This patch-set was created in context of clone of git branch:
git://git.linux-nfs.org/projects/trondmy/nfs-2.6.git
and rebased on tag "v3.1".

2 Trond:
Nothing changed against previous patch-set we discussed already.
If no other issues will appear against it, hoping for soon commit.
If git repo, mentioned above, is not suitable for development purposes, please,
reply with the right one.

v6:
1) Fixes in rpcb_clients management.

v4:
1) creation and destruction on rpcbind clients now depends on service program
versions "vs_hidden" flag.

This patch is required for further RPC layer virtualization, because rpcbind
clients have to be per network namespace.
To achieve this, we have to untie network namespace from rpcbind clients sockets.
The idea of this patch set is to make rpcbind clients non-static, i.e. rpcbind
clients will be created during first RPC service creation, and destroyed when
last RPC service is stopped.
With this patch set rpcbind clients can be virtualized easily.

The following series consists of:

---

Stanislav Kinsbursky (8):
  SUNRPC: introduce helpers for reference counted rpcbind clients
  SUNRPC: use rpcbind reference counting helpers
  SUNRPC: introduce svc helpers for preparing rpcbind infrastructure
  SUNRPC: setup rpcbind clients if service requires it
  SUNRPC: cleanup service destruction
  NFSd: call svc rpcbind cleanup explicitly
  SUNRPC: remove rpcbind clients creation during service registering
  SUNRPC: remove rpcbind clients destruction on module cleanup

fs/nfsd/nfssvc.c | 2 +
include/linux/sunrpc/clnt.h | 2 +
include/linux/sunrpc/svc.h | 1
Subject: [PATCH v6 3/8] SUNRPC: introduce svc helpers for preparing rpcbind infrastructure
Posted by Stanislav Kinsbursky on Tue, 25 Oct 2011 10:17:04 GMT

This helpers will be used only for those services, that will send portmapper registration calls.

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

---

This helpers will be used only for those services, that will send portmapper registration calls.

Signed-off-by: Stanislav Kinsbursky <skinsbursky@parallels.com>
{ static DEFINE_MUTEX(rpcb_create_local_mutex);
  int result = 0;
}

diff --git a/net/sunrpc/svc.c b/net/sunrpc/svc.c
index 6a69a11..d2d61bf 100644
--- a/net/sunrpc/svc.c
+++ b/net/sunrpc/svc.c
@@ -354,6 +354,41 @@ svc_pool_for_cpu(struct svc_serv *serv, int cpu)
  return &serv->sv_pools[pidx % serv->sv_nrpools];
 }

+static int svc_rpcb_setup(struct svc_serv *serv)
+{ int err;
+  err = rpcb_create_local();
+  if (err) 
+    return err;
+  /* Remove any stale portmap registrations */
+  svc_unregister(serv);
+  return 0;
+}
+
+static void svc_rpcb_cleanup(struct svc_serv *serv)
+{ svc_unregister(serv);
+  rpcb_put_local();
+}
+
+static int svc_uses_rpcbind(struct svc_serv *serv)
+{ struct svc_program *progp;
+  unsigned int i;
+  for (progp = serv->sv_program; progp; progp = progp->pg_next) {
+    for (i = 0; i < progp->pg_nvers; i++) {
+      if (progp->pg_vers[i] == NULL) 
+        continue;
+      if (progp->pg_vers[i]->vs_hidden == 0) 
+        return 1;
+    }
+  }
+  return 0;
+}
+
/*
* Create an RPC service

Subject: [PATCH v6 2/8] SUNRPC: use rpcbind reference counting helpers
Posted by Stanislav Kinsbursky on Tue, 25 Oct 2011 10:17:05 GMT

All is simple: we just increase users counter if rpcbind clients has been created already. Otherwise we create them and set users counter to 1.

