

Online Identity: OpenID, OAuth, Information Cards

OCRN Aug 2009

Kaliya Hamlin, Identity Woman

@identitywoman
identitywoman.net
skype:identitywoman
AIM/e-mail:kaliya@mac.com

co-founder, co-producer and the facilitator of the

INTERNET IDENTITY WORKSHOP

www.internetidentityworkshop.com



I am a community builder.

This is the technical community around user-centric digital identity that I have helped build. We have met since 2005 every 6 months at the Internet Identity Workshop.



Activism **is** Patriotism



A campaign of Circle of Life | <http://www.circleoflife.org>

In mid 2004 Julia Butterfly Hill launched this website to encourage people to be active and linked to 40+ organizations. These sites had about 50 login opportunities - each one of them each required a new/ different user name and password.

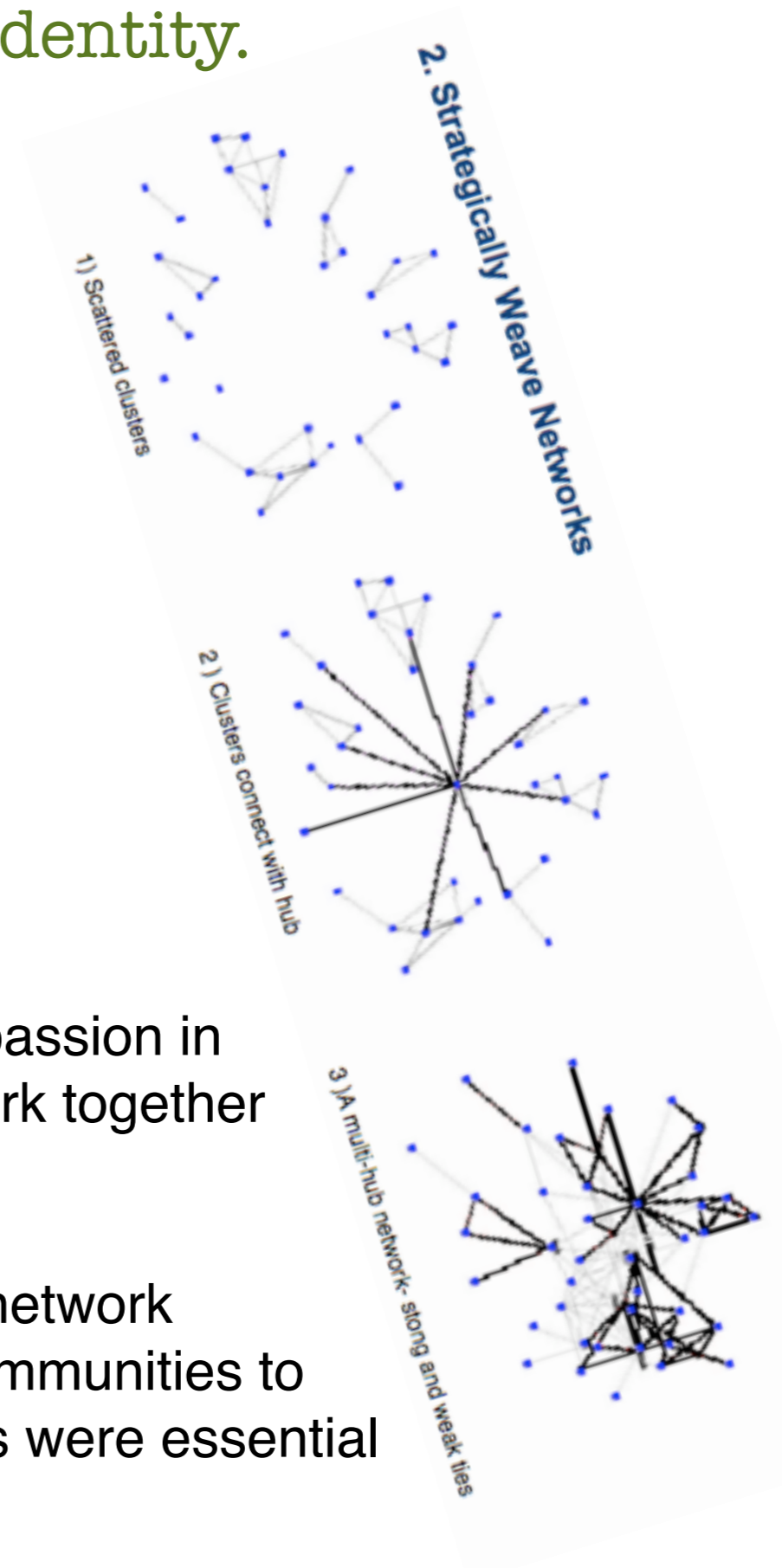
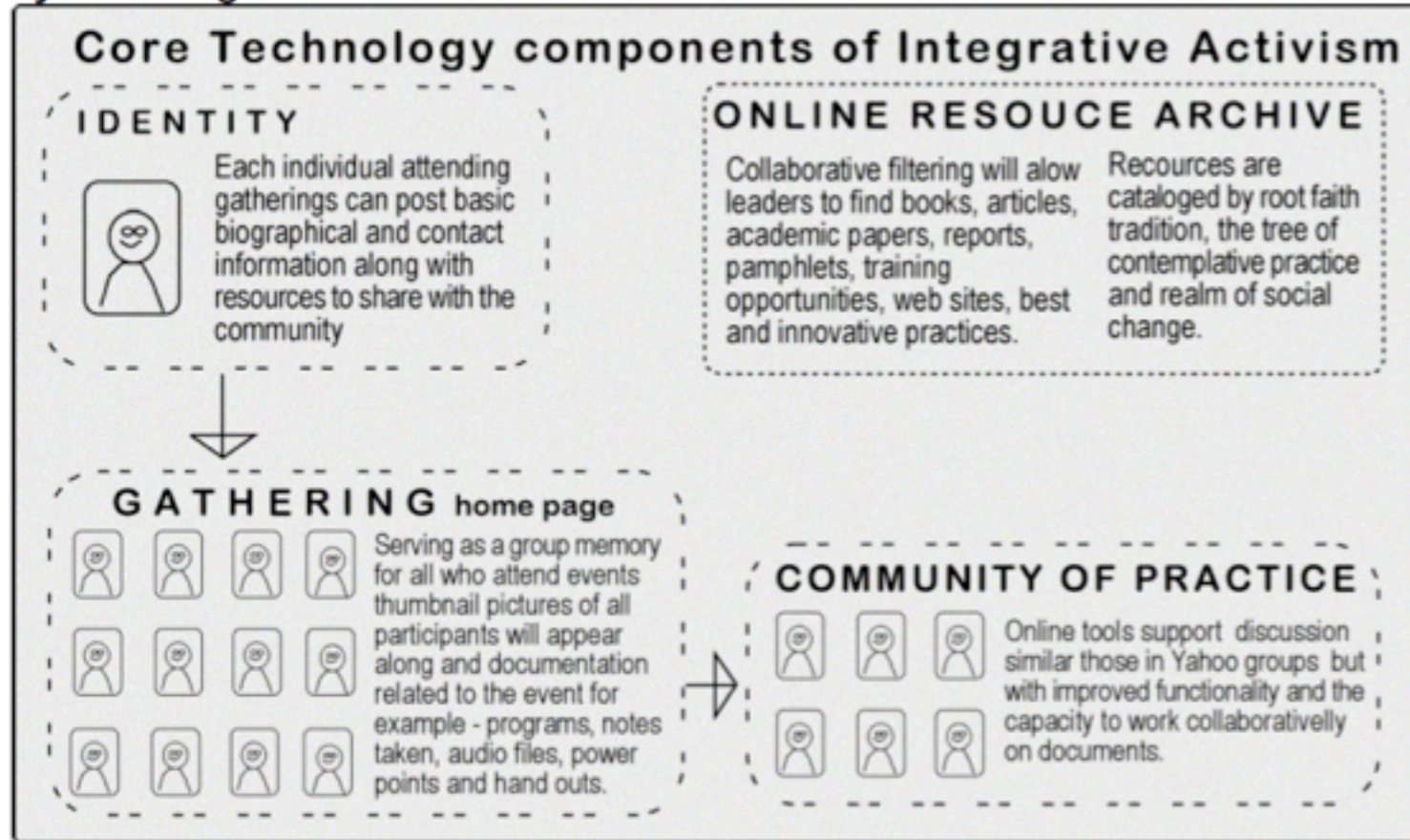
How were all these groups going to work together –to form a strong community - if the citizens they were asking to participate were required to create several dozen accounts just to join the related efforts and collaborate across them?

