
Subject: Re: [RFC][PATCH][cryo] Save/restore state of unnamed pipes

Posted by [Sukadev Bhattiprolu](#) on Fri, 20 Jun 2008 01:54:10 GMT

[View Forum Message](#) <> [Reply to Message](#)

Matt Helsley [matthlhc@us.ibm.com] wrote:

| Yes, I think that's sufficient:

```
|     int pipefds[2];
|
|     ...
|
|     restarted_read_fd = 11;
|     restarted_write_fd = 12;
|
|     ...
|
|     pipe(pipefds);
|
| /*
|  * pipe() may have returned one (or both) of the restarted fds
|  * at the wrong end of the pipe. This could cause dup2() to
|  * accidentally close the pipe. Avoid that with an extra dup().
|  */
|     if (pipefds[1] == restarted_read_fd) {
|         dup2(pipefds[1], last_fd + 1);
|         pipefds[1] = last_fd + 1;
|     }
|
|     if (pipefds[0] != restarted_read_fd) {
|         dup2(pipefds[0], restarted_read_fd);
|         close(pipefds[0]);
|     }
|
|     if (pipefds[0] != restarted_read_fd) {
|         dup2(pipefds[1], restarted_write_fd);
|         close(pipefds[1]);
|     }
| }
```

Shouldn't the last if be

```
if (pipefds[1] != restarted_wрте_fd) ?
```

(otherwise it would break if pipefds[0] = 11 and pipefds[1] = 200)

I came up with something similar, but with an extra close(). And in my code, I had restarted_* names referring to pipefds[] making it a bit confusing initially.

How about using `actual_fds[]` (instead of `pipefds`) and `expected_fds[]` instead of `(restart_*)` ?

Thanks,

Suka

|
| I think this code does the minimal number of operations needed in the
| restarted application too -- it counts on the second `dup2()` closing one
| of the `fds` if `pipefds[1] == restarted_read_fd`.

|
| Cheers,
| -Matt

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