# Control Groupstats

Control Groupstats is inspired by the discussion at https://lore.kernel.org/r/461CF883.2030308@sw.ru and implements per cgroup statistics as suggested by Andrew Morton in https://lore.kernel.org/r/20070411114927.1277d7c9.akpm@linux-foundation.org.

Per cgroup statistics infrastructure re-uses code from the taskstats interface. A new set of cgroup operations are registered with commands and attributes specific to cgroups. It should be very easy to extend per cgroup statistics, by adding members to the cgroupstats structure.

The current model for cgroupstats is a pull, a push model (to post statistics on interesting events), should be very easy to add. Currently user space requests for statistics by passing the cgroup path. Statistics about the state of all the tasks in the cgroup is returned to user space.

NOTE: We currently rely on delay accounting for extracting information about tasks blocked on I/O. If CONFIG_TASK_DELAY_ACCT is disabled, this information will not be available.

To extract cgroup statistics a utility very similar to getdelays.c has been developed, the sample output of the utility is shown below:

```
~/balbir/cgroupstats # ./getdelays  -C "/sys/fs/cgroup/a"
sleeping 1, blocked 0, running 1, stopped 0, uninterruptible 0
~/balbir/cgroupstats # ./getdelays  -C "/sys/fs/cgroup"
sleeping 155, blocked 0, running 1, stopped 0, uninterruptible 2
```