
Subject: [PATCH] Clean proto_(un)register from in-code ifdefs
Posted by [Pavel Emelianov](#) on Tue, 06 Nov 2007 17:20:24 GMT
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The struct proto has the per-cpu "inuse" counter, which is handled with a special care. All the handling code hides under the ifdef CONFIG_SMP and it introduces some code duplication and makes it look worse than it could.

Clean this.

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

```
diff --git a/net/core/sock.c b/net/core/sock.c
index e077f26..8fc2f84 100644
--- a/net/core/sock.c
+++ b/net/core/sock.c
@@ -1819,23 +1819,48 @@ static int inuse_get(const struct proto *prot)
     res += per_cpu_ptr(prot->inuse_ptr, cpu)[0];
     return res;
 }
-#endif

-int proto_register(struct proto *prot, int alloc_slab)
+static int inuse_init(struct proto *prot)
 {
-    char *request_sock_slab_name = NULL;
-    char *timewait_sock_slab_name;
-    int rc = -ENOBUFS;
-
-#ifdef CONFIG_SMP
     if (!prot->inuse_getval || !prot->inuse_add) {
         prot->inuse_ptr = alloc_percpu(int);
         if (prot->inuse_ptr == NULL)
-            goto out;
+        return -ENOBUFS;
+
+        prot->inuse_getval = inuse_get;
+        prot->inuse_add = inuse_add;
     }
+    return 0;
+}
+
+static void inuse_fini(struct proto *prot)
+{
+    if (prot->inuse_ptr != NULL) {
```



```
- prot->inuse_getval = NULL;
- prot->inuse_add = NULL;
- }
-#endif
- goto out;
+ inuse_fini(prot);
+out:
+ return -ENOBUFFS;
}
```

```
EXPORT_SYMBOL(proto_register);
```

```
@@ -1922,14 +1940,7 @@ void proto_unregister(struct proto *prot)
```

```
list_del(&prot->node);
```

```
write_unlock(&proto_list_lock);
```

```
-#ifdef CONFIG_SMP
```

```
- if (prot->inuse_ptr != NULL) {
```

```
- free_percpu(prot->inuse_ptr);
```

```
- prot->inuse_ptr = NULL;
```

```
- prot->inuse_getval = NULL;
```

```
- prot->inuse_add = NULL;
```

```
- }
```

```
-#endif
```

```
+ inuse_fini(prot);
```

```
if (prot->slab != NULL) {
```

```
    kmem_cache_destroy(prot->slab);
```

```
    prot->slab = NULL;
```