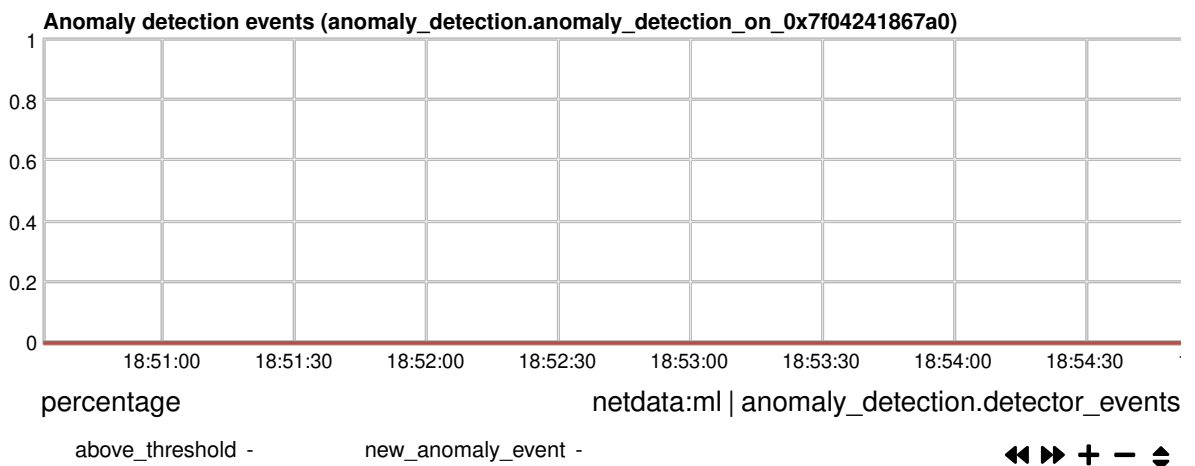


Flags (0 or 1) to show when an anomaly event has been triggered by the detector.

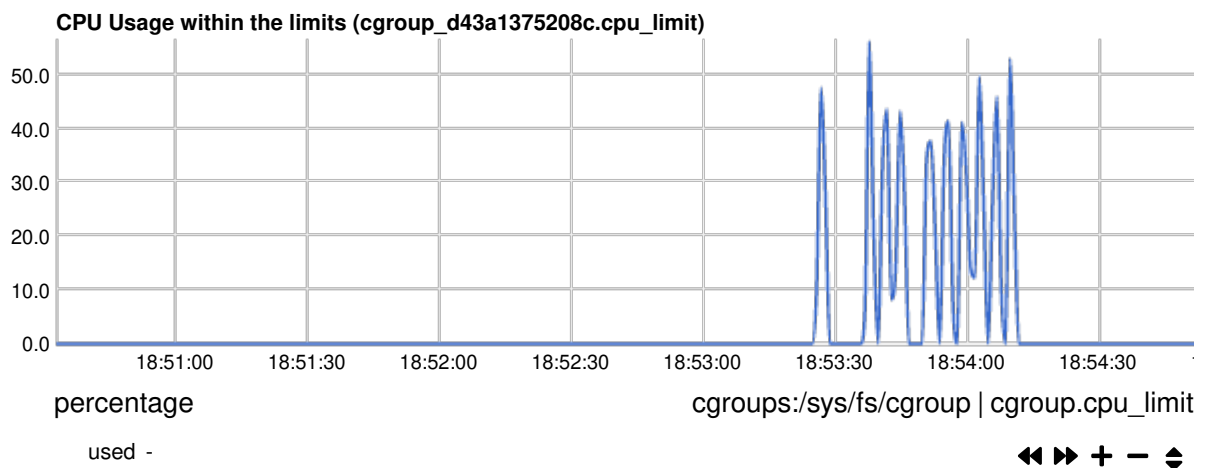


■ d43a1375208c

Container resource utilization metrics. Netdata reads this information from **cgroups** (abbreviated from **control groups**), a Linux kernel feature that limits and accounts resource usage (CPU, memory, disk I/O, network, etc.) of a collection of processes. **cgroups** together with **namespaces** (that offer isolation between processes) provide what we usually call: **containers**.

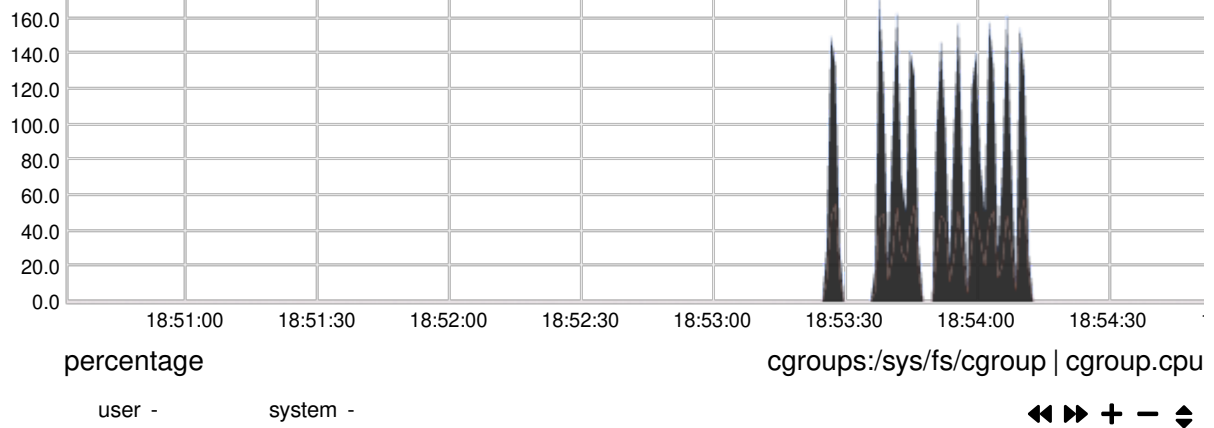
cpu

Total CPU utilization within the configured or system-wide (if not set) limits. When the CPU utilization of a cgroup exceeds the limit for the configured period, the tasks belonging to its hierarchy will be throttled and are not allowed to run again until the next period.



