

DSpace Workshop

Outline

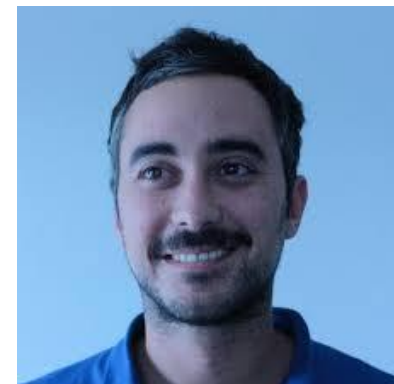
1. Who we are and who are you?
2. International context, interoperability and next generation repositories
3. Dspace technical implementation
4. Dspace-CRIS tutorial
5. Building a community of practice for repositories in Peru

The presenters



Kathleen Shearer, Executive Director, COAR

**Michele Menielli, DuraSpace International
Membership and Partnership Manager**



**Joan Caparros, Technical Leader, Consorci de
Serveis Universitaris de Catalunya**

Susanna Mornati, Chief Operating Officer, 4Science



Who are you?

1. Are you affiliated with a university?
2. Do you currently run DSpace?
3. What version are you running?
version 1, version 2, version 3...

Evolving role of repositories

- From open access to open science – providing access to more than text content (data, etc.)
- Tracking and monitoring research outputs and open access compliance
- Next generation repositories:
 - Better discovery
 - Assessment
 - Social Networking
 - Preservation

Who is COAR?

- Over 100 members and partners from 35 countries in 5 continents
- Universities, libraries, government agencies, open access organizations, not-for-profit organizations, and platform developers
- Diverse perspectives that share a common vision

Major Activities

International voice

Raising the visibility of repository networks as key infrastructure for open science

Alignment and interoperability

Building a global knowledge commons through harmonization of standards and practices

Cultivating relationships

Supporting an international community of practice for repositories and open access

Building capacity

Advancing skills and competencies for repository and research data management

Adopting value-added services

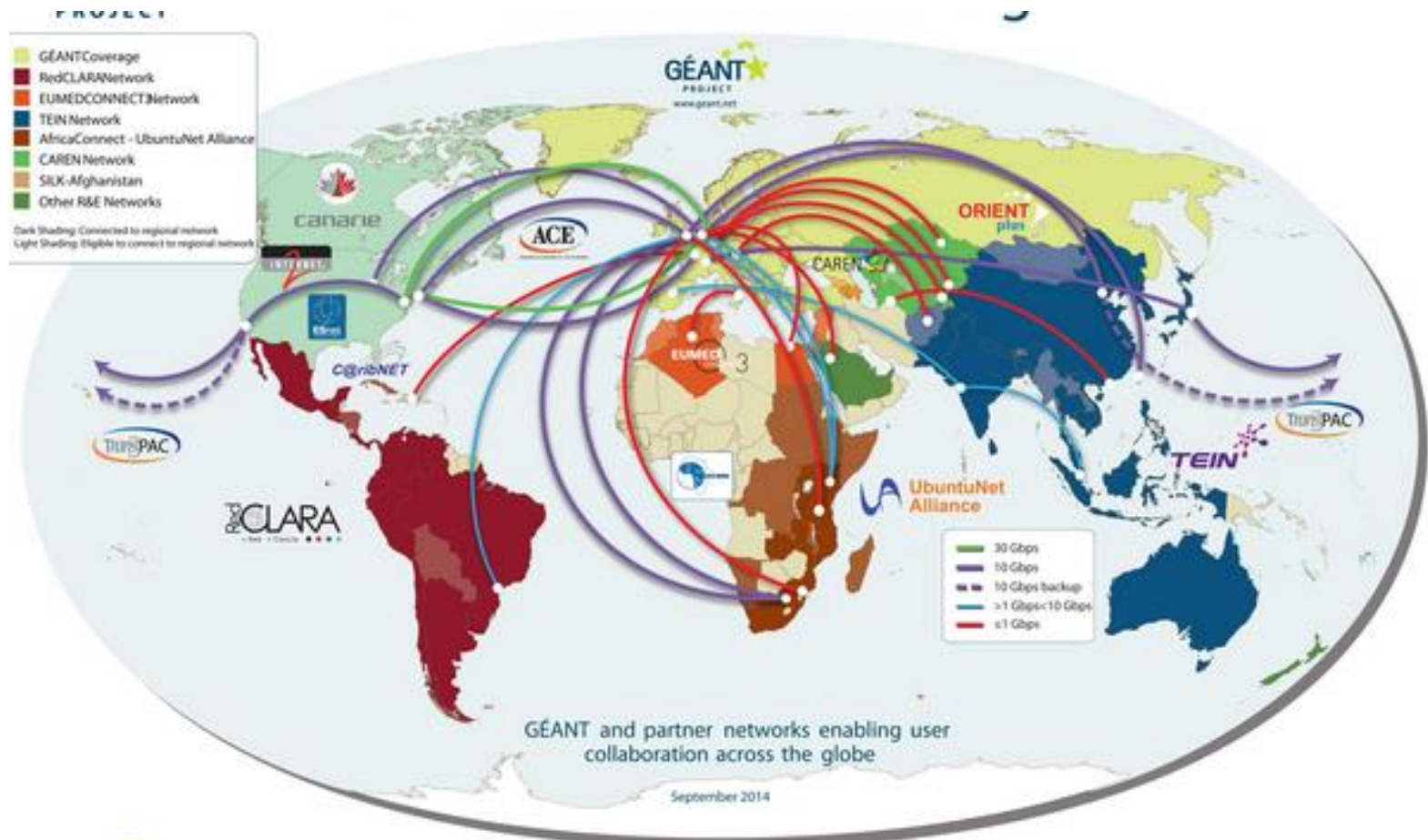
Promoting the use of web-friendly technologies and new functionalities for repositories

