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Subject: [PATCH net-2.6.25 15/19] [NETNS] Provide correct namespace for fibnl  
netlink socket.

Posted by [den](#) on Wed, 19 Dec 2007 15:23:10 GMT

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Signed-off-by: Denis V. Lunev <den@openvz.org>

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```
include/net/netns/ipv4.h |  2 ++
net/ipv4/fib_frontend.c | 26 ++++++-----+
2 files changed, 20 insertions(+), 8 deletions(-)
```

```
diff --git a/include/net/netns/ipv4.h b/include/net/netns/ipv4.h
```

```
index 629ec6c..031d761 100644
```

```
--- a/include/net/netns/ipv4.h
```

```
+++ b/include/net/netns/ipv4.h
```

```
@@ -9,6 +9,7 @@ struct ctl_table_header;
```

```
struct ipv4_devconf;
```

```
struct fib_rules_ops;
```

```
struct hlist_head;
```

```
+struct sock;
```

```
struct netns_ipv4 {
```

```
    struct ctl_table_header *forw_hdr;
```

```
@@ -18,5 +19,6 @@ struct netns_ipv4 {
```

```
    struct fib_rules_ops *rules_ops;
```

```
#endif
```

```
    struct hlist_head *fib_table_hash;
```

```
+ struct sock *fibnl;
```

```
};
```

```
#endif
```

```
diff --git a/net/ipv4/fib_frontend.c b/net/ipv4/fib_frontend.c
```

```
index 2e150ae..abe9f43 100644
```

```
--- a/net/ipv4/fib_frontend.c
```

```
+++ b/net/ipv4/fib_frontend.c
```

```
@@ -49,8 +49,6 @@
```

```
#define FFprint(a...) printk(KERN_DEBUG a)
```

```
-static struct sock *fibnl;
```

```
-
```

```
#ifndef CONFIG_IP_MULTIPLE_TABLES
```

```
static int __net_init fib4_rules_init(struct net *net)
```

```
@@ -845,11 +843,13 @@ static void nl_fib_lookup(struct fib_result_nl *frn, struct fib_table *tb )
```

```
static void nl_fib_input(struct sk_buff *skb)
```

```
{
```

```

+ struct net *net;
  struct fib_result_nl *frn;
  struct nlmsghdr *nlh;
  struct fib_table *tb;
  u32 pid;

+ net = skb->sk->sk_net;
  nlh = nlmsg_hdr(skb);
  if (skb->len < NLMSG_SPACE(0) || skb->len < nlh->nlmsg_len ||
      nlh->nlmsg_len < NLMSG_LENGTH(sizeof(*frn))) {
@@ -858,26 +858,36 @@ static void nl_fib_input(struct sk_buff *skb)
}

frn = (struct fib_result_nl *) NLMSG_DATA(nlh);
- tb = fib_get_table(&init_net, frn->tb_id_in);
+ tb = fib_get_table(net, frn->tb_id_in);

nl_fib_lookup(frn, tb);

pid = NETLINK_CB(skb).pid; /* pid of sending process */
NETLINK_CB(skb).pid = 0; /* from kernel */
NETLINK_CB(skb).dst_group = 0; /* unicast */
- netlink_unicast(fibnl, skb, pid, MSG_DONTWAIT);
+ netlink_unicast(net->ipv4.fibnl, skb, pid, MSG_DONTWAIT);
}

static int nl_fib_lookup_init(struct net *net)
{
- fibnl = netlink_kernel_create(net, NETLINK_FIB_LOOKUP, 0,
-     nl_fib_input, NULL, THIS_MODULE);
- return fibnl != NULL ? 0 : -EAFNOSUPPORT;
+ struct sock *sk;
+ sk = netlink_kernel_create(net, NETLINK_FIB_LOOKUP, 0,
+     nl_fib_input, NULL, THIS_MODULE);
+ if (sk == NULL)
+     return -EAFNOSUPPORT;
+ /* Don't hold an extra reference on the namespace */
+ put_net(sk->sk_net);
+ net->ipv4.fibnl = sk;
+ return 0;
}

static void nl_fib_lookup_exit(struct net *net)
{
- sock_put(fibnl);
+ /* At the last minute lie and say this is a socket for the
+ * initial network namespace. So the socket will be safe to free.
+ */

```

```
+ net->ipv4.fibnl->sk_net = get_net(&init_net);
+ sock_put(net->ipv4.fibnl);
}

static void fib_disable_ip(struct net_device *dev, int force)
--
```

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1.5.3.rc5

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