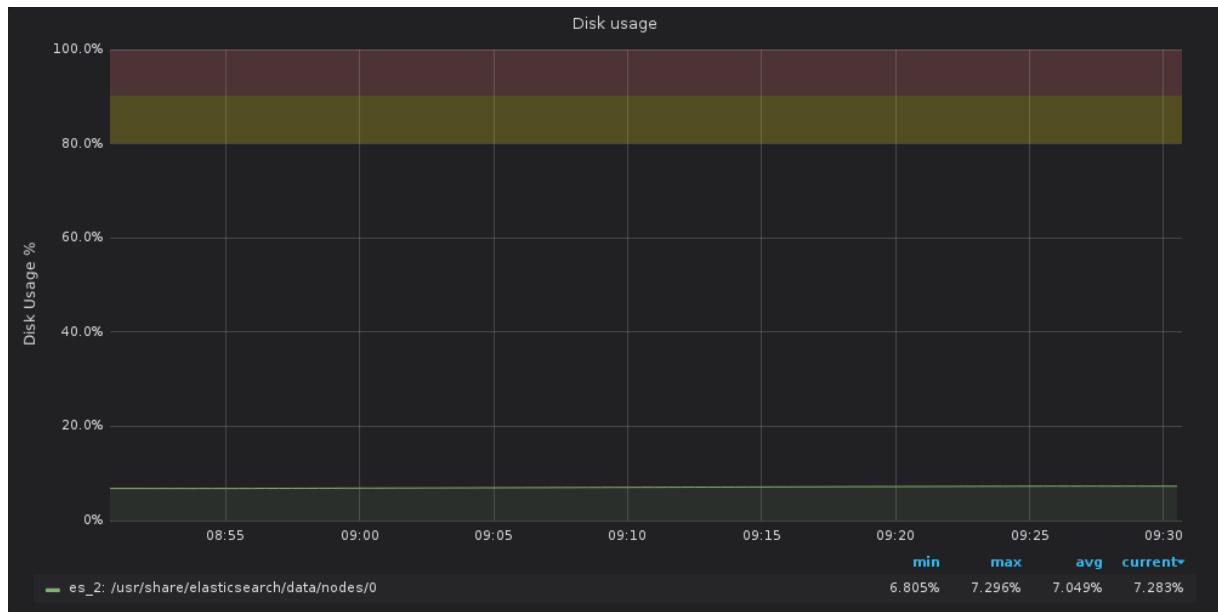
Tripped for breakers



Estimated size in bytes of breaker



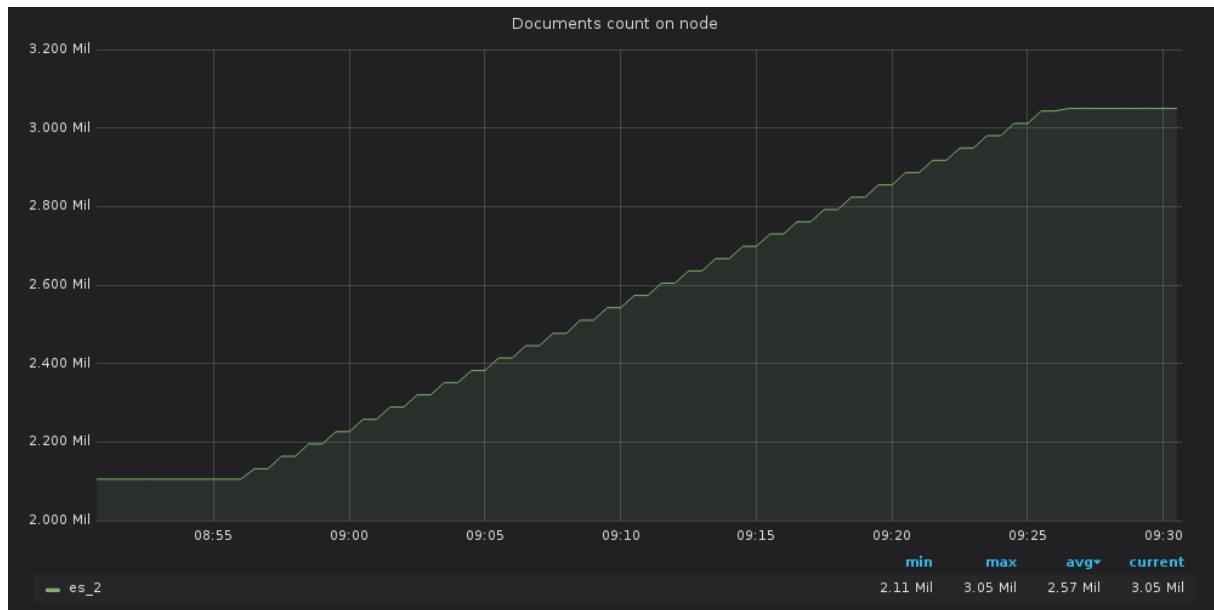
Disk usage



Network usage



Documents count on node



Documents indexed rate



Documents merged rate



Documents merged bytes



Query time



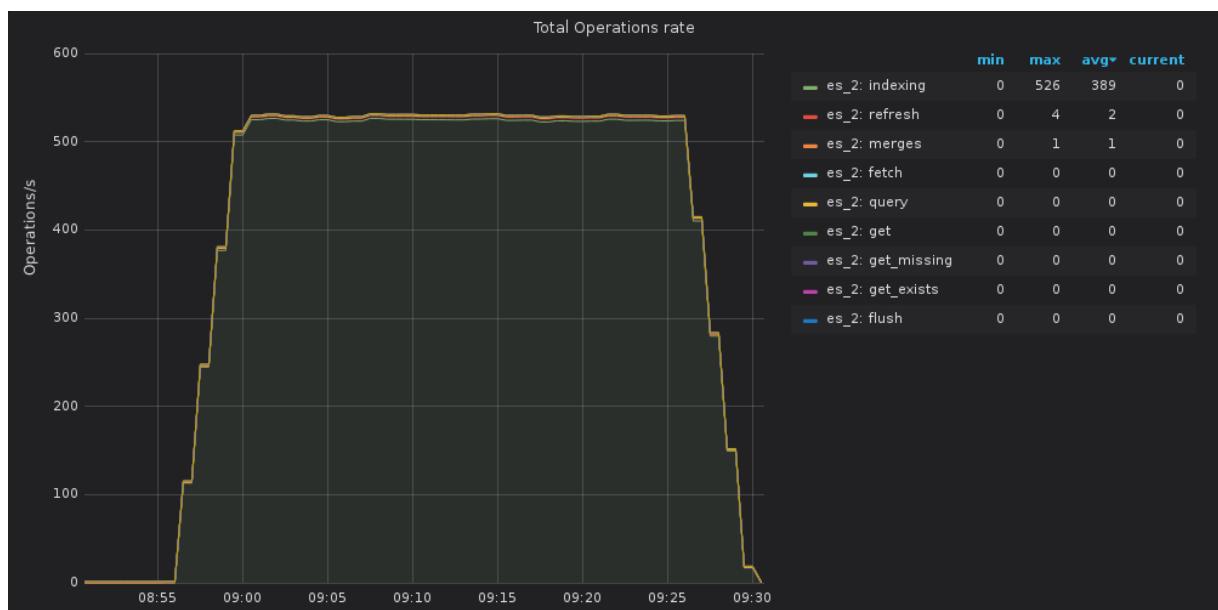
Indexing time



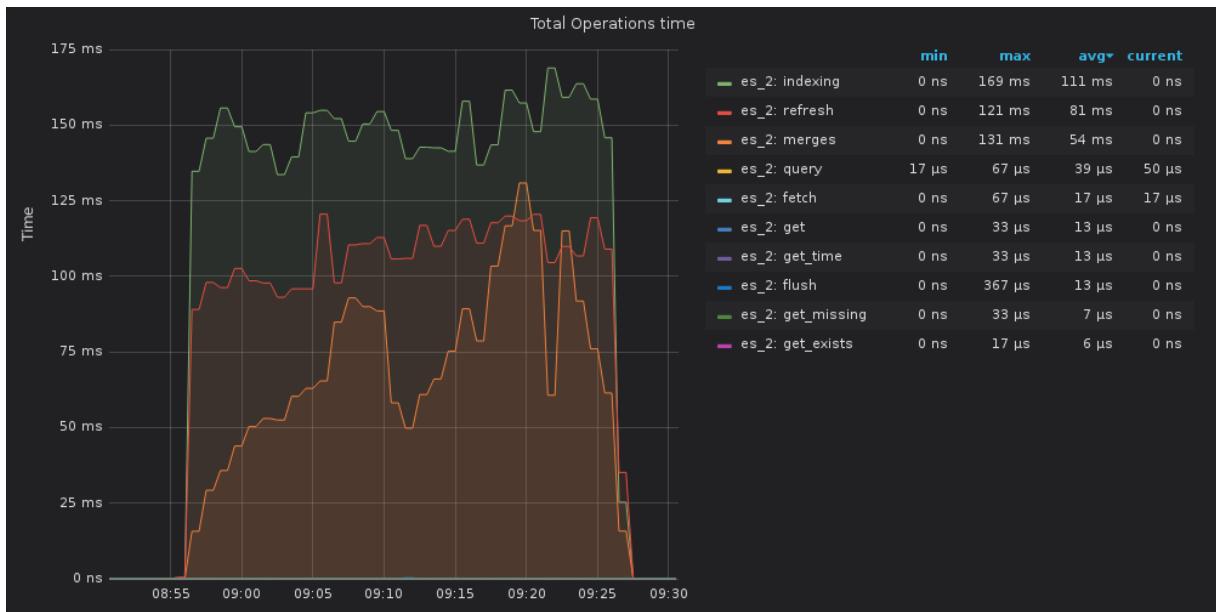
Merging time



Total Operations rate



Total Operations time



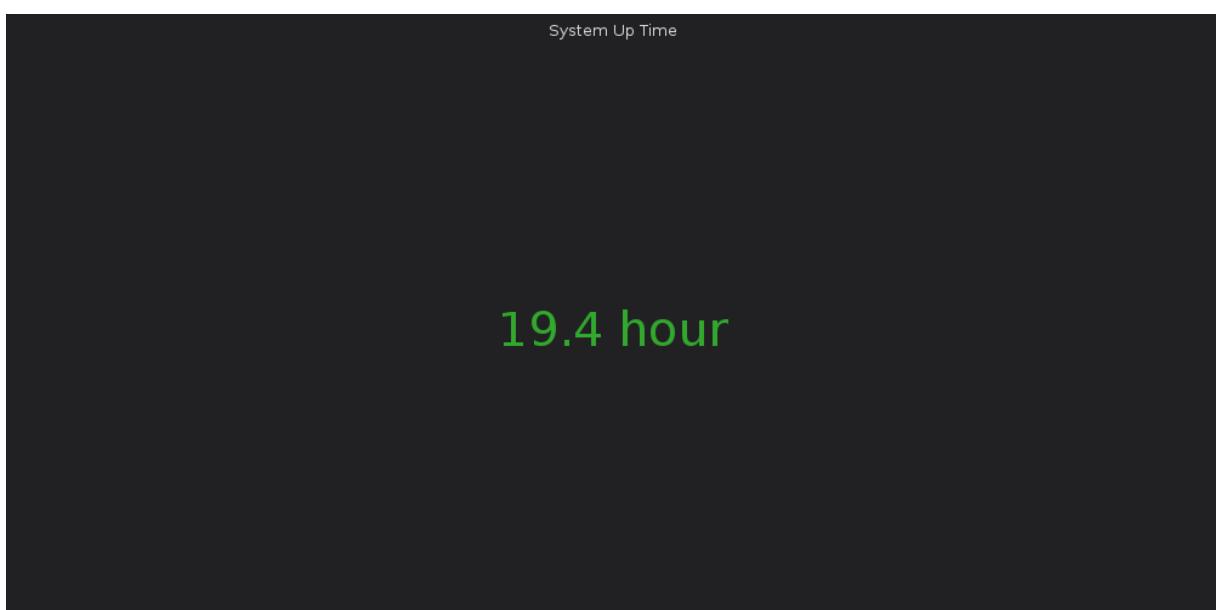
Host: es2

- name: es2
- type: elasticsearch

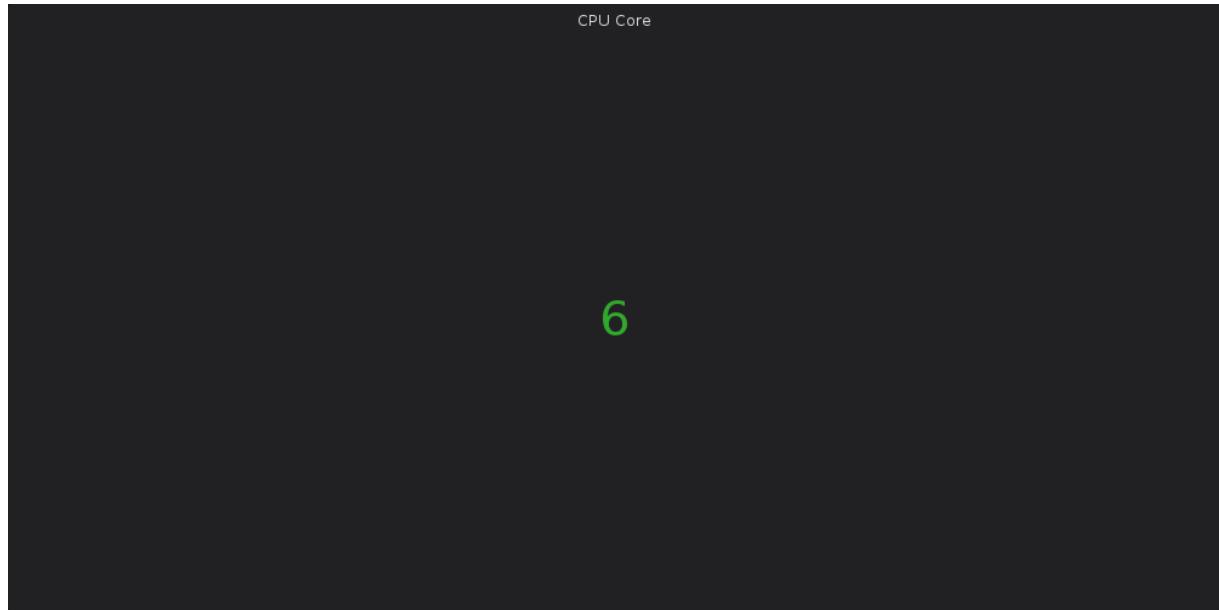
Service: node_es_2

- name: node_es_2
- type: node_exporter

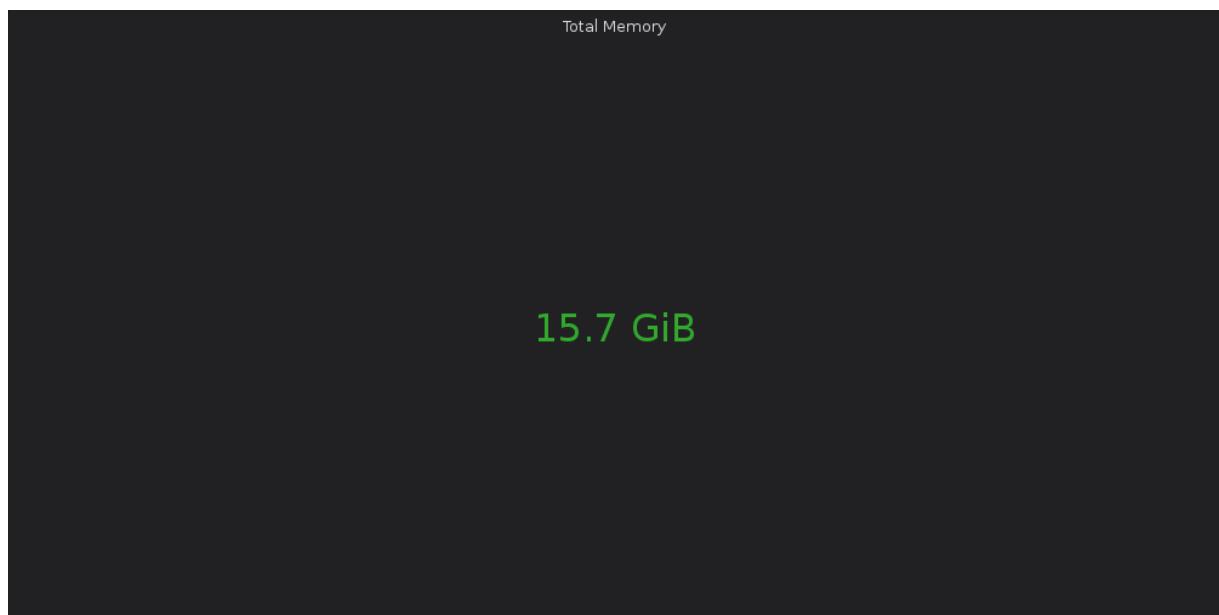
系统运行时间



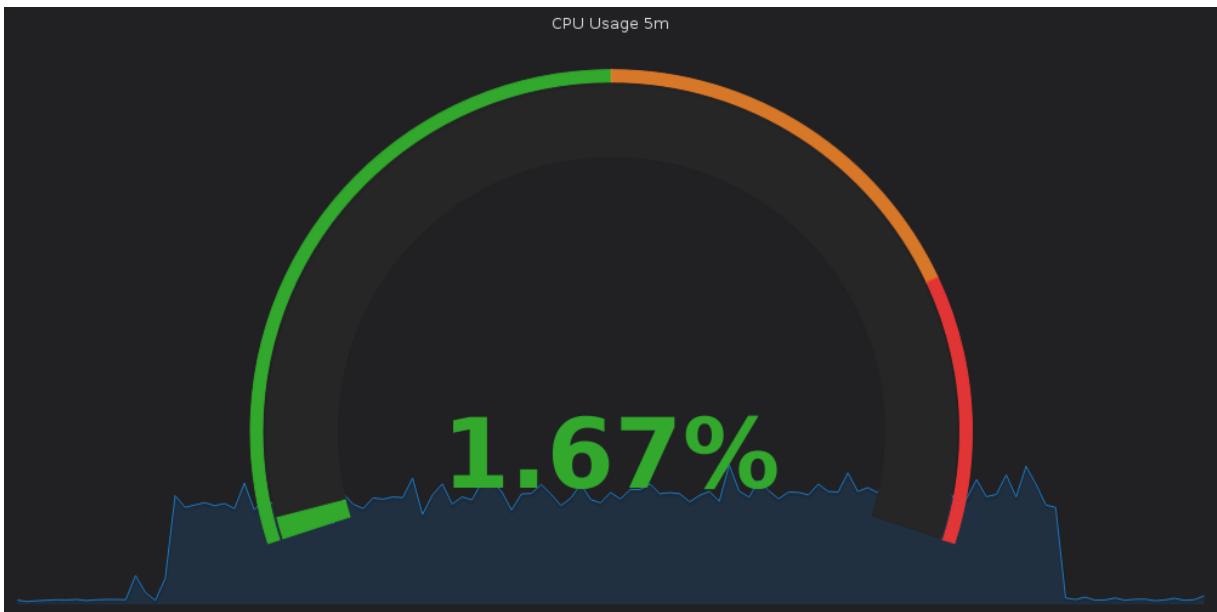
CPU 核数



内存总量



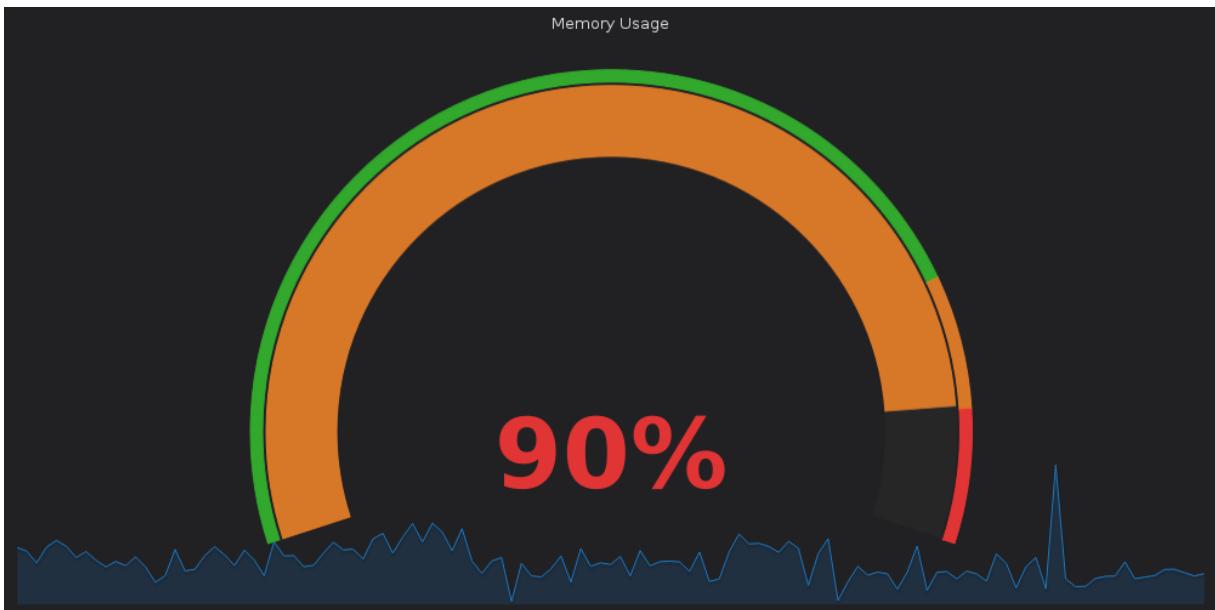
CPU使用率 (5m)



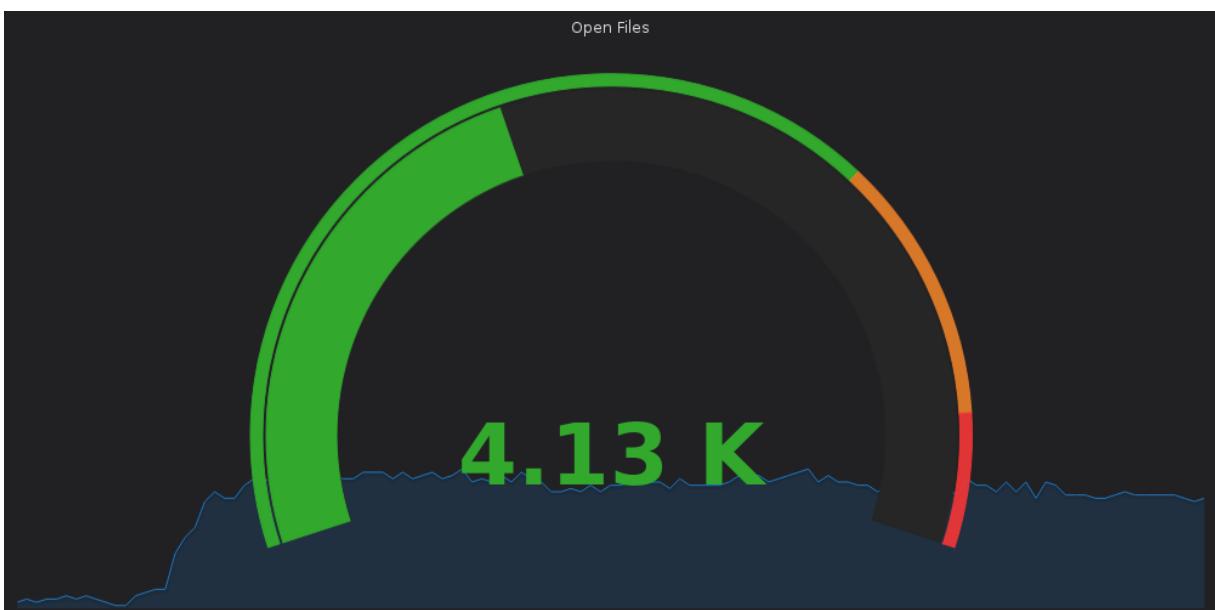
CPU iowait (5m)



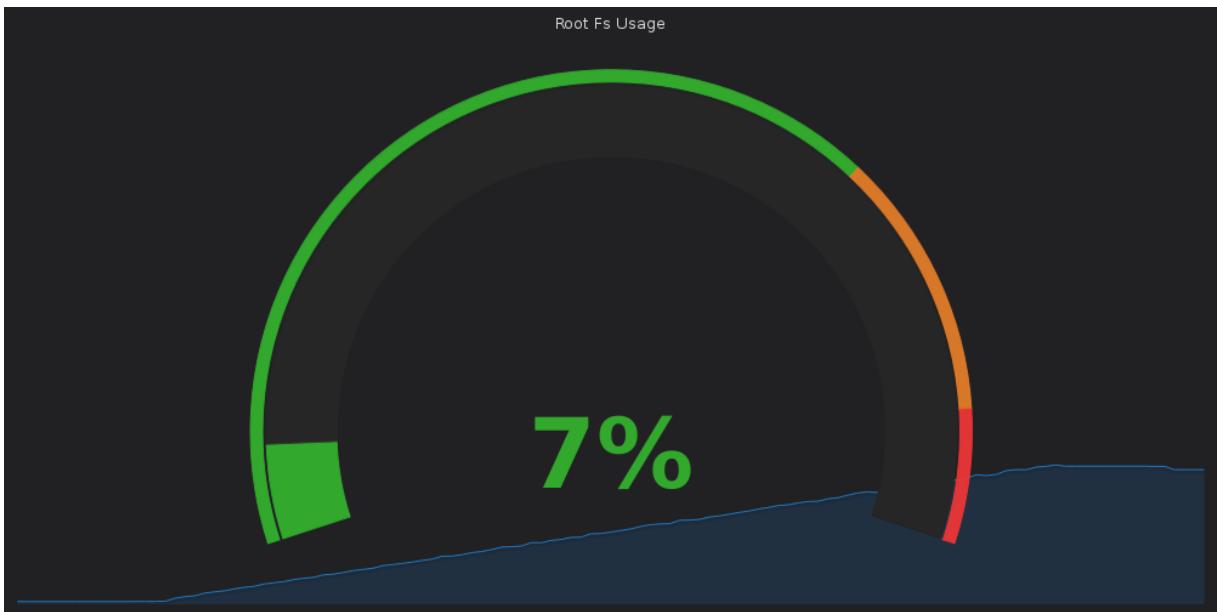
内存使用率



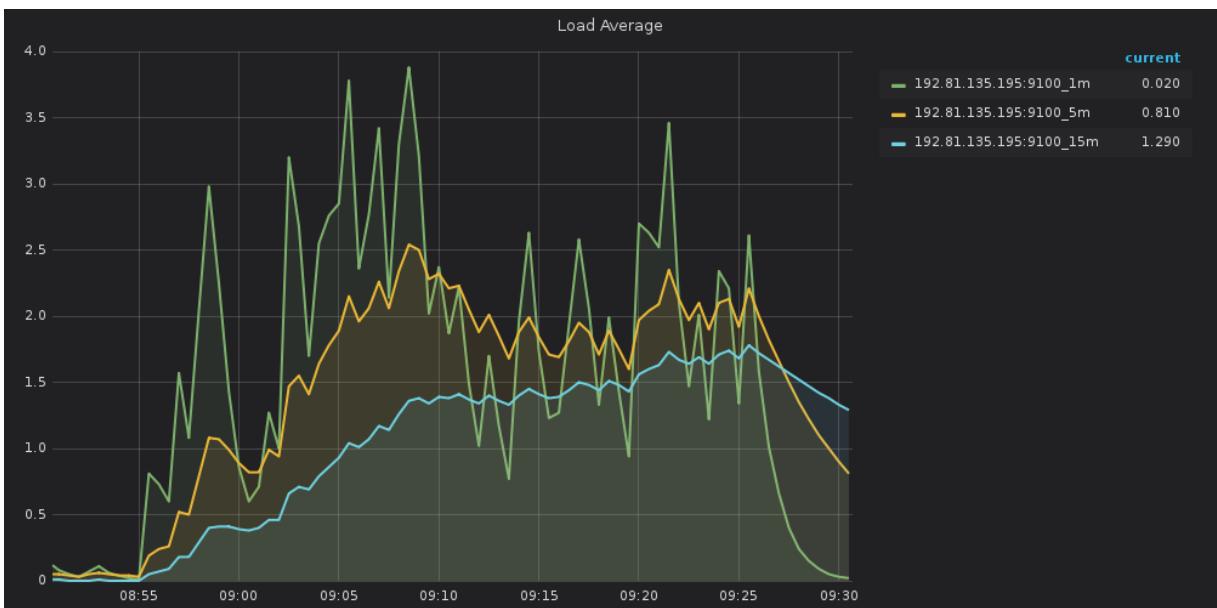
当前打开的文件描述符



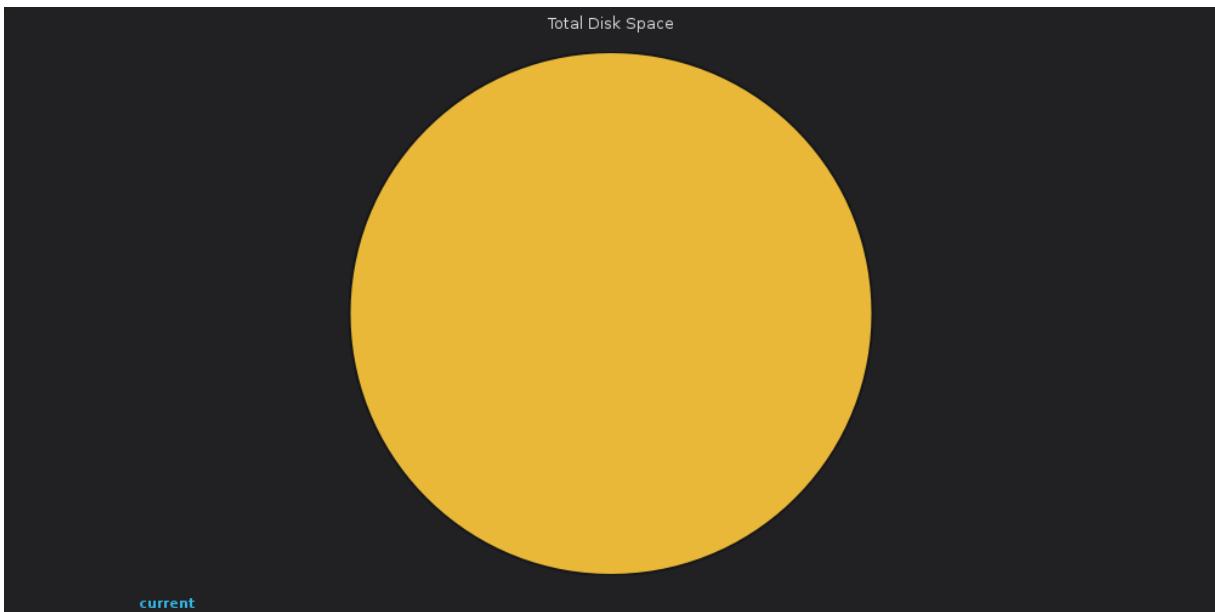
根分区使用率



系统平均负载



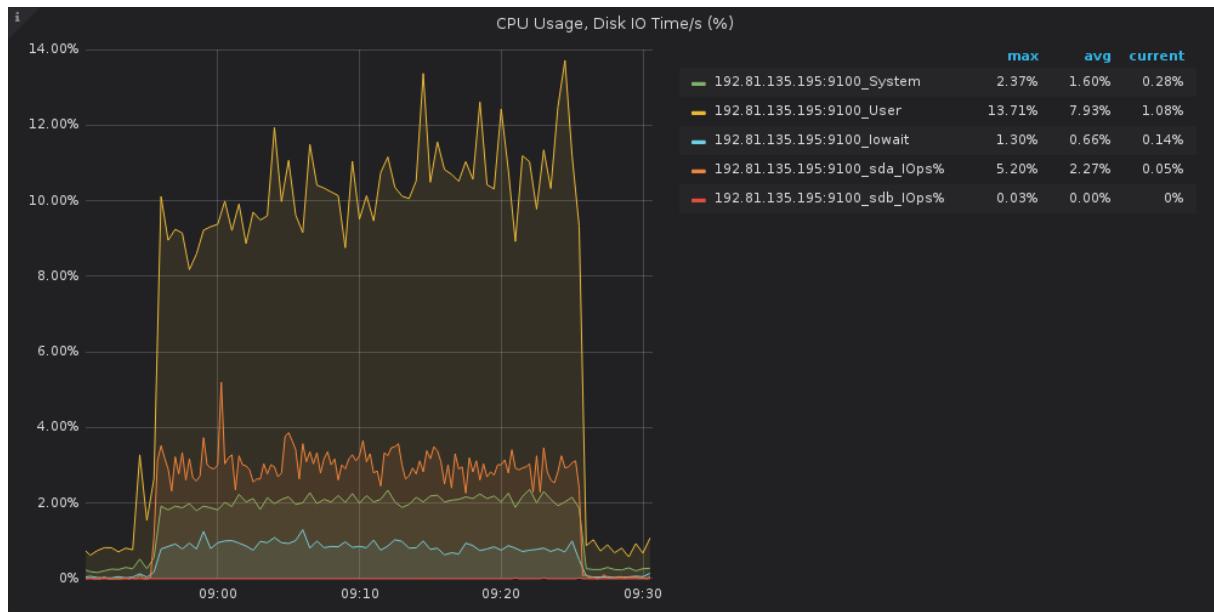
磁盘总空间



各分区可用空间

Volumes Available				
File System	IP	Mount ▲	Available	Usage
ext4	192.81.135.195:9100	/	291.62 GiB	2.20%

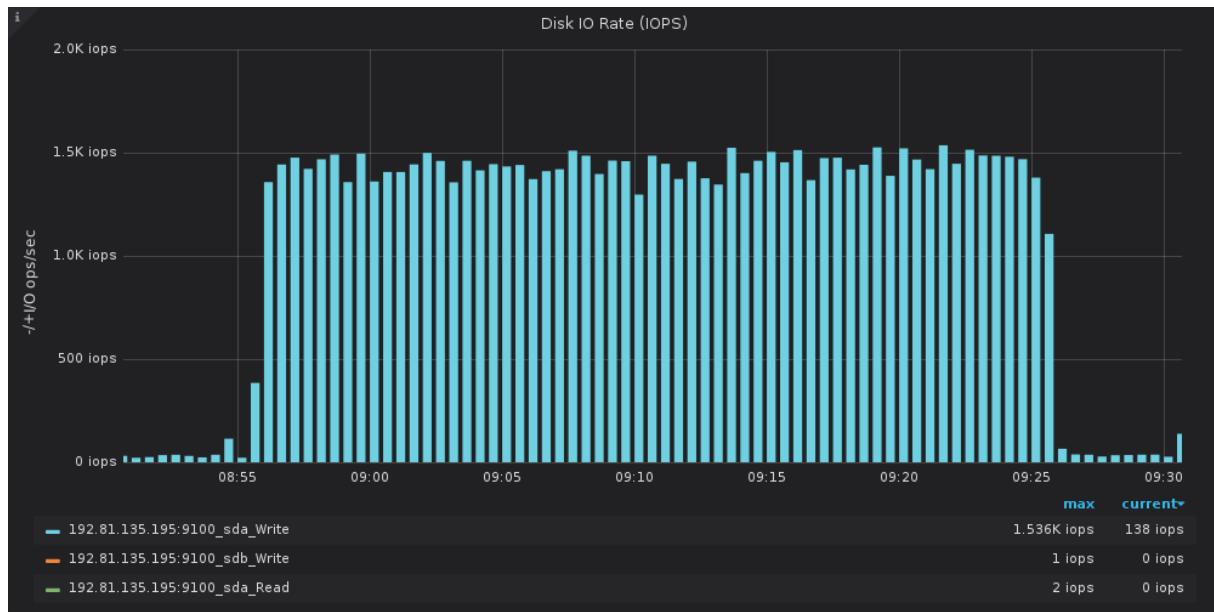
CPU使用率、磁盘每秒的I/O操作耗费时间 (%)



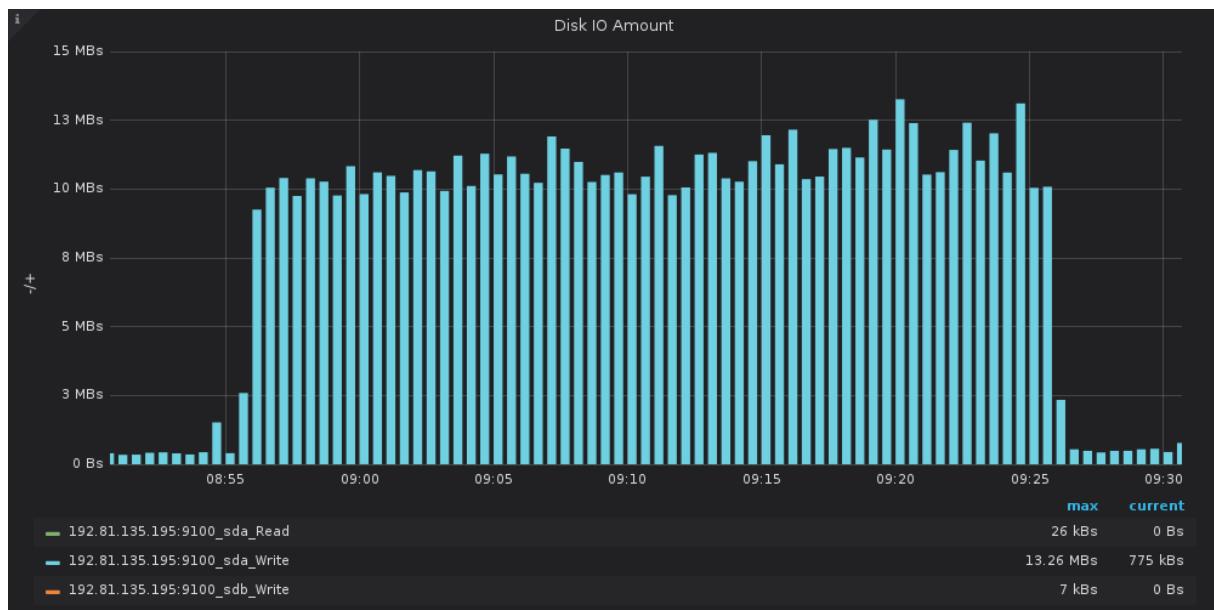
内存信息



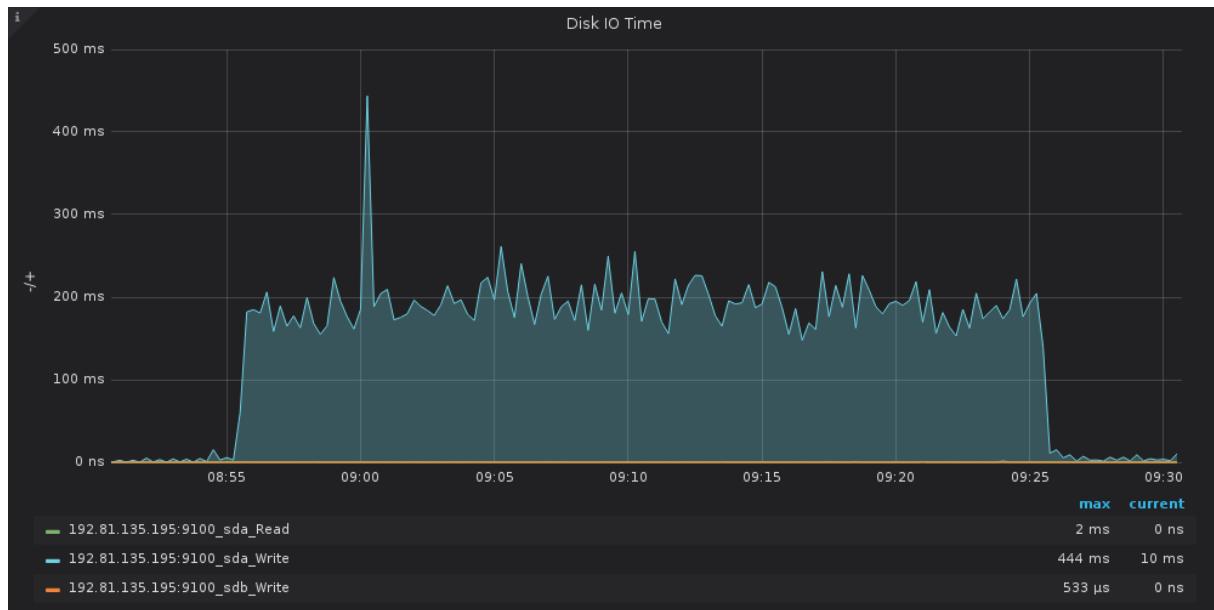
磁盘读写速率 (IOPS)



