
Subject: [PATCH RFC 24/31] net: Make rtnetlink network namespace aware
Posted by [ebiederm](#) on Thu, 25 Jan 2007 19:00:26 GMT

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From: Eric W. Biederman <ebiederm@xmission.com> - unquoted

After this patch none of the netlink callback support anything
except the initial network namespace but the rtnetlink infrastructure
now handles multiple network namespaces.

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

```
include/linux/rtnetlink.h |  8 +---  
net/bridge/br_netlink.c |  4 +-  
net/core/fib_rules.c  |  4 +-  
net/core/neighbour.c  |  4 +-  
net/core/rtnetlink.c   | 74 ++++++-----  
net/core/wireless.c   |  5 +--  
net/decnet/dn_dev.c   |  4 +-  
net/decnet/dn_route.c |  2 +-  
net/decnet/dn_table.c |  4 +-  
net/ipv4/devinet.c    |  4 +-  
net/ipv4/fib_semantics.c |  4 +-  
net/ipv4/ipmr.c      |  4 +-  
net/ipv4/route.c     |  2 +-  
net/ipv6/addrconf.c  | 14 +----  
net/ipv6/route.c     |  6 +---  
net/sched/cls_api.c  |  2 +-  
net/sched/sch_api.c  |  4 +-  
17 files changed, 98 insertions(+), 51 deletions(-)
```

```
diff --git a/include/linux/rtnetlink.h b/include/linux/rtnetlink.h  
index 4a629ea..6c8281d 100644  
--- a/include/linux/rtnetlink.h  
+++ b/include/linux/rtnetlink.h  
@@ -581,11 +581,11 @@ struct rtnetlink_link  
};  
  
extern struct rtnetlink_link * rtnetlink_links[NPROTO];  
-extern int rtnetlink_send(struct sk_buff *skb, u32 pid, u32 group, int echo);  
-extern int rtnl_unicast(struct sk_buff *skb, u32 pid);  
-extern int rtnl_notify(struct sk_buff *skb, u32 pid, u32 group,  
+extern int rtnetlink_send(struct sk_buff *skb, net_t net, u32 pid, u32 group, int echo);  
+extern int rtnl_unicast(struct sk_buff *skb, net_t net, u32 pid);  
+extern int rtnl_notify(struct sk_buff *skb, net_t net, u32 pid, u32 group,  
    struct nlmsghdr *nlh, gfp_t flags);  
-extern void rtnl_set_sk_err(u32 group, int error);  
+extern void rtnl_set_sk_err(net_t net, u32 group, int error);
```

```

extern int rtnealink_put_metrics(struct sk_buff *skb, u32 *metrics);
extern int rtnl_put_cacheinfo(struct sk_buff *skb, struct dst_entry *dst,
    u32 id, u32 ts, u32 tsage, long expires,
diff --git a/net/bridge/br_netlink.c b/net/bridge/br_netlink.c
index 85165a1..372fb18 100644
--- a/net/bridge/br_netlink.c
+++ b/net/bridge/br_netlink.c
@@ -94,10 +94,10 @@ void br_ifinfo_notify(int event, struct net_bridge_port *port)
 /* failure implies BUG in br_nlmsg_size() */
 BUG_ON(err < 0);

- err = rtnl_notify(skb, 0, RTNLGRP_LINK, NULL, GFP_ATOMIC);
+ err = rtnl_notify(skb, init_net(), 0, RTNLGRP_LINK, NULL, GFP_ATOMIC);
erout:
if (err < 0)
- rtnl_set_sk_err(RTNLGRP_LINK, err);
+ rtnl_set_sk_err(init_net(), RTNLGRP_LINK, err);
}

/*
diff --git a/net/core/fib_rules.c b/net/core/fib_rules.c
index 00b4148..5f65973 100644
--- a/net/core/fib_rules.c
+++ b/net/core/fib_rules.c
@@ -418,10 +418,10 @@ static void notify_rule_change(int event, struct fib_rule *rule,
 /* failure implies BUG in fib_rule_nlmsg_size() */
 BUG_ON(err < 0);

- err = rtnl_notify(skb, pid, ops->nlgrouop, nlh, GFP_KERNEL);
+ err = rtnl_notify(skb, init_net(), pid, ops->nlgrouop, nlh, GFP_KERNEL);
erout:
if (err < 0)
- rtnl_set_sk_err(ops->nlgrouop, err);
+ rtnl_set_sk_err(init_net(), ops->nlgrouop, err);
}

static void attach_rules(struct list_head *rules, struct net_device *dev)
diff --git a/net/core/neighbour.c b/net/core/neighbour.c
index d89c6fe..6f61207 100644
--- a/net/core/neighbour.c
+++ b/net/core/neighbour.c
@@ -2453,10 +2453,10 @@ static void __neigh_notify(struct neighbour *n, int type, int flags)
 /* failure implies BUG in neigh_nlmsg_size() */
 BUG_ON(err < 0);

- err = rtnl_notify(skb, 0, RTNLGRP_NEIGH, NULL, GFP_ATOMIC);
+ err = rtnl_notify(skb, init_net(), 0, RTNLGRP_NEIGH, NULL, GFP_ATOMIC);
erout:

```

```

if (err < 0)
- rtnl_set_sk_err(RTNLGRP_NEIGH, err);
+ rtnl_set_sk_err(init_net(), RTNLGRP_NEIGH, err);
}

void neigh_app_ns(struct neighbour *n)
diff --git a/net/core/rtnetlink.c b/net/core/rtnetlink.c
index 9be586c..29a81bf 100644
--- a/net/core/rtnetlink.c
+++ b/net/core/rtnetlink.c
@@ -58,7 +58,7 @@
#endif /* CONFIG_NET_WIRELESS_RTNETLINK */

static DEFINE_MUTEX(rtnl_mutex);
-static struct sock *rtnl;
+static DEFINE_PER_NET(struct sock *, rtnl);

void rtnl_lock(void)
{
@@ -72,9 +72,17 @@ void __rtnl_unlock(void)

void rtnl_unlock(void)
{
+ net_t net;
 mutex_unlock(&rtnl_mutex);
- if (rtnl && rtnl->sk_receive_queue.qlen)
- rtnl->sk_data_ready(rtnl, 0);
+
+ net_lock();
+ for_each_net(net) {
+ struct sock *rtnl = per_net(rtnl, net);
+ if (rtnl && rtnl->sk_receive_queue.qlen)
+ rtnl->sk_data_ready(rtnl, 0);
+ }
+ net_unlock();
+
 netdev_run_todo();
}

@@ -151,8 +159,9 @@ size_t rtattr_strlcpy(char *dest, const struct rtattr *rta, size_t size)
    return ret;
}

-int rtnetlink_send(struct sk_buff *skb, u32 pid, unsigned group, int echo)
+int rtnetlink_send(struct sk_buff *skb, net_t net, u32 pid, unsigned group, int echo)
{
+ struct sock *rtnl = per_net(rtnl, net);
    int err = 0;

```

```

NETLINK_CB(skb).dst_group = group;
@@ -164,14 +173,17 @@ int rtnetlink_send(struct sk_buff *skb, u32 pid, unsigned group, int
echo)
    return err;
}

-int rtnl_unicast(struct sk_buff *skb, u32 pid)
+int rtnl_unicast(struct sk_buff *skb, net_t net, u32 pid)
{
+ struct sock *rtnl = per_net(rtnl, net);
+
    return nlmsg_unicast(rtnl, skb, pid);
}

-int rtnl_notify(struct sk_buff *skb, u32 pid, u32 group,
+int rtnl_notify(struct sk_buff *skb, net_t net, u32 pid, u32 group,
    struct nlmsghdr *nlh, gfp_t flags)
{
+ struct sock *rtnl = per_net(rtnl, net);
    int report = 0;

    if (nlh)
@@ -180,8 +192,10 @@ int rtnl_notify(struct sk_buff *skb, u32 pid, u32 group,
    return nlmsg_notify(rtnl, skb, pid, group, report, flags);
}

-void rtnl_set_sk_err(u32 group, int error)
+void rtnl_set_sk_err(net_t net, u32 group, int error)
{
+ struct sock *rtnl = per_net(rtnl, net);
+
    netlink_set_err(rtnl, 0, group, error);
}

@@ -649,7 +663,7 @@ static int rtnl_getlink(struct sk_buff *skb, struct nlmsghdr* nlh, void *arg)
/* failure implies BUG in if_nlmsg_size or wireless_rtinetlink_get */
BUG_ON(err < 0);

- err = rtnl_unicast(nskb, NETLINK_CB(skb).pid);
+ err = rtnl_unicast(nskb, net, NETLINK_CB(skb).pid);
erout:
    kfree(iw_buf);
    dev_put(dev);
@@ -698,10 +712,10 @@ void rtmsg_ifinfo(int type, struct net_device *dev, unsigned change)
/* failure implies BUG in if_nlmsg_size() */
BUG_ON(err < 0);

