

Privacy Suites

Shared Privacy For Social Networks

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Creating usable and expressive privacy controls for social networks is a major challenge. Users' lack of understanding of privacy settings can lead to unwanted disclosure of private information and, in some cases, to material harm. We propose a new paradigm which allows users to easily choose a "suite" of privacy settings which have been specified by friends or trusted experts, modifying them if they wish. Such a system could dramatically increase privacy for users who currently stick with operator-chosen defaults.

Why Usability Is Hard

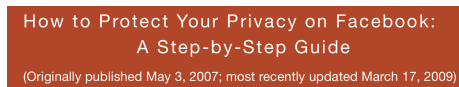
Modern online social networks are extremely complicated. Facebook, for example, implements over 50 ways for users to interact and has over 60 privacy settings. A deep understanding of the site is needed to comprehend the effects of many settings:

Don't allow friends to view my memberships on other websites through Facebook Connect.

Many users remain opted-in to little-known privacy-violating features which they don't know exist. Additionally, new features are frequently introduced, so managing privacy requires continued diligence.

Learning From Others

A plethora of "how-to" articles have sprung up on the internet to guide frustrated users in managing their privacy, including one costing US\$9.99:



WARNING!
Online social network websites can be hazardous if you don't change the default settings!

The popularity of these guides, one of which has had over 1 million downloads, indicates that users care about privacy but don't feel comfortable managing it.

Delegating Privacy?

Delegating management to a trusted third-party has been a successful paradigm in many areas of computer security where configuration is complex and tedious. Examples include OS patching, anti-virus software, firewall management, and ad blocking. The Ad-Block Plus extension for Mozilla Firefox has been downloaded over 50 million times, allowing users to import blacklists from the authority of their choice.

My Exception Rules

@@[http://www.univatchblog.com/
@[http://www.youtube.com/
@[http://failblog.org/

Filter subscription: EasyList (USA)

Some filters in this subscription require Adblock Plus 1.0.2 to work pr...
Source: <http://easylis.adblockplus.org/easylis.txt>
Status: Updated automatically; Last download: Sun 05 Jul 2009 14:1...
!
! Rick752's EasyList - Global English ad blocking su...
! <https://easylis.adblockplus.org/>
! License: <http://creativecommons.org/licenses/by-...>
! Last modified: 05 Jul 2009 13:11 UTC

Specification Format

We must first define a privacy settings language independent of the interface used to configure it. This could be as simple as XML or could be a more powerful scripting language:

```
def showPhotoStream(self, user):  
    if user in self.friends:  
        return True  
  
    mutual = self.friends &  
            user.friends  
  
    return len(mutual) > 10
```

Privacy Suites

Once privacy settings are specified in transferrable documents, they can be shared amongst users. Users could choose one based on the reputation of a trusted expert or organisation. They may also choose to adopt a suite used by one of their friends, enabling privacy to spread virally along social links:

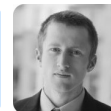
Viewing Privacy Suite: Joe's Safe Settings

Details Preview Adopt This Suite

Author: Joseph Bonneau

Created: May 29, 2009

My settings share your photos with friends only, hide your email address from search engines, and... (more)



Used By:

24 of your friends

234 people in the University of Cambridge network

457 people in the London network

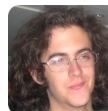
1802 people overall



Reviewed By: Jonathan Anderson

Rating: ★★★★★

I love it!!! Keeps my data out of stranger's hands, and Joe does a great job keeping it updated... (more)



Reviewed By: Luke Church

Rating: ★★★★★

I liked this suite, but it hid too much of my info from my university network, so I modified it into my own

Open Questions

- What interface will enable users to establish trust in a privacy suite?
- How can we facilitate "localising" a suite to each user's situation?
- Can we "subscribe" to a privacy suite, automatically getting future updates?
- Will major SNS operators support privacy suites, or must we build it as an external add-on?