Subject: [PATCH 3/9] network namespaces: playing and debugging
Posted by Andrey Savochkin on Tue, 15 Aug 2006 14:48:43 GMT
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Temporary code to play with network namespaces in the simplest way.
Do
	exec 7< /proc/net/net_ns
in your bash shell and you'll get a brand new network namespace.
There you can, for example, do
	ip link set lo up
	ip addr list
	ip addr add 1.2.3.4 dev lo
	ping -n 1.2.3.4

Signed-off-by: Andrey Savochkin <saw@swsoft.com>
---
 dev.c | 20 ++++++++++++++++++++
 1 files changed, 20 insertions(+)

--- ./net/core/dev.c.vensxdbg Tue Aug 15 13:46:44 2006
+++ ./net/core/dev.c Tue Aug 15 13:46:44 2006
@@ -3597,6 +3597,8 @@ int net_ns_start(void)
  if (err)
   goto out_register;
  put_net_ns(orig_ns);
+ printk(KERN_DEBUG "NET_NS: created new netcontext %p for %s (pid=%d)\n",
+   ns, task->comm, task->tgid);
  return 0;

 out_register:
@@ -3629,14 +3631,29 @@ static void net_ns_destroy(void *data)
  ip_fib_struct_cleanup();
  pop_net_ns(orig_ns);
  kfree(ns);
+ printk(KERN_DEBUG "NET_NS: netcontext %p freed\n", ns);
 }

 void net_ns_stop(struct net_namespace *ns)
 {
+ printk(KERN_DEBUG "NET_NS: netcontext %p scheduled for stop\n", ns);
  INIT_WORK(&ns->destroy_work, net_ns_destroy, ns);
  schedule_work(&ns->destroy_work);
 }
 EXPORT_SYMBOL(net_ns_stop);
+
+static int net_ns_open(struct inode *i, struct file *f)
+{
+ return net_ns_start();

```
+}
+static struct file_operations net_ns_fops = {
+ .open = net_ns_open,
+};
+static int net_ns_init(void)
+{
+ return proc_net_fops_create("net_ns", S_IRWXU, &net_ns_fops)
+    ? 0 : -ENOMEM;
+}
 #endif

 /*
@@ -3701,6 +3718,9 @@ static int __init net_dev_init(void)
  hotcpu_notifier(dev_cpu_callback, 0);
  dst_init();
  dev_mcast_init();
+#ifdef CONFIG_NET_NS
+ net_ns_init();
+#endif
  rc = 0;
 out:
  return rc;
```

Subject: Re: [PATCH 3/9] network namespaces: playing and debugging
Posted by Stephen Hemminger on Wed, 16 Aug 2006 16:46:41 GMT
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On Tue, 15 Aug 2006 18:48:43 +0400
Andrey Savochkin <saw@sw.ru> wrote:

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> Signed-off-by: Andrey Savochkin <saw@swsoft.com>

NACK, new /proc interfaces are not acceptable.

Subject: Re: [PATCH 3/9] network namespaces: playing and debugging

Posted by ebiederm on Wed, 16 Aug 2006 17:22:28 GMT
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Stephen Hemminger <shemminger@osdl.org> writes:

> On Tue, 15 Aug 2006 18:48:43 +0400
> Andrey Savochkin <saw@sw.ru> wrote:
>
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>> ping -n 1.2.3.4
>>
>> Signed-off-by: Andrey Savochkin <saw@swsoft.com>
>
> NACK, new /proc interfaces are not acceptable.

The rule is that new /proc interfaces that are not process related
are not acceptable. If structured right a network namespace can
arguably be process related.

I do agree that this interface is pretty ugly there.

Eric

Subject: Re: [PATCH 3/9] network namespaces: playing and debugging
Posted by Andrey Savochkin on Thu, 17 Aug 2006 06:28:14 GMT
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On Wed, Aug 16, 2006 at 11:22:28AM -0600, Eric W. Biederman wrote:
> Stephen Hemminger <shemminger@osdl.org> writes:
>
> > On Tue, 15 Aug 2006 18:48:43 +0400
> > Andrey Savochkin <saw@sw.ru> wrote:
> >
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> >>
> >> Signed-off-by: Andrey Savochkin <saw@swsoft.com>
> >
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>
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> are not acceptable. If structured right a network namespace can
> arguably be process related.
>
> I do agree that this interface is pretty ugly there.

This proc interface was a backdoor to play with namespaces without
compiling any user-space programs.

As you wish.
Do you want to have a new clone flag right away?

Andrey

Subject: Re: [PATCH 3/9] network namespaces: playing and debugging
Posted by dev on Thu, 17 Aug 2006 08:29:04 GMT
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>> ping -n 1.2.3.4
>>
>>Signed-off-by: Andrey Savochkin <saw@swsoft.com>
>
>
> NACK, new /proc interfaces are not acceptable.

As you can find from the comment this patch is just for playing
with network namespace.

Kirill
