Indie Web

Being social on the Web

DrupalCamp Gent 2018 | 23 November 2018

Your domain as your identity on the Web
About me

realize.be
About me

realize.be

(or swentel, on drupal.org and twitter)
In this presentation

- IndieWeb 101
- Communicating via Webmention
- Markup your content with Microformats2
- Publishing content through Micropub
- Your new social reader with Microsub
- Authenticating with your domain
- Joining the Fediverse with ActivityPub
- Live demo - nothing will go wrong
Goal of the talk

An idea how to create a setup where you can read and interact with the web, all from one place

This talk basically describes my current setup

Disclaimer: I maintain the Drupal IndieWeb module and also Indigenous for Android
So what is this IndieWeb anyway?
But first

A history of the web in 5 minutes

- Iteratively built
- Promoting Web standards
- Everyone had a blog
- RSS feeds! (they are not dead yet)
- Something happened around 2006-2007
Who uses the following?

- Twitter
- Facebook
- Instagram
- Snapchat
- LinkedIn
- Swarm
- Google+
- Pinboard
- Pocket
- Flickr
Does anyone really like them?
What do these services do what {insert your favorite framework} can't do?

- 5% posting interface
- 95% reader interface

Benefits

- Ease of use
- Clean user interfaces
- Network effects
Corporations

- Own your data
- Misuse or even leak your data
- Keep or delete them
- They work for themselves and not for you
- Growing lethargy and lack of competition
Algorithms

- can be toxic
- no control over them
- no control over bias
- monetization
- gamification
- dopamine response
Site Deaths

- Short, if any notice
- Data disappears
- Community disappears
- Connections disappear

https://indieweb.org/site-deaths
Site Deaths

- Storify
- del.icio.us
- App.net
- Orkut
- My Space
- Friendster
- FriendFeed
- Google Reader
- Posterous
- Google Buzz
- Geocities
Upcoming Site Deaths

- Google+ August 2019
Policy changes

Flickr: Independent -> Yahoo -> Smugmug
Recently announced switch from unlimited data to 1000 photos without paid account
Policy changes

Flickr: Independent -> Yahoo -> Smugmug
Recently announced switch from unlimited data to 1000 photos without paid account

Facebook as good as closed anonymously in Belgium
Policy changes

**Flickr:** Independent -> Yahoo -> Smugmug
Recently announced switch from unlimited data to 1000 photos without paid account

Facebook as good as closed anonymously in Belgium

Shutting down public API's
Policy changes

**Flickr**: Independent -> Yahoo -> Smugmug
Recently announced switch from unlimited data to 1000 photos without paid account

Facebook as good as closed anonymously in Belgium

Shutting down public API's

Slack drops IRC support
Policy changes

**Flickr**: Independent -> Yahoo -> Smugmug
Recently announced switch from unlimited data to 1000 photos without paid account

Facebook as good as closed anonymously in Belgium

Shutting down public API's

**Slack** drops IRC support

plus side: you have WimLeers all for yourself on #drupal-contribute :)
Benefits of your own domain

- Control
- Freedom
- Your data is yours
- Reach everyone who can go online!
- Telephone analogy
Avoid problems

- Content loss
- Identity loss
- Censorship
- Content theft
- Personalisation/filter bubble
- Negative community
IndieWeb movement

- Back to the roots of the Web
- Loose collective, no corporation behind
- Focus on people and the message
IndieWeb principles

- Own your domain and data *
- Scratch your own itches
- Use what you make
- Document and open source your stuff
- UX and design come first!
- Use, promote or contribute to web standards (W3C involvement)
- Syndicate your content

* own your own server too?
HWC

- bi-weekly meetings in your local town
- hwc.gent? Come talk to me if you're interested.
- hack on own sites, projects etc
IndieWeb building blocks

https://spec.indieweb.org/
Drupal IndieWeb module

https://drupal.org/project/indieweb

- Functionality currently split into 8 submodules
- Websub, Salmention, Vouch and ActivityPub
  upcoming
Webmention

https://indieweb.org/webmention

W3C status: Recommendation
What is it?

When you link to a website, you can send it a Webmention to notify it. If it supports Webmentions, then that website may display your post as a comment, like, or other response, and presto, you’re having a conversation from one site to another!
What is it?

When you link to a website, you can send it a Webmention to notify it. If it supports Webmentions, then that website may display your post as a comment, like, or other response, and presto, you’re having a conversation from one site to another!

