FAIR EVA

Présentation de FAIR EVA dans le cadre d'un webinaire organisé par EOCS-SYnergie

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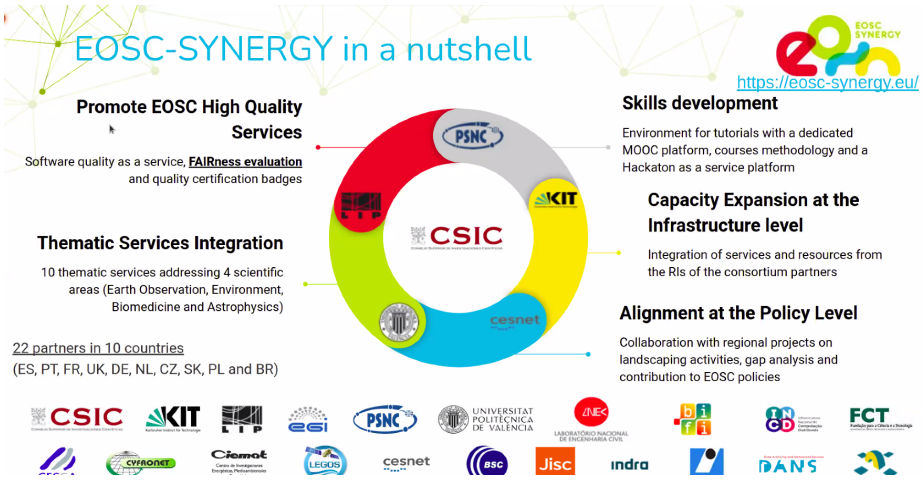
présentation de FAIR EVA (Evaluator, Validator, Advisor) Enregistrement de la présentation sur Youtube

Fernando Aguilar Gomez IFCA-CSIC (aguilarf@ifca.unican.es), impliqué dans RDA (Research Data Alliance) FAIR EVA conçu pour s'assurer de la qualité des métadonnées que l'on crée pour nos jeux de données. Evaluation de la compatibilité avec les principes [[FAIR]]

"create a FAIRness evaluation"



Overview of the FAIR Principles

- Findable
- Accessible
- Interoperable
- Reusable

Refer to three types of entities: data (digital object), metadata (information about that digital object), and infrastructure.

FAIR Indicators

**Findable

Findable

- ❑ F1: (Meta) data are assigned globally unique and persistent identifiers
- ❑ F2: Data are described with rich metadata
- ❑ F3: Metadata clearly and explicitly include the identifier of the data they describe
- ❑ F4: (Meta)data are registered or indexed in a searchable resource

**Accessible

- A1: (Meta)data are retrievable by their identifier using a standardised communication protocol
- A1.1: The protocol is open, free and universally implementable
- A1.2: The protocol allows for an authentication and authorisation where necessary
- A2: Metadata should be accessible even when the data is no longer available

**Interopérable, reusable

- I1: (Meta)data use a formal, accessible, shared, and broadly applicable language for knowledge representation
- I2: (Meta)data use vocabularies that follow the FAIR principles
- I3: (Meta)data include qualified references to other (meta)data

not only evaluate, but also validate (label) and advise

application modulaire faite de plusieurs composants, la solution est conçue pour être flexible et adaptable à différentes communautés scientifiques

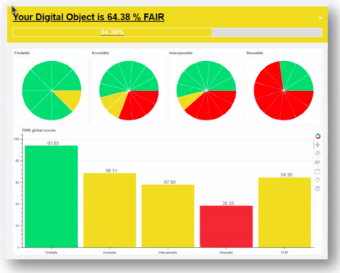
cible : déposants de données, administrateurs de portails, financeurs

développé en Python, dispose d'une API et d'une interface web. possible de lancer l'outil Python avec Docker

FAIR Assessment tools - FAIR EVA

- FAIR EVA functionality
- Comply with FAIR Data principles:
  1. **Data**: use a proper format
  2. **Metadata**: community standard. Machine-actionable (JSON, XML, RDF...)
  3. **PIDs**: Persistent Identifier (e.g. DOI). Provided by an accepted authority.
  4. **Repository/Data service**: indexed and machine-actionable.
- Integration: Different types of repositories/data portals

