
Subject: [PATCH] net: Marking struct pernet_operations __net_initdata was inappropriate

Posted by [ebiederm](#) on Fri, 26 Oct 2007 23:45:33 GMT

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It is not safe to place struct pernet_operations in a special section.
We need struct pernet_operations to last until we call unregister_pernet_subsys.
Which doesn't happen until module unload.

So marking struct pernet_operations is a disaster for modules in two ways.

- We discard it before we call the exit method it points to.
- Because I keep struct pernet_operations on a linked list discarding it for compiled in code removes elements in the middle of a linked list and does horrible things for linked insert.

So this looks safe assuming __exit_refok is not discarded for modules.

Signed-off-by: Eric W. Biederman <ebiederm@xmission.com>

```
---
drivers/net/loopback.c    |  2 +-
fs/proc/proc_net.c        |  2 +-
include/net/net_namespace.h |  2 --
net/core/dev.c            |  6 +++---
net/core/dev_mcast.c      |  2 +-
net/netlink/af_netlink.c  |  2 +-
6 files changed, 7 insertions(+), 9 deletions(-)
```

```
diff --git a/drivers/net/loopback.c b/drivers/net/loopback.c
index 662b8d1..45f30a2 100644
--- a/drivers/net/loopback.c
+++ b/drivers/net/loopback.c
@@ -284,7 +284,7 @@ static __net_exit void loopback_net_exit(struct net *net)
    unregister_netdev(dev);
}
```

```
-static struct pernet_operations __net_initdata loopback_net_ops = {
+static struct pernet_operations loopback_net_ops = {
    .init = loopback_net_init,
    .exit = loopback_net_exit,
};
```

```
diff --git a/fs/proc/proc_net.c b/fs/proc/proc_net.c
index 4edaad0..749def0 100644
--- a/fs/proc/proc_net.c
+++ b/fs/proc/proc_net.c
@@ -185,7 +185,7 @@ static __net_exit void proc_net_ns_exit(struct net *net)
    kfree(net->proc_net_root);
}
```

```

-static struct pernet_operations __net_initdata proc_net_ns_ops = {
+static struct pernet_operations proc_net_ns_ops = {
    .init = proc_net_ns_init,
    .exit = proc_net_ns_exit,
};
diff --git a/include/net/net_namespace.h b/include/net/net_namespace.h
index 93aa87d..5279466 100644
--- a/include/net/net_namespace.h
+++ b/include/net/net_namespace.h
@@ -102,11 +102,9 @@ static inline void release_net(struct net *net)
#ifdef CONFIG_NET_NS
#define __net_init
#define __net_exit
-#define __net_initdata
#else
#define __net_init __init
#define __net_exit __exit_refok
-#define __net_initdata __initdata
#endif

struct pernet_operations {
diff --git a/net/core/dev.c b/net/core/dev.c
index ddfef3b..853c8b5 100644
--- a/net/core/dev.c
+++ b/net/core/dev.c
@@ -2668,7 +2668,7 @@ static void __net_exit dev_proc_net_exit(struct net *net)
    proc_net_remove(net, "dev");
}

-static struct pernet_operations __net_initdata dev_proc_ops = {
+static struct pernet_operations dev_proc_ops = {
    .init = dev_proc_net_init,
    .exit = dev_proc_net_exit,
};
@@ -4328,7 +4328,7 @@ static void __net_exit netdev_exit(struct net *net)
    kfree(net->dev_index_head);
}

-static struct pernet_operations __net_initdata netdev_net_ops = {
+static struct pernet_operations netdev_net_ops = {
    .init = netdev_init,
    .exit = netdev_exit,
};
@@ -4359,7 +4359,7 @@ static void __net_exit default_device_exit(struct net *net)
    rtnl_unlock();
}

```

```

-static struct pernet_operations __net_initdata default_device_ops = {
+static struct pernet_operations default_device_ops = {
    .exit = default_device_exit,
};

diff --git a/net/core/dev_mcast.c b/net/core/dev_mcast.c
index 15241cf..ae35405 100644
--- a/net/core/dev_mcast.c
+++ b/net/core/dev_mcast.c
@@ -285,7 +285,7 @@ static void __net_exit dev_mc_net_exit(struct net *net)
    proc_net_remove(net, "dev_mcast");
}

-static struct pernet_operations __net_initdata dev_mc_net_ops = {
+static struct pernet_operations dev_mc_net_ops = {
    .init = dev_mc_net_init,
    .exit = dev_mc_net_exit,
};

diff --git a/net/netlink/af_netlink.c b/net/netlink/af_netlink.c
index 3252729..4f994c0 100644
--- a/net/netlink/af_netlink.c
+++ b/net/netlink/af_netlink.c
@@ -1888,7 +1888,7 @@ static void __net_exit netlink_net_exit(struct net *net)
#endif
}

-static struct pernet_operations __net_initdata netlink_net_ops = {
+static struct pernet_operations netlink_net_ops = {
    .init = netlink_net_init,
    .exit = netlink_net_exit,
};
--
1.5.3.rc6.17.g1911

```

Containers mailing list
Containers@lists.linux-foundation.org
<https://lists.linux-foundation.org/mailman/listinfo/containers>