```

```

- err = rtnl_notify(skb, 0, RTNLGRP_LINK, NULL, GFP_KERNEL);
+ err = rtnl_notify(skb, init_net(), 0, RTNLGRP_LINK, NULL, GFP_KERNEL);
errout:
if (err < 0)
- rtnl_set_sk_err(RTNLGRP_LINK, err);
+ rtnl_set_sk_err(init_net(), RTNLGRP_LINK, err);
}

/* Protected by RTNL sempahore. */
@@ -713,6 +727,7 @@ static int rtattr_max;
static __inline__ int
rtnetlink_rcv_msg(struct sk_buff *skb, struct nlmsghdr *nlh, int *errp)
{
+ net_t net = skb->sk->sk_net;
    struct rtnetlink_link *link;
    struct rtnetlink_link *link_tab;
    int sz_idx, kind;
@@ -767,7 +782,7 @@ rtnetlink_rcv_msg(struct sk_buff *skb, struct nlmsghdr *nlh, int *errp)
    if (link->dumpit == NULL)
        goto err_inval;

- if ((*errp = netlink_dump_start(rtnl, skb, nlh,
+ if ((*errp = netlink_dump_start(per_net(rtnl, net), skb, nlh,
        link->dumpit, NULL)) != 0) {
    return -1;
}
@@ -875,6 +890,36 @@ static struct notifier_block rtnetlink_dev_notifier = {
    .notifier_call = rtnetlink_event,
};

+
+static int rtnetlink_net_init(net_t net)
+{
+ struct sock *sk;
+ sk = netlink_kernel_create(net, NETLINK_ROUTE, RTNLGRP_MAX,
+     rtnetlink_rcv, THIS_MODULE);
+ if (!sk)
+     return -ENOMEM;
+
+ /* Don't hold an extra reference on the namespace */
+ put_net(sk->sk_net);
+ per_net(rtnl, net) = sk;
+ return 0;
+}
+
+static void rtnetlink_net_exit(net_t net)
+{
+ /* At the last minute lie and say this is a socket for the

```

```

+ * initial network namespace. So the socket will be safe to
+ * free.
+ */
+ per_net(rtnl, net)->sk_net = get_net(init_net());
+ sock_put(per_net(rtnl, net));
+}
+
+static struct pernet_operations rtinetlink_net_ops = {
+ .init = rtinetlink_net_init,
+ .exit = rtinetlink_net_exit,
+};
+
void __init rtinetlink_init(void)
{
    int i;
@@ -887,10 +932,9 @@ void __init rtinetlink_init(void)
    if (!rta_buf)
        panic("rtinetlink_init: cannot allocate rta_buf\n");

- rtnl = netlink_kernel_create(init_net(), NETLINK_ROUTE, RTNLGRP_MAX,
-     rtinetlink_rcv, THIS_MODULE);
- if (rtnl == NULL)
-     panic("rtinetlink_init: cannot initialize rtinetlink\n");
+ if (register_pernet_subsys(&rtinetlink_net_ops))
+     panic("rtinetlink_init: cannot initialize rtinetlink\n");
+
    netlink_set_nonroot(NETLINK_ROUTE, NL_NONROOT_RECV);
    register_netdevice_notifier(&rtinetlink_dev_notifier);
    rtinetlink_links[PF_UNSPEC] = link_rtinetlink_table;
diff --git a/net/core/wireless.c b/net/core/wireless.c
index d1418bf..9036359 100644
--- a/net/core/wireless.c
+++ b/net/core/wireless.c
@@ -1935,7 +1935,7 @@ static void wireless_nlevent_process(unsigned long data)
    struct sk_buff *skb;

    while ((skb = skb_dequeue(&wireless_nlevent_queue)))
-     rtnl_notify(skb, 0, RTNLGRP_LINK, NULL, GFP_ATOMIC);
+     rtnl_notify(skb, init_net(), 0, RTNLGRP_LINK, NULL, GFP_ATOMIC);
}

static DECLARE_TASKLET(wireless_nlevent_tasklet, wireless_nlevent_process, 0);
@@ -1992,6 +1992,9 @@ static inline void rtmsg_iwinfo(struct net_device * dev,
    struct sk_buff *skb;
    int size = NLMSG_GOODSIZE;

+ if (!net_eq(dev->nd_net, init_net()))
+     return;

