Open Console

Mark Overmeer (MarkOv) German Perl Workshop 2025 13 May 2025, München DE

Presentation overview

- 1) OpenWebSearch.EU / OpenSearchFoundation
- 2) Why "Open Console"
- 3) Collecting proofs
 - email ownership
 - website ownership
- 4) Defining Services
- 5) Connecting

OpenWebSearch.EU

- EU NGI funded, 8.5M€, 2022-2026
- https://openwebsearch.eu
- Started by The Open Search Foundation

https://opensearchfoundation.org





~15 partners uni & research: CFR Radboud University Nijmegen, the Netherlands UNIVERSITÄT LEIPZIG CSC Leibniz-Rechenzei

Open WebSearch

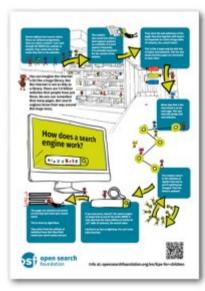
OpenWebSearch.EU

- 4 larger projects, >50 papers
- Smaller grants, like Open Console
- Publication of a crawled dataset, 3B URLs ~ 14TB index

CommonCrawl 2.6B/394TB per 2 months.

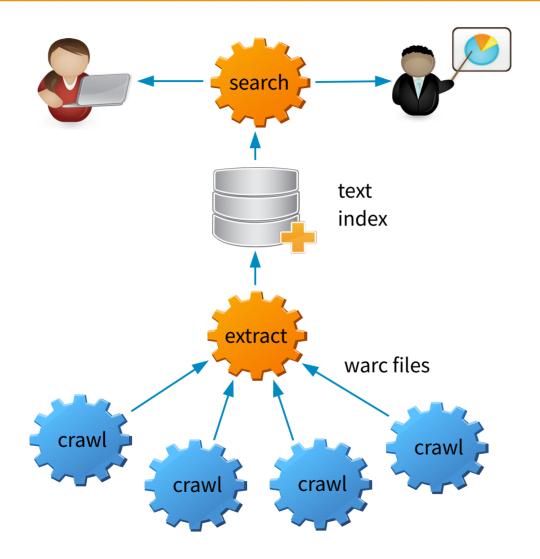
- Many task forces (OSF)
 - applications
 - economy
 - education
 - ethics





OSSYM Conferences





This is **not** how a "Google scale" can be made to work.

For most use-cases, the (text) index will **lack crucial data**.

Websearch Cooperation?

- People want different things
 - traditional search engine
 - JRC media monitor
 - NCSC-NL security information
 - KB: keep digital history
 - DLR/CERN open internal data
 - dictionary composers

Use of CommonCrawl



OWS breaking flaws

- Needs strong **central** management
- No continuous **upgrade** path by design
- Parties may will get **domination**
- Only "open" for **in-crowd**
- Far to complex to pull off as a community
- They **do not understand Open** communities, growth and compete

- privacy by design
- micro-payments
- source tracking
- take-down process
- combat crime /abuse

crawl

ÉRN

crawl

IRM

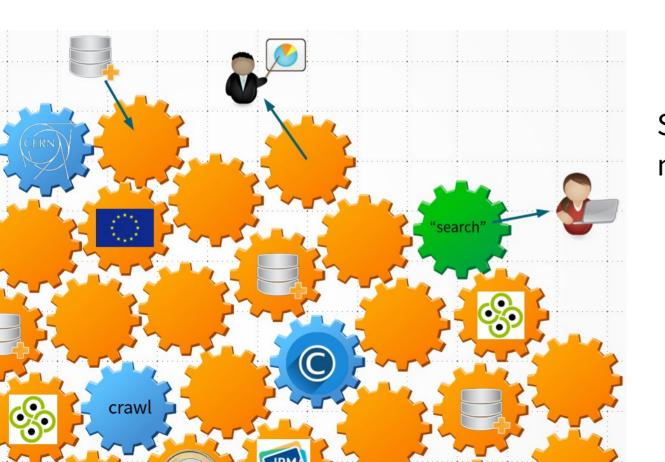
- ISP participation
- licensing
- resource sharing

Market place of specialized data & -services

'search'

Project Skrodon





2023-2025 "Open Console" Single front-end for a mesh of components.



Project "Open Console"







Mark Overmeer

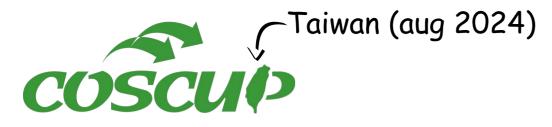
Architect Developer



Nguyễn Phương Thảo

Community Finances

Arnhem, The Netherlands



May 2023 till now:

MozFest Amsterdam NL OSSYM#5 Geneva CH NGI Forum Brussels BE OWS Cons Nijmegen NL COSCUP'24 Taipei TW OSSYM#6 München DE OWS Cons Passau DE 4x NLUUG NL 2x FOSDEM BE Upcoming: WHY2025



@Google Google Search Console

- Site usage
- Crawl optimization
- Crawl feedback
- Take-downs

| ≡ Google Search Console | Q Een UF |
|---|---------------------|
| http://mark.overme 🔻 | Prestaties |
| ♠ Overzicht | Zoektype: We |
| ✓ Prestaties | |
| Q URL-inspectie | 🗹 Totaal aan |
| - Index | 0 |
| Dekking | |
| 品 Sitemaps | Aantal klikken 3 |
| 🐼 Verwijderingen | |
| - Functionaliteit | 2 |
| Pagina functionaliteit | |
| 🕜 Site-vitaliteit | 0 |
| Beveiligingsproblemen en handmatige acties | 03-02-2022 |
| Verouderde tools en rapporten | ZOEK |
| 品 Links | |
| ्रिः Instellingen | |

RL in 'http://mark.overmeer.net/' inspecteren Datum: Afgelopen 3 maand... 🧷 eb ntal klikk. ✓ Totaal aantal vert... 🗌 Gem 14 0% 17-02-2022 01-03-2022 13-03-2022 25 KOPDRACHTEN PAGINA'S LANDEN

@Google Google Search Console

- Site usage
- Crawl optimization
- Crawl feedback
- Take-downs

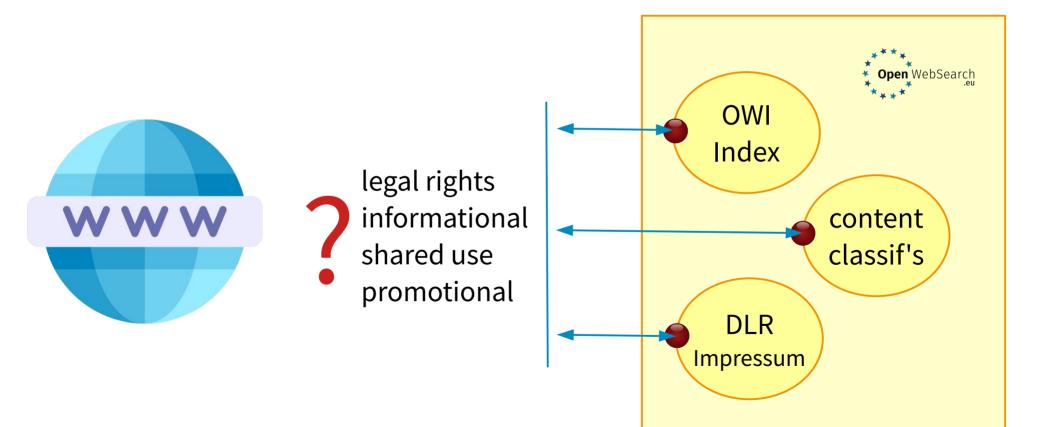
Major competitive advantage

Google Search Console \equiv http://mark.overme ... 🔻 Overzicht Prestaties \sim URL-inspectie Q Index Ē Dekkina 뭠 Sitemaps Verwijderingen 1 - Functionaliteit 0 Paginafunctionaliteit Site-vitaliteit a Beveiligingsproblemen en handmatige acties Verouderde tools en rapporten 놂 Links

Instellingen

Q Een URL in 'http://mark.overmeer.net/' inspecteren Prestaties Datum: Afgelopen 3 maand... 🧷 Zoektype: Web 🧷 🖂 Totaal aantal klikk. ✓ Totaal aantal vert... 🗌 Gem 14 0% 0 Aantal klikken 2 05-02-2022 17-02-2022 01-03-2022 13-03-2022 25 ZOEKOPDRACHTEN PAGINA'S LANDEN

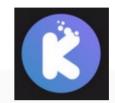
Positioning in OWS



Managing

Available claims/proofs

It is not about creating access!

