Subject: Re: [PATCH 2.6.18] e1000: fix initialization irqs Posted by Auke Kok on Wed, 22 Nov 2006 16:19:16 GMT

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Dmitry Mishin wrote:

- > In case of irgpoll boot option set, e1000 may oops due to:
- > 1) e1000 register it's handler with e1000_request_irq
- > 2) spurious interrupt happens
- > 3) kernel tries to handle this interrupt with all available descs
- > 4) e1000 intr is called and oops due to not initialized clean rx handler,
- > because e1000_up is not called yet.

>

> Solution is to initialize driver before handler registration.

I'm not so sure of that. even if we request our irq's to be routed it does not mean that we told the NIC to send them. It would suggest that you might be haunted by the MSI interrupts not working 100% correctly on some non-intel platform.

Now you're telling the NIC to send interrupts before we routed them I think.

If we _up() before we even have an interrupt, even more bad things could happen.

What is the reason you wrote this workaround?

Auke

```
> Signed-off-by: Dmitry Mishin <dim@openvz.org>
> Signed-off-by: Pavel Emelianov <xemul@openvz.org>
>
> e1000_main.c | 9 +++++----
  1 file changed, 5 insertions(+), 4 deletions(-)
> ---
> --- ./drivers/net/e1000/e1000 main.c.e1000 2006-09-20 07:42:06.000000000 +0400
> +++ ./drivers/net/e1000/e1000_main.c 2006-11-22 14:08:15.000000000 +0300
> @ @ -1206,14 +1206,15 @ @ e1000 open(struct net_device *netdev)
   if ((err = e1000 setup all rx resources(adapter)))
   goto err_setup_rx;
> - err = e1000_request_irg(adapter);
> - if (err)
> - goto err_up;
  e1000_power_up_phy(adapter);
  if ((err = e1000 \text{ up}(adapter)))
```

```
> goto err_up;
> +
> + err = e1000_request_irq(adapter);
> + if (err)
> + goto err_up;
> +
> adapter->mng_vlan_id = E1000_MNG_VLAN_NONE;
> if ((adapter->hw.mng_cookie.status &
> E1000_MNG_DHCP_COOKIE_STATUS_VLAN_SUPPORT)) {
> -
> To unsubscribe from this list: send the line "unsubscribe netdev" in
> the body of a message to majordomo@vger.kernel.org
> More majordomo info at http://vger.kernel.org/majordomo-info.html
```