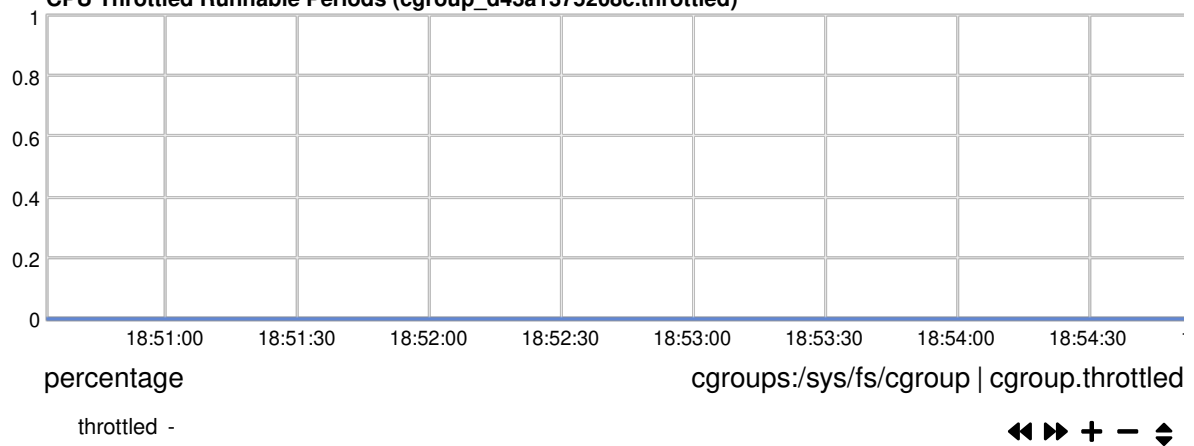
Total CPU utilization within the system-wide CPU resources (all cores). The amount of time spent by tasks of the cgroup in user and kernel (https://en.wikipedia.org/wiki/CPU_modes#Mode_types) modes.

CPU Usage (100% = 1 core) (cgroup_d43a1375208c.cpu)



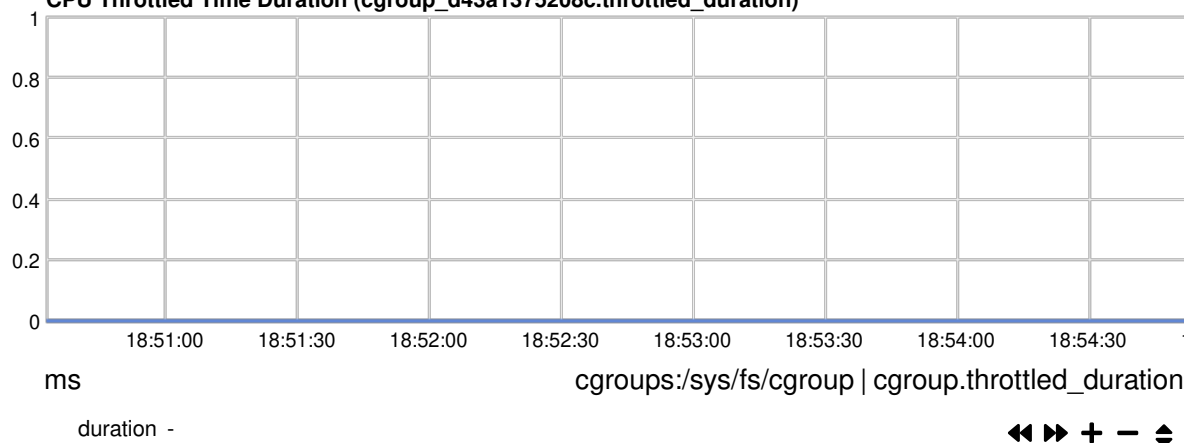
The percentage of runnable periods when tasks in a cgroup have been throttled. The tasks have not been allowed to run because they have exhausted all of the available time as specified by their CPU quota.

CPU Throttled Runnable Periods (cgroup_d43a1375208c.throttled)



The total time duration for which tasks in a cgroup have been throttled. When an application has used its allotted CPU quota for a given period, it gets throttled until the next period.

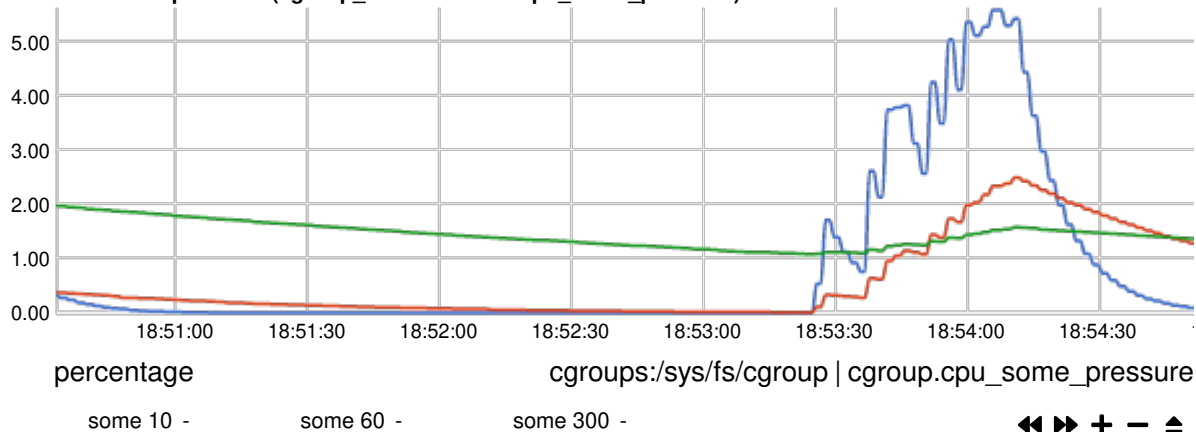
CPU Throttled Time Duration (cgroup_d43a1375208c.throttled_duration)



CPU Pressure Stall Information (<https://www.kernel.org/doc/html/latest/accounting/psi.html>).