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

---

net/sunrpc/rpcb_clnt.c | 12 ++++--------
1 files changed, 4 insertions(+), 8 deletions(-)

diff --git a/net/sunrpc/rpcb_clnt.c b/net/sunrpc/rpcb_clnt.c
index 9fcdb42..7e5a0f8 100644
--- a/net/sunrpc/rpcb_clnt.c
+++ b/net/sunrpc/rpcb_clnt.c
@@ -259,9 +259,7 @@ static int rpcb_create_local_unix(void)
    clnt4 = NULL;
 }

-/* Protected by rpcb_create_local_mutex */
-rpcb_local_clnt = clnt;
-rpcb_local_clnt4 = clnt4;
+rpcb_set_local(clnt, clnt4);

out:
    return result;
@@ -313,9 +311,7 @@ static int rpcb_create_local_net(void)
    clnt4 = NULL;
 }

-/* Protected by rpcb_create_local_mutex */
-rpcb_local_clnt = clnt;
-rpcb_local_clnt4 = clnt4;
+rpcb_set_local(clnt, clnt4);

out:
    return result;
@@ -330,11 +326,11 @@ static int rpcb_create_local(void)
    static DEFINE_MUTEX(rpcb_create_local_mutex);
    int result = 0;

-if (rpcb_local_clnt)
+if (rpcb_get_local())
Subject: [PATCH v6 1/8] SUNRPC: introduce helpers for reference counted rpcbind clients
Posted by Stanislav Kinsbursky on Tue, 25 Oct 2011 10:17:07 GMT
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v6:
1) added write memory barrier to rpcb_set_local to make sure, that rpcbind clients become valid before rpcb_users assignment
2) explicitly set rpcb_users to 1 instead of incrementing it (looks clearer from my pow).

v5: fixed races with rpcb_users in rpcb_get_local()

This helpers will be used for dynamical creation and destruction of rpcbind clients. Variable rpcb_users is actually a counter of launched RPC services. If rpcbind clients has been created already, then we just increase rpcb_users.

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

---
net/sunrpc/rpcb_clnt.c | 54 ++++++++++++++++++++++++++++++++++++++++
1 files changed, 54 insertions(+), 0 deletions(-)
diff --git a/net/sunrpc/rpcb_clnt.c b/net/sunrpc/rpcb_clnt.c
index e45d2fb..9fcdb42 100644
--- a/net/sunrpc/rpcb_clnt.c
+++ b/net/sunrpc/rpcb_clnt.c
@@ -114,6 +114,9 @@ static struct rpc_program
    static struct rpc_clnt *trpcb_local_clnt;
    static struct rpc_clnt *trpcb_local_clnt4;

+DEFINE_SPINLOCK(rpcb_clnt_lock);
+unsigned intrpcb_users;
+
struct rpcbind_args {
    struct rpc_xprt *r_xprt;
static void rpcb_map_release(void *data)
kfree(map);
}

+static int rpcb_get_local(void)
+{
+int cnt;
+
+spin_lock(&rpcb_clnt_lock);
+if (rpcb_users)
+rpcb_users++;
+cnt = rpcb_users;
+spin_unlock(&rpcb_clnt_lock);
+
+return cnt;
+}
+
+void rpcb_put_local(void)
+{
+struct rpc_clnt *clnt = rpcb_local_clnt;
+struct rpc_clnt *clnt4 = rpcb_local_clnt4;
+int shutdown;
+
+spin_lock(&rpcb_clnt_lock);
+if (--rpcb_users == 0) {
+rpcb_local_clnt = NULL;
+rpcb_local_clnt4 = NULL;
+}
+shutdown = !rpcb_users;
+spin_unlock(&rpcb_clnt_lock);
+
+if (shutdown) {
+/*
+ * cleanup_rpcb_clnt - remove xprtsock's sysctls, unregister
+ */
+if (clnt4)
+rpc_shutdown_client(clnt4);
+if (clnt)
+rpc_shutdown_client(clnt);
+}
+return;
+}
+
+static void rpcb_set_local(struct rpc_clnt *clnt, struct rpc_clnt *clnt4)
+{
+/* Protected by rpcb_create_local_mutex */
+rpcb_local_clnt = clnt;
+rpcb_local_clnt4 = clnt4;
+smp_wmb();  
+rpcb_users = 1;  
+dprintf("RPC: created new rpcb local clients (rpcb_local_clnt: "+"%p, rpcb_local_clnt4: %p)\n", rpcb_local_clnt, rpcb_local_clnt4);  
+}  
+/*  
 * Returns zero on success, otherwise a negative errno value  
 * is returned.