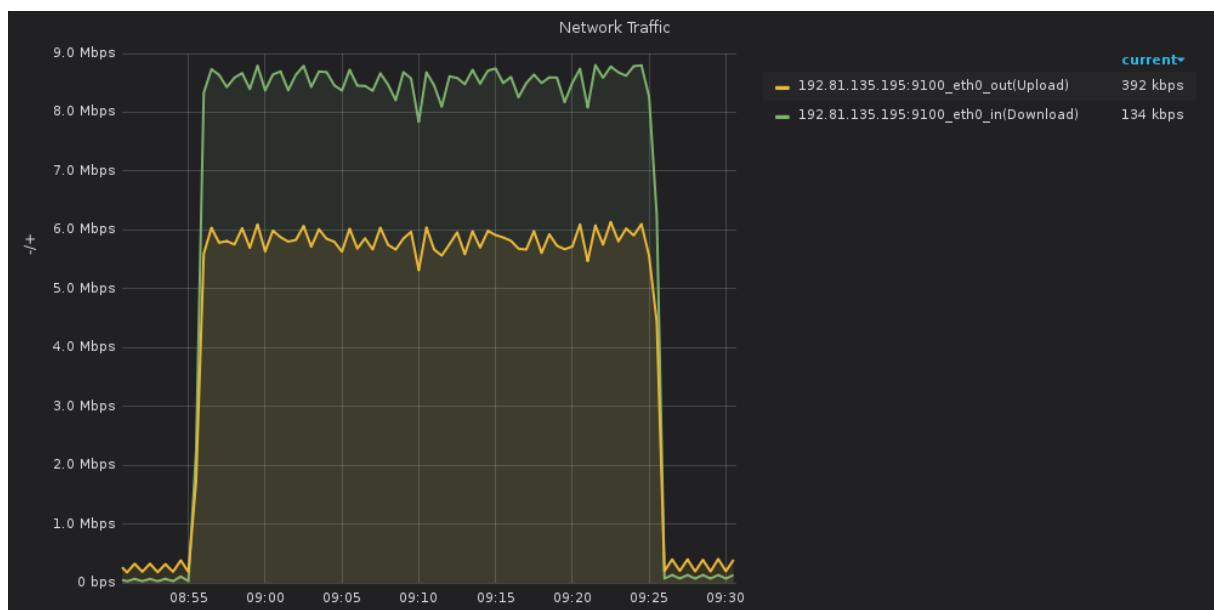
磁盘读写容量大小



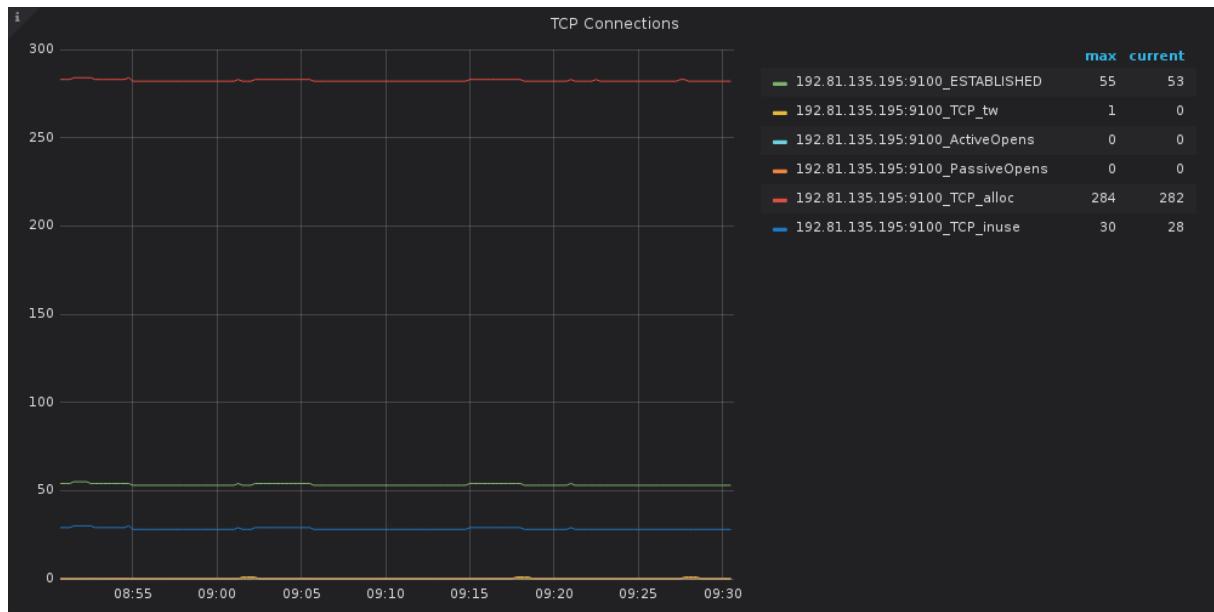
磁盘IO读写时间



网络流量



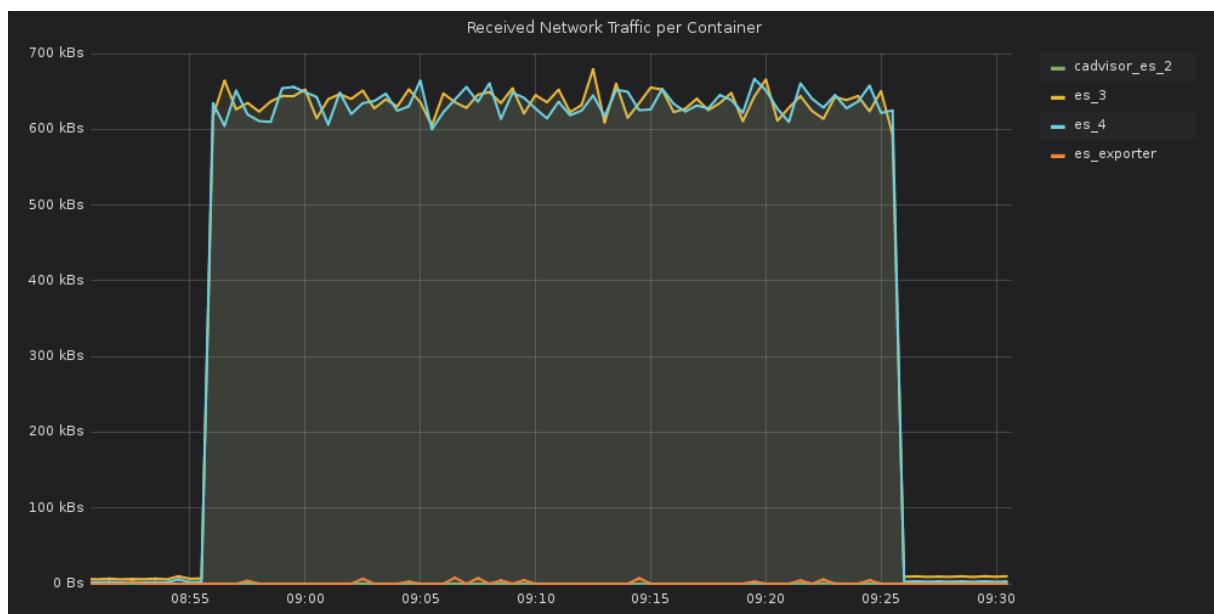
TCP 连接情况



Service: cAdvisor_es_2

- name: cAdvisor_es_2
- type: cAdvisor

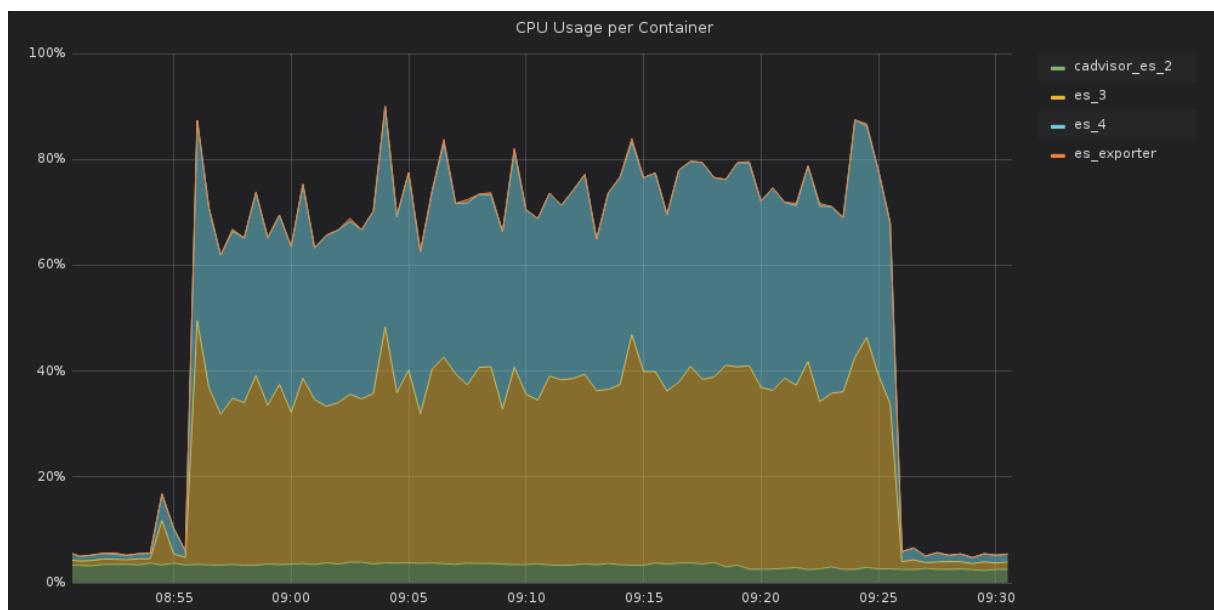
Received Network Traffic per Container



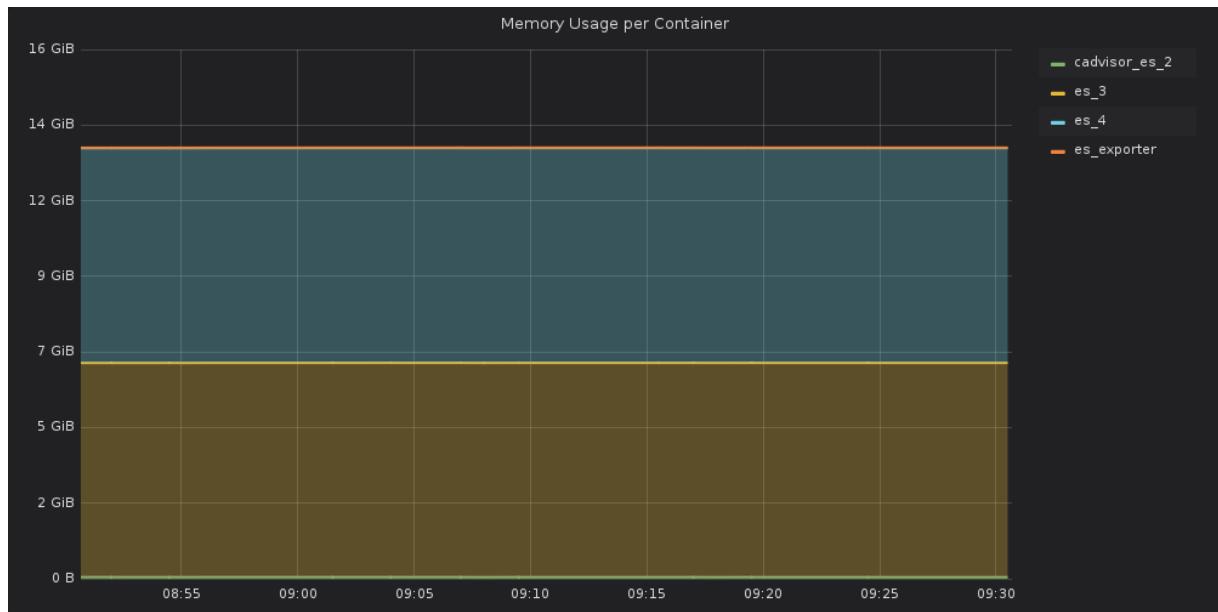
Sent Network Traffic per Container



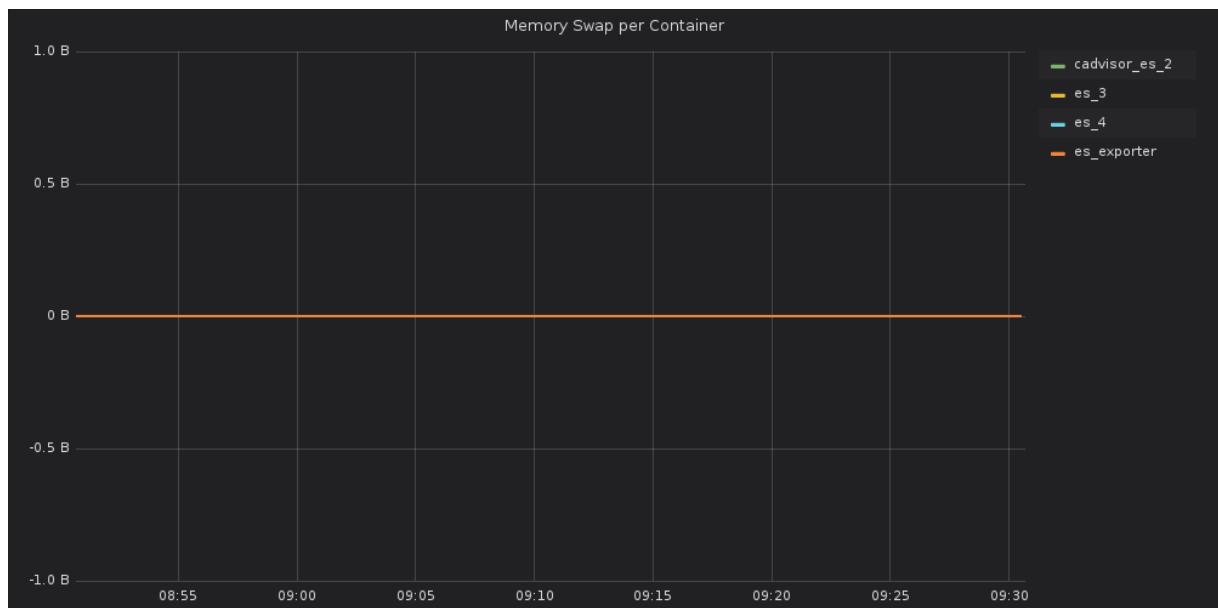
CPU Usage per Container



Memory Usage per Container



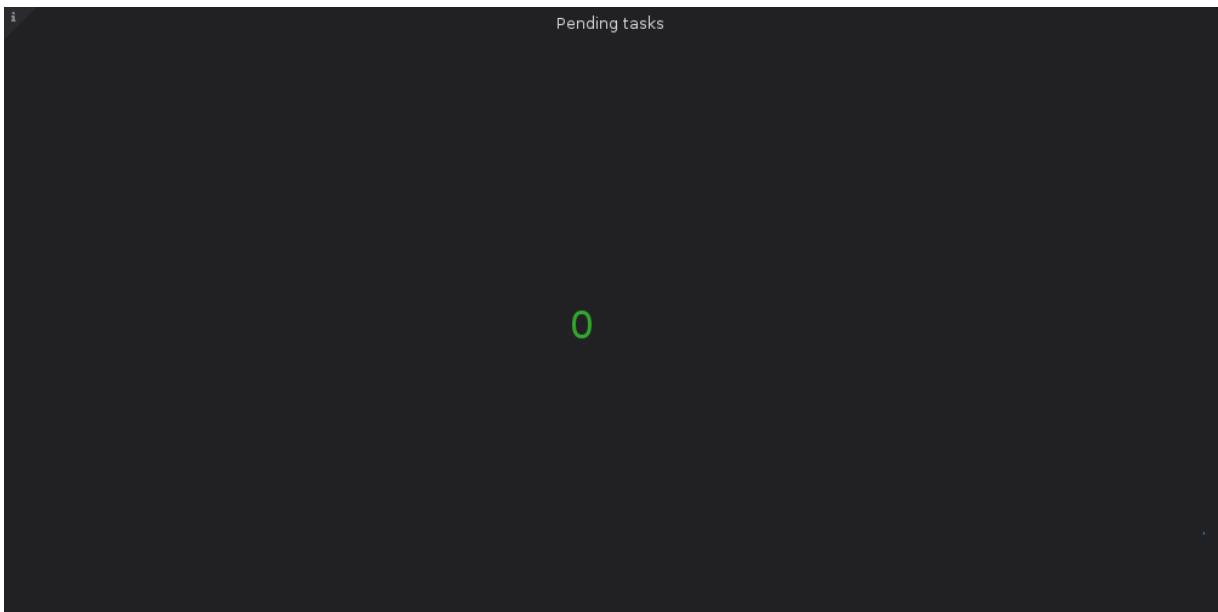
Memory Swap per Container



Service: es_3

- name: es_3
- type: elasticsearch

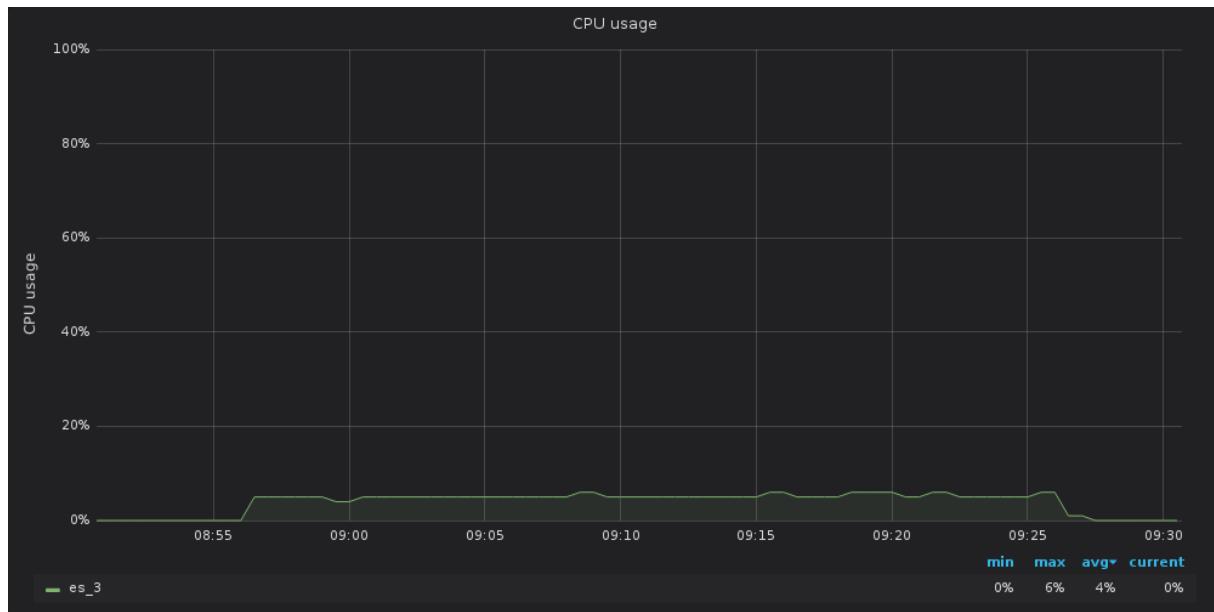
Pending tasks



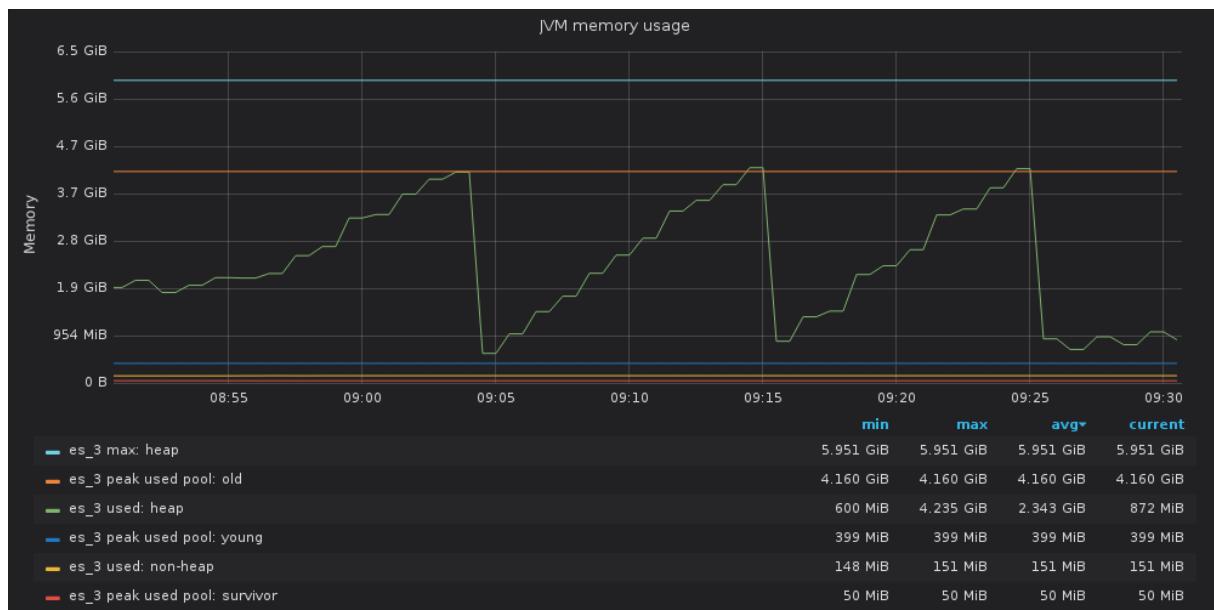
Load average



CPU usage



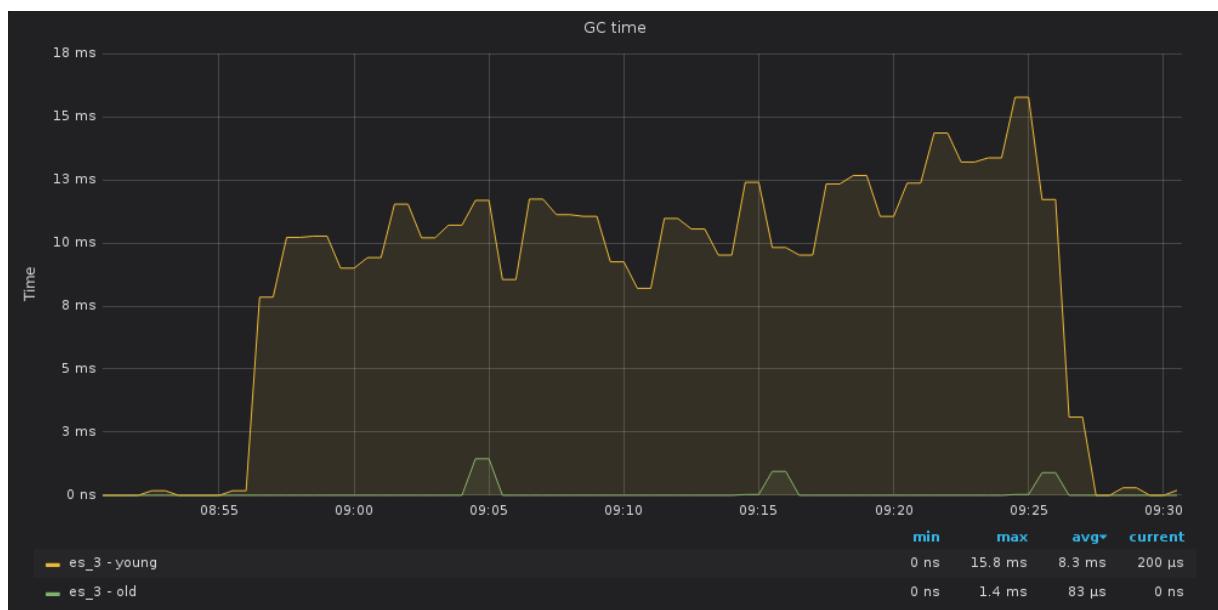
JVM memory usage



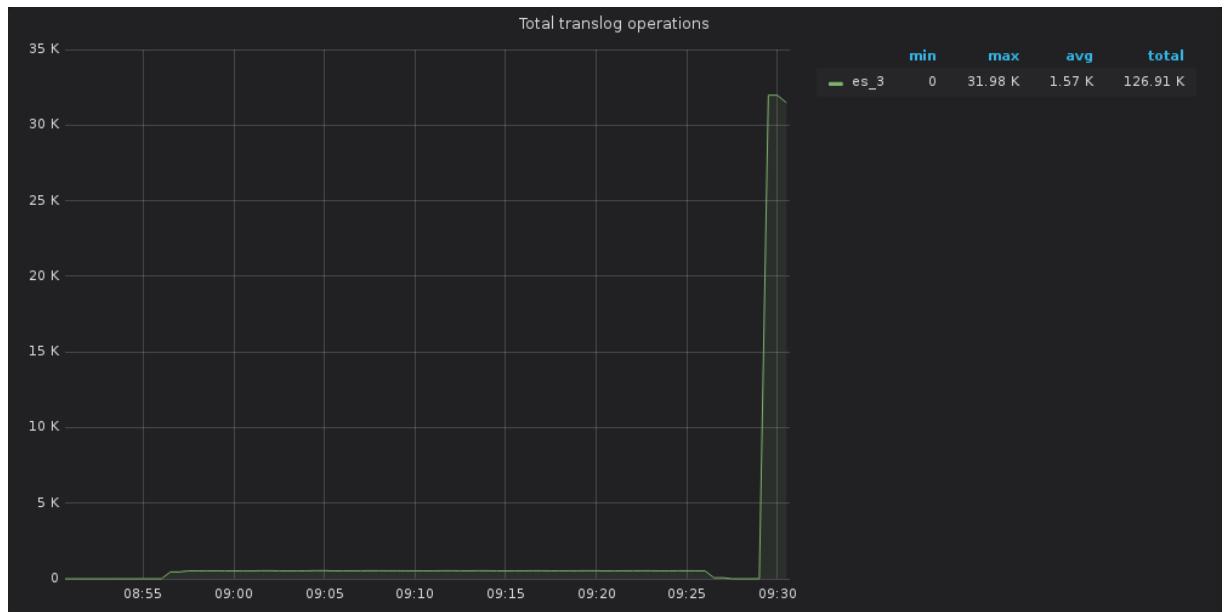
GC count



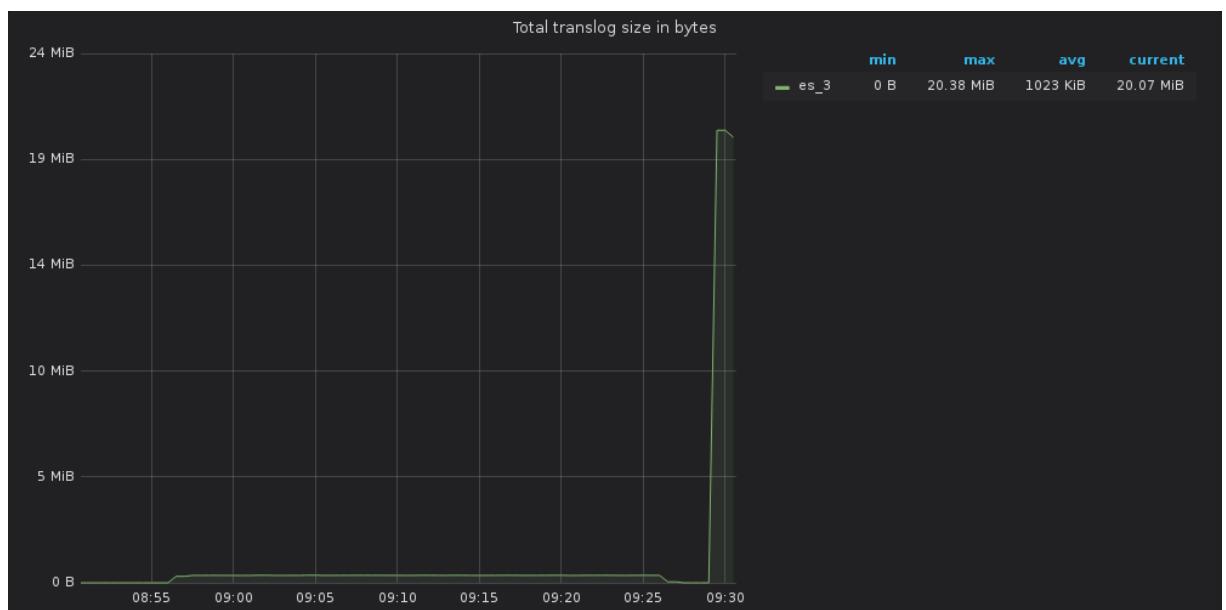
GC time



Total translog operations



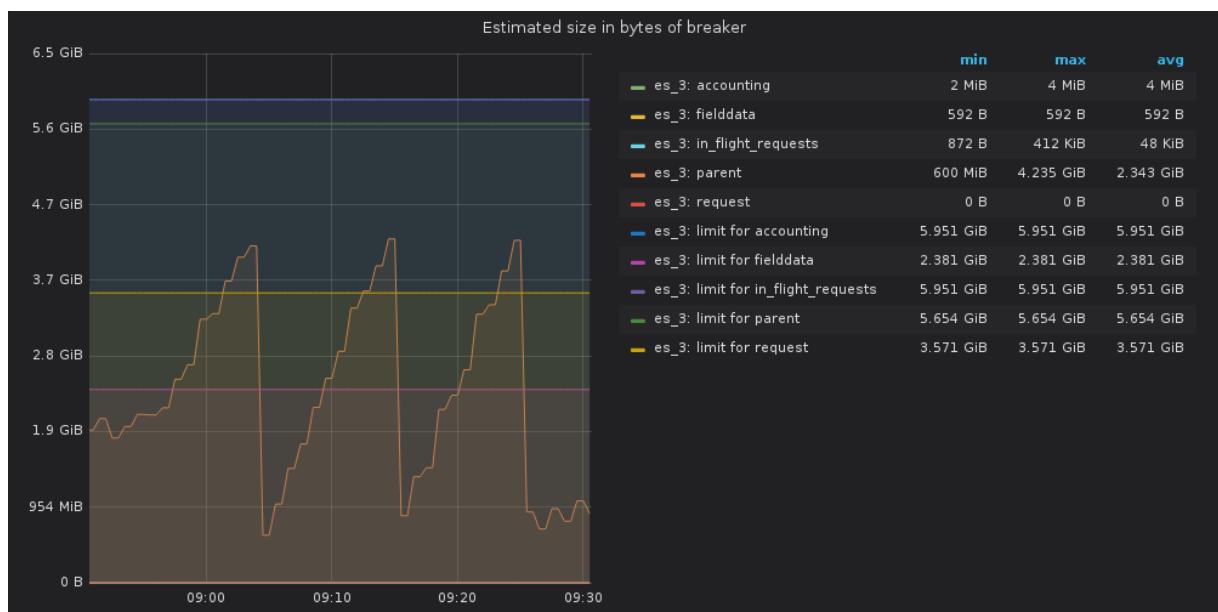
Total translog size in bytes



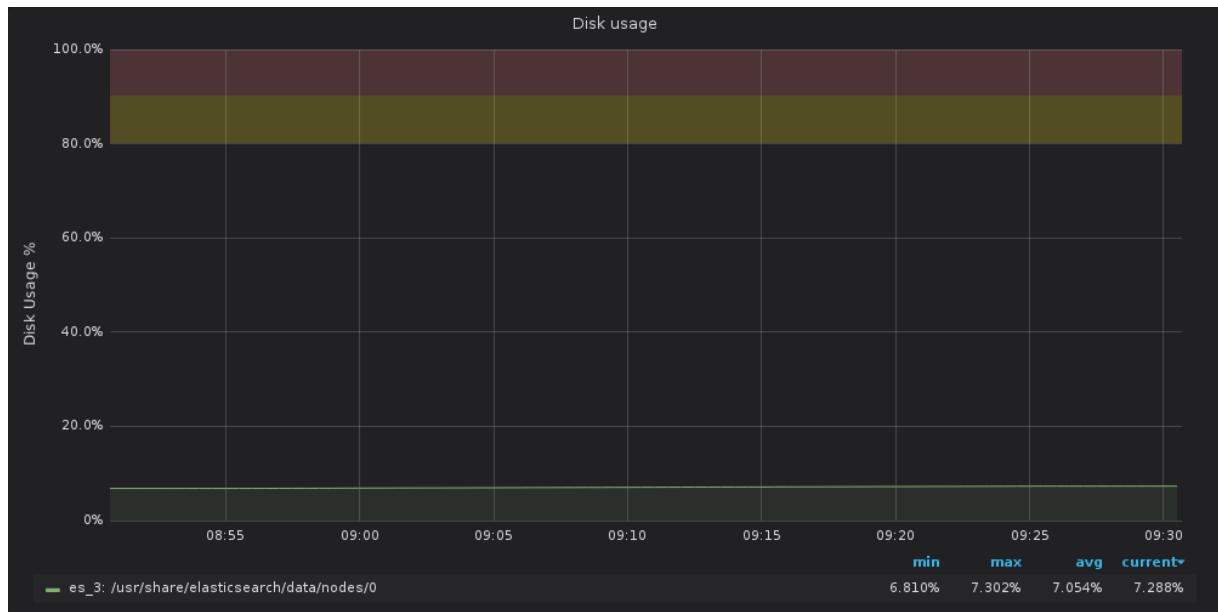
Tripped for breakers



Estimated size in bytes of breaker



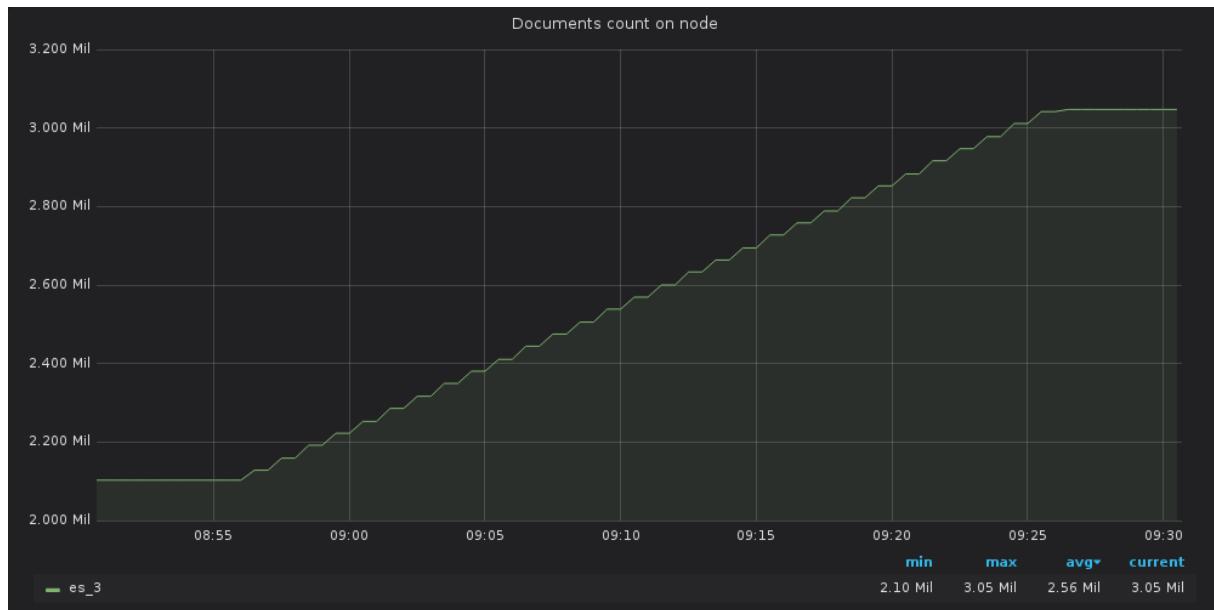
Disk usage



Network usage



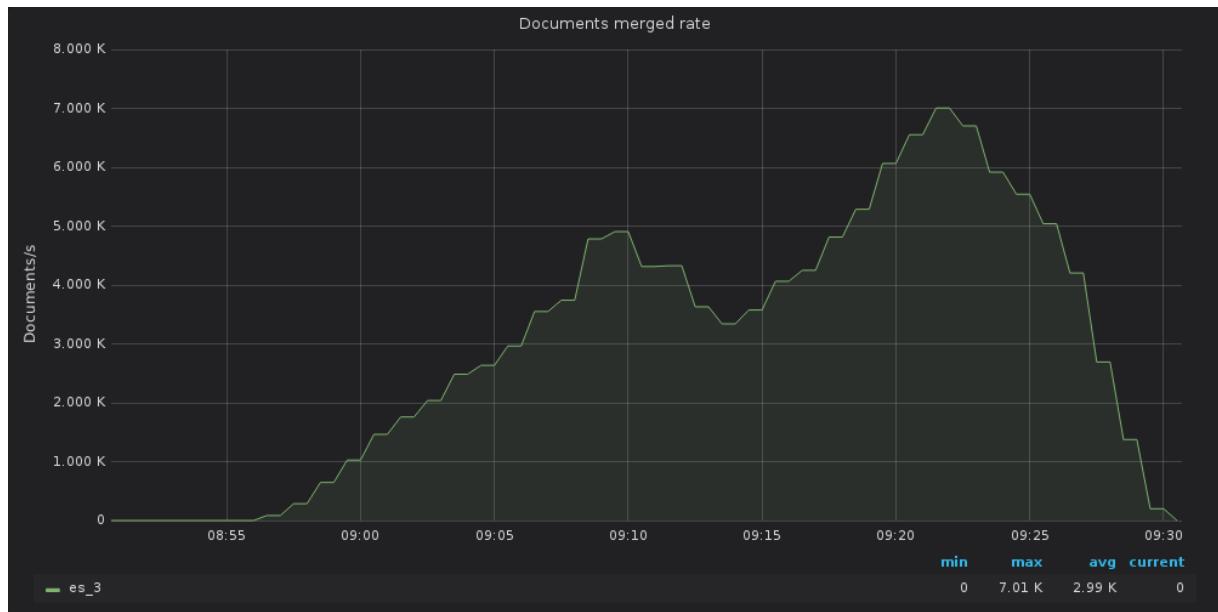
Documents count on node



Documents indexed rate



Documents merged rate



Documents merged bytes



Query time



Indexing time



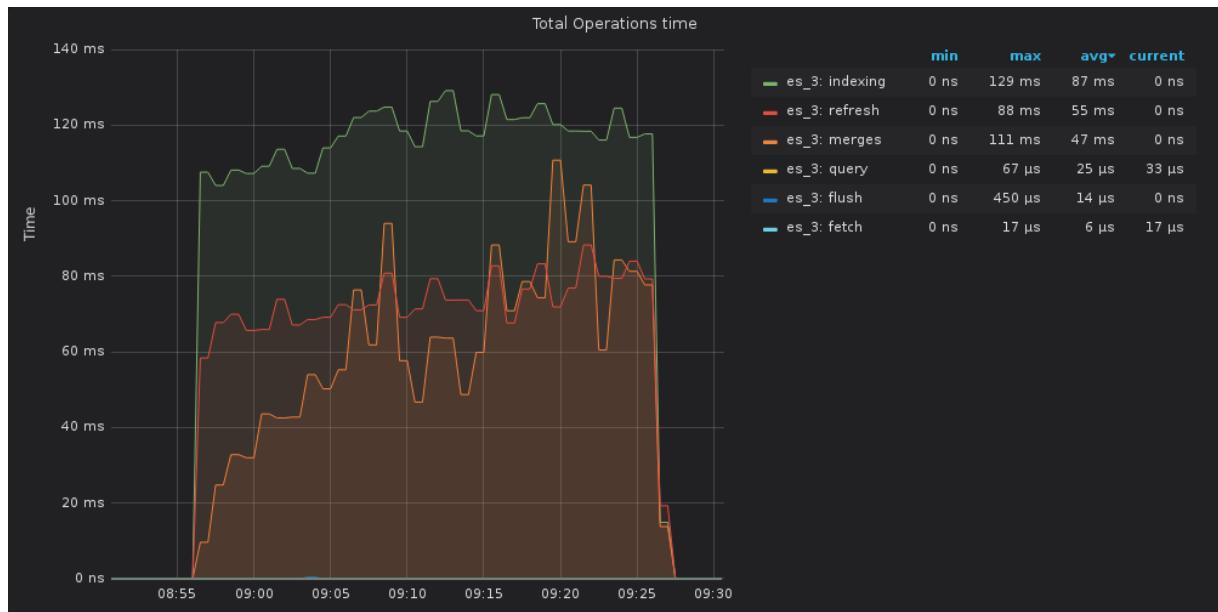
Merging time



Total Operations rate



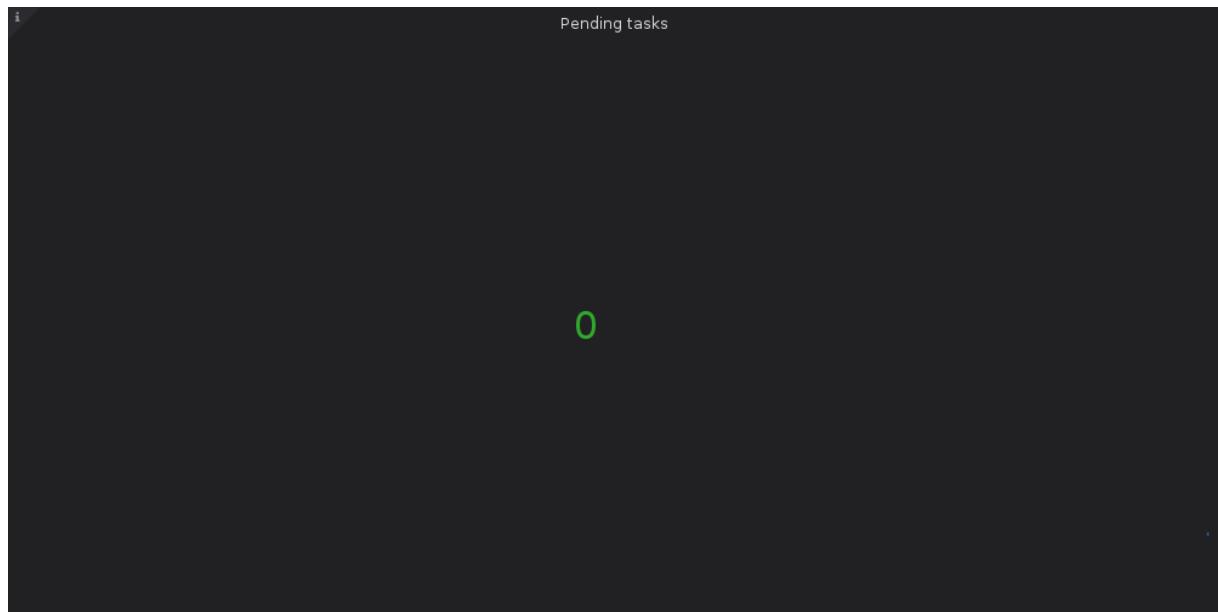
Total Operations time



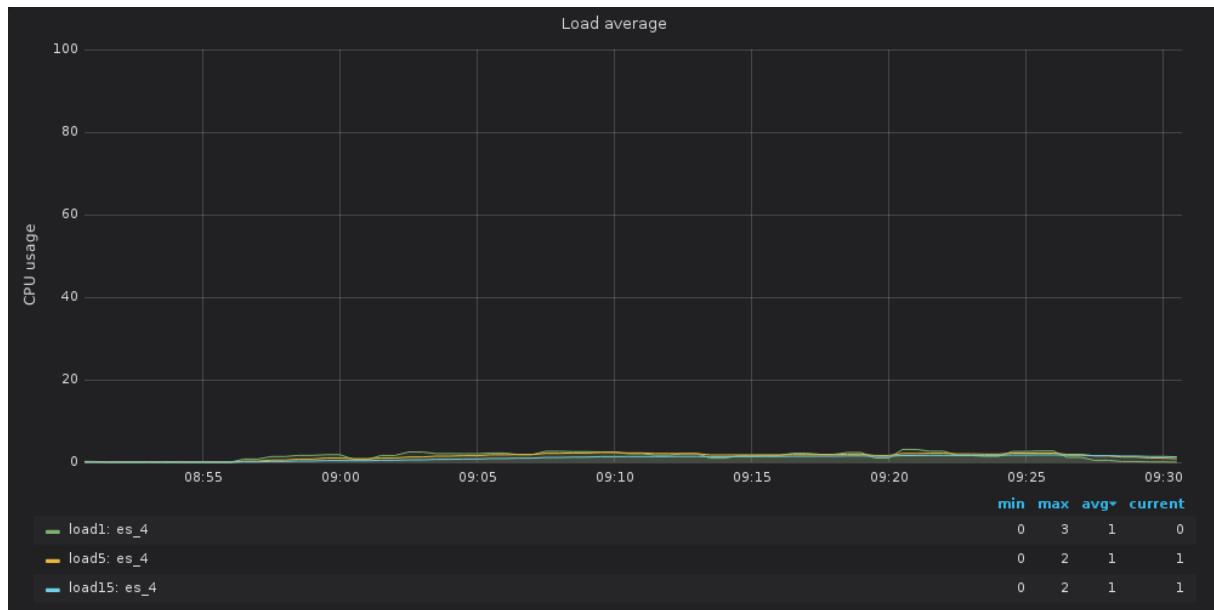
Service: es_4

- name: es_4
- type: elasticsearch

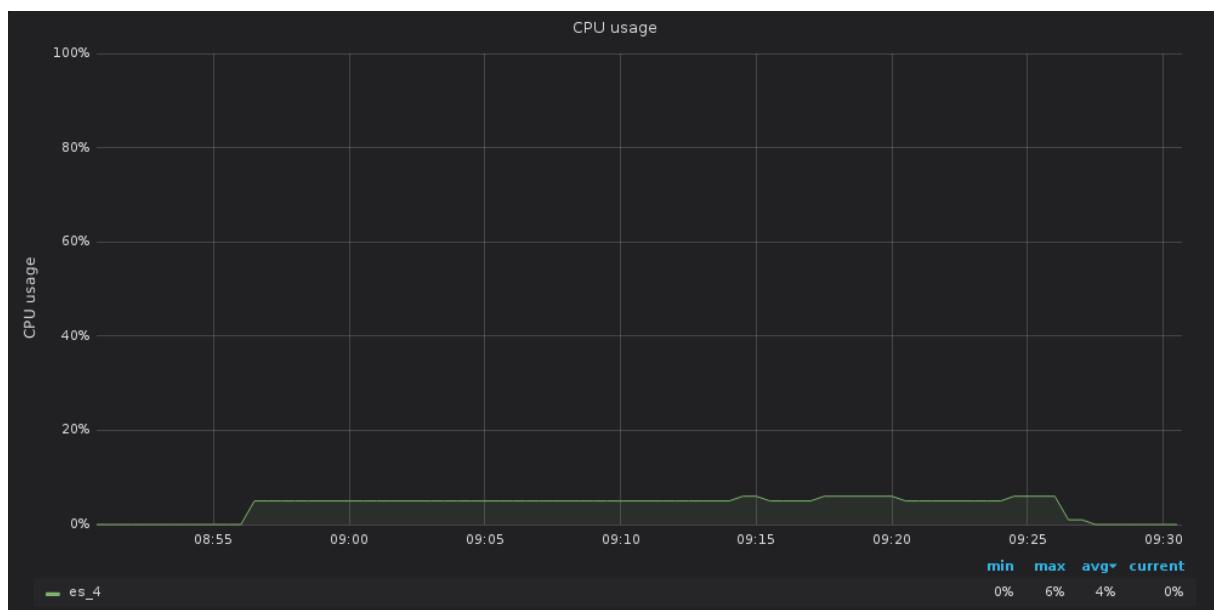
Pending tasks