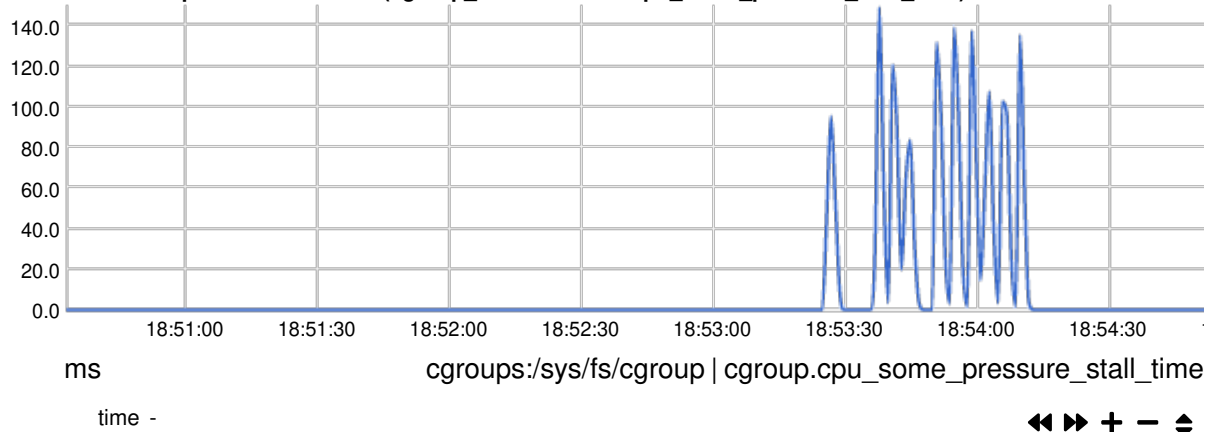
Some indicates the share of time in which at least **some tasks** are stalled on CPU. The ratios are tracked as recent trends over 10-, 60-, and 300-second windows.

CPU some pressure (cgroup_d43a1375208c.cpu_some_pressure)



The amount of time some processes have been waiting for CPU time.

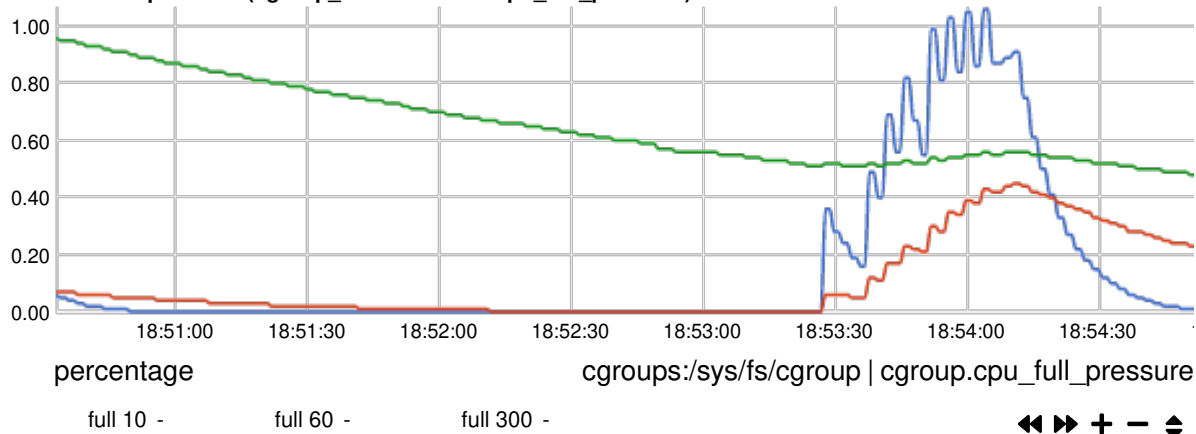
CPU some pressure stall time (cgroup_d43a1375208c.cpu_some_pressure_stall_time)



CPU Pressure Stall Information (<https://www.kernel.org/doc/html/latest/accounting/psi.html>).

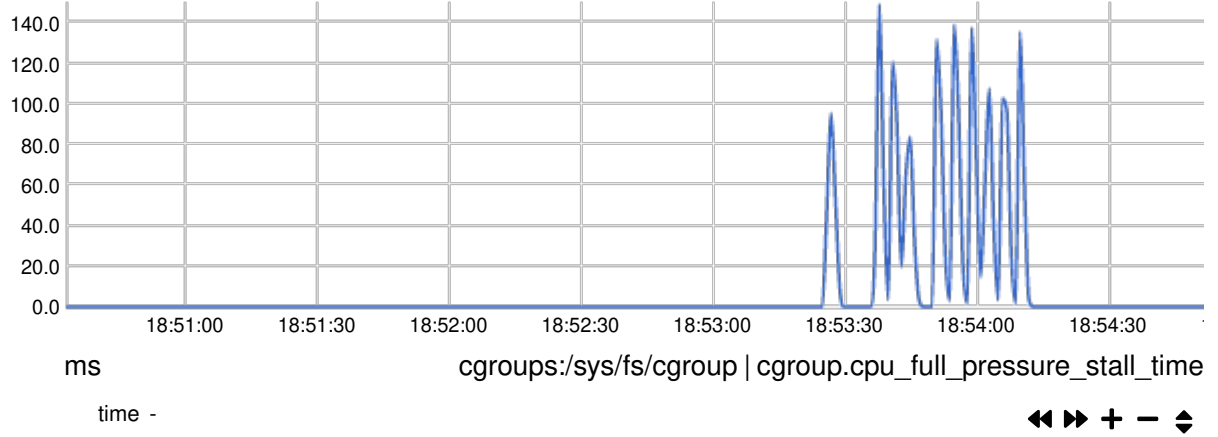
Full indicates the share of time in which **all non-idle tasks** are stalled on CPU resource simultaneously. The ratios are tracked as recent trends over 10-, 60-, and 300-second windows.