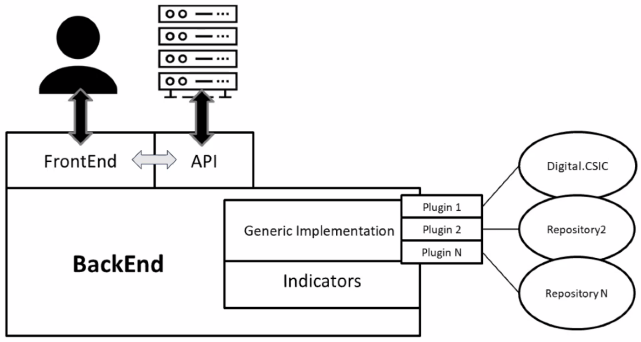
FAIR EVA



Technical Implementation examples

Indicator Code	EN_title	EN_tech
RDA-F1-01M	Metadata is identified by a persistent identifier	Search within a predefined list of potential metadata terms to identify the metadata (dc.identifier.uri and dc.identifier.doi) if any information is available.
RDA-A1-04M	Metadata is accessed through standardised protocol	Checks the protocol to access metadata (OAI-PMH, API..)
RDA-I1-01M	Metadata uses knowledge representation expressed in standardised format	Checks metadata terms including controlled vocabulary information. So far, it checks GEONAMES, Library of Congress Subject Headings and ORCID, but it's being extended.
RDA-R1-01M	Plurality of accurate and relevant attributes are provided to allow reuse	Depending on the metadata schema used, checks that at least the mandatory terms are filled (75%) and the number of terms are high (25%)

FAIR EVA - Architecture



Launch application

Stand-alone mode

```
git clone https://github.com/EOSC-synergy/FAIR_eva.git
cd ./FAIR_eva
pip3 install -r requirements.txt
cp config.ini.template config.ini
/FAIR_eva/fair.py &
/FAIR_eva/web.py &
```

ça fonctionne en localhost (localhost:5000)

Autres modes de fonctionnement (cf plus bas, mail reçu de l'auteur le 18 avril 2022) :

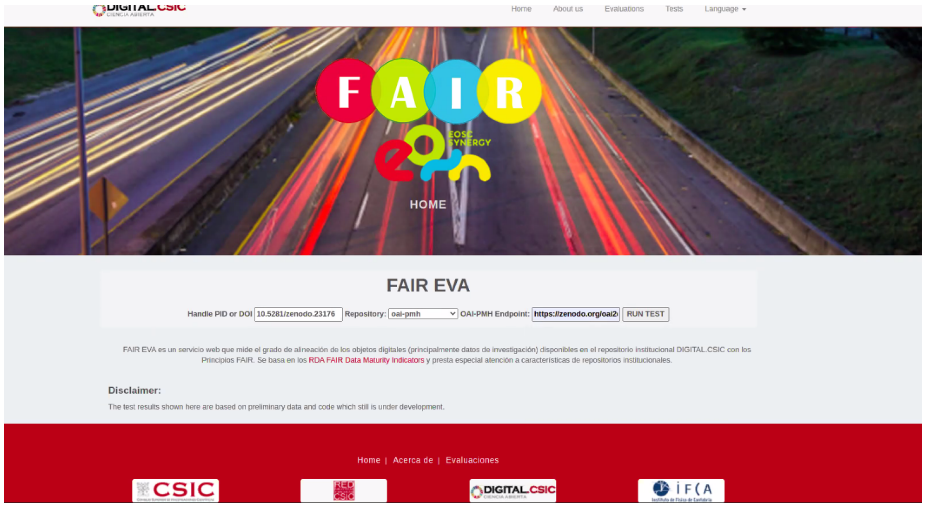
"The tool has two different and main parts: the API and the web interface. You are running the API, so you can try to access using the URL "http://localhost:9090/v1.0". Otherwise, you can also run the web interface (web.py), which connects directly with the API.