The answer is: with difficulty.

Just having links to good things is not enough to support a networked movement. Activism as Patriotism only lasted until early 2007.

My sketches from 2003 for distributed social network platform with user-centric identity.

System Design for Phase 1



How could the people that I knew shared interests and passion in community (both face to face and online), be able to work together across boundaries and domains on the web?

In 2003 I began to sketch out designs for online “social network tools” (that term was not yet in widespread use) for face to face communities to connect online. I knew user-centric identity technologies were essential but others didn’t see it yet.

To cross boundaries and domains on the web people, citizens, consumers needed the power to manage their own identity information.

By identity information I specifically mean the identifiers and handles that they use across time and in cyber space - controlling the ways in which they are “seen” in different contexts.

To do this we need open technical standards to make identifiers portable across contexts and we need interfaces to make this easy.

The good news is that the identity community has come a long way in developing identity management tools. Three are discussed in this slideshare.

The logo for OpenID, featuring the word "OpenID" in a bold, orange, hand-drawn font.The logo for Auth, featuring a stylized letter 'A' inside a circle with a grid pattern, followed by the word "Auth" in a grey, hand-drawn font.The logo for Information Cards & Selectors, featuring a dark blue rounded square containing a white lowercase letter 'i', followed by the text "Information Cards & Selectors" in a purple, hand-drawn font.

The first two technologies I will be covering are OpenID and OAuth - the key protocols in the so-called “open stack”