---

net/sunrpc/svc.c |   11 +++++++++--
1 files changed, 9 insertions(+), 2 deletions(-)

diff --git a/net/sunrpc/svc.c b/net/sunrpc/svc.c
index d2d61bf..918edc3 100644
--- a/net/sunrpc/svc.c
+++ b/net/sunrpc/svc.c
@@ -454,8 +454,15 @@ __svc_create(struct svc_program *prog, unsigned int bufsize, int npools,
        spin_lock_init(&pool->sp_lock);
    }

-/* Remove any stale portmap registrations */
-svc_unregister(serv);
+if (svc_uses_rpcbind(serv)) {
+    if (svc_rpcb_setup(serv) < 0) {
+        kfree(serv->sv_pools);
+        kfree(serv);
+return NULL;
+
+if (!serv->sv_shutdown)
+serv->sv_shutdown = svc_r RPCb_cleanup;
+
}

return serv;
}

Subject: [PATCH v6 5/8] SUNRPC: cleanup service destruction
Posted by Stanislav Kinsbursky on Tue, 25 Oct 2011 10:17:25 GMT

svc_unregister() call have to be removed from svc_destroy() since it will be called in sv_shutdown callback.

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

---
net/sunrpc/svc.c | 1 -
1 files changed, 0 insertions(+), 1 deletions(-)

diff --git a/net/sunrpc/svc.c b/net/sunrpc/svc.c
index 918edc3..407462f 100644
--- a/net/sunrpc/svc.c
+++ b/net/sunrpc/svc.c
@@ -530,7 +530,6 @@ svc_destroy(struct svc_serv *serv)
 if (svc_serv_is_pooled(serv))
     svc_pool_map_put();

-svc_unregister(serv);
-kfree(serv->sv_pools);
kfree(serv);
}

Subject: [PATCH v6 6/8] NFSd: call svc rpcbind cleanup explicitly
Posted by Stanislav Kinsbursky on Tue, 25 Oct 2011 10:17:33 GMT

We have to call svc_rpcb_cleanup() explicitly from nfsd_last_thread() since this function is registered as service shutdown callback and thus nobody else will done it for us.

Signed-off-by: Stanislav Kinsbursky <skinsbursky@parallels.com>
diff --git a/fs/nfsd/nfssvc.c b/fs/nfsd/nfssvc.c
index dc5a1bf..52cd976 100644
--- a/fs/nfsd/nfssvc.c
+++ b/fs/nfsd/nfssvc.c
@@ -256,6 +256,8 @@ static void nfsd_last_thread(struct svc_serv *serv)
    nfsd_serv = NULL;
    nfsd_shutdown();
    svc_rpcb_cleanup(serv);
+
    printk(KERN_WARNING "nfsd: last server has exited, flushing export 
       "cache\n");
    nfsd_export_flush();

diff --git a/include/linux/sunrpc/svc.h b/include/linux/sunrpc/svc.h
index 223588a..5e71a30 100644
--- a/include/linux/sunrpc/svc.h
+++ b/include/linux/sunrpc/svc.h
@@ -401,6 +401,7 @@ struct svc_procedure {
    /*
       * Function prototypes.
       */
+    void svc_rpcb_cleanup(struct svc_serv *serv);
+    +
    struct svc_serv *svc_create(struct svc_program *, unsigned int,
        void (*shutdown)(struct svc_serv *));
    struct svc_rqst *svc_prepare_thread(struct svc_serv *serv,

diff --git a/net/sunrpc/svc.c b/net/sunrpc/svc.c
index 407462f..252552a 100644
--- a/net/sunrpc/svc.c
+++ b/net/sunrpc/svc.c
@@ -367,11 +367,12 @@ static int svc_rpcb_setup(struct svc_serv *serv)
    return 0;
 }