Load average



CPU usage



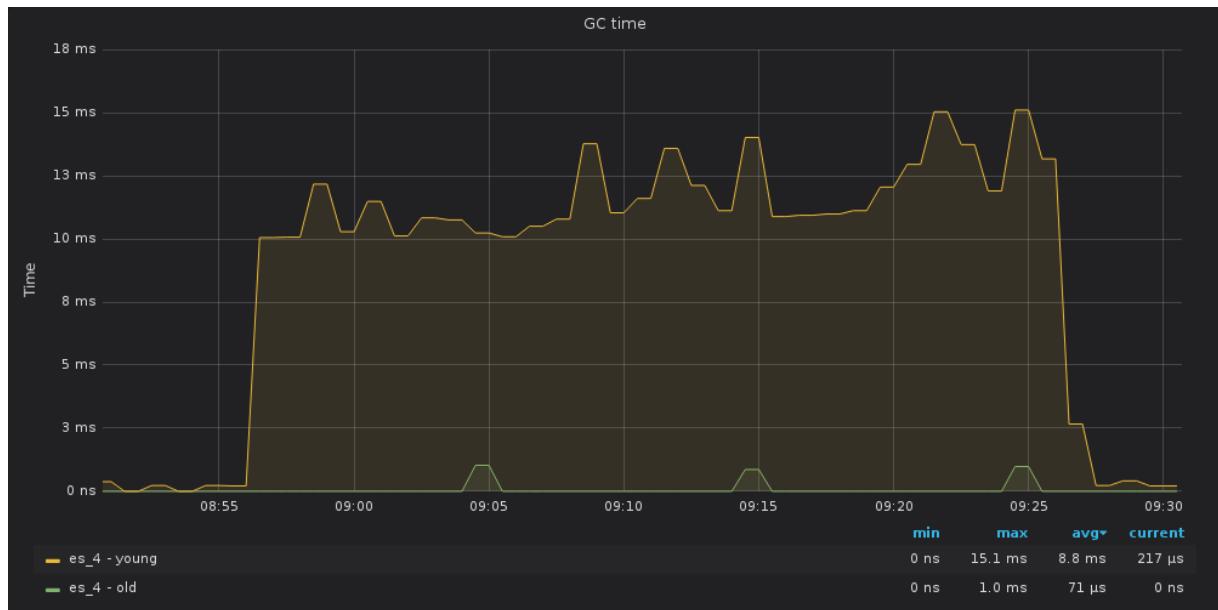
JVM memory usage



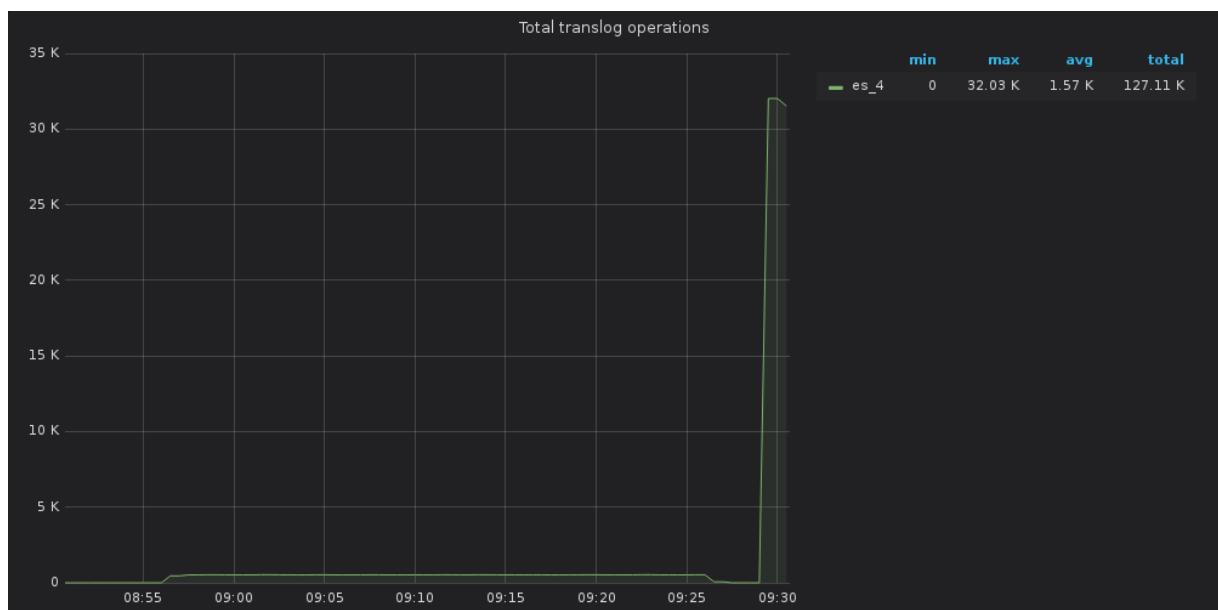
GC count



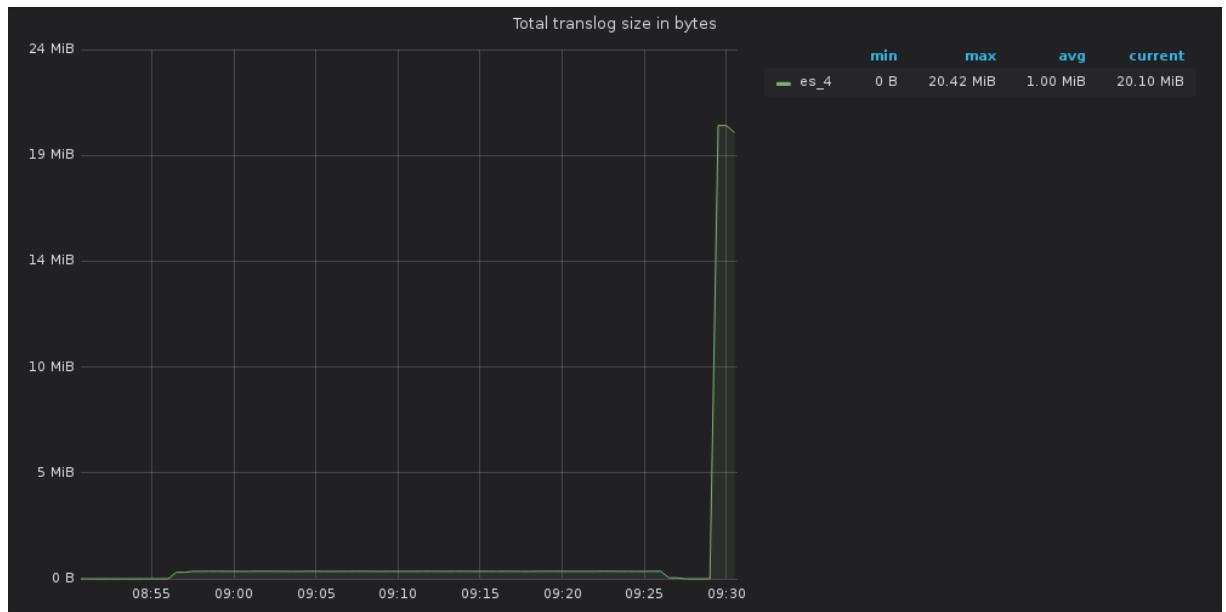
GC time



Total translog operations



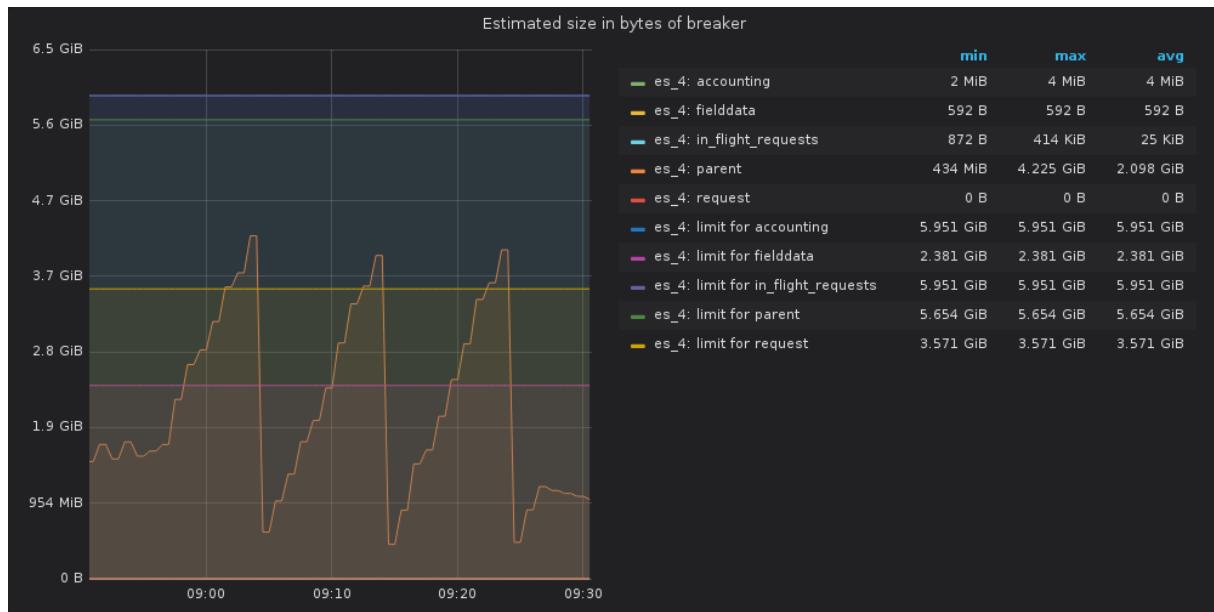
Total translog size in bytes



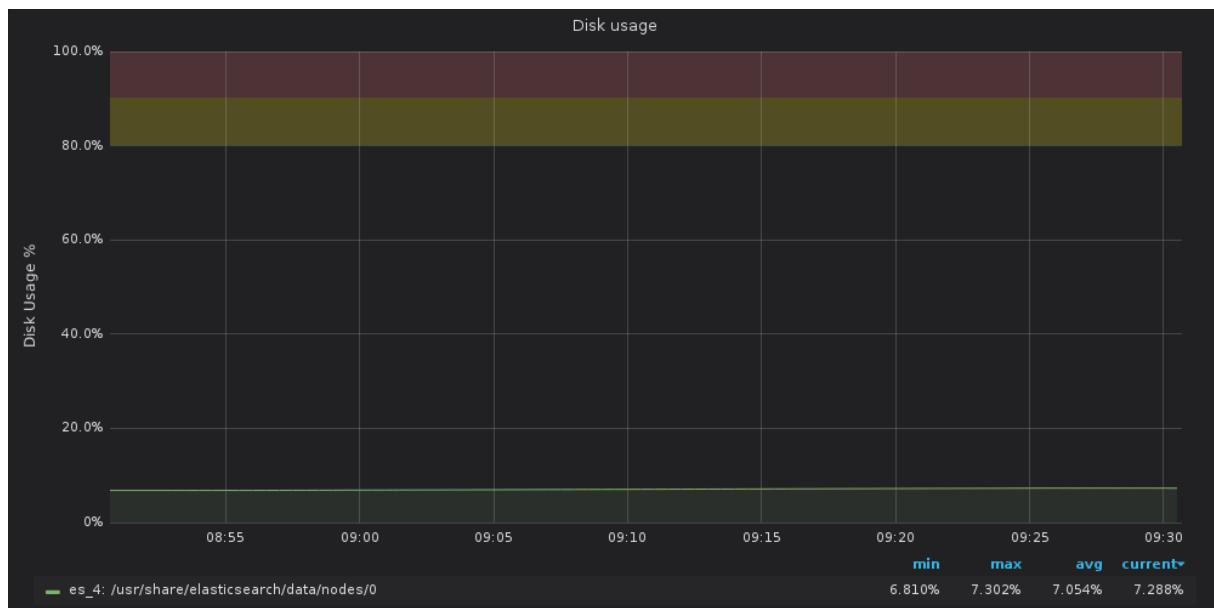
Tripped for breakers



Estimated size in bytes of breaker



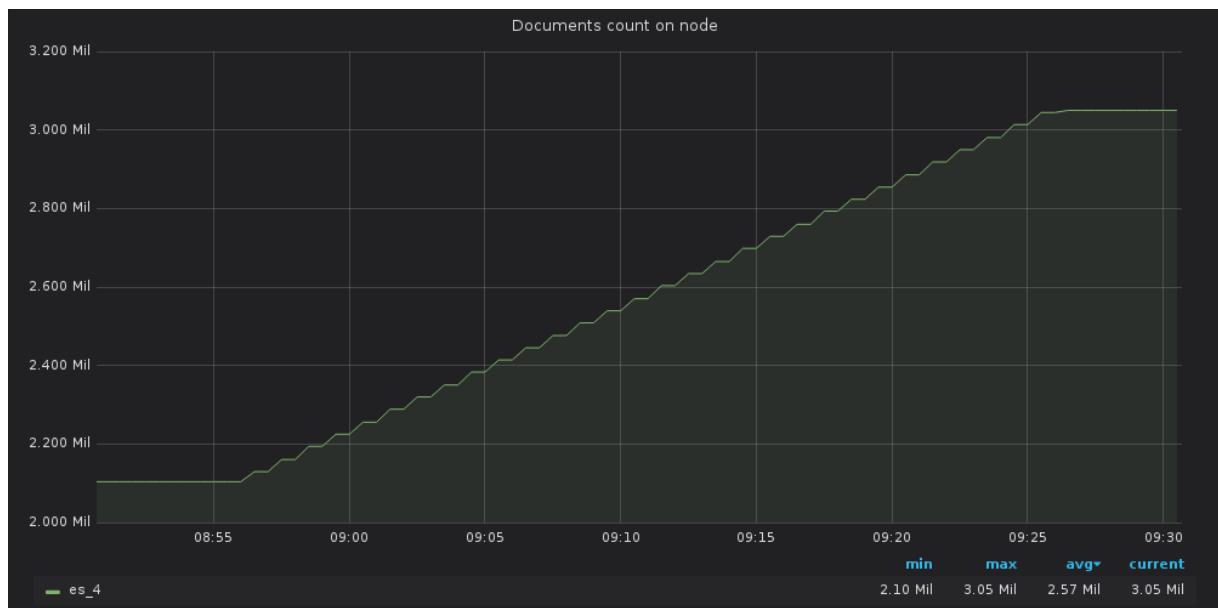
Disk usage



Network usage



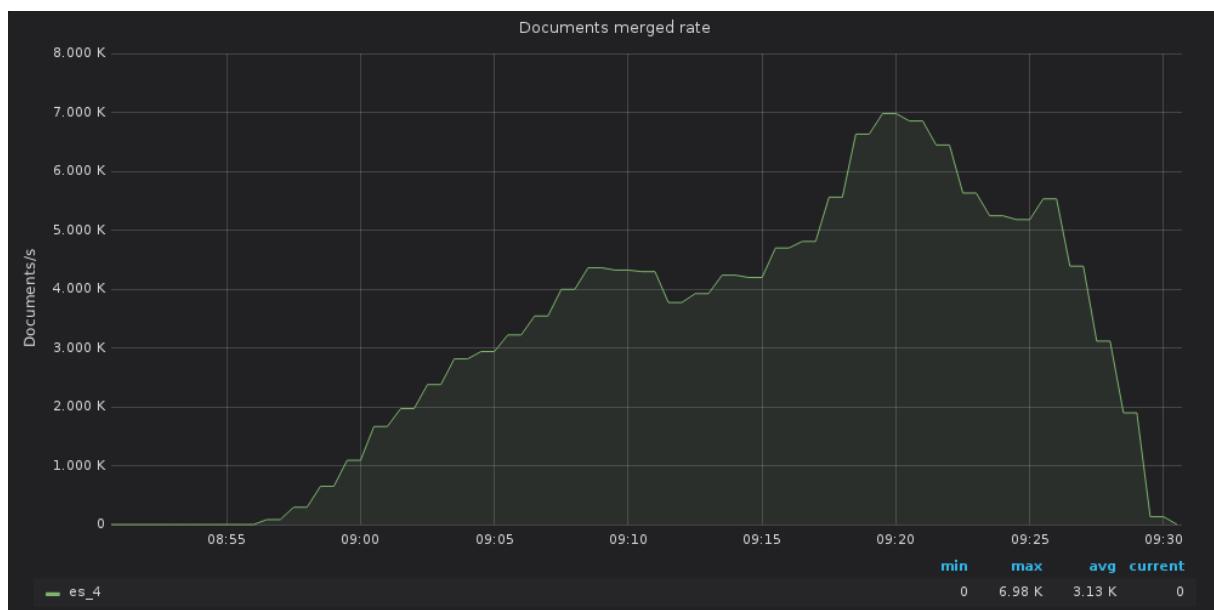
Documents count on node



Documents indexed rate



Documents merged rate



Documents merged bytes



Query time



Indexing time



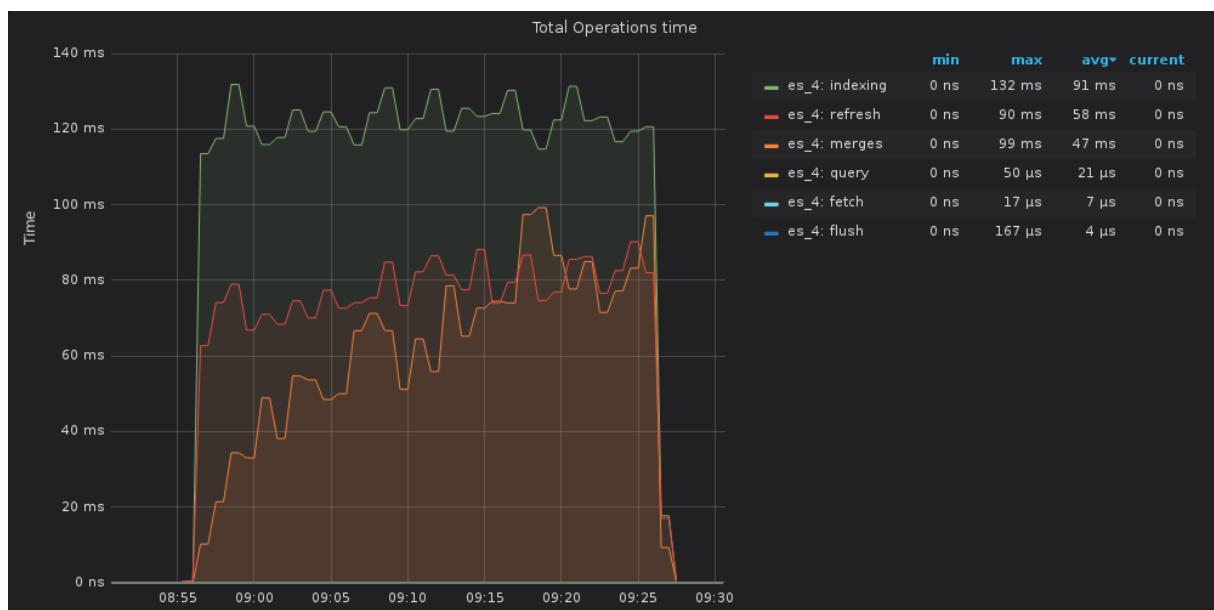
Merging time



Total Operations rate



Total Operations time



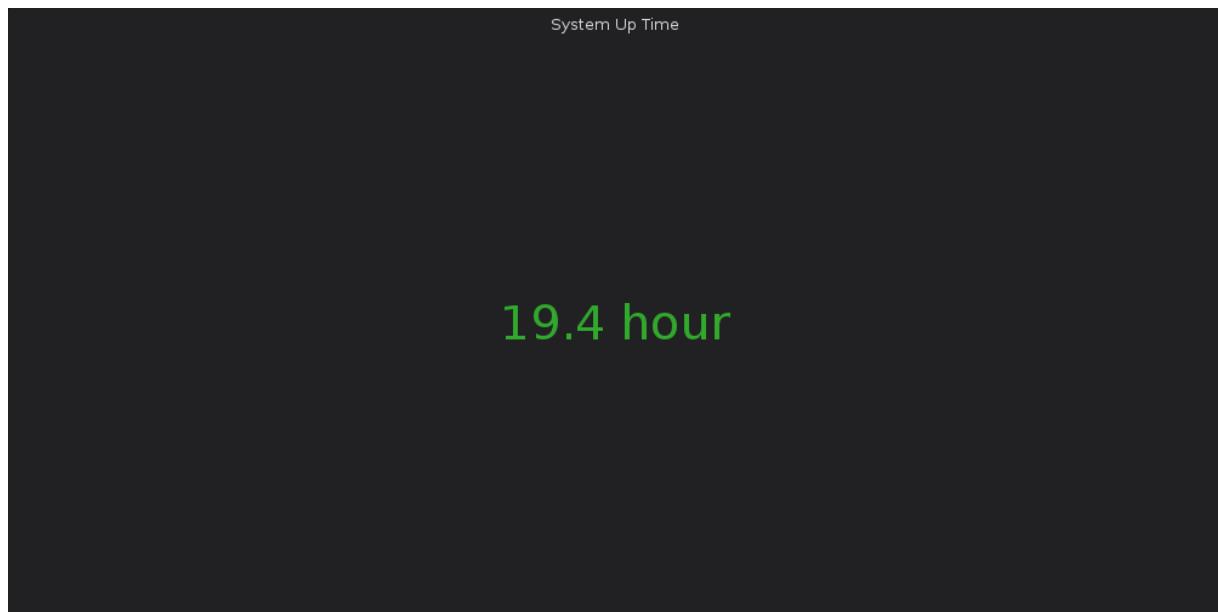
Host: monitor

- name: monitor
- type: monitor

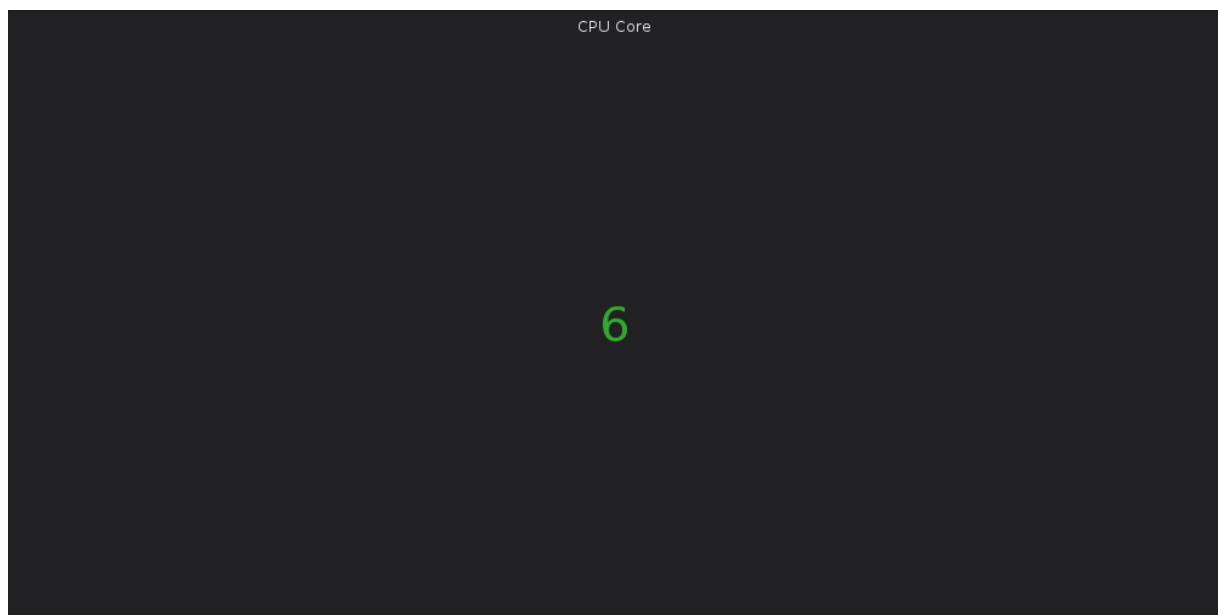
Service: node_monitor

- name: node_monitor
- type: node_exporter

系统运行时间



CPU 核数

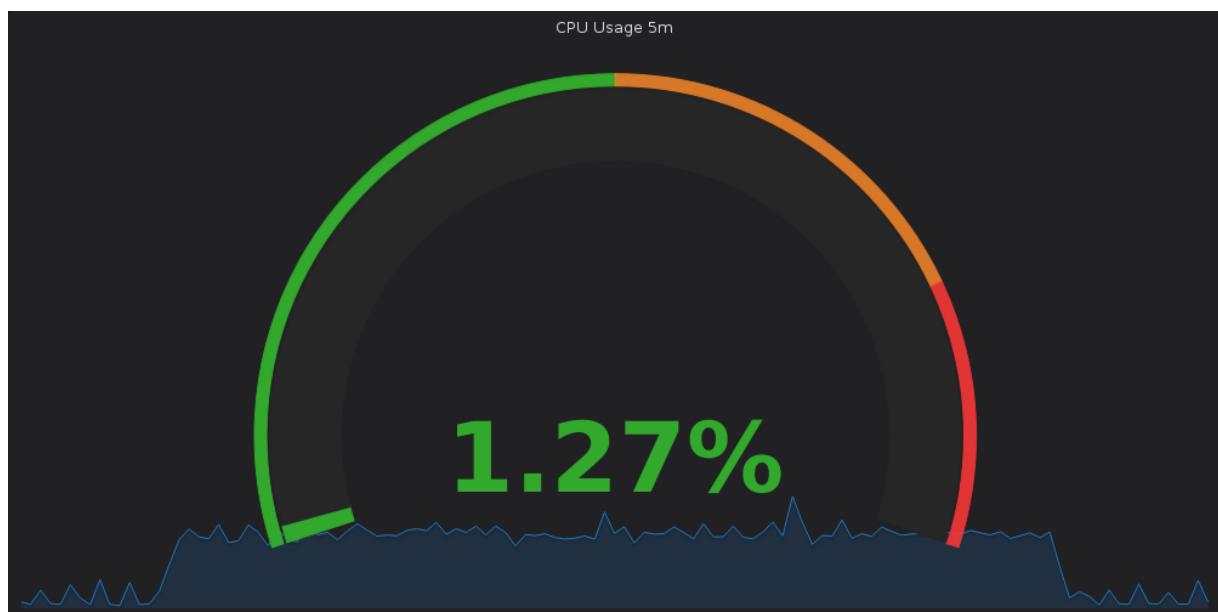


内存总量

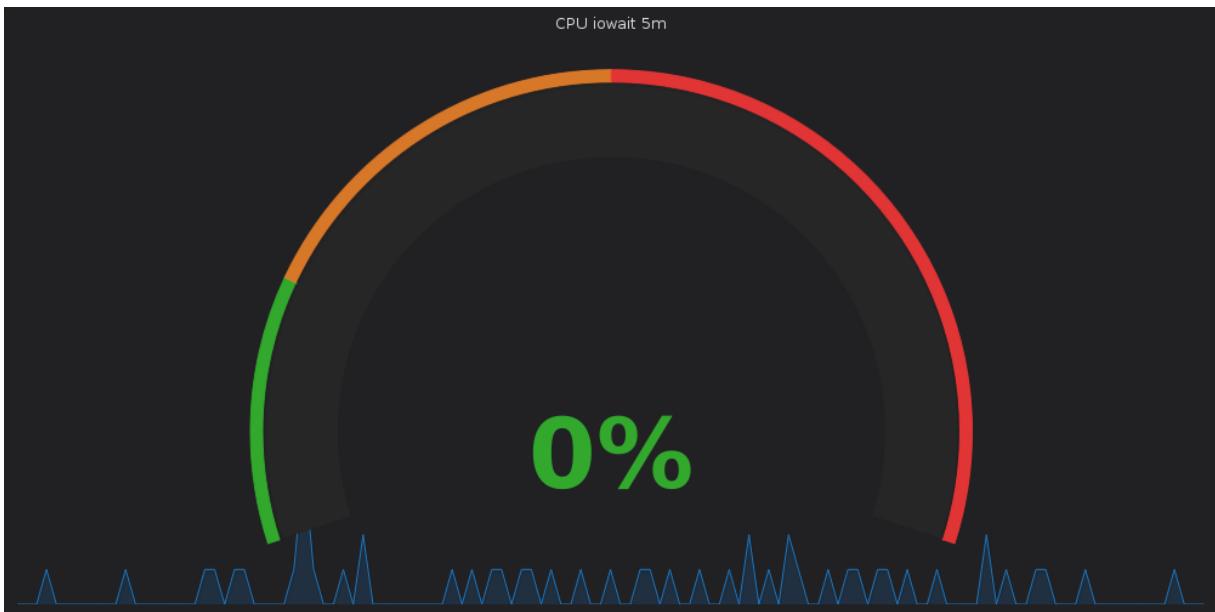
Total Memory

15.7 GiB

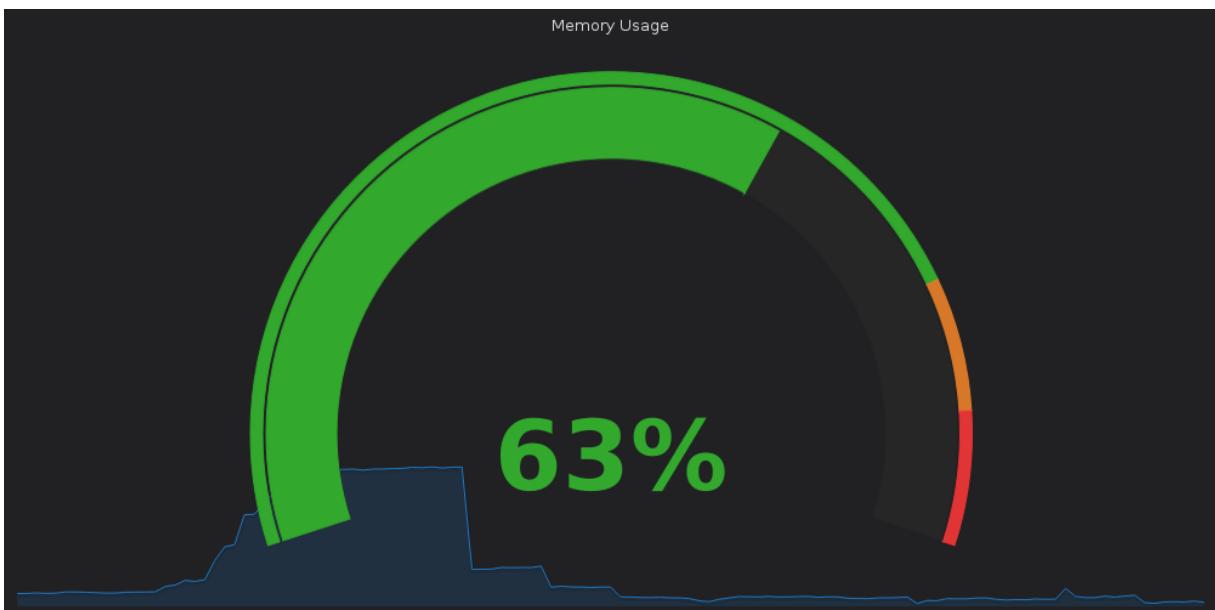
CPU使用率 (5m)



CPU iowait (5m)



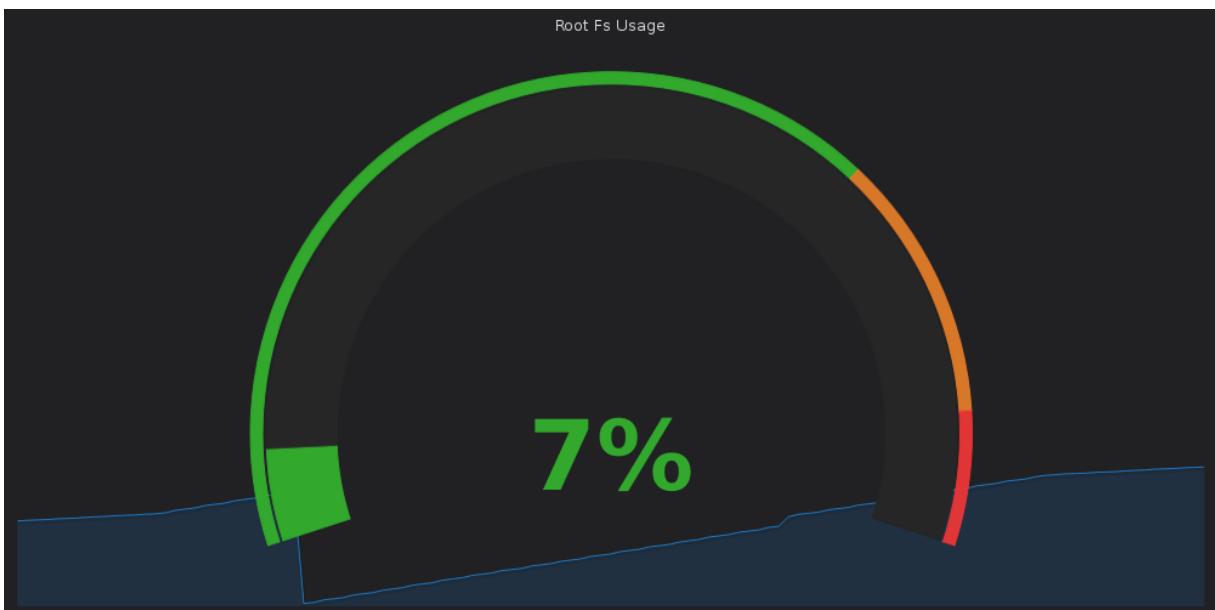
内存使用率



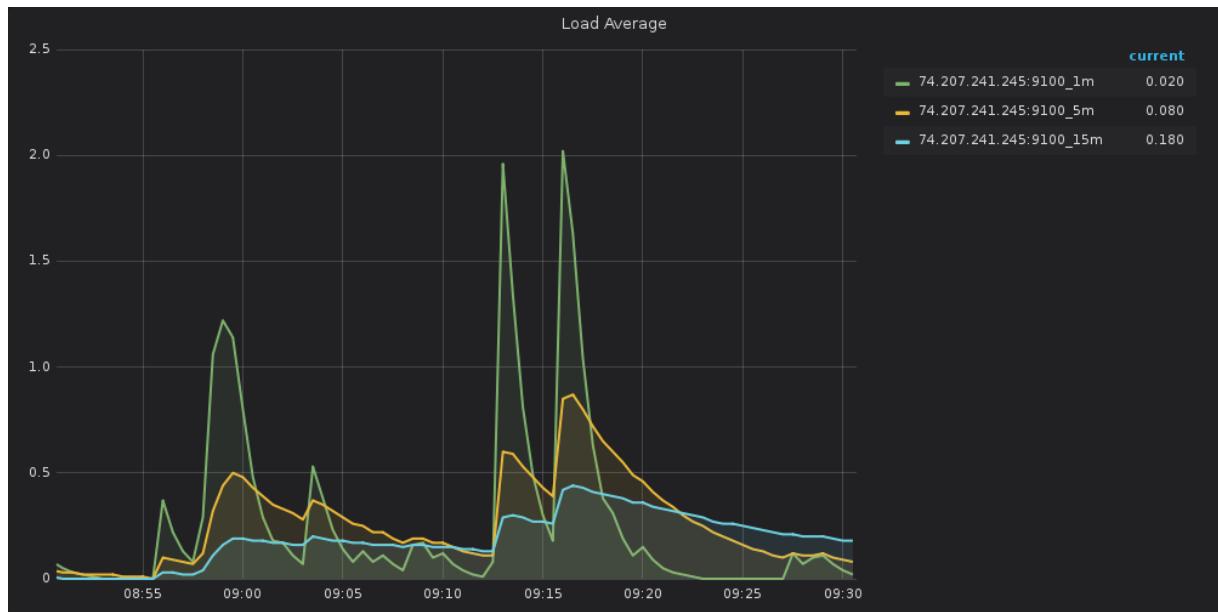
当前打开的文件描述符



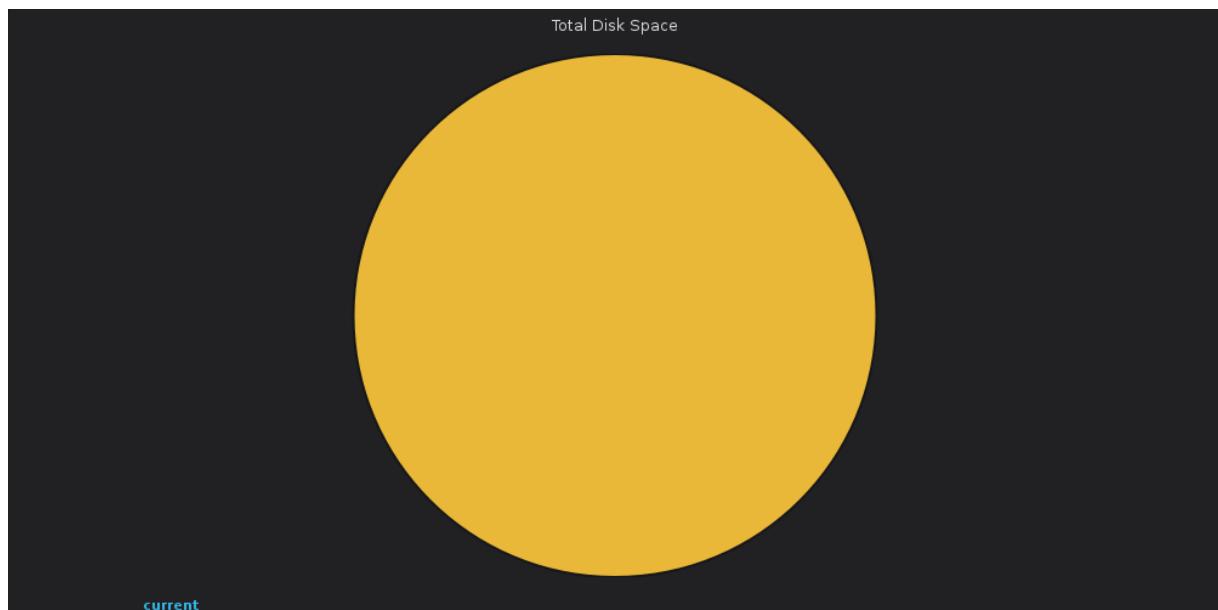
根分区使用率



系统平均负载



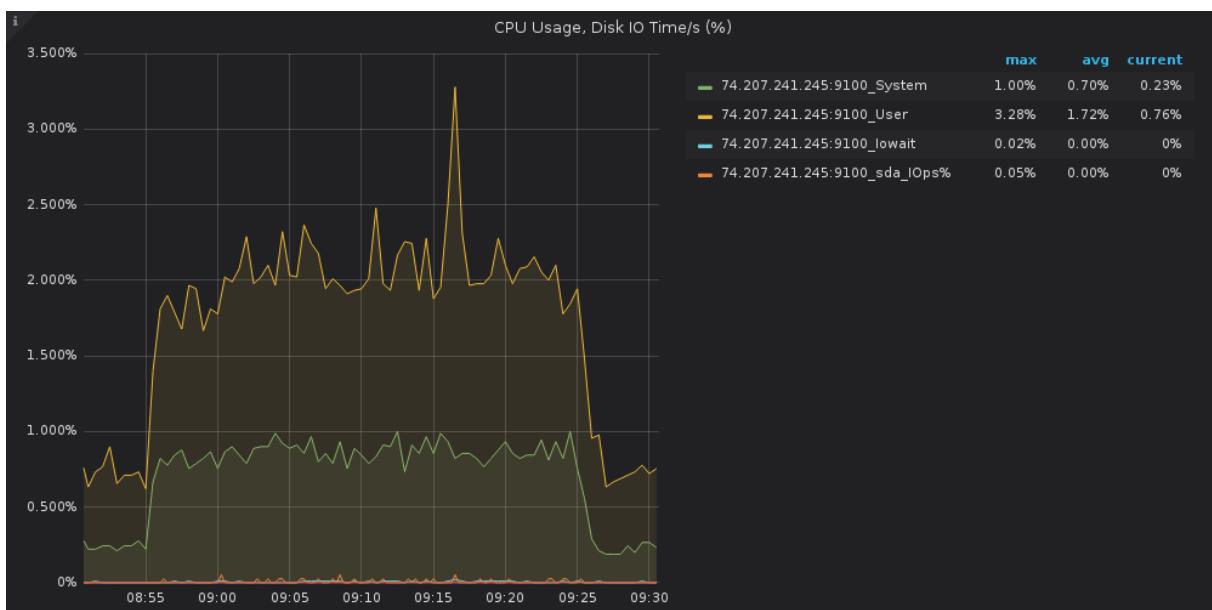
磁盘总空间



各分区可用空间

Volumes Available				
File System	IP	Mount ▲	Available	Usage
ext4	74.207.241.245:9100	/	292.22 GiB	2.01%

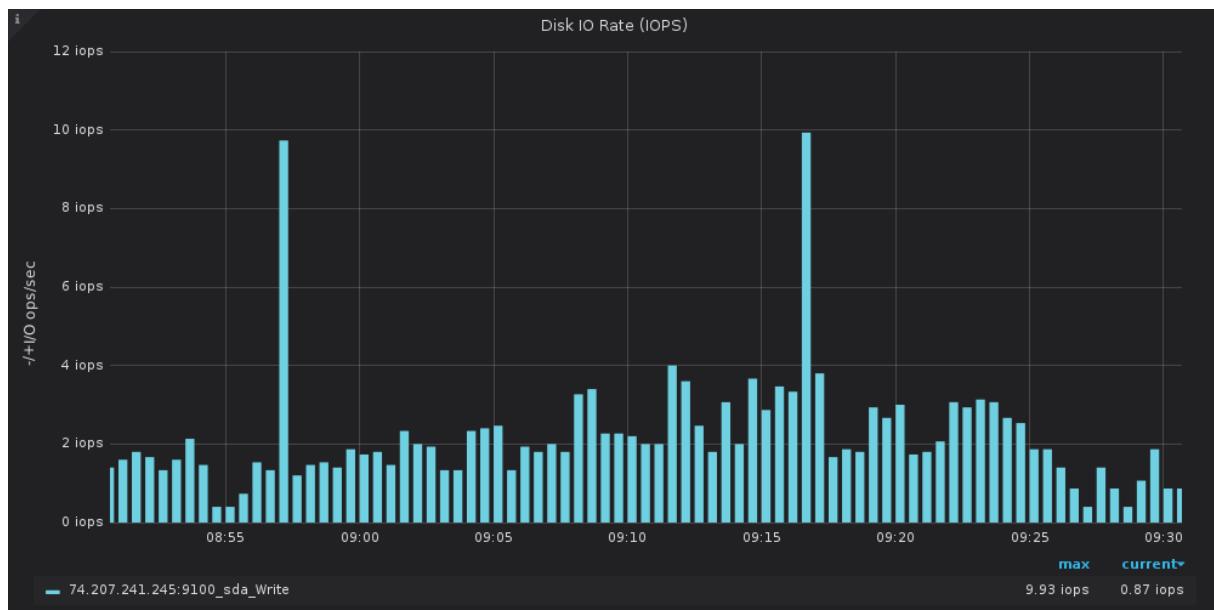
CPU使用率、磁盘每秒的I/O操作耗费时间 (%)



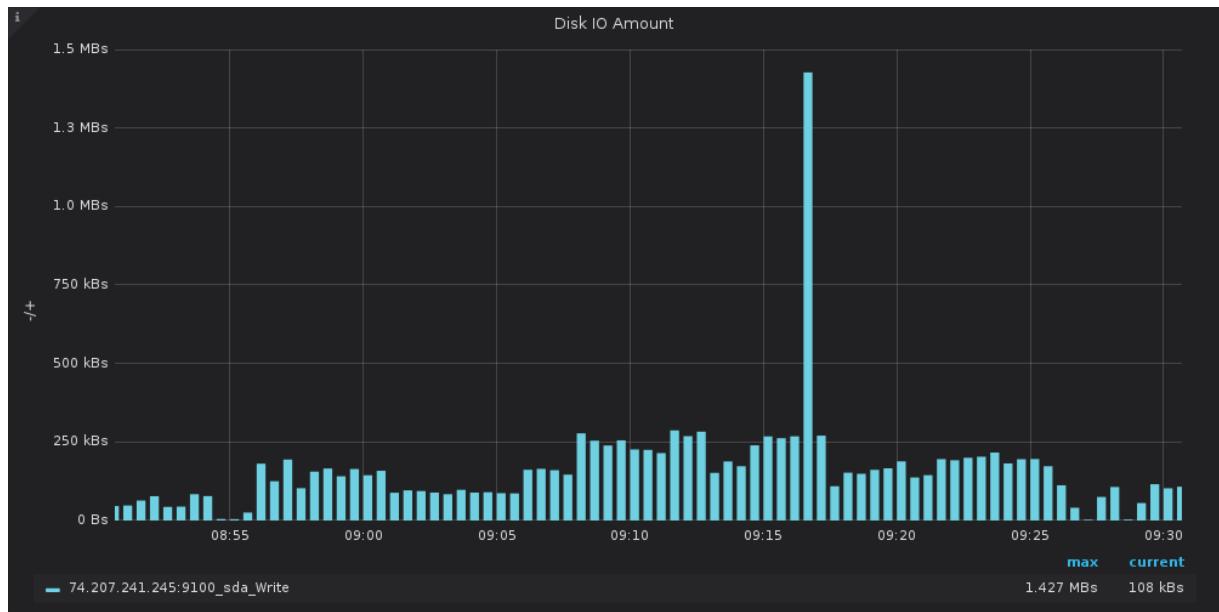
内存信息



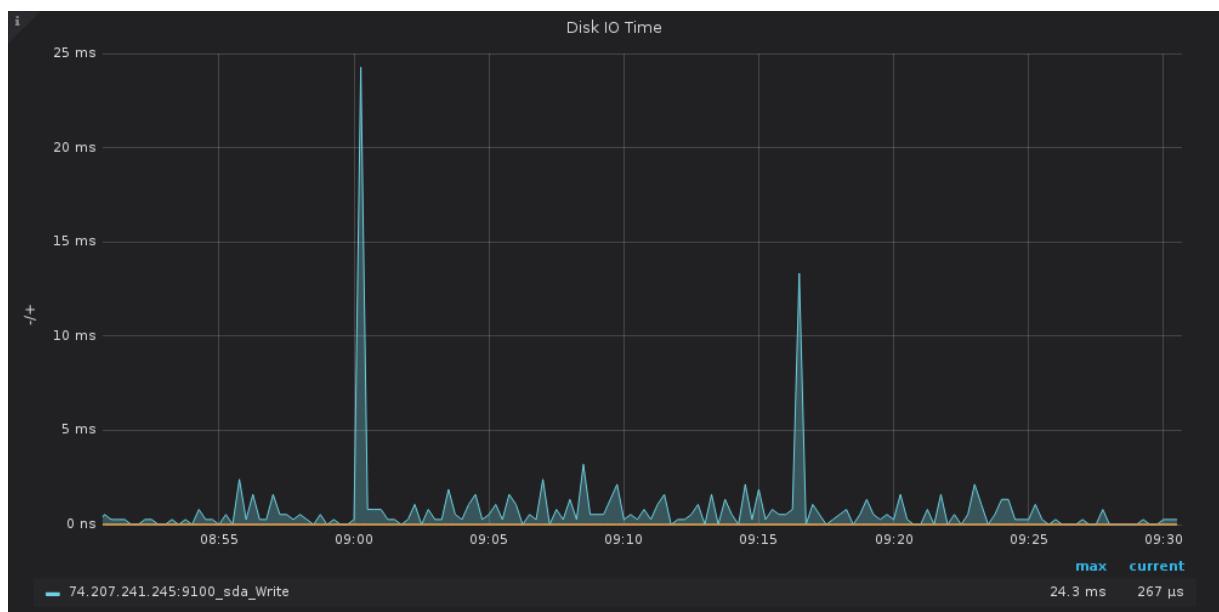
磁盘读写速率 (IOPS)