CPU full pressure (cgroup_d43a1375208c.cpu_full_pressure)



The amount of time all non-idle processes have been stalled due to CPU congestion.

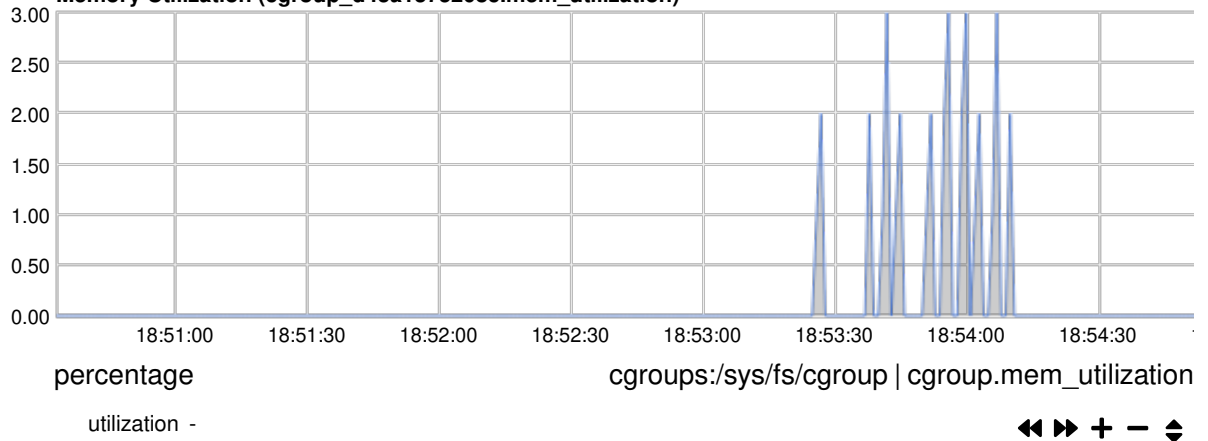
CPU full pressure stall time (cgroup_d43a1375208c.cpu_full_pressure_stall_time)



mem

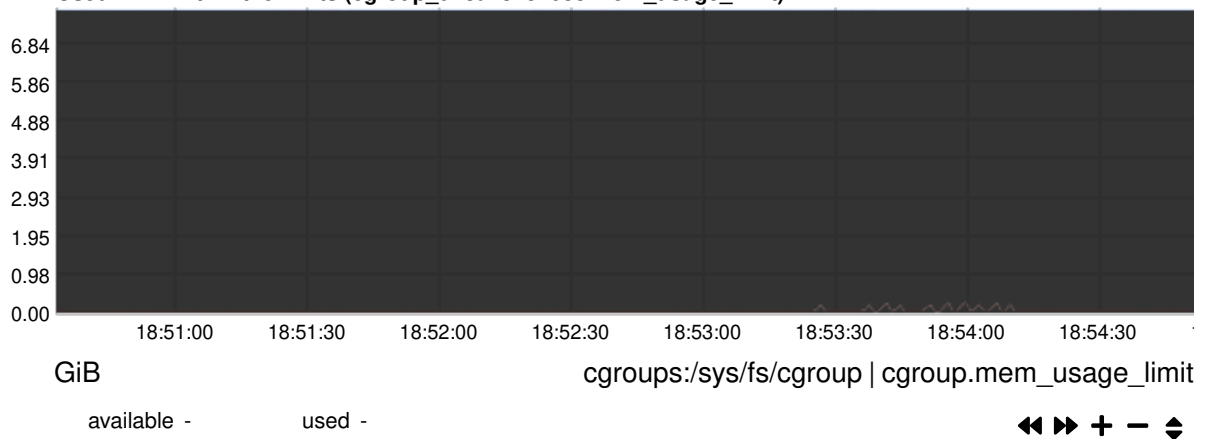
RAM utilization within the configured or system-wide (if not set) limits. When the RAM utilization of a cgroup exceeds the limit, OOM killer will start killing the tasks belonging to the cgroup.

Memory Utilization (cgroup_d43a1375208c.mem_utilization)

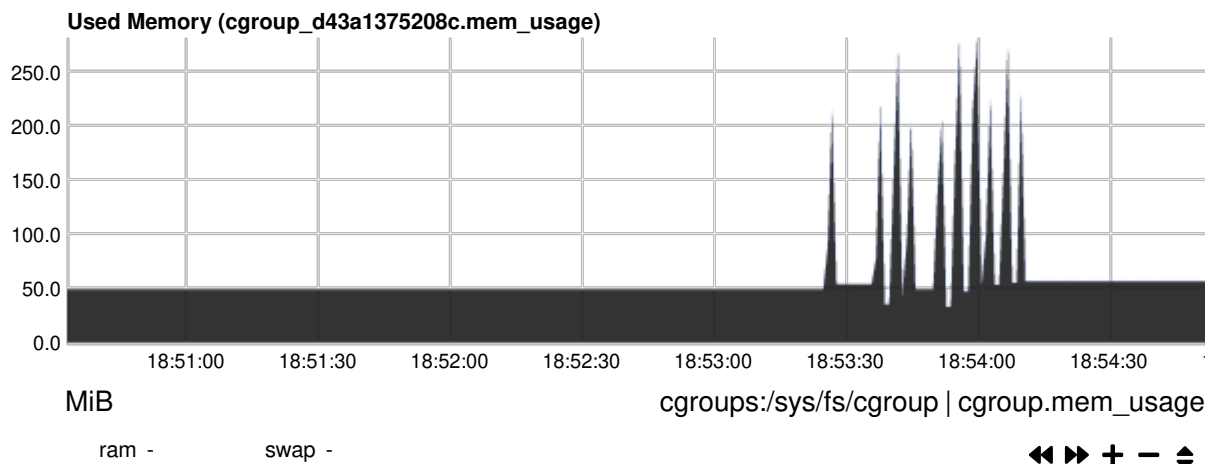


RAM usage within the configured or system-wide (if not set) limits. When the RAM usage of a cgroup exceeds the limit, OOM killer will start killing the tasks belonging to the cgroup.

