

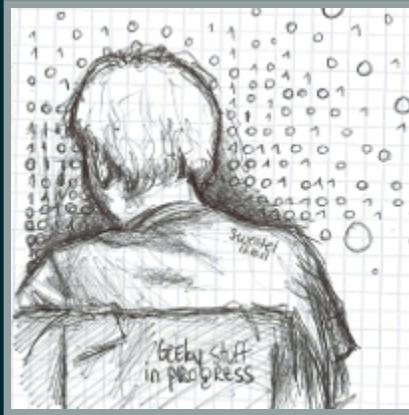
# IndieWeb

## Being social on the Web

DrupalCamp Gent 2018 | 23 November 2018

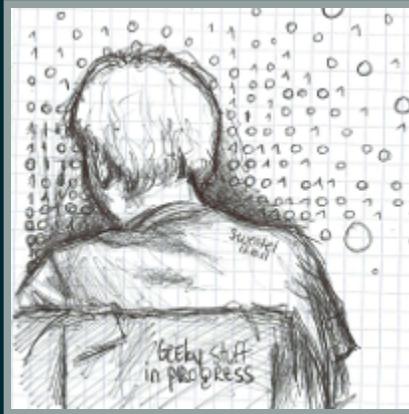
Your domain as your identity on the Web

# About me



realize.be

# About me



# realize.be

(or swentel, on [drupal.org](http://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 ?**

**POSSE Webmention Microsub RelMeAuth  
Activitypub Domain Feeds Pingback HWC  
WebSub MF2 PESOS Salmention Micropub  
JF2 PTD Backfeed Reader IndieAuth  
Fediverse Vouch Reply-context**

# 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

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Slack drops IRC support

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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

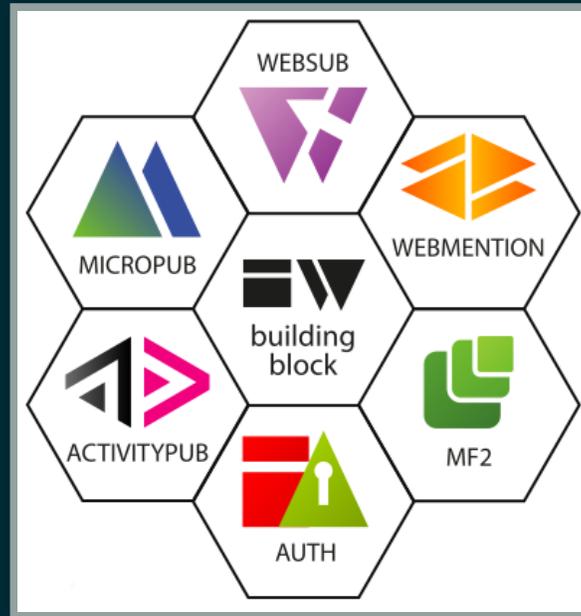
- Own your domain and data \*
- Scratch your own itches
- Use what you make
- Document and open source your stuff
- UX and design come first!
- Use, promote or contribute to web standards (W3C involvement)
- Syndicate your content

\* own your own server too ?

# HWC

- bi-weekly meetings in your local town
- [hwc.gent](http://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

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](http://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/>

# A note with interactions (replies, repost, like)

home > notes > #62

## #62

20/10/2018 12:05

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?

swentel on Sat, 20/10/2018 - 15:30

Not sure if there's really one, but I'll do one myself to begin with :)

Tatár Balázs János on Sat, 20/10/2018 - 16:26

I would love to help on it as at my work i do many sec audits, being involved in vuln management and being provisional

### Topics

- [indieweb](#)
- [drupal](#)

### Interactions



Steve

Purkiss



Wim

Leers



Jakob



Daniel

Wehner



Rachel

Lawson ??