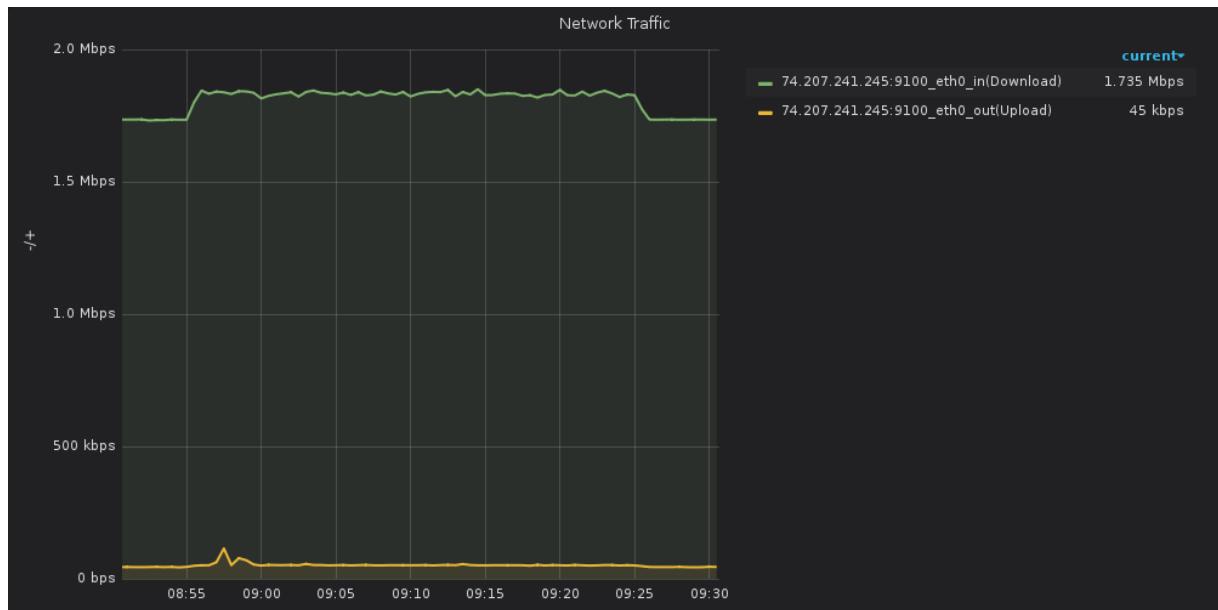
磁盘读写容量大小



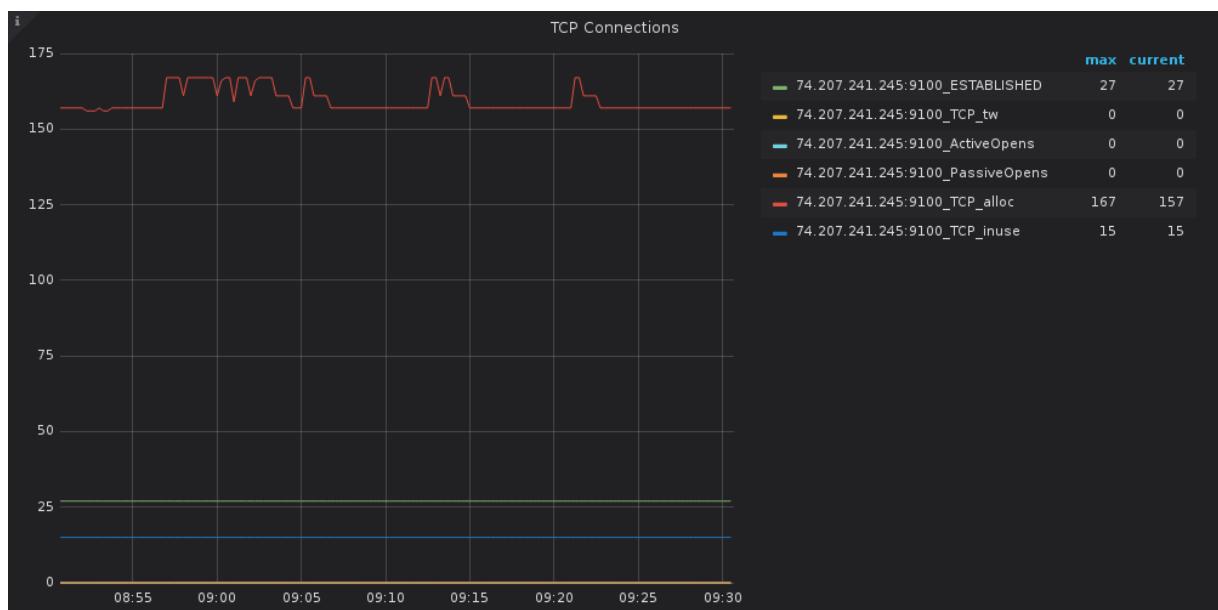
磁盘IO读写时间



网络流量



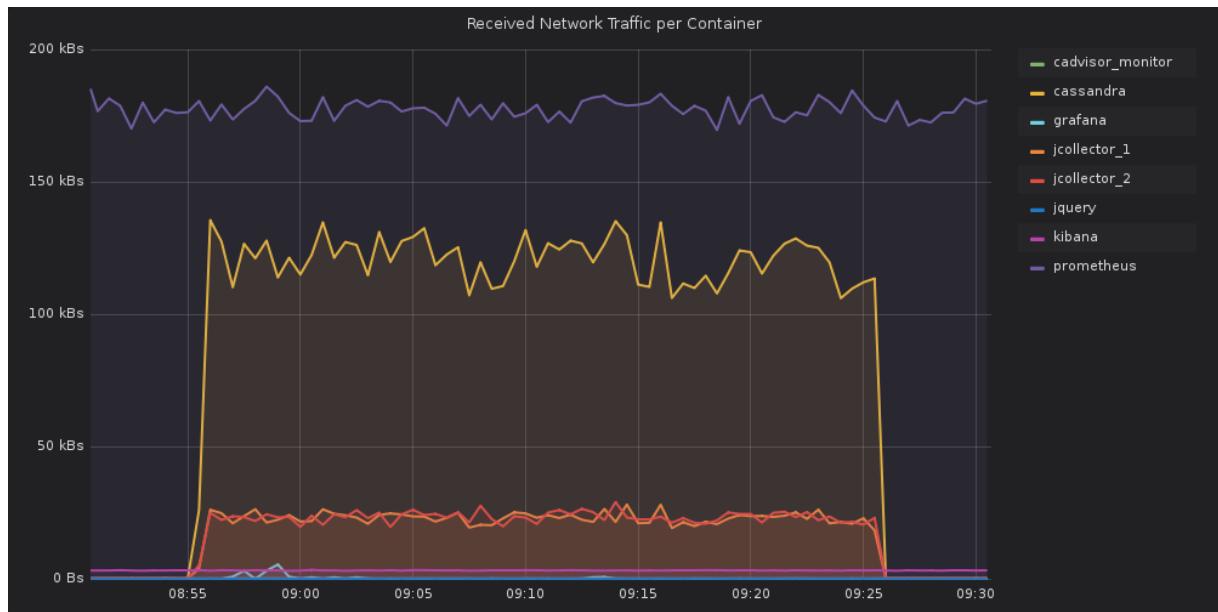
TCP 连接情况



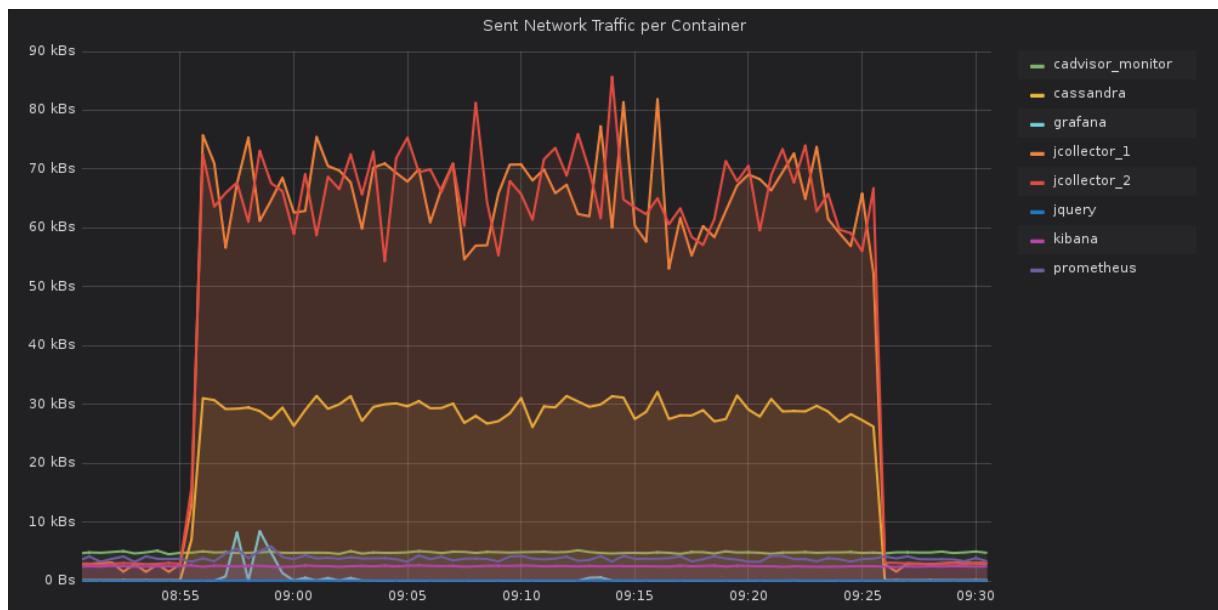
Service: cAdvisor_monitor

- name: cadvisor_monitor
- type: cadvisor

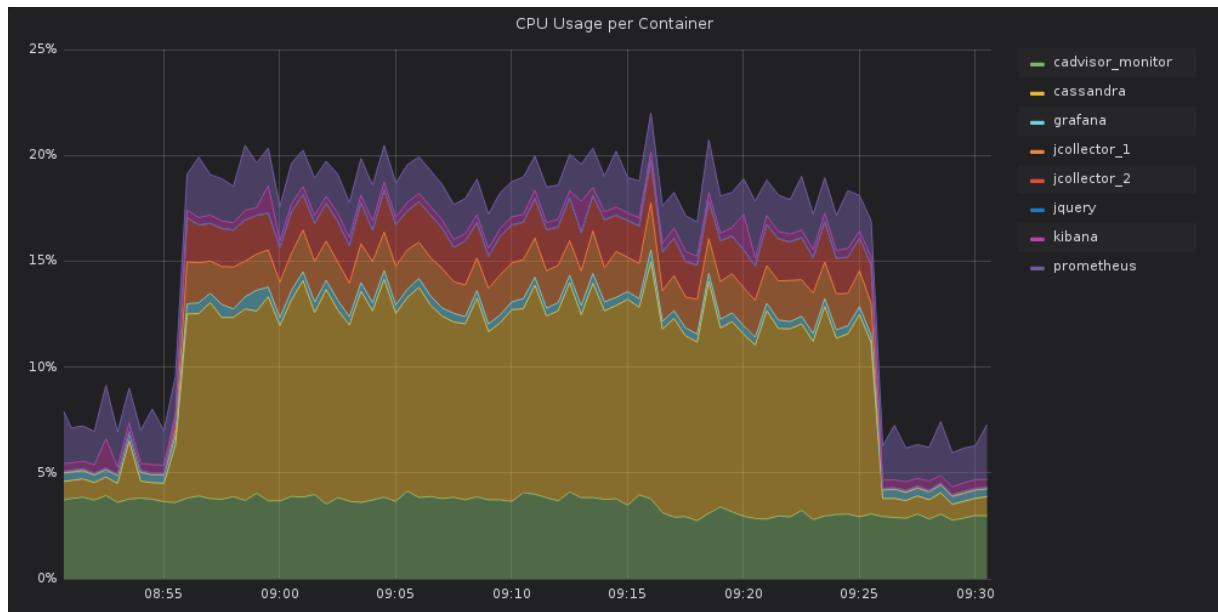
Received Network Traffic per Container



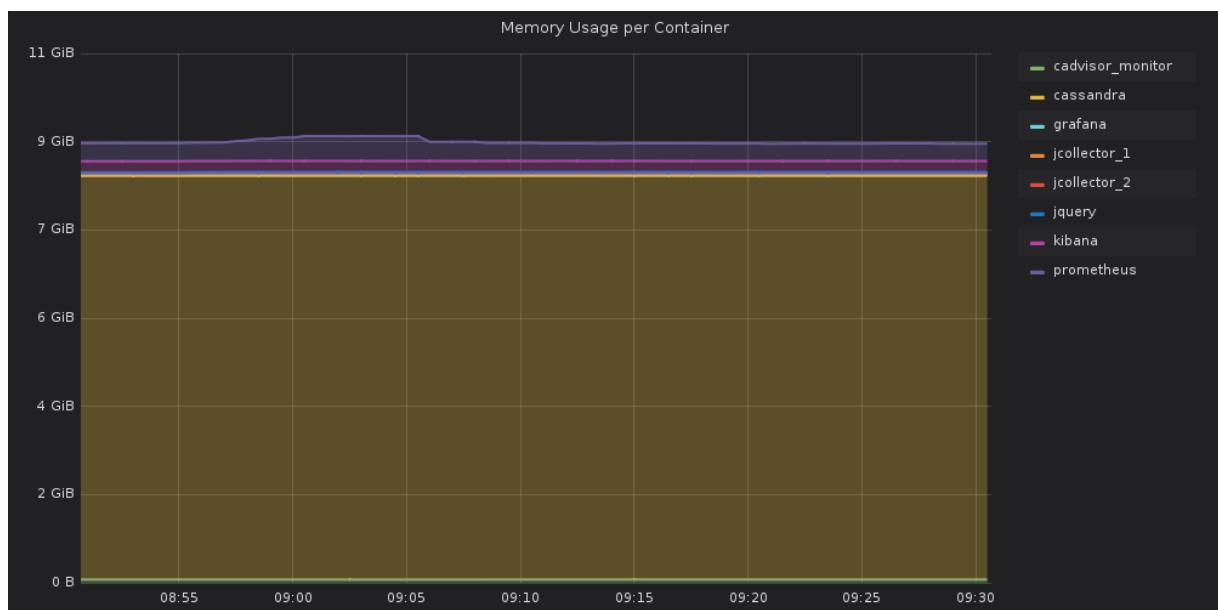
Sent Network Traffic per Container



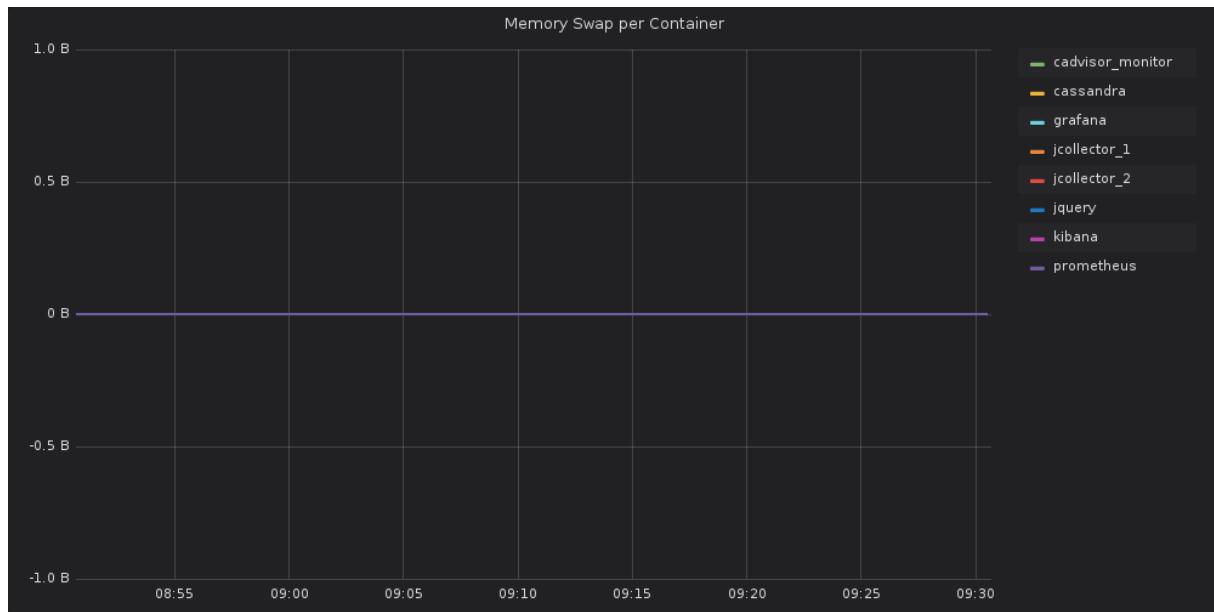
CPU Usage per Container



Memory Usage per Container



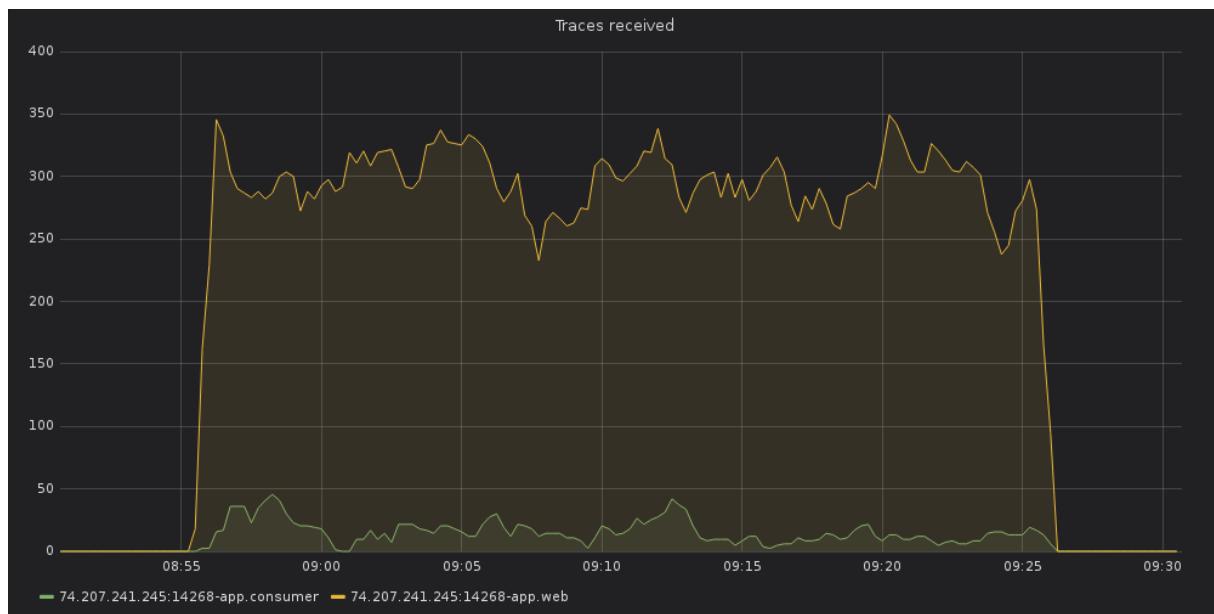
Memory Swap per Container



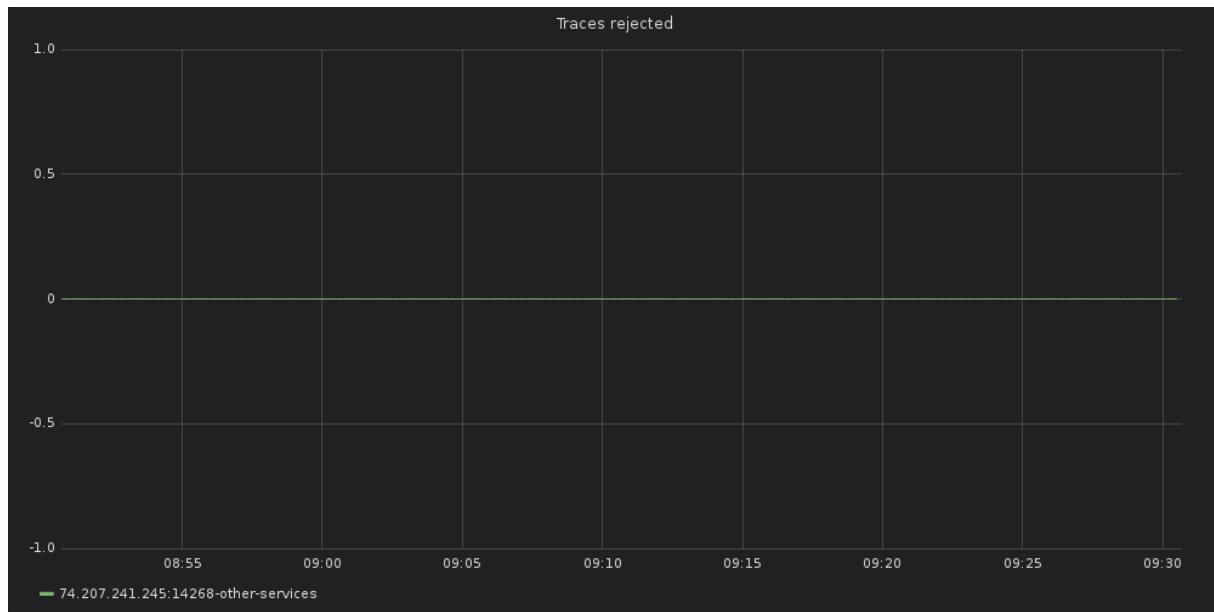
Service: jcollector_1

- name: jcollector_1
- type: jaeger_collector

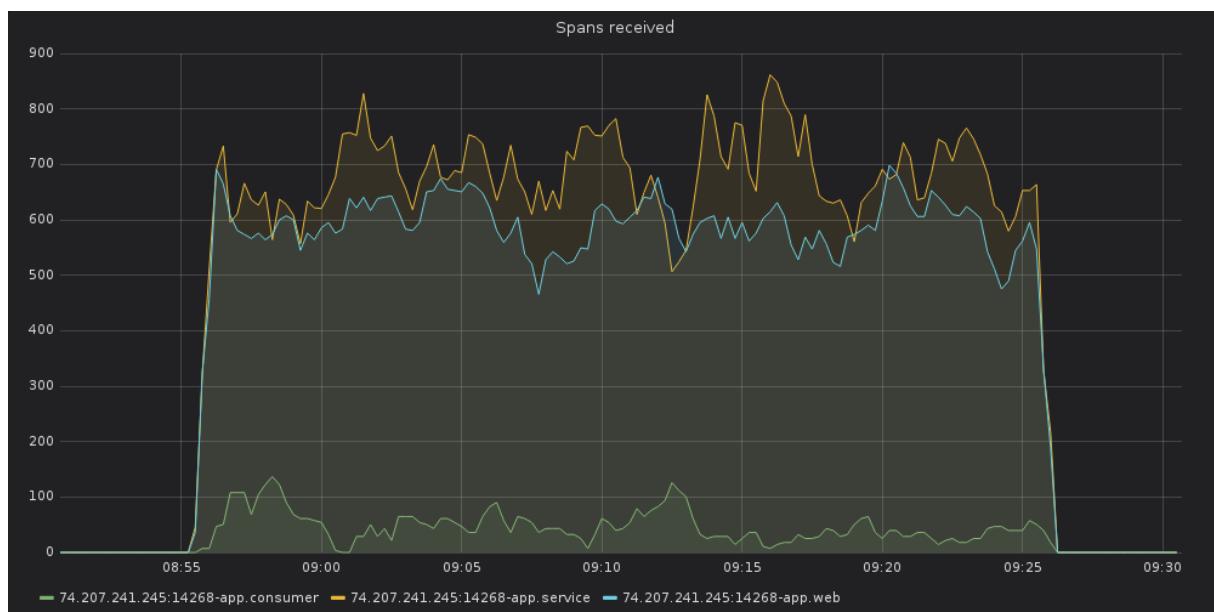
Traces received



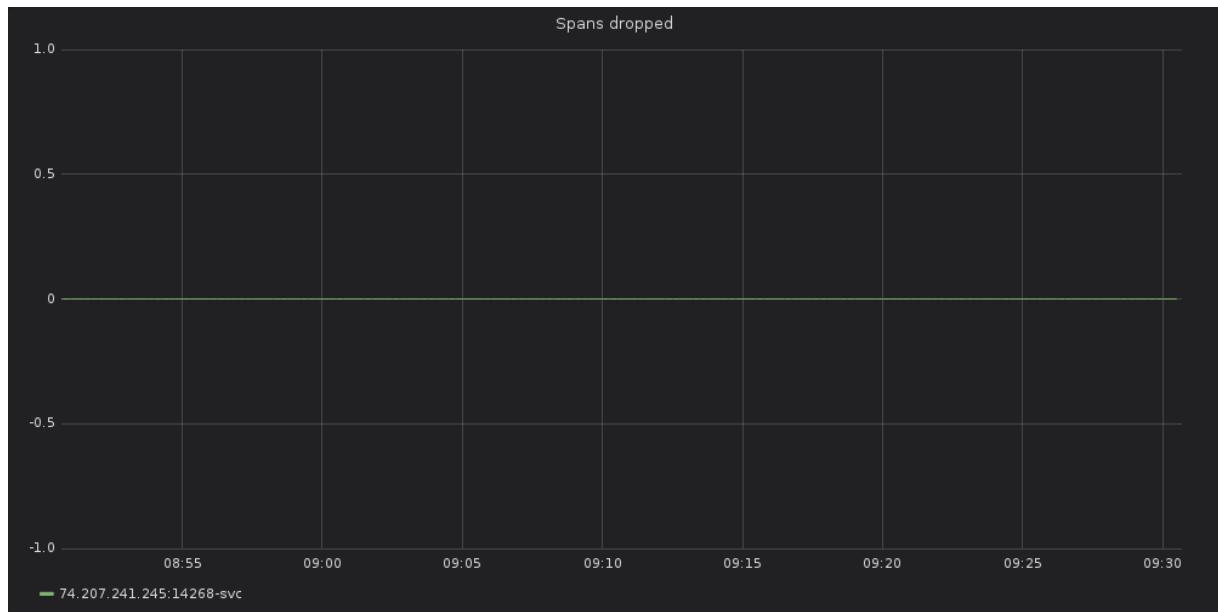
Traces rejected



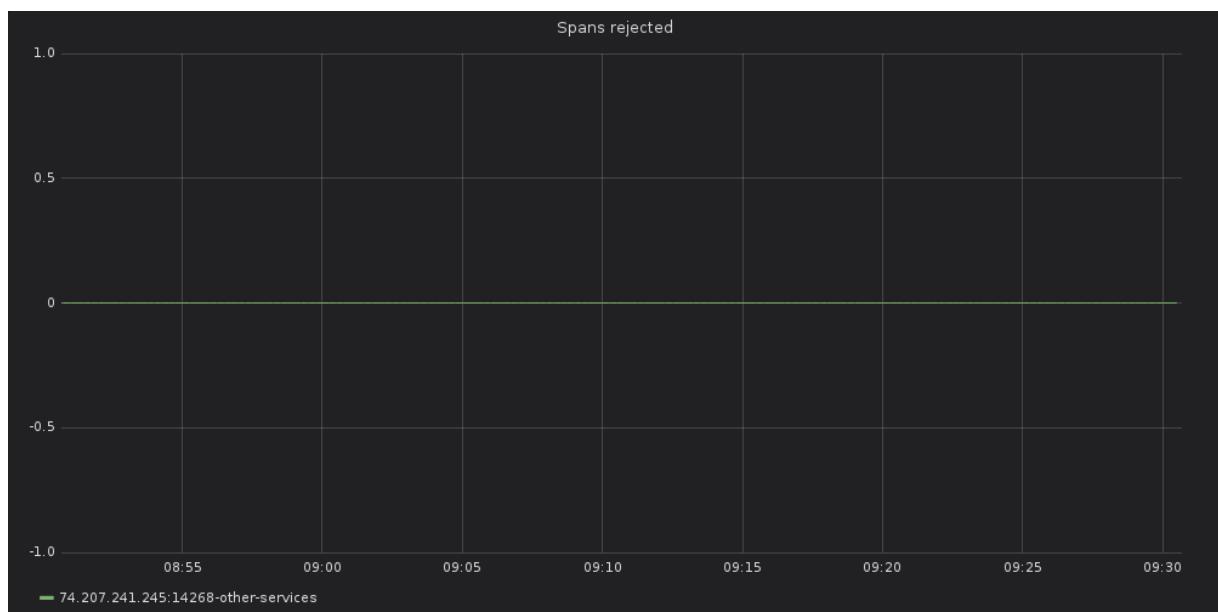
Spans received



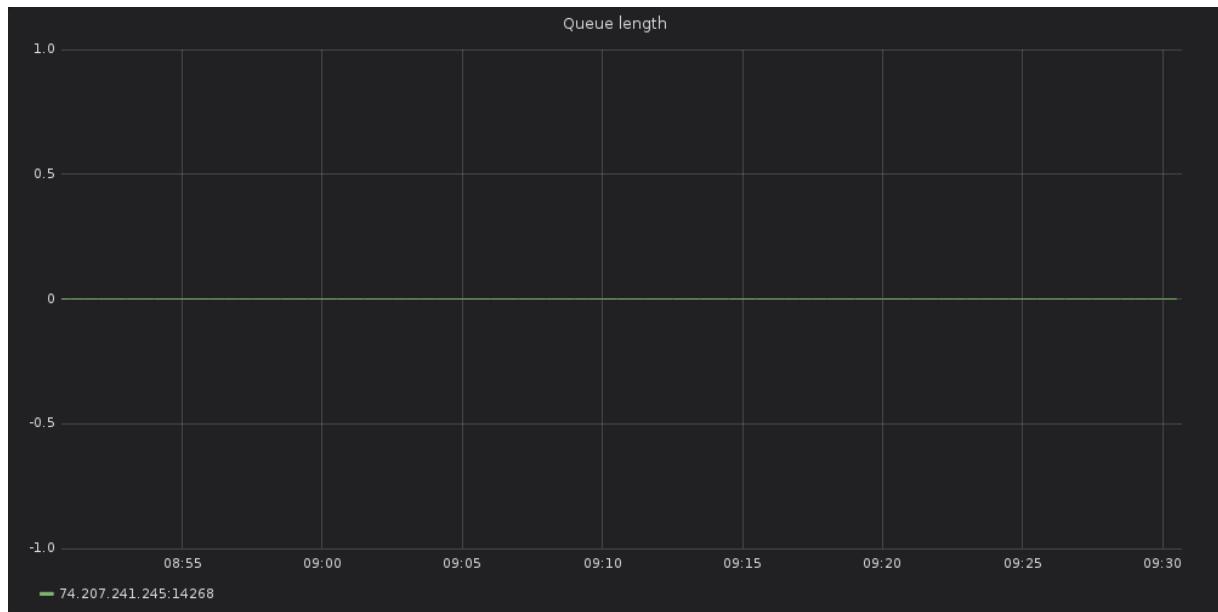
Spans dropped



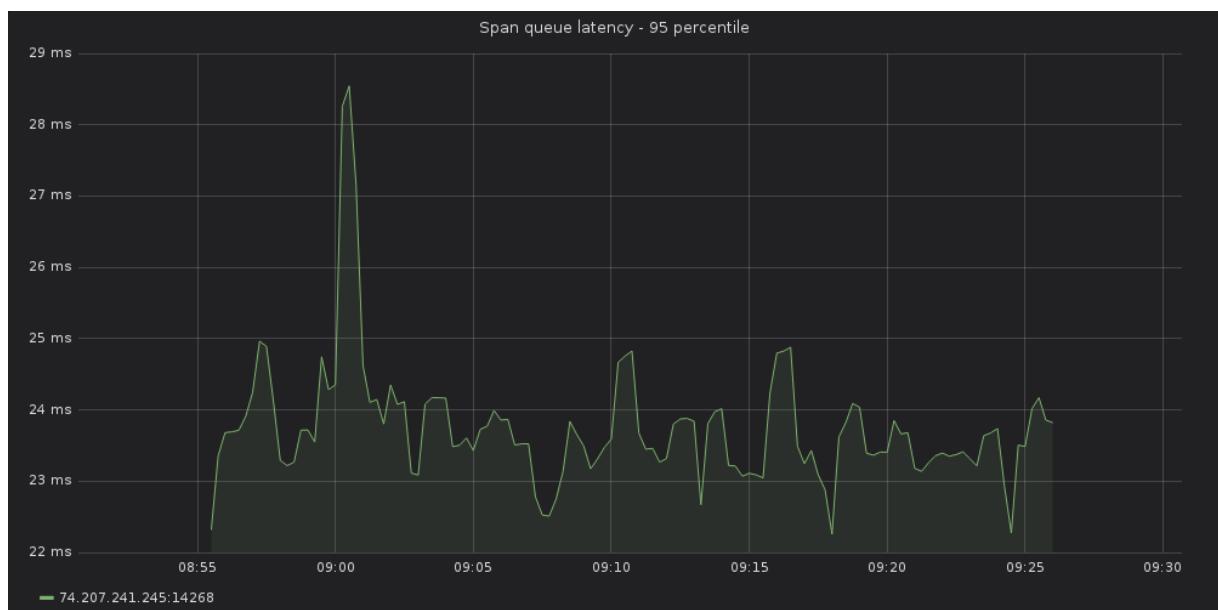
Spans rejected



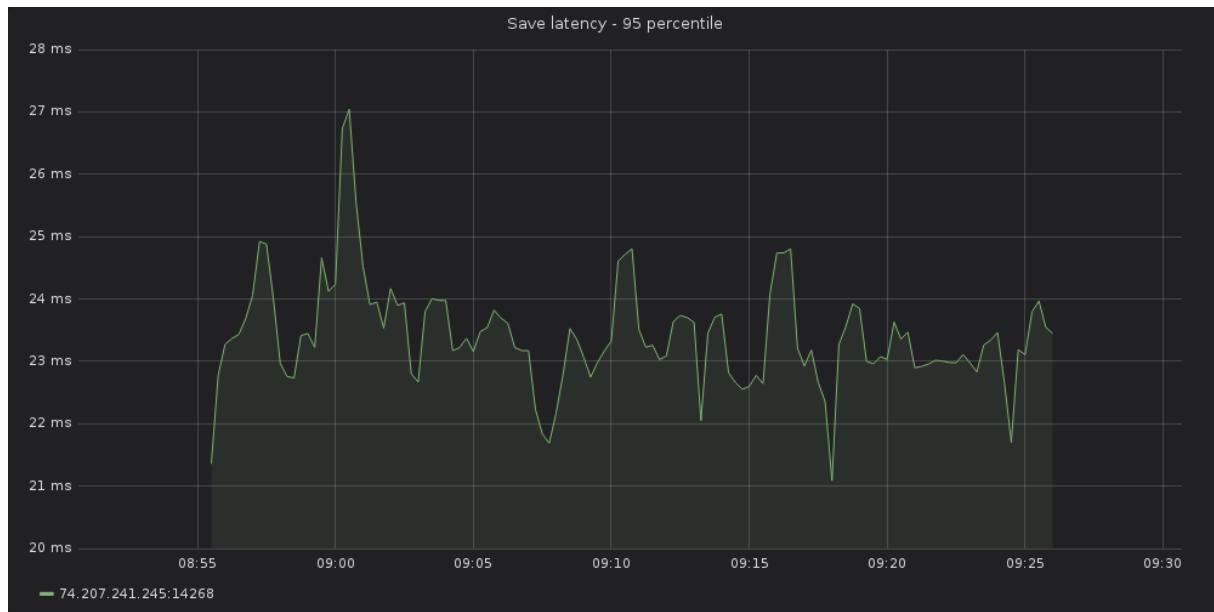
Queue length



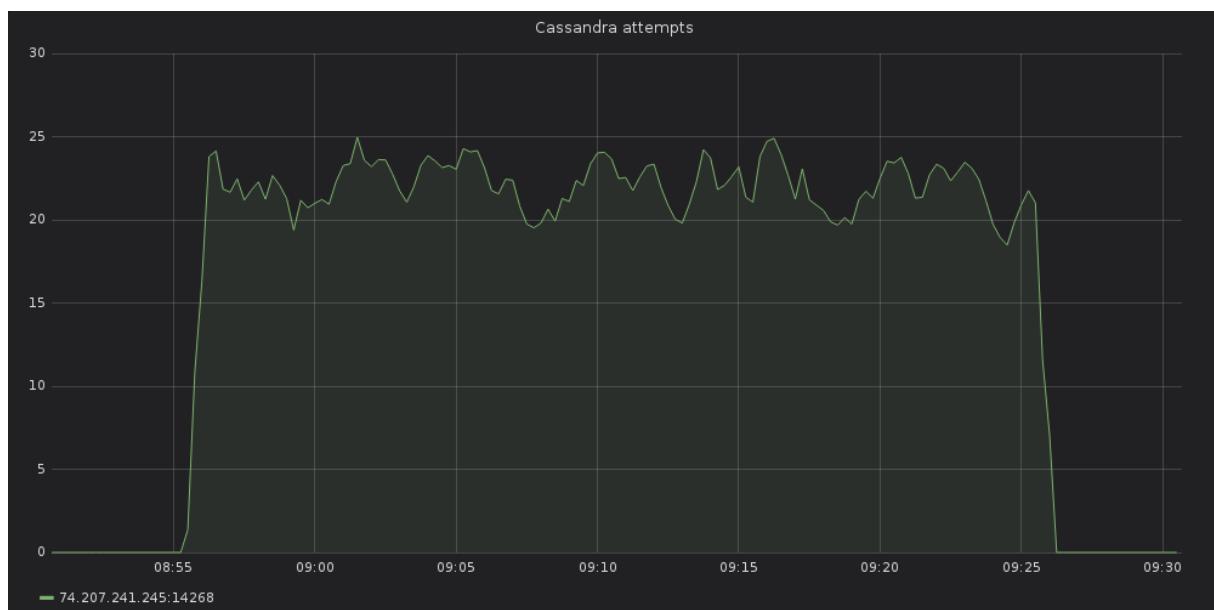
Span queue latency



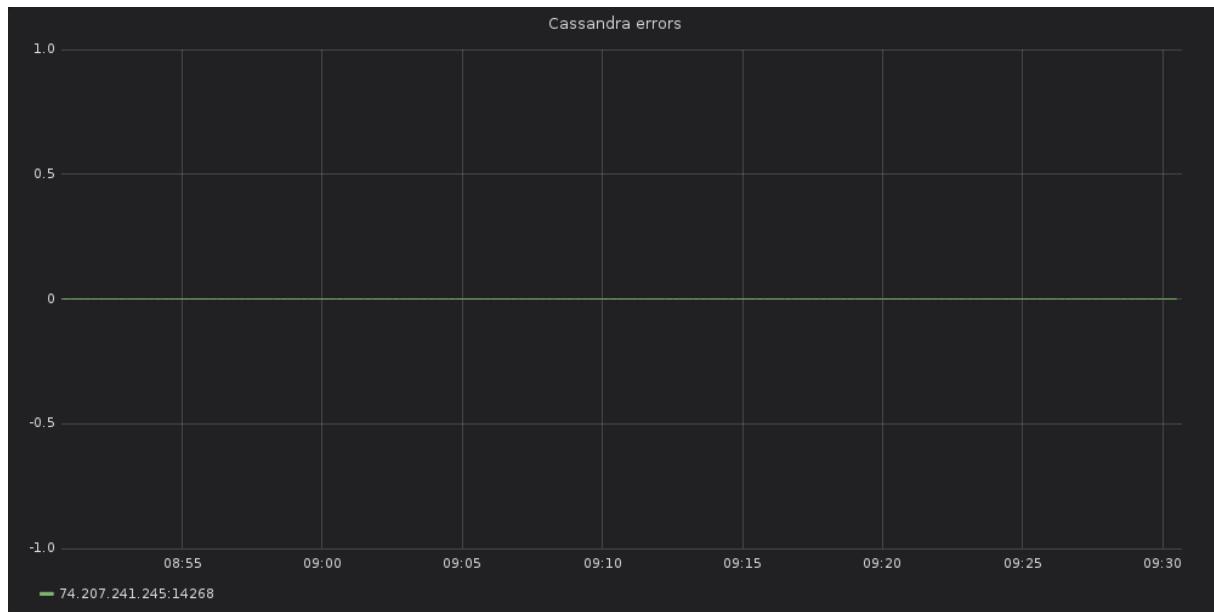
Save latency



Cassandra attempts



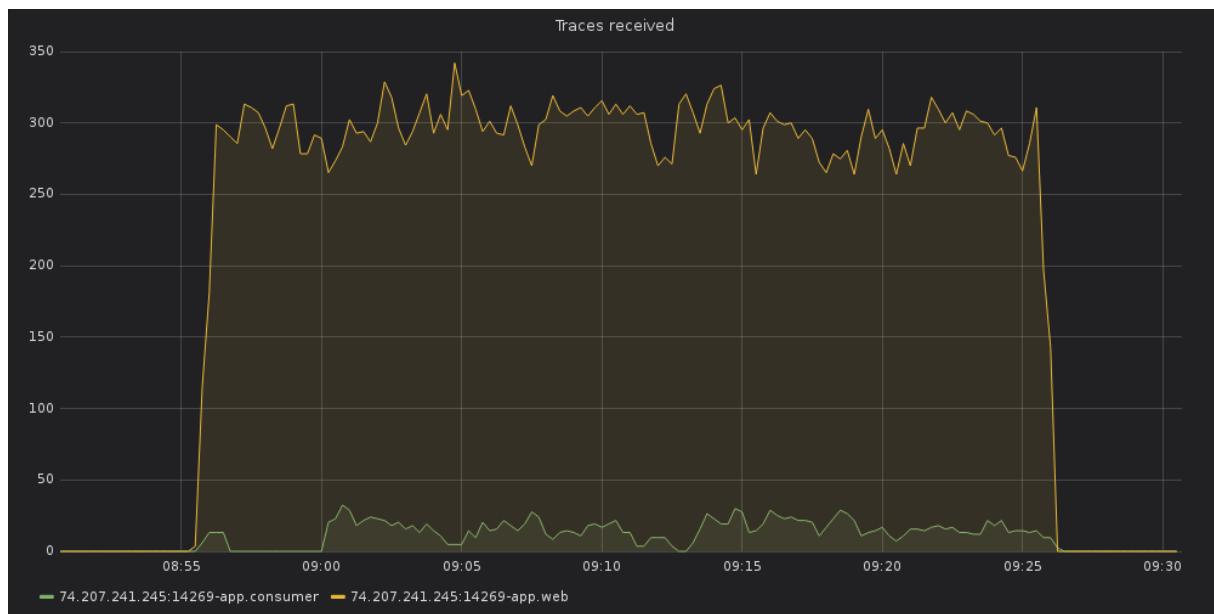
Cassandra errors



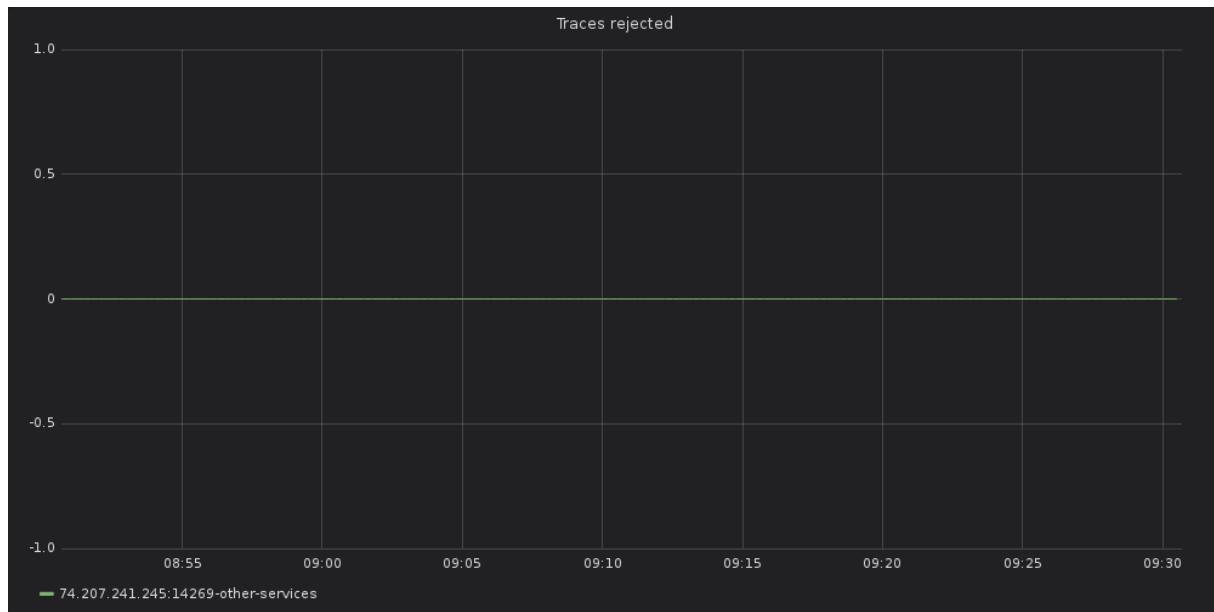
Service: jcollector_2

- name: jcollector_2
- type: jaeger_collector

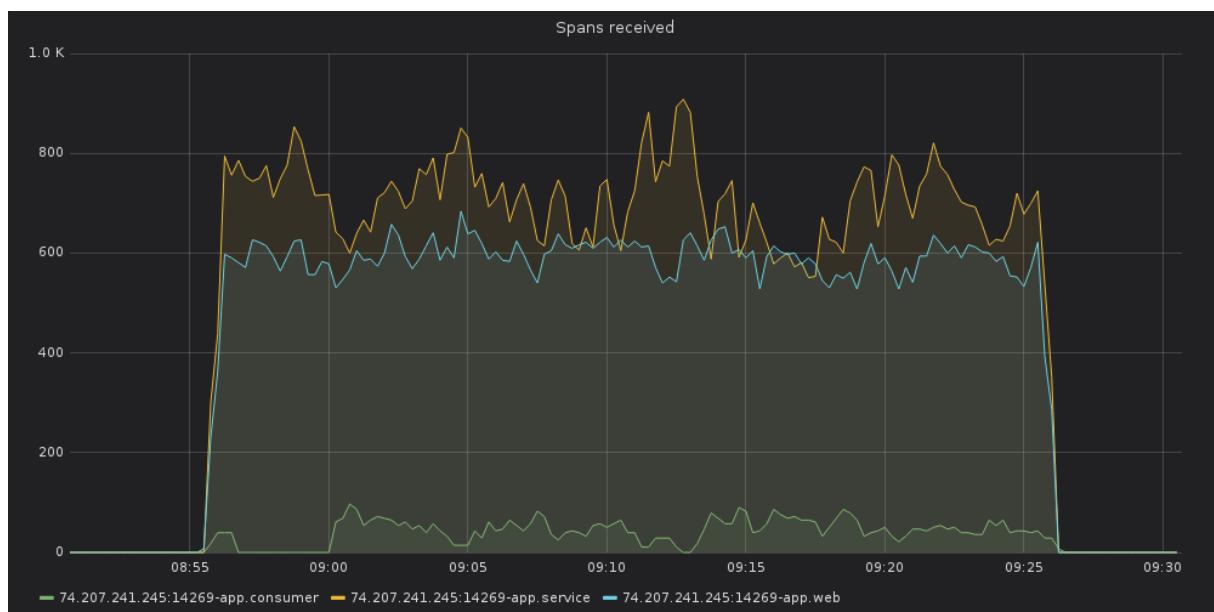
Traces received



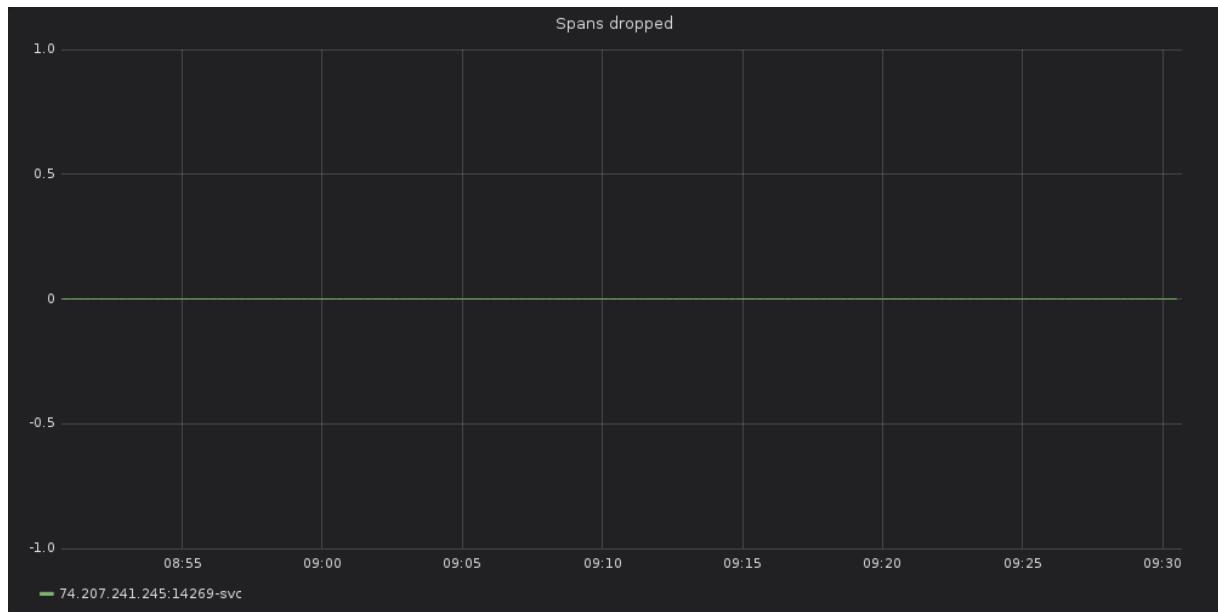
Traces rejected



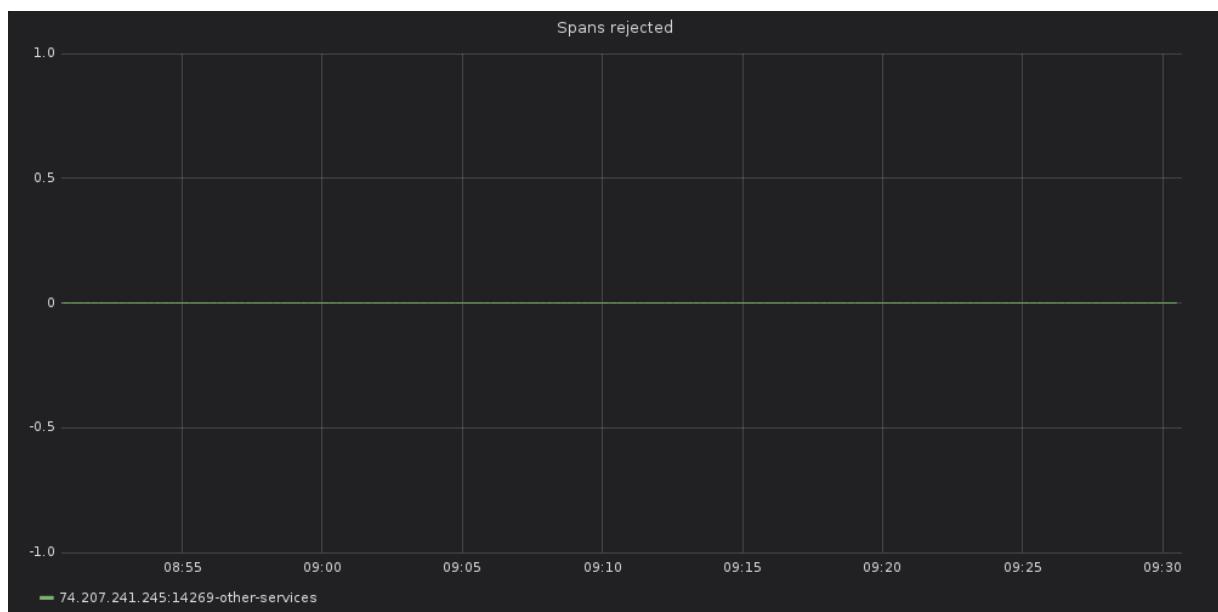
Spans received



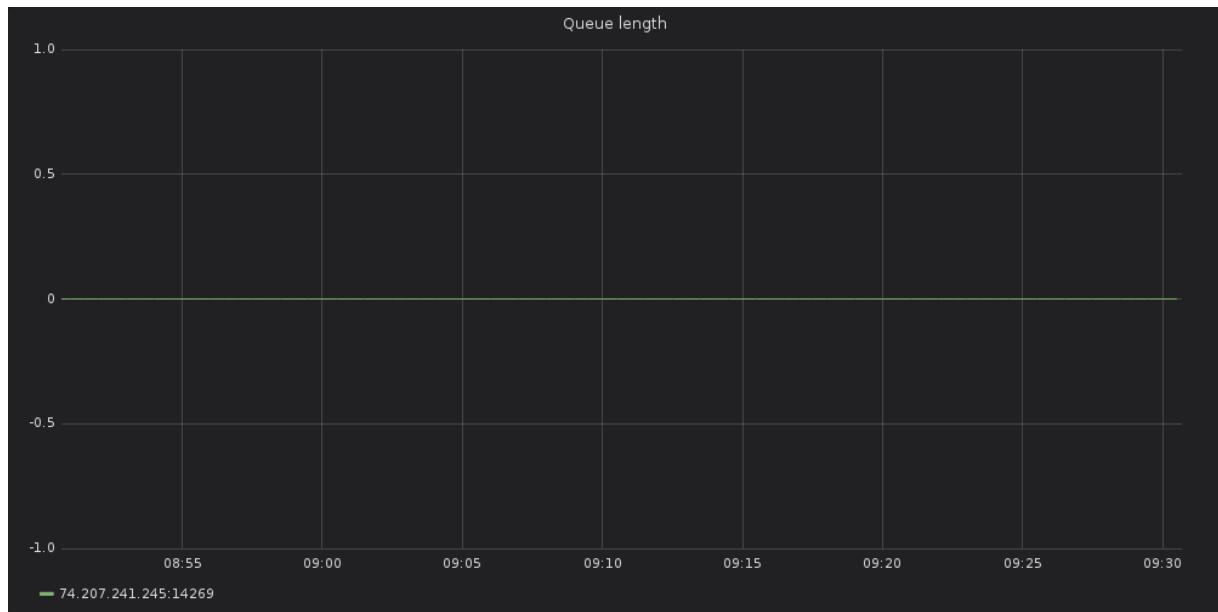
