Why "Federated" Social Networking Is Important

By Daniel Devine, 18 April 2013.

What is "Federation"?

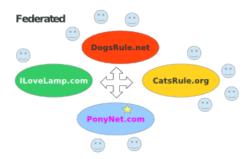
And why is it in quotes? The reason it is in quotes is because I'd rather you asked that, than just ignore the article because you hadn't the faintest idea what federation was.

Federation means that many different computers are able to communicate with each-other because they speak the same language in the same way... Every computer participating in this sytem (or "network") can understand every other computer it has to talk to. A federated social network is a social networking system (like Facebook or Twitter) which instead of being run in just one place – which is how the current social networks are run, it is run in many different places by different people. Weird, but it actually works – read the next paragraph for proof.

As it turns out, you are almost certainly part of a federated social network already! Email is pretty much the oldest form of social networking. It is federated because anybody can run an email server (a computer which runs a program to provide email), and communicate with anybody else who has an email address. Gmail users can talk to Hotmail users who can also talk to supershinyponyemail.com users. They all talk a language called *SMTP* – which is an acronym for *Simple Mail Transfer Protocol*. A "protocol" is a language that allows computers to talk to eachother.

Some people refer to federated social networks as "distributed social networks" and this is technically correct, but I prefer to call attention to the most important feature of such a system: the federation which makes everything run smoothly both for the computers and for the people using them.





Cool, but why?

Everybody tends to use the social network that their friends (and perhaps family) are on. A network that has nobody to talk to is useless! The great thing about a federated social networking is that it allows *everybody* to participate – all they have to do is use a service which speaks the same computer language and they're in!

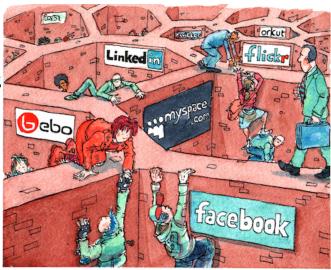
Imagine how cool it would be if all social networks - say Facebook, Google+ and Twitter, were combined into one big network so it didn't matter which one your friends prefer and you could use all the different features whenever you feel like it. That's what federation can do.

If you didn't like the way one service (for example, Facebook) did things and you wanted to try an alternative (eg. Google+) then if the networks were federated it would be as simple as just logging into the other service, running through some setup questions such as "Where can we fetch your existing friends list from?" and just start talking to your friends back on the old service from your shiny new one!

Unfortunately Facebook, Google+ and Twitter have not wisened up to the benefits of federated social networking yet so this is not possible today. It's not just your loss, but theirs too because federation

makes them available to more customers.

Also, social networks are not just for chatting to friends they're also a platform for services to be built on top of. If you've ever ordered something online you've likely received an email containing a receipt or shipping confirmation for your item — this is one of the oldest examples of a social network being used as a platform for a service. Games on Facebook are able to invite your friends to be part of the game and can even harness information from your profile to create game-play unique to you. Perhaps in the future it may be possible for you to share information with your health-care provider via a federated social networking platform so that your doctor



can pick up on problems early! Many countries are working towards enabling services like this under "eHealth" initiatives. Unlike email, social network integration offers the ability to easily share information through a specially tailored interface as part of your every-day life. It also offers the ability for devices (or software for smart phones) to be created which collect, analyse and share information automatically on your behalf in an efficient and flexible way.

Are you one of those people who don't use social networks because you don't want to potentially expose your personal life to the Internet or some company that you've never even met the employees of? Good, you're smart – but you're really missing out on the fun and opportunities social networking provides. With federated social networking you can use a service that gives you more control over your data – or if you like you can run your own server (a computer running the social networking program) on your own terms.

Scary Stuff!

"...this sounds good, but I'm happy enough with how things are at the moment... I also have nothing to hide!"

I wish you were right, but you're not.

It is not uncommon for social networking providers to do nasty things which can range from annoying or unfair, to embarrassing to dangerous to, in the case of people in oppressive countries — deadly. Even when social networking providers don't do anything wrong, others (governments or criminals) can force them to divulge your information without you even knowing.