Discovery

Profiles/Identity

Access Control

Streams/Feeds

People

Applications

XRD

OpenID

OAuth

Activity Streams

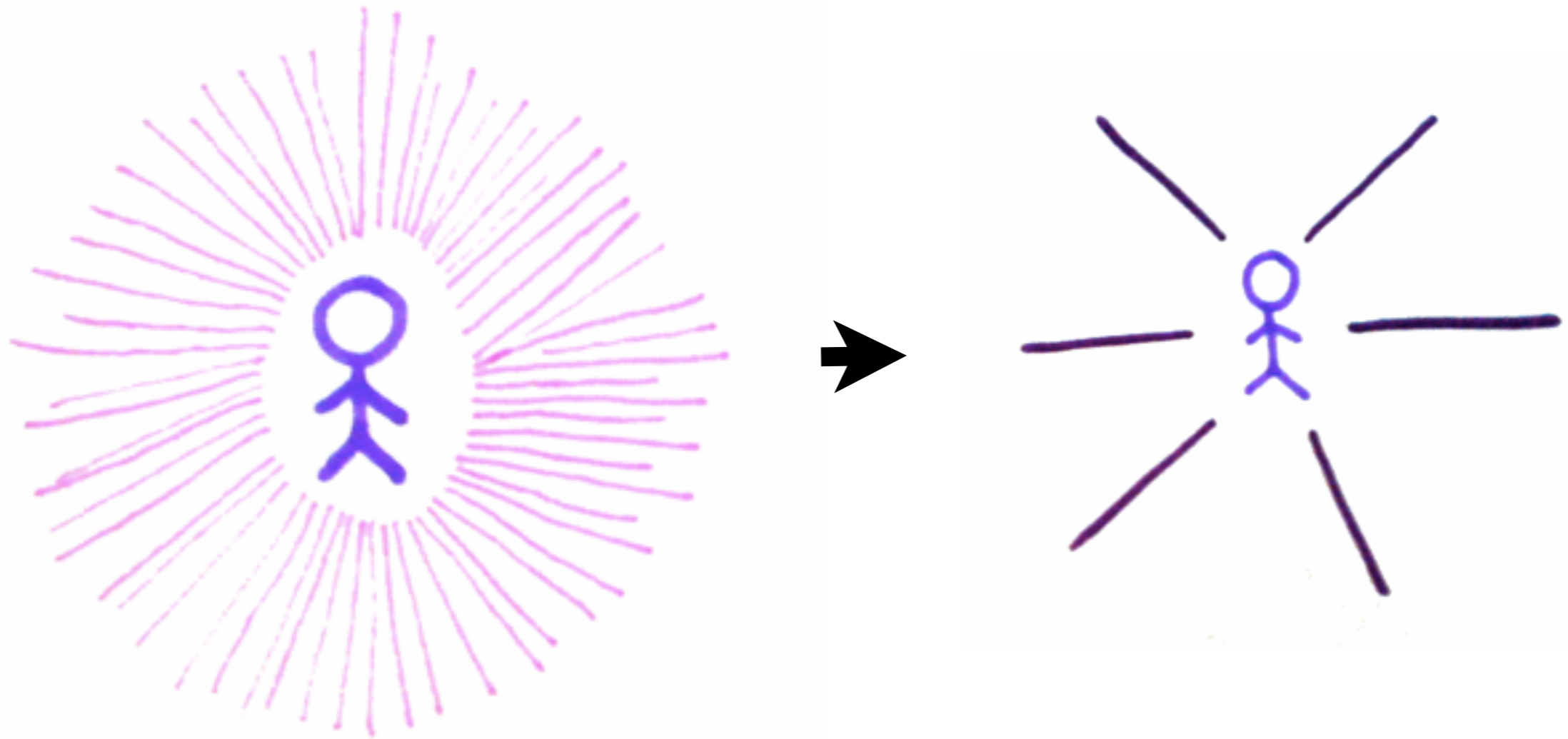
Portable Contacts

OpenSocial

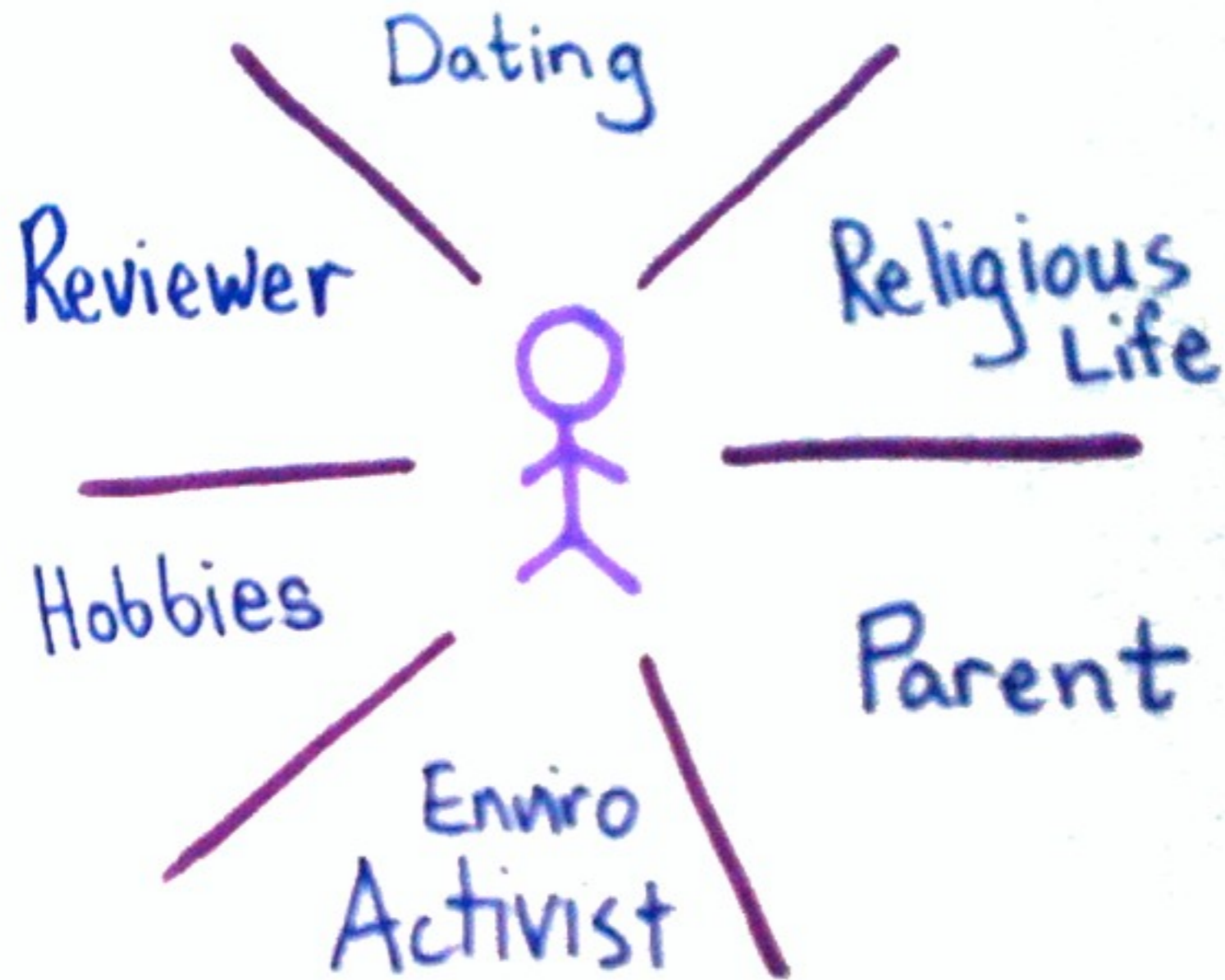
OpenID

openid.net

OpenID creates an integrated and wholistic “online life” (identity) replacing the fragmentation that is created by maintaining 100-300 different accounts for different online services and the necessity to create a new one at every website that requires a login.



Can you imagine how much easier and more pleasant community life would be if we could reduce the number of identifiers and handles to a manageable number – say under ten.



Different persona's for one user that could each have a different OpenID URL.

The user goes to a website





Traditionally the user is presented with the opportunity Login with a user-name and password



The user enters a URL they control
- like their blog URL or from a provider.

* Newer user interfaces allow user to pick
Open ID provider they might have like
Google, Yahoo, Myspace, Facebook, AOL etc...



