Subject: [RFC][PATCH 0/5] Remove nsproxy->pid_ns
Posted by Sukadev Bhattiprolu on Sat, 10 Mar 2007 04:00:53 GMT
View Forum Message <> Reply to Message

From: Sukadev Bhattiprolu <sukadev@us.ibm.com>
Subject [RFC][PATCH 0/5] Remove nsproxy->pid_ns

We need to decouple pid namespace from nsproxy to allow getting and releasing pid namespace independently from other namespaces. This is required since a process's reference to its pid namespace must exist even after its references to other namespaces are dropped during process exit.

This patchset accomplishes this by using the pid->pid_nrs list defined in earlier patches. As noted from that patchset, pid->pid_nrs list allows each process to have multiple pid_t values, one per each namespace.

We define a task's clone-pid-namespace as the pid namespace that the process last unshared into. If the process never unshared its pid namespace, then its clone-pid-namespace is same as its parent clone-pid-namespace (possibly init-pid-ns), when the process was created.

When a process unshares its pid namespace, we allocate a new struct pid_nr and attach this pid_nr at the head of the pid->pid_nrs list.

The task_pid_ns() wrapper always returns this clone-pid-ns of the task and returns the pid namespace from the head of the pid->pid_nrs list.

This patch set includes following 5 patches:

[PATCH 1/5]
Rename *namespaces() functions to *nsproxy() to reflect that these functions only operate on an nsproxy and not on all namespaces.

[PATCH 2/5]
Define helper functions to use as we move pid namespace out of nsproxy

[PATCH 3/5]
Use pid_namespace in struct pid_nr rather than nsproxy->pid_ns.

[PATCH 4/5]
Remove the struct pid_namespace * from struct nsproxy

[PATCH 5/5]
Remove the now-unused function, copy_pid_ns().

Signed-off-by: Sukadev Bhattiprolu <sukadev@us.ibm.com>
Cc: Cedric Le Goater <clg@fr.ibm.com>
Cc: Dave Hansen <haveblue@us.ibm.com>
Cc: Serge Hallyn <serue@us.ibm.com>
Cc: containers@lists.osdl.org

_____

Containers mailing list
Containers@lists.osdl.org
https://lists.osdl.org/mailman/listinfo/containers