```

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+
 skb = alloc_skb(size, GFP_ATOMIC);
 if (!skb)
 return;
diff --git a/net/decnet/dn_dev.c b/net/decnet/dn_dev.c
index a09275b..bad972d 100644
--- a/net/decnet/dn_dev.c
+++ b/net/decnet/dn_dev.c
@@ -788,10 +788,10 @@ static void dn_ifaddr_notify(int event, struct dn_ifaddr *ifa)
 /* failure implies BUG in dn_ifaddr_nlmsg_size() */
 BUG_ON(err < 0);

- err = rtnl_notify(skb, 0, RTNLGRP_DECnet_IFADDR, NULL, GFP_KERNEL);
+ err = rtnl_notify(skb, init_net(), 0, RTNLGRP_DECnet_IFADDR, NULL, GFP_KERNEL);
errout:
if (err < 0)
- rtnl_set_sk_err(RTNLGRP_DECnet_IFADDR, err);
+ rtnl_set_sk_err(init_net(), RTNLGRP_DECnet_IFADDR, err);
}

static int dn_nl_dump_ifaddr(struct sk_buff *skb, struct netlink_callback *cb)
diff --git a/net/decnet/dn_route.c b/net/decnet/dn_route.c
index d942ea0..4b353d4 100644
--- a/net/decnet/dn_route.c
+++ b/net/decnet/dn_route.c
@@ -1604,7 +1604,7 @@ int dn_cache_getroute(struct sk_buff *in_skb, struct nlmsghdr *nlh,
void *arg)
goto out_free;
}

- return rtnl_unicast(skb, NETLINK_CB(in_skb).pid);
+ return rtnl_unicast(skb, init_net(), NETLINK_CB(in_skb).pid);

out_free:
kfree_skb(skb);
diff --git a/net/decnet/dn_table.c b/net/decnet/dn_table.c
index 3ff151c..4090ab5 100644
--- a/net/decnet/dn_table.c
+++ b/net/decnet/dn_table.c
@@ -371,10 +371,10 @@ static void dn_rtmsg_fib(int event, struct dn_fib_node *f, int z, u32
tb_id,
/* failure implies BUG in dn_fib_nlmsg_size() */
BUG_ON(err < 0);

- err = rtnl_notify(skb, pid, RTNLGRP_DECnet_ROUTE, nlh, GFP_KERNEL);
+ err = rtnl_notify(skb, init_net(), pid, RTNLGRP_DECnet_ROUTE, nlh, GFP_KERNEL);
errout:
if (err < 0)

```

```

- rtnl_set_sk_err(RTNLGRP_DECnet_ROUTE, err);
+ rtnl_set_sk_err(init_net(), RTNLGRP_DECnet_ROUTE, err);
}

static __inline__ int dn_hash_dump_bucket(struct sk_buff *skb,
diff --git a/net/ipv4/devinet.c b/net/ipv4/devinet.c
index 7769b1c..59acce2 100644
--- a/net/ipv4/devinet.c
+++ b/net/ipv4/devinet.c
@@ -1241,10 +1241,10 @@ static void rtmsg_ifa(int event, struct in_ifaddr* ifa, struct nlmsghdr
*nlh,
 /* failure implies BUG in inet_nlmsg_size() */
 BUG_ON(err < 0);

- err = rtnl_notify(skb, pid, RTNLGRP_IPV4_IFADDR, nlh, GFP_KERNEL);
+ err = rtnl_notify(skb, init_net(), pid, RTNLGRP_IPV4_IFADDR, nlh, GFP_KERNEL);
errout:
if (err < 0)
- rtnl_set_sk_err(RTNLGRP_IPV4_IFADDR, err);
+ rtnl_set_sk_err(init_net(), RTNLGRP_IPV4_IFADDR, err);
}

static struct rtnetlink_link inet_rtnetlink_table[RTM_NR_MSGTYPES] = {
diff --git a/net/ipv4/fib_semantics.c b/net/ipv4/fib_semantics.c
index 76218e5..8c64334 100644
--- a/net/ipv4/fib_semantics.c
+++ b/net/ipv4/fib_semantics.c
@@ -317,11 +317,11 @@ void rtmsg_fib(int event, __be32 key, struct fib_alias *fa,
/* failure implies BUG in fib_nlmsg_size() */
BUG_ON(err < 0);