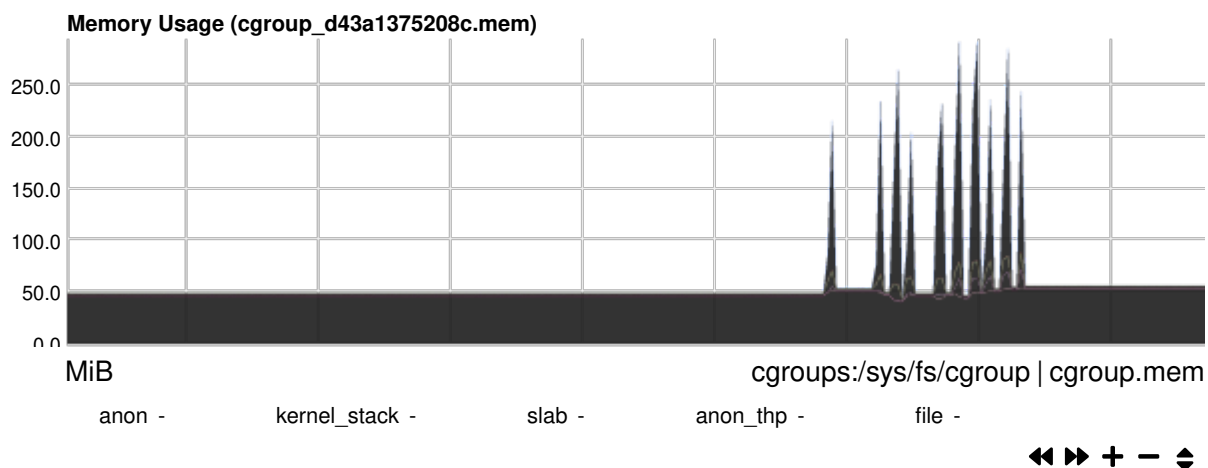
Used RAM within the limits (cgroup_d43a1375208c.mem_usage_limit)



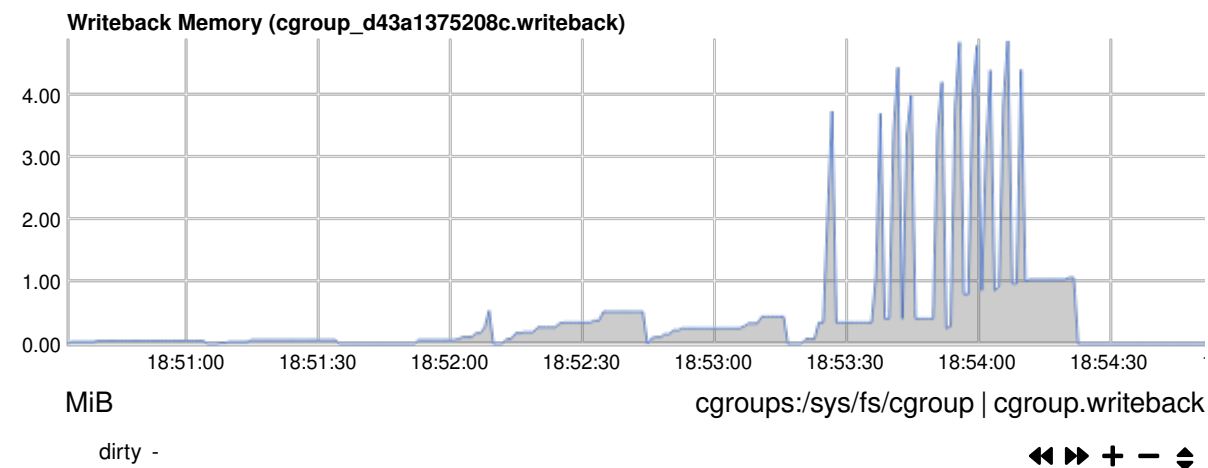
The amount of used RAM and swap memory.



Memory usage statistics. The individual metrics are described in the memory.stat section for cgroup-v1 (<https://www.kernel.org/doc/html/latest/admin-guide/cgroup-v1/memory.html#per-memory-cgroup-local-status>) and cgroup-v2 (<https://www.kernel.org/doc/html/latest/admin-guide/cgroup-v2.html#memory-interface-files>).

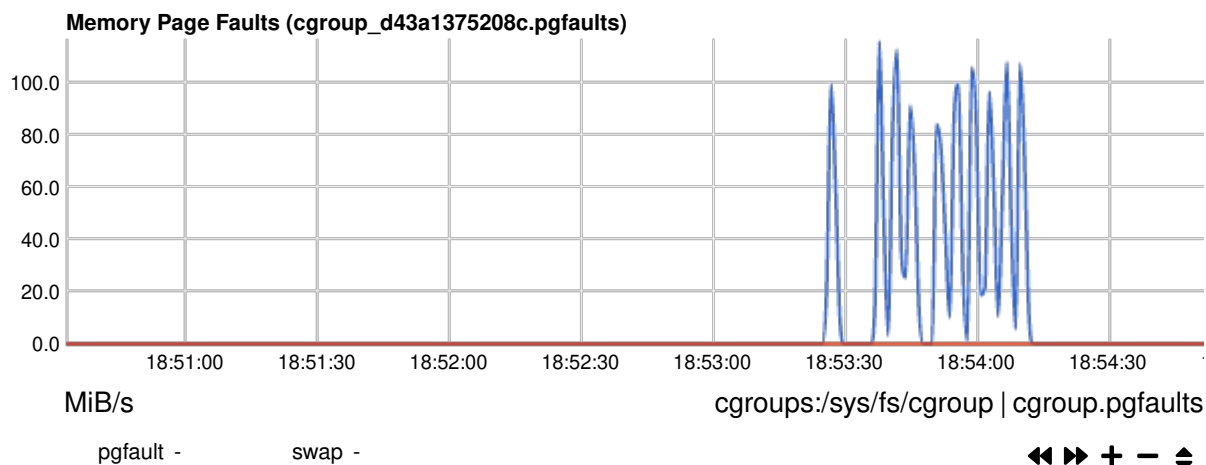


Dirty is the amount of memory waiting to be written to disk. **Writeback** is how much memory is actively being written to disk.

