
Subject: [patch 03/22] r/o bind mounts: stub functions
Posted by [Cedric Le Goater](#) on Thu, 07 Jun 2007 15:25:30 GMT
[View Forum Message](#) <> [Reply to Message](#)

From: Dave Hansen <hansendc@us.ibm.com>

This patch adds two function `mnt_want_write()` and `mnt_drop_write()`. These are used like a lock pair around and fs operations that might cause a write to the filesystem.

Before these can become useful, we must first cover each place in the VFS where writes are performed with a want/drop pair. When that is complete, we can actually introduce code that will safely check the counts before allowing r/w<->r/o transitions to occur.

Note that we put the `linux/fs.h` `#include` as far down in `mount.h` as possible. This is to keep the `mount.h->fs.h->sched.h->mount.h` include dependency from biting us.

Signed-off-by: Dave Hansen <hansendc@us.ibm.com>

```
fs/namespace.c      | 13 ++++++++
include/linux/mount.h | 13 ++++++++
2 files changed, 26 insertions(+)
```

Index: 2.6.22-rc4-mm2-robindmount/fs/namespace.c

=====

```
--- 2.6.22-rc4-mm2-robindmount.orig/fs/namespace.c
+++ 2.6.22-rc4-mm2-robindmount/fs/namespace.c
@@ -79,6 +79,19 @@ struct vfsmount *alloc_vfsmnt(const char
    return mnt;
}
```

```
+int mnt_want_write(struct vfsmount *mnt)
+{
+ if (__mnt_is_readonly(mnt))
+ return -EROFS;
+ return 0;
+}
+EXPORT_SYMBOL_GPL(mnt_want_write);
+
+void mnt_drop_write(struct vfsmount *mnt)
+{
+}
+EXPORT_SYMBOL_GPL(mnt_drop_write);
```

```

+
int simple_set_mnt(struct vfsmount *mnt, struct super_block *sb)
{
    mnt->mnt_sb = sb;
Index: 2.6.22-rc4-mm2-robindmount/include/linux/mount.h
=====
--- 2.6.22-rc4-mm2-robindmount.orig/include/linux/mount.h
+++ 2.6.22-rc4-mm2-robindmount/include/linux/mount.h
@@ -74,6 +74,19 @@ static inline struct vfsmount *mntget(st
    return mnt;
}

```

```

+ #include <linux/fs.h>
+
+ /*
+  * This shouldn't be used directly outside of the VFS,
+  * use mnt_want/drop_write() instead.
+  */
+ static inline int __mnt_is_readonly(struct vfsmount *mnt)
+ {
+     return (mnt->mnt_sb->s_flags & MS_RDONLY);
+ }
+
+ extern int mnt_want_write(struct vfsmount *mnt);
+ extern void mnt_drop_write(struct vfsmount *mnt);
+ extern void mntput_no_expire(struct vfsmount *mnt);
+ extern void mnt_pin(struct vfsmount *mnt);
+ extern void mnt_unpin(struct vfsmount *mnt);

```

--

Containers mailing list
Containers@lists.linux-foundation.org
<https://lists.linux-foundation.org/mailman/listinfo/containers>
