

---

Subject: Re: [patch 07/10] unprivileged mounts: add sysctl tunable for "safe" property

Posted by [serue](#) on Mon, 21 Jan 2008 20:32:49 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

Quoting Miklos Szeredi (miklos@szeredi.hu):

> From: Miklos Szeredi <mszeredi@suse.cz>

>

> Add the following:

>

> /proc/sys/fs/types/\${FS\_TYPE}/usermount\_safe

>

> Signed-off-by: Miklos Szeredi <mszeredi@suse.cz>

> ---

>

> Index: linux/fs/filesystems.c

> =====

> --- linux.orig/fs/filesystems.c 2008-01-16 13:24:52.000000000 +0100

> +++ linux/fs/filesystems.c 2008-01-16 13:25:09.000000000 +0100

> @@ -12,6 +12,7 @@

> #include <linux/kmod.h>

> #include <linux/init.h>

> #include <linux/module.h>

> +#include <linux/sysctl.h>

> #include <asm/uaccess.h>

>

> /\*

> @@ -51,6 +52,57 @@ static struct file\_system\_type \*\*find\_fi

> return p;

> }

>

> +#define MAX\_FILESYSTEM\_VARS 1

> +

> +struct filesystem\_sysctl\_table {

> + struct ctl\_table\_header \*header;

> + struct ctl\_table table[MAX\_FILESYSTEM\_VARS + 1];

> +};

> +

> +/\*

> + \* Create /sys/fs/types/\${FSNAME} directory with per fs-type tunables.

> + \*/

> +static int filesystem\_sysctl\_register(struct file\_system\_type \*fs)

> +{

> + struct filesystem\_sysctl\_table \*t;

> + struct ctl\_path path[] = {

> + { .procname = "fs", .ctl\_name = CTL\_FS },

> + { .procname = "types", .ctl\_name = CTL\_UNNUMBERED },

> + { .procname = fs->name, .ctl\_name = CTL\_UNNUMBERED },

```

> + { }
> + };
> +
> + t = kzalloc(sizeof(*t), GFP_KERNEL);
> + if (!t)
> + return -ENOMEM;
> +
> +
> + t->table[0].ctl_name = CTL_UNNUMBERED;
> + t->table[0].procname = "usermount_safe";
> + t->table[0].maxlen = sizeof(int);
> + t->table[0].data = &fs->fs_safe;
> + t->table[0].mode = 0644;
> + t->table[0].proc_handler = &proc_dointvec;
> +
> + t->header = register_sysctl_paths(path, t->table);
> + if (!t->header) {
> + kfree(t);
> + return -ENOMEM;
> + }
> +
> + fs->sysctl_table = t;
> +
> + return 0;
> +}
> +
> +static void filesystem_sysctl_unregister(struct file_system_type *fs)
> +{
> + struct filesystem_sysctl_table *t = fs->sysctl_table;
> +
> + unregister_sysctl_table(t->header);
> + kfree(t);
> +}
> +
> /**
> * register_filesystem - register a new filesystem
> * @fs: the file system structure
> @@ -80,6 +132,13 @@ int register_filesystem(struct file_syst
> else
> *p = fs;
> write_unlock(&file_systems_lock);
> +
> + if (res == 0) {
> + res = filesystem_sysctl_register(fs);

```

What do you think about doing this only if FS\_SAFE is also set, so for instance at first only FUSE would allow itself to be made user-mountable?

A safe thing to do, or overly intrusive?

```
> + if (res != 0)
> +   unregister_filesystem(fs);
> + }
> +
>   return res;
> }
>
> @@ -108,6 +167,7 @@ int unregister_filesystem(struct file_sy
>   *tmp = fs->next;
>   fs->next = NULL;
>   write_unlock(&file_systems_lock);
> + filesystem_sysctl_unregister(fs);
>   return 0;
> }
>   tmp = &(*tmp)->next;
> Index: linux/include/linux/fs.h
> =====
> --- linux.orig/include/linux/fs.h 2008-01-16 13:25:09.000000000 +0100
> +++ linux/include/linux/fs.h 2008-01-16 13:25:09.000000000 +0100
> @@ -1437,6 +1437,7 @@ struct file_system_type {
>   struct module *owner;
>   struct file_system_type * next;
>   struct list_head fs_supers;
> + struct filesystem_sysctl_table *sysctl_table;
>
>   struct lock_class_key s_lock_key;
>   struct lock_class_key s_umount_key;
> Index: linux/Documentation/filesystems/proc.txt
> =====
> --- linux.orig/Documentation/filesystems/proc.txt 2008-01-16 13:25:07.000000000 +0100
> +++ linux/Documentation/filesystems/proc.txt 2008-01-16 13:25:09.000000000 +0100
> @@ -43,6 +43,7 @@ Table of Contents
>   2.13 /proc/<pid>/oom_score - Display current oom-killer score
>   2.14 /proc/<pid>/io - Display the IO accounting fields
>   2.15 /proc/<pid>/coredump_filter - Core dump filtering settings
> + 2.16 /proc/sys/fs/types - File system type specific parameters
>
> -----
> Preface
> @@ -2283,4 +2284,21 @@ For example:
>   $ echo 0x7 > /proc/self/coredump_filter
>   $ ./some_program
>
> +2.16 /proc/sys/fs/types/ - File system type specific parameters
> +-----
```

> +  
> +There's a separate directory /proc/sys/fs/types/<type>/ for each  
> +filesystem type, containing the following files:  
> +  
> +usermount\_safe  
> +-----  
> +  
> +Setting this to non-zero will allow filesystems of this type to be  
> +mounted by unprivileged users (note, that there are other  
> +prerequisites as well).  
> +  
> +Care should be taken when enabling this, since most  
> +filesystems haven't been designed with unprivileged mounting  
> +in mind.  
> +  
> -----  
>  
>  
> --  
> -  
> To unsubscribe from this list: send the line "unsubscribe linux-fsdevel" in  
> the body of a message to majordomo@vger.kernel.org  
> More majordomo info at <http://vger.kernel.org/majordomo-info.html>

---

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

---