

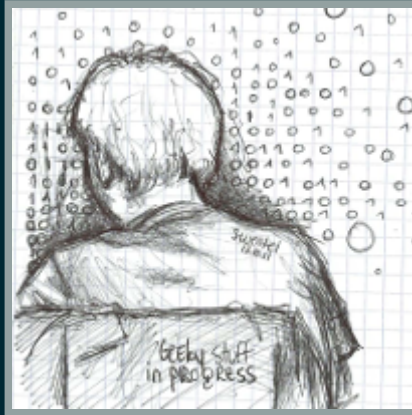
IndieWeb

Being social on the Web

DrupalCamp Gent 2018 | 23 November 2018

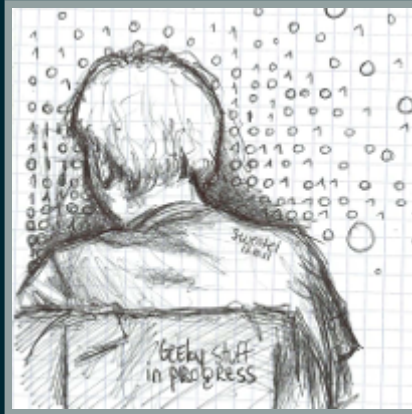
Your domain as your identity on the Web

About me



realize.be

About me



realize.be

(or swentel, on drupal.org and [twitter](https://twitter.com/swentel))

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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Facebook as good as closed anonymously in Belgium

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Shutting down public API's

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Slack drops IRC support

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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

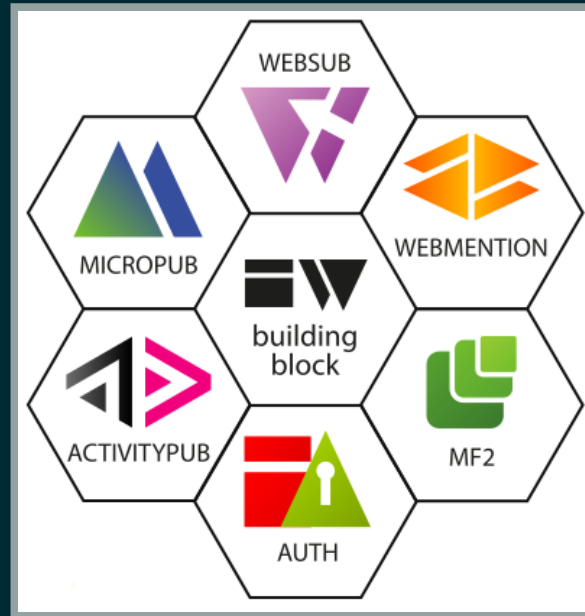
- Own your domain and data *
- Scratch your own itches
- Use what you make
- Document and open source your stuff
- UX and design come first!
- Use, promote or contribute to web standards (W3C involvement)
- Syndicate your content

* 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

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/>

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 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  
  
  <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

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

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

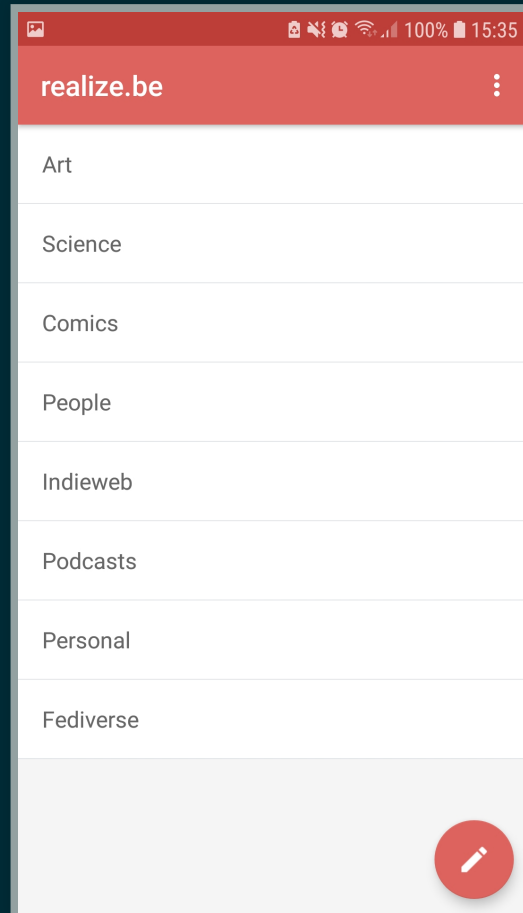
- Clients: Indigenous, Together, Monocle
- Servers: Aperture, yarns, ekster

