
Subject: [PATCH 1/2] Add the max_usage member on the res_counter

Posted by [Pavel Emelianov](#) on Fri, 07 Mar 2008 15:30:55 GMT

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This is a very usefull feature. E.g. one may set the limit to "unlimited" value and check for the memory requirements of a new container.

Signed-off-by: Pavel Emelyanov <xemul@openvz.org>

```
include/linux/res_counter.h |  5 +++++
kernel/res_counter.c      |  4 +////
mm/memcontrol.c          |  5 +////
3 files changed, 14 insertions(+), 0 deletions(-)
```

```
diff --git a/include/linux/res_counter.h b/include/linux/res_counter.h
index 8cb1ecd..2c4deb5 100644
--- a/include/linux/res_counter.h
+++ b/include/linux/res_counter.h
@@ -25,6 +25,10 @@ struct res_counter {
 */
 unsigned long long usage;
 /*
+ * the maximal value of the usage from the counter creation
+ */
+ unsigned long long max_usage;
+ /*
+ * the limit that usage cannot exceed
+ */
 unsigned long long limit;
@@ -67,6 +71,7 @@ ssize_t res_counter_write(struct res_counter *counter, int member,
```



```
enum {
    RES_USAGE,
+   RES_MAX_USAGE,
    RES_LIMIT,
    RES_FAILCNT,
};
```



```
diff --git a/kernel/res_counter.c b/kernel/res_counter.c
index 791ff2b..f1f20c2 100644
--- a/kernel/res_counter.c
+++ b/kernel/res_counter.c
@@ -27,6 +27,8 @@ int res_counter_charge_locked(struct res_counter *counter, unsigned long
val)
}

counter->usage += val;
```

```

+ if (counter->usage > counter->max_usage)
+ counter->max_usage = counter->usage;
return 0;
}

@@ -65,6 +67,8 @@ res_counter_member(struct res_counter *counter, int member)
switch (member) {
case RES_USAGE:
    return &counter->usage;
+ case RES_MAX_USAGE:
+ return &counter->max_usage;
case RES_LIMIT:
    return &counter->limit;
case RES_FAILCNT:
diff --git a/mm/memcontrol.c b/mm/memcontrol.c
index 2d59163..e5c741a 100644
--- a/mm/memcontrol.c
+++ b/mm/memcontrol.c
@@ -911,6 +911,11 @@ static struct cftype mem_cgroup_files[] = {
    .read_u64 = mem_cgroup_read,
},
{
+ .name = "max_usage_in_bytes",
+ .private = RES_MAX_USAGE,
+ .read_u64 = mem_cgroup_read,
+ },
+ {
    .name = "limit_in_bytes",
    .private = RES_LIMIT,
    .write = mem_cgroup_write,
--
```

1.5.3.4

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

Subject: Re: [PATCH 1/2] Add the max_usage member on the res_counter
 Posted by [KAMEZAWA Hiroyuki](#) on Sat, 08 Mar 2008 04:33:07 GMT
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On Fri, 07 Mar 2008 18:30:55 +0300
 Pavel Emelyanov <xemul@openvz.org> wrote:

> This is a very usefull feature. E.g. one may set the
 > limit to "unlimited" value and check for the memory

> requirements of a new container.

>

Hm, I like this. Could you add a method to reset this counter ?