Gábor

**Privacy ?**

# Drupal IndieWeb module

- Rely on [Webmention.io](https://webmention.io) or use built-in endpoint
- Send webmentions (via drush or cron)
- Create comments when a reply comes in
- Use [brid.gy](https://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](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  
  
  <span class="p-note">My bio</span>  
  
  
```

# 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](https://indieweb.org/posts#Kinds_of_Posts)

# JF2

- 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

## General

## Article

## Note

## Like

## Reply

## Repost

## Bookmark

## Event

## Rsvp

## Issue

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

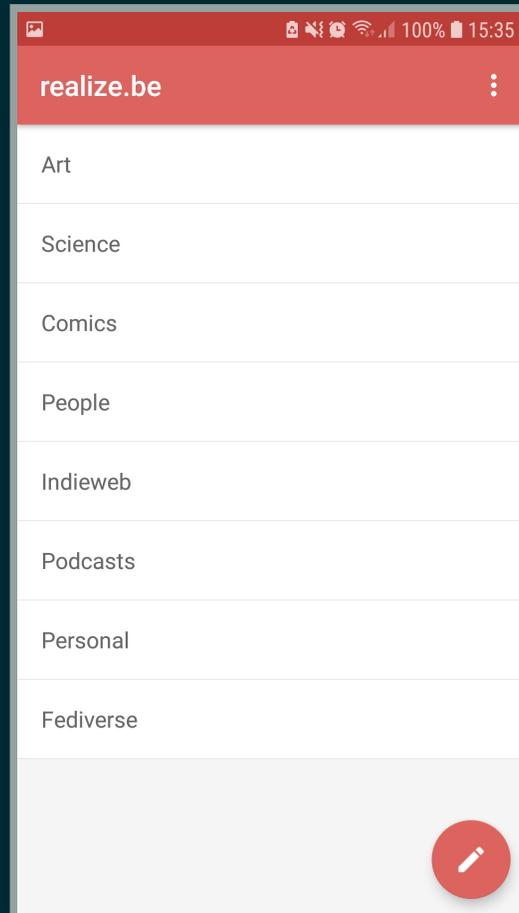
- Clients: Indigenous, Together, Monocle
- Servers: Aperture, yarns, ekster

<https://indieweb.org/reader>

<https://indieweb.org/Microsub#Clients>

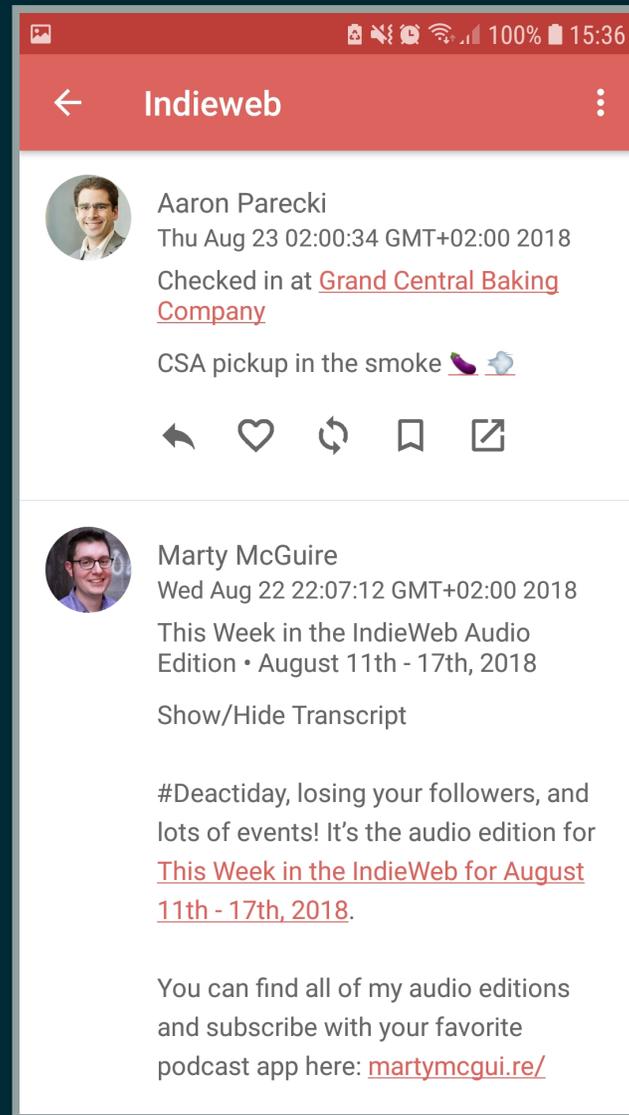
<https://indieweb.org/Microsub#Servers>

# Indigenous android: channels

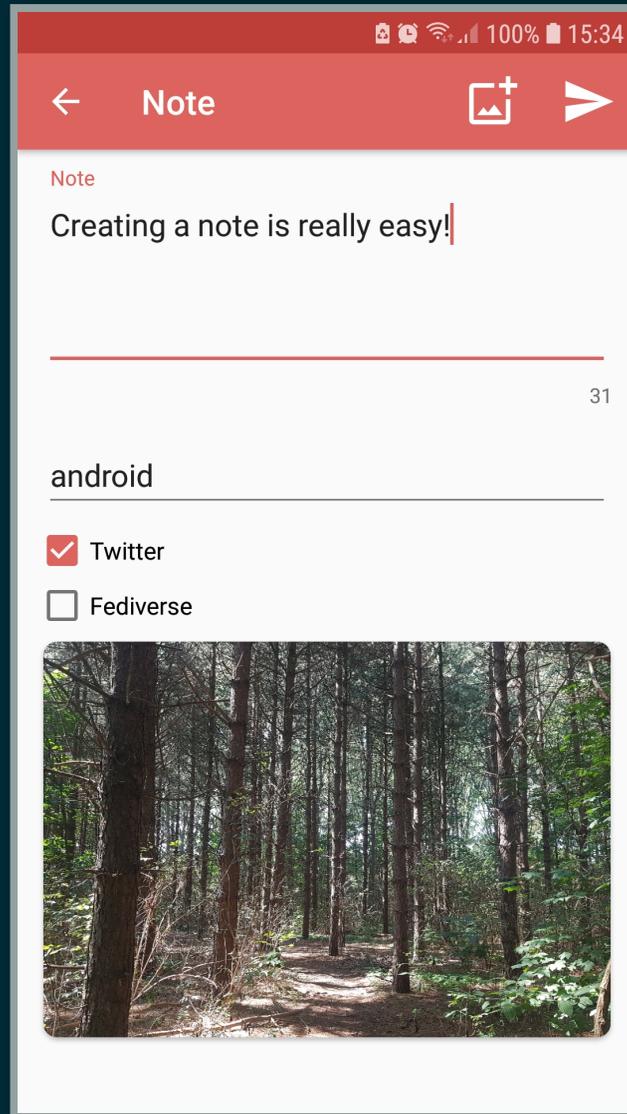