How to participate?

- Organizations can join COAR for €500 Euros per year (about \$600 US)
- Join as a single, consortial, or special member or partner
- Download the membership application (<https://www.coar-repositories.org/about/join/become-a-member>)

Interoperability – why?

Because science is networked and repositories are nodes in that network



Interoperability – why?

To support discovery and reuse of content by other services...

The screenshot displays the ALICIA (Acceso Libre a Información Científica para la Innovación) digital repository interface. The main search results page shows a search for "Propuesta de modelo de gestión de hidroviás en el Perú". The results list includes the title, author (JE Reátegui Ríos - 2018), and a brief description of the document. The interface also features a sidebar with filters for "Cualquier momento" (Any time) and "Cualquier idioma" (Any language), and a "Narrow Search" section with suggested topics like "derecho" (law) and "Economía" (economy). The bottom of the page shows a navigation bar with links to "Inicio" (Home), "Institucional", "Nodos" (Nodes), "Servicios" (Services), "Documentos" (Documents), "Prensa" (Press), and "Contacto" (Contact). A large banner at the bottom promotes the repository's mission: "EXPLORA LAS PUBLICACIONES CIENTÍFICAS DE AMÉRICA LATINA EN ACCESO ABIERTO".

ALICIA Acceso Libre a Información Científica para la Innovación

MANUAL DE USO BASE LEGAL RENAF

La mayor colección digital de la producción científica-tecnológica del país

Search:

☒ Retain my current filters

Narrow Search

Remove Filters

Format: Article

Suggested Topics... within your search.

derecho 820 Psicología 417 more ...

Derecho 822 Economía 351

Perú 508 Antropología 304

LA Referencia Red de repositorios de acceso abierto a la ciencia

Inicio Institucional Nodos Servicios Documentos Prensa Contacto

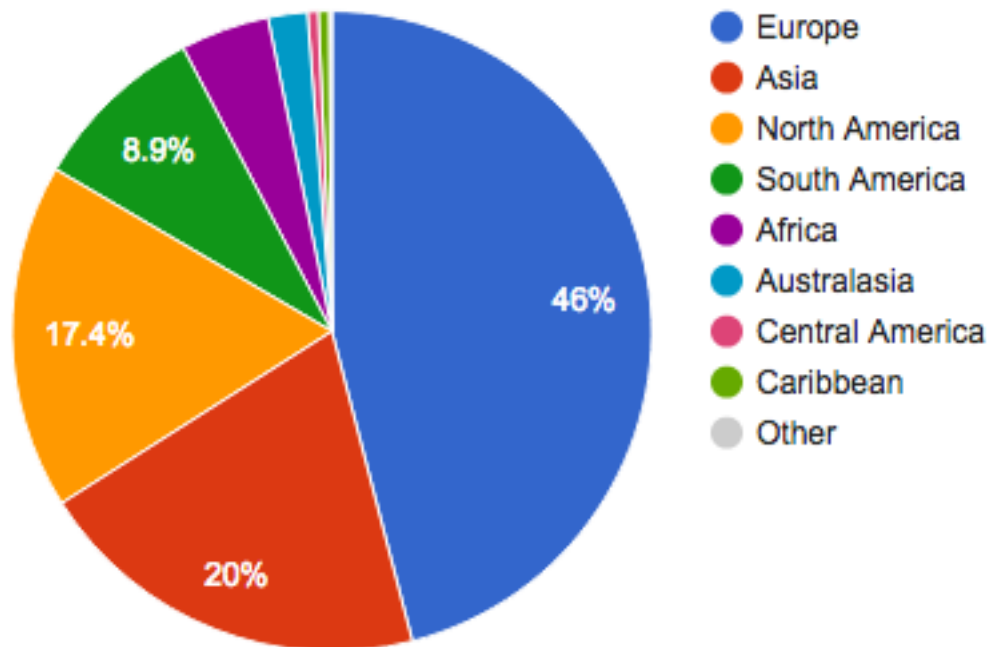
EXPLORA LAS PUBLICACIONES CIENTÍFICAS DE AMÉRICA LATINA EN ACCESO ABIERTO

Ingresa texto... Todos los Campos

9 NODOS NACIONALES	1 431 703 DOCUMENTOS	799 411 ARTÍCULOS 7 107 REPORTES	187 350 TESIS DE DOCTORADO 437 835 TESIS DE MAESTRÍA
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International context