If you want to run the docker container, you I'd suggest you to use the following command:

`docker run --name=fair_eva -dit --network host ferag/fair_eva:latest`

There is a version of the config.ini by default, but it probably need to be customized.""

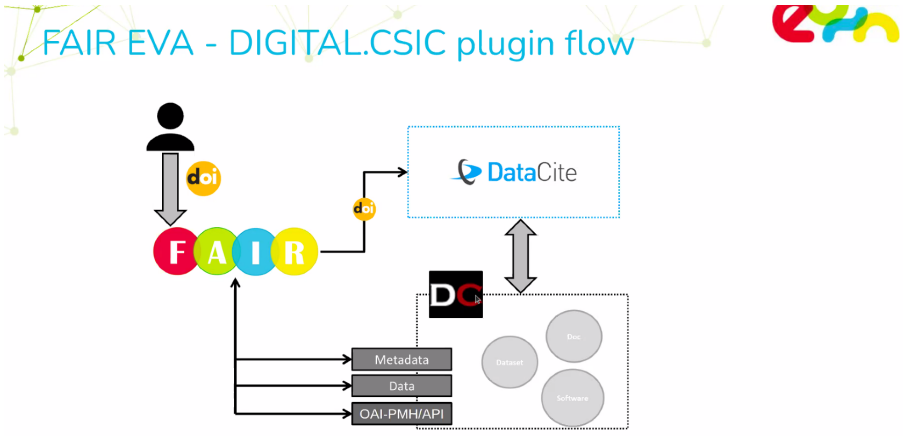
on envoie le DOI de l'entrepôt



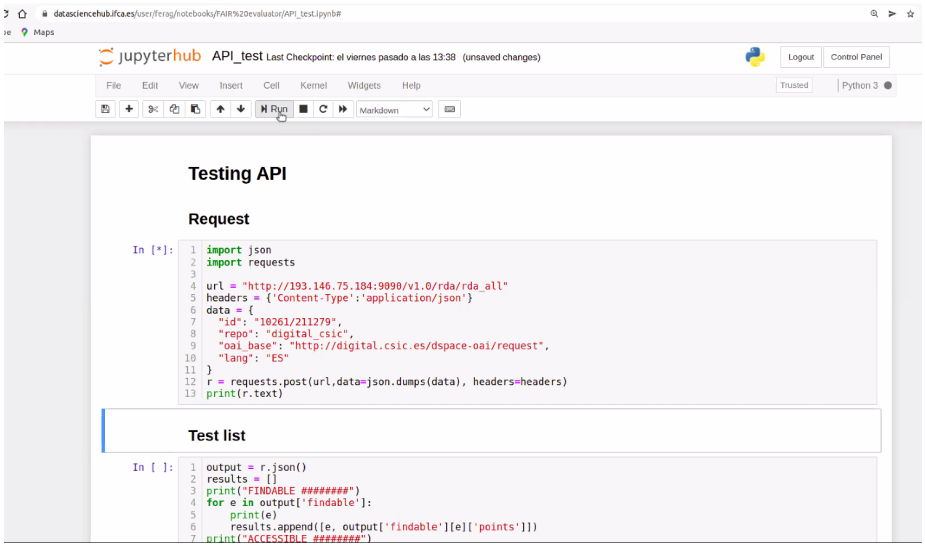
Quand le score n'est pas de 100% on reçoit des recommandations pour améliorer la FAIRité des données. On peut exporter le bilan en PDF

possibilité selon l'entrepôt de départ de configurer le fichier config en indiquant par exemple où trouver les informations relatives à la licence (dans le cas de Zotero c'est dans dc.rights)

implémentation de l'API sur l'entrepôt du CSI



intégration dans Jupyter



difficulté de trouver le endpoint d'un repository, pour Zenodo, c'est sur le site https://zenodo.org/oai2d pas de menu déroulant avec la liste des dépôts liés à leurs *endpoints*. Il faut fournir l'un et l'autre.