
Subject: Re: [PATCH 3/5] page_cgroup: make page tracking available for blkio
Posted by [Andrea Righi](#) on Tue, 22 Feb 2011 23:08:40 GMT
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On Tue, Feb 22, 2011 at 04:22:53PM -0500, Vivek Goyal wrote:

> On Tue, Feb 22, 2011 at 06:12:54PM +0100, Andrea Righi wrote:

> > The page_cgroup infrastructure, currently available only for the memory
> > cgroup controller, can be used to store the owner of each page and
> > opportunistically track the writeback IO. This information is encoded in
> > the upper 16-bits of the page_cgroup->flags.

> >

> > A owner can be identified using a generic ID number and the following
> > interfaces are provided to store a retrieve this information:

> >

> > unsigned long page_cgroup_get_owner(struct page *page);
> > int page_cgroup_set_owner(struct page *page, unsigned long id);
> > int page_cgroup_copy_owner(struct page *npage, struct page *opage);

> >

> > The blkio.throttle controller can use the cgroup css_id() as the owner's
> > ID number.

> >

> > Signed-off-by: Andrea Righi <arighi@develer.com>

> > ---

> > block/Kconfig | 2 +
> > block/blk-cgroup.c | 6 ++
> > include/linux/memcontrol.h | 6 ++
> > include/linux/mmzone.h | 4 +-
> > include/linux/page_cgroup.h | 33 ++++++++
> > init/Kconfig | 4 +
> > mm/Makefile | 3 +-
> > mm/memcontrol.c | 6 ++
> > mm/page_cgroup.c | 129 ++++++++
> > 9 files changed, 176 insertions(+), 17 deletions(-)

> >

> > diff --git a/block/Kconfig b/block/Kconfig

> > index 60be1e0..1351ea8 100644

> > --- a/block/Kconfig

> > +++ b/block/Kconfig

> > @@ -80,6 +80,8 @@ config BLK_DEV_INTEGRITY

> > config BLK_DEV_THROTTLING

> > bool "Block layer bio throttling support"

> > depends on BLK_CGROUP=y && EXPERIMENTAL

> > + select MM_OWNER

> > + select PAGE_TRACKING

> > default n

> > ---help---

> > Block layer bio throttling support. It can be used to limit

> > diff --git a/block/blk-cgroup.c b/block/blk-cgroup.c

```

> > index f283ae1..5c57f0a 100644
> > --- a/block/blk-cgroup.c
> > +++ b/block/blk-cgroup.c
> > @@ -107,6 +107,12 @@ blkio_policy_search_node(const struct blkio_cgroup *blkcg, dev_t
dev,
> >     return NULL;
> > }
> >
> > +bool blkio_cgroup_disabled(void)
> > +{
> > + return blkio_subsys.disabled ? true : false;
> > +}
> > +EXPORT_SYMBOL_GPL(blkio_cgroup_disabled);
> > +
>
> I think there should be option to just disable this asyn feature of
> blkio controller. So those who don't want it (running VMs with cache=none
> option) and don't want to take the memory reservation hit should be
> able to disable just ASYNC facility of blkio controller and not
> the whole blkio controller facility.

```

Definitely a better choice.

OK, I'll apply all your suggestions and post a new version of the patch.

Thanks for the review!

-Andrea

Containers mailing list

Containers@lists.linux-foundation.org

<https://lists.linux-foundation.org/mailman/listinfo/containers>
