
Subject: Re: [PATCH v8 2/5] ipc: add sysctl to specify desired next object id
Posted by [Stanislav Kinsbursky](#) on Thu, 25 Oct 2012 07:53:10 GMT
[View Forum Message](#) <> [Reply to Message](#)

> On Wed, 24 Oct 2012 19:35:09 +0400
> Stanislav Kinsbursky <skinsbursky@parallels.com> wrote:
>
>> This patch adds 3 new variables and sysctls to tune them (by one "next_id"
>> variable for messages, semaphores and shared memory respectively).
>> This variable can be used to set desired id for next allocated IPC object.
>> By default it's equal to -1 and old behaviour is preserved.
>> If this variable is non-negative, then desired idr will be extracted from it
>> and used as a start value to search for free IDR slot.
>>
>> Notes:
>> 1) this patch doesn't guarantee, that new object will have desired id. So it's
>> up to user space how to handle new object with wrong id.
>> 2) After successful id allocation attempt, "next_id" will be set back to -1
>> (if it was non-negative).
>>
>> --- a/ipc/ipc_sysctl.c
>> +++ b/ipc/ipc_sysctl.c
>> @@ -158,6 +158,7 @@ static int proc_ipcauto_dointvec_minmax(ctl_table *table, int write,
>>
>> static int zero;
>> static int one = 1;
>> +static int int_max = INT_MAX;
>>
>> static struct ctl_table ipc_kern_table[] = {
>> {
>> @@ -227,6 +228,33 @@ static struct ctl_table ipc_kern_table[] = {
>> .extra1 = &zero,
>> .extra2 = &one,
>> },
>> + {
>> + .procname = "sem_next_id",
>> + .data = &init_ipc_ns.ids[IPC_SEM_IDS].next_id,
>> + .maxlen = sizeof(init_ipc_ns.ids[IPC_SEM_IDS].next_id),
>> + .mode = 0644,
>> + .proc_handler = proc_ipc_dointvec_minmax,
>> + .extra1 = &zero,
>> + .extra2 = &int_max,
>> + },
>> + {
>> + .procname = "msg_next_id",
>> + .data = &init_ipc_ns.ids[IPC_MSG_IDS].next_id,
>> + .maxlen = sizeof(init_ipc_ns.ids[IPC_MSG_IDS].next_id),

```

>> + .mode = 0644,
>> + .proc_handler = proc_ipc_dointvec_minmax,
>> + .extra1 = &zero,
>> + .extra2 = &int_max,
>> + },
>> + {
>> + .procname = "shm_next_id",
>> + .data = &init_ipc_ns.ids[IPC_SHM_IDS].next_id,
>> + .maxlen = sizeof(init_ipc_ns.ids[IPC_SHM_IDS].next_id),
>> + .mode = 0644,
>> + .proc_handler = proc_ipc_dointvec_minmax,
>> + .extra1 = &zero,
>> + .extra2 = &int_max,
>> + },
>> {}
>> };
>
> ipc_kern_table[] is (badly) documented in
> Documentation/sysctl/kernel.txt. Can we at least mention these
> controls in there? Better, create a new way of properly documenting
> each control and document these three in that manner? Better still,
> document all the other ones as well ;)
>

```

Yes, sure. I'll do my best.

```

> The patch adds these controls to CONFIG_CHECKPOINT_RESTORE=n kernels.
> Why is this?
>

```

I'll fix this.

--

Best regards,
Stanislav Kinsbursky
