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Subject: [RFC PATCH] SUNRPC: protect service sockets lists during per-net shutdown

Posted by [Stanislav Kinsbursky](#) on Fri, 11 May 2012 11:41:56 GMT

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Service sv\_tempsocks and sv\_permsocks lists are accessible by tasks with different network namespaces, and thus per-net service destruction must be protected.

These lists are protected by service sv\_lock. So lets wrap list manipulations with this lock and move transports destruction outside wrapped area to prevent deadlocks.

Signed-off-by: Stanislav Kinsbursky <[skinsbursky@parallels.com](mailto:skinsbursky@parallels.com)>

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net/sunrpc/svc\_xprt.c | 29 ++++++-----  
1 files changed, 25 insertions(+), 4 deletions(-)

diff --git a/net/sunrpc/svc\_xprt.c b/net/sunrpc/svc\_xprt.c

index 8195c6a..233f993 100644

--- a/net/sunrpc/svc\_xprt.c

+++ b/net/sunrpc/svc\_xprt.c

```
@@ -954,7 +954,8 @@ static void svc_clear_pools(struct svc_serv *serv, struct net *net)
 }
 }
```

```
-static void svc_clear_list(struct list_head *xprt_list, struct net *net)
```

```
+static void svc_clear_list(struct list_head *xprt_list, struct net *net,
+    struct list_head *kill_list)
```

```
{
    struct svc_xprt *xprt;
    struct svc_xprt *tmp;
@@ -962,7 +963,8 @@ static void svc_clear_list(struct list_head *xprt_list, struct net *net)
    list_for_each_entry_safe(xprt, tmp, xprt_list, xprt_list) {
        if (xprt->xprt_net != net)
            continue;
```

```
-    svc_delete_xprt(xprt);
```

```
+    list_move(&xprt->xprt_list, kill_list);
```

```
+    set_bit(XPT_DETACHED, &xprt->xprt_flags);
```

```
    }
    list_for_each_entry(xprt, xprt_list, xprt_list)
```

```
        BUG_ON(xprt->xprt_net == net);
```

```
@@ -970,6 +972,15 @@ static void svc_clear_list(struct list_head *xprt_list, struct net *net)
```

```
void svc_close_net(struct svc_serv *serv, struct net *net)
```

```
{
+    struct svc_xprt *xprt;
+    LIST_HEAD(kill_list);
+
+    for (xprt = list_first_entry(&serv->xprt_list, struct svc_xprt, xprt_list);
```

```

+ /*
+  * Protect the lists, since they can be by tasks with different network
+  * namespace contexts.
+  */
+ spin_lock(&serv->sv_lock);
+
+   svc_close_list(&serv->sv_tempsocks, net);
+   svc_close_list(&serv->sv_permsocks, net);

@@ -979,8 +990,18 @@ void svc_close_net(struct svc_serv *serv, struct net *net)
    * svc_enqueue will not add new entries without taking the
    * sp_lock and checking XPT_BUSY.
    */
-   svc_clear_list(&serv->sv_tempsocks, net);
-   svc_clear_list(&serv->sv_permsocks, net);
+   svc_clear_list(&serv->sv_tempsocks, net, &kill_list);
+   svc_clear_list(&serv->sv_permsocks, net, &kill_list);
+
+   spin_unlock(&serv->sv_lock);
+
+ /*
+  * Destroy collected transports.
+  * Note: transports has been marked as XPT_DETACHED on svc_clear_list(),
+  * so no need to protect against list_del() in svc_delete_xprt().
+  */
+   list_for_each_entry(xprt, &kill_list, xprt_list)
+   svc_delete_xprt(xprt);
+ }

/*

```

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