-void svc_rpcb_cleanup(struct svc_serv *serv)
+void svc_rpcb_cleanup(struct svc_serv *serv)
{
    svc_unregister(serv);
    rpcb_put_local();
}
+EXPORT_SYMBOL_GPL(svc_rpcb_cleanup);

static int svc_uses_rpcbind(struct svc_serv *serv)
Subject: [PATCH v6 7/8] SUNRPC: remove rpcbind clients creation during service registering
Posted by Stanislav Kinsbursky on Tue, 25 Oct 2011 10:17:47 GMT

We don't need this code since rpcbind clients are creating during RPC service creation.

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

---

We don't need this code since rpcbind clients are creating during RPC service creation.

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

---

net/sunrpc/rpcb_clnt.c | 9 ---------
1 files changed, 0 insertions(+), 9 deletions(-)

diff --git a/net/sunrpc/rpcb_clnt.c b/net/sunrpc/rpcb_clnt.c
index dba2331..088e4e2 100644
--- a/net/sunrpc/rpcb_clnt.c
+++ b/net/sunrpc/rpcb_clnt.c
@@ -432,11 +432,6 @@ int rpcb_register(u32 prog, u32 vers, int prot, unsigned short port)
    struct rpc_message msg = {
        .rpc_argp = &map,
    };
-   int error;
-   if (error)
-      return error;
-   if (rpcb_local_clnt4 == NULL)
-      return -EPROTONOSUPPORT;

dprintf("RPC: cregistering (%u, %u, %d, %u) with local ");
"rpcbind\n", (port ? "": "un"),
@@ -572,11 +567,7 @@ int rpcb_v4_register(const u32 program, const u32 version,
    struct rpc_message msg = {
        .rpc_argp = &map,
    };
-   int error;
-   if (error)
-      return error;
-   if (rpcb_local_clnt4 == NULL)
    return -EPROTONOSUPPORT;

Subject: [PATCH v6 8/8] SUNRPC: remove rpcbind clients destruction on module
Rpcbind clients destruction during SUNRPC module removing is obsolete since now those clients are destroying during last RPC service shutdown.

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

---
net/sunrpc/rpcb_clnt.c   |   12  ------------
net/sunrpc/sunrpc_syms.c |    3  ---
2 files changed, 0 insertions(+), 15 deletions(-)

diff --git a/net/sunrpc/rpcb_clnt.c b/net/sunrpc/rpcb_clnt.c
index 088e4e2..c2054ae 100644
--- a/net/sunrpc/rpcb_clnt.c
+++ b/net/sunrpc/rpcb_clnt.c
@@ -1101,15 +1101,3 @@ static struct rpc_program rpcb_program = {
 .version = rpcb_version,
 .stats = &rpcb_stats,
 }
-
-/**
-* cleanup_rpcb_clnt - remove xprtsock's sysctls, unregister
-*
- */
-void cleanup_rpcb_clnt(void)
-{
- if (rpcb_local_clnt4)
- rpc_shutdown_client(rpcb_local_clnt4);
- if (rpcb_local_clnt)
- rpc_shutdown_client(rpcb_local_clnt);
-}

diff --git a/net/sunrpc/sunrpc_syms.c b/net/sunrpc/sunrpc_syms.c
index 9d08091..8ec9778 100644
--- a/net/sunrpc/sunrpc_syms.c
+++ b/net/sunrpc/sunrpc_syms.c
@@ -61,8 +61,6 @@ static struct pernet_operations sunrpc_net_ops = {

 extern struct cache_detail unix_gid_cache;

-extern void cleanup_rpcb_clnt(void);
-
 static int __init
 init_sunrpc(void)
 {
-@@ -102,7 +100,6 @@ out:
- static void __exit

cleanup_sunrpc(void)
{
	cleanup_rpcb_clnt();
rpcauth_remove_module();
cleanup_socket_xprt();
svc_cleanup_xprt_sock();
}

