Subject: [PATCH] net: Marking struct pernet_operations __net_initdata was inappropriate
Posted by ebiederm on Fri, 26 Oct 2007 23:45:33 GMT
View Forum Message <> Reply to Message

It is not safe to 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