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Subject: [PATCH] vlan: fix potential race in vlan\_cleanup\_module vs  
vlan\_ioctl\_handler

Posted by [Pavel Emelianov](#) on Tue, 11 Dec 2007 10:25:11 GMT

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The vlan module cleanup function starts with

```
vlan_netlink_fini();  
vlan_ioctl_set(NULL);
```

The first call removes all the vlan devices and  
the second one closes the vlan ioctl.

AFAIS there's a tiny race window between these two  
calls - after rtnl unregistered all the vlans, but  
the ioctl handler isn't set to NULL yet, user can  
manage to call this ioctl and create one vlan device,  
and that this function will later BUG\_ON seeing  
non-empty hashes.

I think, that we must first close the vlan ioctl  
and only after this remove all the vlans with the  
vlan\_netlink\_fini() call.

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

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```
diff --git a/net/8021q/vlan.c b/net/8021q/vlan.c  
index 5b18315..4add9bd 100644  
--- a/net/8021q/vlan.c  
+++ b/net/8021q/vlan.c  
@@ -124,8 +124,8 @@ static void __exit vlan_cleanup_module(void)  
{  
    int i;  
  
-    vlan_netlink_fini();  
-    vlan_ioctl_set(NULL);  
+    vlan_netlink_fini();  
  
    /* Un-register us from receiving netdevice events */  
    unregister_netdevice_notifier(&vlan_notifier_block);
```

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Subject: Re: [PATCH] vlan: fix potential race in vlan\_cleanup\_module vs  
vlan\_ioctl\_handler

Posted by [Patrick McHardy](#) on Tue, 11 Dec 2007 10:38:38 GMT

Pavel Emelyanov wrote:

> The vlan module cleanup function starts with  
>  
> vlan\_netlink\_fini();  
> vlan\_ioctl\_set(NULL);  
>  
> The first call removes all the vlan devices and  
> the second one closes the vlan ioctl.  
>  
> AFAIS there's a tiny race window between these two  
> calls - after rtnl unregistered all the vlans, but  
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> and that this function will later BUG\_ON seeing  
> non-empty hashes.

Indeed, I can't see anything preventing this.

> I think, that we must first close the vlan ioctl  
> and only after this remove all the vlans with the  
> vlan\_netlink\_fini() call.

That looks correct, thanks Pavel. Dave, please apply.

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Subject: Re: [PATCH] vlan: fix potential race in vlan\_cleanup\_module vs  
vlan\_ioctl\_handler

Posted by [davem](#) on Tue, 11 Dec 2007 10:41:38 GMT

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From: Patrick McHardy <kaber@trash.net>

Date: Tue, 11 Dec 2007 11:38:38 +0100

> Pavel Emelyanov wrote:  
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> > I think, that we must first close the vlan ioctl  
> > and only after this remove all the vlans with the  
> > vlan\_netlink\_fini() call.

>  
> That looks correct, thanks Pavel. Dave, please apply.

Applied to net-2.6, thanks!

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