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Subject: [PATCH 4/4] sysctl: Fix sys\_sysctl interface of ipc sysctls

Posted by [ebiederm](#) on Mon, 27 Nov 2006 05:05:11 GMT

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Currently there is a regression and the ipc sysctls don't show up in the binary sysctl namespace.

This patch adds sysctl\_ipc\_data to read data/write from the appropriate namespace and deliver it in the expected manner.

Signed-off-by: Eric W. Biederman <[ebiederm@xmission.com](mailto:ebiederm@xmission.com)>

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kernel/sysctl.c | 50 +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++  
1 files changed, 50 insertions(+), 0 deletions(-)

diff --git a/kernel/sysctl.c b/kernel/sysctl.c

index 638aa14..24c2ca8 100644

--- a/kernel/sysctl.c

+++ b/kernel/sysctl.c

@@ -142,6 +142,10 @@ static int sysctl\_uts\_string(ctl\_table \*  
void \_\_user \*oldval, size\_t \_\_user \*oldlenp,  
void \_\_user \*newval, size\_t newlen, void \*\*context);

+static int sysctl\_ipc\_data(ctl\_table \*table, int \_\_user \*name, int nlen,  
+ void \_\_user \*oldval, size\_t \_\_user \*oldlenp,  
+ void \_\_user \*newval, size\_t newlen, void \*\*context);  
+

#ifdef CONFIG\_PROC\_SYSCTL

static int proc\_do\_cad\_pid(ctl\_table \*table, int write, struct file \*filp,  
void \_\_user \*buffer, size\_t \*lenp, loff\_t \*ppos);

@@ -475,6 +479,7 @@ #ifdef CONFIG\_SYSVIPC

.maxlen = sizeof (init\_ipc\_ns.shm\_ctlmax),  
.mode = 0644,  
.proc\_handler = &proc\_ipc\_doulongvec\_minmax,  
+ .strategy = sysctl\_ipc\_data,  
},  
{

.ctl\_name = KERN\_SHMALL,

@@ -483,6 +488,7 @@ #ifdef CONFIG\_SYSVIPC

.maxlen = sizeof (init\_ipc\_ns.shm\_ctlall),  
.mode = 0644,  
.proc\_handler = &proc\_ipc\_doulongvec\_minmax,  
+ .strategy = sysctl\_ipc\_data,  
},  
{

.ctl\_name = KERN\_SHMMNI,

@@ -491,6 +497,7 @@ #ifdef CONFIG\_SYSVIPC

.maxlen = sizeof (init\_ipc\_ns.shm\_ctlmni),

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        .mode = 0644,
        .proc_handler = &proc_ipc_dointvec,
+ .strategy = sysctl_ipc_data,
    },
    {
        .ctl_name = KERN_MSGMAX,
@@ -499,6 +506,7 @@ #ifdef CONFIG_SYSVIPC
        .maxlen = sizeof (init_ipc_ns.msg_ctlmax),
        .mode = 0644,
        .proc_handler = &proc_ipc_dointvec,
+ .strategy = sysctl_ipc_data,
    },
    {
        .ctl_name = KERN_MSGMNI,
@@ -507,6 +515,7 @@ #ifdef CONFIG_SYSVIPC
        .maxlen = sizeof (init_ipc_ns.msg_ctlmni),
        .mode = 0644,
        .proc_handler = &proc_ipc_dointvec,
+ .strategy = sysctl_ipc_data,
    },
    {
        .ctl_name = KERN_MSGMNB,
@@ -515,6 +524,7 @@ #ifdef CONFIG_SYSVIPC
        .maxlen = sizeof (init_ipc_ns.msg_ctlmnb),
        .mode = 0644,
        .proc_handler = &proc_ipc_dointvec,
+ .strategy = sysctl_ipc_data,
    },
    {
        .ctl_name = KERN_SEM,
@@ -523,6 +533,7 @@ #ifdef CONFIG_SYSVIPC
        .maxlen = 4*sizeof (int),
        .mode = 0644,
        .proc_handler = &proc_ipc_dointvec,
+ .strategy = sysctl_ipc_data,
    },
#endif
#ifdef CONFIG_MAGIC_SYSRQ
@@ -2613,6 +2624,45 @@ static int sysctl_uts_string(ctl_table *
    return r;
}

+/* The generic sysctl ipc data routine. */
+static int sysctl_ipc_data(ctl_table *table, int __user *name, int nlen,
+ void __user *oldval, size_t __user *oldlenp,
+ void __user *newval, size_t newlen, void **context)
+{
+ size_t len;

```

```

+ void *data;
+
+ /* Get out of I don't have a variable */
+ if (!table->data || !table->maxlen)
+ return -ENOTDIR;
+
+ data = get_ipc(table, 1);
+ if (!data)
+ return -ENOTDIR;
+
+ if (oldval && oldlenp) {
+ if (get_user(len, oldlenp))
+ return -EFAULT;
+ if (len) {
+ if (len > table->maxlen)
+ len = table->maxlen;
+ if (copy_to_user(oldval, data, len))
+ return -EFAULT;
+ if (put_user(len, oldlenp))
+ return -EFAULT;
+ }
+ }
+
+ if (newval && newlen) {
+ if (newlen > table->maxlen)
+ newlen = table->maxlen;
+
+ if (copy_from_user(data, newval, newlen))
+ return -EFAULT;
+ }
+ return 1;
+}
+
#else /* CONFIG_SYSCTL_SYSCALL */

```

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1.4.2.rc3.g7e18e-dirty

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Containers mailing list  
Containers@lists.osdl.org  
<https://lists.osdl.org/mailman/listinfo/containers>

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