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Hyperledger Project reflects on blockchain politics

Hyperledger's Brian Behlendorf discusses abortive attempt to relicense the C++ Ethereum client to the Apache 2.0 licence.

By Ian Allison

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Like any community, the blockchain world is also a political arena. Powerful consortia have emerged in a race to production, licencing spats occur and there's even a risk that patent enforcements could freeze innovation.

The Hyperledger Project, which is now a major player in the space, gives blockchain the Linux Foundation treatment: fostering a series of open multi-stakeholder technology projects. Brian Behlendorf, the executive director of the Hyperledger Project, is a primary developer of the Apache Web server and a founding member of the Apache Software Foundation.

Blockchain politics are well illustrated by the proposal to bring the C++ implementation of the Ethereum client runtime to Hyperledger, which required relicensing the code from the copyleft GPLv3 licence to the more permissive Apache 2.0 licence – a deal shepherded by Behlendorf among others.

In the end it turned out that there were some developers in the Ethereum community who were opposed to relicensing it under the Apache licence.

Behlendorf said: "Hyperledger has standardised on the Apache license. With everything under the same licence, there's this mixability that we

preserve for the future, so that you can merge and recycle code from one code base to another. You don't get when you have code under different multiple licences.

"You put the Apache licence in front of any corporate lawyer and they can understand it. They can see this avoids creating any obligation to release their own proprietary IP they might link to this code. The GPL causes concern for people who read it closely. This has been the strategy at the Apache Software Foundation for over 20 years, and we are following suit."

Behlendorf explained that several developers in the Ethereum C++ client community were interested in bringing the project to Hyperledger, and they had managed to convince all but a few of the over 100 developers who had touched the code to accept the change to the licence.

"When the code is not originally written under the Apache licence, we require developers to re-licence their work – that is the only legal and fair way to do it. But there were a few hold-outs who all worked for a company building a competitive implementation of Ethereum. The last thing that they wanted was to enable a new competitor - at least this is how it looked from our perspective.

"I thought it was a pretty unfriendly thing to do because it pissed on the work of a lot of their previous collaborators. It's exactly why development in a consortium like ours - where you know what the rules are going in - is really what people need to do, rather than work on these kinds of amorphously licensed efforts that end up being constrained when they want to change and go in different directions."

Behlendorf said that while the experience was frustrating and saddening (and certainly not in the spirit of open source) Hyperledger has a good relationship with the Ethereum community.

"We are still in a kind of honeymoon period when it comes to all this and I think it's too early to be getting cutthroat competitive about it. I can't begrudge anyone wanting to go get venture capital funding and build a business in this space. But I don't think the business models around owning the infrastructure are the ones that are going to generate high returns.

"I think the ones that are about building products and services that sit on top of a ubiquitous high quality blockchain infrastructure are the ones that are going to win. The ones that are more about reforming how healthcare records work, such as writing a great EHR system or

prescription management system, that all talk to a blockchain."

He said there are opportunities for companies to be the Red Hat of this space, but pointed out that Red Hat doesn't make its money from exclusive licencing or from playing games with dual licencing; it's still around non-exclusive ownership of the underlying technology.

Another area where harmonisation of the nascent blockchain industry is advisable is the development of an intellectual property strategy to combat aggressive patent enforcements.

Many players are aggressively pursuing patents in the blockchain space. As of mid-June 2016, there were 48 granted patents and more than 200 pending applications worldwide directed to DLT, according to a study conducted by Reed Smith LLP and Questel – and this is likely just the tip of the iceberg.

"It's a big challenge out there in the industry. This is true for blockchain technology, but also other early stage technology. The industry can become locked down like what happened to the bio-technology industry for decades, which slowed down innovation. Until some key patents were unleashed the only people who could afford to participate were the ones who were big patent portfolio holders and they tended to crush small companies.

"A lot of what is happening in the blockchain world is not about exotic invention. It's much more about high quality implementation. I'd like to believe that the standards for patenting pure algorithms and software is rising, so it will be harder to patent things in this space over time.

"Anybody who contributes their code into Hyperledger is also granting an implicit licence to any patents they own that may read on that contribution. So when you use Hyperledger you don't have to worry about patent risk from IBM, from DTCC, or anyone else on the projects they participate in.

Another approach is for the industry players to develop a patent pool which is available for cross-license to all participants in the ecosystem. "I think ultimately we should have a patent pooling mechanism, like the approach of the Open Innovation Network," said Behlendorf.