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Subject: Re: [RFC PATCH 0/5] net: socket bind to file descriptor introduced  
Posted by [ebiederm](#) on Wed, 15 Aug 2012 21:25:42 GMT  
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"H. Peter Anvin" <[hpa@zytor.com](mailto:hpa@zytor.com)> writes:

> On 08/15/2012 12:49 PM, Eric W. Biederman wrote:  
>>  
>> There is also the trick of getting a shorter directory name using  
>> /proc/self/fd if you are threaded and can't change the directory.  
>>  
>> The obvious choices at this point are  
>> - Teach bind and connect and af\_unix sockets to take longer AF\_UNIX  
>> socket path names.  
>>  
>> - introduce sockaddr\_fd that can be applied to AF\_UNIX sockets,  
>> and teach unix\_bind and unix\_connect how to deal with a second type of sockaddr.  
>> struct sockaddr\_fd { short fd\_family; short pad; int fd; };  
>>  
>> - introduce sockaddr\_unix\_at that takes a directory file descriptor  
>> as well as a unix path, and teach unix\_bind and unix\_connect to deal with a  
>> second sockaddr type.  
>> struct sockaddr\_unix\_at { short family; short pad; int dfd; char path[102]; }  
>> AF\_UNIX\_AT  
>>  
>> I don't know what the implications of for breaking connect up into 3  
>> system calls and changing the semantics are and I would really rather  
>> not have to think about it.  
>>  
>> But it certainly does not look to me like you introduce new systems  
>> calls to do what you want.  
>>  
>  
> How would you distinguish the new sockaddr types from the traditional  
> one? New AF\_?

Yeah. AF\_FD or AF\_UNIX\_AT is what I was thinking. The way the code falls out that should be comparatively simple to implement.

recvmsg etc would give you sockaddr\_un sockets when they come from the kernel.

Eric

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