

LOSH

Library of Open Source Hardware

**...collecting data on innovation projects in open
source hardware communities**

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Martin Häuer, Fraunhofer Institute for Production
Systems and Design Technology IPK,
[OPEN!NEXT](#) project



open source
hardware

The Problem

isolated innovation



PubInv Ventilator Project

- individual ventilator designs
-



PubInv Ventilator Project

- 145 individual (!) ventilator designs

-



PubInv Ventilator Project

- 145 individual (!) ventilator designs
...partly merging after the launch of PubInv
-



PubInv Ventilator Project

- 145 individual (!) ventilator designs
...partly merging after the launch of PubInv
- <50% under free/open license

The LOSH Approach

distributed, open innovation

Goal

making innovation:

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-
-

Goal

making innovation:

- explorable ...for non-geeks
-
-

Goal

making innovation:

- explorable ...for non-geeks
- comparable ...after standardised criteria
-

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- linkable ...platform-independent

Goal

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Support Design Reuse

Open Know-How



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-
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Open Know-How



- metadata specification
-
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Open Know-How



- metadata specification
- central CSV
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Open Know-How



- metadata specification
- central CSV
- frontend for searching

LOSH

What It Is

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-
-

LOSH

What It Is

- metadata specification (+ ontology etc.)
-
-

LOSH

What It Is

- metadata specification (+ ontology etc.)
- crawler-based distributed knowledge base (linked open data)
-

LOSH

What It Is

- metadata specification (+ ontology etc.)
- crawler-based distributed knowledge base (linked open data)
- meta search engine

