Subject: Re: [PATCH v6 02/10] ipc: "use key as id" functionality for resource get system ca
Posted by Stanislav Kinsbursky on Tue, 16 Oct 2012 07:52:01 GMT
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> Stanislav Kinsbursky <skinsbursky@parallels.com> writes:
>
>> This patch introduces new IPC resource get request flag IPC_PRESET, which
>> should be interpreted as a request to try to allocate IPC slot with number,
>> starting from value resented by key. IOW, kernel will try
>> allocate new segment in specified slot.
>>
>> Note: if desired slot is not emply, then next free slot will be used.
>
> This way of handling things is pretty nasty.
>
> - You don't fail if the requested id is not available.

It's a part of design. Consider IPC_PRESET as an advice.
It's up to user to check, does returned id suits it's needs.

> - You don't allow assigning the key (which leads to the need to change
> the key in later patches). Changing the creator uid and creator
> gid and key is semantically ugly.
>

Key assigning ability is implemented in 4-6'th patches of the series.
Changing creator uid and creator gid with key can be dropped. The reason why I added this was to give more abilities to syscall caller.

> It would be much cleaner if you could instead add IPC_PRESET and then
> extend the definition of the creation functions all by one argument.
>
> aka
> int msgget(key_t key, int msgflg, int id);
> int semget(key_t key, int nsems, int semflg, int id);
> int shmget(key_t key, size_t size, int shmflg, int id);
>
> Where the extra id argument is ignored unless IPC_PRESET is specified.
>

This way suits my needs. The reason, why I didn't this that way was trying to affect user-space API as less, as possible.
So, if there will be more votes for adding one more argument to existent systems calls - I'll do it.

> Also msgget, semget, and shmget should fail if unregconized flags are

> passed in. That ipcget doesn't do that today is bizarre.
>

This looks like another issue, which can be fixed separately.

> Eric
>

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Best regards,
Stanislav Kinsbursky