## Subject: [PATCH][DOCUMENTATION] The namespaces compatibility list doc Posted by Pavel Emelianov on Fri, 16 Nov 2007 09:34:44 GMT

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>From time to time people begin discussions about how the namespaces are working/going-to-work together.

Ted T'so proposed to create some document that describes what problems user may have when he/she creates some new namespace, but keeps others shared. I liked this idea, so here's the initial version of such a document with the problems I currently have in mind and can describe somewhat audibly - the "namespaces compatibility list".

The Documentation/namespaces/ directory is about to contain more docs about the namespaces stuff.

Thanks to Cedirc for notes and spell checks on the doc.

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

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commit 83061c56e1c4dcd54d48a62b108d219a7f5279a0

Author: Pavel <pavel@xemulnb.sw.ru>
Date: Fri Nov 16 12:25:53 2007 +0300

Namespaces compatibility list

diff --git a/Documentation/00-INDEX b/Documentation/00-INDEX index 910e511..3ead06b 100644

- --- a/Documentation/00-INDEX
- +++ b/Documentation/00-INDEX
- @ @ -262,6 +262,8 @ @ mtrr.txt
- how to use PPro Memory Type Range Registers to increase performance. mutex-design.txt
- info on the generic mutex subsystem.
- +namespaces/
- + directory with various information about namespaces nbd.txt
- info on a TCP implementation of a network block device. netlabel/

diff --git a/Documentation/namespaces/compatibility-list.txt

b/Documentation/namespaces/compatibility-list.txt

new file mode 100644

index 0000000..9c9e5c1

- --- /dev/null
- +++ b/Documentation/namespaces/compatibility-list.txt

```
@ @ -0,0 +1,33 @ @
+ Namespaces compatibility list
+This document contains the information about the problems user
+may have when creating tasks living in different namespaces.
+Here's the summary. This matrix shows the known problems, that
+occur when tasks share some namespace (the columns) while living
+in different other namespaces (the rows):
+ UTS IPC VFS PID User Net
+UTS X
+IPC X 1
+VFS X
+PID 1 1 X
+User 2 X
        Χ
+Net
+1. Both the IPC and the PID namespaces provide IDs to address
  object inside the kernel. E.g. semaphore with ipcid or
  process group with pid.
+
 In both cases, tasks shouldn't try exposing this id to some
+ other task living in a different namespace via a shared filesystem
+ or IPC shmem/message. The fact is that this ID is only valid
 within the namespace it was obtained in and may refer to some
  other object in another namespace.
+2. Intentionnaly, two equal user ids in different user namespaces
+ should not be equal from the VFS point of view. In other
+ words, user 10 in one user namespace shouldn't have the same
+ access permissions to files, beloging to user 10 in another
  namespace. But currently this is not so.
Containers mailing list
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Containers mailing list Containers@lists.linux-foundation.org https://lists.linux-foundation.org/mailman/listinfo/containers