- err = rtnl_notify(skb, info->pid, RTNLGRP_IPV4_ROUTE,
+ err = rtnl_notify(skb, init_net(), info->pid, RTNLGRP_IPV4_ROUTE,
info->nlh, GFP_KERNEL);
errout:
if (err < 0)
- rtnl_set_sk_err(RTNLGRP_IPV4_ROUTE, err);
+ rtnl_set_sk_err(init_net(), RTNLGRP_IPV4_ROUTE, err);
}

/* Return the first fib alias matching TOS with
diff --git a/net/ipv4/ipmr.c b/net/ipv4/ipmr.c
index d2e7e55..15e0eb4 100644
--- a/net/ipv4/ipmr.c
+++ b/net/ipv4/ipmr.c
@@ -314,7 +314,7 @@ static void ipmr_destroy_unres(struct mfc_cache *c)
e->error = -ETIMEDOUT;
memset(&e->msg, 0, sizeof(e->msg));

```

```

- rtnl_unicast(skb, NETLINK_CB(skb).pid);
+ rtnl_unicast(skb, init_net(), NETLINK_CB(skb).pid);
} else
    kfree_skb(skb);
}
@@ -527,7 +527,7 @@ static void ipmr_cache_resolve(struct mfc_cache *uc, struct mfc_cache
*c)
    memset(&e->msg, 0, sizeof(e->msg));
}

- rtnl_unicast(skb, NETLINK_CB(skb).pid);
+ rtnl_unicast(skb, init_net(), NETLINK_CB(skb).pid);
} else
    ip_mr_forward(skb, c, 0);
}
diff --git a/net/ipv4/route.c b/net/ipv4/route.c
index 509bfb1..5f8592e 100644
--- a/net/ipv4/route.c
+++ b/net/ipv4/route.c
@@ -2802,7 +2802,7 @@ int inet_rtm_getroute(struct sk_buff *in_skb, struct nlmsghdr* nh, void
*arg)
if (err <= 0)
    goto errout_free;

- err = rtnl_unicast(skb, NETLINK_CB(in_skb).pid);
+ err = rtnl_unicast(skb, init_net(), NETLINK_CB(in_skb).pid);
errout:
return err;

diff --git a/net/ipv6/addrconf.c b/net/ipv6/addrconf.c
index 83b7312..597bc10 100644
--- a/net/ipv6/addrconf.c
+++ b/net/ipv6/addrconf.c
@@ -3362,7 +3362,7 @@ static int inet6_rtm_getaddr(struct sk_buff *in_skb, struct nlmsghdr*
nlh,
/* failure implies BUG in inet6_ifaddr_msgsize() */
BUG_ON(err < 0);

- err = rtnl_unicast(skb, NETLINK_CB(in_skb).pid);
+ err = rtnl_unicast(skb, init_net(), NETLINK_CB(in_skb).pid);
errout_ifa:
in6_ifa_put(ifa);
errout:
@@ -3382,10 +3382,10 @@ static void inet6_ifa_notify(int event, struct inet6_ifaddr *ifa)
/* failure implies BUG in inet6_ifaddr_msgsize() */
BUG_ON(err < 0);

```

```

- err = rtnl_notify(skb, 0, RTNLGRP_IPV6_IFADDR, NULL, GFP_ATOMIC);
+ err = rtnl_notify(skb, init_net(), 0, RTNLGRP_IPV6_IFADDR, NULL, GFP_ATOMIC);
errout:
if (err < 0)
- rtnl_set_sk_err(RTNLGRP_IPV6_IFADDR, err);
+ rtnl_set_sk_err(init_net(), RTNLGRP_IPV6_IFADDR, err);
}

static void inline ipv6_store_devconf(struct ipv6_devconf *cnf,
@@ -3539,10 +3539,10 @@ void inet6_ifinfo_notify(int event, struct inet6_dev *idev)
/* failure implies BUG in inet6_if_nlmsg_size() */
BUG_ON(err < 0);