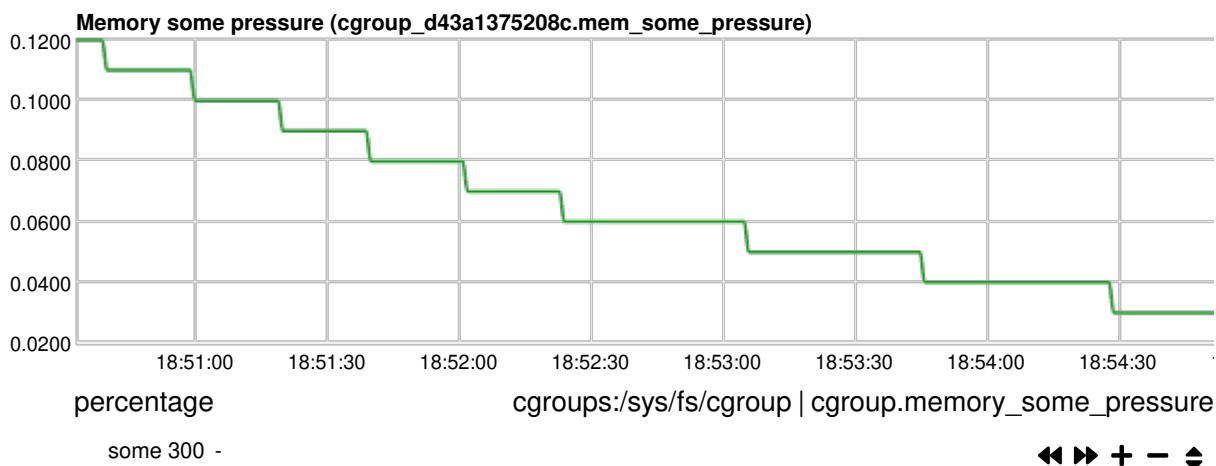


Memory page fault (https://en.wikipedia.org/wiki/Page_fault) statistics.

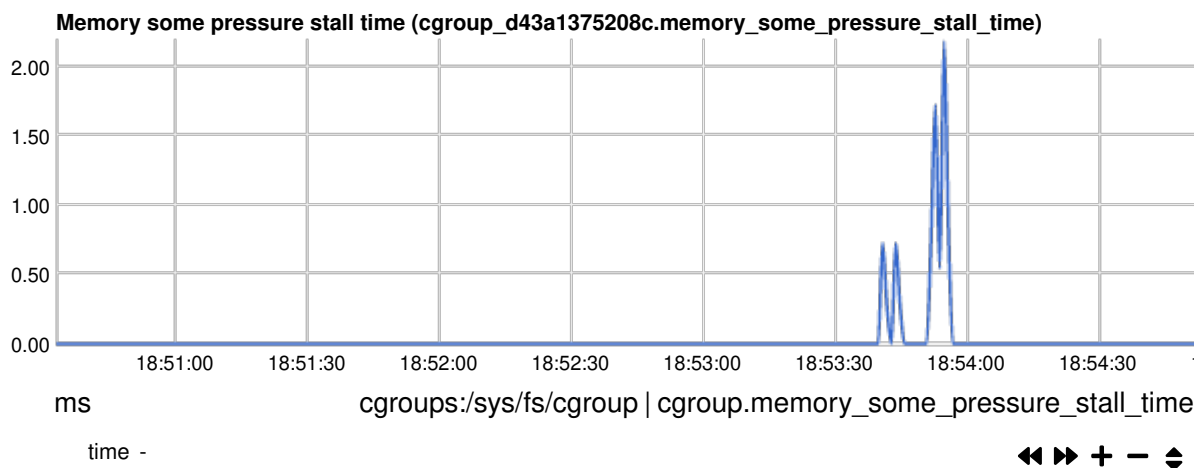
Pgfault - all page faults. **Swap** - major page faults.



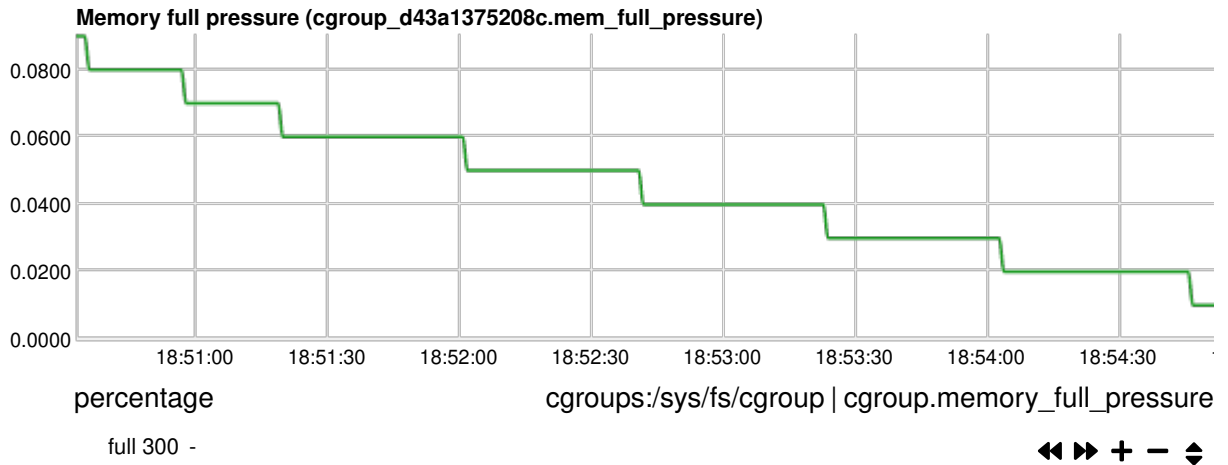
Memory Pressure Stall Information (<https://www.kernel.org/doc/html/latest/accounting/psi.html>). **Some** indicates the share of time in which at least **some tasks** are stalled on memory. In this state the CPU is still doing productive work. The ratios are tracked as recent trends over 10-, 60-, and 300-second windows.



