

# OpenAIRE

## Services für Repositorien im Content Provider Dashboard

OpenAIRE - Workshop auf den Open Access Tagen 2018, Graz

**Jochen Schirrwagen**

Universitätsbibliothek Bielefeld

**Olivia Kaiser**

Universitätsbibliothek Wien

**Jessica Rex**

Universitätsbibliothek Konstanz

**André Hoffmann**

Universitätsbibliothek Zürich

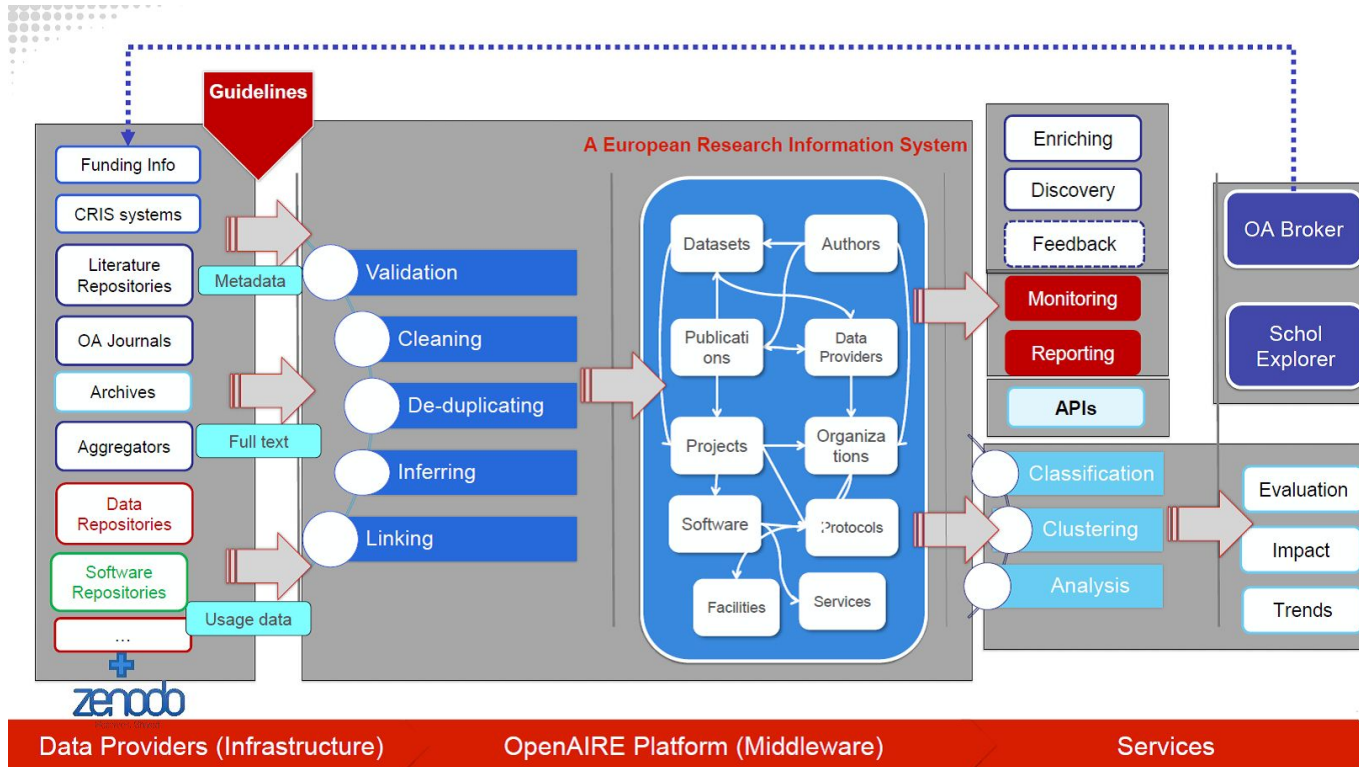


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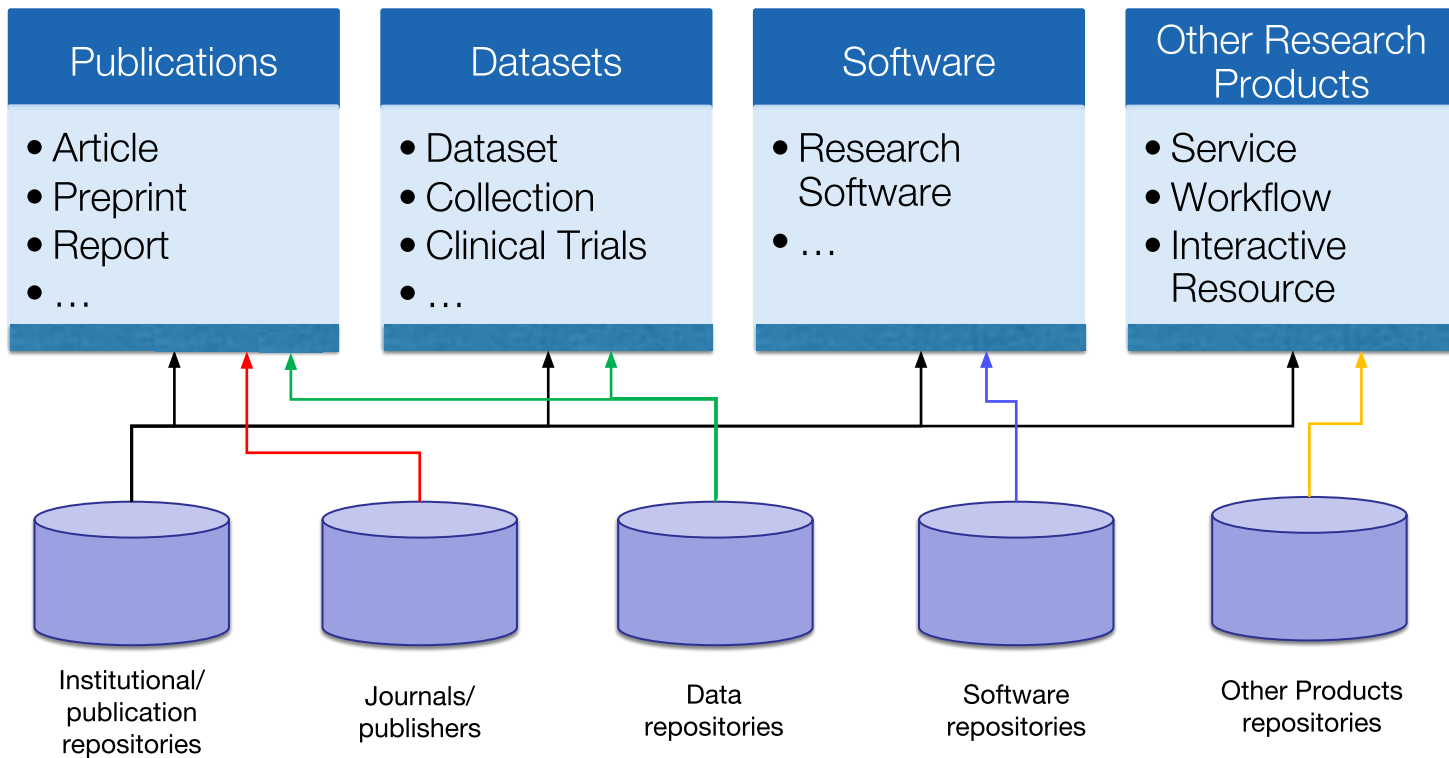
# Agenda

- **Übersicht OpenAIRE Infrastruktur**
- **Interoperabilitätsguidelines**
- **Services im Content Provider Dashboar**
- **OpenAIRE API**

# OpenAIRE Infrastruktur schematisch



# Aggregation von Forschungsergebnissen (entspr. überarbeiteter Content Acquisition Policy)



# Interoperability Guidelines

# Von Guidelines für Data Provider Zu **Guidelines für Open Science Content Provider**

## RESEARCH

### LITERATURE

Thematic Repositories

Institutional Repositories

E-journals

### RESEARCH SOFTWARE

Software Repositories

Catch-all Repositories

### RESEARCH DATA

Data Repositories

Catch-all Repositories

Institutional & thematic repositories

### Other RESEARCH Products

Catch-all Repositories

### RESEARCH INFORMATION

CRIS



OpenAIRE Guidelines 3.0

Docs » OpenAIRE Guidelines for Literature Repositories View page source

## OpenAIRE Guidelines for Literature Repositories

- Introduction
- Use of OAI-PMH
- Use of OAI-DC
- Application Profile Overview

**Application Profile:**

- 1. Title (M)
- 2. Creator (M)
- 3. Project Identifier (MA)
- 4. Access Level (M)
- 5. License Condition (R)
- 6. Embargo End Date (MA)