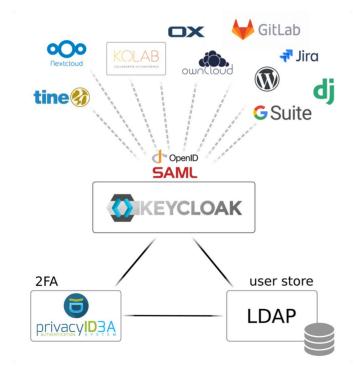


keyoxide.org

| ActivityPub | O ^{rds} ASPE | Bluesky | Discord | Discourse | DNS | FOREM <u>forem</u> | Forgejo |
|---------------|--------------------------|----------------|-------------------|-----------|---------------------------------|-----------------------|-----------|
| Friendica | Gitea | Github | Gitlab | Hackemews | IRC | kbin | Keybase |
| Lemmy | Liberapay | <u>Lichess</u> | L Lobste.rs | Mastodon | [matrix] <u>Matrix</u> | <u>OpenCollective</u> | OpenPGP |
| | o Owncast | Peertube | Pixelfed | Pleroma | pronouns.cc.logo pronouns.cc | Reddit | SourceHut |
| StackExchange | Telegram | Twitter | W. WriteFreely | XMPP | | | |

Managing

It is not about your organization







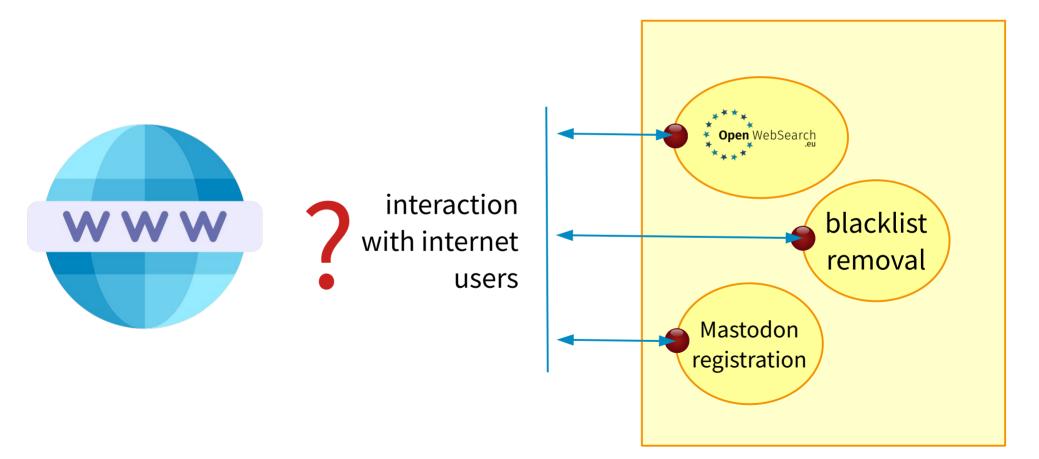
It is not about creating access It is not about your organization It's a fight against fragmentation from *your* personal perspective



Composition

- Organization of many "back-ends"
- Privacy
- Legal diversity
- Parties need the same kind of registration
 - some personal facts
 - email ownership proof
 - website ownership proof
- Disconnected implementations

Positioning, generic use



Generic Console

A Overzicht

A Prestaties Q URL-inspectie

- Index

Dekking

Eg Sitemaps

Werwijderinge - Functionaliteit O Paginafunct

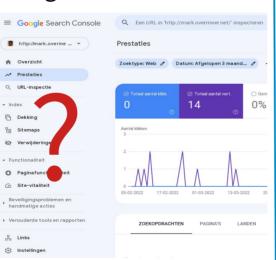
Site-vitaliteit

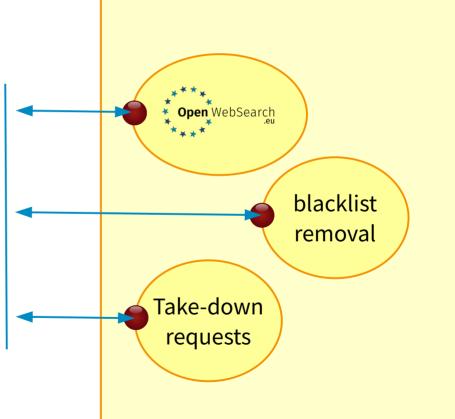
品 Links

🔅 Instellingen

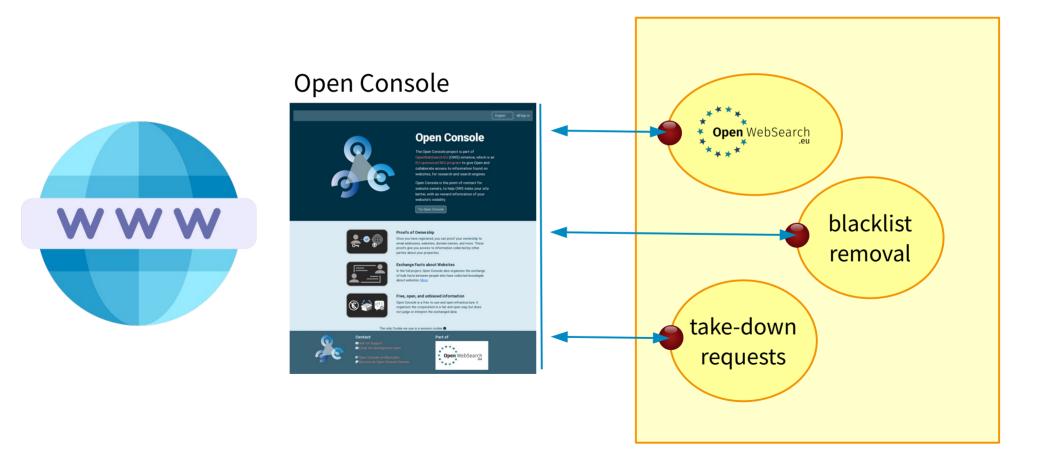


Google Search Console





Generic Console





Google's power, created for Open Communities

- Service discovery: who has info for me?
- "OpenID" provider, single sign on



Google's power, created for Open Communities

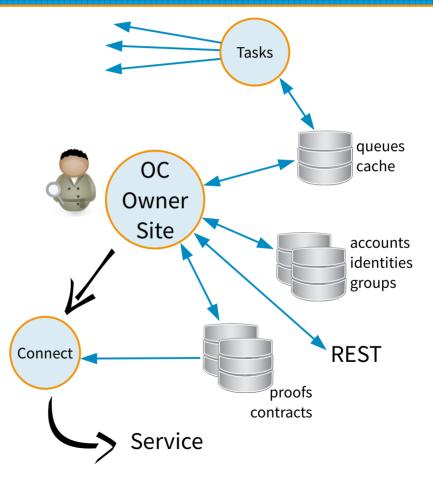
- Service discovery: who has info for me?
- "OpenID" provider, single sign on

Huge scale:

- 300M+ websites \rightarrow 100M+ website owners
- any internet user
- any open source application

Prepared for HUGE scale

- Different DBs clusters per data character, different DB types.
- Cluster of worker servers for slow tasks.
- Cluster of servers for connect (login) processes
- Security/Privacy/Fairness



Technological choices

- Perl
 - Mojolicious
 - Minion + Postgresql
 - MongoDB \rightarrow Couch::DB
 - Log::Report
 - Net::DNS

- Bootstrap 5
- SCSS \rightarrow CSS
- Javascript
- FontAwesome
- Limit client ↔ server interaction
- Limit database lookups



- Sufficient performance
- Many useful, stable modules on CPAN (which I know to use)
- Many own modules

"Console"

• Use is **not limited** to OpenWebSearch.EU!



Open Console

The Open Console project is part of OpenWebSearch.EU (OWS) initiative, which is an EU-sponsored NGI program to give Open and collaborate access to information found on websites, for research and search engines.

Open Console is the point of contact for website owners, to help OWS index your site better, with as reward information of your website's visibility.

Try Open Consol



Proofs of Ownership

Once you have registered, you can proof your ownership to email addresses, websites, domain-names, and more. These proofs give you access to information collected by other parties about your properties.



Exchange Facts about Websites

In the full project, Open Console also organizes the exchange of bulk facts between people who have collected knowlegde about websites. <u>More</u>



Contact

Free, open, and unbiased information

Open Console is a free to use and open infrastructure: it organizes the cooperation in a fair and open way, but does not judge or interpret the exchanged data.

The only Cookie we use is a session cookie 😏

☑ Ask for Support
☑ Email the development team

Open Console on Mastodon
 Become an Open Console Patreon





Login

- Register
- Reset password
- Sign in

📧 Register



Please, fill in this form to gain access to Open Console.

User registeration

Welcome to Open Console

Open Console is a single interface to various internet services which know something about your websites, domain-names, or networks. Create an account to be able to contact them.

Create an account name (email-address)

mark@overmeer.net

Your email-address will identify your account, but it can be changed later.

Pick a good password



Spam reducing challenge

five hundred and ninety

Please enter the place-holder text in numeric.



Login

- Register
- Reset password
- Sign in



| Open Console | | | | | |
|--|------------|--|--|--|--|
| Password reset | | | | | |
| (Hopefully) you have asked for a password reset for your Open Console account. | | | | | |
| Please click the following link, and change your password: <u>confirm reset</u> . | | | | | |
| Cheers, The Open Console Team | | | | | |
| Follow Us | Contact Us | | | | |

Mastodon

≤ support@open-console.eu

This is email is sent to you by Open Console

Open Console

→] Sign in

📧 Register

⑦ Reset password

Password Reset Procedure

When you do not know your password anymore, then you can request to start the reset procedure here.

Your account name

2 Your email-address

Spam reducing challenge

five hundred and thirty-one

Please enter the place-holder text in numeric.

🔓 Request reset

You will receive an email \blacksquare with instructions, typically within a $\mathring{\pmb{\vartheta}}$ few minutes.



