Subject: [PATCH][NETNS] Consolidate hashes creation in netdev_init()
Posted by Pavel Emelianov on Fri, 14 Sep 2007 08:40:49 GMT
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The dev_name_hash and the dev_index_hash are now booth kmalloc-ed
(and each element is properly initialized as usually) so I think
it's worth consolidating this code making it look nicer (and
saving 28 bytes of .text section ;))

Signed-off-by: Pavel Emelyanov <xemul@openvz.org>

```
diff --git a/net/core/dev.c b/net/core/dev.c
index a22a95d..1a60ed2 100644
--- a/net/core/dev.c
+++ b/net/core/dev.c
@@ -4258,32 +4258,39 @@ int netdev_compute_features(unsigned lon
 }
 EXPORT_SYMBOL(netdev_compute_features);

+static struct hlist_head *netdev_create_hash(void)
+{
+ int i;
+ struct hlist_head *hash;
+
+ hash = kmalloc(sizeof(*hash) * NETDEV_HASHENTRIES, GFP_KERNEL);
+ if (hash != NULL)
+  for (i = 0; i < NETDEV_HASHENTRIES; i++)
+   INIT_HLIST_HEAD(&hash[i]);
+
+ return hash;
+}
+
 /* Initialize per network namespace state */
 static int netdev_init(struct net *net)
 {
- int i;
  INIT_LIST_HEAD(&net->dev_base_head);
  rwlock_init(&dev_base_lock);

- net->dev_name_head = kmalloc(
-  sizeof(*net->dev_name_head)*NETDEV_HASHENTRIES, GFP_KERNEL);
- if (!net->dev_name_head)
-  return -ENOMEM;
-
- net->dev_index_head = kmalloc(
-  sizeof(*net->dev_index_head)*NETDEV_HASHENTRIES, GFP_KERNEL);
```

```
- if (!net->dev_index_head) {
-  kfree(net->dev_name_head);
-  return -ENOMEM;
- }
-
- for (i = 0; i < NETDEV_HASHENTRIES; i++)
-  INIT_HLIST_HEAD(&net->dev_name_head[i]);
-
- for (i = 0; i < NETDEV_HASHENTRIES; i++)
-  INIT_HLIST_HEAD(&net->dev_index_head[i]);
+ net->dev_name_head = netdev_create_hash();
+ if (net->dev_name_head == NULL)
+  goto err_name;
+
+ net->dev_index_head = netdev_create_hash();
+ if (net->dev_index_head == NULL)
+  goto err_idx;

  return 0;
+
+err_idx:
+ kfree(net->dev_name_head);
+err_name:
+ return -ENOMEM;
 }

 static void netdev_exit(struct net *net)
```

Subject: Re: [PATCH][NETNS] Consolidate hashes creation in netdev_init()
Posted by davem on Sun, 16 Sep 2007 22:40:54 GMT

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From: Pavel Emelyanov <xemul@openvz.org>
Date: Fri, 14 Sep 2007 12:40:49 +0400

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>
> Signed-off-by: Pavel Emelyanov <xemul@openvz.org>

Applied to net-2.6.24, thanks Pavel.