OpenAIRE Guidelines 3.0

Docs » OpenAIRE Guidelines for Data Archives

## OpenAIRE Guidelines for Data Archives

- Introduction
- Use of OAI-PMH
- Use of DataCite
- Application Profile Overview

**Application Profile:**

- 1. Identifier (M)
- 2. Creator (M)
- 3. Title (M)
- 4. Publisher (M)
- 5. Publication Year (M)
- 6. Subject (R)
- 7. Contributor (MA/O)
- 8. Date (M)
- 9. Language (R)
- 10. ResourceType (R)
- 11. AlternateIdentifier (O)
- 12. RelatedIdentifier (MA)
- 13. Size (O)
- 14. Format (O)
- 15. Version (O)
- 16. Rights (MA)
- 17. Description (MA)
- 18. GeoLocation (O)

OpenAIRE Guidelines for CRIS Managers

CRIS information elements relevant for OpenAIRE

CERIF is a comprehensive model for the research domain. Only a subset of that information is relevant for OpenAIRE. For example, Publications, Products (including research datasets and software), and Events fall in the scope of the OpenAIRE profile, while Prizes and Geographic bounding boxes do not. The following diagram shows the part of the CERIF model is being used in this version of the OpenAIRE Guidelines:

— since OpenAIRE CERIF Guidelines 1.0  
— added in OpenAIRE CERIF Guidelines 1.1

## CURRENT GUIDELINES

[OpenAIRE Guidelines for Literature Repositories](#)[OpenAIRE Guidelines for Data Archives](#)[OpenAIRE Guidelines for CRIS Managers based on CERIF-XML](#)

## GUIDELINES DRAFTS

[Draft OpenAIRE Guidelines for Literature Repository Managers v4](#)[Draft OpenAIRE Guidelines for Software Repository Managers](#)[Draft OpenAIRE Guidelines for CRIS Managers v1.1](#)

## HOW TO CONTRIBUTE

[Contributing](#)

## APPENDIX

## Draft OpenAIRE Guidelines for Software Repository Managers

The OpenAIRE Guidelines for Software Repository Managers are drafted for consultation and community feedback at <http://software-guidelines.readthedocs.io/en/latest/index.html>.

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## Application Profile Overview

This documentation uses the following namespace abbreviation:

- [datacite](http://datacite.org/schema/kernel-4) : <http://datacite.org/schema/kernel-4>

| OpenAIRE-Field                | Metadata Element             |
|-------------------------------|------------------------------|
| 1. Identifier (M)             | datacite:identifier          |
| 2. Author (M)                 | datacite:creator             |
| 3. Contact Person (O)         | datacite:contributor         |
| 4. Contact Group (O)          | datacite:contributor         |
| 5. Name (M)                   | datacite:title               |
| 6. Repository (R)             | datacite:publisher           |
| 7. Software Type (M)          | datacite:resourceType        |
| 8. Subject (R)                | datacite:subject             |
| 9. Release date (R)           | datacite:date                |
| 10. Description language (O)  | datacite:language            |
| 11. Alternate identifier (O)  | datacite:alternateIdentifier |
| 12. Landing page (R)          | datacite:alternateIdentifier |
| 13. Distribution location (R) | datacite:alternateIdentifier |
| 14. Documentation (R)         | datacite:relatedIdentifier   |
| 15. RelatedIdentifier (O)     | datacite:relatedIdentifier   |
| 16. Programming Language (R)  | datacite:format              |
| 17. Version Number (R)        | datacite:version             |
| 18. Access Rights (M)         | datacite:rights              |
| 19. Licence Condition (R)     | datacite:rights              |
| 20. Description (R)           | datacite:description         |
| 21. Tool (R)                  | datacite:description         |
| 22. Funding Reference (R)     | datacite:fundingReference    |
| 23. Distribution form (O)     | datacite:description         |
| 24. Development status (O)    | datacite:description         |



draft

<https://guidelines.openaire.eu>



# OpenAIRE Guidelines for Other Research Products (ORP) Repository Managers

These guidelines describe the application profile for ORPs Repository managers to be compatible with OpenAIRE.