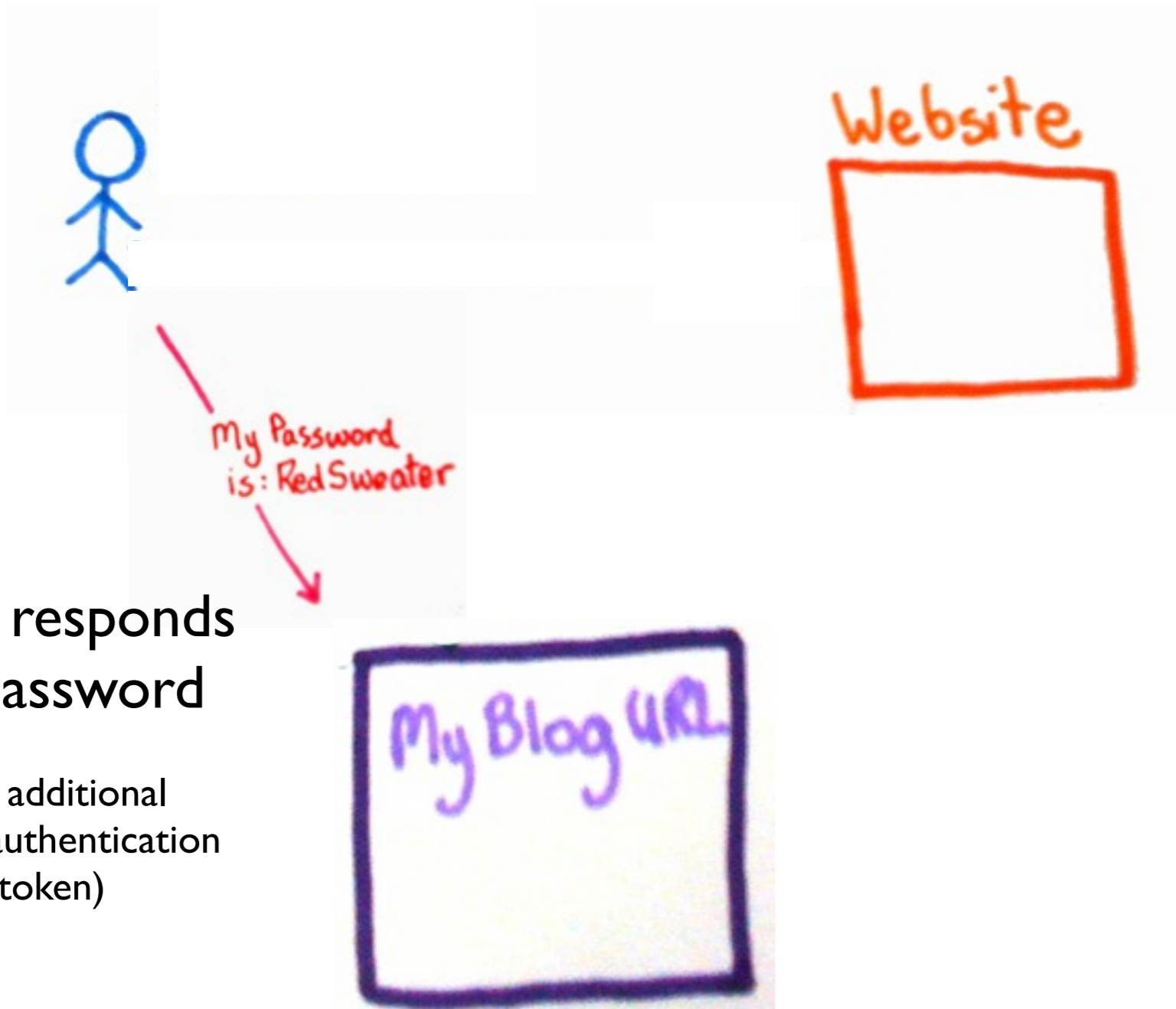
The website the user is logging into redirects the user to where their URL



What is your
password?

The user
is asked to
authenticate



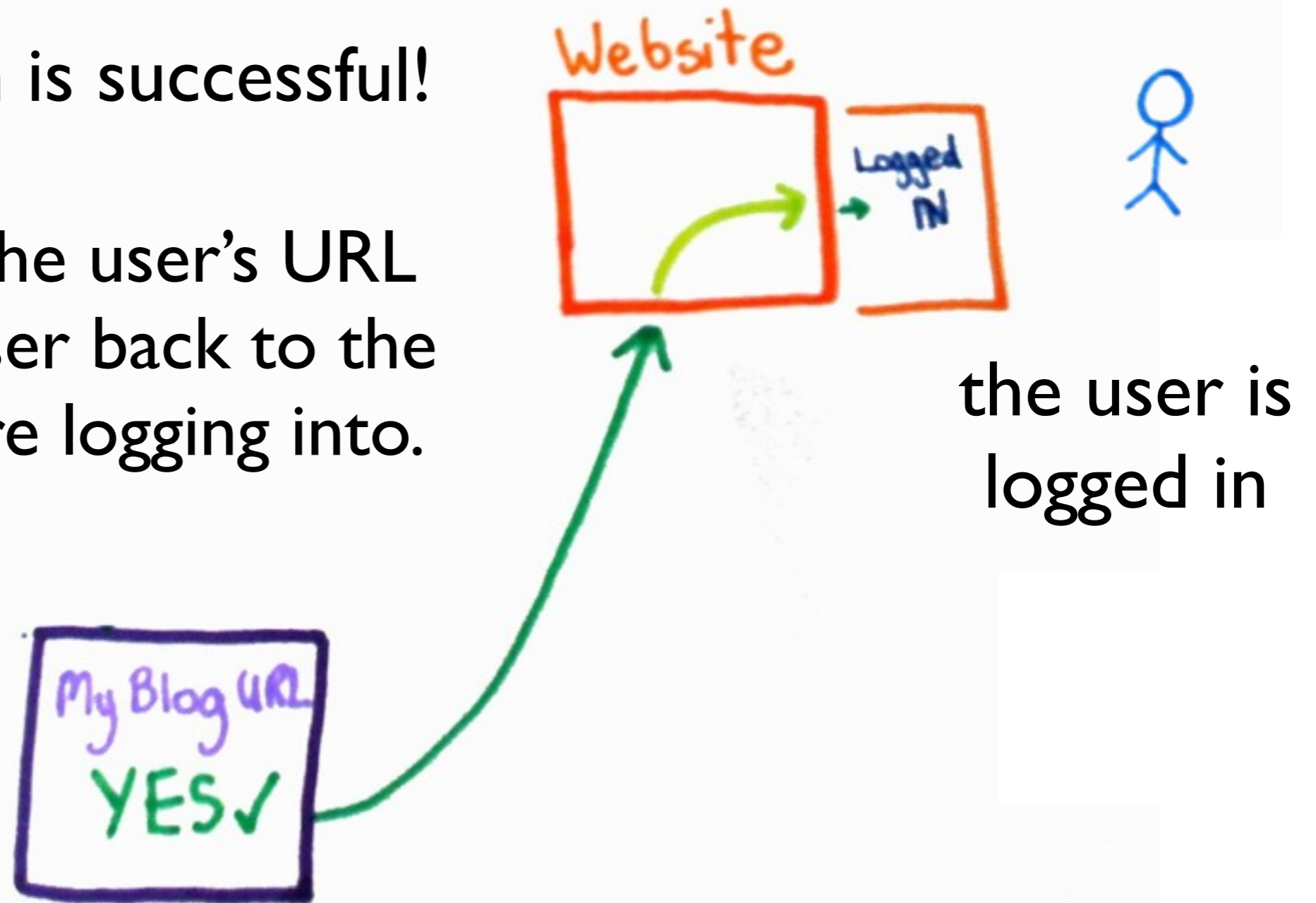


The user responds
with a password

(or other additional
methods of authentication
like a token)

Authentication is successful!