<https://indieweb.org/reader>

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

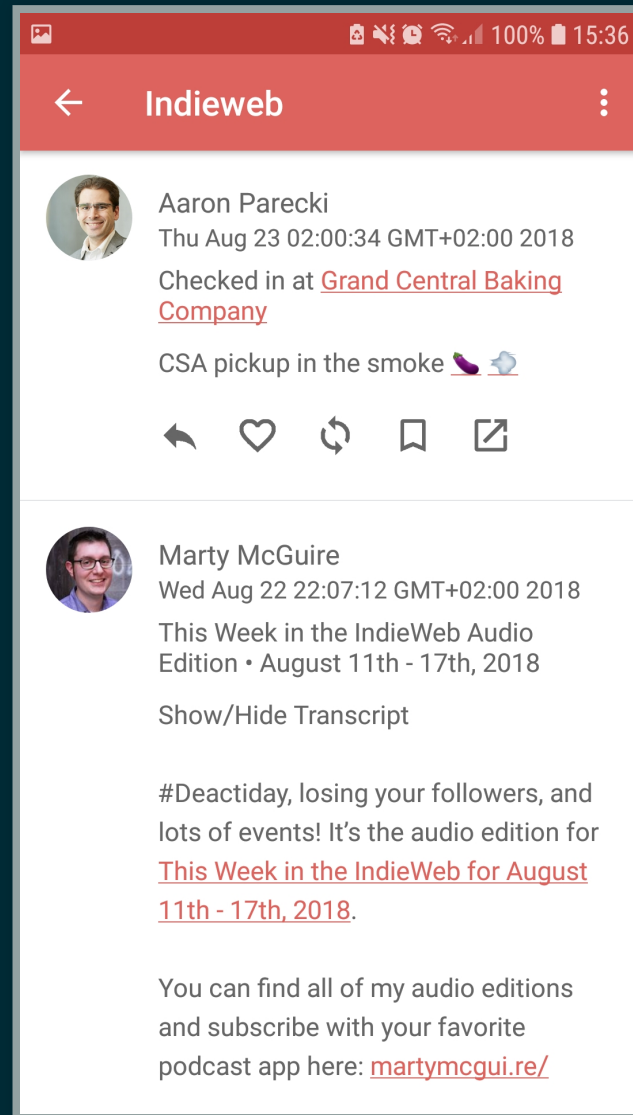
<https://indieweb.org/Microsub#Servers>

Indigenous android: channels




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

Indigenous android: timeline with actions per post




The screenshot shows the Indieweb mobile application interface. At the top, there is a red header bar with a back arrow, the text "Indieweb", and a menu icon. Below the header, the timeline displays two posts. The first post is by Aaron Parecki, dated Thu Aug 23 02:00:34 GMT+02:00 2018, with the text "Checked in at [Grand Central Baking Company](#)" and "CSA pickup in the smoke" followed by a purple eggplant emoji and a location pin icon. Below the text are five icons: a left-pointing arrow, a heart, a circular refresh arrow, a bookmark, and a share icon. The second post is by Marty McGuire, dated Wed Aug 22 22:07:12 GMT+02:00 2018, with the text "This Week in the IndieWeb Audio Edition • August 11th - 17th, 2018" and "Show/Hide Transcript". The main text of the post reads "#Deactiday, losing your followers, and lots of events! It's the audio edition for [This Week in the IndieWeb for August 11th - 17th, 2018](#)." Below this, it says "You can find all of my audio editions and subscribe with your favorite podcast app here: martymcgui.re/".