Subject: Re: [PATCH v6 1/8] SUNRPC: introduce helpers for reference counted rpcbind clients
Posted by Trond Myklebust on Tue, 25 Oct 2011 11:16:09 GMT
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On Tue, 2011-10-25 at 14:16 +0300, Stanislav Kinsbursky wrote:
> v6:
> 1) added write memory barrier to rpcb_set_local to make sure, that rpcbind
> clients become valid before rpcb_users assignment
> 2) explicitly set rpcb_users to 1 instead of incrementing it (looks clearer from
> my pow).
>
> v5: fixed races with rpcb_users in rpcb_get_local()
>
> This helpers will be used for dynamical creation and destruction of rpcbind
> clients.
> Variable rpcb_users is actually a counter of launched RPC services. If rpcbind
> clients has been created already, then we just increase rpcb_users.
>
> Signed-off-by: Stanislav Kinsbursky <skinsbursky@parallels.com>
>
> ---
> net/sunrpc/rpcb_clnt.c | 54 ++++++++++++++++++++++++++++++++++++++++++++++++
> 1 files changed, 54 insertions(+), 0 deletions(-)
>
> diff --git a/net/sunrpc/rpcb_clnt.c b/net/sunrpc/rpcb_clnt.c
> index e45d2fb..9fcdb42 100644
> --- a/net/sunrpc/rpcb_clnt.c
> +++ b/net/sunrpc/rpcb_clnt.c
> @@ -114,6 +114,9 @@ static struct rpc_program	rpcb_program;
> static struct rpc_clnt *	trpcb_local_clnt;
> static struct rpc_clnt *	trpcb_local_clnt4;
> +
> +DEFINE_SPINLOCK(rpcb_clnt_lock);
> +unsigned int		rpcb_users;
> +
> struct rpcbind_args {
> struct rpc_xprt *	*r_xprt;
> +
> @@ -164,6 +164,9 @@ static void rpcb_map_release(void *data)
> kfree(map);
> }
>
> +static int rpcb_get_local(void)
> +{
> +int cnt;
> +
> +spin_lock(&rpcb_clnt_lock);
> +if (rpcb_users)
> +rpcb_users++;
> +cnt = rpcb_users;
> +spin_unlock(&rpcb_clnt_lock);
> +
> +return cnt;
> +}
>
> +void rpcb_put_local(void)
> +{
> +struct rpc_clnt *clnt = rpcb_local_clnt;
> +struct rpc_clnt *clnt4 = rpcb_local_clnt4;
> +int shutdown;
> +
> +spin_lock(&rpcb_clnt_lock);
> +if (!rpcb_users) {
> +rpcb_local_clnt = NULL;
> +rpcb_local_clnt4 = NULL;
> +}
> +shutdown = !rpcb_users;
> +spin_unlock(&rpcb_clnt_lock);
> +
> +if (shutdown) {
> +*/
> + * cleanup_rpcb_clnt - remove xprtsock's sysctls, unregister
> + */
> +if (clnt4)
> +rpc_shutdown_client(clnt4);
> +if (clnt)
> +rpc_shutdown_client(clnt);
> +} 
> +return;
>

I'm removing this before applying...

> +}
> +
>
> --
Trond Myklebust
Subject: Re: [PATCH v6 1/8] SUNRPC: introduce helpers for reference counted rpcbind clients