Thanks,

-Kame

> Signed-off-by: Pavel Emelyanov <xemul@openvz.org>

```
>
> ---
> include/linux/res_counter.h |  5 +++++
> kernel/res_counter.c       |  4 +++
> mm/memcontrol.c           |  5 +++
> 3 files changed, 14 insertions(+), 0 deletions(-)
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>   unsigned long long usage;
>   /*
> + * the maximal value of the usage from the counter creation
> + */
> + unsigned long long max_usage;
> + /*
>   * the limit that usage cannot exceed
>   */
>   unsigned long long limit;
> @@ -67,6 +71,7 @@ ssize_t res_counter_write(struct res_counter *counter, int member,
>
> enum {
>   RES_USAGE,
> + RES_MAX_USAGE,
>   RES_LIMIT,
>   RES_FAILCNT,
> };
> diff --git a/kernel/res_counter.c b/kernel/res_counter.c
> index 791ff2b..f1f20c2 100644
> --- a/kernel/res_counter.c
> +++ b/kernel/res_counter.c
> @@ -27,6 +27,8 @@ int res_counter_charge_locked(struct res_counter *counter, unsigned
long val)
> }
>
> counter->usage += val;
```

```
> + if (counter->usage > counter->max_usage)
> + counter->max_usage = counter->usage;
> return 0;
> }
>
> @@ -65,6 +67,8 @@ res_counter_member(struct res_counter *counter, int member)
> switch (member) {
> case RES_USAGE:
>     return &counter->usage;
> + case RES_MAX_USAGE:
> +     return &counter->max_usage;
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> diff --git a/mm/memcontrol.c b/mm/memcontrol.c
> index 2d59163..e5c741a 100644
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>     .read_u64 = mem_cgroup_read,
> },
> {
> + .name = "max_usage_in_bytes",
> + .private = RES_MAX_USAGE,
> + .read_u64 = mem_cgroup_read,
> + },
> +
> + {
>     .name = "limit_in_bytes",
>     .private = RES_LIMIT,
>     .write = mem_cgroup_write,
> --
> 1.5.3.4
>
> --
> To unsubscribe, send a message with 'unsubscribe linux-mm' in
> the body to majordomo@kvack.org. For more info on Linux MM,
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> Don't email: <a href="mailto:dont@kvack.org"> email@kvack.org </a>
```

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Subject: Re: [PATCH 1/2] Add the max_usage member on the res_counter
Posted by [Balbir Singh](#) on Sat, 08 Mar 2008 05:39:14 GMT

Pavel Emelyanov wrote:

> This is a very usefull feature. E.g. one may set the
> limit to "unlimited" value and check for the memory
> requirements of a new container.
>
> Signed-off-by: Pavel Emelyanov <xemul@openvz.org>
>
> ---
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> enum {
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> };
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> index 791ff2b..f1f20c2 100644
> --- a/kernel/res_counter.c
> +++ b/kernel/res_counter.c
> @@ -27,6 +27,8 @@ int res_counter_charge_locked(struct res_counter *counter, unsigned
long val)
> }
>
> counter->usage += val;
> + if (counter->usage > counter->max_usage)
> + counter->max_usage = counter->usage;

How about

```
counter->max_usage = max(counter->usage, counter->max_usage);

>   return 0;
> }
>
> @@ -65,6 +67,8 @@ res_counter_member(struct res_counter *counter, int member)
> switch (member) {
> case RES_USAGE:
>   return &counter->usage;
> + case RES_MAX_USAGE:
> +   return &counter->max_usage;
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> + .name = "max_usage_in_bytes",
> + .private = RES_MAX_USAGE,
> + .read_u64 = mem_cgroup_read,
> + },
> + {
>   .name = "limit_in_bytes",
>   .private = RES_LIMIT,
>   .write = mem_cgroup_write,
```

Looks very good,

Acked-by: Balbir Singh <balbir@linux.vnet.ibm.com>

--
Warm Regards,
Balbir Singh
Linux Technology Center
IBM, ISTL

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

Subject: Re: [PATCH 1/2] Add the max_usage member on the res_counter
Posted by [Pavel Emelianov](#) on Tue, 11 Mar 2008 08:41:45 GMT

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KAMEZAWA Hiroyuki wrote:

> On Fri, 07 Mar 2008 18:30:55 +0300

> Pavel Emelyanov <xemul@openvz.org> wrote:

>

>> This is a very usefull feature. E.g. one may set the
>> limit to "unlimited" value and check for the memory
>> requirements of a new container.

>>

> Hm, I like this. Could you add a method to reset this counter ?

OK. Sounds reasonable.

> How about

>

> counter->max_usage = max(counter->usage, counter->max_usage);

No, I prefer explicit checks :)

> Looks very good,

>

> Acked-by: Balbir Singh <balbir@linux.vnet.ibm.com>

OK. I'll push this change the the git at openvz.org then.

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