- err = rtnl_notify(skb, 0, RTNLGRP_IPV6_IFADDR, NULL, GFP_ATOMIC);
+ err = rtnl_notify(skb, init_net(), 0, RTNLGRP_IPV6_IFADDR, NULL, GFP_ATOMIC);
errout:
if (err < 0)
- rtnl_set_sk_err(RTNLGRP_IPV6_IFADDR, err);
+ rtnl_set_sk_err(init_net(), RTNLGRP_IPV6_IFADDR, err);
}

static inline size_t inet6_prefix_nlmsg_size(void)
@@ -3604,10 +3604,10 @@ static void inet6_prefix_notify(int event, struct inet6_dev *idev,
/* failure implies BUG in inet6_prefix_nlmsg_size() */
BUG_ON(err < 0);

- err = rtnl_notify(skb, 0, RTNLGRP_IPV6_PREFIX, NULL, GFP_ATOMIC);
+ err = rtnl_notify(skb, init_net(), 0, RTNLGRP_IPV6_PREFIX, NULL, GFP_ATOMIC);
errout:
if (err < 0)
- rtnl_set_sk_err(RTNLGRP_IPV6_PREFIX, err);
+ rtnl_set_sk_err(init_net(), RTNLGRP_IPV6_PREFIX, err);
}

static struct rtnetlink_link inet6_rtinetlink_table[RTM_NR_MSGTYPES] = {
diff --git a/net/ipv6/route.c b/net/ipv6/route.c
index 02fd8ae..cf568f6 100644
--- a/net/ipv6/route.c
+++ b/net/ipv6/route.c
@@ -2210,7 +2210,7 @@ int inet6_rtm_getroute(struct sk_buff *in_skb, struct nlmsghdr* nlh,
void *arg)
goto errout;
}

- err = rtnl_unicast(skb, NETLINK_CB(in_skb).pid);
+ err = rtnl_unicast(skb, init_net(), NETLINK_CB(in_skb).pid);
errout:
return err;

```

```

}

@@ -2237,10 +2237,10 @@ void inet6_rt_notify(int event, struct rt6_info *rt, struct nl_info *info)
 /* failure implies BUG in rt6_nlmsg_size() */
 BUG_ON(err < 0);

- err = rtnl_notify(skb, pid, RTNLGRP_IPV6_ROUTE, nlh, gfp_any());
+ err = rtnl_notify(skb, init_net(), pid, RTNLGRP_IPV6_ROUTE, nlh, gfp_any());
errout:
if (err < 0)
- rtnl_set_sk_err(RTNLGRP_IPV6_ROUTE, err);
+ rtnl_set_sk_err(init_net(), RTNLGRP_IPV6_ROUTE, err);
}

/*
diff --git a/net/sched/cls_api.c b/net/sched/cls_api.c
index 09a3ec8..c69b4fc 100644
--- a/net/sched/cls_api.c
+++ b/net/sched/cls_api.c
@@ -369,7 +369,7 @@ static int tfilter_notify(struct sk_buff *oskb, struct nlmsghdr *n,
    return -EINVAL;
}

- return rtnetlink_send(skb, pid, RTNLGRP_TC, n->nlmsg_flags&NLM_F_ECHO);
+ return rtnetlink_send(skb, init_net(), pid, RTNLGRP_TC, n->nlmsg_flags&NLM_F_ECHO);
}

struct tcf_dump_args
diff --git a/net/sched/sch_api.c b/net/sched/sch_api.c
index 7e33f73..ae55988 100644
--- a/net/sched/sch_api.c
+++ b/net/sched/sch_api.c
@@ -850,7 +850,7 @@ static int qdisc_notify(struct sk_buff *oskb, struct nlmsghdr *n,
}

if (skb->len)
- return rtnetlink_send(skb, pid, RTNLGRP_TC, n->nlmsg_flags&NLM_F_ECHO);
+ return rtnetlink_send(skb, init_net(), pid, RTNLGRP_TC, n->nlmsg_flags&NLM_F_ECHO);

err_out:
kfree_skb(skb);
@@ -1082,7 +1082,7 @@ static int tclass_notify(struct sk_buff *oskb, struct nlmsghdr *n,
    return -EINVAL;
}

- return rtnetlink_send(skb, pid, RTNLGRP_TC, n->nlmsg_flags&NLM_F_ECHO);
+ return rtnetlink_send(skb, init_net(), pid, RTNLGRP_TC, n->nlmsg_flags&NLM_F_ECHO);
}

```

```
struct qdisc_dump_args
```

```
--
```

```
1.4.4.1.g278f
```

Containers mailing list

Containers@lists.osdl.org

<https://lists.osdl.org/mailman/listinfo/containers>