25.10.2011 15:16, Trond Myklebust
> On Tue, 2011-10-25 at 14:16 +0300, Stanislav Kinsbursky wrote:
>> v6:
>> 1) added write memory barrier to rpcb_set_local to make sure, that rpcbind
>> clients become valid before rpcb_users assignment
>> 2) explicitly set rpcb_users to 1 instead of incrementing it (looks clearer from
>> my pow).
>>
>> v5: fixed races with rpcb_users in rpcb_get_local()
>
>> This helpers will be used for dynamical creation and destruction of rpcbind
>> clients.
>> Variable rpcb_users is actually a counter of lauched RPC services. If rpcbind
>> clients has been created already, then we just increase rpcb_users.
>
>> Signed-off-by: Stanislav Kinsbursky<skinsbursky@parallels.com>
>>
>> ---
>> net/sunrpc/rpcb_clnt.c | 54 ++++++++++++++++++++++++++++++++++++++++++++++++
>> 1 files changed, 54 insertions(+), 0 deletions(-)
>>
>> diff --git a/net/sunrpc/rpcb_clnt.c b/net/sunrpc/rpcb_clnt.c
>> index e45d2fb..9fcdb42 100644
>> --- a/net/sunrpc/rpcb_clnt.c
>> +++ b/net/sunrpc/rpcb_clnt.c
>> @@ -114,6 +114,57 @@ static struct rpc_program
>>   static struct rpc_clnt *	rpcb_local_clnt;
>>   static struct rpc_clnt *	rpcb_local_clnt4;
>>
>> +DEFINE_SPINLOCK(rpcb_clnt_lock);
>> +unsigned int	rpcb_users;
>> +
>> struct rpcbind_args {
>>   struct rpc_xprt *	r_xprt;
>>
>> @@ -161,6 +164,57 @@ static void rpcb_map_release(void *data)
```c
>> kfree(map);
>> }
>>
>> +static int rpcb_get_local(void)
>> +{
>> +
>> +    spin_lock(&rpcb_clnt_lock);
>> +    if (rpcb_users)
>> +        rpcb_users++;
>> +    cnt = rpcb_users;
>> +    spin_unlock(&rpcb_clnt_lock);
>> +
>> +    return cnt;
>> +}
>> +
>> +void rpcb_put_local(void)
>> +{
>> +    struct rpc_clnt *clnt = rpcb_local_clnt;
>> +    struct rpc_clnt *clnt4 = rpcb_local_clnt4;
>> +    shutdown;
>> +    spin_lock(&rpcb_clnt_lock);
>> +    if (--rpcb_users == 0) {
>> +        rpcb_local_clnt = NULL;
>> +        rpcb_local_clnt4 = NULL;
>> +    }
>> +    shutdown = !rpcb_users;
>> +    spin_unlock(&rpcb_clnt_lock);
>> +
>> +    if (shutdown) {
>> +        /*
>> +         * cleanup_rpcb_clnt - remove xprtsock's sysctls, unregister
>> +         */
>> +        if (clnt4)
>> +            rpc_shutdown_client(clnt4);
>> +        if (clnt)
>> +            rpc_shutdown_client(clnt);
>> +    }
>> +    return;
>> >
>> > I'm removing this before applying...
>> >
>> Sorry, but I don't understand what exactly you are removing, and why?
>> >
>> +}
>> +
>> +
>> >
Subject: Re: [PATCH v6 1/8] SUNRPC: introduce helpers for reference counted rpcbind clients
Posted by Trond Myklebust on Tue, 25 Oct 2011 12:45:50 GMT

On Tue, 2011-10-25 at 16:41 +0400, Stanislav Kinsbursky wrote:
> 25.10.2011 15:16, Trond Myklebust
> > On Tue, 2011-10-25 at 14:16 +0300, Stanislav Kinsbursky wrote:
> > >> v6:
> > >> 1) added write memory barrier to rpcb_set_local to make sure, that rpcbind
> > >> clients become valid before rpcb_users assignment
> > >> 2) explicitly set rpcb_users to 1 instead of incrementing it (looks clearer from
> > >> my pow).
> > >>
> > >> v5: fixed races with rpcb_users in rpcb_get_local()
> > >>
> > >> This helpers will be used for dynamical creation and destruction of rpcbind
> > >> clients.
> > >> Variable rpcb_users is actually a counter of launched RPC services. If rpcbind