- [Introduction](#)
- [Application Profile Overview](#)

Next 

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<https://guidelines.openaire.eu>

draft

## Application Profile Overview

This documentation uses the following namespace abbreviation:

- `datacite` : <http://datacite.org/schema/kernel-4>

| OpenAIRE-Field                | Metadata Element             |
|-------------------------------|------------------------------|
| 1 Identifier (M)              | datacite:identifier          |
| 2. Author (M)                 | datacite:creator             |
| 3. Contact Person (O)         | datacite:contributor         |
| 4. Contact Group (O)          | datacite:contributor         |
| 5. Name (M)                   | datacite:title               |
| 6. Repository (R)             | datacite:publisher           |
| 7. Type (M)                   | datacite:resourceType        |
| 8. Subject (R)                | datacite:subject             |
| 9. Release date (R)           | datacite:date                |
| 10. Description language (O)  | datacite:language            |
| 11. Alternate identifier (O)  | datacite:alternateIdentifier |
| 12. Landing page (R)          | datacite:alternateIdentifier |
| 13. Distribution location (R) | datacite:alternateIdentifier |
| 14. Documentation (R)         | datacite:relatedIdentifier   |
| 15. RelatedIdentifier (R)     | datacite:relatedIdentifier   |
| 16. Format (O)                | datacite:format              |
| 17. Version Number (R)        | datacite:version             |
| 18. Access Rights (M)         | datacite:rights              |
| 19. Licence Condition (R)     | datacite:rights              |
| 20. Description (R)           | datacite:description         |
| 21. Tool (R)                  | datacite:description         |
| 22. Funding Reference (R)     | datacite:fundingReference    |

# Bedarfe zur Aktualisierung der Guidelines für Literature Repositories

- **Perspektive der Forschungsförderer**
  - Verknüpfung von Forschungsergebnissen mit Projekt-Förderer-Information
- **Autoren- und Leser-Perspektive**
  - Verknüpfung von Autoren-Identifiern mit ihren Forschungsergebnissen, sowie Unterstützung der Autorennamen-Disambiguierung
- **Serviceprovider-Perspektive**
  - Vermeiden des Überladens von OAI-DC Metadatenelementen
  - Unterstützung kontrollierter Vokabulare, deren Implementierung Linked-Data-Prinzipien unterstützt
  - Lokalisierung von Volltexten
  - Verbesserung der Interoperabilität mit anderen Repository-Netzwerken weltweit
    - **Beispiele: LA Referencia, JAIRO**

# Vergleich Guidelines v3 mit v4

|                           | V3  | V4  |
|---------------------------|---|---|
| Metadaten-Schemata        | DC (OAI-DC)<br>22 Properties in 15 Feldern                  | DC+DataCite+OAIRE<br>30 Properties in 29 Feldern mit Attributen |
| Vokabulare                | info:eu-repo  | COAR-CV, CC, ...  |
| Identifizier-Bezüge       | Zum Werk, zu anderen Werken, zu ausgewählten (EU)-Projekten | Zusätzl. zu Personen, Forschungsförderern, Projekten            |
| Bibliographisches Zitat   | Als Wert in dc:source                                       | Verschiedene "citation"-Properties; Granularität                |
| Auszeichnung des Volltext | -   | Eigenes Property und Feld                                       |
| Lizenzangaben             | In dc:rights vermischt mit Access-Angaben                   | Eigenes Property und Feld                                       |
| Version                   | In dc:type vermischt mit Publikationstyp                    | Eigenes Property und Feld (Vokabular in Überarbeitung)          |

