主　题:	Re: A way to reduce your workload: how do you think of it?
发件人:	[redacted] 2018-7-31 22:04:06
收件人:	"谭鑫" <tanxin16@pku.edu.cn>, "Jason Gunthorpe" <jgg@ziepe.ca>
附　件:	signature.asc

Putting t[redacted] the thread...

On 7/31/2018 2:10 AM, 谭鑫 wrote:
> [redacted]
> Thank you for your opinion. I noticed that you mentioned two concerns.
> 1) the risk is greater if the developers are working for different competitors.
> 2) the reviewers are not enough.
> I know there are many sub subsystems under "INFINIBAND SUBSYSTEM", and most of them are supported by an individual company. You two as the gatekeepers to avoid the conflict. I have an idea that I don't know whether it is feasible. Using the multiple-committer model doesn't mean abandon the general hierarchy review workflow entirely. You could try to add the core contributors as committers gradually to help you review the patches. In order to avoid conflict, the committers should come from different companies and the rules of review should be stricter, e.g., the patches submitted by them should be reviewed by their competitors. Because having commit right can help them add their implementations more quickly into the main repository, the committers would be willing to make some changes. Therefore, I think "not enough reviewers" will no longer be a problem.
>
> How do you think of it? Looking forward to your reply.

It's possible we could do something like that. But, while Mellanox and Intel make up the lion's share of commits, we do still have about 6 other companies all contributing. And the situation is made more complex because we have a lot of interactions with the net subsystem. Many of the patches we might take need to at least be seen by Dave Miller and the rest of the netdev folks. The situation is simply a complex one. Weighted into the answer to all of this is a balancing act between making sure companies can't sneak in bad code via lack of code review combined with commit rights, or getting things accomplished. I'm not prepared to say that just the ability to get their own code in quicker is enough to get the various companies to step up their review of other people's code. I'm afraid people will more or less ignore the code that needs reviewed on list until their own code is in need of review and then they'll try to do review swaps (this happens all the time in Fedora with package reviews, which must be completed prior to a new package being accepted into the Fedora repo...no one wants to do the reviews, so they sit there languishing, until someone needs their own new package reviewed, and then they offer to swap reviews with someone else). This might not make the situation better, and in fact could make it worse, as the quality of the review might vary greatly depending on who you swap with. For instance, Mellanox might have a new feature that is fundamentally OK but is implemented in a manner that is wrong for Intel hardware, but if their reviewer ends up being Chelsio instead, then it might slip through before Intel is aware that the change will impact them negatively.

This is something we would have to think long and hard on before we could implement it I think.

> Thanks,
> Xin Tan
>
>> -----原始邮件-----
>> 发件人: "[redacted]
>> 发送时间: 2018-07-30 23:51:17 (星期一)
>> 收件人: [redacted]
>> 抄送: "谭鑫" <tanxin16@pku.edu.cn>
>> 主题: Re: A way to reduce your workload: how do you think of it?
>>
>> On Mon, Jul 30, 2018 at 11:14:32AM -0400, Doug Ledford wrote:
>>
>>>> more balanced to keep maintainers from burning out. Meanwhile, because
>>>> it introduces a stricter review mechanism (e.g., the patches submitted

>>>> by committers need to be reviewed by at least another one developers),
>>>> the quality of patches is also guaranteed.
>>
>> I have followed Daniel's presentations and writings on this subject. I
>> can't figure out how he managed is to jump start this 'review economy'
>> for GPU.
>>
>> In RDMA's case, we have, as you pointed out, one company that submits
>> over 50% of all patches every cycle. Even if every other company had
>> to review 1:1 a Mellanox patch for their own to go forward it still
>> wouldn't be enough review capacity, and Mellanox would have to review
>> the entirety of every other company's work.
>>
>> It is not a politically supportable position, unfortunately.
>>
>> I guess that GPU must have a very different submission profile..
>>
>>>> 2) the code ownership is relatively low (rank 71/367 in the subsystems
>>>> we analyzed) which means that multiple developers modify the same file
>>>> at the same time. Using multiple-committer model could avoid the
>>>> conflict because all the patches are submitted to the same tree. It also
>>>> may suggest that developers trust each other.
>>
>> I wonder if this is just an artifact of age, drivers/infiniband is
>> very old and has been extended/rewritten over the years by quite a few
>> different people. I also wonder if this vanishes a bit if you isolate
>> for company not individual developer. Each of the drivers is
>> substantially authored 100% by the respective company, as far I as
>> know.
>>
>>>> 3) developers are sharing affiliations (Mellanox and Intel contributes
>>>> 57% of patches and 44% of developers), which suggests that these
>>
>> This doesn't feel accurate based on the usual patch flow, I think your
>> sampling window includes a period when Intel was unusually active due
>> to their new HW. This cycle has almost nothing from Intel and Mellanox
>> is still at least 58% of the patches.
>>
>>>> How do you think of this model? We would like to know your opinion.
>>>> Thank you very much!
>>>
>>> I don't think it's a good idea in our subsystem, but I'll allow Jason to
>>> speak his mind on the topic.
>>
>> In RDMA we have always wanted to get more reviewers, but I don't know
>> how, in years of trying we have never made progress.
>>
>> [redacted]