Spans dropped



Spans rejected



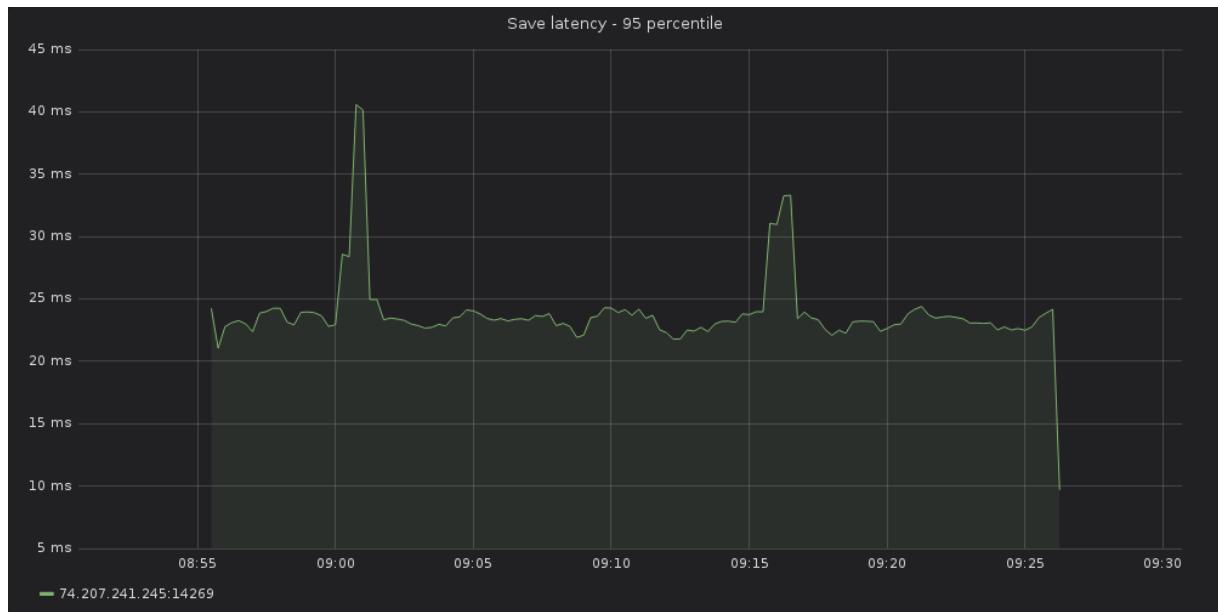
Queue length



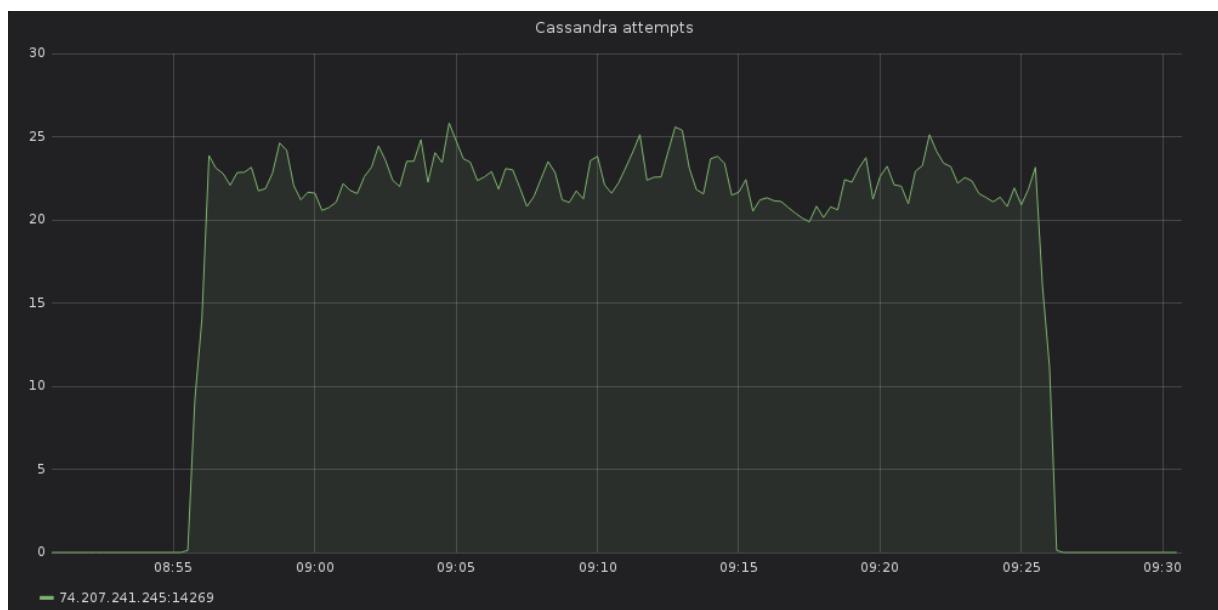
Span queue latency



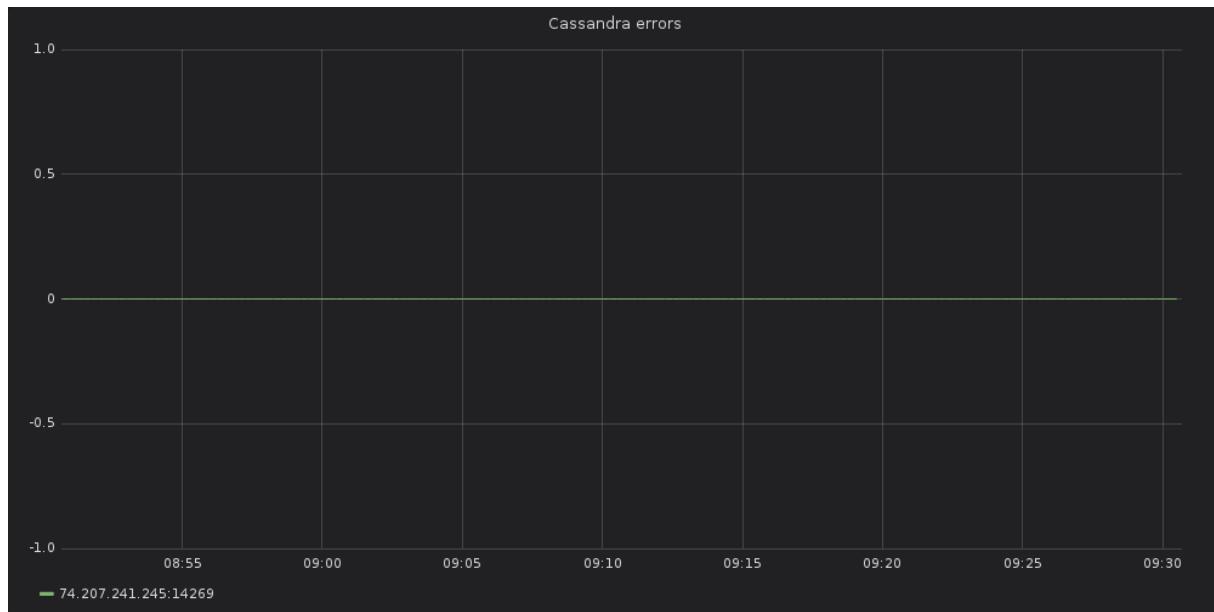
Save latency



Cassandra attempts



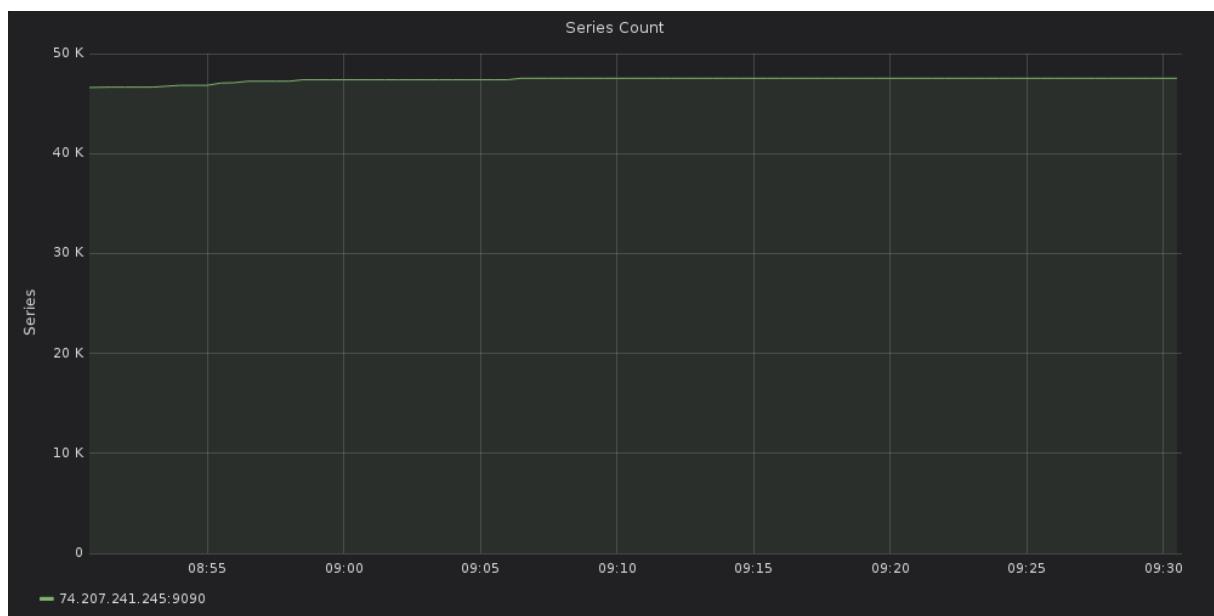
Cassandra errors



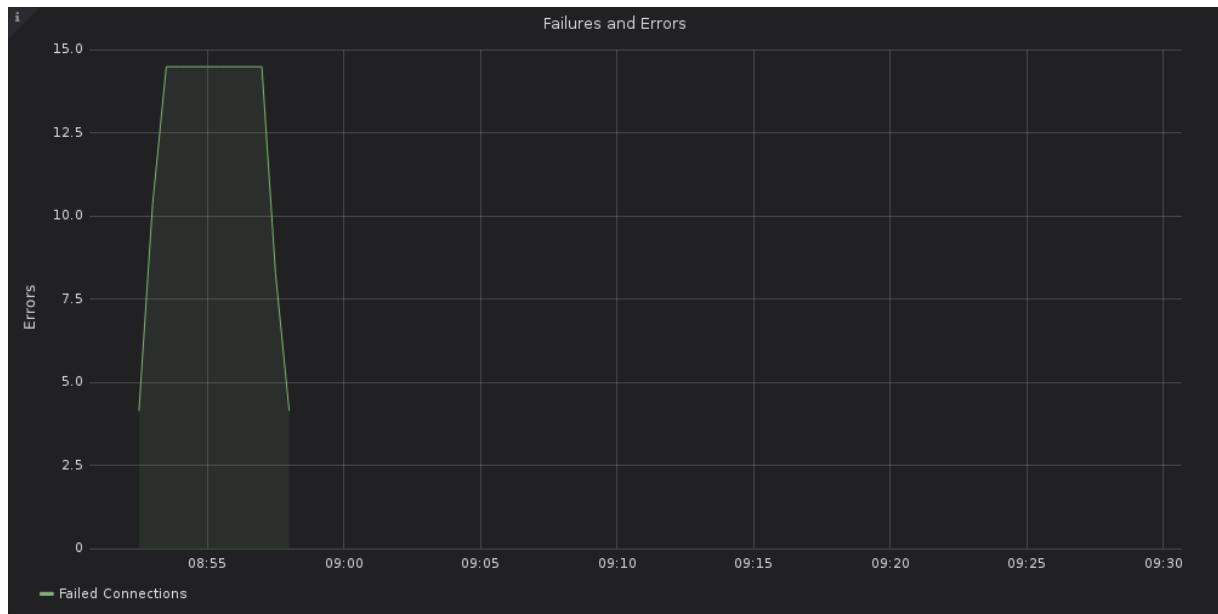
Service: prometheus

- name: prometheus
- type: prometheus

Series Count



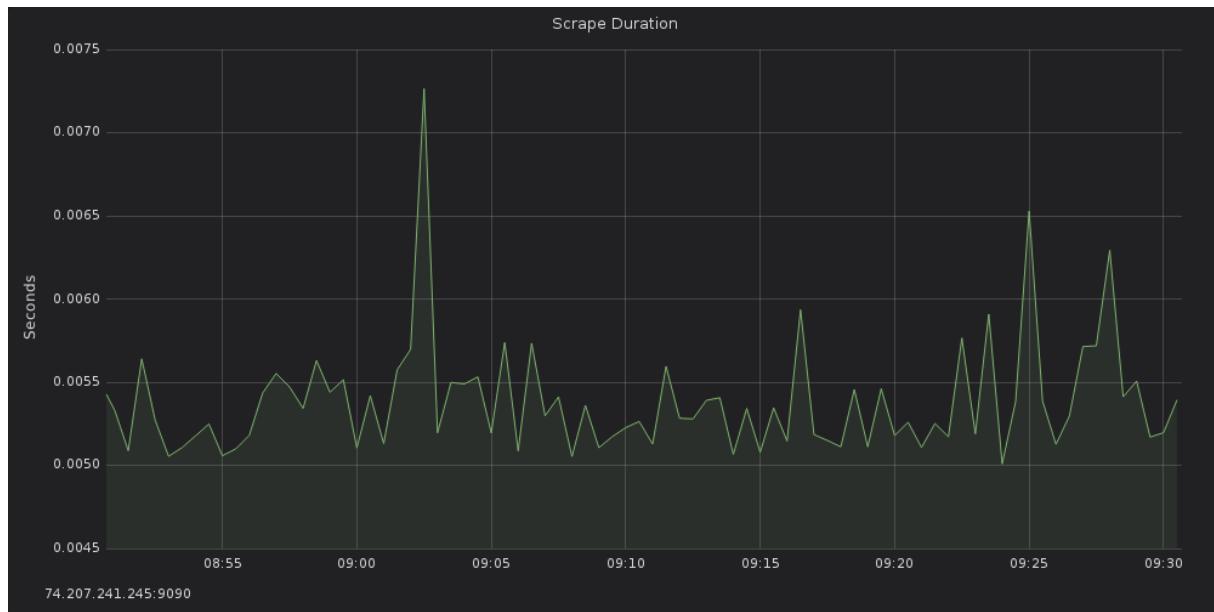
Failures and Errors



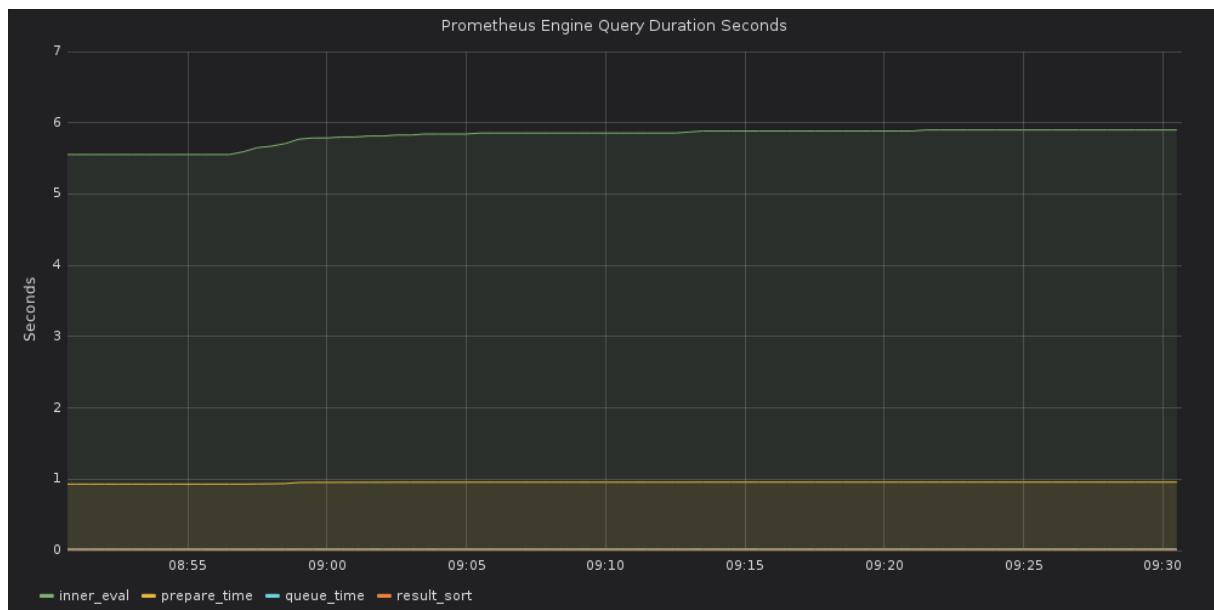
Appended Samples per Second



Scrape Duration



Prometheus Engine Query Duration Seconds



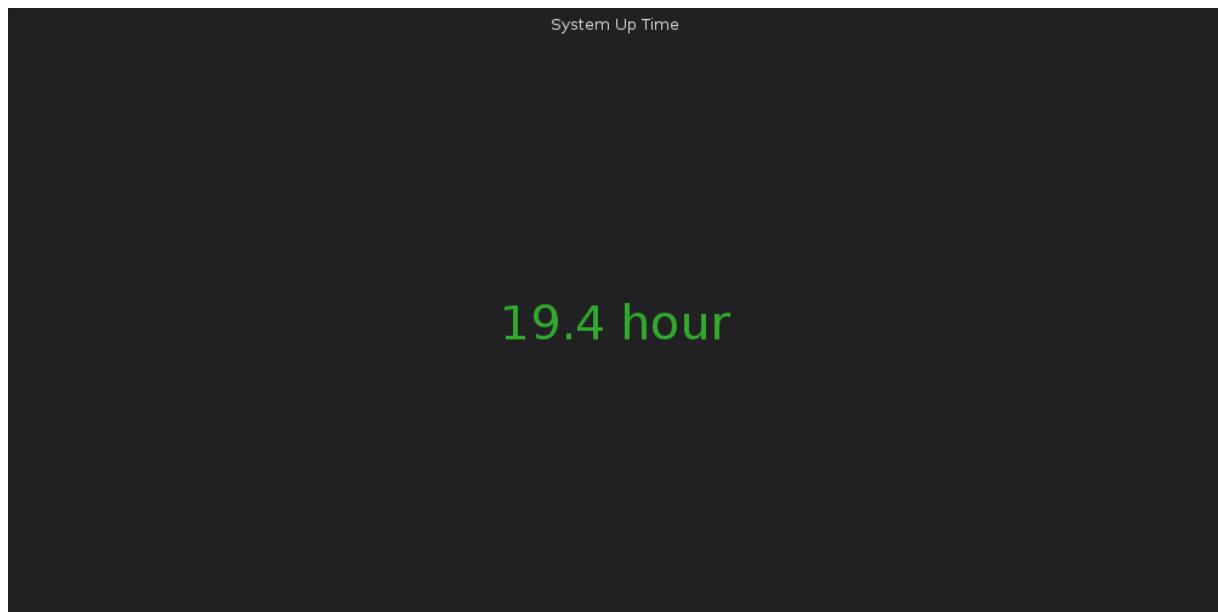
Host: service

- name: service
- type: service

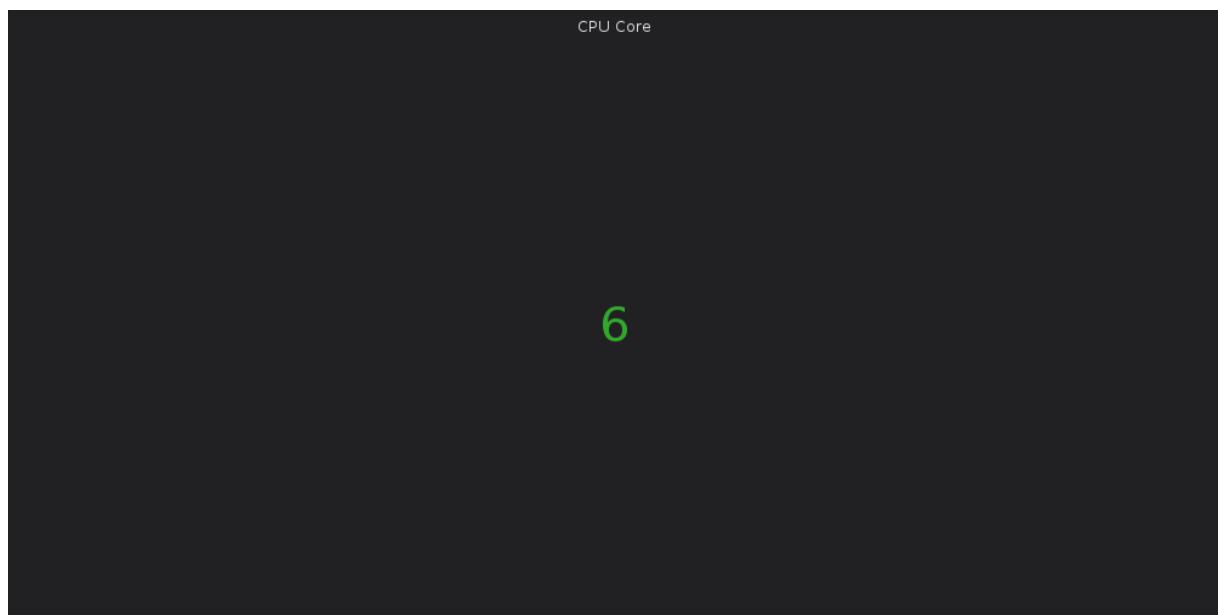
Service: node_service

- name: node_service
- type: node_exporter

系统运行时间



CPU 核数

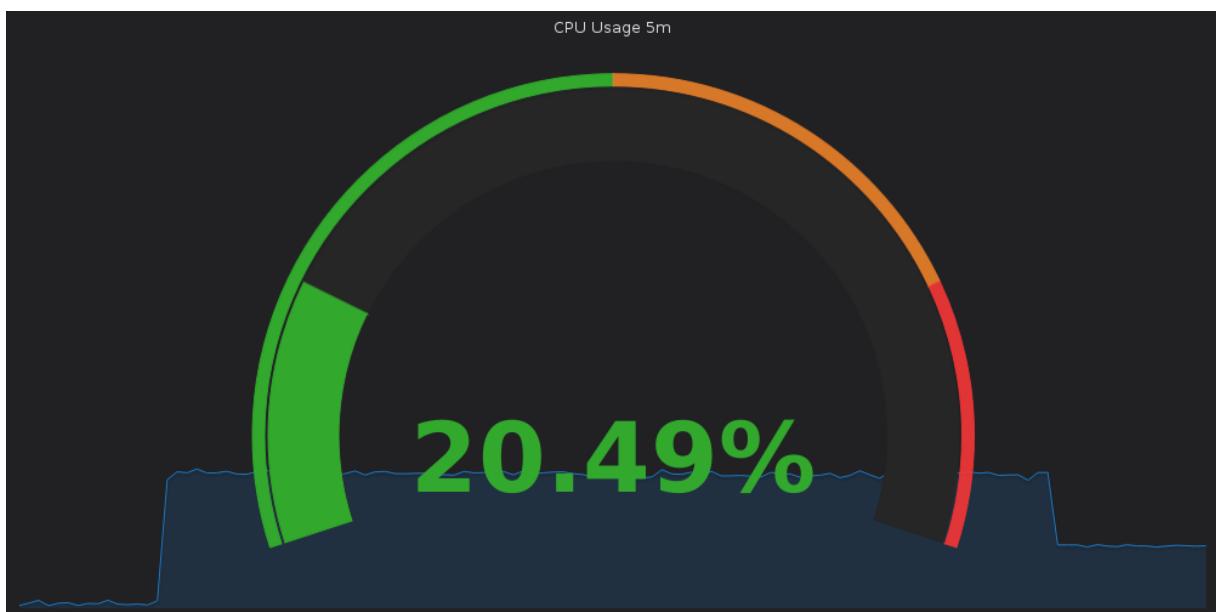


内存总量

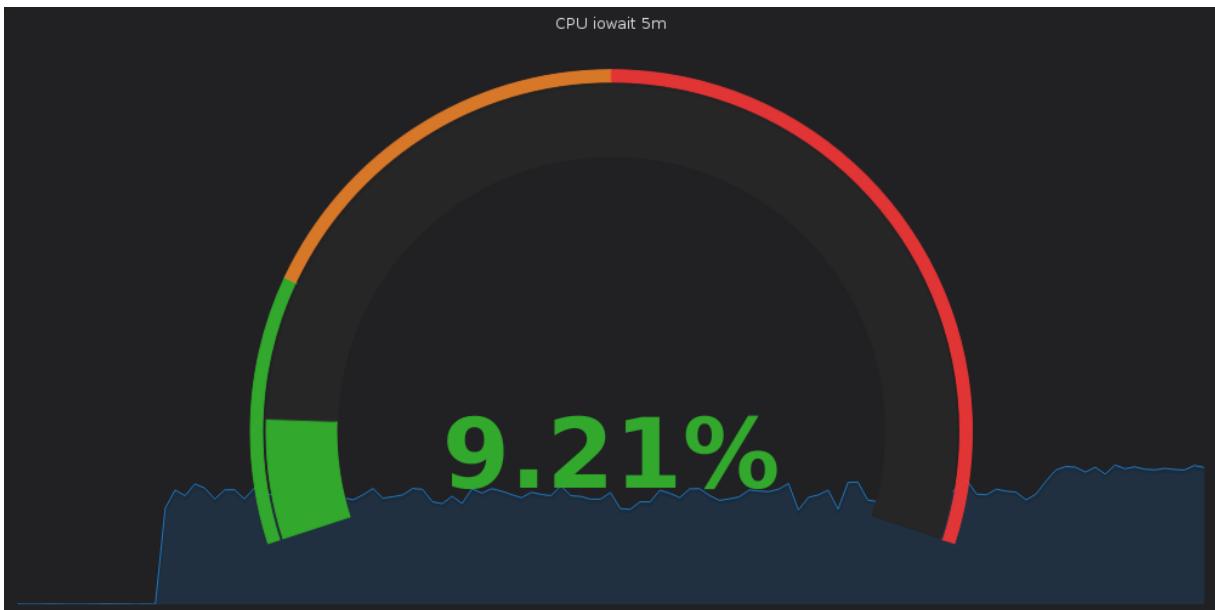
Total Memory

15.7 GiB

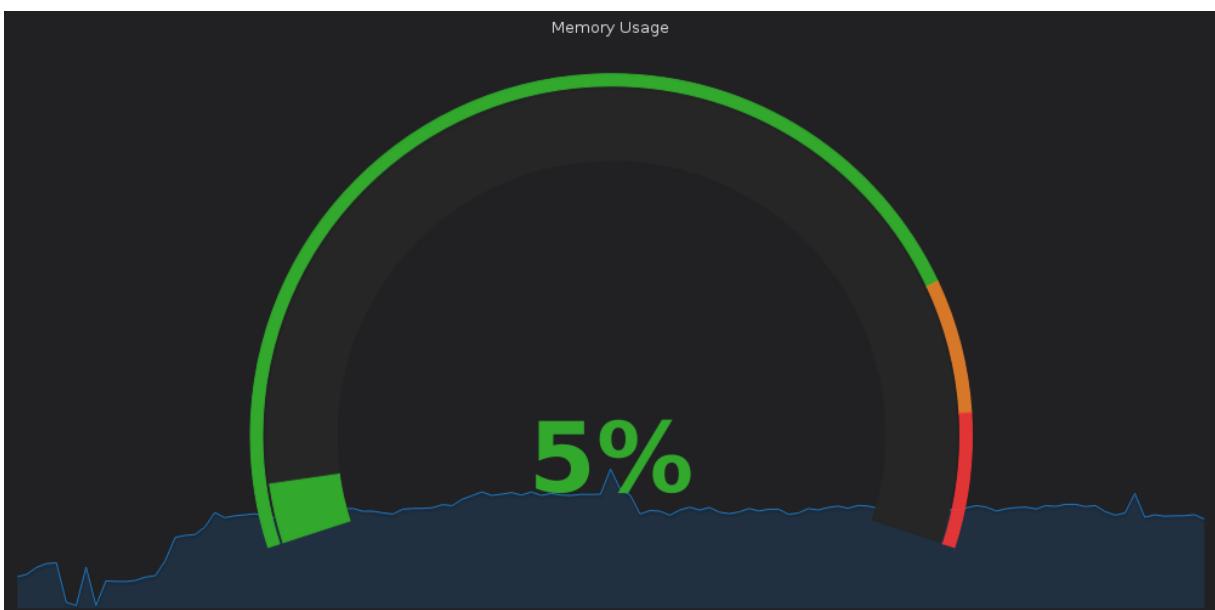
CPU使用率 (5m)



CPU iowait (5m)



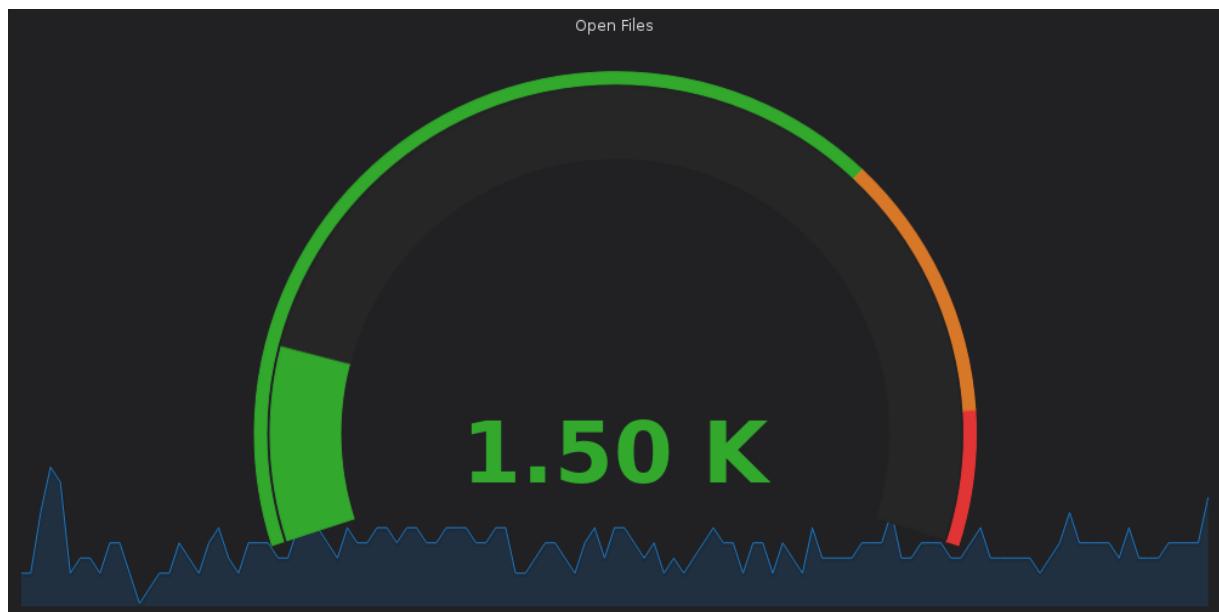
内存使用率



当前打开的文件描述符

Open Files

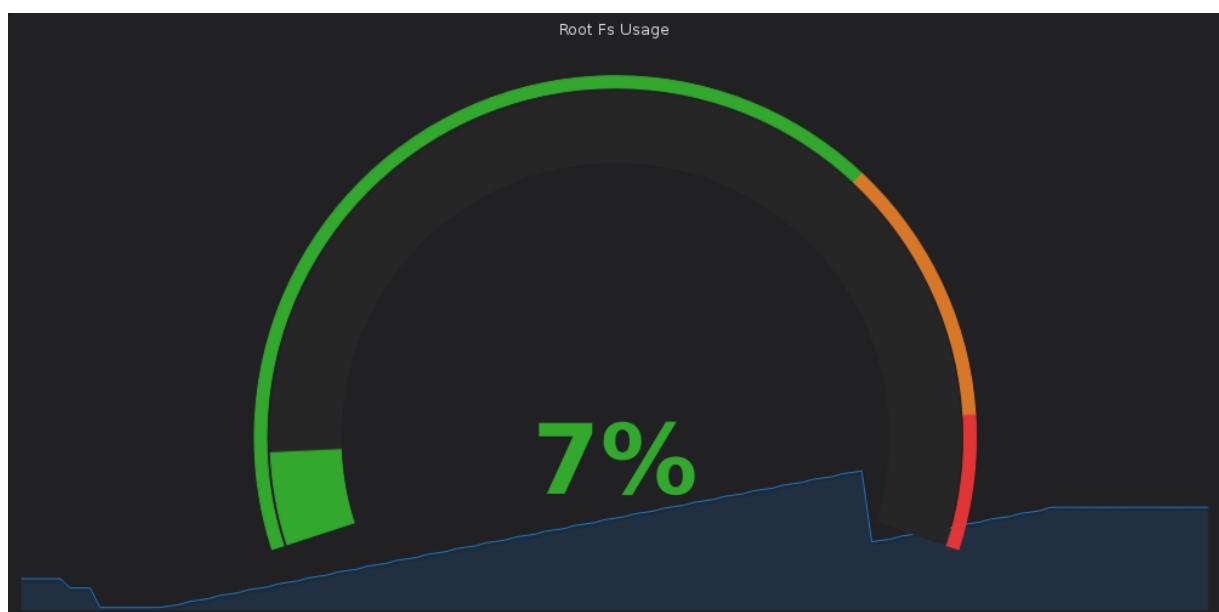
1.50 K



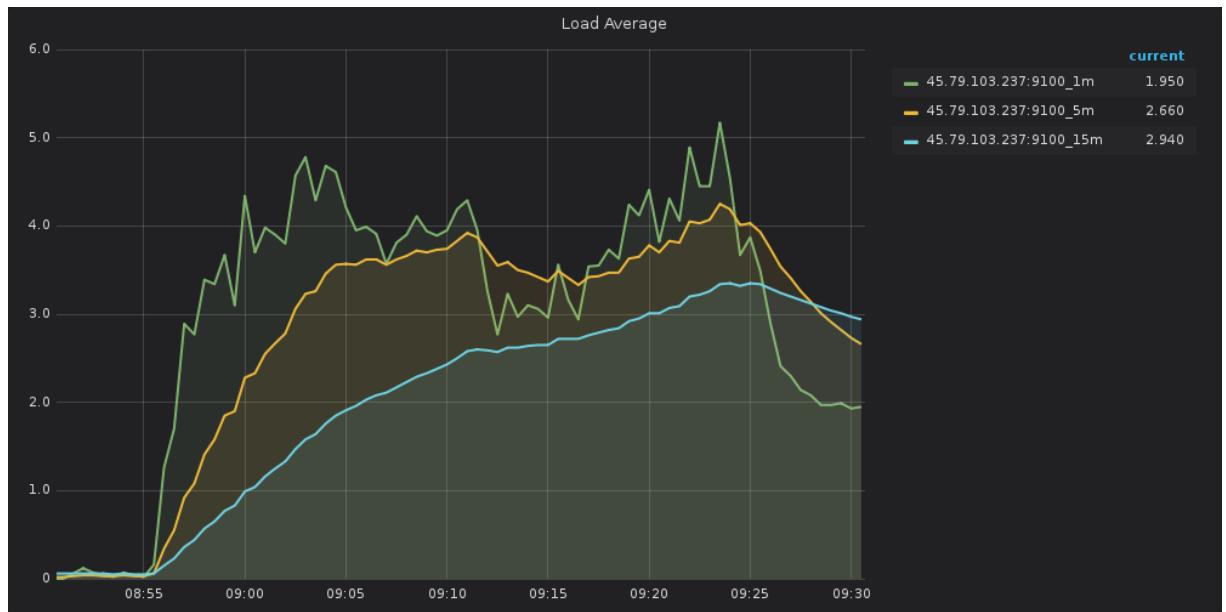
根分区使用率

Root Fs Usage

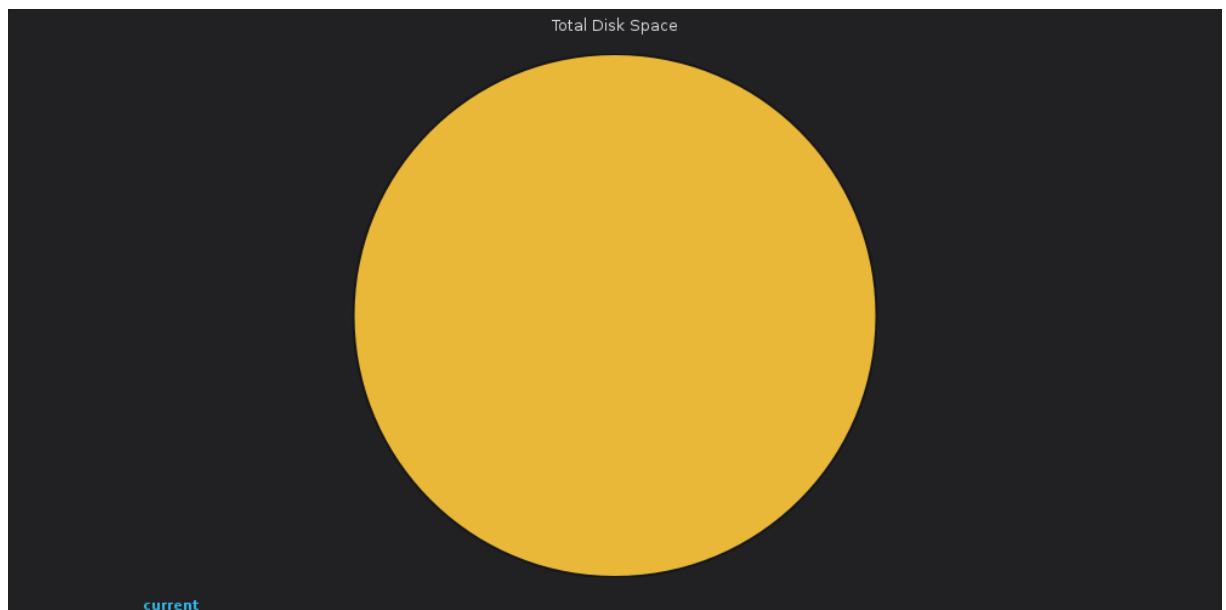
7%



系统平均负载



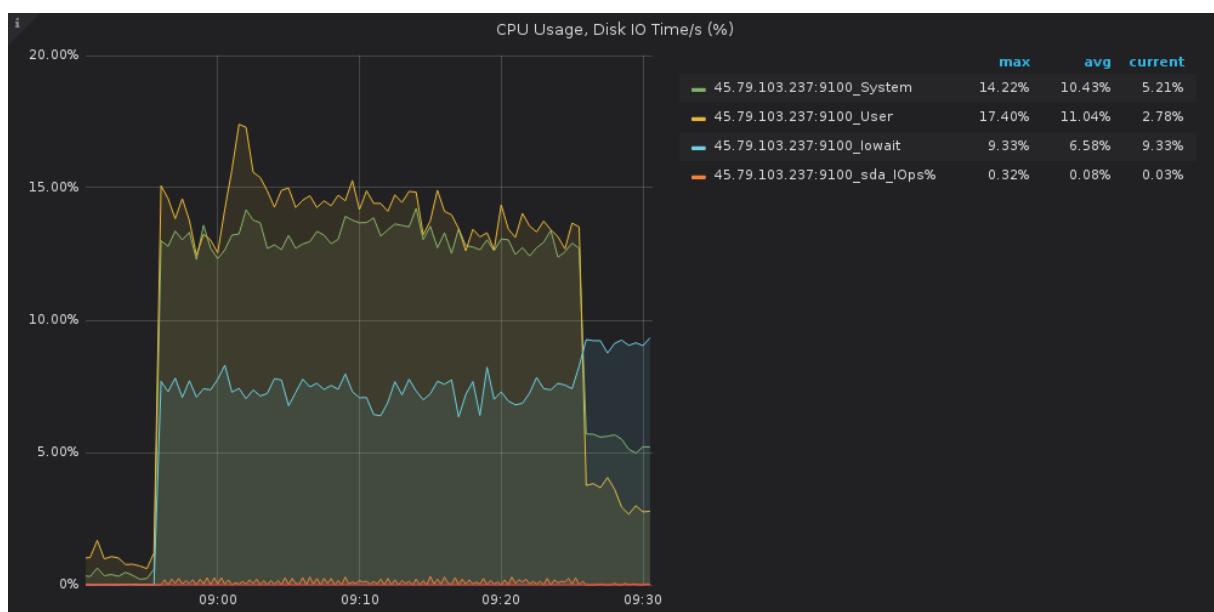
磁盘总空间



各分区可用空间

Volumes Available				
File System	IP	Mount ▲	Available	Usage
ext4	45.79.103.237:9100	/	292.00 GiB	2.08%

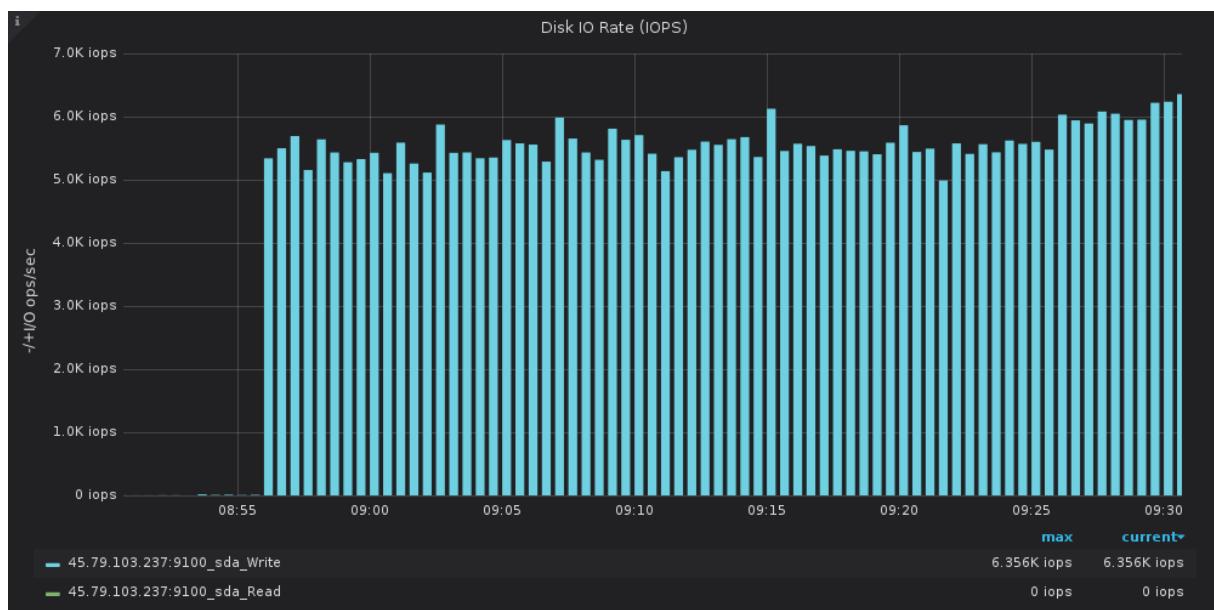
CPU使用率、磁盘每秒的I/O操作耗费时间 (%)



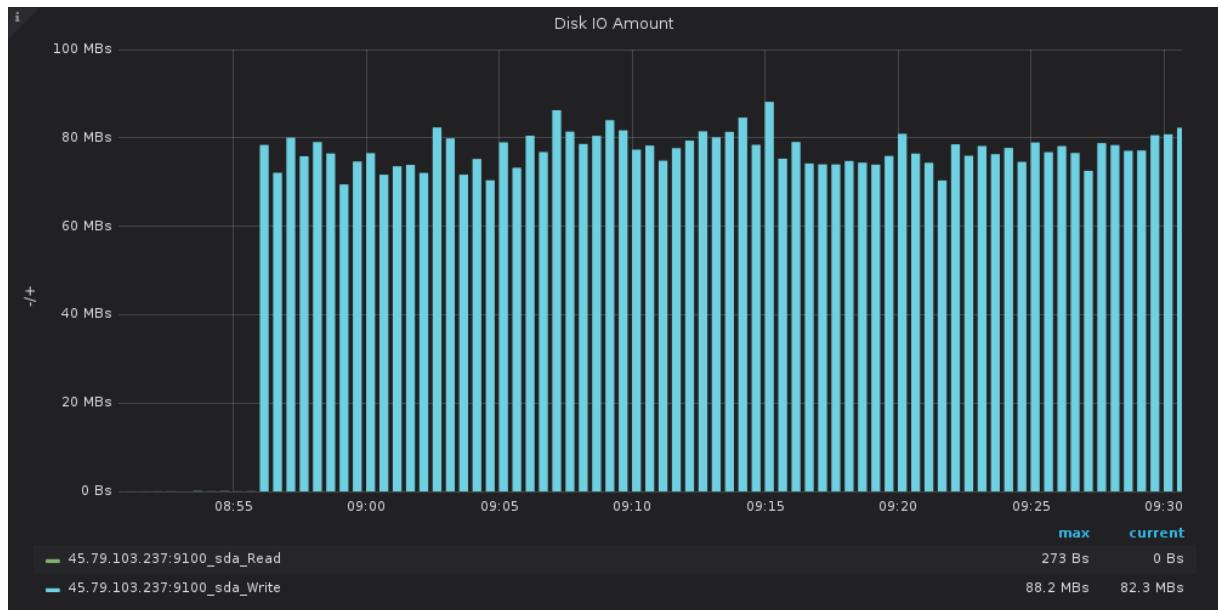
内存信息



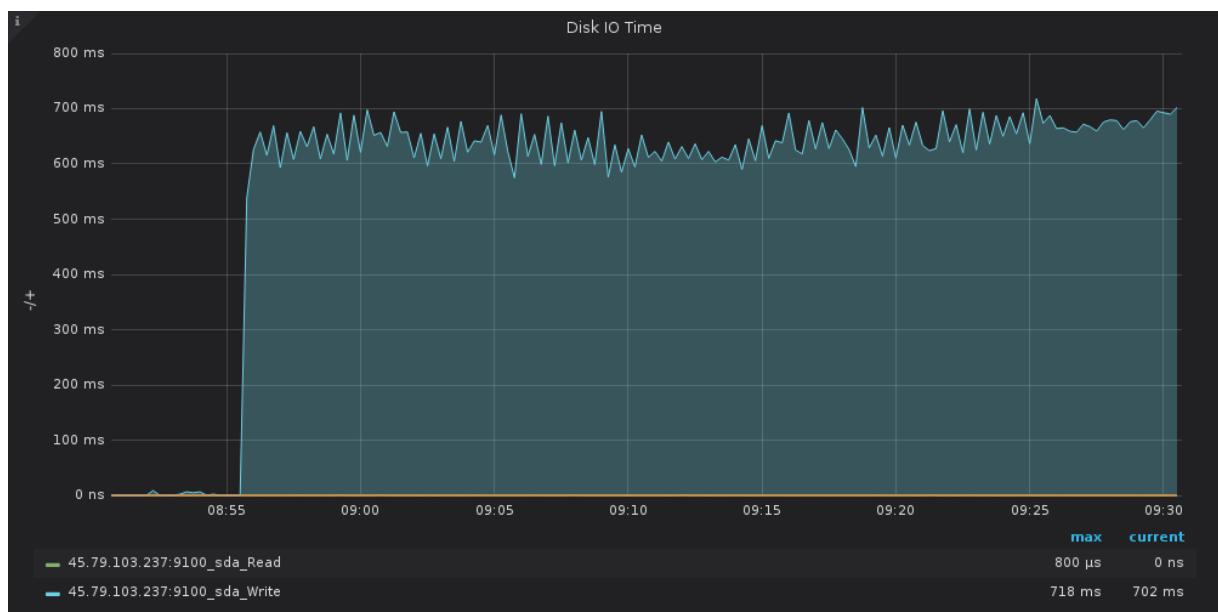
磁盘读写速率 (IOPS)



