How Open Source Projects Can Leverage Standards and Specifications

David Rudin

Assistant General Counsel – Microsoft

Founder & President – Joint Development Foundation

CONGRESS STANDING TO RECEIVE WILSON

But it doesn't need to be this way, and isn't always this way.

Standards organizations come in lots of shapes and sizes
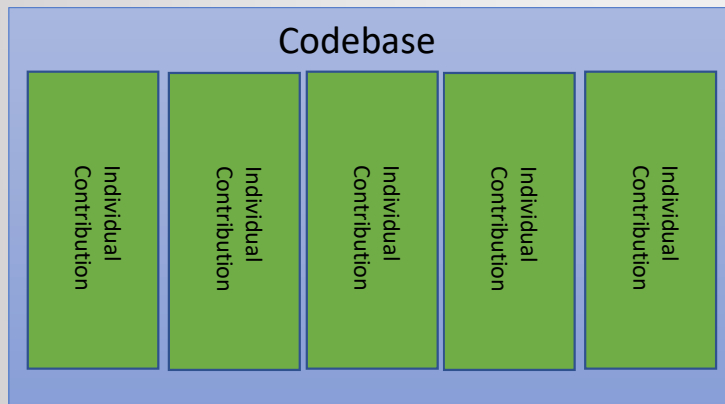
Why do standards bodies work this way?

And how does this compare to Open Source?
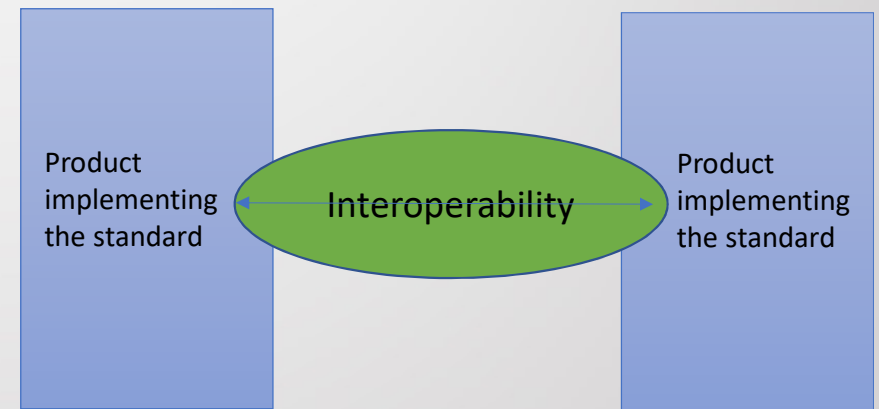
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Patents

Differing Legal Coverage

Open Source
- Contribution based licensing
- Covers implementation details

Open Standards
- Commitment by participants to the entire approved Specification
- Generally limited to Necessary Claims required for interoperability

Codebase

Individual Contribution | Individual Contribution | Individual Contribution | Individual Contribution | Individual Contribution

Product implementing the standard

Interoperability

Product implementing the standard

Intellectual Property Coverage

Shhhh…… Confidentiality

Fine, but how can they work together?

Models

1. **Source is the standard**
2. **Code 1st, Specification 2nd**
3. **Code and Specification together**
4. **Specification 1st, Code 2nd**
5. **Specification**

bitcoin AllJoyn®

The Documentation is NOT a Specification

"The Bitcoin.org Developer Documentation describes how Bitcoin works to help educate new Bitcoin developers, but it is not a specification—and it never will be.

Bitcoin security depends on consensus. Should your program diverge from consensus, its security is weakened or destroyed. The cause of the divergence doesn't matter: it could be a bug in your program, it could be an error in this documentation which you implemented as described, or it could be you do everything right but other software on the network behaves unexpectedly. The specific cause will not matter to the users of your software whose wealth is lost.

The only correct specification of consensus behavior is the actual behavior of programs on the network which maintain consensus. As that behavior is subject to arbitrary inputs in a large variety of unique environments, it cannot ever be fully documented here or anywhere else.

In addition, we also warn you that this documentation has not been extensively reviewed by Bitcoin experts and so likely contains numerous errors. At the bottom of the menu on the left, you will find links that allow you to report an issue or to edit the documentation on GitHub. Please use those links if you find any errors or important missing information."
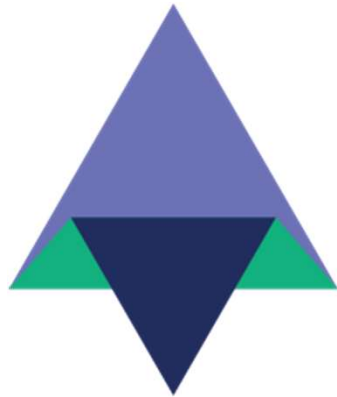
Code 1st, Specification 2nd

Code and Specification together

Specification 1st, Code 2nd

Specification

So how do you get the best of both worlds?