> > >> clients has been created already, then we just increase rpcb_users.
> > >>
> > >> Signed-off-by: Stanislav Kinsbursky<skinsbursky@parallels.com>
> > >>
> > >> ---
> > >>   net/sunrpc/rpcb_clnt.c | 54 ++++++++++++++++++++++++++++++++++++++++++++++++
> > >>   1 files changed, 54 insertions(+), 0 deletions(-)
> > >>
> > >> diff --git a/net/sunrpc/rpcb_clnt.c b/net/sunrpc/rpcb_clnt.c
> > >> index e45d2fb..9fcdb42 100644
> > >> --- a/net/sunrpc/rpcb_clnt.c
> > >> +++ b/net/sunrpc/rpcb_clnt.c
> > >> @@ -114,6 +114,9 @@ static struct rpc_program	rpcb_program;
> > >> static struct rpc_clnt *	 rpcb_local_clnt;
> > >> 
> > >> +DEFINE_SPINLOCK(rpcb_clnt_lock);
> > >> +unsigned int rpcb_users;
> > >> +
> > >> struct rpcbind_args {
> > >>   struct rpc_xprt *	 r_xprt;
> > >> +
> > >> struct rpcbind_args {
> > >> struc...
static void rpcb_map_release(void *data)
{
    kfree(map);
}

+static int rpcb_get_local(void)
{
    int cnt;

    spin_lock(&rpcb_clnt_lock);
    if (rpcb_users)
        rpcb_users++;
    cnt = rpcb_users;
    spin_unlock(&rpcb_clnt_lock);
    return cnt;
}

+void rpcb_put_local(void)
{
    struct rpc_clnt *clnt = rpcb_local_clnt;
    struct rpc_clnt *clnt4 = rpcb_local_clnt4;
    int shutdown;

    spin_lock(&rpcb_clnt_lock);
    if (--rpcb_users == 0) {
        rpcb_local_clnt = NULL;
        rpcb_local_clnt4 = NULL;
    }
    shutdown = !rpcb_users;
    spin_unlock(&rpcb_clnt_lock);

    if (shutdown) {
        cleanup_rpcb_clnt - remove xprtsock’s sysctls, unregister
    }
    return;
}

I'm removing this before applying...

Sorry, but I don't understand what exactly you are removing, and why?

The empty 'return' at the end of a void function: it is 100% redundant...
Subject: Re: [PATCH v6 1/8] SUNRPC: introduce helpers for reference counted rpcbind clients

25.10.2011 16:45, Trond Myklebust
>
> The empty 'return' at the end of a void function: it is 100%
> redundant...
>
> O, yes, of course. Sorry.

--
Best regards,
Stanislav Kinsbursky

Subject: Re: [PATCH v6 4/8] SUNRPC: setup rpcbind clients if service requires it

On Tue, Oct 25, 2011 at 02:17:08PM +0300, Stanislav Kinsbursky wrote:
> New function ("svc_uses_rpcbind") will be used to detect, that new service will
> send portmapper register calls. For such services we will create rpcbind
> clients and remove all stale portmap registrations.
> Also, svc Rpcb_cleanup() will be set as sv_shutdown callback for such services
> in case of this field wasn't initialized earlier. This will allow to destroy
> rpcbind clients when no other users of them left.
>
> Note: Currently, any creating service will be detected as portmap user.
> Probably, this is wrong. But now it depends on program versions "vs_hidden"
> flag.
>
> Signed-off-by: Stanislav Kinsbursky <skinsbursky@parallels.com>


diff --git a/net/sunrpc/svc.c b/net/sunrpc/svc.c
index d2d61bf..918edc3 100644
--- a/net/sunrpc/svc.c
+++ b/net/sunrpc/svc.c
@@ -454,8 +454,15 @@ __svc_create(struct svc_program *prog, unsigned int bufsize, int npools,
     spin_lock_init(&pool->sp_lock);
 }

-/* Remove any stale portmap registrations */
- svc_unregister(serv);
+if (svc_uses_rpcbind(serv)) {
+    if (svc_rpcb_setup(serv) < 0) {
+        kfree(serv->sv_pools);
+        kfree(serv);
+        return NULL;
+    }
+    if (!serv->sv_shutdown)