From a technical perspective, the notification part is not so different as pingback.
Extensions

- Vouch: anti-spam extension
- Salmention
- Private webmention

Tricky - not supported yet by Drupal module
Webmention model
Site A

Original Post

By Author A on January 12, 2017

COMMENTS

Author B
January 12, 2017

Copy of Reply #1

Author A
January 12, 2017

Reply #2

Author B
January 12, 2017

Copy of Reply #3

Site B

Copy of Original Post for Reply Context

By Author A on January 12, 2017

COMMENTS

Reply #1

By Author B on January 12, 2017

COMMENTS

Author A
January 12, 2017

Copy of Reply #2

Author B
January 12, 2017

Reply #3
Discovery

<link rel="webmention" href="https://realize.be/webmention">
Syndication

- POSSE: Publish (on your) Own Site, Syndicate Elsewhere
- PESOS: Publish Elsewhere, Syndicate (to your) Own Site (e.g. ownyourgram.com)
Brid.gy

- Allows you to publish on other networks
- Provides backfeed to your site
- All by sending or receiving webmentions

https://brid.gy/
The #indieweb module for #drupal is now in beta! Some smaller things can still go in, but what's left for a 1.0 release is a decent security review, anyone up for that? :)

Replies

Chris McIntosh on Sat, 20/10/2018 - 14:36
What's the current process for security reviews these days?

sventel on Sat, 20/10/2018 - 15:30
Not sure if there's really one, but I'll do one myself to begin with :)
Privacy ?
Drupal IndieWeb module

- Rely on Webmention.io or use built-in endpoint
- Send webmentions (via drush or cron)
- Create comments when a reply comes in
- Use brid.gy to syndicate and get backfeed
- Show interactions with or without avatars and so on

Other implementations at https://indieweb.org/Webmention#Publishing_Software
MF2 and JF2

http://microformats.org/wiki/microformats2
http://microformats.org/wiki/jf2
Microformats2

• Markup structured information in HTML
• Extremely simple: add classes to your markup!
• Representation in JSON
Why apply to your content?

- Figure out response type (like, reply, bookmark ..) on incoming webmention
- Microformats2 h-feed: gives richer, more structured content than RSS, ideal for microsub servers
Example 'author' h-card

<p class="h-card">My name is Kristof De Jaeger also known as <a class="u-url p-name" rel="me" href="http://realize.be">swen</a>

<span class="p-note">My bio</span>

<img src="../images/swentel-200.png" class="u-photo hidden" alt=""></p>
Example 'note' post type

<article role="article" class="h-entry">
  <a href="https://realize.be/notes/1606" class="u-url">
    <span class="dt-published">2018-10-20T12:05:57+02:00</span>
  </a>
  <a href="/" class="u-author"></a>
  <div>
    <div class="e-content p-name">
      <p>A note</p>
    </div>
    <ul class="tags">
      <li><a href="/drupal" class="p-category">drupal</a></li>
    </ul>
  </div>
</article>
Example 'reply' post type

<article role="article" class="h-entry">
  <a href="https://twitter.com/status/10" class="u-in-reply-to">
    in reply to twitter
  </a>
  <a href="https://realize.be/notes/1606" class="u-url">
    <span class="dt-published">2018-10-20T12:05:57+02:00</span>
  </a>
  <a href="/" class="u-author"></a>
  <div class="e-content p-name"><p>Awesome!</p></div>
</article>
Post types

- Note, article, reply, photo, like ..
- These can be Drupal content types or comments

https://indieweb.org/posts#Kinds_of_Posts
Working prototype of a simpler JSON serialization of MF2
Drupal IndieWeb module

- Microformats2: markup content (preprocess, formatters)
- Feeds: generate Microformats2 or JF2 feeds (You especially need this for Brid.gy)
- Post context: get references from external content (or microsub content) e.g https://realize.be/reply/content/1619
Micropub

https://indieweb.org/micropub

W3C status: Recommendation
Micropublishing

- Allow 3rd party clients to create, update or delete posts on your site
- Uses microformats2 JSON to post, or form-encoded
- Ties in great with readers: social actions! Extensions allow managing your content from apps too (Indigenous)
Discovery

<link rel="micropub" href="https://realize.be/micropub">
Clients and servers

- Indigenous (iOS and Android) - also readers!
- https://micropublish.net/

Many, many more at
https://indieweb.org/Micropub/Clients and
https://indieweb.org/Micropub/Servers
Drupal IndieWeb module

- Does post type discovery on incoming requests and can be mapped onto Drupal content types
Map 'note' to Note content type

A note request contains 'content', but no 'name' and the 'h' value is 'entry'. Think of it as a Tweet. The note can also contain a 'mp-syndicate-to' value which will contain the target you want to syndicate to.

- Enable

**Status**

- Unpublished
- Published

When the payload contains the "post-status" property, its value will take precedence over this one. See [https://indieweb.org/Micropub-extensions#Post_Status](https://indieweb.org/Micropub-extensions#Post_Status)

**The user id which will own the created node**

1

**Node type**

- Note

Select the node type to use for creating a node

**Content field**

- Text (formatted, long, with summary): body

Select the field which will be used to store the content. Make sure the field exists on the node type.