Pro tip: use <https://granary.io/> to follow Twitter for instance

# Indigenous android: timeline with actions per post



# Indigenous Android: create posts directly



# 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

Log In

# Authorize

## 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.

Authorize

Cancel

# Drupal IndieWeb module

- Use external service (e.g. [IndieAuth.com](https://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

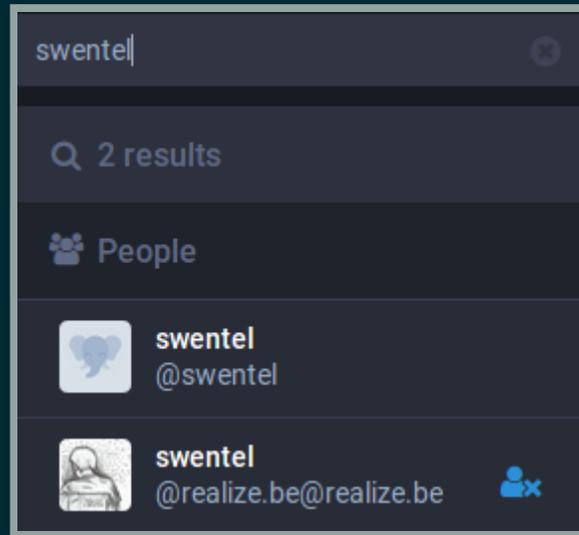
- Examples: Mastodon, GNU social, Pixelfed
- Everyone can install an instance on a different domain
- Typically use ActivityPub or OStatus to communicate with each other
- Webfinger to authenticate

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 comming (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

# Discovery



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](http://www.boffosocko.com)
- Sebastian Lasse - [sebastianlasse.de/](http://sebastianlasse.de/)

# Thank you!

- join us! [indieweb.org](https://indieweb.org)
- #indieweb / #indieweb-dev on [freenode.net](https://freenode.net)