Subject: Re: [PATCH 11/13] Changes to show virtual ids to user Posted by ebiederm on Thu, 24 May 2007 16:33:21 GMT

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Pavel Emelianov <xemul@sw.ru> writes:

- > That's true. Sending of signal from parent ns to children
- > is tricky question. It has many solutions, I wanted to
- > discuss which one is better:

With unix domain sockets and the like it is conceivable we get a pid transfer from one namespace to another and both namespaces are leaf namespaces. I don't remember we can get a leaf to leaf transfer when sending signals.

- > 1. Make an "unused" pid in each namespace and use it when signal
- > comes from outside. This resembles the way it is done in OpenVZ.
- > 2. Send the signal like it came from the kernel.

>

- >> In particular we need to know the pid of the source task
- >> in the destination namespace.

>

- > But the source task is not always visible in dst. In this case
- > we may use pid, that never exists in the destination, just like
- > it was kill run from bash by user.

Quite true. So we have the question how do we name a the pid of an unmapped task.

The two practical alternatives I see are:

- Map the struct pid into the namespace in question.
- Use pid == 0 (as if the kernel had generated the signal).
- Use pid == -1 (to signal an unknown user space task?)

My gut fee is that using pid == 0 is the simplest and most robust way to handle it. That way we don't have information about things outside the pid namespace leaking in. Of course I don't there may be trust issues with reporting a user space process as pid == 0.

The worst case I can see with pid == 0. Is that it would be a bug that we can fix later. For other cases it would seem to be a user space API thing that we get stuck with for all time.

Eric