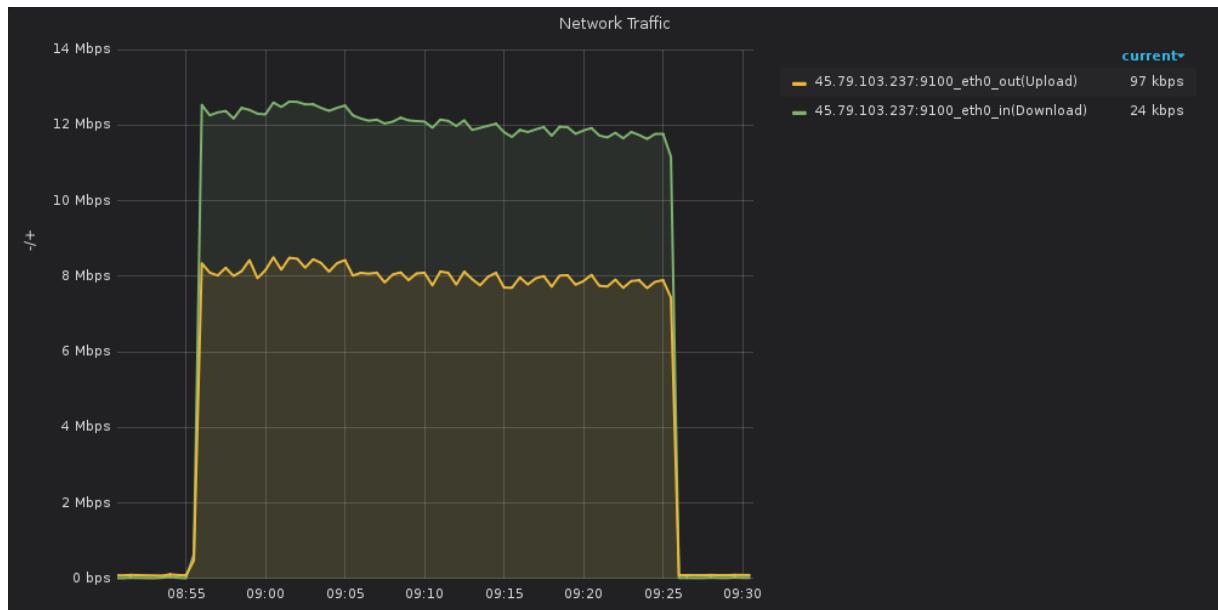
磁盘读写容量大小



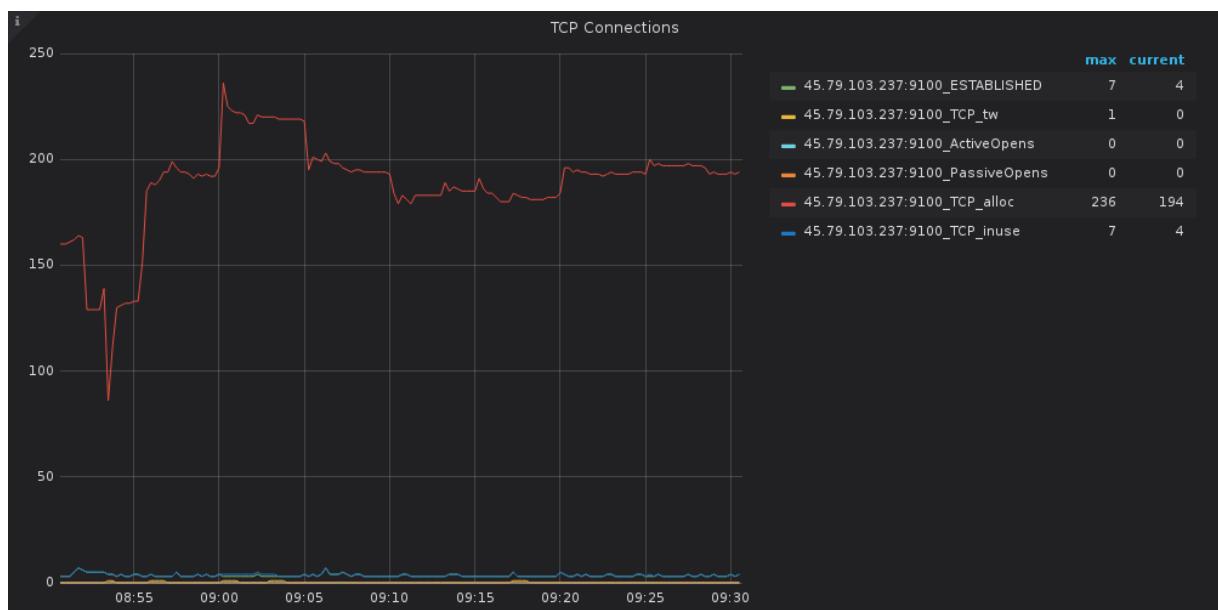
磁盘IO读写时间



网络流量



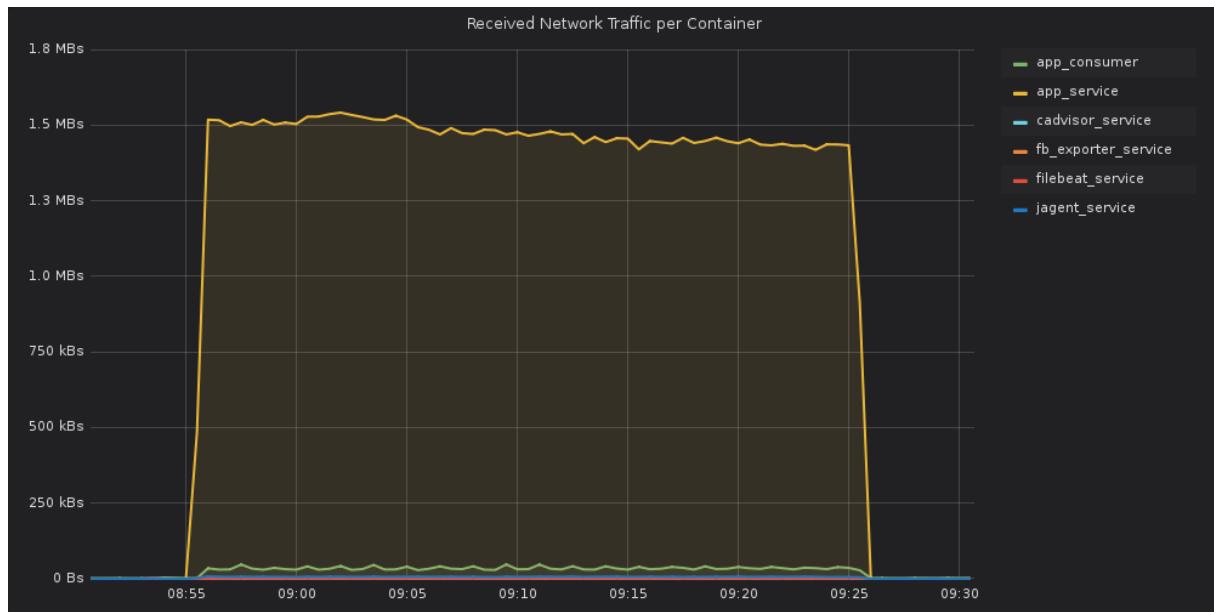
TCP 连接情况



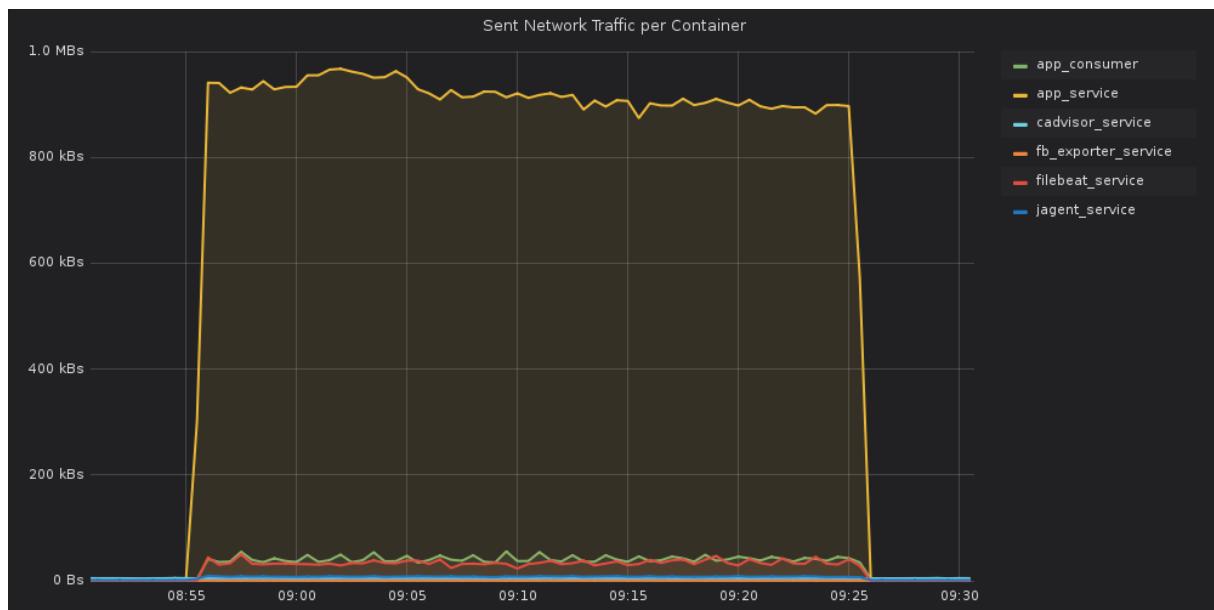
Service: cAdvisor_service

- name: cadvisor_service
- type: cadvisor

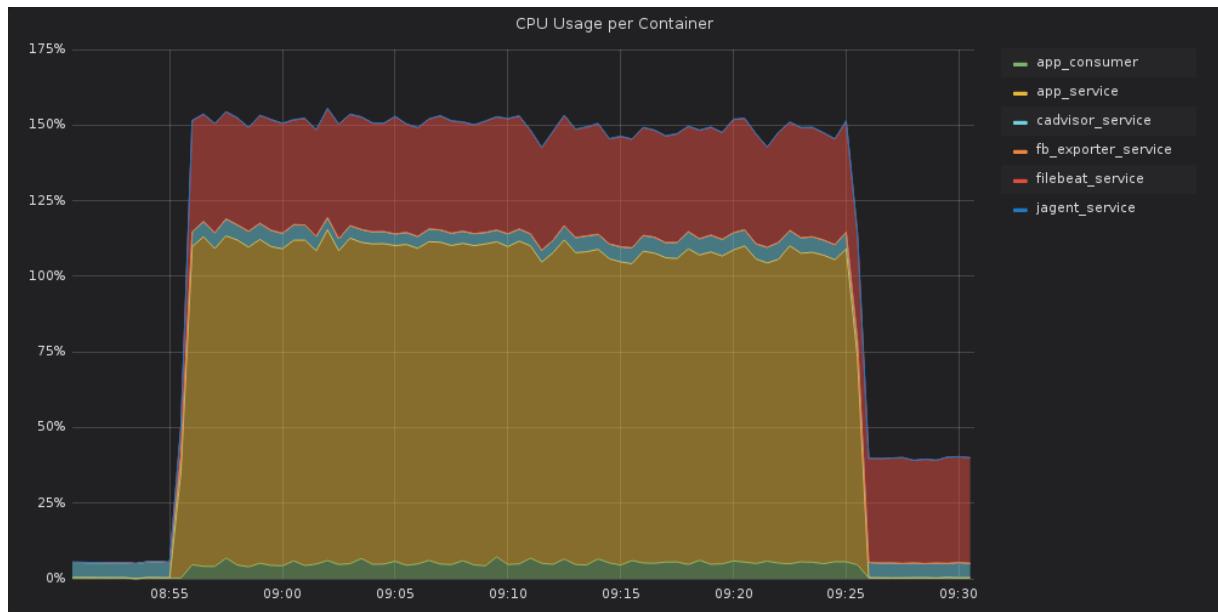
Received Network Traffic per Container



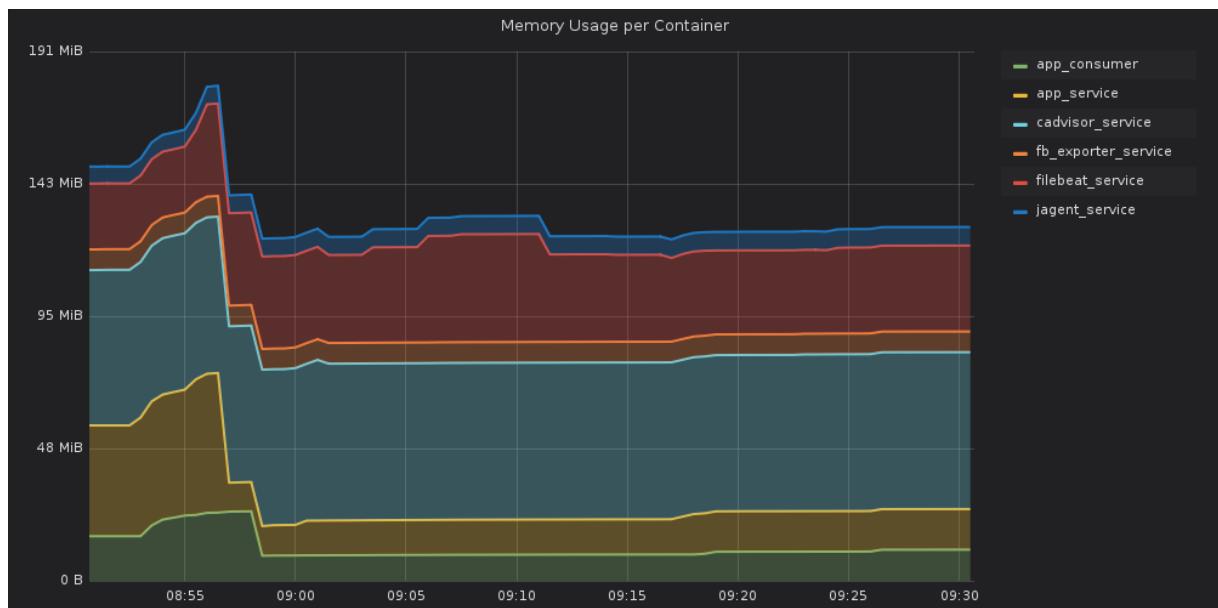
Sent Network Traffic per Container



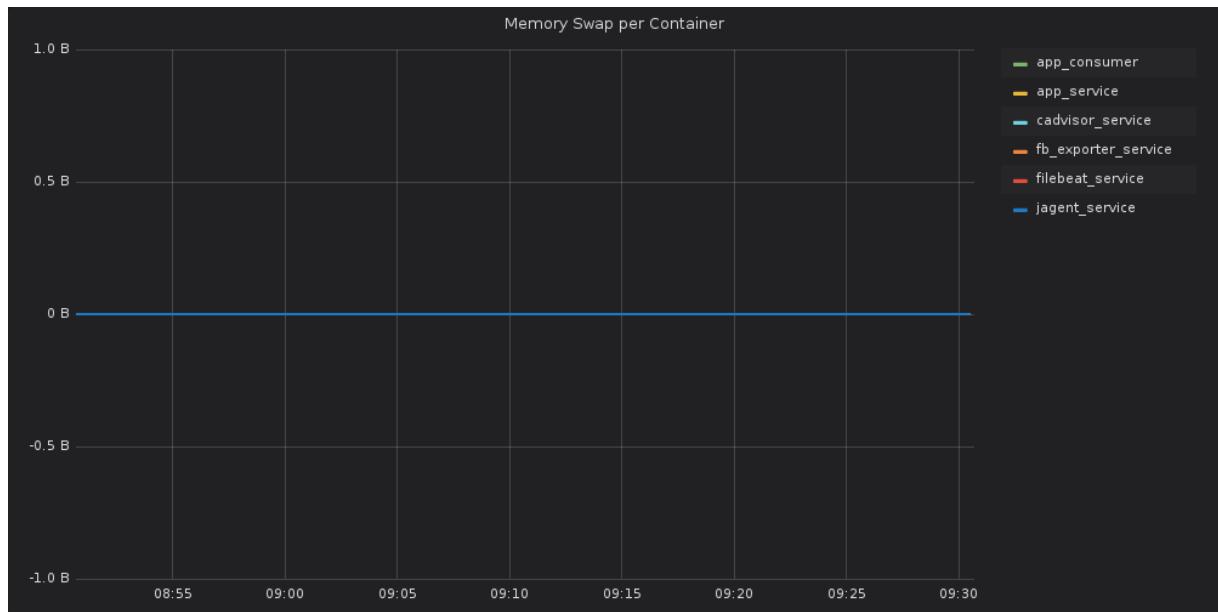
CPU Usage per Container



Memory Usage per Container



Memory Swap per Container



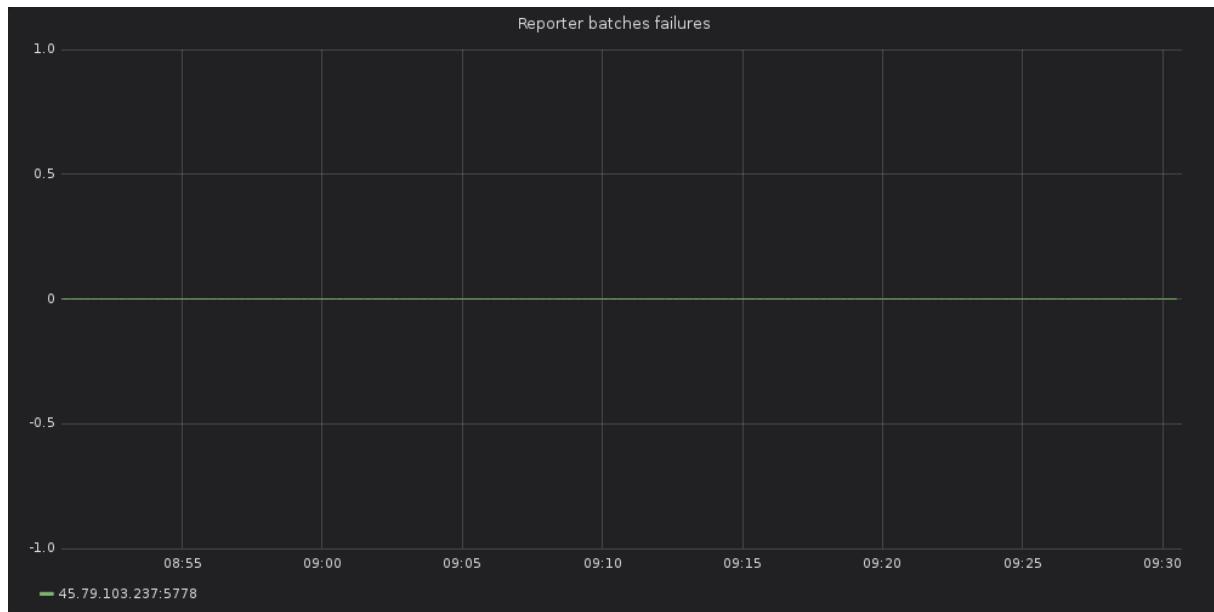
Service: `jagent_service`

- name: `jagent_service`
- type: jaeger_agent

Reporter batches submitted



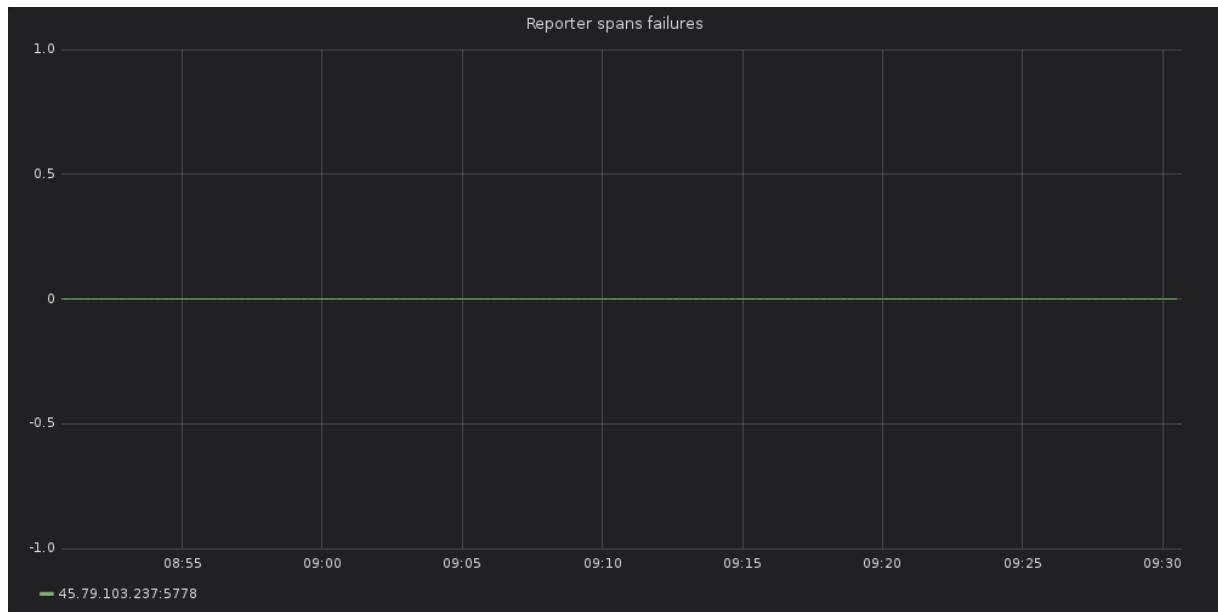
Reporter batches failures



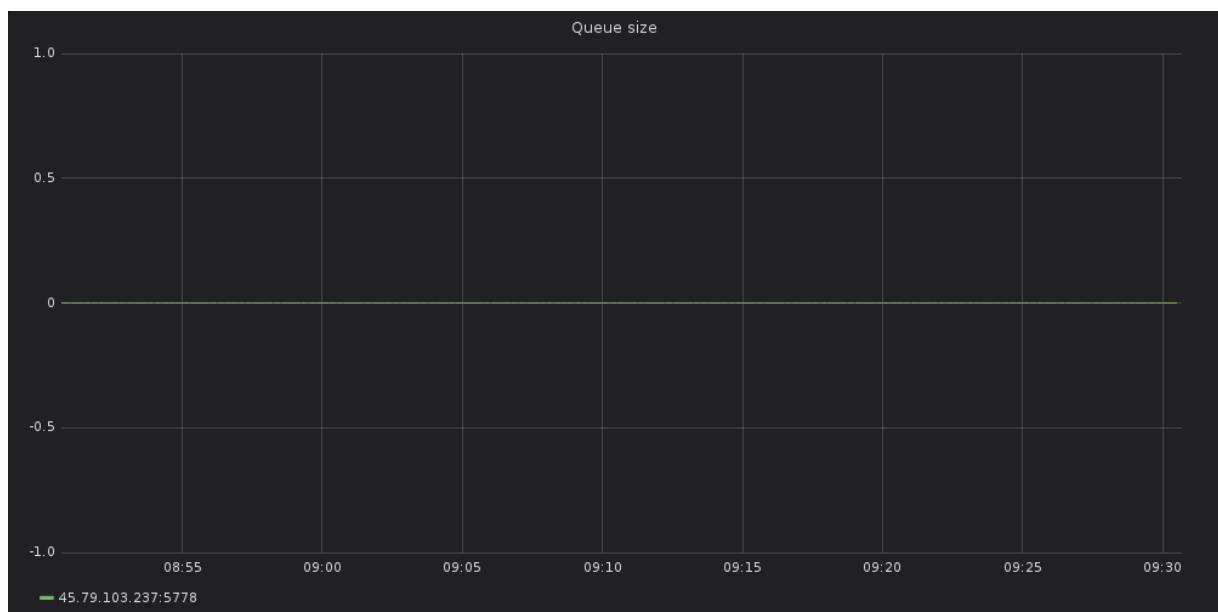
Reporter spans submitted



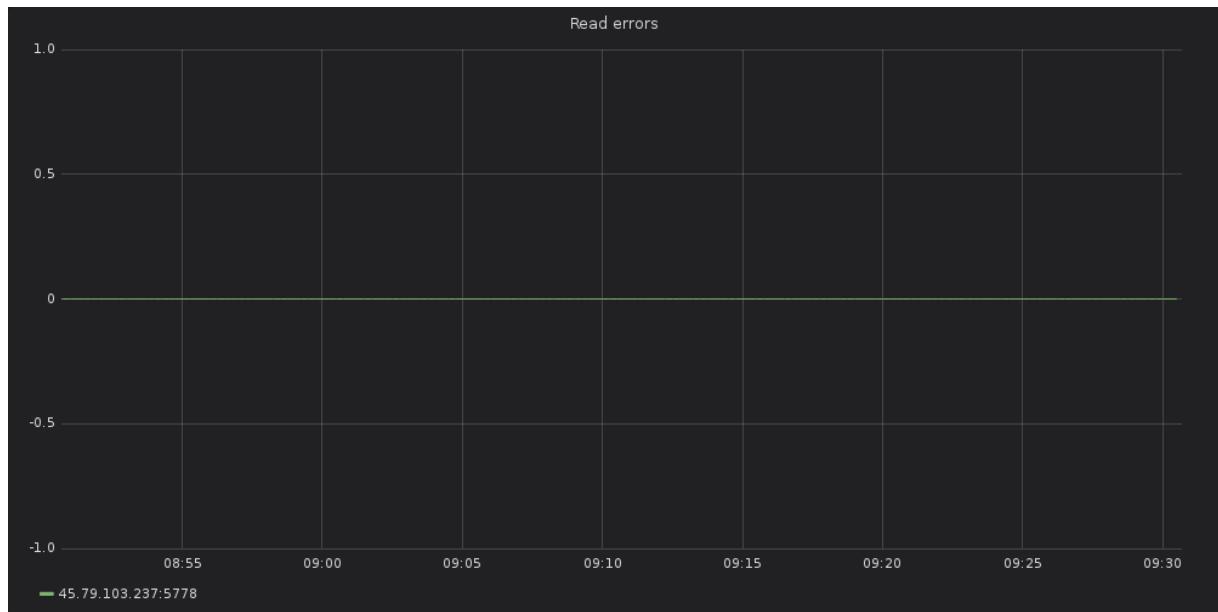
Reporter spans failures



Queue size



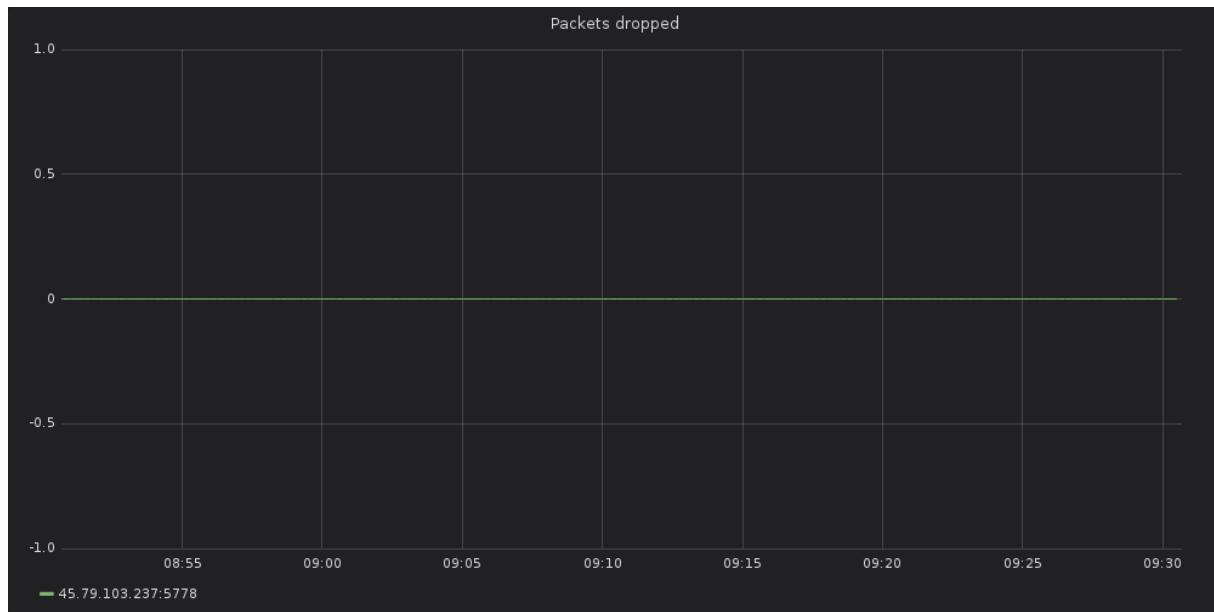
Read errors



Packets processed



Packets dropped



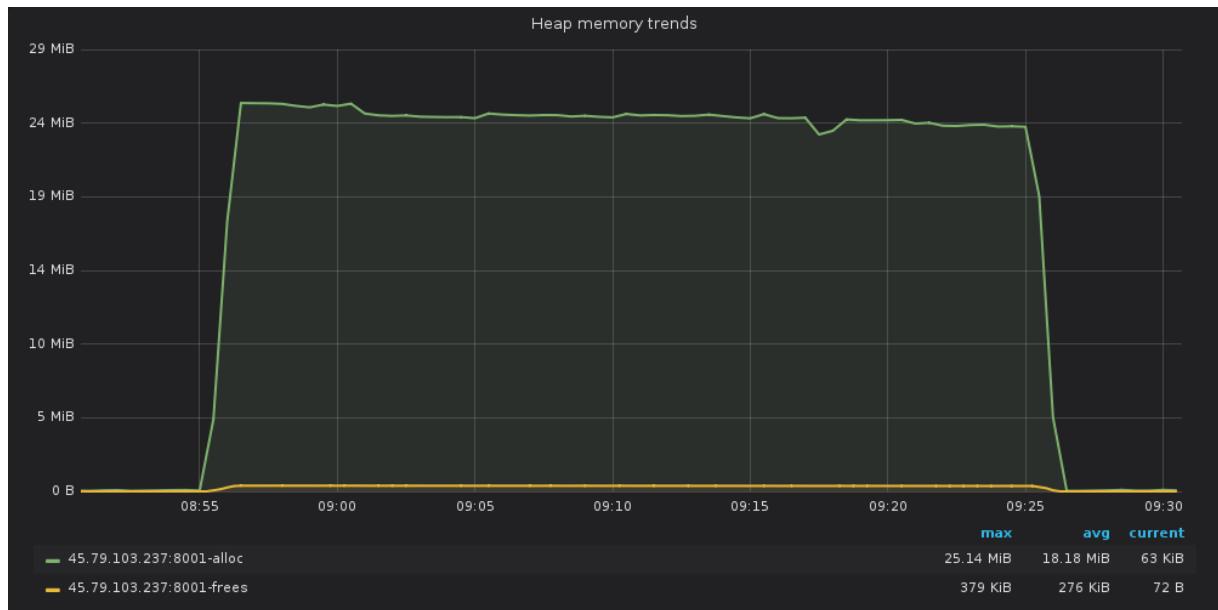
Service: app_service

- name: app_service
- type: app_service

Heap memory



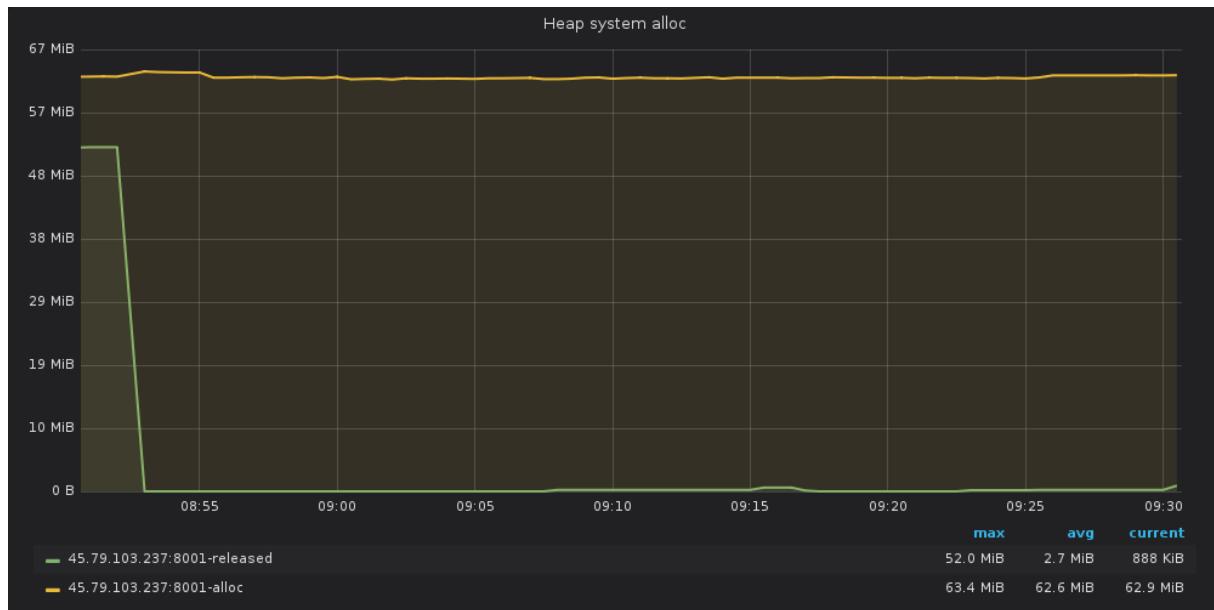
Heap memory trends



Heap objects



Heap system alloc



GC rate



Next gc target



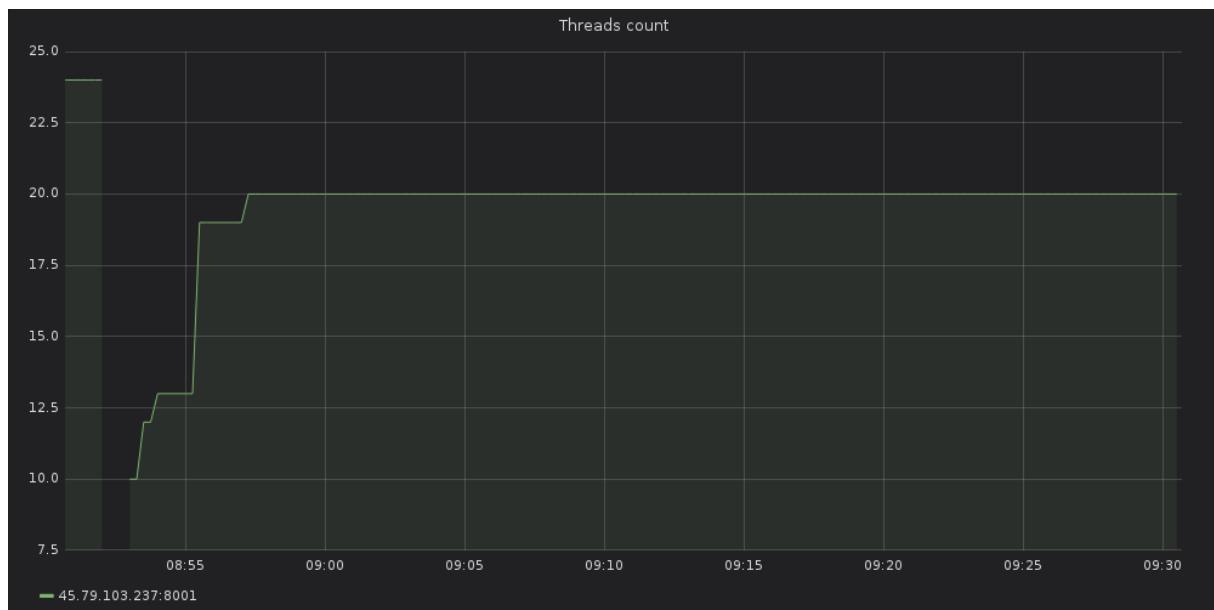
GC duration quantiles



Goroutines count



Threads count



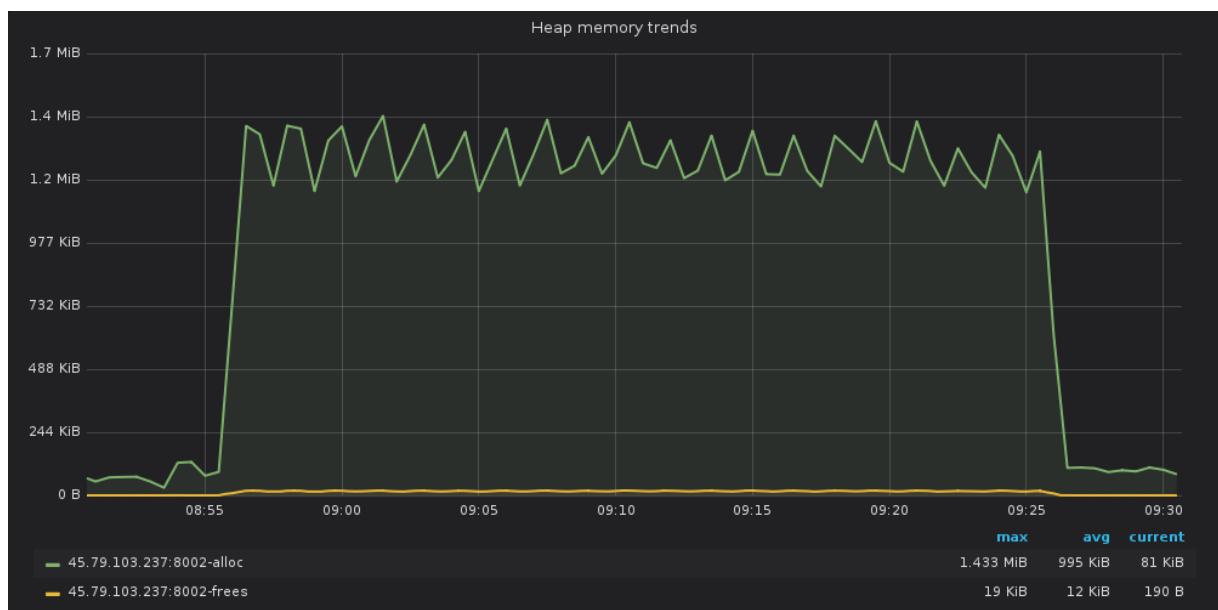
Service: app_consumer

- name: app_consumer
- type: app_consumer

Heap memory



Heap memory trends