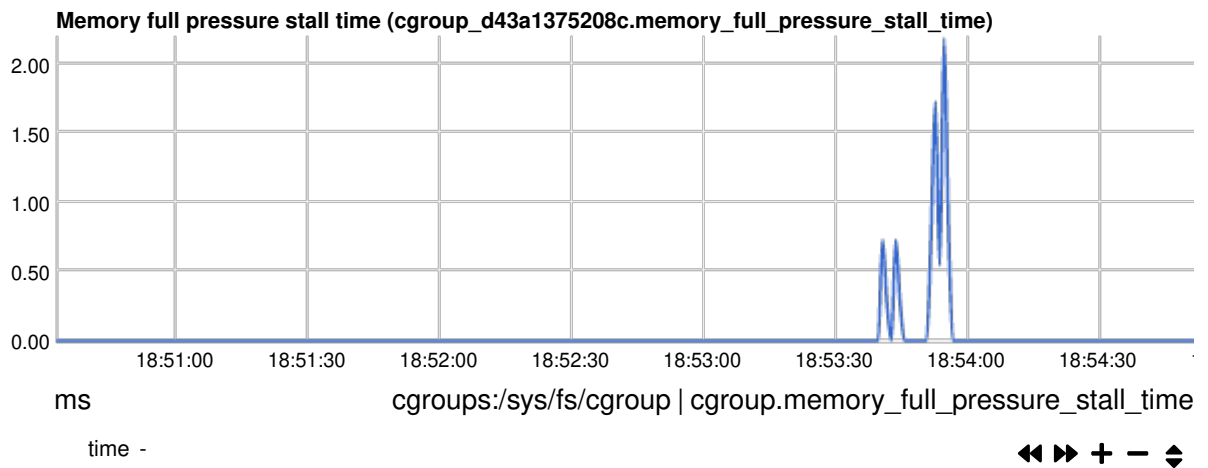
The amount of time some processes have been waiting due to memory congestion.



Memory Pressure Stall Information (<https://www.kernel.org/doc/html/latest/accounting/psi.html>). **Full** indicates the share of time in which **all non-idle tasks** are stalled on memory resource simultaneously. In this state actual CPU cycles are going to waste, and a workload that spends extended time in this state is considered to be thrashing. This has severe impact on performance. The ratios are tracked as recent trends over 10-, 60-, and 300-second windows.



The amount of time all non-idle processes have been stalled due to memory congestion.



disk

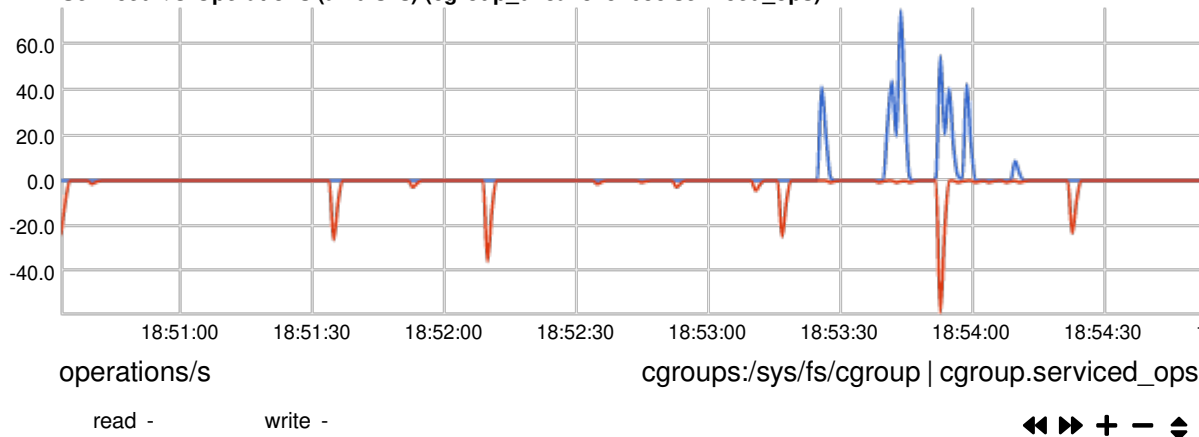
The amount of data transferred to and from specific devices as seen by the CFQ scheduler. It is not updated when the CFQ scheduler is operating on a request queue.

I/O Bandwidth (all disks) (cgroup_d43a1375208c.io)



The number of I/O operations performed on specific devices as seen by the CFQ scheduler.