The site with the user's URL redirects the user back to the website they are logging into.



Who's In?

Corporate Members:

- [Facebook](#) - Luke Shepard
- [Google](#) - Eric Sachs
- [IBM](#) - Nataraj (Raj) Nagaratnam
- [Microsoft](#) - Michael B. Jones
- [PayPal](#) - Andrew Nash
- [VeriSign](#) - Gary Krall
- [Yahoo!](#) - Raj Mata

Community Members:

- Brian Kissel ([JanRain](#))
- [Chris Messina](#) (independent)
- David Recordon ([Six Apart](#))
- Joseph Smarr ([Plaxo](#))
- Nat Sakimura (Nomura Research Institute)
- Scott Kveton
- Snorri Giorgetti (OpenID Europe)
- Allen Tom (Yahoo)

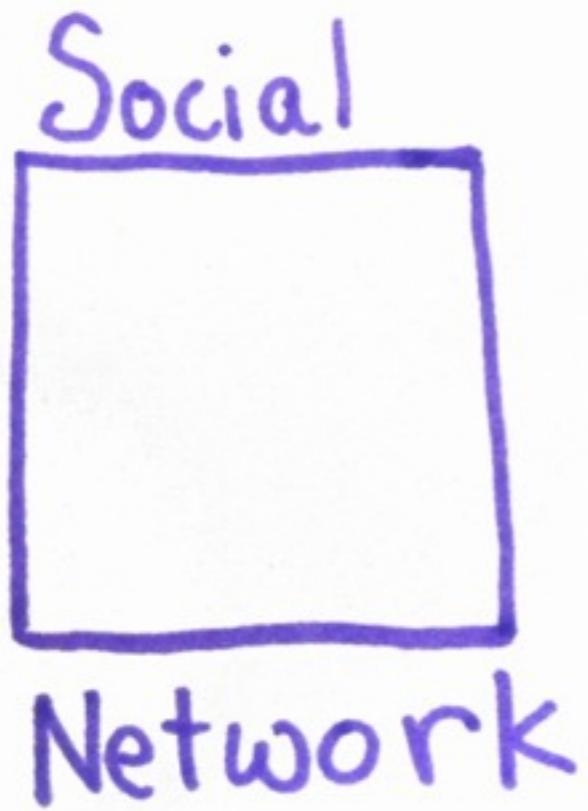
What you can do:

- * Accept OpenID's
- * Issue OpenID's (to employees)
- * Issue OpenID's to your user base

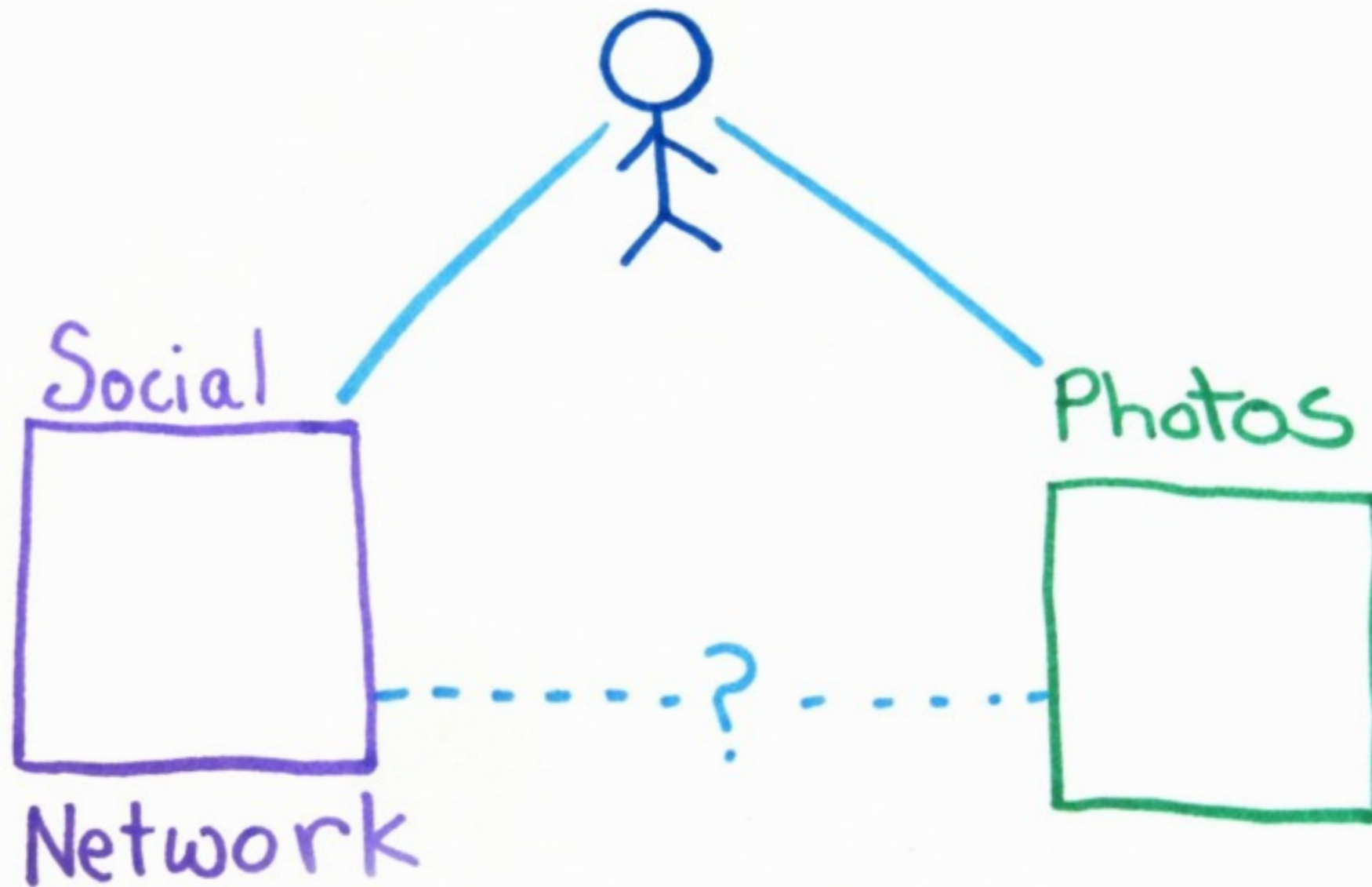
Single Sign On isn't enough though.
You also have to empower people to be able to
share data their own data.



