
Subject: [PATCH 0/3] Simple cleanups for cgroups
Posted by [Glauber Costa](#) on Sun, 11 Dec 2011 14:45:34 GMT
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Hi,

While hacking on other stuff I found these spots that could receive some simple cleanup in cgroup.c. Nothing revolutionary. Patch 1 is rather trivial, the other 2 are more of a matter of taste I'd say, but I believe we'd be better of this way.

Glauber Costa (3):
 nitpick: make simple functions inline
 make clone_children a flag
 make 'none' field a flag

kernel/cgroup.c | 30 ++++++-----
1 files changed, 17 insertions(+), 13 deletions(-)

--
1.7.6.4

Subject: [PATCH 3/3] make 'none' field a flag
Posted by [Glauber Costa](#) on Sun, 11 Dec 2011 14:45:38 GMT
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There is no reason to have a flags field, and then a separate bool field just to indicate if 'none' subsystem were explicitly requested.

Make it a flag

Signed-off-by: Glauber Costa <glommer@parallels.com>

kernel/cgroup.c | 20 ++++++-----
1 files changed, 12 insertions(+), 8 deletions(-)

```
diff --git a/kernel/cgroup.c b/kernel/cgroup.c
index fa405ee..e700abe 100644
--- a/kernel/cgroup.c
+++ b/kernel/cgroup.c
@@ -232,6 +232,7 @@ inline int cgroup_is_removed(const struct cgroup *cgrp)
enum {
    ROOT_NOPREFIX, /* mounted subsystems have no named prefix */
    ROOT_CLONE_CHILDREN, /* mounted subsystems starts with clone_children */
+ ROOT_NOSUBSYS, /* explicitly asked for 'none' subsystems */
};
```

```

static int cgroup_is_releasable(const struct cgroup *cgrp)
@@ -1064,13 +1065,16 @@ struct cgroup_sb_opts {
    unsigned long flags;
    char *release_agent;
    char *name;
- /* User explicitly requested empty subsystem */
- bool none;

    struct cgroupfs_root *new_root;

};

+static inline int opts_no_subsys(const struct cgroup_sb_opts *opts)
+{
+ return test_bit(ROOT_NOSUBSYS, &opts->flags);
+}
+
+/*
+ * Convert a hierarchy specifier into a bitmask of subsystems and flags. Call
+ * with cgroup_mutex held to protect the subsys[] array. This function takes
@@ -1098,7 +1102,7 @@ static int parse_cgroupfs_options(char *data, struct cgroup_sb_opts
*opts)
    return -EINVAL;
    if (!strcmp(token, "none")) {
        /* Explicitly have no subsystems */
- opts->none = true;
+ set_bit(ROOT_NOSUBSYS, &opts->flags);
        continue;
    }
    if (!strcmp(token, "all")) {
@@ -1178,7 +1182,7 @@ static int parse_cgroupfs_options(char *data, struct cgroup_sb_opts
*opts)
    * otherwise 'all', 'none' and a subsystem name options were not
    * specified, let's default to 'all'
    */
- if (all_ss || (!all_ss && !one_ss && !opts->none)) {
+ if (all_ss || (!all_ss && !one_ss && !opts_no_subsys(opts))) {
    for (i = 0; i < CGROUP_SUBSYS_COUNT; i++) {
        struct cgroup_subsys *ss = subsys[i];
        if (ss == NULL)
@@ -1202,7 +1206,7 @@ static int parse_cgroupfs_options(char *data, struct cgroup_sb_opts
*opts)

    /* Can't specify "none" and some subsystems */
- if (opts->subsys_bits && opts->none)
+ if (opts->subsys_bits && opts_no_subsys(opts))

```

```

return -EINVAL;

/*
@@ -1370,7 +1374,7 @@ static int cgroup_test_super(struct super_block *sb, void *data)
 * If we asked for subsystems (or explicitly for no
 * subsystems) then they must match
 */
- if ((opts->subsys_bits || opts->none)
+ if ((opts->subsys_bits || opts_no_subsys(opts))
    && (opts->subsys_bits != root->subsys_bits))
    return 0;

@@ -1381,7 +1385,7 @@ static struct cgroupfs_root *cgroup_root_from_opts(struct
cgroup_sb_opts *opts)
{
    struct cgroupfs_root *root;

- if (!opts->subsys_bits && !opts->none)
+ if (!opts->subsys_bits && !opts_no_subsys(opts))
    return NULL;

    root = kzalloc(sizeof(*root), GFP_KERNEL);
@@ -1426,7 +1430,7 @@ static int cgroup_set_super(struct super_block *sb, void *data)
    if (!opts->new_root)
        return -EINVAL;

- BUG_ON(!opts->subsys_bits && !opts->none);
+ BUG_ON(!opts->subsys_bits && !opts_no_subsys(opts));

    ret = set_anon_super(sb, NULL);
    if (ret)
--
1.7.6.4

```

Subject: Re: [PATCH 3/3] make 'none' field a flag
Posted by [KOSAKI Motohiro](#) on Sun, 11 Dec 2011 18:59:25 GMT
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(12/11/11 9:45 AM), Glauber Costa wrote:
> There is no reason to have a flags field, and then a separate
> bool field just to indicate if 'none' subsystem were explicitly
> requested.
>
> Make it a flag
>
> Signed-off-by: Glauber Costa<glommer@parallels.com>

Subject: Re: [PATCH 3/3] make 'none' field a flag
Posted by [Tejun Heo](#) on Tue, 13 Dec 2011 15:41:08 GMT
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On Sun, Dec 11, 2011 at 03:45:38PM +0100, Glauber Costa wrote:

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> bool field just to indicate if 'none' subsystem were explicitly
> requested.

>

> Make it a flag

>

> Signed-off-by: Glauber Costa <glommer@parallels.com>

Same as the previous patch. Doesn't this change how remount
conditions are checked?

Thanks.

--

tejun

Subject: Re: [PATCH 3/3] make 'none' field a flag
Posted by [Li Zefan](#) on Wed, 14 Dec 2011 02:08:33 GMT
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> On Sun, Dec 11, 2011 at 03:45:38PM +0100, Glauber Costa wrote:

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>> bool field just to indicate if 'none' subsystem were explicitly
>> requested.

>>

>> Make it a flag

>>

>> Signed-off-by: Glauber Costa <glommer@parallels.com>

>

> Same as the previous patch. Doesn't this change how remount
> conditions are checked?

>

Right. The patch prevents us from doing:

```
# mount -t cgroup -o none,name=tmp xxx /mnt
# mount -o remount,cpuset xxx /mnt
```

(failed)