Contact

Sk for Support Email the development team

Open Console on MastodonSources on GitHUB

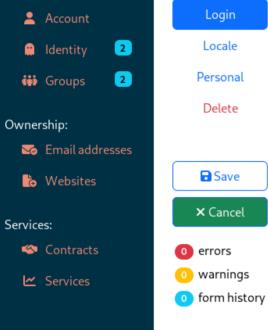


• Open WebSearch



🔒 Dashboard

Identification:



Account

mark@overmeer.net

Configure your default email-address, which is also used for signing in to the Open Console website.

Change password

When you wish to change your login password, type a new one here.

Password



The **email**-address is used to Sign-in, but also for Open Console to communicate with you. When you change this, your ownership proofs, service registrations, and other configuration will *not* be lost.

Login

- Register
- Reset password
- Sign in

0

→] Sign in

🗷 Register

🔓 Reset password

Welcome back to Open Console

When you are new to Open Console, please register first. When you do not remember your password, use the password reset procedure. You will get an email with instructions.

🗷 Register 🛛 🔓 Reset password

User Sign in

.

Please login to access our website.

mark@overmeer.net

••••••





act

Sk for Support Email the development tean

Open Console on MastodonSources on GitHUB





🏫 Dashboard

lentification:

💄 Identities

2

2

🐞 Groups

wnership:

🌄 Email addresses

🏷 Websites

<table-cell-rows> Domains

器 Networks

ervices: Contracts

for identity contract owner information about service - any role - v - any owner - any category OpenWebSearch.EU v - any property v Take-down requests v

Take-down requests

With this form, you can force exclusion of urls from all the OpenWebSearch.EU indexes. This is complementary to the sitemap mechanism, which lists what should be included. And there is a gray area between these two.

Changes are processed as fast as feasible, but at most take a week to reach all our projects.

Website

https://open-console.eu

 \sim

Select the website which you wish to configure.

Exclude patterns

/images/*.odt /security.txt /search?source=backup&* • Open WebSearch

• Earlier take-downs.

OpenWebSearch.EU

- Our mission.
- Licence.
- Become a sponsor.

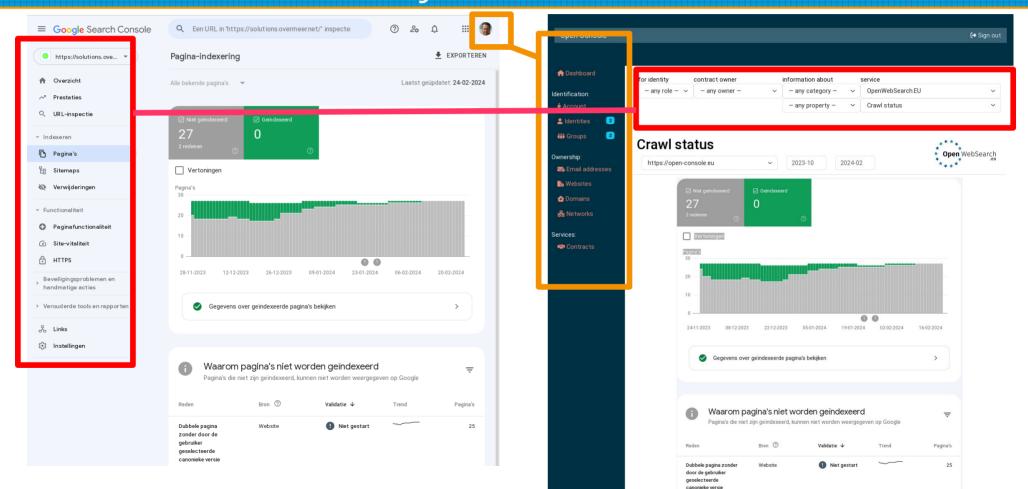
Two modes:

1) Integrated display

2) Login button

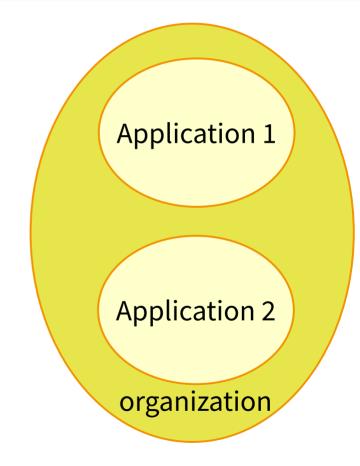
Specify all (patterns of) urls which should not be included in one of our indexes.