+        serv->sv_shutdown = svc_rpcb_cleanup;
+
+return serv;
 }

Nit: could we convert this (and the previous failure to allocate sv_pools) to the usual pattern of collecting the cleanup at the end and jumping to it with a goto?

Looks fine otherwise.

--b.

On Tue, Oct 25, 2011 at 02:17:18PM +0300, Stanislav Kinsbursky wrote:
> svc_unregister() call have to be removed from svc_destroy() since it will be
> called in sv_shutdown callback.

It would be clearer that you're "moving" this if this were merged with
the following patch. And without doing that the series isn't quite bisectable, unless I'm missing something.

--b.

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

---

diff --git a/net/sunrpc/svc.c b/net/sunrpc/svc.c
index 918edc3..407462f 100644
--- a/net/sunrpc/svc.c
+++ b/net/sunrpc/svc.c
@@ -530,7 +530,6 @@ svc_destroy(struct svc_serv *serv)
  	if (svc_serv_is_pooled(serv))
  	svc_pool_map_put();
>
-    svc_unregister(serv);
  	kfree(serv->sv_pools);
  	kfree(serv);
  }

Subject: Re: [PATCH v6 4/8] SUNRPC: setup rpcbind clients if service requires it
Posted by Stanislav Kinsbursky on Fri, 28 Oct 2011 09:27:01 GMT
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28.10.2011 01:27, J. Bruce Fields
> On Tue, Oct 25, 2011 at 02:17:08PM +0300, Stanislav Kinsbursky wrote:
>> New function ("svc_uses_rpcbind") will be used to detect, that new service will
>> send portmapper register calls. For such services we will create rpcbind
>> clients and remove all stale portmap registrations.
>> Also, svc_rpcb_cleanup() will be set as sv_shutdown callback for such services
>> in case of this field wasn't initialized earlier. This will allow to destroy
>> rpcbind clients when no other users of them left.
>>
>> Note: Currently, any creating service will be detected as portmap user.
>> Probably, this is wrong. But now it depends on program versions "vs_hidden"
>> flag.
>>
>> Signed-off-by: Stanislav Kinsbursky <skinsbursky@parallels.com>
>
>> net/sunrpc/svc.c | 11 ++++++++--
Nit: could we convert this (and the previous failure to allocate sv_pools) to the usual pattern of collecting the cleanup at the end and jumping to it with a goto?

Sure, we can. I will implement this "goto pattern", is you insist.

Looks fine otherwise.

--

Best regards,
Stanislav Kinsbursky
28.10.2011 01:30, J. Bruce Fields
> On Tue, Oct 25, 2011 at 02:17:18PM +0300, Stanislav Kinsbursky wrote:
>> svc_unregister() call have to be removed from svc_destroy() since it will be
>> called in sv_shutdown callback.
> 
> It would be clearer that you're *moving* this if this were merged with
> the following patch. And without doing that the series isn't quite
> bisectable, unless I'm missing something.
> 
> Yes, you are right. Will resend new version soon.

> --b.
> 
>> Signed-off-by: Stanislav Kinsbursky<skinsbursky@parallels.com>
>> 
>> ---
>> net/sunrpc/svc.c | 1 -
>> 1 files changed, 0 insertions(+), 1 deletions(-)
>> 
>> diff --git a/net/sunrpc/svc.c b/net/sunrpc/svc.c
>> index 918edc3..407462f 100644
>> --- a/net/sunrpc/svc.c
>> +++ b/net/sunrpc/svc.c
>> @@ -530,7 +530,6 @@ svc_destroy(struct svc_serv *serv)
>> if (svc_serv_is_pooled(serv))
>> svc_pool_map_put();
>> }
>> -svc_unregister(serv);
>> kfree(serv->sv_pools);
>> kfree(serv);
>> }
>> 

--

Best regards,
Stanislav Kinsbursky