# OpenAIRE Services im Content Provider Dashboard



## SOURCES

Register

Update

## COMPATIBILITY

Validate

Validation History

Collection Monitor



## CONTENT

Events

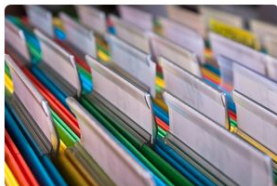
Enrichments

Notifications

## METRICS

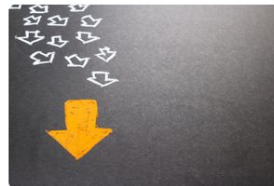
Enable usage stats

Views and downloads



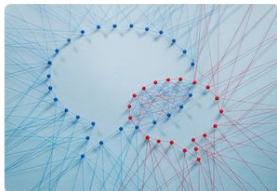
## Register

Register data sources in the OpenAIRE infrastructure



## Validate

Validate data sources against OpenAIRE guidelines



## Notifications

View notifications to enrich the metadata and the content



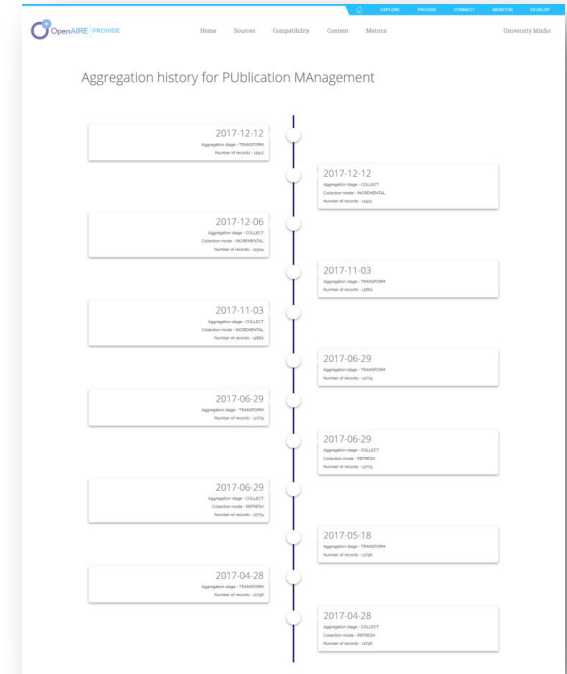
## Metrics

View aggregated, cleaned usage statistics for repository access

# PROVIDE Dashboard: Validator

- Validierung von Metadatenrecords gegen Metadatenschemata (OpenAIRE Guidelines)
- Aggregationshistorie

The screenshot shows the 'Run compatibility test' interface. At the top, there is a navigation bar with 'Home', 'Sources', 'Compatibility', 'Content', and 'Metrics'. Below the navigation bar, a progress indicator shows four steps: 'Select datasource' (active), 'Select guidelines', 'Select parameters', and 'Finish'. Under 'Select datasource', there are two options: 'CHOOSE EXISTING BASE URL' (selected) and 'OR ENTER ONE MANUALLY'. A text input field contains the URL 'http://repositorium.sdum.uminho.pt/oa/openaire'.



# PROVIDE Dashboard: OA Broker Service

Idee: Nutzung des OpenAIRE Information Graph (im Ergebnis von Metadaten-Aggr., Deduplizierung, Inferenz)

Zielgruppe: Repository-Manager mit Interesse an zusätzlichen Metadateninformationen zu Publikation ihrer Kollektionen

- weitere Records (als Ergebnis von Wissensextraktion, Relationsbeziehungen, z.B. Autor / Affiliation)
- Anreicherung / Korrektur von Metadaten (als Ergebnis von Deduplizierung und Wissensextraktion)



# PROVIDE Dashboard: OA Broker in der Praxis

The image displays the OpenAIRE PROVIDE dashboard interface. The top navigation bar includes 'EXPLORE', 'PROVIDE', 'CONNECT', 'MONITOR', and 'DEVELOP'. The main content area is divided into two panels. The left panel, titled 'Enrichments for Universidade do Minho: RepositoriUM', shows a list of enrichment events categorized into 'MORE' and 'MISSING'. The right panel, titled 'Universidade do Minho: RepositoriUM', displays a detailed view of a specific event, including its ID, title, author, and PID, along with a 'TWEAK AND REFINE EVENTS' sidebar.

**Enrichments for Universidade do Minho: RepositoriUM**

| EVENTS THAT MAY ENRICH UNIVERSIDADE DO MINHO: REPOSITORIUM CONTENT   | # OF EVENTS  |
|--|--------------|
| <b>ENRICH/MORE/OPENACCESS_VERSION</b><br><i>OpenAIRE discovered another Open Access version of a publication</i>   | 18296        |
| <b>ENRICH/MORE/PID</b><br><i>OpenAIRE discovered another persistent identifier associated to your publications</i>   | 5725         |
| <b>ENRICH/MORE/SUBJECT/JEL</b><br><i>OpenAIRE discovered more Journal of Economic Literature (JEL) classification terms that can be associated to your publications</i>            | 4151         |
| <b>ENRICH/MORE/SUBJECT/DDC</b><br><i>OpenAIRE discovered more Dewey Decimal classification terms (DDC) that can be associated to your publications</i>                             | 1028         |
| <b>ENRICH/MORE/SUBJECT/MESHUROPMC</b><br><i>OpenAIRE discovered more classification terms from the Medical Subject Headings (MeSH) that can be associated to your publications</i> | 799          |
| <b>ENRICH/MORE/SUBJECT/ARXIV</b><br><i>OpenAIRE discovered more ARXIV classification terms that can be associated to your publications</i>   | 636          |
| <b>ENRICH/MORE/SUBJECT/ACM</b><br><i>OpenAIRE discovered more ACM classification terms that can be associated to your publications</i>   | 158          |
| <b>Total</b>   | <b>30793</b> |