Consoles Side-by-side



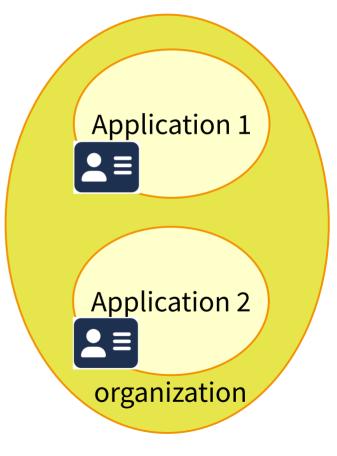
Level of integration



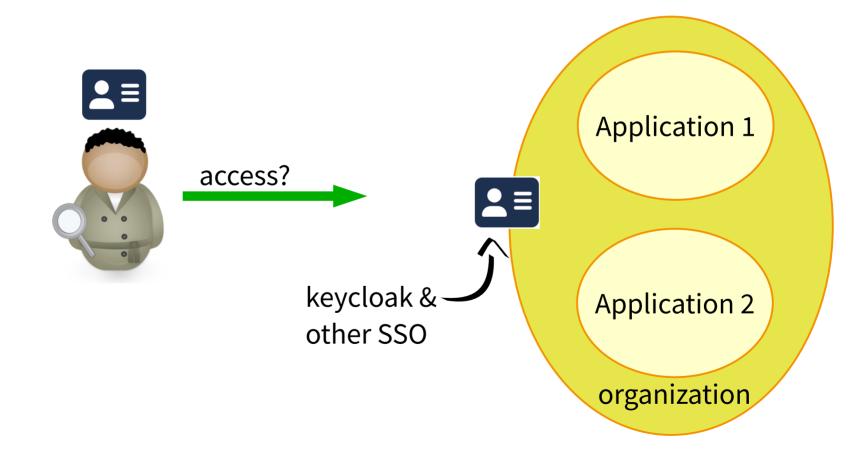


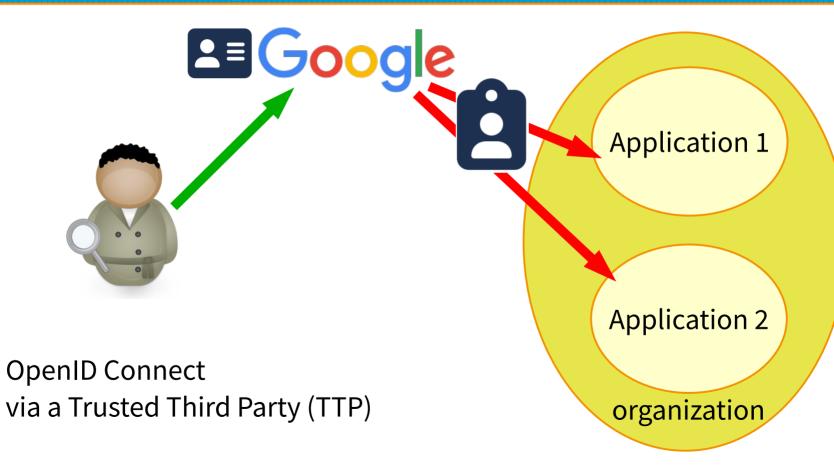
Level of integration

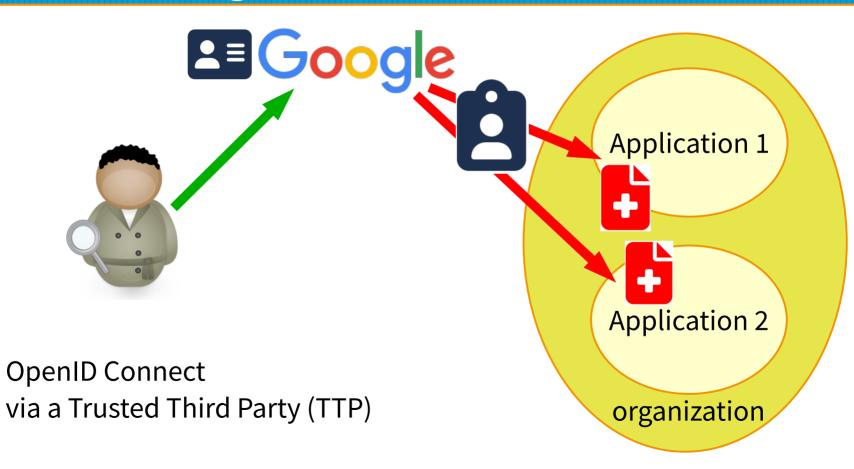


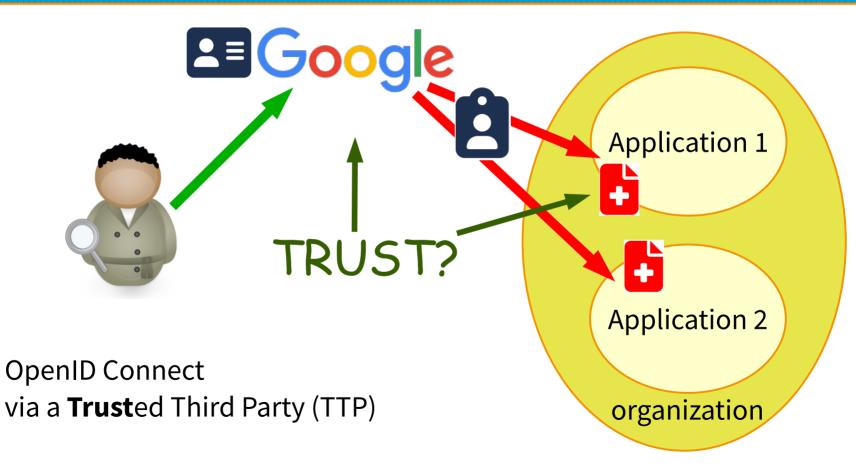


Level of integration









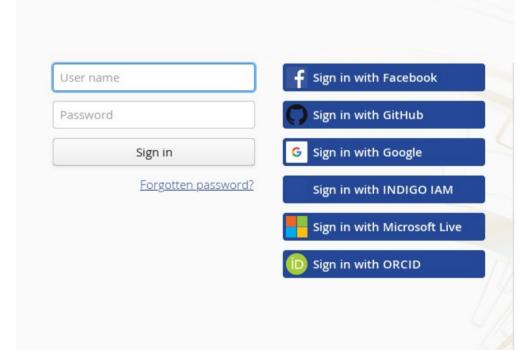
← → C GO TO EUDAT WEBSITE



WHAT IS B2ACCESS USER

Who do you TRUST ?

TTP

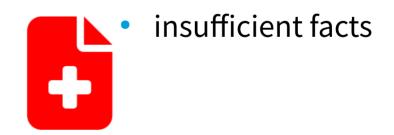




organize me







- My activities are diverse
- My services come from many sources

- My activities are **diverse**
- My services come from many sources

- Some logins are shared with colleagues
 - My boss is **responsible** for my use!



- My activities are **diverse**
- My services come from many sources



- I want to manage which facts are shared
- I do not (want to) trust the TTF (BigTech)



- Some logins are **shared** with colleagues
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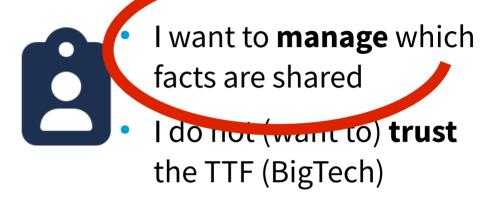


- Some logins are **shared** with colleagues
- My boss is **responsible** for my use!



- Still need for **additional registration**, like "agree terms"
- Additional facts needed

- My activities are **diverse**
- My services come from many sources



- Some logins are **shared** with colleagues
 - My boss is **responsible** for my use!

- Still need for **additional registration**, like "agree terms"
- Additional facts needed

Facts to share

"Login via Google"

- OpenID Connect: claims: sub name given_name family_name middle_name nickname preferred_username profile picture website email email_verified gender birthdate zoneinfo locale phone_number phone_number_verified address updated_at
- Website use statistics



Facts to share

"Login via Google"

- OpenID Connect: sub name given_name family_name middle_name nickname preferred_username profile picture website email email_verified gender birthdate zoneinfo locale phone_number phone_number_verified address updated_at
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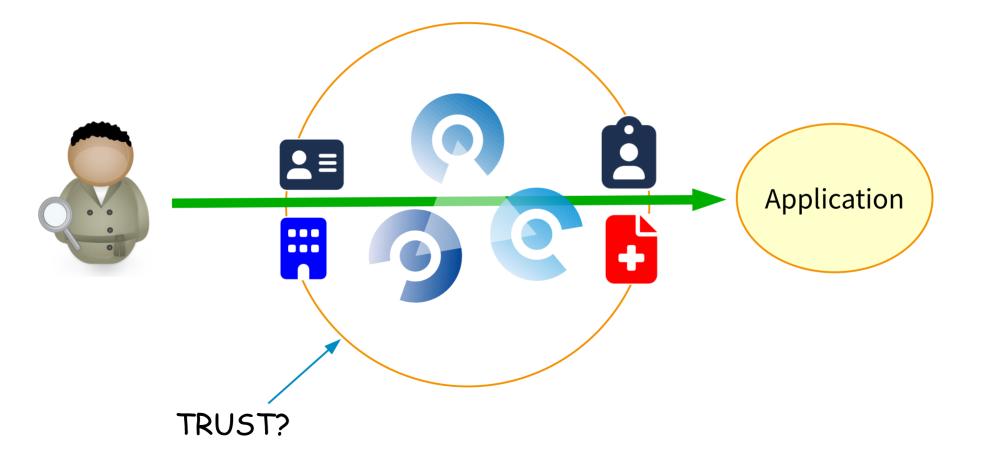
"Login via Open Console"

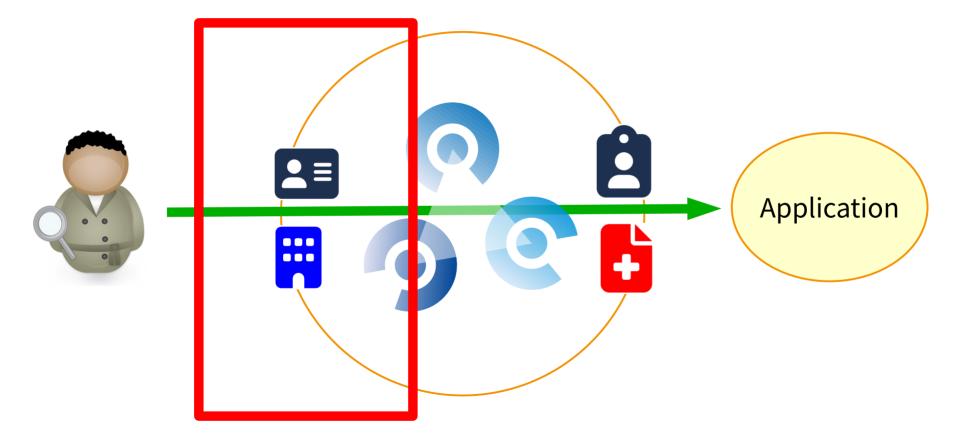
- Selected OpenID claims
- Identities and Groups
 - Proofs
- No tracing in any way



Ownership: 🐱 Email addresses là Websites 🔹 Bank accounts 📞 Phone numbers Postal addresses 9 🚧 Social media Domains 器 Networks

Security keys





Identification:

💄 Account Identity

2

2

🐞 Groups

Ownership:

So Email addresses

& Websites

Services:

Contracts

🗠 Services

| | ld | e | n | ti | ty |
|----|------|-----|---|----|------|
| Pe | rsoi | n 🌘 | D | | Role |

Personal

Location

Save

warnings

form history

Full name

Purpose (required)

A hint about the purpose of this Identity.

A Required parameter missing.

Name × Cancel Your name in this context. errors

Nickname

Pseudonym, public short name

The name people you want people to use to address you informally in this context.

Language

English

Which language (as pre-selected in your Account) do you prefer for this identity.

You express your separate **Roles** in life as separate Identities. Your preferences may differ in a certain context. For instance, `Home`, `Work`, or `Association board member`, or `Association board member`.

The Role names will not be shared with anyone, but are displayed in overviews in this Open Console interface.

As Full name, fill-in your name as suits to this role. For instance, when you use this Identity for OpenID, then this will be passed to the website you login to. This is also the Name as shown in identity Groups.

Some Services support Nicknames: an abstract, short name you like to use for vourself.

You can only select from Languages which are selected in your Account.

 \sim

ty

Identification:

Account
 Identity
 Groups

Ownership:

🐱 Email addresse

🍖 Websites

Services:

🍩 Contracts

🗠 Services

| | Group |
|------|--------------|
| 2 | Organization |
| 2 | Contact |
| | Members |
| sses | Invitations |
| 3303 | Delete |
| | |
| | Save |
| | × Cancel |

Group Group

errors
warnings
form history

| Group's short name | |
|---|--|
| Open Console | |
| A hint about the coverage of this Group. | |
| Group's full name | |
| Open Console, project Website Owner | |
| The longer version of the name of this group. | |
| Language | |
| English | |

The (main) communication language of this group.

Time-zone

| Europe/Amsterdam | ~ |
|------------------------------------|---|
| The Time-zone this group lives in. | |

This Group of people (Personal Identities) with manage Ownerships or share a login somewhere. A Group could be colleagues, family members, friends, whatever.

The **Group short name** is only used for convenience, within the Open Console interface. When needed, the **Full name** is presented to outside services.

The **Time-zone** will be used for some emails: in this website, your own time-zone setting is used.

