
Subject: [PATCH net-2.6.25 2/3][IPV4] Unify and cleanup calls to

devinet_sysctl_register

Posted by [Pavel Emelianov](#) on Fri, 30 Nov 2007 18:26:58 GMT

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Currently this call is used to register sysctls for devices
and for the "default" confs. The "all" sysctls are registered
separately.

Besides, the `inet_device` is passed to this function, but
it is not needed there at all - just the device name and
ifindex are required.

The fix is to make a `__devinet_sysctl_register()`, which registers
sysctls for all "devices" we need, including "default" and "all" :)

The original `devinet_sysctl_register()` works with `struct net_device`,
not the `inet_device`, and calls the introduced function, passing
the device name and ifindex (to be used as procname and `ctl_name`)
into it.

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```
diff --git a/net/ipv4/devinet.c b/net/ipv4/devinet.c
index 34c34c6..f65c350 100644
--- a/net/ipv4/devinet.c
+++ b/net/ipv4/devinet.c
@@ -98,7 +98,7 @@ static BLOCKING_NOTIFIER_HEAD(inetaddr_chain);
static void inet_del_ifa(struct in_device *in_dev, struct in_ifaddr **ifap,
    int destroy);
#endif CONFIG_SYSCTL
-static void devinet_sysctl_register(struct in_device *in_dev,
+static void devinet_sysctl_register(struct net_device *dev,
    struct ipv4_devconf *p);
static void devinet_sysctl_unregister(struct ipv4_devconf *p);
#endif
@@ -173,7 +173,7 @@ static struct in_device *inetdev_init(struct net_device *dev)
    in_dev_hold(in_dev);

#endif CONFIG_SYSCTL
- devinet_sysctl_register(in_dev, &in_dev->cnf);
+ devinet_sysctl_register(dev, &in_dev->cnf);
#endif
    ip_mc_init_dev(in_dev);
    if (dev->flags & IFF_UP)
@@ -1120,7 +1120,7 @@ static int inetdev_event(struct notifier_block *this, unsigned long event,
```

```

neigh_sysctl_unregister(in_dev->arp_parms);
neigh_sysctl_register(dev, in_dev->arp_parms, NET_IPV4,
    NET_IPV4_NEIGH, "ipv4", NULL, NULL);
- devinet_sysctl_register(in_dev, &in_dev->cnf);
+ devinet_sysctl_register(dev, &in_dev->cnf);
#endif
break;
}
@@ -1502,13 +1502,11 @@ static struct devinet_sysctl_table {
},
};

-static void devinet_sysctl_register(struct in_device *in_dev,
-    struct ipv4_devconf *p)
+static void __devinet_sysctl_register(char *dev_name, int ctl_name,
+    struct ipv4_devconf *p)
{
int i;
- struct net_device *dev = in_dev ? in_dev->dev : NULL;
- struct devinet_sysctl_table *t;
- char *dev_name = NULL;

t = kmempdup(&devinet_sysctl, sizeof(*t), GFP_KERNEL);
if (!t)
@@ -1519,13 +1517,7 @@ static void devinet_sysctl_register(struct in_device *in_dev,
    t->devinet_vars[i].extra1 = p;
}

-if (dev) {
- dev_name = dev->name;
- t->devinet_dev[0].ctl_name = dev->ifindex;
- } else {
- dev_name = "default";
- t->devinet_dev[0].ctl_name = NET_PROTO_CONF_DEFAULT;
- }
+ t->devinet_dev[0].ctl_name = ctl_name;

/*
 * Make a copy of dev_name, because '.procname' is regarded as const
@@ -1557,6 +1549,12 @@ out:
return;
}

+static void devinet_sysctl_register(struct net_device *dev,
+    struct ipv4_devconf *p)
+{
+ return __devinet_sysctl_register(dev->name, dev->ifindex, p);
+}

```

```
+ static void devinet_sysctl_unregister(struct ipv4_devconf *p)
{
    if (p->sysctl) {
@@ -1578,9 +1576,10 @@ void __init devinet_init(void)
    rtnl_register(PF_INET, RTM_DELADDR, inet_rtm_deladdr, NULL);
    rtnl_register(PF_INET, RTM_GETADDR, NULL, inet_dump_ifaddr);
#endif CONFIG_SYSCTL
- devinet_sysctl.sysctl_header =
- register_sysctl_table(devinet_sysctl.devinet_root_dir);
- devinet_sysctl_register(NULL, &ipv4_devconf_dflt);
+ __devinet_sysctl_register("all", NET_PROTO_CONF_ALL,
+ &ipv4_devconf);
+ __devinet_sysctl_register("default", NET_PROTO_CONF_DEFAULT,
+ &ipv4_devconf_dflt);
#endif
}
```

--
1.5.3.4