| EVENTS THAT MAY ENRICH UNIVERSIDADE DO MINHO: REPOSITORIUM CONTENT   | # OF EVENTS |
|--|-------------|
| <b>ENRICH/MISSING/PROJECT</b><br><i>OpenAIRE discovered references to research to your publications</i>  |             |
| <b>ENRICH/MISSING/PID</b>  |             |
| <b>ENRICH/MISSING/SUBJECT/DDC</b><br><i>OpenAIRE discovered Dewey Decimal class associated to your publications</i>  |             |
| <b>ENRICH/MISSING/SUBJECT/ARXIV</b><br><i>OpenAIRE discovered ARXIV classification your publications</i>   |             |
| <b>ENRICH/MISSING/ABSTRACT</b><br><i>OpenAIRE discovered missing abstracts among your publications</i>   |             |
| <b>ENRICH/MISSING/SUBJECT/MESH</b><br><i>OpenAIRE discovered classification terms from the Medical Subject Headings (MeSH) that can be associated to your publications</i> |             |
| <b>ENRICH/MISSING/OPENACCESS_VERSION</b><br><i>OpenAIRE discovered Open Access versions of your publications</i>   | 193         |
| <b>ENRICH/MISSING/SUBJECT/JEL</b><br><i>OpenAIRE discovered Journal of Economic Literature (JEL) classification terms that can be associated to your publications</i>      | 162         |
| <b>ENRICH/MISSING/SUBJECT/ACM</b><br><i>OpenAIRE discovered ACM classification terms that can be associated to your publications</i>                                       | 33          |
| <b>Total</b>   | <b>8623</b> |

**Universidade do Minho: RepositoriUM**

ENRICH | MISSING | PROJECT

Showing 1-10 of 28 results

TRUST: 0.85720026512146

| ID               | oai:repositorium.sdum.uminho.pt:1822/29005  |
|------------------|---|
| <b>Title(s)</b>  | Understanding SaP1 specific packaging determinants: Estudo dos determinantes envolvidos no empacotamento da SaP1  |
| <b>Author(s)</b> | Bento, Joana Caetano  |
| <b>PID(s)</b>    | Tese de doutoramento Programa Doutoral em Engenharia Biomédica<br>Staphylococcus aureus encodes numerous virulence factors that allow it to cause a wide variety of infections. S. aureus is, in fact, one of the leading causes of nosocomial and community acquired infections. Many of the toxin and antibiotic resistance genes in S. aureus reside on mobile genetic elements, that includes mobile gene cassettes, prophage, transposons, and pathogenicity islands like the SaPis. Members of the SaP1 family, which carry several enterotoxin genes, employ a novel mechanism for horizontal transfer that exploits |

**TWEAK AND REFINE EVENTS**

Trust: 0.85720026512146

Title: [x]

Author: [x]

Subject: [x]

Date: 05/17/2014 [x]

05/17/2018 [x]

APPLY CLEAR

Interaktive Auswahl von Benachrichtigungstypen

Typen & Anzahl von Benachrichtigungen für ein Repository

# PROVIDE Dashboard: Usage Statistics Funktionen

---

- Tracking von Nutzungsereignissen
  - Abruf von COUNTER Reports
- 

- Akkumulation von “view” und “download” Zahlen für ein Dokument aus verschiedenen Quellen

Anonymisierung von IP-Adressen.

---

**COUNTER Code of Practice kompatibel.**  
zur Vergleichbarkeit von Nutzungsdaten verschiedener Anbieter



# PROVIDE Usage Statistics in der Praxis



Dashboard Sources Compatibility Content Metrics

## Metrics Configuration & Software Details

OpenAIRE's usage statistic service uses the *Piwik Open Source Analytics platform* ([piwik.org](http://piwik.org)) to track usage activity. When *metrics* are enabled for a repository, two unique identifiers are generated - a piwik-ID that associates the repository with its usage events in Piwik and an authentication-ID that allows to track usage activity on the Piwik platform. Metadata views and item downloads are tracked and automatically sent to Piwik. Statistics are generated using the COUNTER Code of practice directives.