 \sim

am not alone

Identification:

| . | Account | |
|----------|----------|---|
| | Identity | 2 |
| (†) | Groups | 2 |
| Owner | shin. | |

| 20 | Ema | aila | add | res | ses |
|----|-----|------|-----|-----|-----|
| | | | aaa | | |

| 🍖 Websites | Websit | Websites |
|------------|--------|----------|
|------------|--------|----------|

Services:

- Contracts
- 🗠 Services

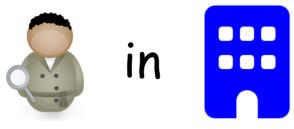
Groups

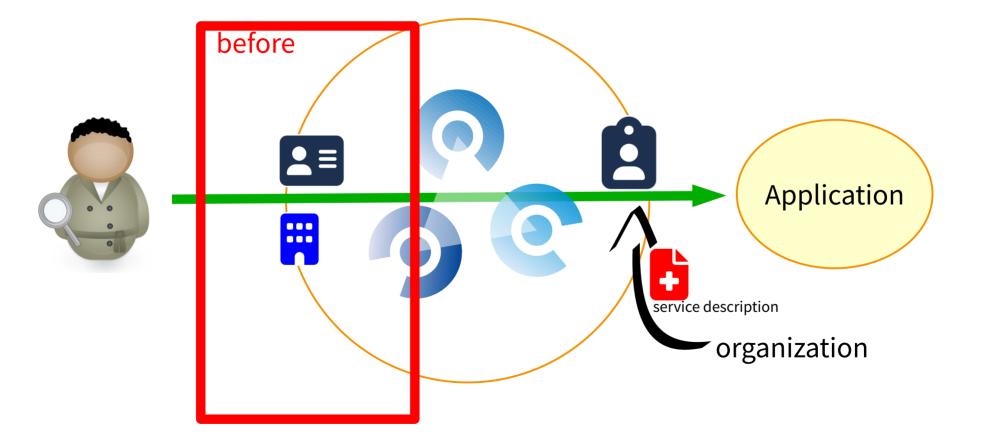
Your group memberships

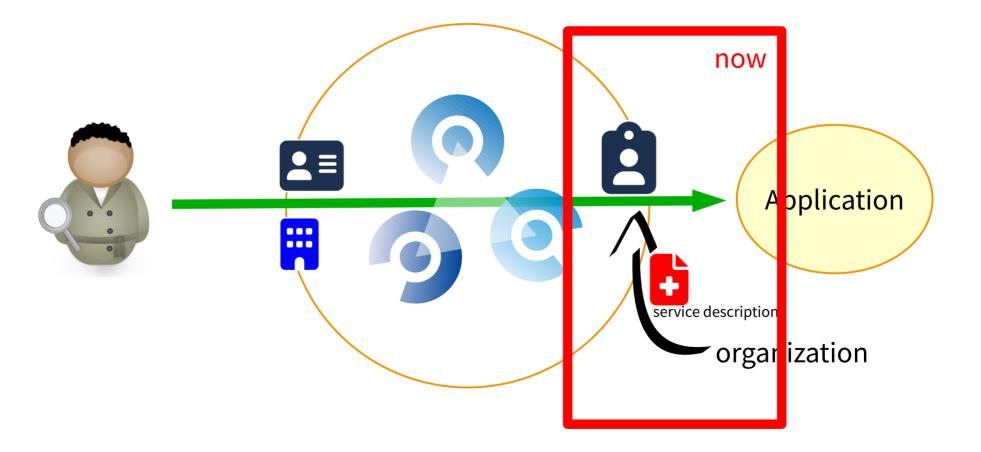
| 🐝 Group | Edit | 🛱 Your member identit | у |
|--------------------|-----------|-----------------------|---|
| Family | 2 / | home | ~ |
| Open Console | / | ZZPer | ~ |
| • Create new Group | | | |

Manage Group Identities

You may need to organize your activities as part of an organization, a company, or any other group of people. Therefore, you can create Group identities, where you can specify such cooperation.

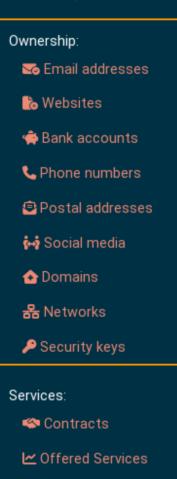








proofs



Identification⁻

Account

💄 Identities

🐞 Groups

Welcome to Open Console

Configure a (personal) identity

We hope you have a good day.

You made your first move to use Open Console. To become useful, you need to continue the configuration by adding Idenities and proves of Ownership. Then you can connect to services. Check the left panel.

 step 1: create yourself one or more <u>personal identities</u>, which you can use to identify yourself to external parties, like service providers.

Once you have created (at least one) personal identity, you can start reaching out to services. Continue with:

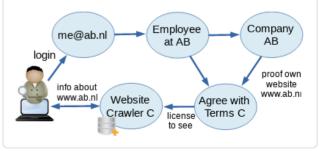
- creating group identities;
- · collect ownership proofs;
- · connect to services you want to use; and
- · define services you offer.



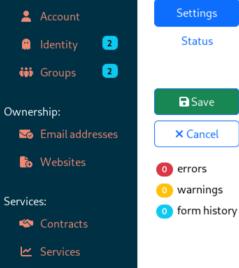
Configuration process



Maybe, **the example** below is more helpful to you. Organization 'C' runs a web-crawler: it collects information about the website of company 'AB' to be used in a search index. The user can see that information in the dashboard when he has proven ownership of that website, or he is member of a group which has that proof.



Identification:



🌄 Email address

When you submit this form, you will receive an email with instructions to complete the proof.

Email address

markov@openwebsearch.eu

Your or the group's email address to be verified.

Sub-Addressing ('+'-trick)

Supports sub-addressing Permit the "+"-trick on the proven email address.

No ownership proof provided (yet)

You have not proved access to this email address yet, so it is practically useless. Please, verify.

- No proof provided
- Receive an email

Proof by email challenge

Start the verification, and then wait for the instructions you receive via email.

You can prove the ownership of a personal email address, but it might also be the address in use by one of your groups.

Sub-addressing is the commonly supported feature to extend your email name with "+" per use. For instance, "me+oc@example.com" where "+oc" can be used to filter and select folders. See <u>Wikipedia</u> Verify

Identification:

Account
 Identity 2
 Groups 2

Ownership:
Email addresses

Services:

Contracts

& Websites

🗠 Services

\sub Email addresses

Claimed email addresses

| Email address | Status | Score | Edit |
|------------------------|--------|-------|------|
| 2 Personal properties | | | |
| ZZPer | | | |
| solutions@overmeer.net | Proven | 50 | 🖉 🧟 |
| A home | | | |
| 🤹 Family | | | |
| mark@overmeer.net | Proven | 50 | |
| 🤹 Open Console | | | |
| | | | |

New email address proof



Proving email receipient

Verify that you are the receipient of emails sent to a specific email address. This may be a personal address, but also a mailinglist for a group.

You can **drag** the properties to change ownership. You can give it away to a group. You can only take it back when you are an admin (**2**) of that group.

Addresses which are marked with "(+)" support sub-addressing: the user name of the email address may be extended by a "+" followed by any random name. All these emails will end-up in the same mail-box. This is useful to organize incoming mail.

Identification:



2

2

Ownership:

- 🀱 Email addresses
- 🏷 Websites

Services:

- Contracts
- 🗠 Services

🔥 Website

Website 🚺

Save

× Cancel

warnings

form history

errors

Website address

Check

https://www.example.com/~user (required)

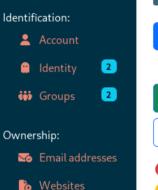
One of your own or your group's website addresses. Website address is required. As URL, you can use IDN (<u>Internationalized</u> <u>Domain Names</u>): extended character-set names.

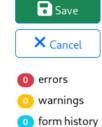
The **Website address** must be "canonical", which means that it does not redirect to another website and matches the '<link rel="canonical">' in the page (if present).

Claim some website, simply by saving this form. Most services do want a proof of ownership, in which case you can add it at when needed.

There are three ways you can deliver a proof with your claim:

- DNS: adding a record to your zone file, requires access for your domain-name registration;
- HTML: add some meta tags to your HTML front-page; and
- File: add a static file to your website.





Services:

🌑 Contracts

🗠 Services

🔥 Website

Website

Website address

https://openwebsearch.eu

One of your own or your group's website addresses.

Check V?

The website address you provided looks valid and working. You may now save your claim, but better immediately add a proof, below.

Proof website ownership

Pick any of these to proof that you own this website:



As URL, you can use IDN (<u>Internationalized</u> <u>Domain Names</u>): extended character-set names.

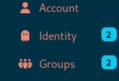
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- File: add a static file to your website.

Identification:



- Ownership:
 - So Email addresses
 - 🚡 Websites

Services:

Contracts

🗠 Services

Nebsite

Website

🗖 Save

X Cancel

Website address

https://openwebsearch.eu

One of your own or your group's website addresses.

