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Subject: Re: [PATCH 3/5] page\_cgroup: make page tracking available for blkio  
Posted by [Vivek Goyal](#) on Tue, 22 Feb 2011 21:22:53 GMT

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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  
> opportunely 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](mailto: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.

Thanks  
Vivek

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Containers mailing list  
Containers@lists.linux-foundation.org  
<https://lists.linux-foundation.org/mailman/listinfo/containers>

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