An example of an annoying or unfair incident is when the interface is changed and removes functionality or makes it inconvenient/hard to find. For some, interface changes can be terrible because the new interface may not be accessible to those who have disabilities.

An embarrassing or even dangerous example would be when privacy settings are changed by the provider or new features are introduced and immediately enabled with inadequate privacy settings which expose personal information to those who aren't supposed to see it (perhaps the entire world!). I'd rather not point fingers – but many people would already have guessed that I'm talking about Facebook. Facebook has done (or is still doing) crazy things like exposing private information without

your permission, claiming ownership of your pictures, and allowing you to be automatically detected and named in any picture.

Also, every site that you visit and it has some sort of "Like" button automatically sends information about you back to Facebook, Google+ or Twitter when you load the page with the button on. Big brother is watching, hidden in plain sight.

Deadly. Yes, social networking can result in death. Governments and criminals are scrambling to get access to social networks because they are a huge "honey pot" of data on their users. These databases are much bigger and more intimate than any government or criminal could ever hope to gather because people tend to say what they really think when they think only their friends are listening. Alarmingly, another reason the honey-pot is so big is because it is not just the person of interest building the database but all their friends are helping too! Traditional social networking providers are just companies — not trusted friends. If the authorities say they have to supply information to them or else risk being arrested or shut down, then they will just hand over the data that is demanded. If the government of an oppressive regime gets hold of the plans and identities of dissenters (or people of undesirable ethnicity or religion) then they and possibly even their families are in *big* trouble. Also, consider that what is legal today may not be legal tomorrow so even people in relatively stable countries should be careful about who they give their data to.

"[It] is threatening the rights of people in America, and effectively rights everywhere, because what happens in America tends to affect people all over the world. Even though the Sopa and Pipa acts were stopped by huge public outcry, it's staggering how quickly the US government has come back with a new, different, threat to the rights of its citizens." - Tim Berners Lee, inventor of the Internet, commenting on the "CISPA" Bill being proposed in the USA.

Federated social networking gives you the ability to control who holds your information. It could be a company that you pay to do so, a trusted friend or community, or even yourself. Keep in mind, if you are not paying for a service from a company then you are the product. The business model of current social networks is to harvest data about you for the purpose of selling advertising.

Run a Server? Are You Crazy?

Woah, slow down. I didn't say *you* have to run a server! Previously I mentioned that the holder of your information could be a company, friend, community organisation, or yourself. The "holder of your information" is generally who runs the server(s) you use.

If you need (or want) to run a server then there are easier ways to do this rather than setting up a server from scratch. There are "appliance images" for some social networking servers which provide a copy of the software already set up and ready for you to just fill in the blanks to make it your own.

An up-and-coming project called Freedom Box is software which when when loaded onto a (small, sub-\$100) computer running in your home will make it easy to secure all your internet communications for every device in your house. In the near future Freedom Box will also run a federated social networking service with minimal setup needed – and there are plans to sell hardware with Freedom Box already installed for you.

Why Federated Social Networking is Important

So if you read the last few paragraphs you should already have a good idea of why it is important. But

here's the summary.

- Federated social networking is cool because it allows users to use whatever they like, without having to venture out alone, without their friends.
- Federated social networking is exciting because it offers an amazing platform for cool things to be created upon.
- Federated social networking is important because it offers better privacy.

Where Can I Find More on Federated Social Networking?

Social Networking Issues

If you are interested in the social impact of social networking, or are not convinced that social networking is actually important then the following video offers an amazing insight into the social significance of social networking and some of the privacy and government problems.

https://www.youtube.com/watch?v=sKOk4Y4inVY

Also, I recommend typing "Facebook privacy issues" into a search engine such as Google and seeing what the latest concerns are.

A Real Live Federated Social Network

To learn exactly what a federated social network is take a look at *buddycloud*. There is lots of information on how it works and you can try their demo.

http://buddycloud.com

Acknowledgments

Silos picture: http://www.w3.org/DesignIssues/CloudStorage.html

Tim Berners Lee quote: http://www.guardian.co.uk/technology/2012/apr/18/tim-berners-lee-google-

facebook