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| may now save y |
| below. |
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| Proof websit |
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| One of your own or your group's | | | |
|---|----------------|--|--|
| Check 🗸 | Website url | | |
| The website add may now save y below. | Verification t | | |
| | 2024-09-181 | | |
| | +0.031s | | |
| Proof website Pick any of these | +0.031s | | |
| | +0.032s | | |
| | +0.032s | | |
| + via DNS | +0.034s | | |
| | | | |

| As URL, you can use IDN (Internationalized |
|--|
| Domain Names): extended character-set |
| names. |

The Website address must be "canonical", which means that it does not redirect to another website and matches the '<link

| Website url checking details × | | esent). |
|--------------------------------|---|-------------|
| Verification trace: | | |
| 2024-09-18 12:35:45 | Checking field 'website' value 'https://openwebsearch.eu' | add it at |
| +0.031s | No DNSSEC records found for CNAME. | |
| +0.031s | CNAME redirection to test-sites.overmeer.net | ver a proof |
| +0.032s | No DNSSEC records found for CNAME. | |
| +0.032s | CNAME redirection to moon.overmeer.net | zone file, |
| +0.034s | No DNSSEC records found for CNAME. | ain-name |
| +0.034s | No DNSSEC records found for A. | |
| +0.034s | No DNSSEC records found for AAAA. | o your |
| +0.051s | GET https://openwebsearch.eu returned 200 | vebsite. |
| +0.051s | Downloaded in 16ms, 5k text/html | |
| +0.053s | No canonical name for the website found in the html. | |
| | | |

-

Website URL complications

Is this a top?

- http://www.abc.nl/~user/xyz.html
- Redirects: http \rightarrow https, .nl \rightarrow .com
- Redirects: www.xyz.nl → xyz.nl
- <link rel="canonical">
- Public Suffix List
- Redirects: ibm.com → ibm.com/nl-NL NO

Website URL complications

Normalization:

- Remove fragments (#) and queries (?)
- IDNA2008 (Punycode)
- www.räksmörgås.se → www.xn—rksmrgs-5wao1o.se
- Character normalization: $\$43 \rightarrow C$
- UTF8 HEX encoding normalization: ä → %72%E4
- Defaults: http://abc.nl:80 == http://abc.nl
- Casing: HTTP://ABC.NL == http://abc.nl

Open Console

🔒 Dashboard

Identification:

Account
 Identity
 Groups
 2

Ownership:

Email addresses

sses o errors warnings

Services:

Contracts

🗠 Services

Website

Website

Save

o form history

Website address

https://openwebsearch.eu

One of your own or your group's website addresses.

Check V?

The website address you provided looks valid and working. You may now save your claim, but better immediately add a proof, below.

Proof website ownership

Proof via DNS

Pick any of these to proof that you own this website:



No ownership proof provided (yet)

You have not proved ownership of this website. Some services may not care, where other will require a proof to function.

- No proof provided (yet)
- Proof via DNS
- Proof via HTML
- O Proof via File

Proof via DNS

For this proof, you may need the help of someone else: the DNS administrator of zone

openwebsearch.eu

Add this DNS record to that zone:

open-console-challenge TXT "devel01:H:8z8Q06RGijGIhhQcNRtxLm" Q

The record class is "IN", as usual. The record does not need to be cached, so pick something short for the TTL, for instance "300". Multiple records with the same label may exist: parallel proofs.

After the above record was added, start verification.

Start verification

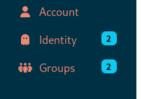
Proof

Open Console

[→ Sign out

🔒 Dashboard

Identification:



Ownership:

Email addresses

Services:

🌑 Contracts

🗠 Services

🔥 Website

Website

Save

× Cancel

0 errors

0 warnings

o form history

Website address

https://openwebsearch.eu

One of your own or your group's website addresses.

Check V?

The website address you provided looks valid and working. You may now save your claim, but better immediately add a proof, below.

Proof website ownership

Pick any of these to proof that you own this website:



Proof via HTML

No ownership proof provided (yet)

You have not proved ownership of this website. Some services may not care, where other will require a proof to function.

- No proof provided (yet)
- Proof via DNS
- 🗿 Proof via HTML
 - Proof via File

Proof via HTML

Add this line to your website's front-page header. How to do this, depends on wait to produce webpages.

<meta name="open-console.website-owner" content="https://openwebsearch.eu" data-note="Website Ownership Proof" data-version="website html 20240717" data-challenge="devel01:H:8z8Q06RGijGIhhQcNRtxLm" data-created="2024-10-01T14:35:07Z" />

When you need more than one challenge, then simply add multiple of these blocks. After you have added above line to your frontpage, start verification.

Start verification

Proof

-

Open Console

🏫 Dashboard

Identification:

Account
 Identity
 Groups
 2

Ownership:

🀱 Email addresses

퉎 Websites

Services:

Contracts

🗠 Services

b Website

Website

Save

× Cancel

errors

0 warnings

o form history

Website address

https://openwebsearch.eu

One of your own or your group's website addresses.

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The website address you provided looks valid and working. You may now save your claim, but better immediately add a proof, below.

Proof website ownership

Pick any of these to proof that you own this website:



No ownership proof provided (yet)

You have not proved ownership of this website. Some services may not care, where other will require a proof to function.

- No proof provided (yet)
- Proof via DNS
- Proof via HTML
- 🗿 Proof via File

Proof via File

In your website, create a file named

/.well-known/open-console.json

containing the following text:

[{ "note": "Website Ownership Proof", "version": "website file 20240716", "website": "https://openwebsearch.eu", "created": "2024-10-01T14:35:07Z", "challenge": "devel01:H:8z8Q06RGijGIhhQcNRtxLm" }

ſQ

(The file contains one JSON array, potentially with multiple challenges)

The file must be readible for the outside world. You may test this by directing your browser to <u>the location</u>.

After you have created this file, start verification.

Start verification

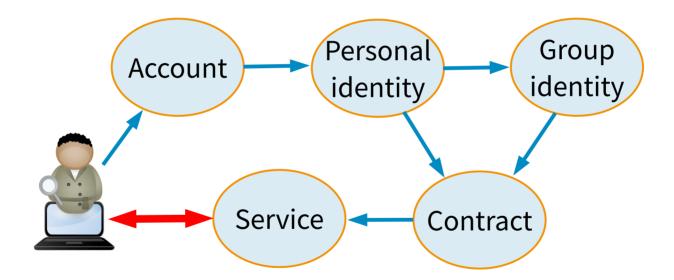
Proof

1

Service



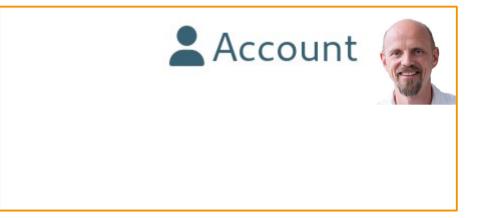
Service login



A bit like OpenID Connect, but ...







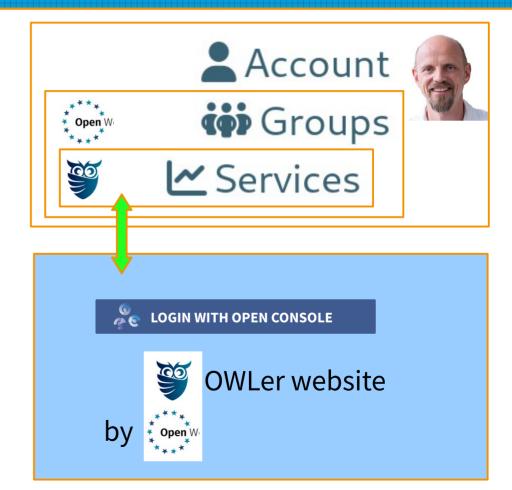


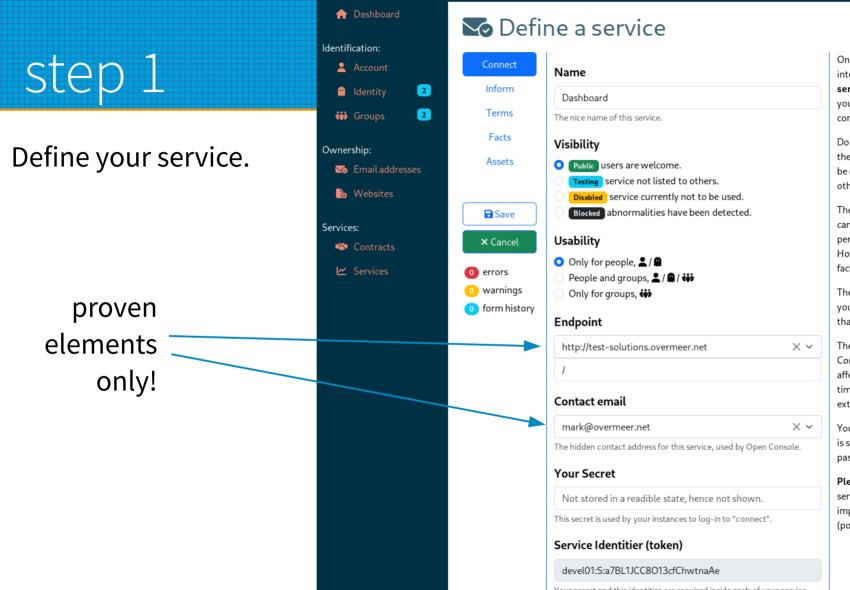
Example











On this first page, we satisfy minimal interface needs. After successful saving, a **service identifier** will be assigned. When you make changes to this service, then the contract user may get informed.

Do not include your organizational name in the **name** of this service, because that will be clearly visual around this service for other reason.

The **Usablilty** influences the data which you can collect from your visitor. Of course, a person can always start a Group for itself. However, that Group can contain different facts.

The **endpoint** contains two parts: one of your proven websites, and a path within that website.