How It Works

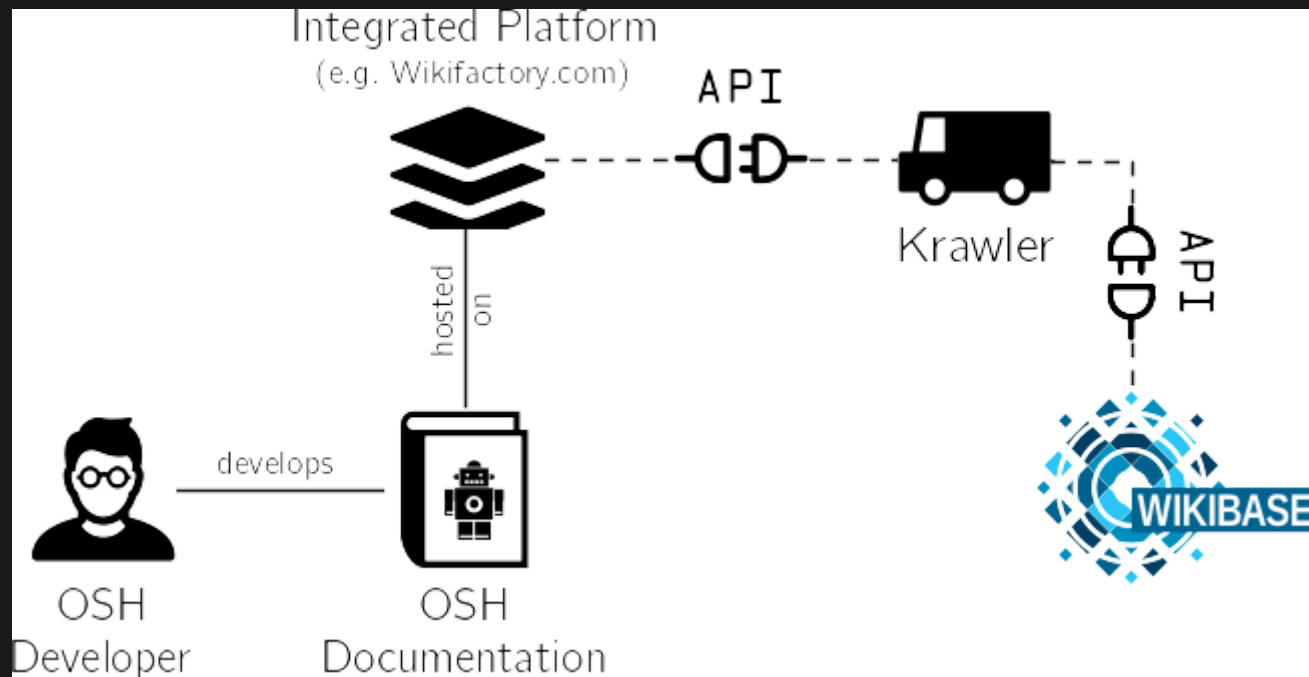


How It Works

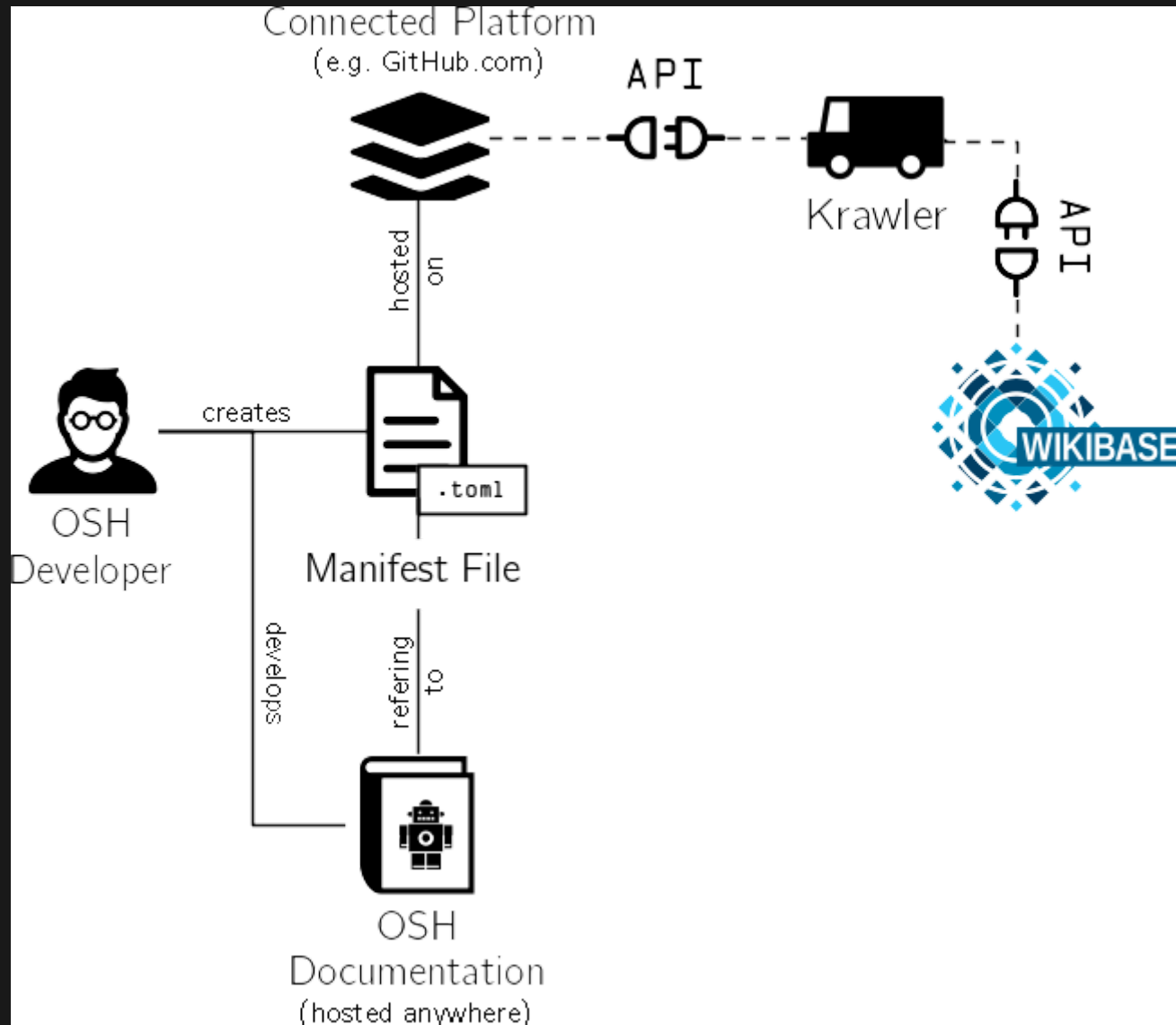


4 methods of data collection:

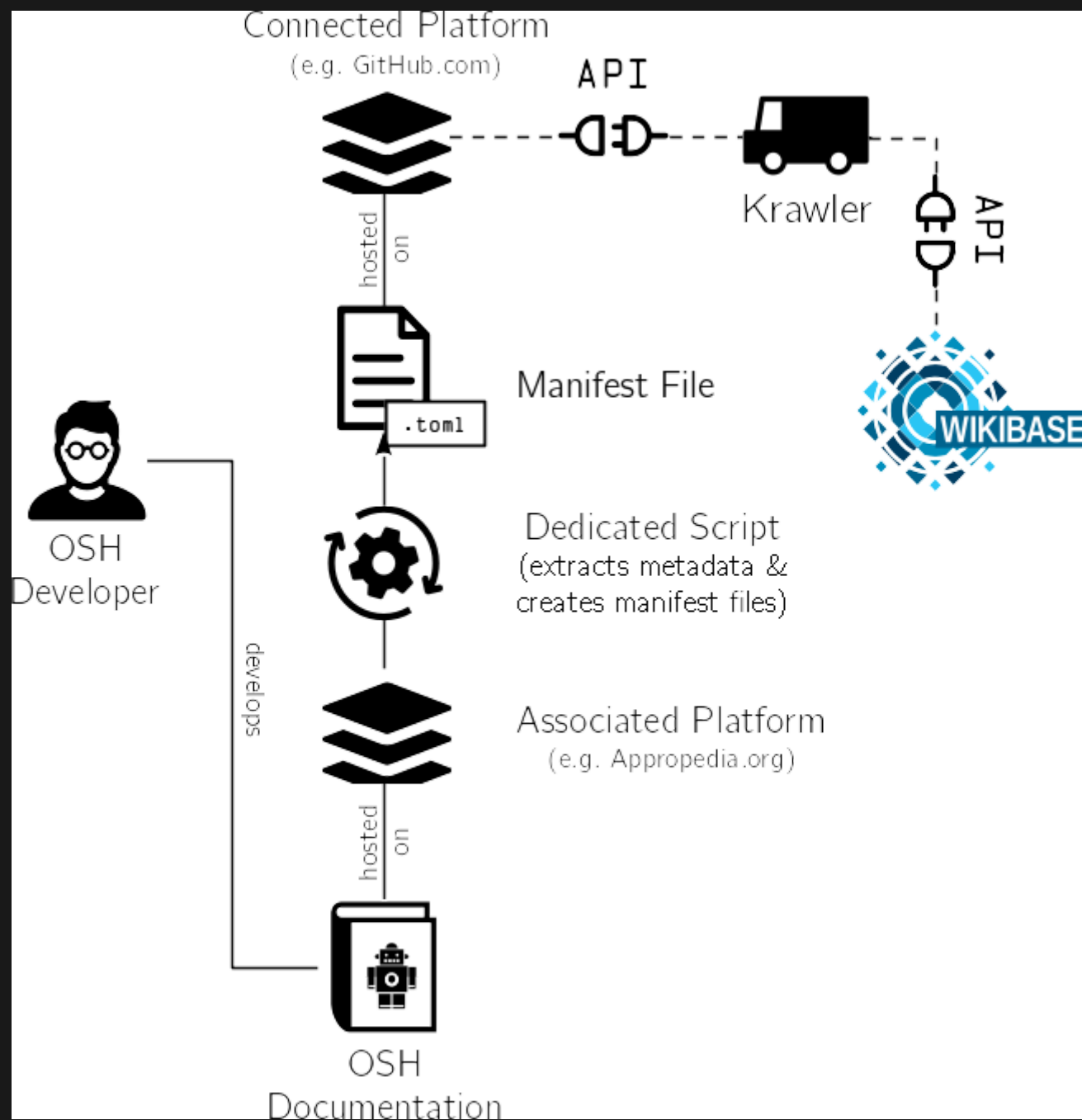
directly from the platform's API



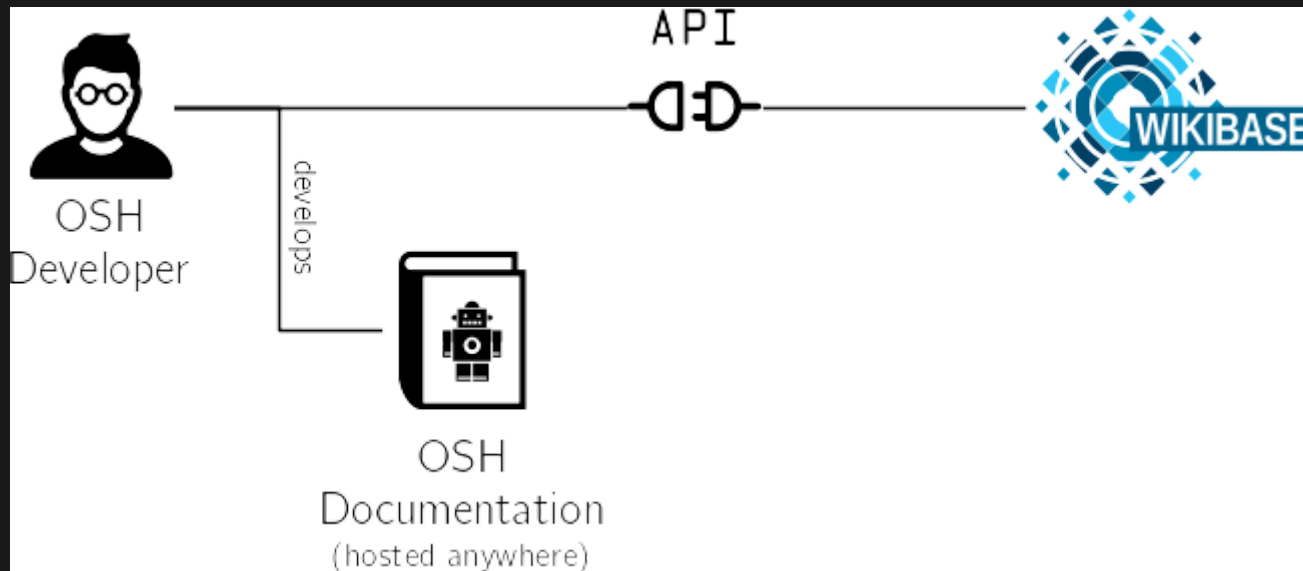
by manifest files accessed via the API

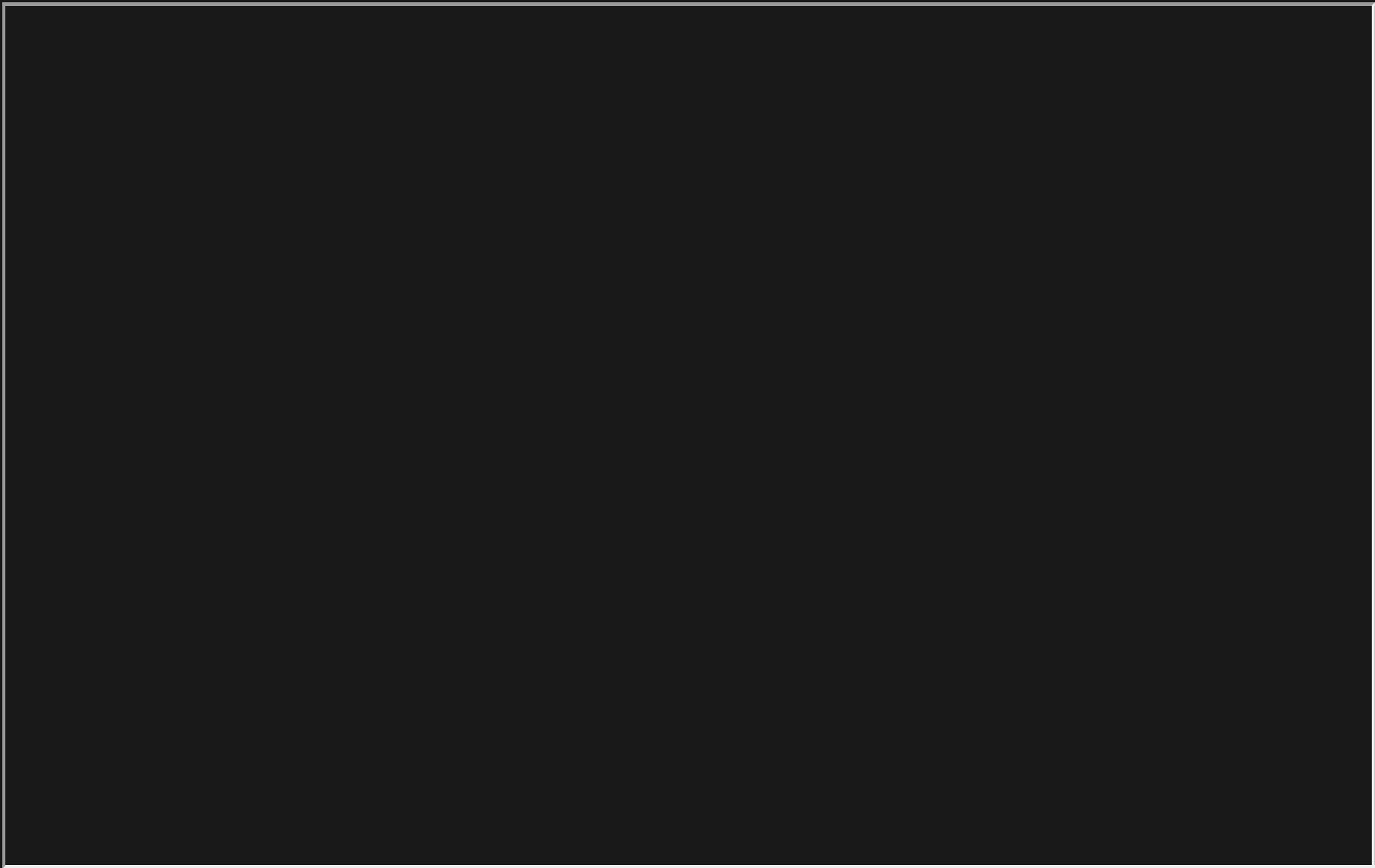


by manifest files using scripts



pushing data directly to the Wikibase API





Features



Features

- filters out projects:
 - without free/open licenses
 - with (mostly) empty repositories
- -
 -
 -
 -
-

Features

- filters out projects:
 - without free/open licenses
 - with (mostly) empty repositories
- find, filter compare projects by their
 - name, function
 - licensing scheme
 - certification status
 - ...
-

Features

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- Linked Open Data!

Top 5 Issues

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- compatibility of data
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- compatibility of data
- reliability of data
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Top 5 Issues

- compatibility of data
- reliability of data
- API limitations & bugs
- compatibility of software modules
-

Top 5 Issues

- compatibility of data
- reliability of data
- API limitations & bugs
- compatibility of software modules
- edge cases only

Q&A
