
Subject: [PATCH] SUNRPC: make SUNRPC clients list per network namespace context

Posted by [Stanislav Kinsbursky](#) on Mon, 12 Dec 2011 17:12:16 GMT

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This patch moves static SUNRPC clients list and it's lock to sunrpc_net structure.

Currently this list is used only for debug purposes. But later it will be used also for selecting clients by networks namespace on PipeFS mount/umount events. Per-network namespace lists will this fater and simplier.

Note: client list is taken from current network namespace context in rpc_show_tasks(). This will be changed with making SUNRPC sysctl's per network namespace context.

Signed-off-by: Stanislav Kinsbursky <skinsbursky@parallels.com>

```
net/sunrpc/clnt.c      | 24 ++++++-----
net/sunrpc/netns.h     |  3 +++
net/sunrpc/sunrpc_syms.c |  3 +++
3 files changed, 20 insertions(+), 10 deletions(-)
```

```
diff --git a/net/sunrpc/clnt.c b/net/sunrpc/clnt.c
index f0268ea..c87f7c8 100644
```

```
--- a/net/sunrpc/clnt.c
```

```
+++ b/net/sunrpc/clnt.c
```

```
@@ -38,6 +38,7 @@
```

```
#include <linux/sunrpc/bc_xprt.h>
```

```
#include "sunrpc.h"
```

```
+#include "netns.h"
```

```
#ifdef RPC_DEBUG
```

```
# define RPCDBG_FACILITY RPCDBG_CALL
```

```
@@ -50,8 +51,6 @@
```

```
/*
```

```
 * All RPC clients are linked into this list
```

```
 */
```

```
-static LIST_HEAD(all_clients);
```

```
-static DEFINE_SPINLOCK(rpc_client_lock);
```

```
static DECLARE_WAIT_QUEUE_HEAD(destroy_wait);
```

```
@@ -81,16 +80,20 @@ static int rpc_ping(struct rpc_clnt *clnt);
```

```
static void rpc_register_client(struct rpc_clnt *clnt)
```

```
{
```

```

- spin_lock(&rpc_client_lock);
- list_add(&clnt->cl_clients, &all_clients);
- spin_unlock(&rpc_client_lock);
+ struct sunrpc_net *sn = net_generic(clnt->cl_xprt->xprt_net, sunrpc_net_id);
+
+ spin_lock(&sn->rpc_client_lock);
+ list_add(&clnt->cl_clients, &sn->all_clients);
+ spin_unlock(&sn->rpc_client_lock);
}

static void rpc_unregister_client(struct rpc_clnt *clnt)
{
- spin_lock(&rpc_client_lock);
+ struct sunrpc_net *sn = net_generic(clnt->cl_xprt->xprt_net, sunrpc_net_id);
+
+ spin_lock(&sn->rpc_client_lock);
  list_del(&clnt->cl_clients);
- spin_unlock(&rpc_client_lock);
+ spin_unlock(&sn->rpc_client_lock);
}

static int
@@ -1857,9 +1860,10 @@ void rpc_show_tasks(void)
  struct rpc_clnt *clnt;
  struct rpc_task *task;
  int header = 0;
+ struct sunrpc_net *sn = net_generic(current->nsproxy->net_ns, sunrpc_net_id);

- spin_lock(&rpc_client_lock);
- list_for_each_entry(clnt, &all_clients, cl_clients) {
+ spin_lock(&sn->rpc_client_lock);
+ list_for_each_entry(clnt, &sn->all_clients, cl_clients) {
  spin_lock(&clnt->cl_lock);
  list_for_each_entry(task, &clnt->cl_tasks, tk_task) {
    if (!header) {
@@ -1870,6 +1874,6 @@ void rpc_show_tasks(void)
  }
  spin_unlock(&clnt->cl_lock);
}
- spin_unlock(&rpc_client_lock);
+ spin_unlock(&sn->rpc_client_lock);
}
#endif
diff --git a/net/sunrpc/netns.h b/net/sunrpc/netns.h
index d013bf2..6010c46 100644
--- a/net/sunrpc/netns.h
+++ b/net/sunrpc/netns.h
@@ -9,6 +9,9 @@ struct cache_detail;

```

```

struct sunrpc_net {
    struct proc_dir_entry *proc_net_rpc;
    struct cache_detail *ip_map_cache;
+
+ struct list_head all_clients;
+ spinlock_t rpc_client_lock;
};

extern int sunrpc_net_id;
diff --git a/net/sunrpc/sunrpc_syms.c b/net/sunrpc/sunrpc_syms.c
index 8ec9778..e57aa10 100644
--- a/net/sunrpc/sunrpc_syms.c
+++ b/net/sunrpc/sunrpc_syms.c
@@ -29,6 +29,7 @@ int sunrpc_net_id;
static __net_init int sunrpc_init_net(struct net *net)
{
    int err;
+ struct sunrpc_net *sn = net_generic(net, sunrpc_net_id);

    err = rpc_proc_init(net);
    if (err)
@@ -38,6 +39,8 @@ static __net_init int sunrpc_init_net(struct net *net)
    if (err)
        goto err_ipmap;

+ INIT_LIST_HEAD(&sn->all_clients);
+ spin_lock_init(&sn->rpc_client_lock);
    return 0;

err_ipmap:

```