Heap objects



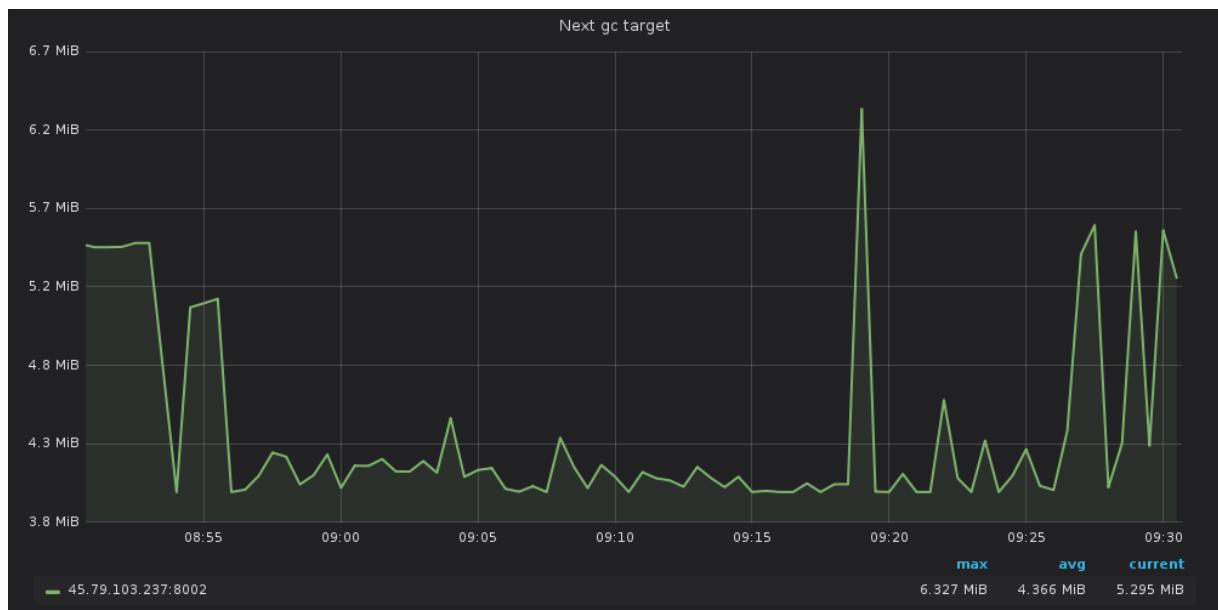
Heap system alloc



GC rate



Next gc target



GC duration quantiles



Goroutines count



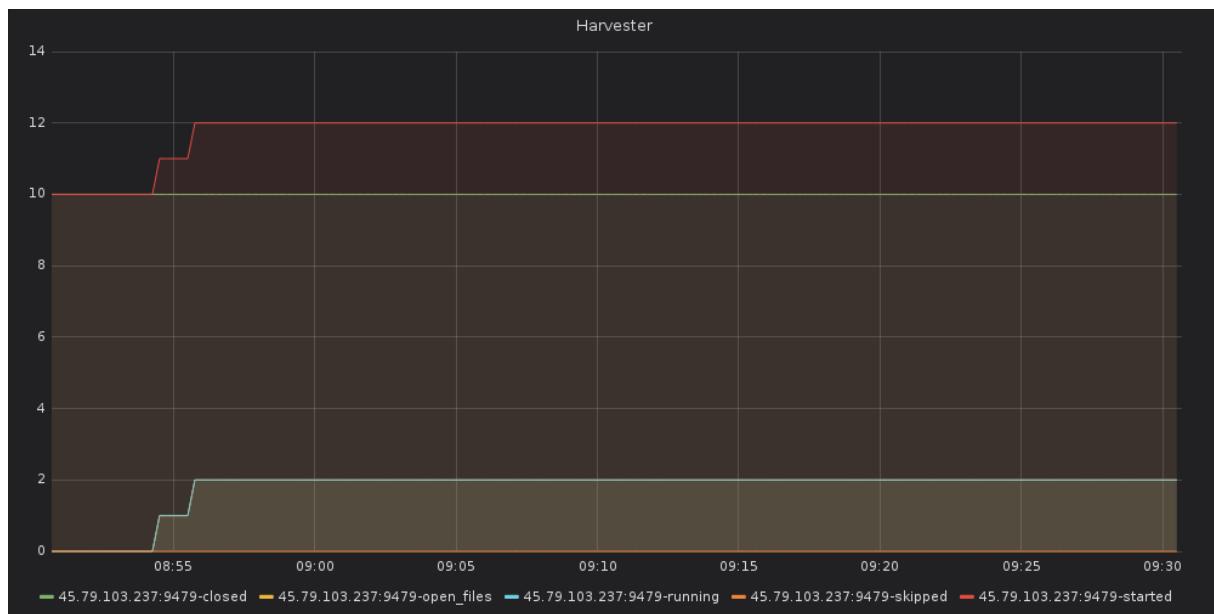
Threads count



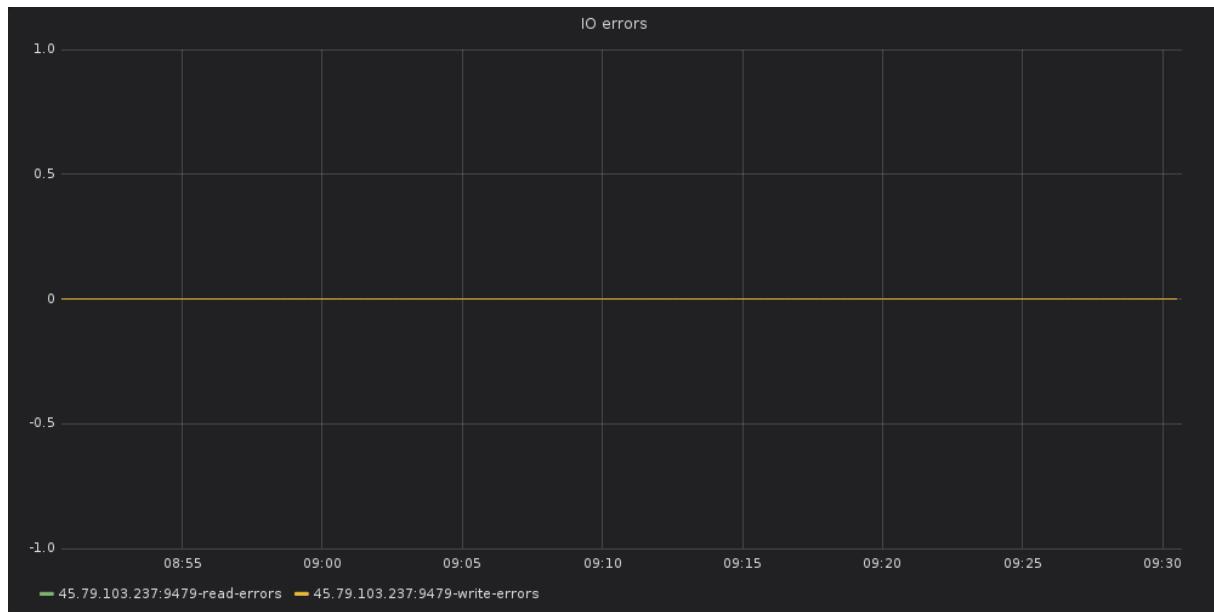
Service: filebeat_service

- name: filebeat_service
- type: filebeat

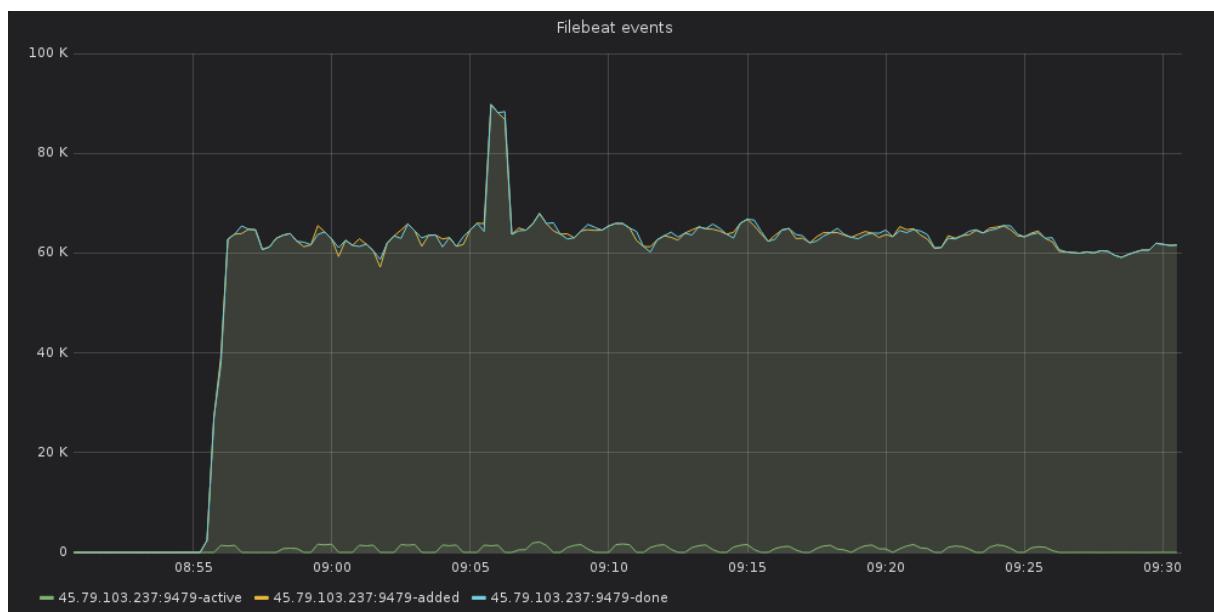
Harvester



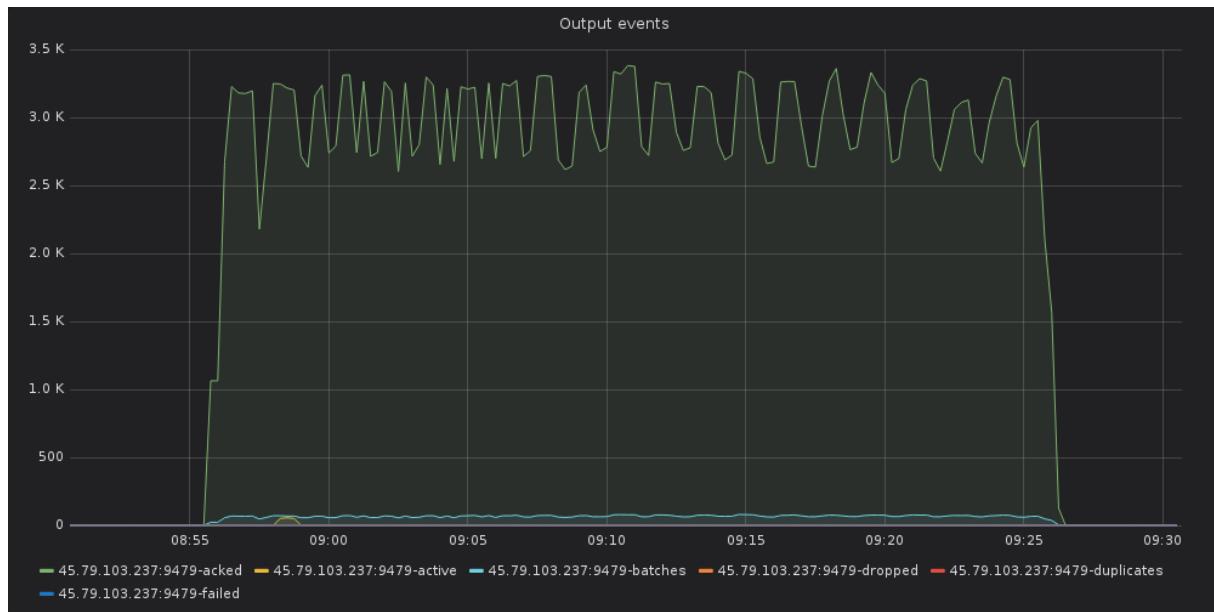
IO errors



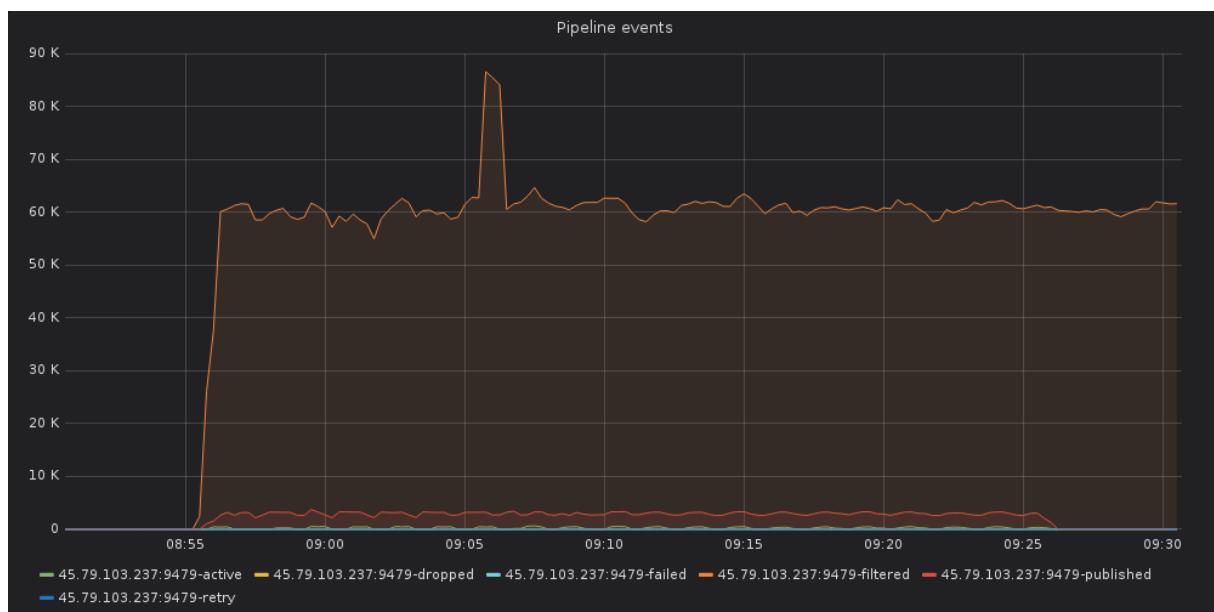
Filebeat events



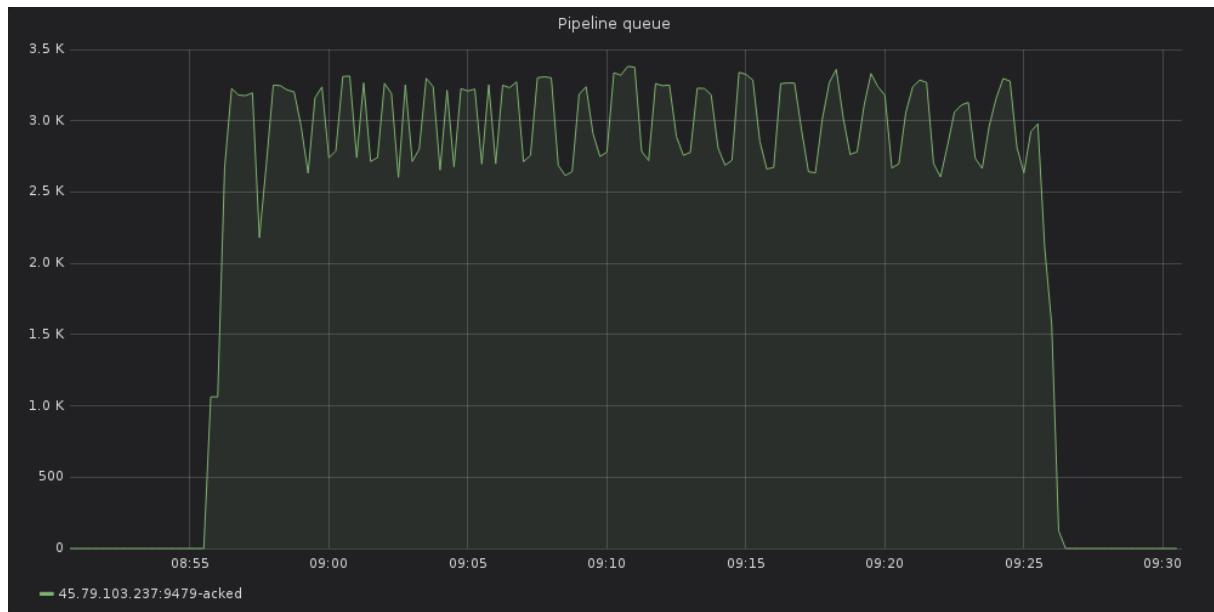
Output events



Pipeline events



Pipeline queue



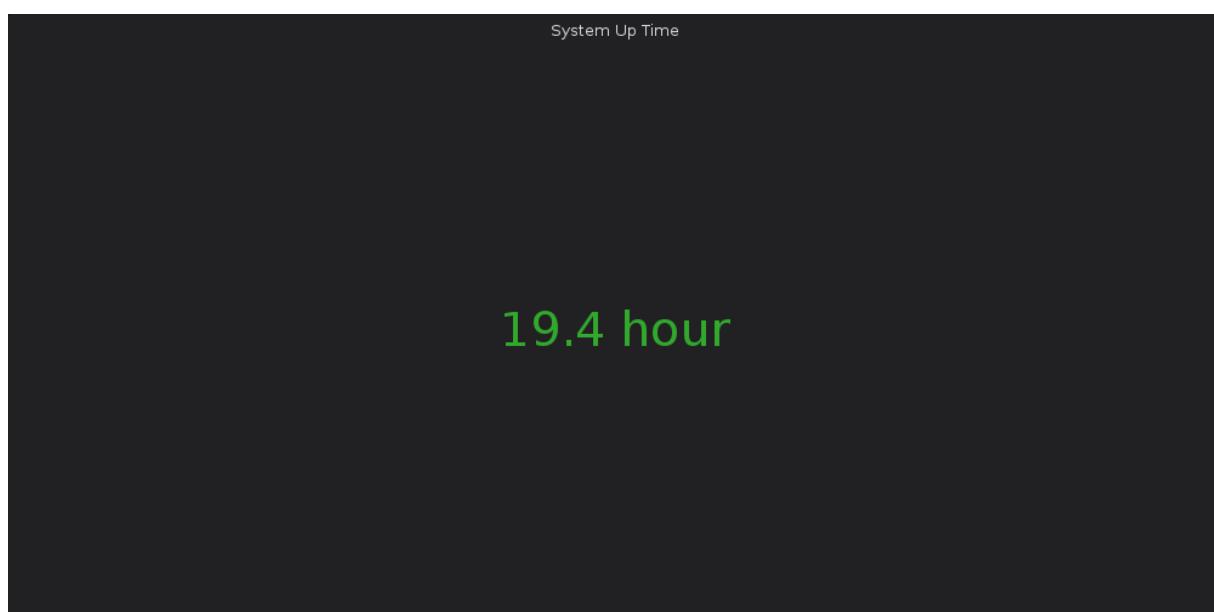
Host: web

- name: web
- type: web

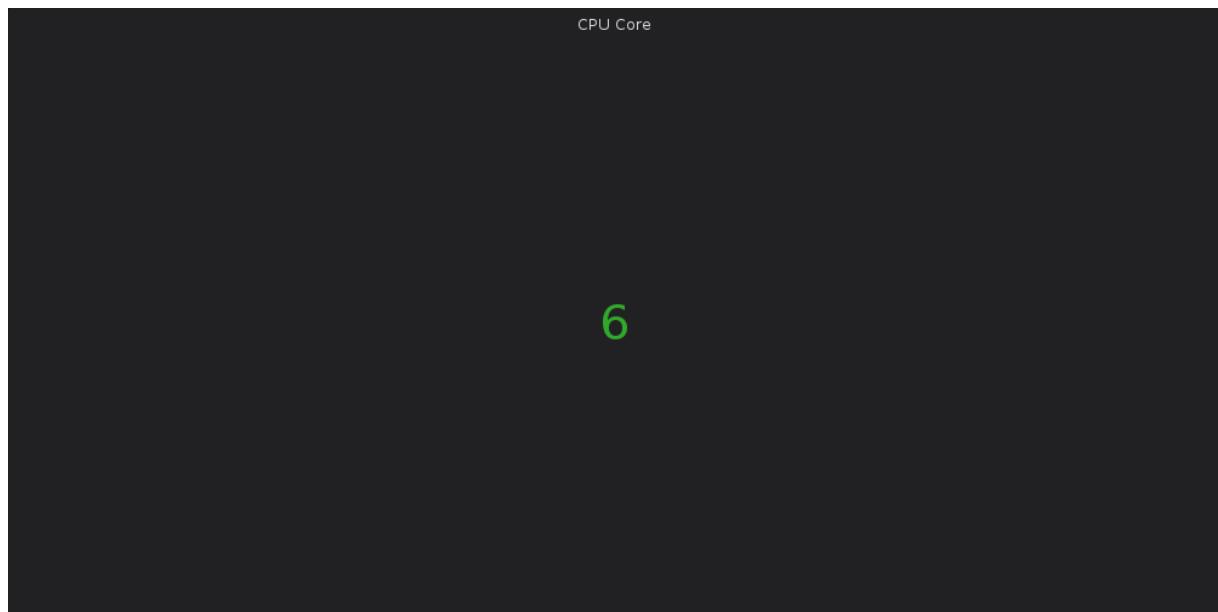
Service: node_web

- name: node_web
- type: node_exporter

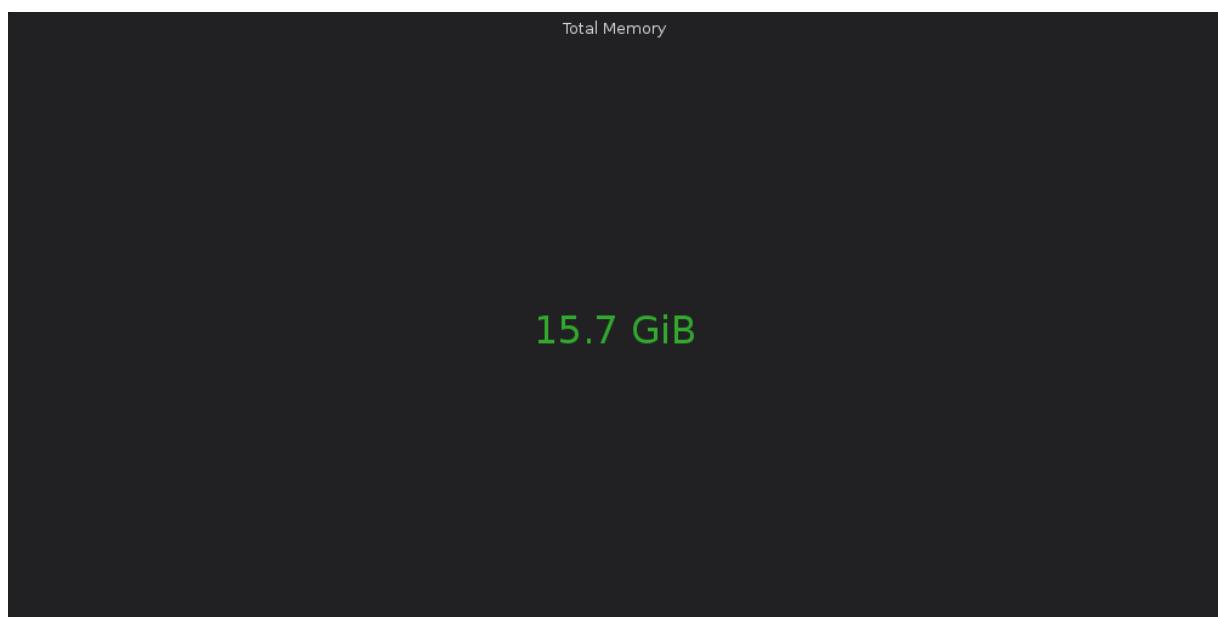
系统运行时间



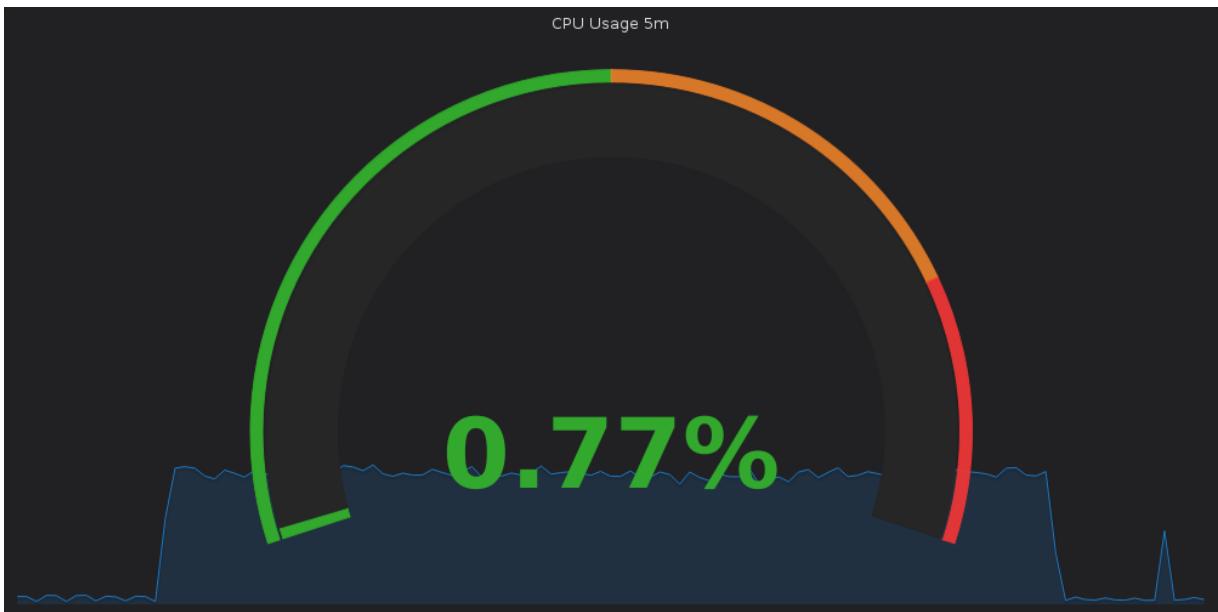
CPU 核数



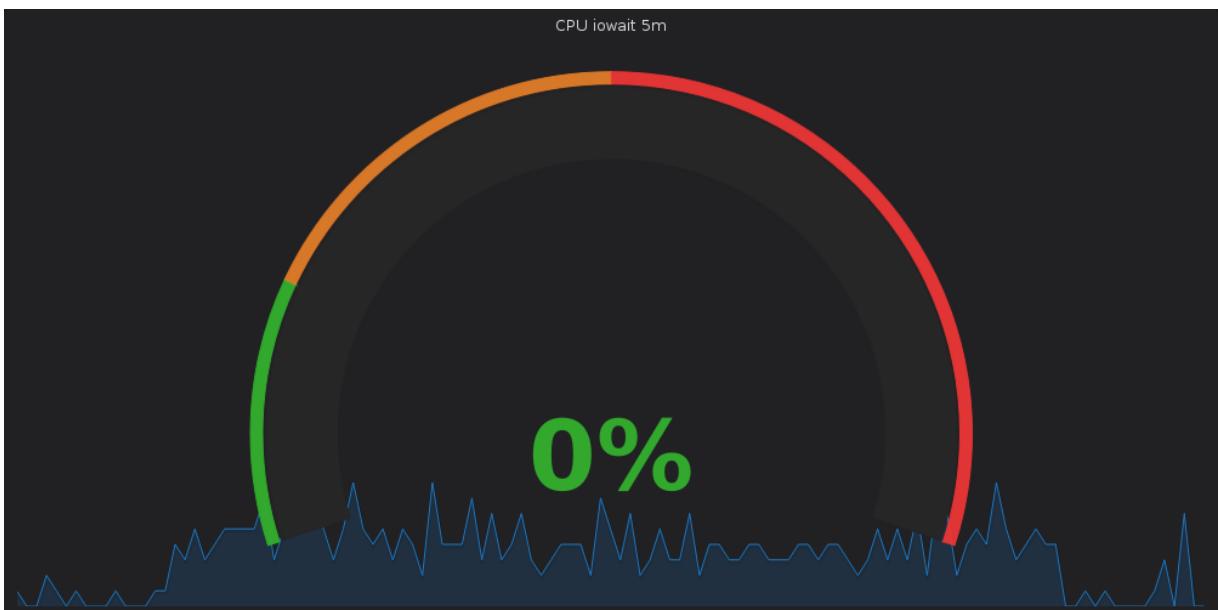
内存总量



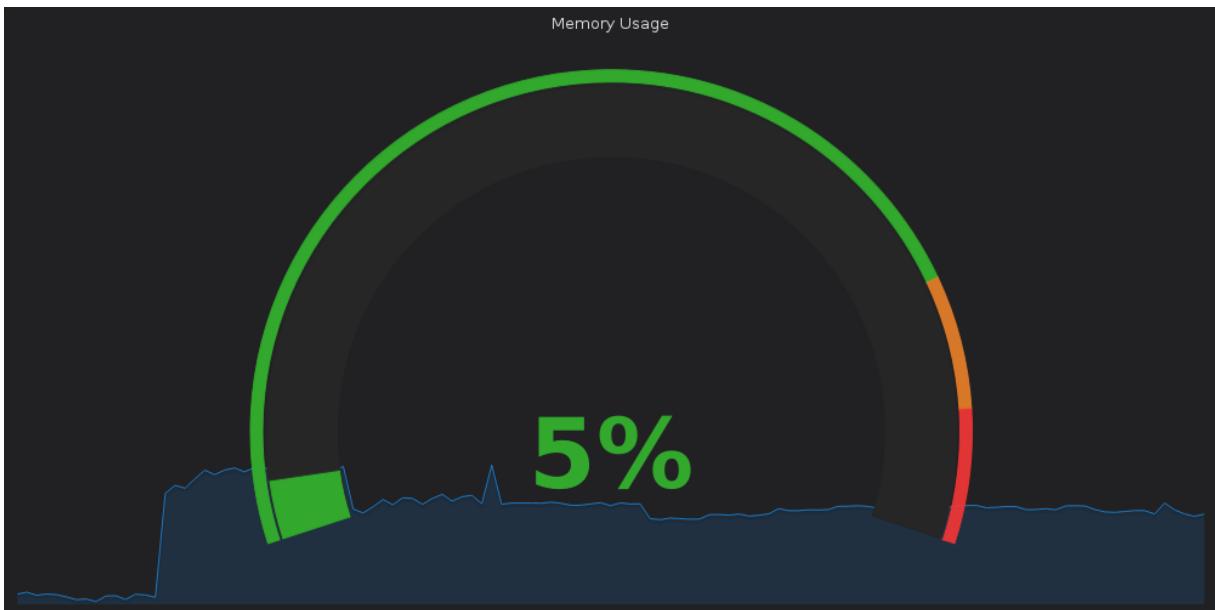
CPU使用率 (5m)



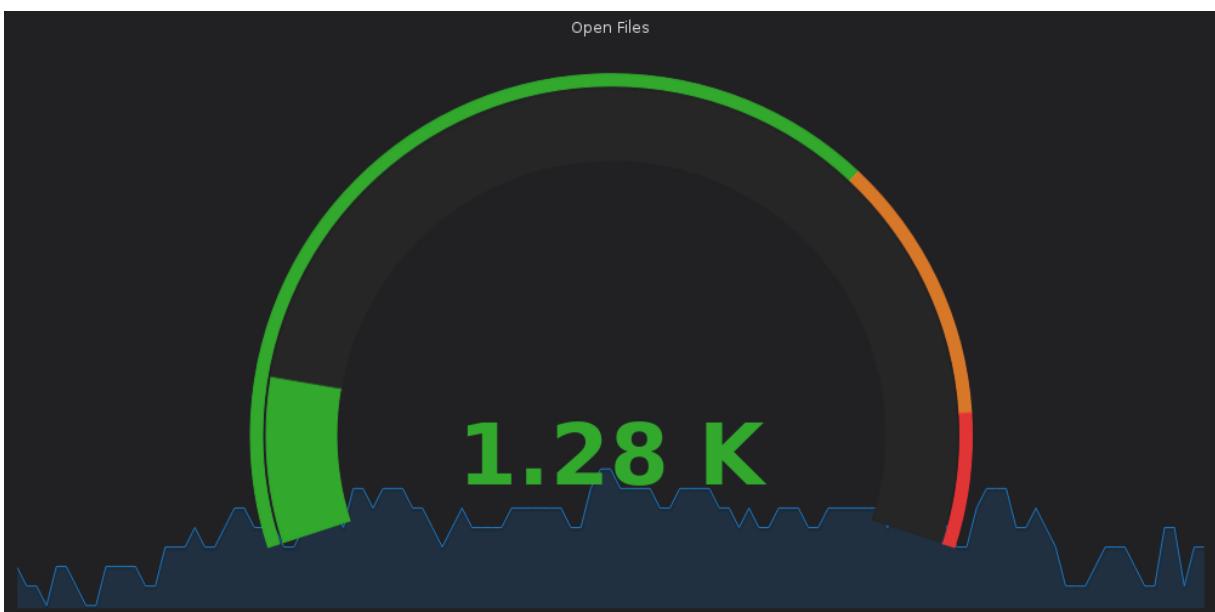
CPU iowait (5m)



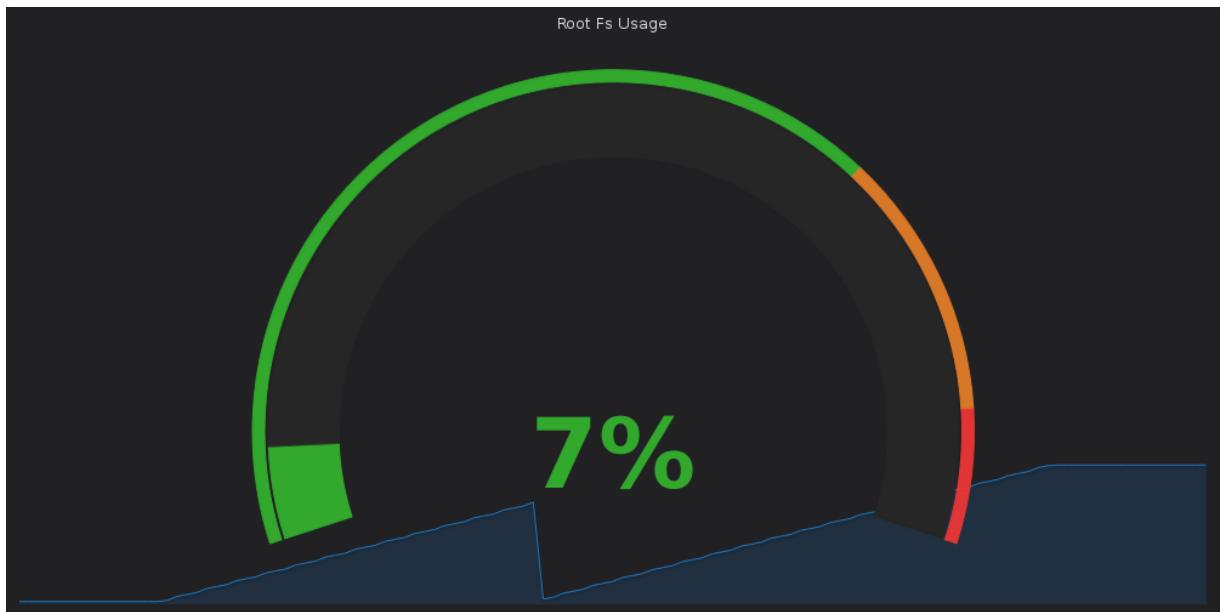
内存使用率



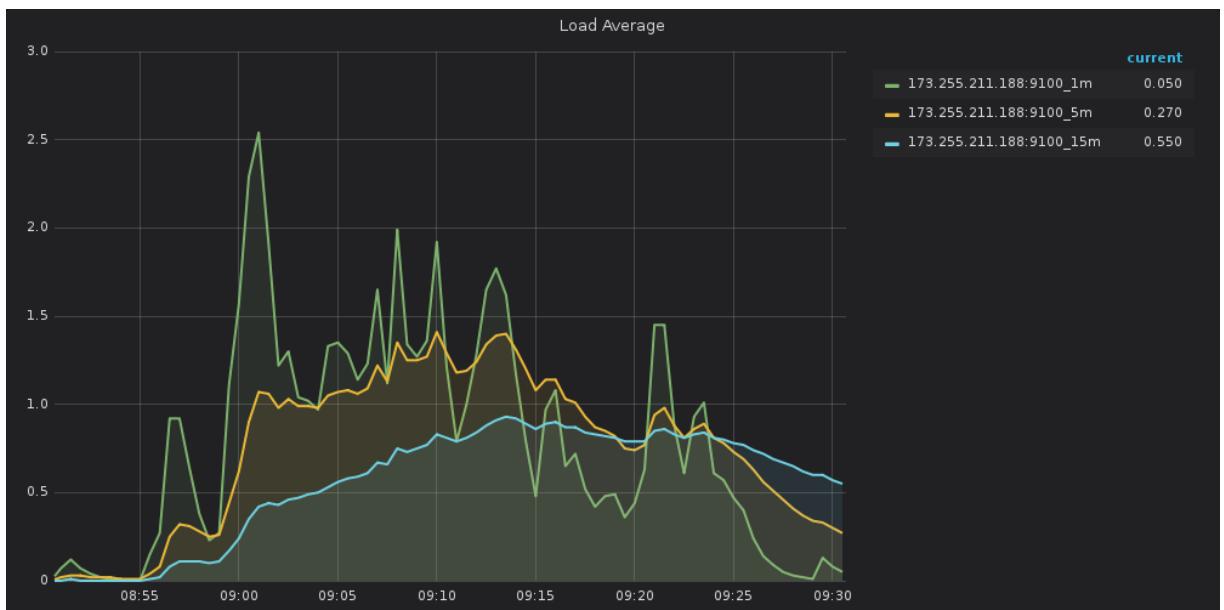
当前打开的文件描述符



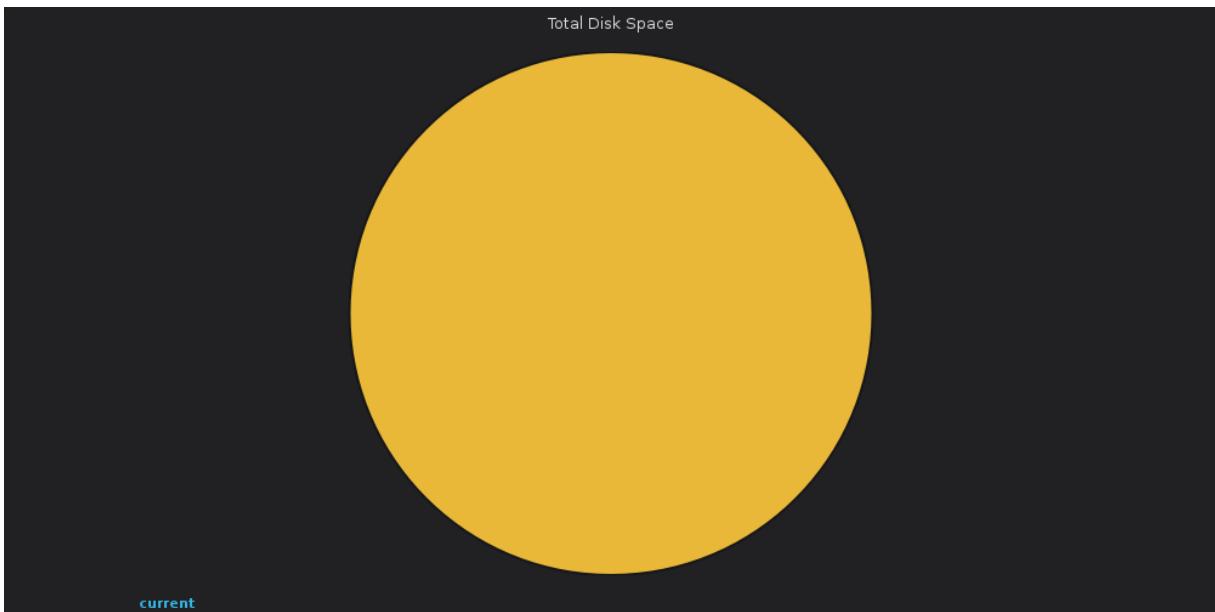
根分区使用率



系统平均负载



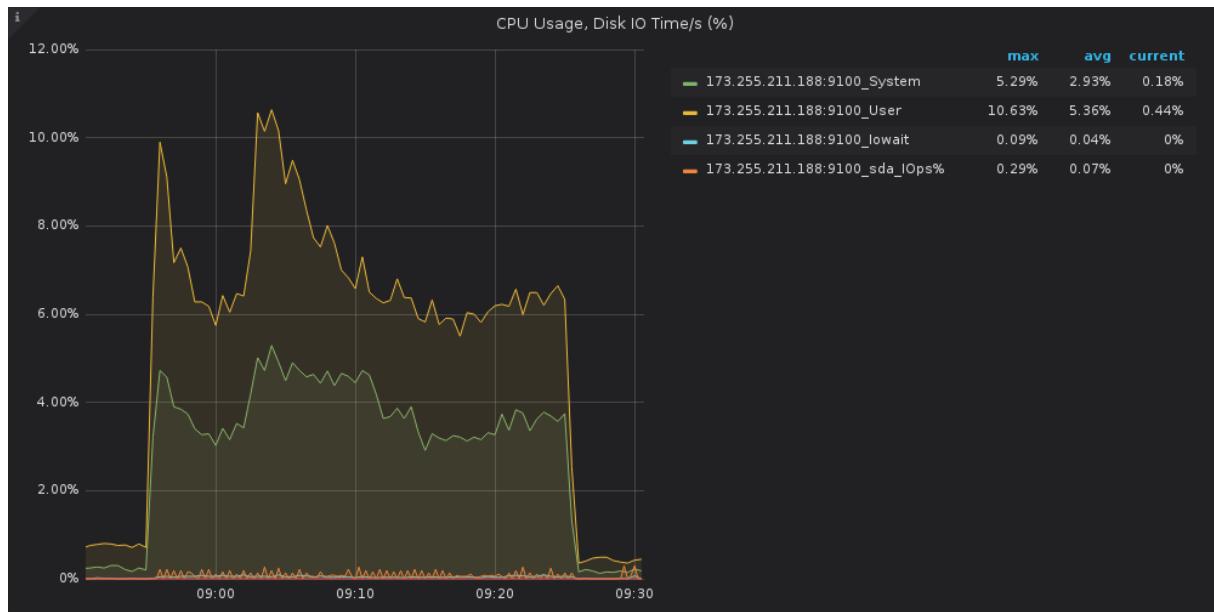
磁盘总空间



各分区可用空间

Volumes Available					
File System	IP	Mount ▲	Available	Usage	
ext4	173.255.211.188:9100	/	292.22 GiB	2.01%	

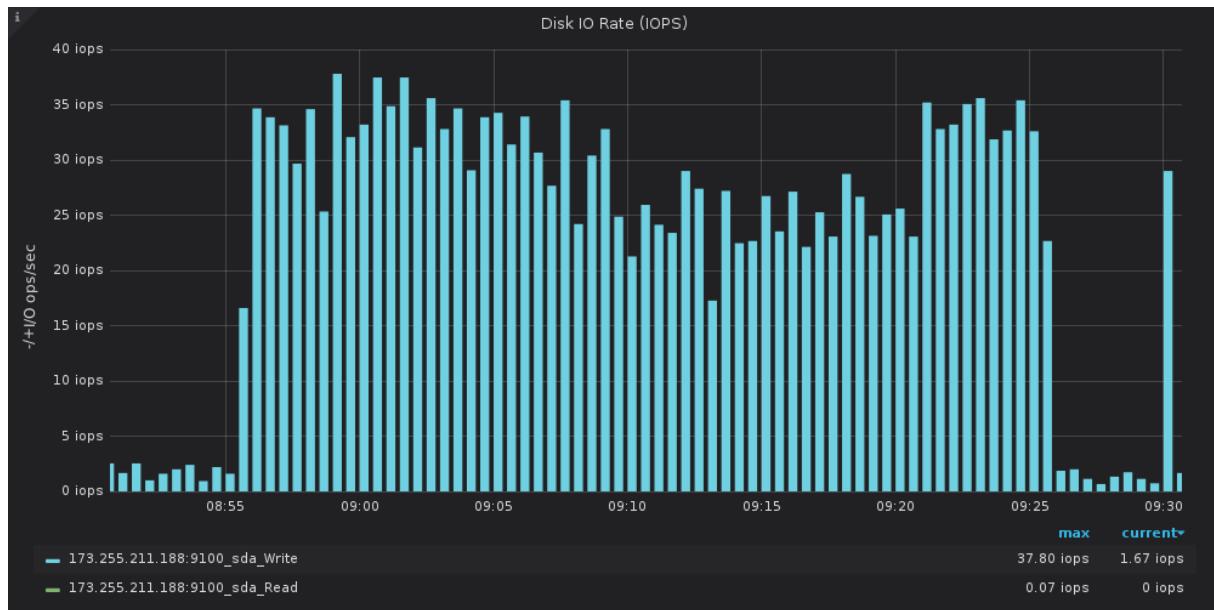
CPU使用率、磁盘每秒的I/O操作耗费时间 (%)



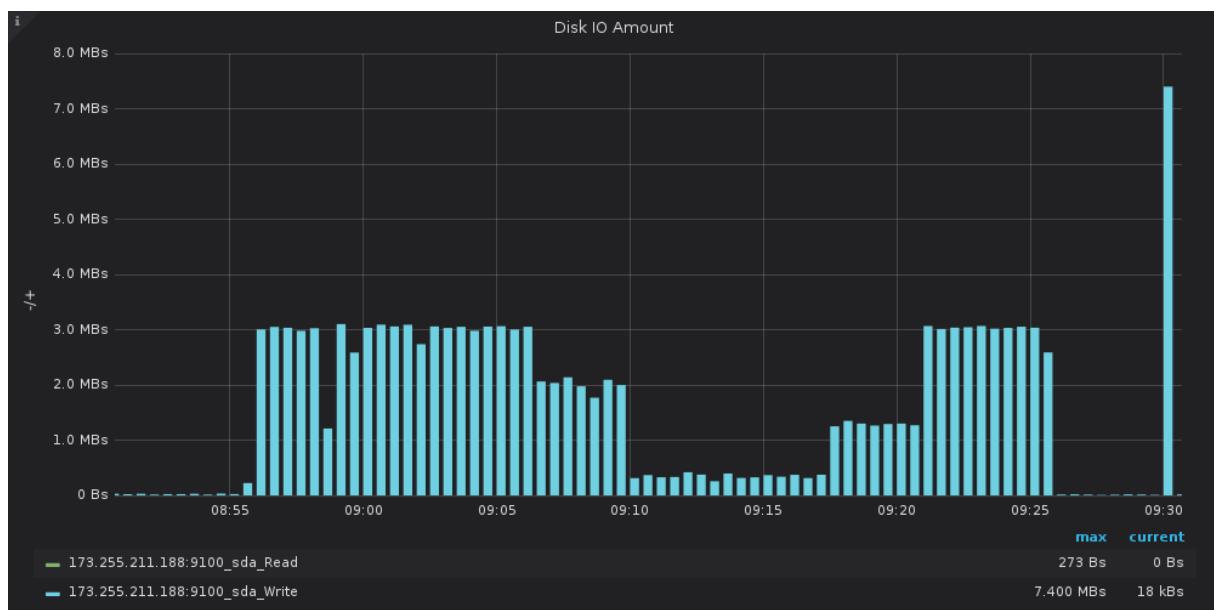
内存信息



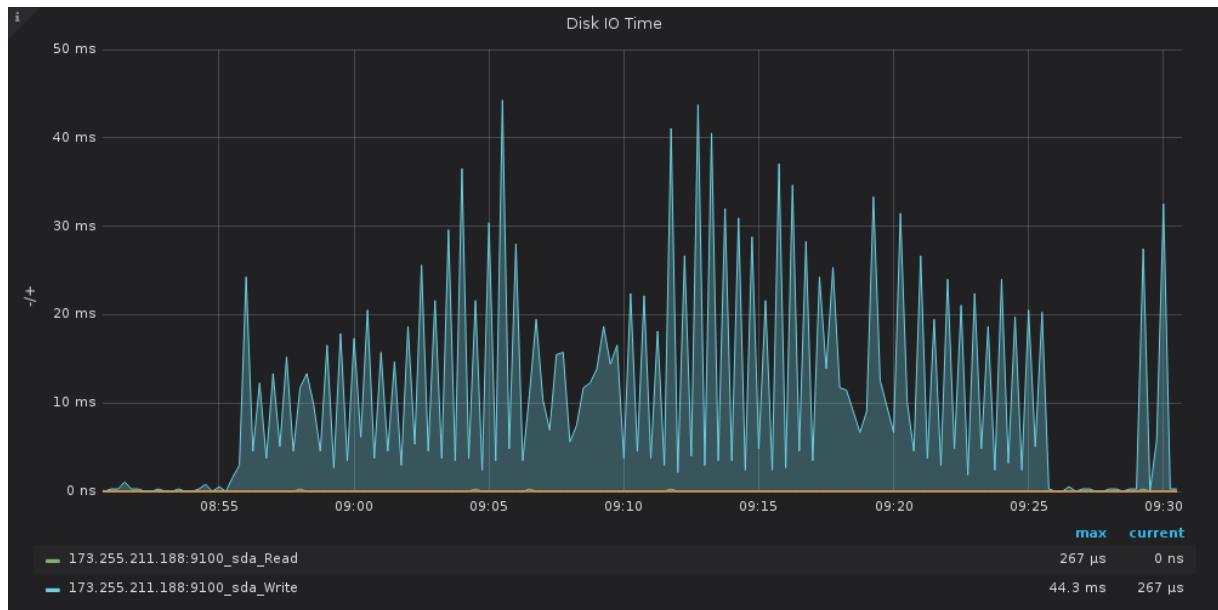
磁盘读写速率 (IOPS)