oauth.net

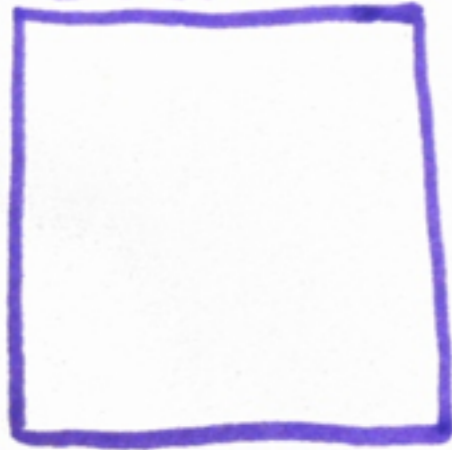


The user belongs to two different sites.



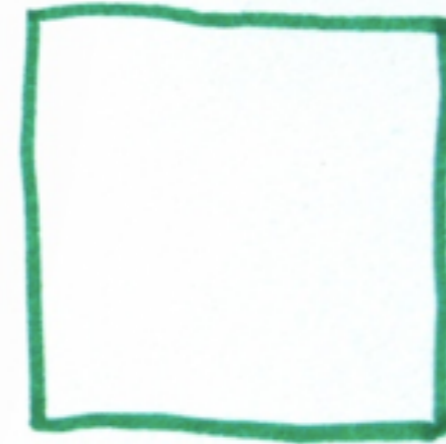
How can the user move photos from photo site to the social network site without giving away the password for the photo site to the social network site?

Social



Network

Photos



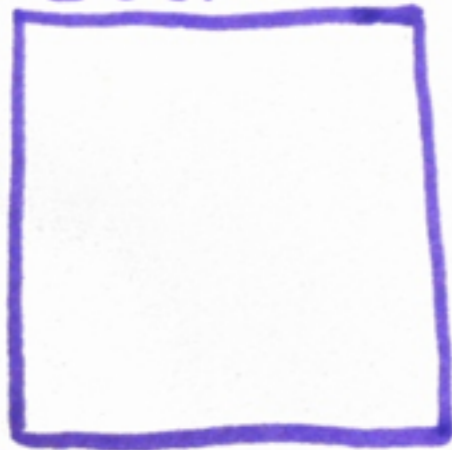
Do You Want to
Import Photos
From Green Photos?



Do you want to
give the Purple
Social Network
access to your
Photos?

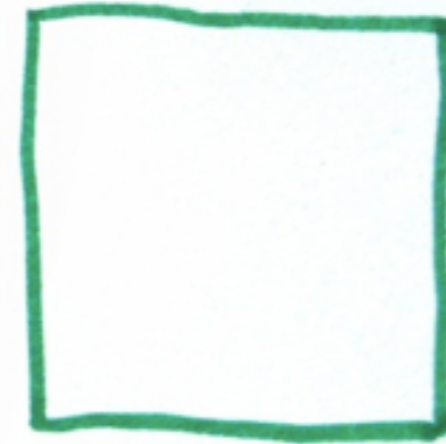
The user asked if they want to share - then redirected to the site to give their permission

Social



Network

Photos



Do You Want to
Import Photos
From Green Photos?