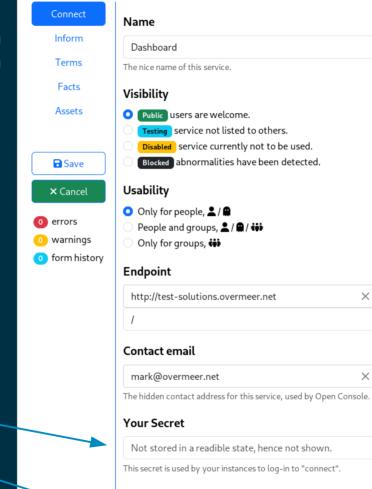
The **contact email** is only used by Open Console to inform you about events which affect your service. For instance, downtime, technical issues, or protocol extensions.

Your **Secret** cannot be displayed, because it is stored encrypted internally. Like a password. Fill-in this field to reset its value.

Please, add additional information to this service on the other pages for this form, to improve the communication with the (potential) users.

Dashboard Identification. 💄 Account Inform 2 Identity 2 Terms 🐝 Groups Step 1: Facts Ownership: Assets So Email addresses Define your & Websites service. Save Services: × Cancel Contracts 0 errors warnings o form history OAuth _____ secrets

Define a service



Service Identitier (token)

devel01:S:a7BL1JCC8O13cfChwtnaAe

and an algorization and the state of the sta

On this first page, we satisfy minimal interface needs. After successful saving, a service identifier will be assigned. When you make changes to this service, then the contract user may get informed.

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 $\times \sim$

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Please, add additional information to this service on the other pages for this form, to improve the communication with the (potential) users.

Open Console

Dashboard

Identification:

💄 Account

Identity

🐞 Groups

Websites

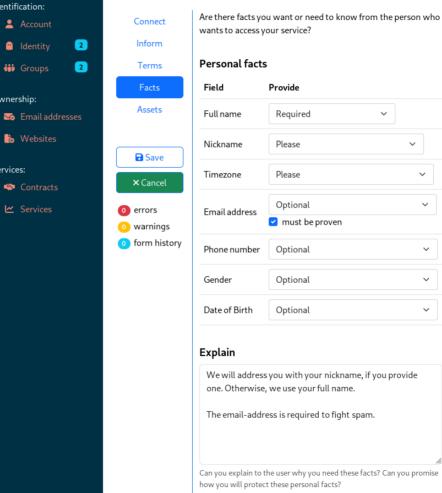
Contracts

✓ Services

Ownership:

Services:

Define a service



Describe which kinds of facts you wish for.

For each of the facts a potential visitor can provide, you need to configure whether you wish to receive that detail. The more details you ask for, probably the fewer people will accept the contract.

Your options are: No I do not want to receive that data; Providing this is optional, but not really important; Please provide this information for a better experience or communication; The fact is required. Where available, required fields may come with a verification proof.

additional proofs



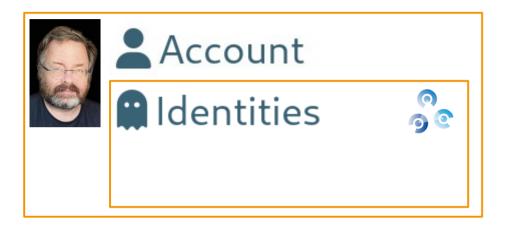
and other assets.

A Dashboard Define a service Identification: Connect Account 2 Inform Identity 2 Terms Groups Facts Ownership: So Email addresses b Websites B Save Services: × Cancel Contracts Services errors warnings o form history

This page specifies which proofs you wish to receive. Assets Min Status Set Max 0 Email addresses 0 Proven 🗸 24 24 Proven ~ Websites

Assets are values which the user has configured, but ownership may not have been proven.

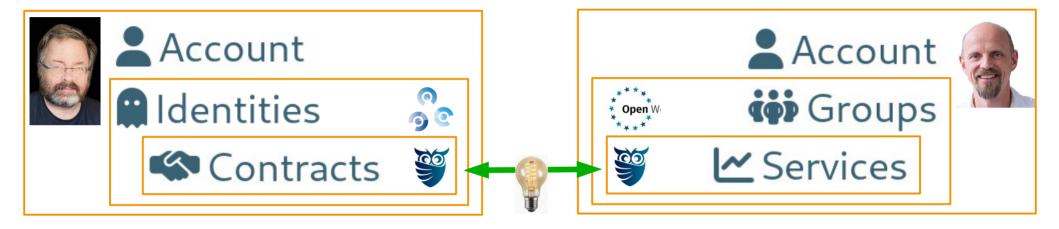
When an Asset is **Claimed**, then it is checked for validity, but not (yet) proven to be owned. Or, the poof may have expired. In some cases, your application may not care about proofs.



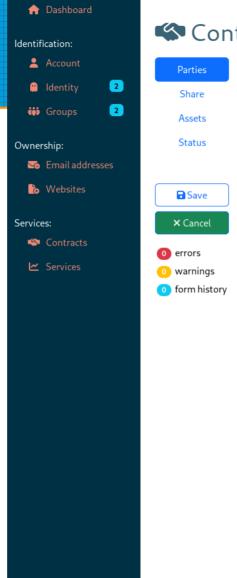








User signs contract.



Contract

The Service

Dashboard

Search engine dashboard application, which demonstrates how OpenWebSearch.EU indexes your sites.

Its Provider

Provider: OpenWebSearch.EU Website: https://dashboard.owler.eu (proven) Support: no support email address shared. You will get access to a demonstration version only.

Your management

ZZPer

home

The service provider does not contract groups.

Confirm the Contract

- I have looked at the enclosed pages, like Share and Assets, and agree that I am willing to share those details with the service provider.
- ✓ I agree with the Terms & Conditions of the provider.
- ✓ I will respect the License ^C on the data, received from the provider.

.Ə Sign

This contract was last signed by you on 2024-12-03T15:33:34Z.

"Sign" an agreement with the party which offers you some services. This is like creating a login at the provider, without the need to configure your personal facts again: simply use one you the identities you have already defined.

The **provider**'s website and contact email are verified to be owned by the party offering these services. The provider- and service names, however, are not verified.

User signs contract.

shows what data is requested

Dashboard Contract Identification: Account Parties 2 Identity Share Groups 2 Assets Status Ownership: So Email addresses Websites Save Services: Contracts errors ✓ Services warnings form history

Parties

Share

Assets

Status

Save

errors warnings form history

A Dashboard

2

2

Identification: 💄 Account

Identity

Groups

So Email addresses

& Websites

Contracts

Ownership:

Services:

Shared personal facts

- Full name: required
- Nickname: please
- Timezone: please
- · Email address: optional, proof required
- Phone number: optional
- Gender: optional
- Date of Birth: optional

The service provider explains:

We will address you with your nickname, if you provide one. Otherwise, we use your full name.

The email-address is required to fight spam.

To be able to use this service, you have to share personal and/or group information with the service provider. You may also need to share some of your proofs.

These details need to be selected on the first use of service, so this page is informational only.

You will be informed when the Service changes its requirements.

Contract The Services accepts the following assets. You will pick them on the moment you use the service (for the first time).

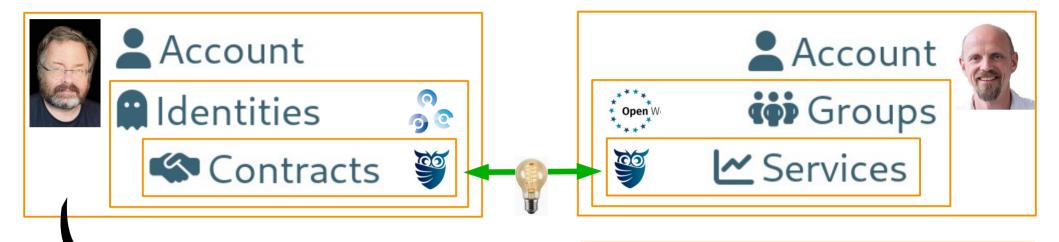
Websites

Exactly 24 of these are required. All which are passed must be proven.

From the selected personal identity only Combine all personal identities All personal and group assets

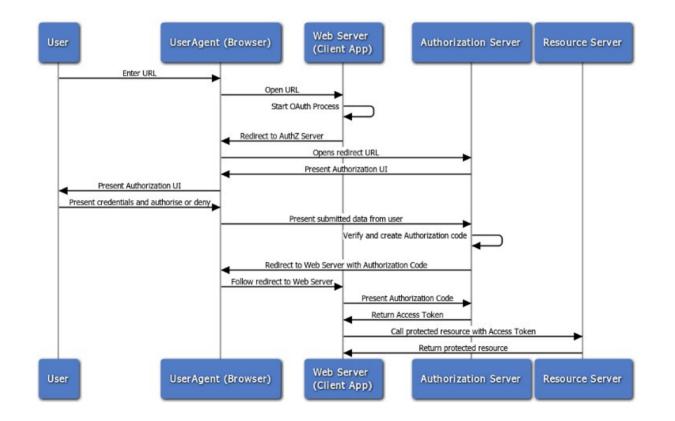
Assets are the things you collect: proofs and other items which are owned. For instance, email addresses and claimed websites.

