
Subject: [PATCH 0/7][v2] Cloning PTS namespace
Posted by [Sukadev Bhattiprolu](#) on Tue, 25 Mar 2008 03:59:04 GMT
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Devpts namespace patchset

In continuation of the implementation of containers in mainline, we need to support multiple PTY namespaces so that the PTY index (ie the tty names) in one container is independent of the PTY indices of other containers. For instance this would allow each container to have a '/dev/pts/0' PTY and refer to different terminals.

[PATCH 1/7]: Propagate error code from devpts_pty_new

[PATCH 2/7]: Factor out PTY index allocation

[PATCH 3/7]: Enable multiple mounts of /dev/pts

[PATCH 4/7]: Implement get_pts_ns() and put_pts_ns()

[PATCH 5/7]: Determine pts_ns from a pty's inode.

[PATCH 6/7]: Check for user-space mount of /dev/pts

[PATCH 7/7]: Enable cloning PTY namespaces

Todo:

- This patchset depends on availability of additional clone flags. and relies on on Cedric's clone64 patchset.
- Needs more testing.

Changelog[v1]:

- Fixed circular reference by not caching the pts_ns in sb->s_fs_info (without incrementing reference count) and clearing the sb->s_fs_info when destroying the pts_ns (See patch 3/7 for details).
- To allow access to a child container's ptys from parent container, determine the 'pts_ns' of a 'pty' from its inode (See patch 5/7 for details).
- Added a check (hack) to ensure user-space mount of /dev/pts is done before creating PTYs in a new pts-ns (see patch 6/7 for details).
- Reorganized the patchset and removed redundant changes.
- Ported to work with Cedric Le Goater's clone64() system call now that we are out of clone_flags.

Changelog[v0]:

This patchset is based on earlier versions developed by Serge Hallyn and Matt Helsley.

Containers mailing list
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