Subject: [PATCH] Remove notifier block from chain when register_netdevice_notifier fails
Posted by Pavel Emelianov on Wed, 14 Nov 2007 12:08:03 GMT View Forum Message <> Reply to Message

Commit fcc5a03ac42564e9e255c1134dda47442289e466 makes the register_netdevice_notifier() handle the error from the NETDEV_REGISTER event, sent to the registering block.

The bad news is that in this case the notifier block is not removed from the list, but the error is returned to the caller. In case the caller is in module init function and handles this error this can abort the module loading. The notifier block will be then removed from the kernel, but will be left in the list. Oops:(

I think that the notifier block should be removed from the chain in case of error, regardless whether this error is handled by the caller or not. In the worst case (the error is _not_ handled) module will not receive the events any longer.

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

```
diff --git a/net/core/dev.c b/net/core/dev.c index dd40b35..86d6261 100644
--- a/net/core/dev.c
+++ b/net/core/dev.c
@ @ -1171,6 +1171,8 @ @ rollback:
    nb->notifier_call(nb, NETDEV_UNREGISTER, dev);
    }
}
+
+ raw_notifier_chain_unregister(&netdev_chain, nb);
    goto unlock;
}
```

Subject: Re: [PATCH] Remove notifier block from chain when register_netdevice_notifier fails
Posted by Herbert Xu on Wed, 14 Nov 2007 13:37:17 GMT
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On Wed, Nov 14, 2007 at 03:08:03PM +0300, Pavel Emelyanov wrote: > Commit fcc5a03ac42564e9e255c1134dda47442289e466 makes the > register_netdevice_notifier() handle the error from the

> NETDEV_REGISTER event, sent to the registering block.

>

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- > chain in case of error, regardless whether this error is
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- > is _not_ handled) module will not receive the events any
- > longer.

>

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

Good catch. Thanks Pavel!

Acked-by: Herbert Xu <herbert@gondor.apana.org.au>

--

Visit Openswan at http://www.openswan.org/

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PGP Key: http://gondor.apana.org.au/~herbert/pubkey.txt

Subject: Re: [PATCH] Remove notifier block from chain when register_netdevice_notifier fails
Posted by Pavel Emelianov on Wed, 14 Nov 2007 13:47:24 GMT
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Herbert Xu wrote:

- > On Wed, Nov 14, 2007 at 03:08:03PM +0300, Pavel Emelyanov wrote:
- >> Commit fcc5a03ac42564e9e255c1134dda47442289e466 makes the
- >> register_netdevice_notifier() handle the error from the
- >> NETDEV_REGISTER event, sent to the registering block.

>>

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>> longer.
>>
>> Signed-off-by: Pavel Emelyanov <xemul@openvz.org>
>
> Good catch. Thanks Pavel!
>
> Acked-by: Herbert Xu <herbert@gondor.apana.org.au>

Thanks:)

BTW, I have one more question I can't find the answer to by myself. Why the unregister_netdevice_notifier doesn't produce the GOING_DOWN-DOWN-UNREGISTER event sequence for the notifier block which is being unregistered? Was this made deliberately?

Pavel

Subject: Re: [PATCH] Remove notifier block from chain when register_netdevice_notifier fails
Posted by Herbert Xu on Wed, 14 Nov 2007 13:50:55 GMT
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On Wed, Nov 14, 2007 at 04:47:24PM +0300, Pavel Emelyanov wrote:

>

- > BTW, I have one more question I can't find the answer to by
- > myself. Why the unregister_netdevice_notifier doesn't produce
- > the GOING_DOWN-DOWN-UNREGISTER event sequence for the notifier
- > block which is being unregistered? Was this made deliberately?

I think it's more of an oversight:)

Although it has no real impact because the only user that matters here is IPv6 and it can't be unloaded.

Cheers.

--

Visit Openswan at http://www.openswan.org/

Email: Herbert Xu ~{PmV>HI~} <herbert@gondor.apana.org.au>

Home Page: http://gondor.apana.org.au/~herbert/

PGP Key: http://gondor.apana.org.au/~herbert/pubkey.txt

Subject: Re: [PATCH] Remove notifier block from chain when register_netdevice_notifier fails Posted by davem on Wed, 14 Nov 2007 23:53:43 GMT

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From: Herbert Xu <herbert@gondor.apana.org.au>

Date: Wed, 14 Nov 2007 21:37:17 +0800

> Acked-by: Herbert Xu <herbert@gondor.apana.org.au>

Indeed, good catch, patch applied.

Thanks!