

Re: RFC: I/O bandwidth controller

Source: <http://linux.derkeiler.com/Mailing-Lists/Kernel/2008-08/msg05632.html>

- *From:* "Dong-Jae Kang" <baramsori72@xxxxxxxxxx>
 - *Date:* Wed, 13 Aug 2008 16:47:25 +0900
-

Hi,

2008/8/13 Andrea Righi <righi.andrea@xxxxxxxxxx>:

Fernando Luis Vázquez Cao wrote:

On Tue, 2008-08-12 at 22:29 +0900, Andrea Righi wrote:

Andrea Righi wrote:

Hirokazu Takahashi wrote:

3.
&
4.
&
5.
–
I/O
bandwidth
shaping
&
General
design
aspects

The
implementation
of
an
I/O
scheduling
algorithm
is
to
a
certain
extent
influenced

Re: RFC: I/O bandwidth controller

by
what
we
are
trying
to
achieve
in
terms
of
I/O
bandwidth
shaping,
but,
as
discussed
below,
the
required
accuracy
can
determine
the
layer
where
the
I/O
controller
has
to
reside.
Off
the
top
of
my
head,
there
are
three
basic
operations
we
may
want
perform:
–
I/O
nice
prioritization:
ionice–like

approach.
–
Proportional
bandwidth
scheduling:
each
process/group
of
processes
has
a
weight
that
determines
the
share
of
bandwidth
they
receive.
–
I/O
limiting:
set
an
upper
limit
to
the
bandwidth
a
group
of
tasks
can
use.

Use
a
deadline-based
IO
scheduling
could
be
an
interesting
path
to
be
explored
as

Re: RFC: I/O bandwidth controller

well,
IMHO,
to
try
to
guarantee
per-cgroup
minimum
bandwidth
requirements.

Please
note
that
the
only
thing
we
can
do
is
to
guarantee
minimum
bandwidth
requirement
when
there
is
contention
for
an
IO
resource,
which
is
precisely
what
a
proportional
bandwidth
scheduler
does.
An
I
missing
something?

Correct.