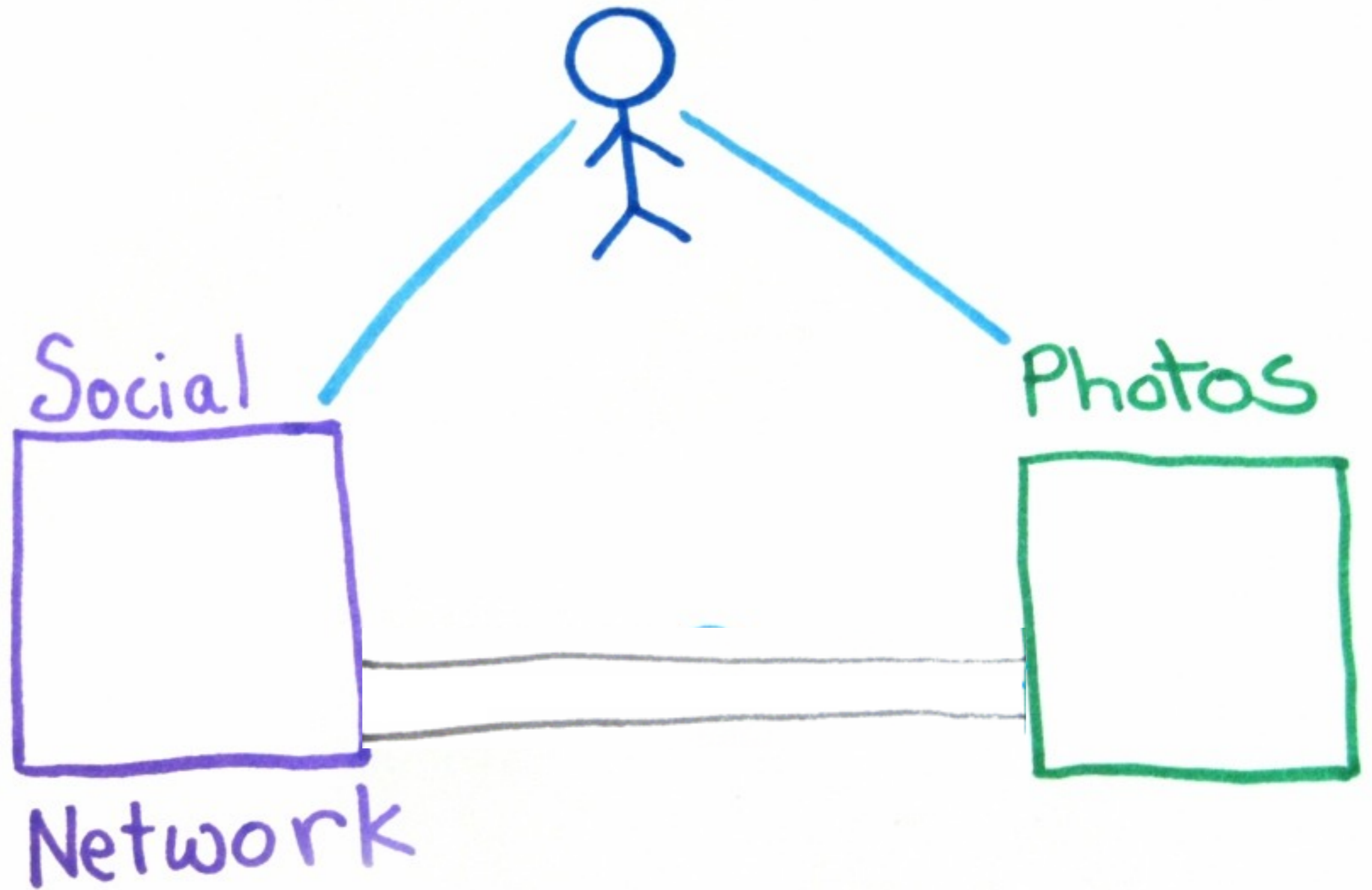


Do you want to
give the Purple
Social Network
access to your
Photos?

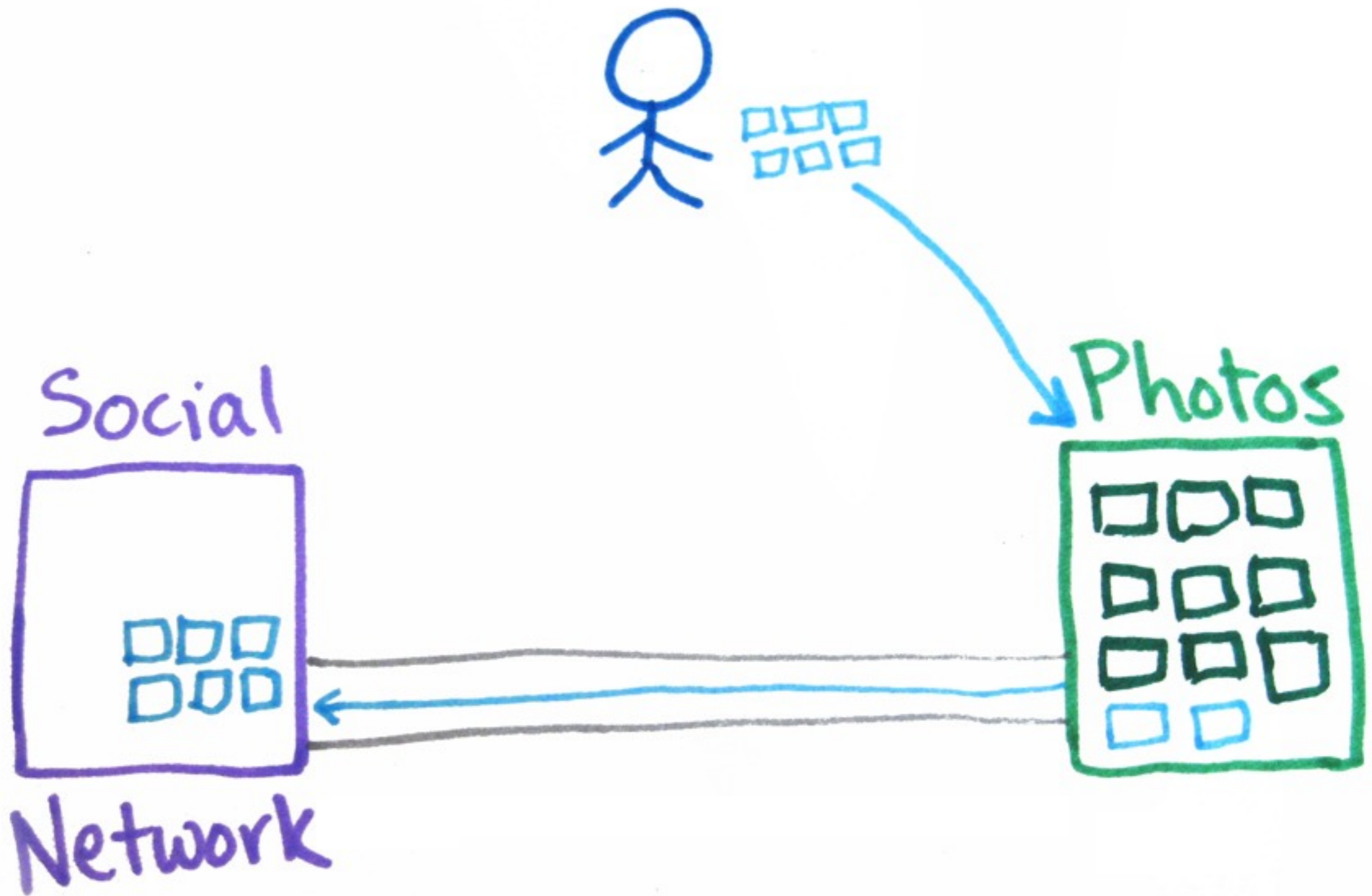


Here is a token
that lets you
access her
account

The photo site gives the social network site a token to the social network that gives it access to their account.



A data tunnel is created between the user's accounts on both sites



A user posts photos and they can flow from one to the other - and they didn't give away their password.

Who's In?