OpenAIRE's usage statistics service tracking code exploits Piwik's API. In order to make the tracking of usage events from repositories more robust, it was necessary to implement repository platform specific patches and plugins starting with DSpace and EPrints. The code is maintained on Github:

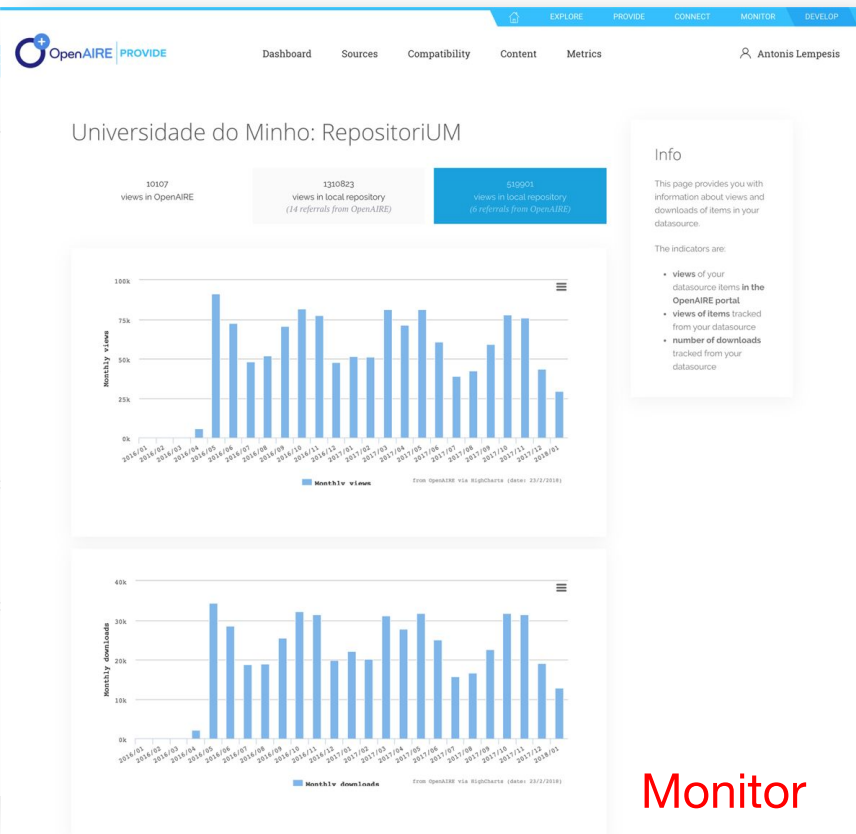
- as a patch for various versions of DSpace (<https://github.com/openaire/OpenAIRE-Piwik-DSpace>)
- as an EPrints plugin for version 3 (<https://github.com/openaire/EPrints-OAPiwik>)

To configure your repository to allow tracking in Piwik platform, please change the configuration files with the following parameters and values, generated for your site:

PiwikID  
104

AuthenticationToken  
106629304

## Konfiguration



# SUSHI-Lite Interface

- <http://services.openaire.eu/usagestats/sushilite/>



- **unterstützt zur Zeit COUNTER R4:**

- Article Reports (AR) und Book Reports (BR) unter Verwendung von Identifiern wie *openaire*, *doi*, *oai-record-id*
- Item Reports (IR)
- Repository Reports (RR) unter Verwendung von Identifiern von OpenDOAR
- Journal Reports (JR) unter Verwendung von Identifiern wie ISSN

## Unterstützte COUNTER USAGE REPORTS

Repository Platform Report – RR1

Journal Report – JR1

Item Report – IR1

Article Report – AR1

Book Report – BR1

Book Chapter Report – BR2

Research Dataset Report tbc.

Research Software Usage Report tbc.

# OpenAIRE APIs

- Exponieren des Information Graph über OAI-PMH und REST-API (<https://api.openaire.eu>)
  - im Scholix Format
  - im OpenAIRE Format
- Zugriff auf Projektinformationen der in OpenAIRE registrierten Forschungsförderer
  - spezielle Schnittstellen für DSpace und EPrints
- Publikation als Linked Open Data (<https://lod.openaire.eu>)
  - Verknüpfung mit Open Citation und WikiData