
Subject: [PATCH 1/8 net-2.6.26] [NETNS]: Make netns refcounting debug like a socket one.

Posted by [den](#) on Tue, 15 Apr 2008 12:37:48 GMT

[View Forum Message](#) <> [Reply to Message](#)

Make release_net/hold_net noop for performance-hungry people. This is a debug staff and should be used in the debug mode only.

Add check for net != NULL in hold/release calls. This will be required later on.

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

```
include/net/net_namespace.h | 44 ++++++-----  
net/core/net_namespace.c   |  4 +++  
2 files changed, 30 insertions(+), 16 deletions(-)
```

```
diff --git a/include/net/net_namespace.h b/include/net/net_namespace.h
```

```
index e2aee26..269a681 100644
```

```
--- a/include/net/net_namespace.h
```

```
+++ b/include/net/net_namespace.h
```

```
@@ -21,9 +21,11 @@ struct net_device;  
 atomic_t count; /* To decided when the network
```

```
 * namespace should be freed.
```

```
 */
```

```
+#ifdef NETNS_REFCNT_DEBUG
```

```
 atomic_t use_count; /* To track references we  
 * destroy on demand
```

```
 */
```

```
+#endif
```

```
 struct list_head list; /* list of network namespaces */
```

```
 struct work_struct work; /* work struct for freeing */
```

```
@@ -115,17 +119,6 @@ static inline void put_net(struct net *net)
```

```
 __put_net(net);
```

```
}
```

```
-static inline struct net *hold_net(struct net *net)
```

```
{
```

```
 atomic_inc(&net->use_count);
```

```
 return net;
```

```
}
```

```
-
```

```
-static inline void release_net(struct net *net)
```

```
{
```

```
 atomic_dec(&net->use_count);
```

```
}
```

```
-
```

```

static inline
int net_eq(const struct net *net1, const struct net *net2)
{
@@ -141,27 +134,46 @@ static inline void put_net(struct net *net)
{
}

+static inline struct net *maybe_get_net(struct net *net)
+{
+ return net;
+}
+
+static inline
+int net_eq(const struct net *net1, const struct net *net2)
+{
+ return 1;
+}
+endif
+
+
+#ifdef NETNS_REFCNT_DEBUG
static inline struct net *hold_net(struct net *net)
{
+ if (net == NULL)
+ return NULL;
+ atomic_inc(&net->use_count);
return net;
}

static inline void release_net(struct net *net)
{
+ if (net == NULL)
+ return;
+ atomic_dec(&net->use_count);
}

-
-static inline struct net *maybe_get_net(struct net *net)
+#else
+static inline struct net *hold_net(struct net *net)
{
return net;
}

-
-static inline
-int net_eq(const struct net *net1, const struct net *net2)
+static inline void release_net(struct net *net)
{
- return 1;

```

```

}

#endif

+
#define for_each_net(VAR) \
list_for_each_entry(VAR, &net_namespace_list, list)

diff --git a/net/core/net_namespace.c b/net/core/net_namespace.c
index 7b66083..f310ef3 100644
--- a/net/core/net_namespace.c
+++ b/net/core/net_namespace.c
@@ -30,7 +30,9 @@ static __net_init int setup_net(struct net *net)
int error;

atomic_set(&net->count, 1);
+#ifdef NETNS_REFCNT_DEBUG
atomic_set(&net->use_count, 0);
+#endif

error = 0;
list_for_each_entry(ops, &pernet_list, list) {
@@ -70,11 +72,13 @@ static void net_free(struct net *net)
if (!net)
return;

+#ifdef NETNS_REFCNT_DEBUG
if (unlikely(atomic_read(&net->use_count) != 0)) {
printk(KERN_EMERG "network namespace not free! Usage: %d\n",
atomic_read(&net->use_count));
return;
}
+#endif

kmem_cache_free(net_cachep, net);
}

--
```

1.5.3.rc5

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