Reference Authentication APIs

- [Facebook Authentication](#)
- [Google Authentication via either the OAuth standard or the proprietary](#)
- [Yahoo's BBAuth](#)
- [Flickr Authentication API](#)
- [Amazon Web Services Auth](#)
- [AOL's OpenAuth™](#) (*supports dynamic authorization on access*)

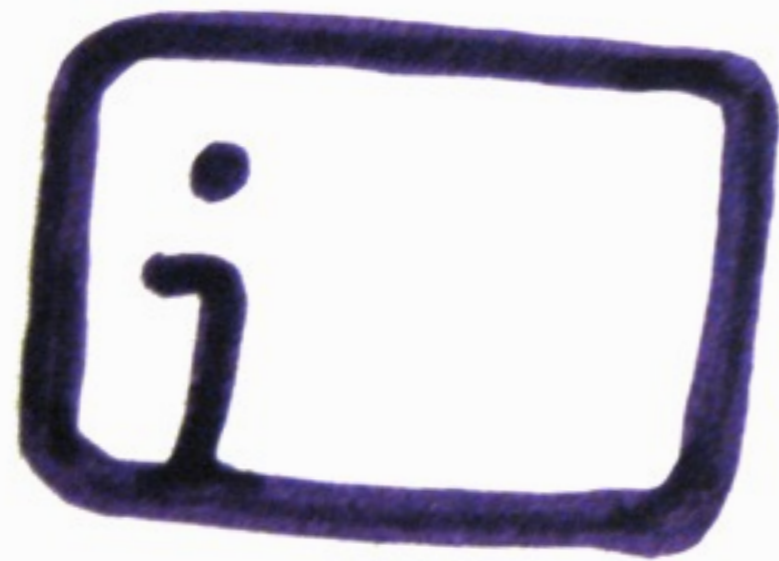
What you can do:

END THE PASSWORD ANTI-PATTERN

STOP Asking users for their password to gain access to another site on their behalf

Implement Oauth on your site

Ask your partners to implement it.



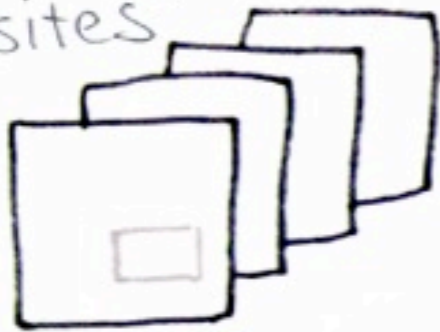
Information
Cards & Selectors

informationcard.net

How Information Cards Work

Get Them

@ Identity Provider
Websites



Use Them

@ Relying Party
Websites



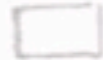
Keep Them

in your Card Selector



Make Them

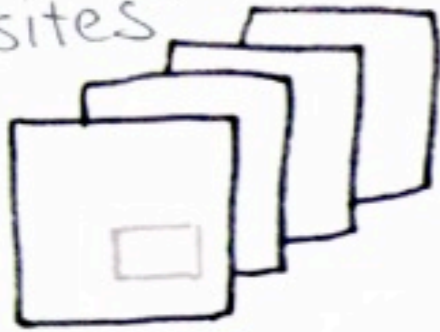
create your own



How Information Cards Work

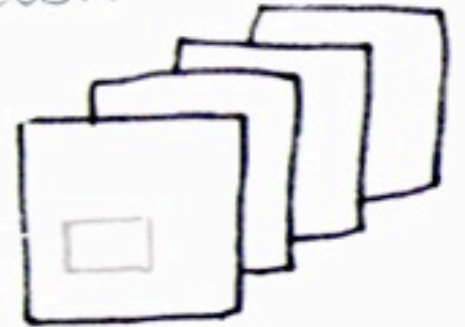
Get Them

@ Identity Provider
Websites



Use Them

@ Relying Party
Websites

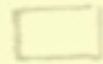


Keep Them

in your Card Selector

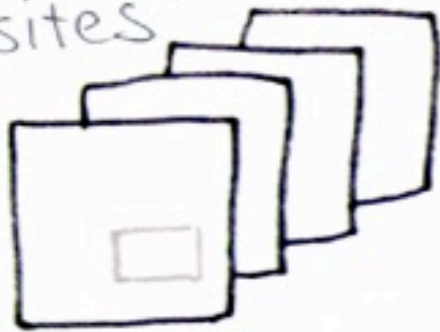


Make Them
create your own



How Information Cards Work

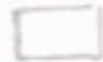
Get Them
© Identity Provider
Websites



Keep Them
in your Card Selector



Make Them
create your own



Use Them
© Relying Party
Websites



How Information Cards Work

Get Them

@ Identity Provider
Websites



Use Them

@ Relying Party
Websites

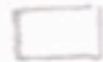


Keep Them

in your Card Selector



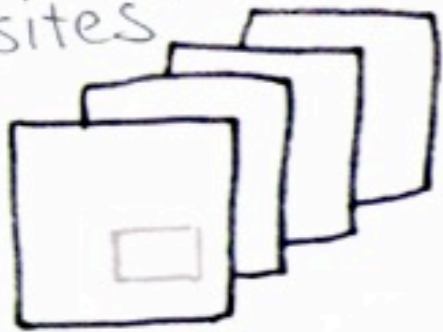
Make Them
create your own



How Information Cards Work

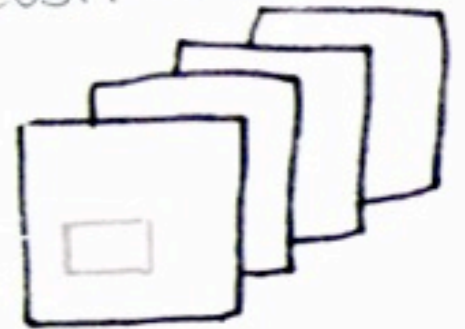
Get Them

@ Identity Provider
Websites



Use Them

@ Relying Party
Websites



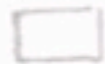
Keep Them

in your Card Selector



Make Them

create your own

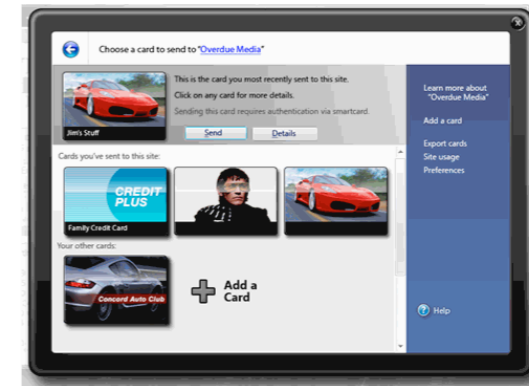


Reminders



Who's In?

Microsoft Card Space



Who's In?

Steering Members



Sponsor Members



What you can do:

- * Issue information cards to members of your site/organization
- * Accept information cards from netizens to collect information you think is important
- * Use it to get third party validation about key things important to you - so you don't have to do identity proofing.

Kaliya Hamlin

Identity Woman

@identitywoman

identitywoman.net

skype:identitywoman

AIM/e-mail:kaliya@mac.com

co-founder, co-producer and the facilitator of the

INTERNET IDENTITY WORKSHOP .com