switching-sched.txt

To choose IO schedulers at boot time, use the argument 'elevator=deadline'. 'noop', 'as' and 'cfq' (the default) are also available. IO schedulers are assigned globally at boot time only presently.

Each io queue has a set of io scheduler tunables associated with it. These tunables control how the io scheduler works. You can find these entries in:

/sys/block/<device>/queue/iosched

assuming that you have sysfs mounted on /sys. If you don't have sysfs mounted, you can do so by typing:

# mount none /sys -t sysfs

As of the Linux 2.6.10 kernel, it is now possible to change the IO scheduler for a given block device on the fly (thus making it possible, for instance, to set the CFQ scheduler for the system default, but set a specific device to use the anticipatory or noop schedulers — which can improve that device's throughput).

To set a specific scheduler, simply do this:

echo SCHEDNAME > /sys/block/DEV/queue/scheduler

where SCHEDNAME is the name of a defined IO scheduler, and DEV is the device name (hda, hdb, sga, or whatever you happen to have).

The list of defined schedulers can be found by simply doing a "cat /sys/block/DEV/queue/scheduler" - the list of valid names will be displayed, with the currently selected scheduler in brackets:

# cat /sys/block/hda/queue/scheduler
noop anticipatory deadline [cfq]
# echo anticipatory > /sys/block/hda/queue/scheduler
# cat /sys/block/hda/queue/scheduler
noop [anticipatory] deadline cfq