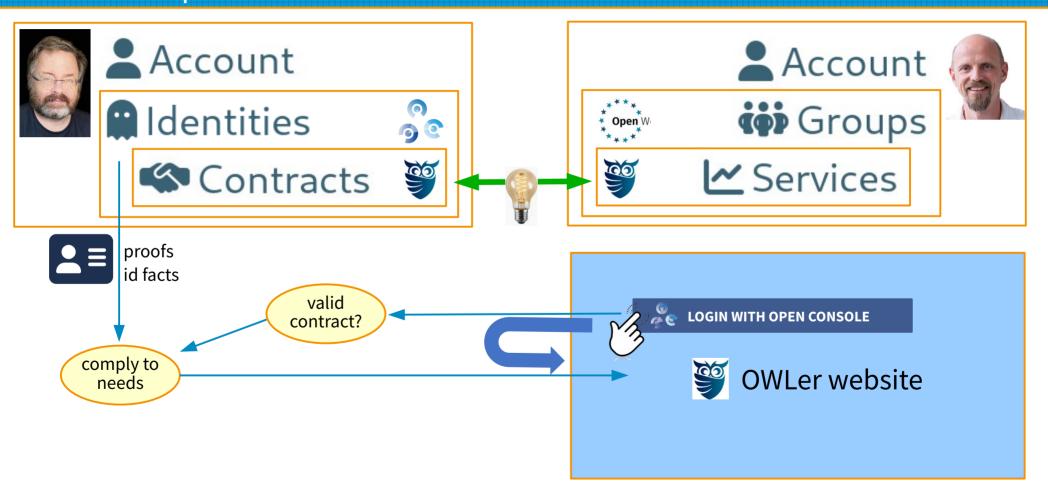
Some services require some assets, because otherwise they can not work properly. Other services are only interested to know you better, but could very well do without these details.

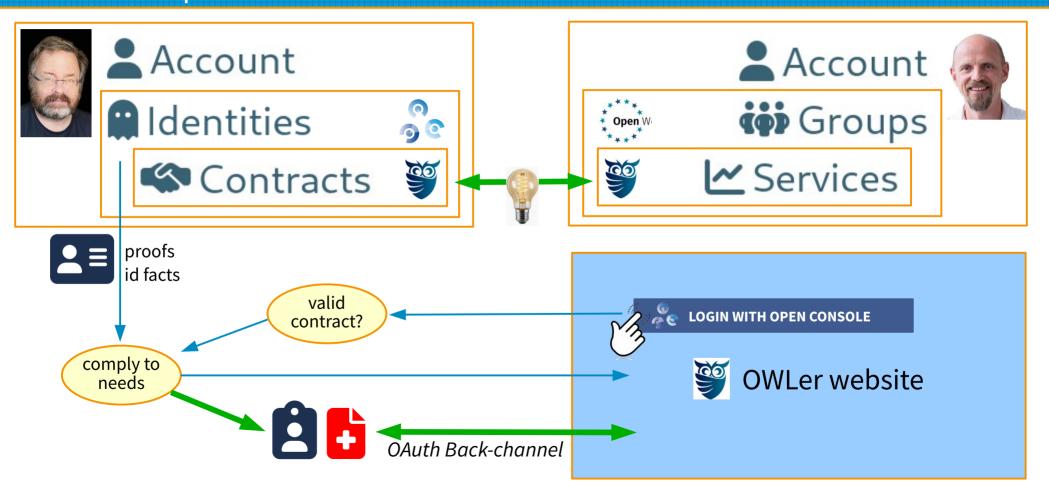




Basically OAuth2





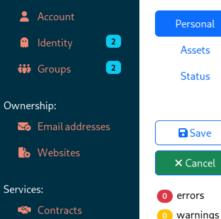


Provide the info



🔒 Dashboard

Identification:



Comply

✓ Dashboard
 ✓ my dashboard
 ✓ Personal properties

All seems to be fine: contract signed, data provided. Within a few seconds, you will be redirected to the service.

Shared personal facts

errors warnings form history Full name: Required M.A.C.J. Overmeer Picked a value, but there are alternatives. Nickname: Please markov Set to the only available value. Timezone: Please

 markov
 × ✓

 I Set to the only available value.

 Timezone:
 Please

 Europe/Amsterdam
 × ✓

 I Set to the only available value.

 Email address:
 Optional

 — select when you want to pass a value —
 ✓

 Phone number:
 Optional

 — select when you want to pass a value —
 ✓

Confirm which information is being passed on to the remote application, the service.

By default, the data from your owning identity is selected, but you may want to present alternative settings. The logical choice is shown in bold.

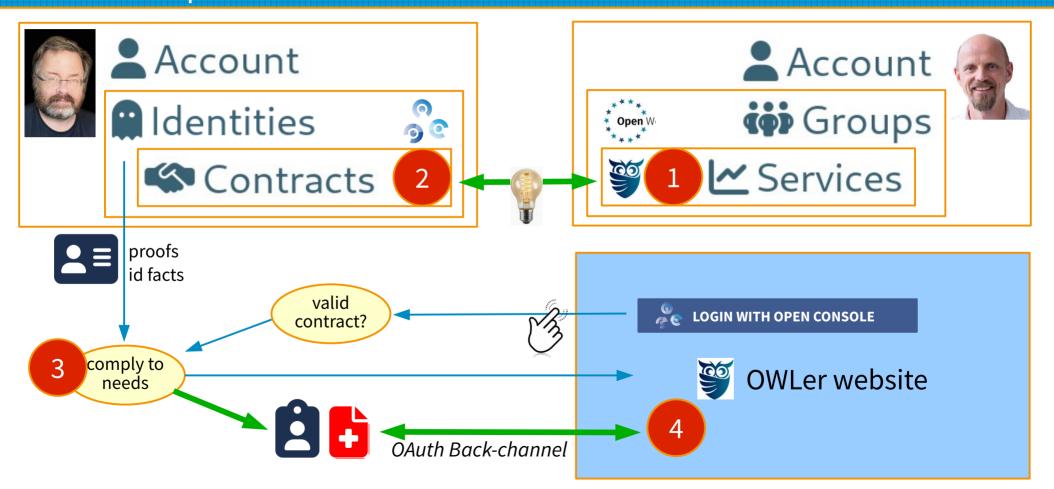
The service provider explains:

STOP

 \sim

We will address you with your nickname, if you provide one. Otherwise, we use your full name.

The email-address is required to fight spam.



Step 4: OAuth Back-channel

{

OpenID Connect

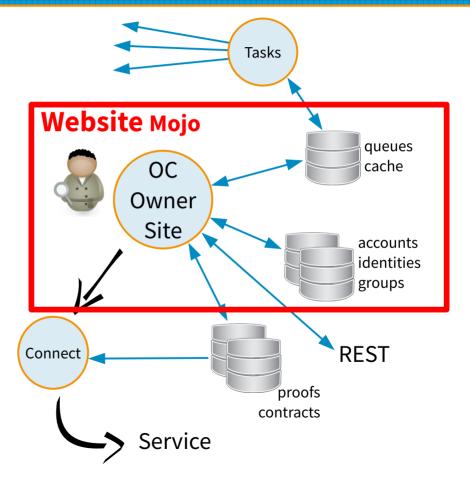
```
"sub": "248289761001",
"name": "Jane Doe",
"given_name": "Jane",
"family_name": "Doe",
"preferred_username": "j.doe",
"email": "janedoe@example.com",
"picture": "http://example.com/me.jpg"
```

"Open Console Connect"

```
'id': 'WDJ@OI@J0JigjodihohOhoh',
'service': {
  'websites': [ 'https://www.doe.com' ],
  'version': '2021v1'
},
'created': '2022-12-21T15:34:12Z',
  'oc_instance': '001'
},
'person': {
          # selected facts of an Identity
  'name': 'John Doe',
  'email': [ 'joe@doe.com', 'joe@example.com' ]
},
},
'contract': {
   'id': 'xyz:C:WDJ@OI@J0JWqjqljdoiqjodihohOhoh',
   'created': '2022-12-21T15:34:12Z',
   'signed': '2024-07-21T15:36:12Z'
},
'proofs': [ ... ]
```

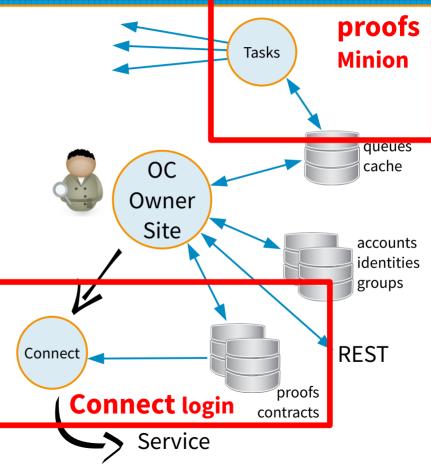
Prepared for HUGE scale

- Different DBs clusters per data character, different DB types.
- Cluster of worker servers for slow tasks.
- Cluster of servers for connect (login) processes
- Security/Privacy/Fairness



Prepared for HUGE scale

- Different DBs clusters per data character, different DB types.
- Cluster of worker servers for slow tasks.
- Cluster of servers for connect (login) processes
- Security/Privacy/Fairness



Try it soon!

https://open-console.eu team@open-console.eu

https://github.com/skrodon/