Indieweb

 Aaron Parecki
Thu Aug 23 02:00:34 GMT+02:00 2018
Checked in at [Grand Central Baking Company](#)
CSA pickup in the smoke 🍆 📍

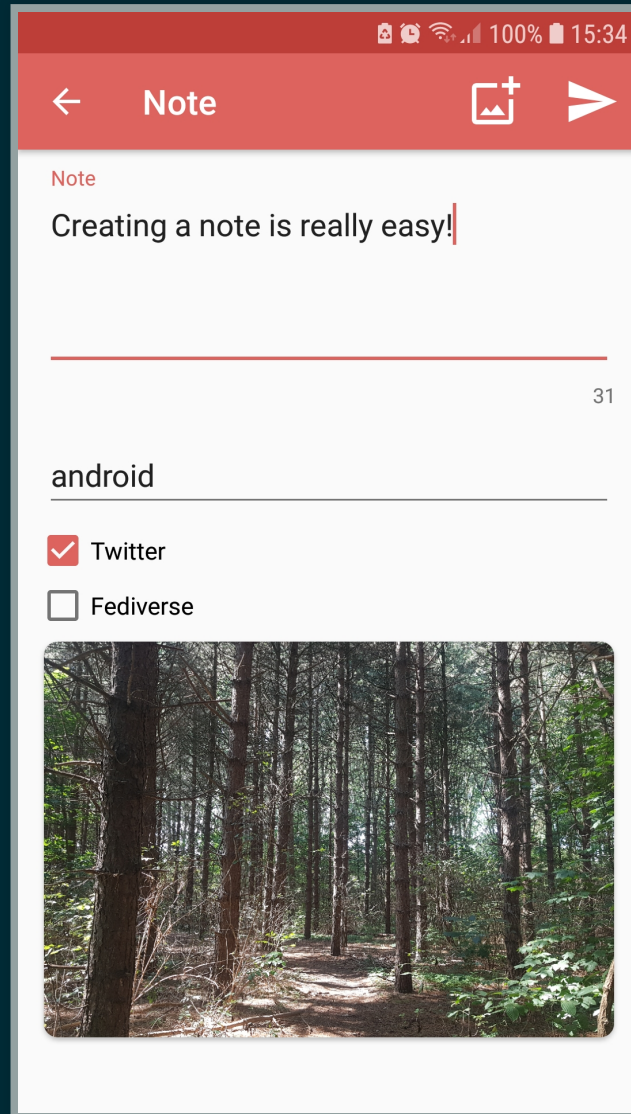
← ❤️ ↻ 📖 📄

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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

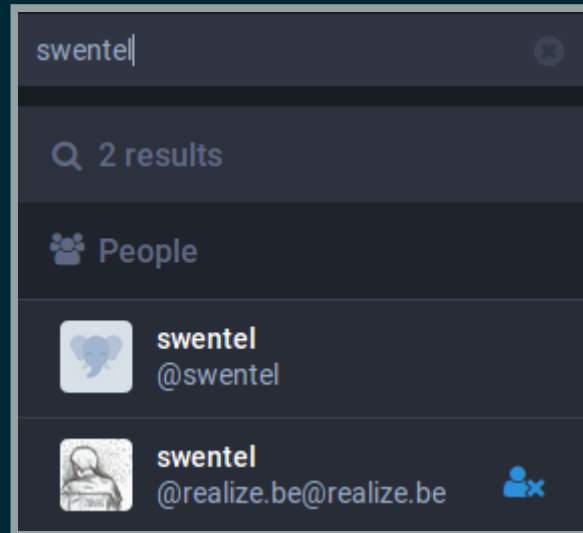
- Examples: Mastodon, GNU social, Pixelfed
- Everyone can install an instance on a different domain
- Typically use ActivityPub or OStatus to communicate with each other
- Webfinger to authenticate

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 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

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
- Sebastian Lasse - sebastianlasse.de/

Thank you!

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