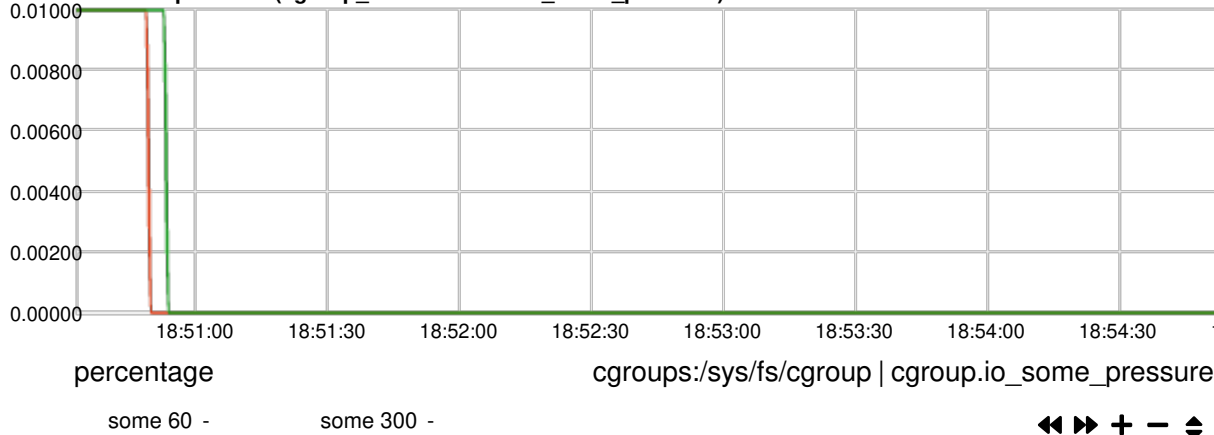
Serviced I/O Operations (all disks) (cgroup_d43a1375208c.serviced_ops)



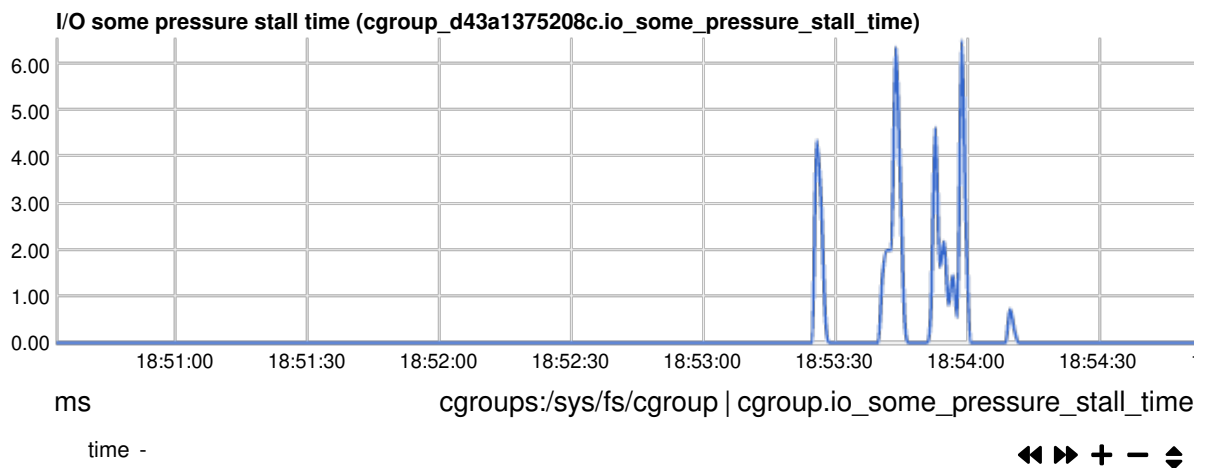
I/O Pressure Stall Information (<https://www.kernel.org/doc/html/latest/accounting/psi.html>).

Some indicates the share of time in which at least **some tasks** are stalled on I/O. In this state the CPU is still doing productive work. The ratios are tracked as recent trends over 10-, 60-, and 300-second windows.

I/O some pressure (cgroup_d43a1375208c.io_some_pressure)

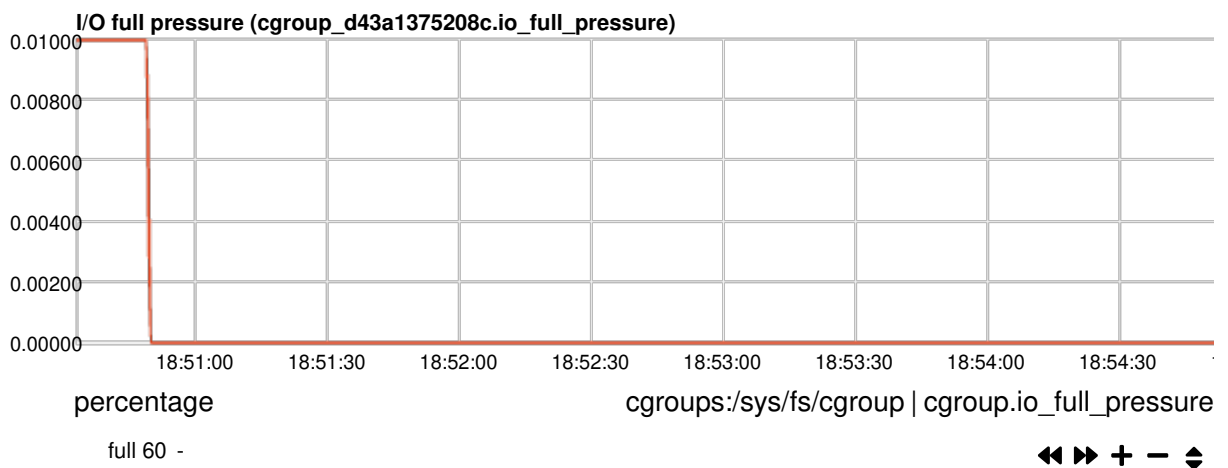


The amount of time some processes have been waiting due to I/O congestion.



I/O Pressure Stall Information (<https://www.kernel.org/doc/html/latest/accounting/psi.html>).

Full line indicates the share of time in which **all non-idle tasks** are stalled on I/O resource simultaneously. In this state actual CPU cycles are going to waste, and a workload that spends extended time in this state is considered to be thrashing. This has severe impact on performance. The ratios are tracked as recent trends over 10-, 60-, and 300-second windows.



The amount of time all non-idle processes have been stalled due to I/O congestion.