**Upload field**

- Image: field_image

Select the field which will be used to store files. Make sure the field exists on the node type. Currently only supports saving 1 file in the "image" section of a micropub request.

**Tags field**

- Entity reference: field_tags

Select the field which will be used to store tags. Make sure the field exists on the node type. Field can only be a reference field targeting a taxonomy vocabulary and should only have one target bundle.
Microsub

https://indieweb.org/microsub

W3C status: Draft
What is it

Provides a standardized way for reader apps to interact with feeds.

- server parses RSS, Atom, Microformats2
- client connects with server and consumes the feed
- server implements various API actions (read, delete, follow)
Discovery

<link rel="microsub" href="https://realize.be/microsub">
Clients and servers

- Clients: Indigenous, Together, Monocle
- Servers: Aperture, yarns, ekster

https://indieweb.org/reader
https://indieweb.org/Microsub#Clients
https://indieweb.org/Microsub#Servers
Indigenous android: channels

Pro tip: use https://granary.io/ to follow Twitter for instance
Indigenous android: timeline with actions per post

Aaron Parecki
Thu Aug 23 02:00:34 GMT+02:00 2018
Checked in at Grand Central Baking Company
CSA pickup in the smoke 🍋 🌿

Marty McGuire
Wed Aug 22 22:07:12 GMT+02:00 2018
This Week in the IndieWeb Audio Edition • August 11th - 17th, 2018
Show/Hide Transcript

#Deactiday, losing your followers, and lots of events! It's the audio edition for This Week in the IndieWeb for August 11th - 17th, 2018.

You can find all of my audio editions and subscribe with your favorite podcast app here: martymcgui.re/
Indigenous Android: create posts directly

Creating a note is really easy!

android

- Twitter
- Fediverse
Drupal IndieWeb module

- Microsub module
- Use external service (e.g. Aperture) or built-in endpoint
- Built-in endpoint is a server, not a client!
- Configure channels and feeds to read.
- Media cache: cache images locally (also for author avatars in webmentions)
IndieAuth

https://indieweb.org/indieauth

W3C status: Draft
Authenticate with your domain

- Built on top of OAuth2
- Can use RelMeAuth (distributed identity authentication)
- Either sign-in into another website
- Or give 3rd party apps an access token so they can
  - Post to your site (micropub)
  - Read from your site (microsub)
Discovery

<link rel="authorization_endpoint" href="https://realize.be/au">
<link rel="token_endpoint" href="https://realize.be/token">
Flow: enter your URL

Sign in to Monocle

https://realize.be

Log In
Authorize form

The app https://monocle.p3k.io/ would like to access your site, using the credentials of swentel.

The app is requesting the following scopes:

- create
- update
- read
- follow
- channels

You will be redirected to https://monocle.p3k.io/login/callback after authorizing this application.
Drupal IndieWeb module

- Use external service (e.g. IndieAuth.com)
- or built-in endpoint for authorization and access tokens
- Allow Web sign-in: Drupal user accounts are created then
Fediverse

- Examples: Mastodon, GNU social, PixelFed
- Everyone can install an instance on a different domain
- Typically use ActivityPub or OStatus to communicate with each other
- Webfinger to authenticate
Fediverse

- Examples: Mastodon, GNU social, Pixelfed
- Everyone can install an instance on a different domain
- Typically use ActivityPub or OStatus to communicate with each other
- Webfinger to authenticate

What if your site can communicate with them?
Enter `fed.brid.gy`

- Proxy around your domain
- Create a post on your site, then simply send webmentions to reply, like, boost on Mastodon
- More support for sites coming (pixelfed)
- Only needs a syndication target in the Drupal configuration
- Mastodon uses Microformats2, or has Atom feeds so you can follow users in your reader
Interact once with the fediverse and you'll be found as your site.

first 'swentel' is a test account
Module roadmap

- Currently at Beta5 (breaking since Beta4)
- Aiming for RC in the next two weeks
- 1.0 end February 2019
- Future 1.x releases: bugfixes, finish Microsub API, multiple responses in one post, quickstart module
- 2.0: ActivityPub, Vouch, multi-user
Demo time!

- publish note via 3rd party client
- trigger syndication
- ask for reactions
- view backfeed coming back
- show interactions on site
- show notifications in reader
- optional: reply back
Credits

- Chris Aldrich - www.boffosocko.com
- Sebastian Lasse - sebastianlasse.de/
Thank you!

- join us! indieweb.org
- #indieweb / #indieweb-dev on freenode.net