Subject: Re: [RFC PATCH 0/5] Resend - Use procfs to change a syscall behavior Posted by Dave Hansen on Thu, 10 Jul 2008 19:04:03 GMT

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On Thu, 2008-07-10 at 20:45 +0200, Pavel Machek wrote:
> On Thu 2008-07-10 10:53:35, Dave Hansen wrote:
> On Thu, 2008-07-10 at 10:54 +0200, Pavel Machek wrote:
>>>
>> If you don't see a backward compatibility problem here, perhaps you
>> should not be hacking kernel...? The way ids are assigned is certainly
>>> part of syscall semantics (applications rely on), at least for open.
> >
> > We also used to have a pretty defined ordering for handing out address
> > space with mmap(). That all changed with address space randomization.
> > Are file descriptors different somehow?
> >
>> Anyway, it's not like we're actually changing existing behavior. An
> > application has to do something special and new to trigger this new
>> behavior. Nobody is going to stumble over it, and it will *not* break
> > backward compatibility.
> It will break compatibility, but not in a way you expect. There's
> application called "subterfugue" that monitors other applications
> using ptrace and enforces security policy (or does other stuff). Such
> hacks depend on existing syscalls behaving in a way they are
> specified...
>
> Then you'll have to update open.2 man page:
>
> DESCRIPTION
      Given a pathname for a file, open() returns a file descriptor,
> a small, non-
      negative integer for use in subsequent system calls
> (read(2), write(2),
      Iseek(2), fcntl(2), etc.). The file descriptor returned by
>
> a successful
      call will be the lowest-numbered file descriptor not currently
> open for the
      process.
>
> ...you'll need to add "unless someone write some number in file in
> /proc somewhere"... hmm... is new behaviour even POSIX compliant?
> open() is specified in POSIX...
Yup, that's true. Good point.
> Ok, so it will not break too many apps... but echo "123 >
```

> /proc/something" breaking bash (etc) is not nice.