
Subject: [PATCH v3, RESEND 14/16] sunrpc: make rpc_pipefs be mountable multiple times

Posted by [Kirill A. Shutemov](#) on Tue, 08 Feb 2011 18:42:05 GMT

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To support containers, allow multiple independent instances of rpc_pipefs. Use '-o newinstance' to create new of the filesystem. The same semantics as with devpts.

Signed-off-by: Kirill A. Shutemov <kas@openvz.org>

Reviewed-by: Rob Landley <rlandley@parallels.com>

net/sunrpc/rpc_pipe.c | 80 ++++++-----
1 files changed, 79 insertions(+), 1 deletions(-)

```
diff --git a/net/sunrpc/rpc_pipe.c b/net/sunrpc/rpc_pipe.c
index 1261f27..f824f33 100644
--- a/net/sunrpc/rpc_pipe.c
+++ b/net/sunrpc/rpc_pipe.c
@@ -19,6 +19,7 @@
 #include <linux/nsproxy.h>
 #include <linux/mnt_namespace.h>
 #include <linux/fs_struct.h>
+#include <linux/parser.h>

#include <asm/ioctls.h>
#include <linux/fs.h>
@@ -41,6 +42,49 @@ static struct kmem_cache *rpc_inode_cachep __read_mostly;

#define RPC_UPCALL_TIMEOUT (30*HZ)

+struct rpc_mount_opts {
+ int newinstance;
+};
+
+enum {
+ Opt_newinstance,
+
+ Opt_err
+};
+
+static const match_table_t tokens = {
+ {Opt_newinstance, "newinstance"},
+
+ {Opt_err, NULL}
+};
+
+static int
```

```

+parse_mount_options(char *data, struct rpc_mount_opts *opts)
+{
+ char *p;
+
+ opts->newinstance = 0;
+
+ while ((p = strsep(&data, ",")) != NULL) {
+ substring_t args[MAX_OPT_ARGS];
+ int token;
+
+ if (!*p)
+ continue;
+
+ token = match_token(p, tokens, args);
+ switch (token) {
+ case Opt_newinstance:
+ opts->newinstance = 1;
+ break;
+ default:
+ return -EINVAL;
+ }
+ }
+
+ return 0;
+}
+
static void rpc_purge_list(struct rpc_inode *rpci, struct list_head *head,
 void (*destroy_msg)(struct rpc_pipe_msg *), int err)
{
@@ -1093,11 +1137,45 @@ rpc_fill_super(struct super_block *sb, void *data, int silent)
 return 0;
}

+static int
+compare_rpc_mnt_sb(struct super_block *s, void *p)
+{
+ if (init_rpc_pipefs)
+ return init_rpc_pipefs->mnt_sb == s;
+ return 0;
+}
+
static struct dentry *
rpc_mount(struct file_system_type *fs_type,
 int flags, const char *dev_name, void *data)
{
- return mount_single(fs_type, flags, data, rpc_fill_super);
+ int error;
+ struct rpc_mount_opts opts;

```

```

+ struct super_block *s;
+
+ error = parse_mount_options(data, &opts);
+ if (error)
+   return ERR_PTR(error);
+
+ if (opts.newinstance)
+   s = sget(fs_type, NULL, set_anon_super, NULL);
+ else
+   s = sget(fs_type, compare_rpc_mnt_sb, set_anon_super, NULL);
+
+ if (IS_ERR(s))
+   return ERR_CAST(s);
+
+ if (!s->s_root) {
+   s->s_flags = flags;
+   error = rpc_fill_super(s, data, flags & MS_SILENT ? 1 : 0);
+   if (error) {
+     deactivate_locked_super(s);
+     return ERR_PTR(error);
+   }
+   s->s_flags |= MS_ACTIVE;
+ }
+
+ return dget(s->s_root);
}

```

static void rpc_kill_sb(struct super_block *sb)

--
1.7.4

Containers mailing list

Containers@lists.linux-foundation.org

<https://lists.linux-foundation.org/mailman/listinfo/containers>