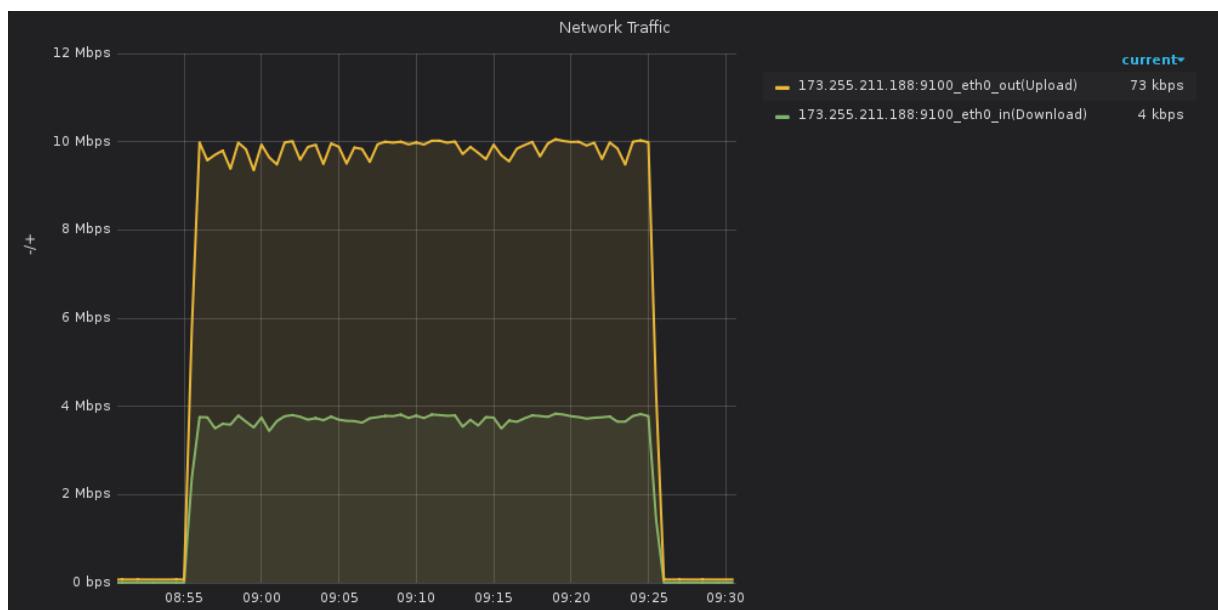
磁盘读写容量大小



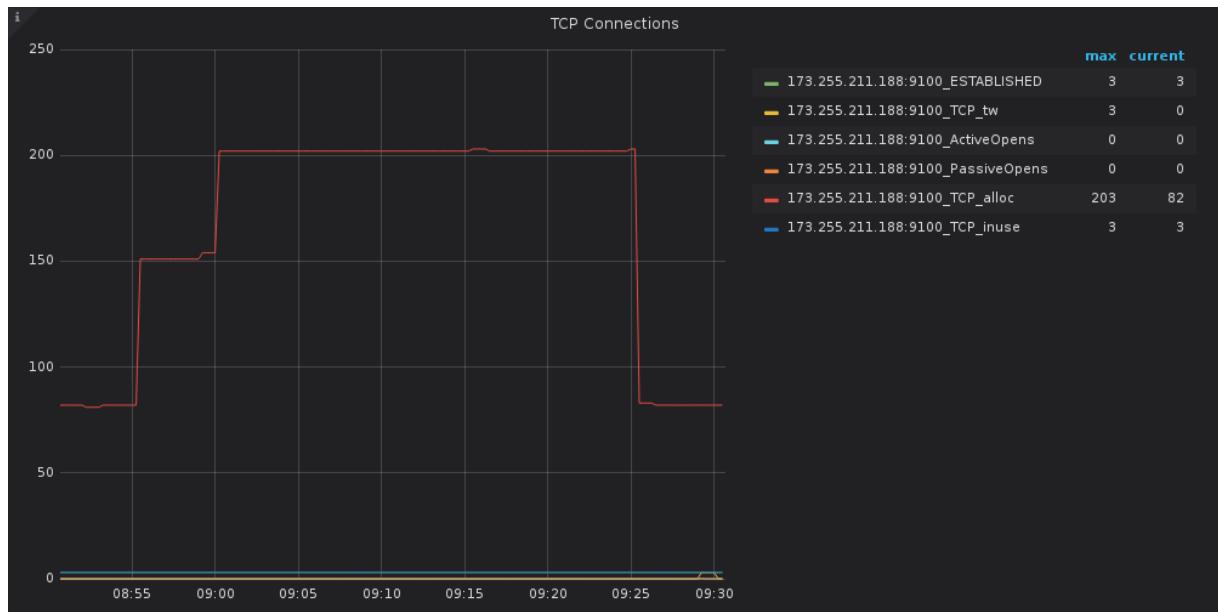
磁盘IO读写时间



网络流量



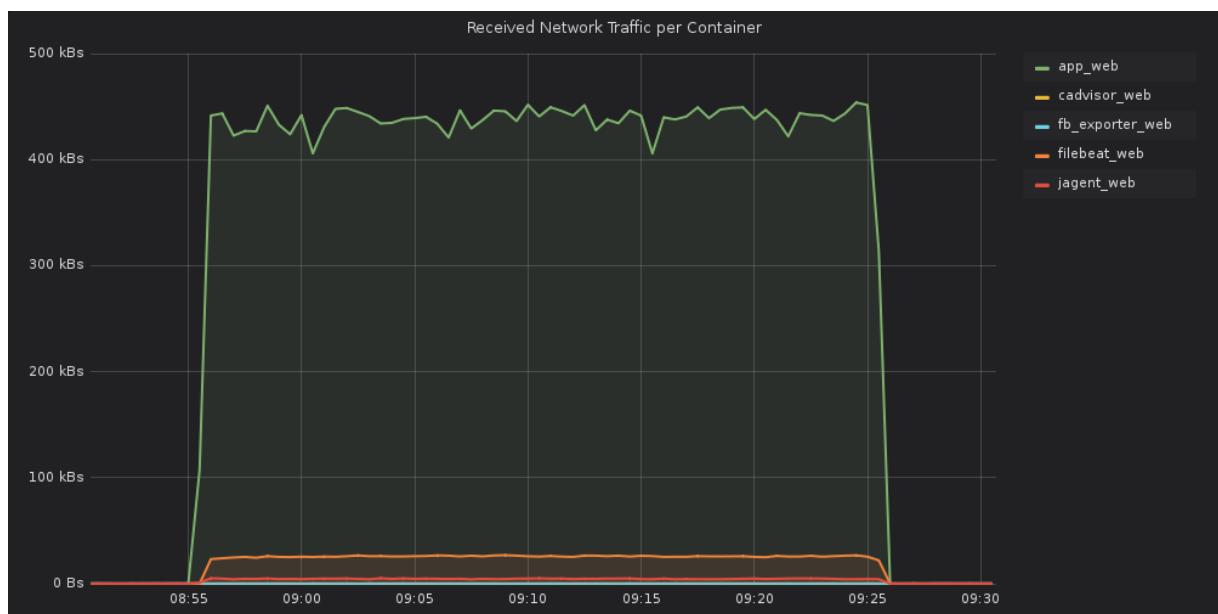
TCP 连接情况



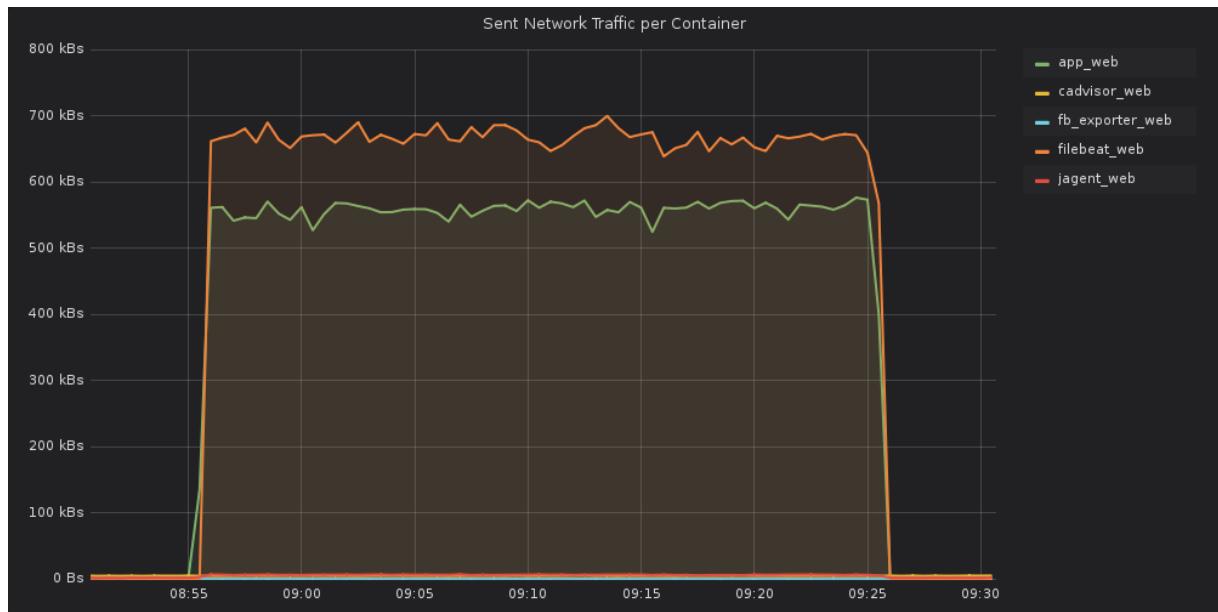
Service: cAdvisor_web

- name: cadvisor_web
- type: cAdvisor

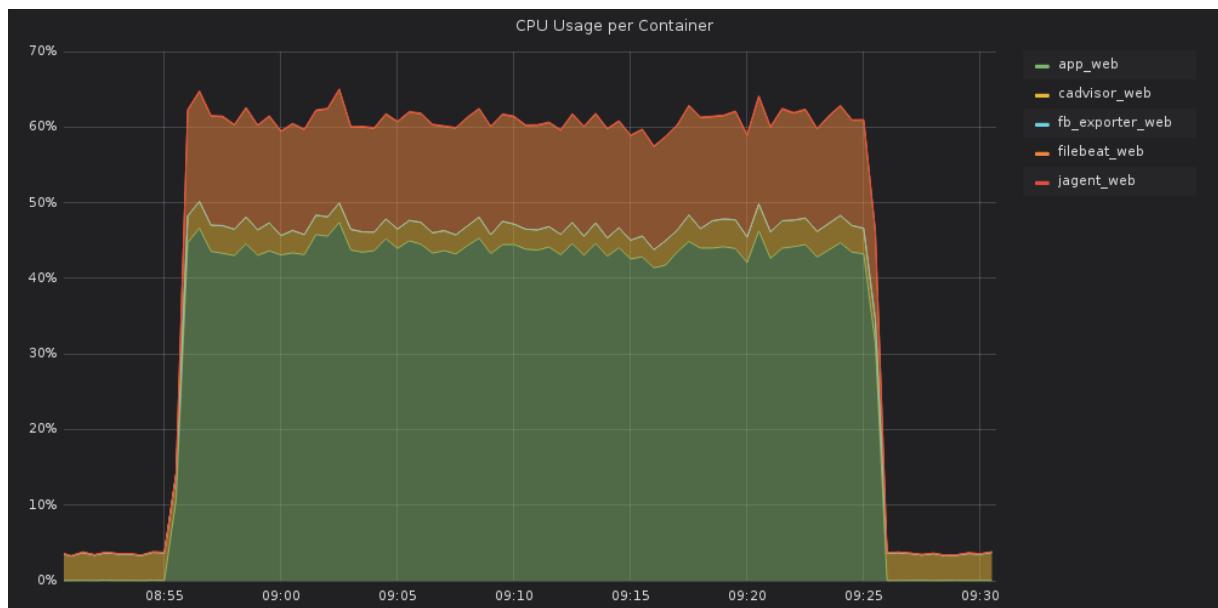
Received Network Traffic per Container



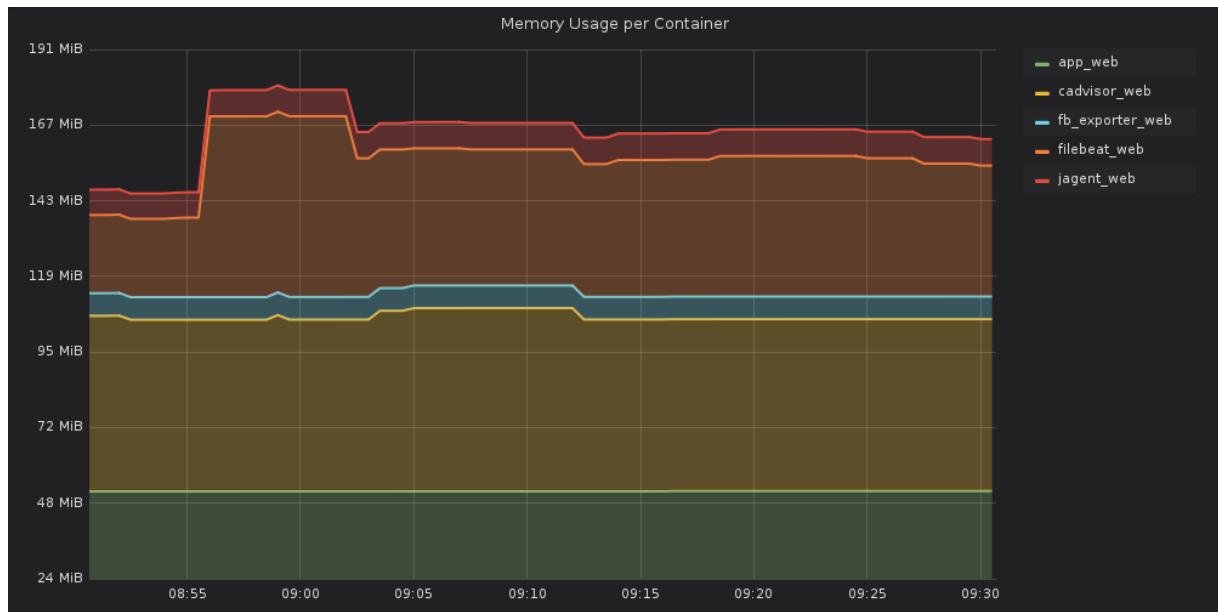
Sent Network Traffic per Container



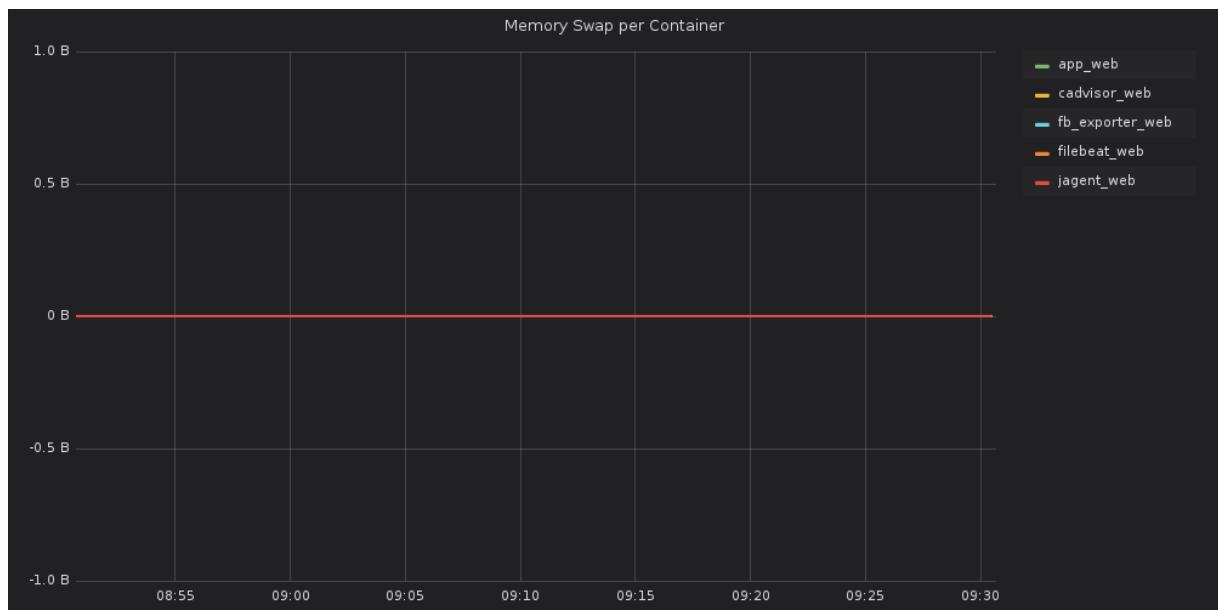
CPU Usage per Container



Memory Usage per Container



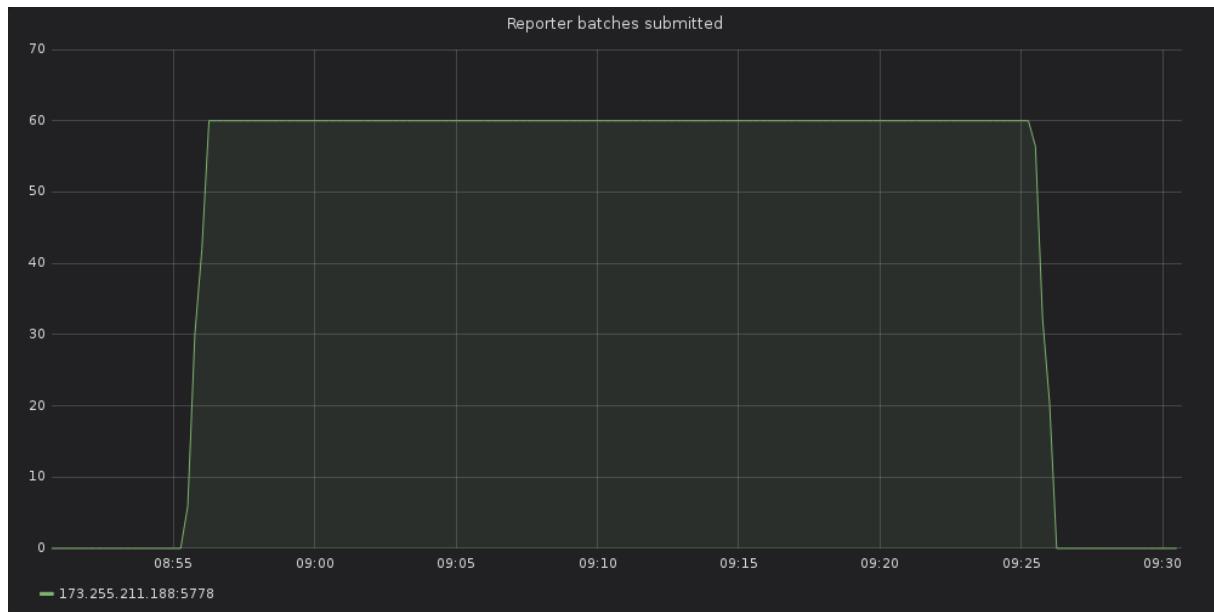
Memory Swap per Container



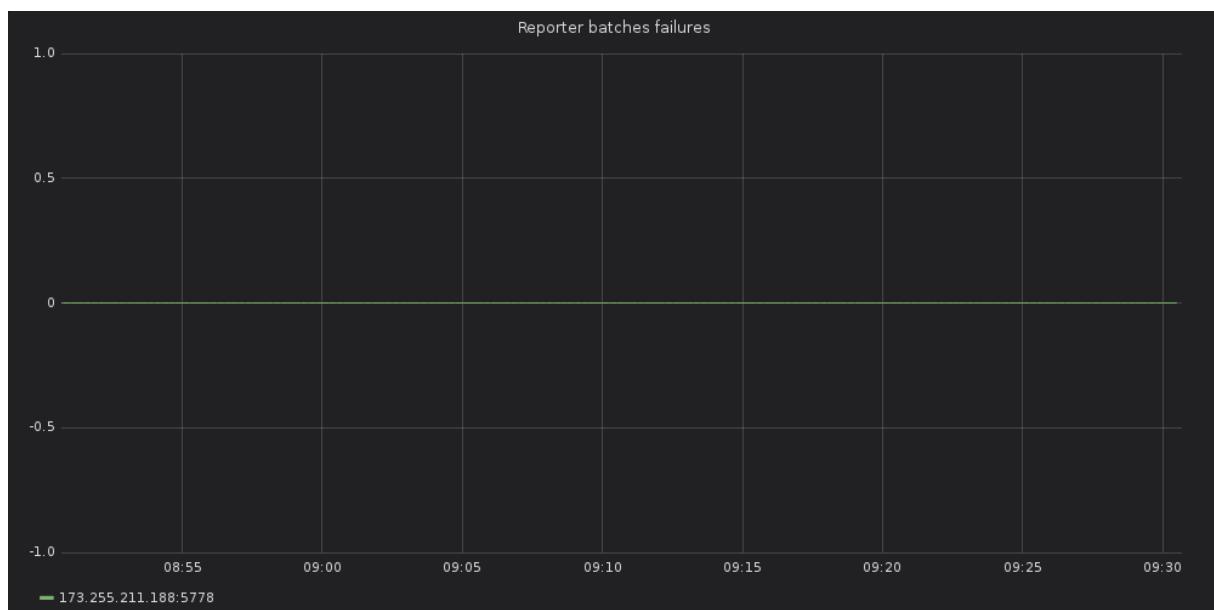
Service: jagent_web

- name: jagent_web
- type: jaeger_agent

Reporter batches submitted



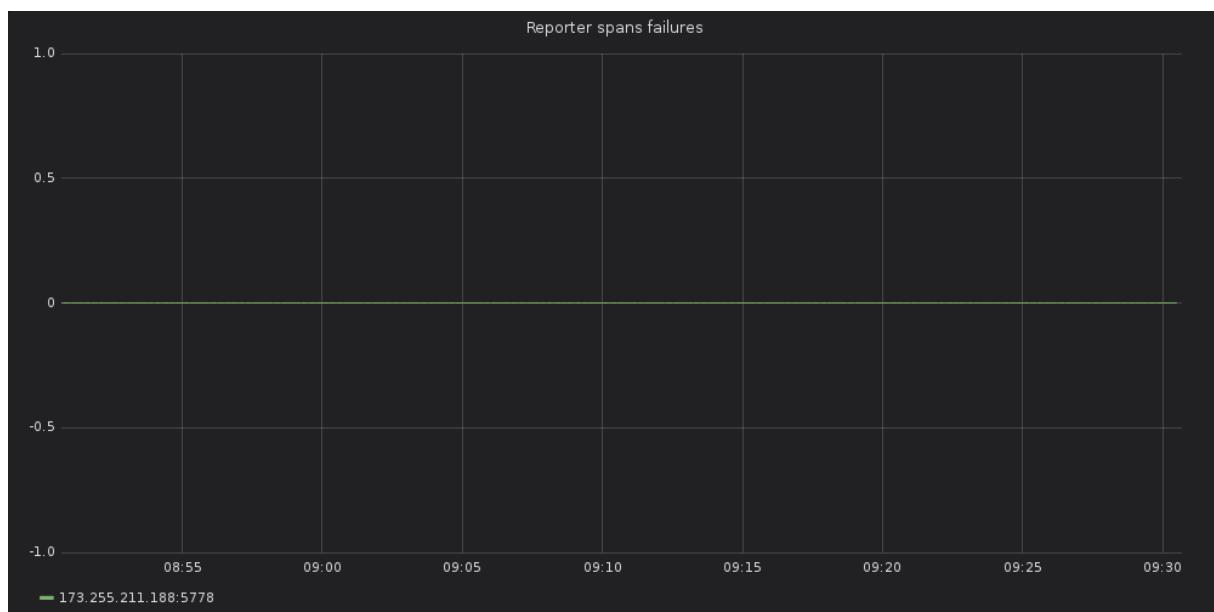
Reporter batches failures



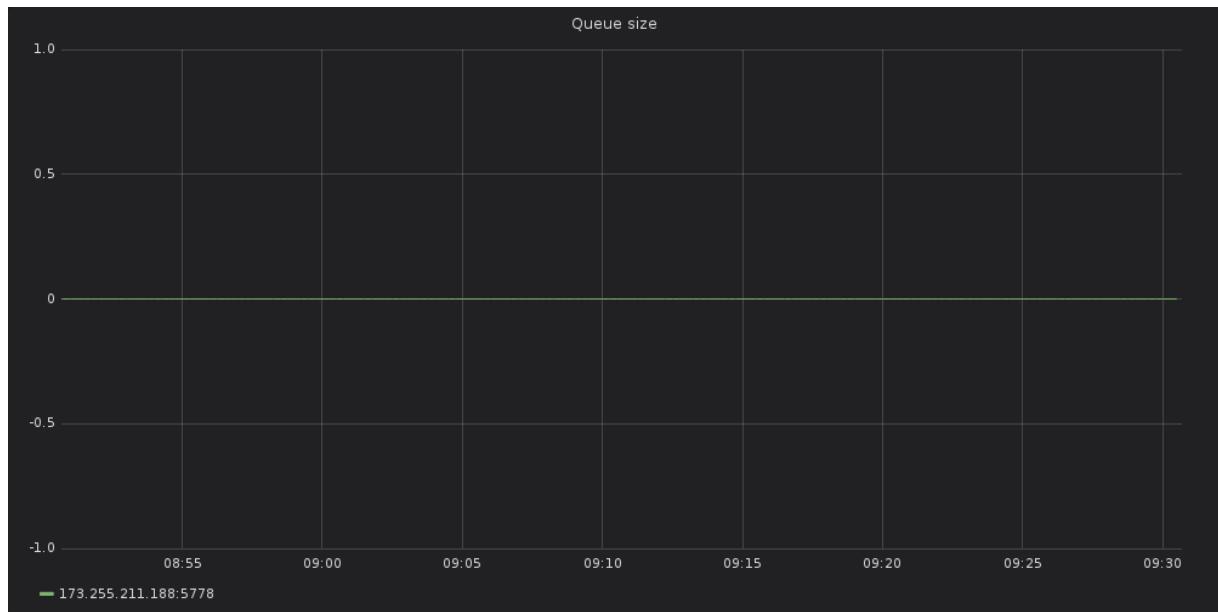
Reporter spans submitted



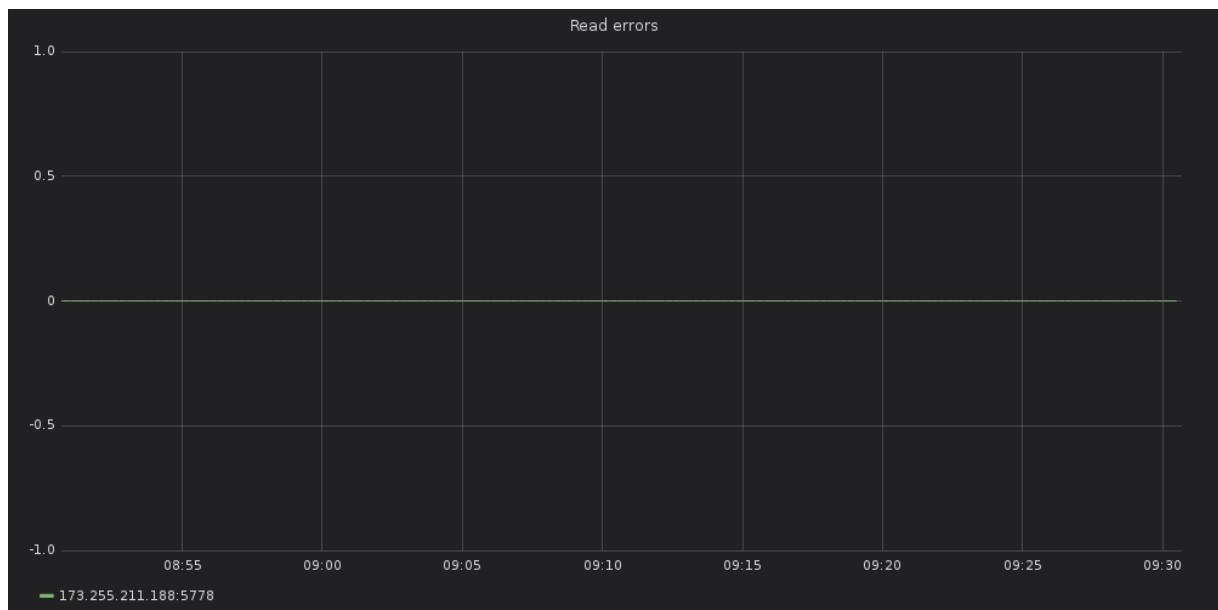
Reporter spans failures



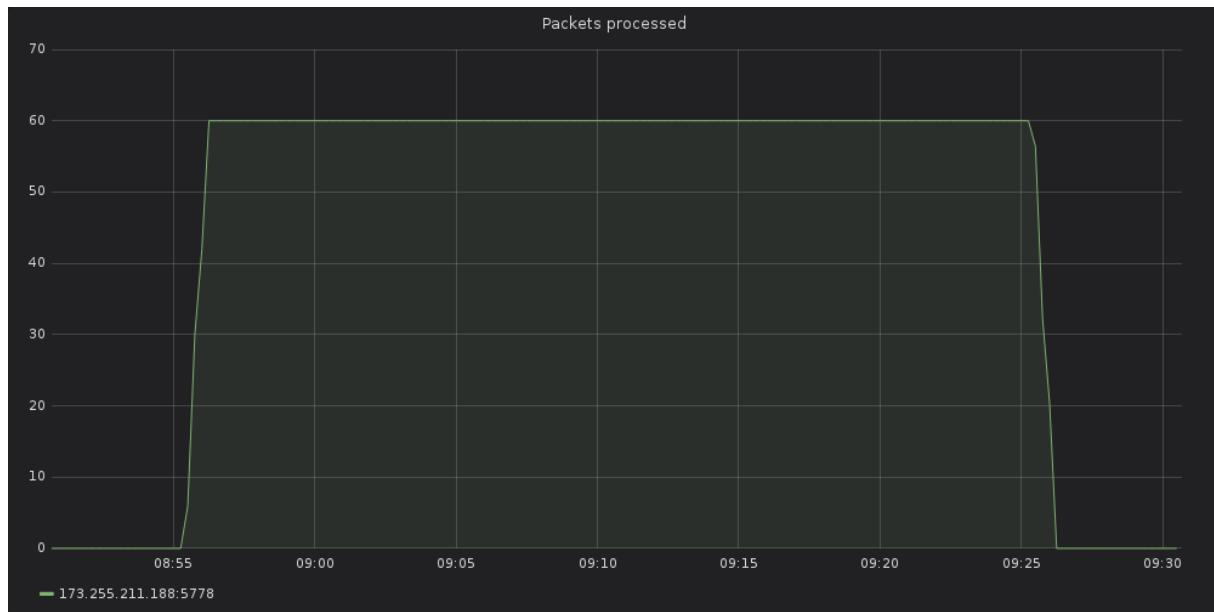
Queue size



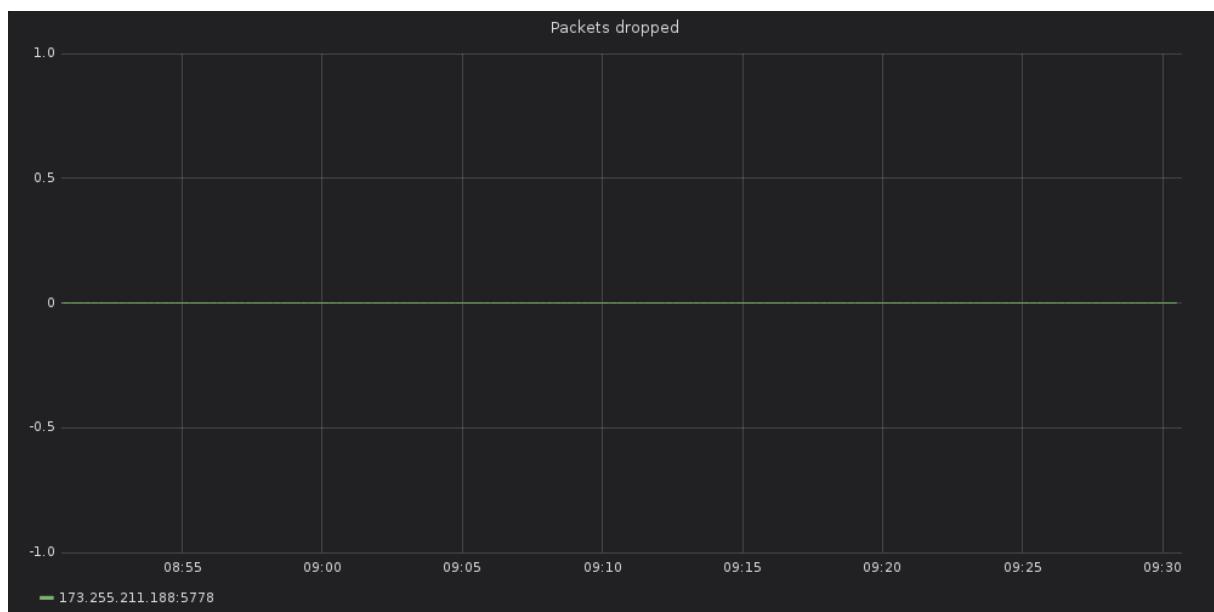
Read errors



Packets processed



Packets dropped



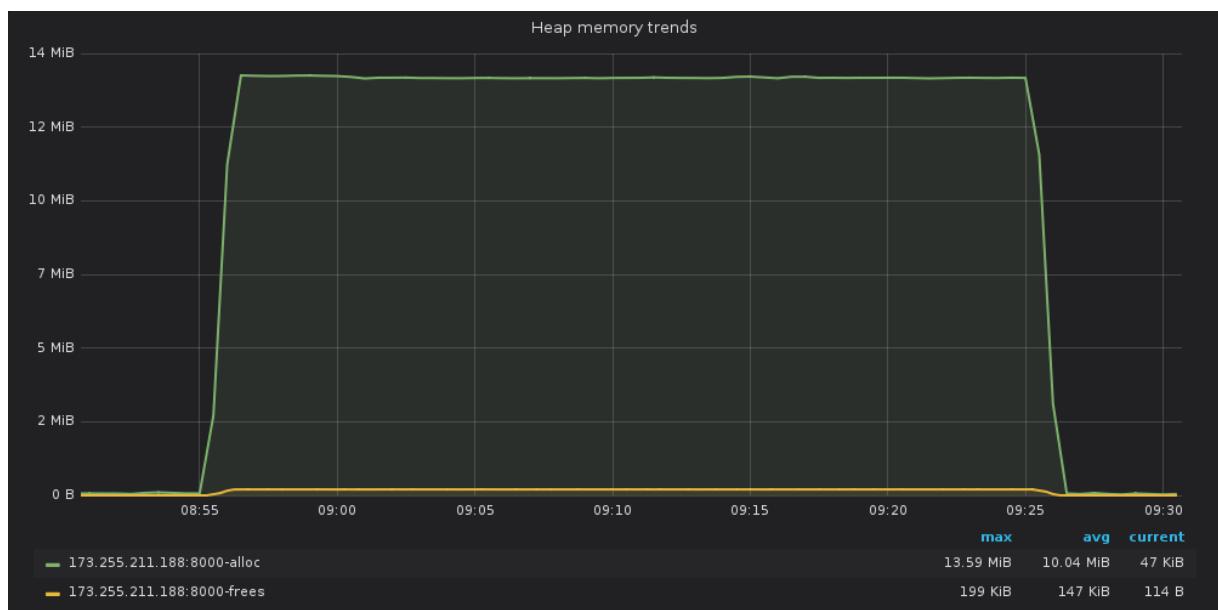
Service: app_web

- name: app_web
- type: app_web

Heap memory



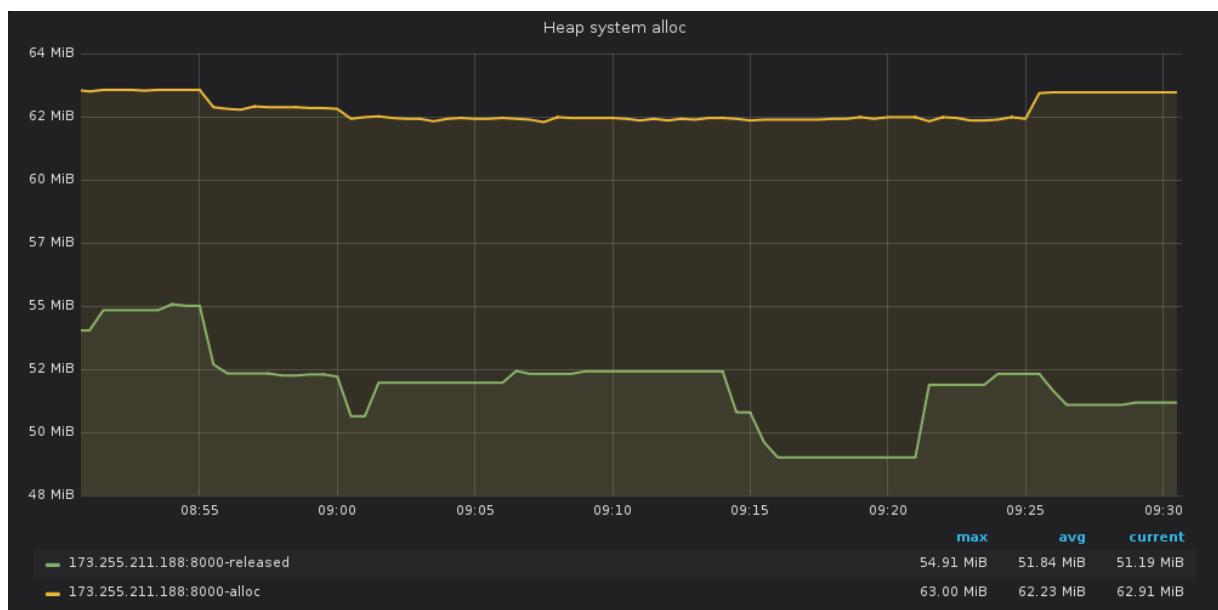
Heap memory trends



Heap objects



Heap system alloc



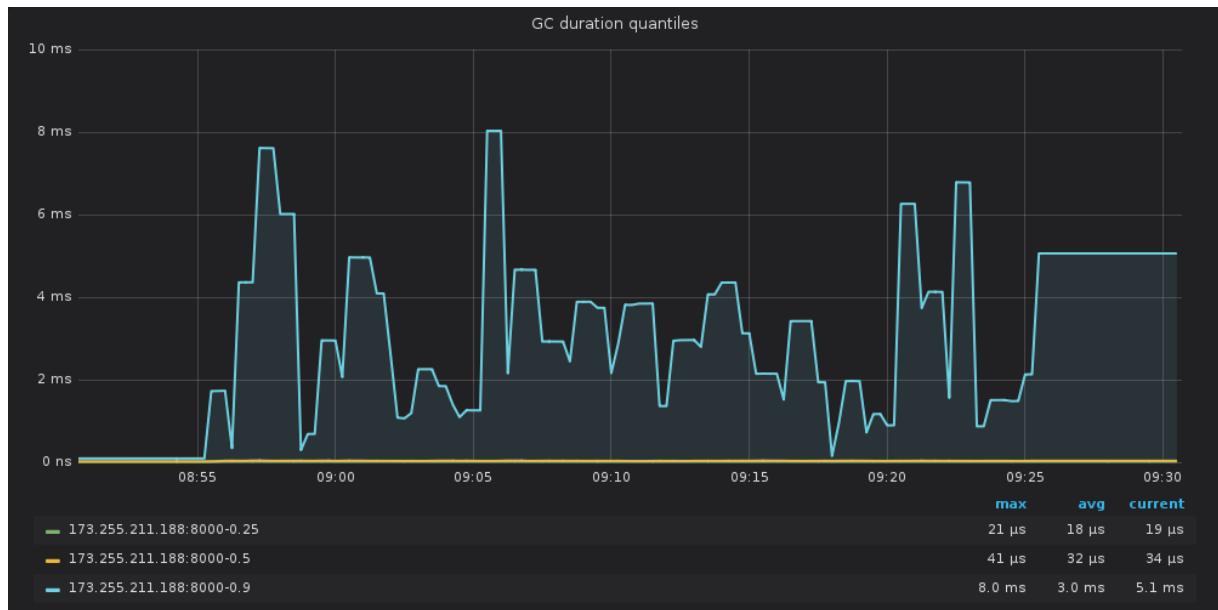
GC rate



Next gc target



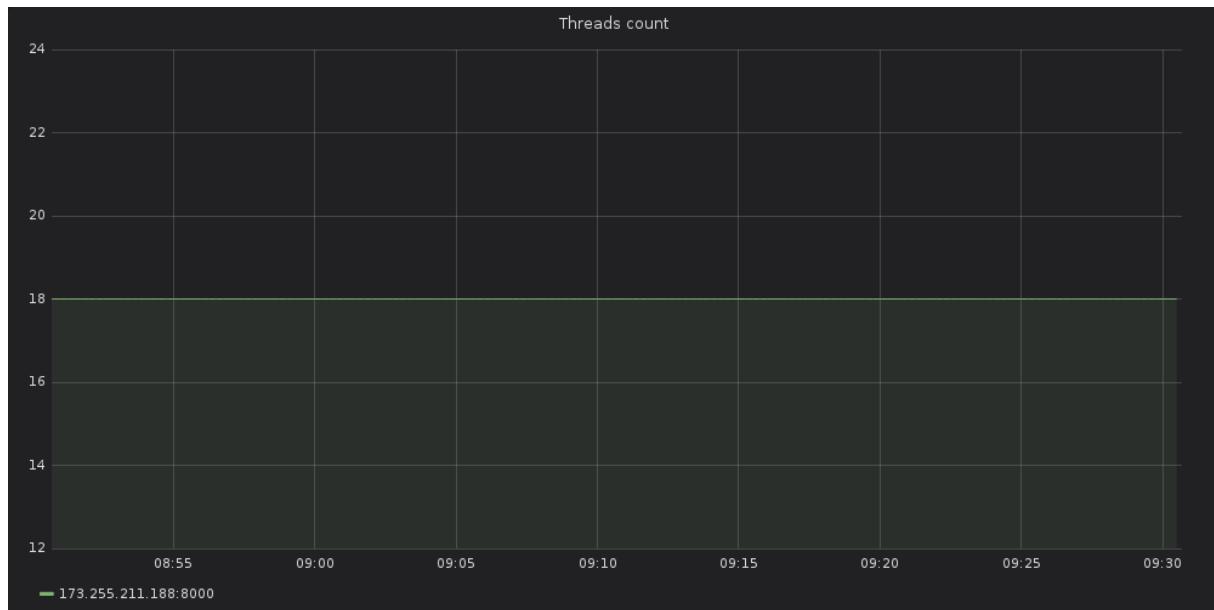
GC duration quantiles



Goroutines count



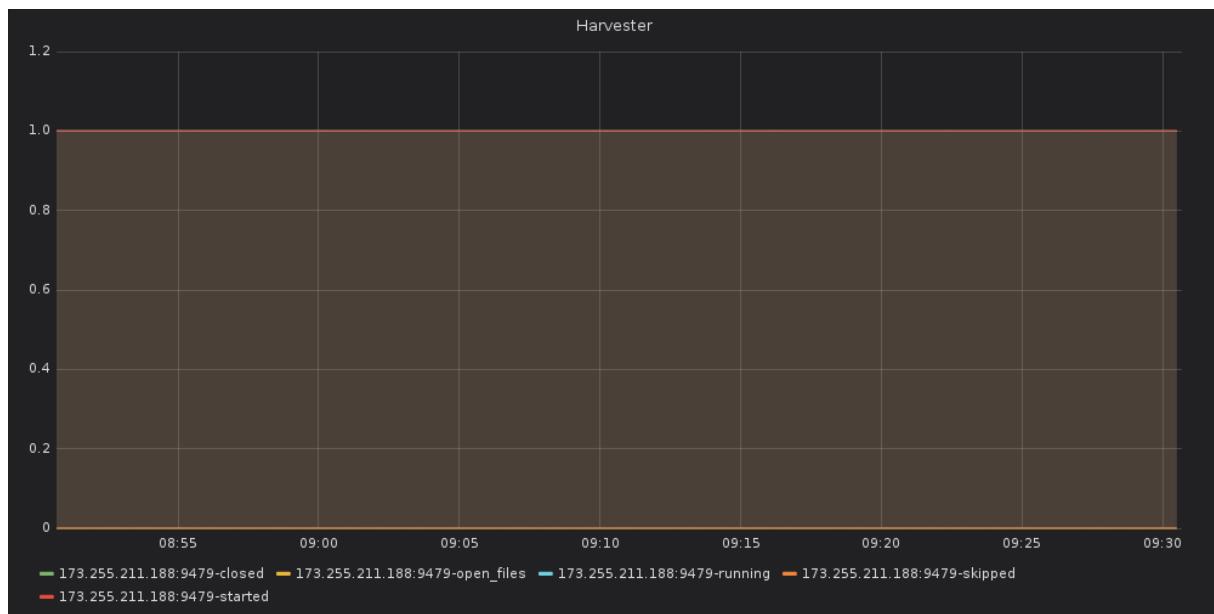
Threads count



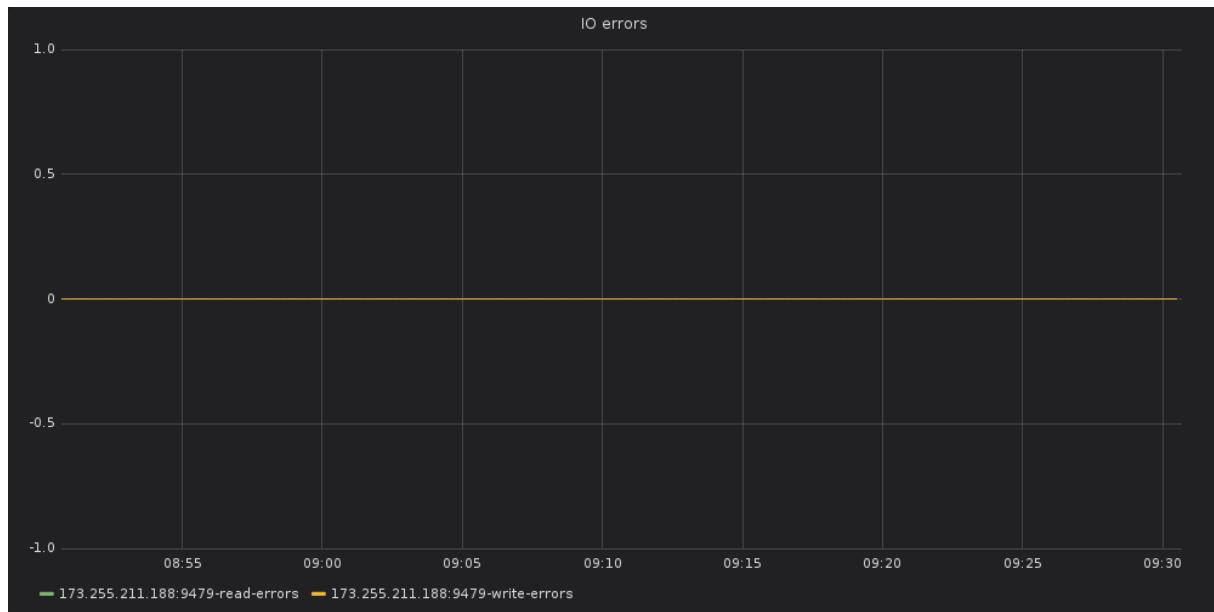
Service: filebeat_web

- name: filebeat_web
- type: filebeat

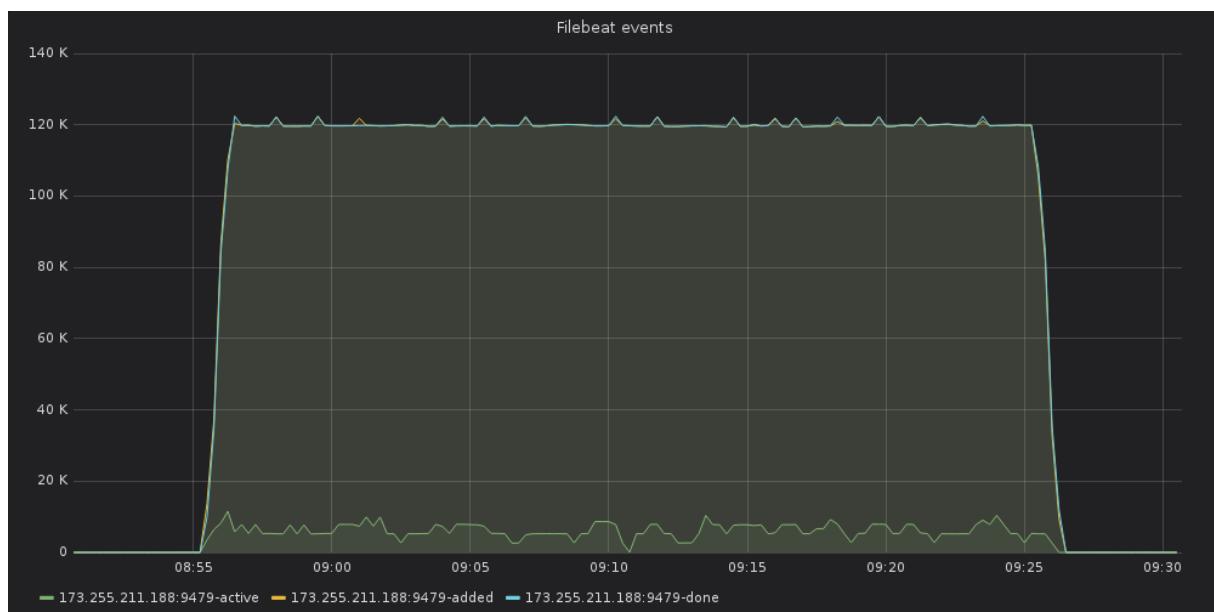
Harvester



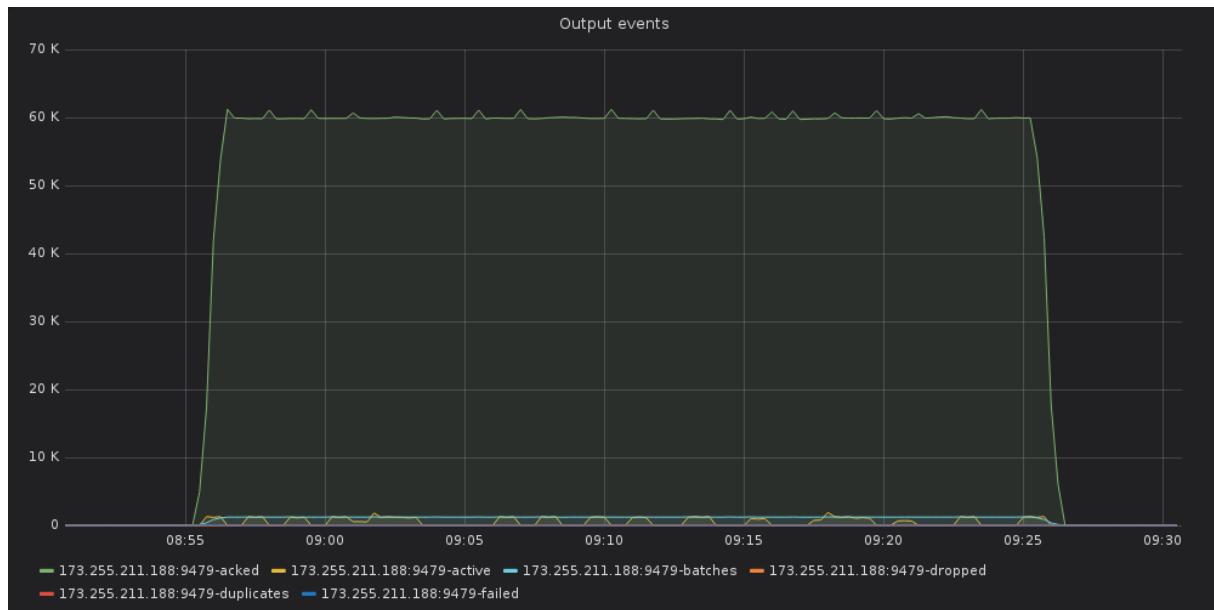
IO errors



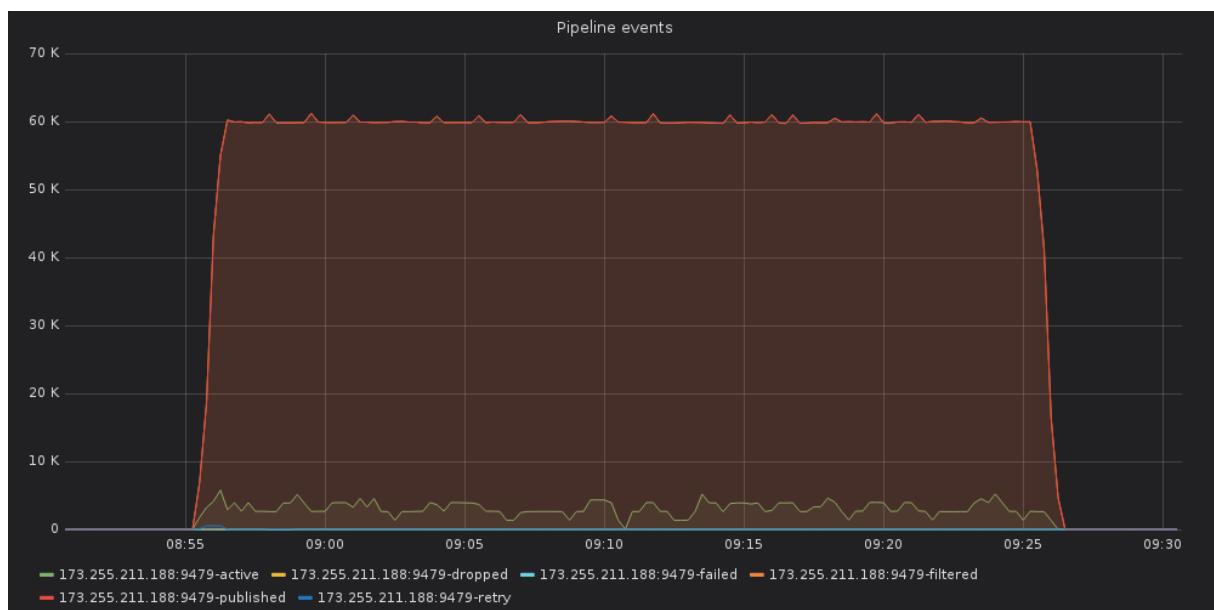
Filebeat events



Output events



Pipeline events



Pipeline queue