Proportion of Repositories by Continent - Worldwide

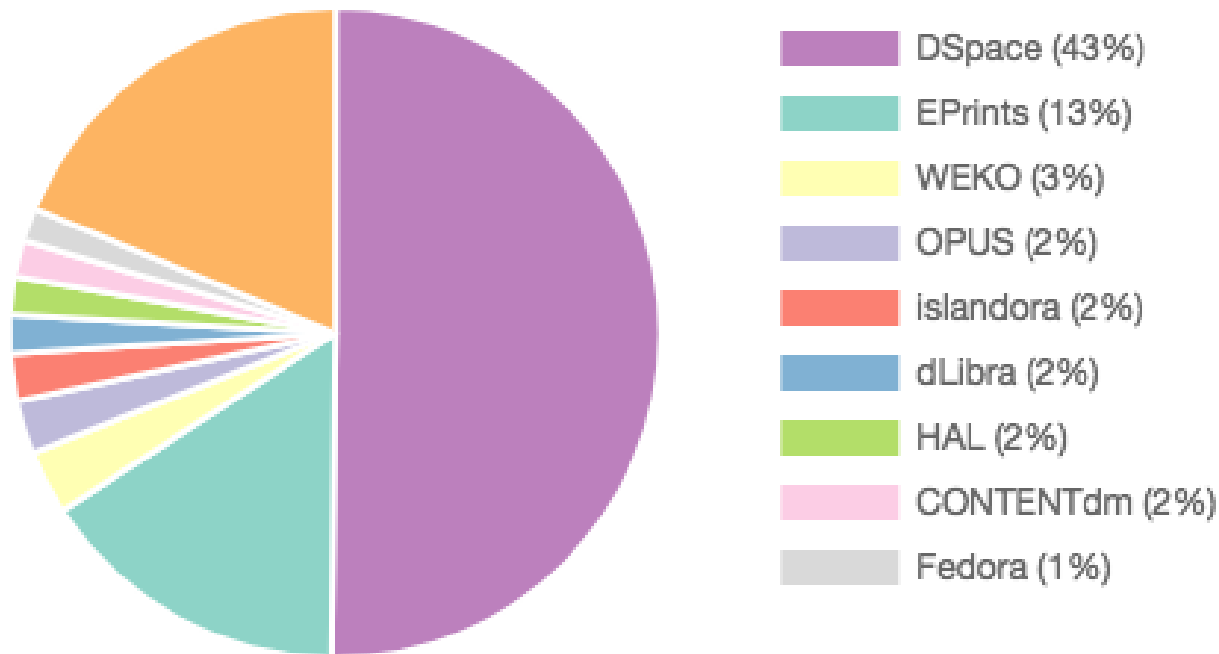


Total = 3519 repositories

OpenDOAR - 18-Jul-2018

International context

Software Platforms Overview



From OpenDOAR: http://v2.sherpa.ac.uk/view/repository_visualisations/1.html

Vocabularios de COAR

02 ¿Por qué es importante?

La utilización de vocabularios controlados para describir los metadatos bibliográficos asegura que todos utilicen el mismo término para significar lo mismo. Mejora la interoperabilidad entre repositorios y con otros sistemas relacionados tales como cosechadores, sistemas CRIS, repositorios de datos y editores. Los vocabularios capturan la riqueza de las variantes terminológicas y promueven la consistencia a través de la elección de términos preferidos y la asignación de un mismo término para significar un contenido similar.



Vocabularios COAR Disponibles

Tipos de Recursos



El vocabulario de tipos de recurso identifica el género de un recurso de investigación.

Actualmente está disponible en 13 idiomas, contiene más de 50 conceptos y utiliza el formato SKOS.

Los conceptos del vocabulario se organizan desde un nivel genérico hasta un nivel granular.

Derechos de Acceso



El vocabulario de derechos de acceso declara el grado de "apertura" o nivel de acceso de un recurso.

Se basa en info: eu-repo. El vocabulario indica el tipo de acceso a un recurso.

Los cuatro conceptos con sus URIs y etiquetas están disponibles en 8 idiomas.

http://vocabularies.coar-repositories.org/documentation/resource_types/2.0.draft/
http://vocabularies.coar-repositories.org/documentation/access_rights/

OpenAIRE Guidelines for Literature Repositories

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

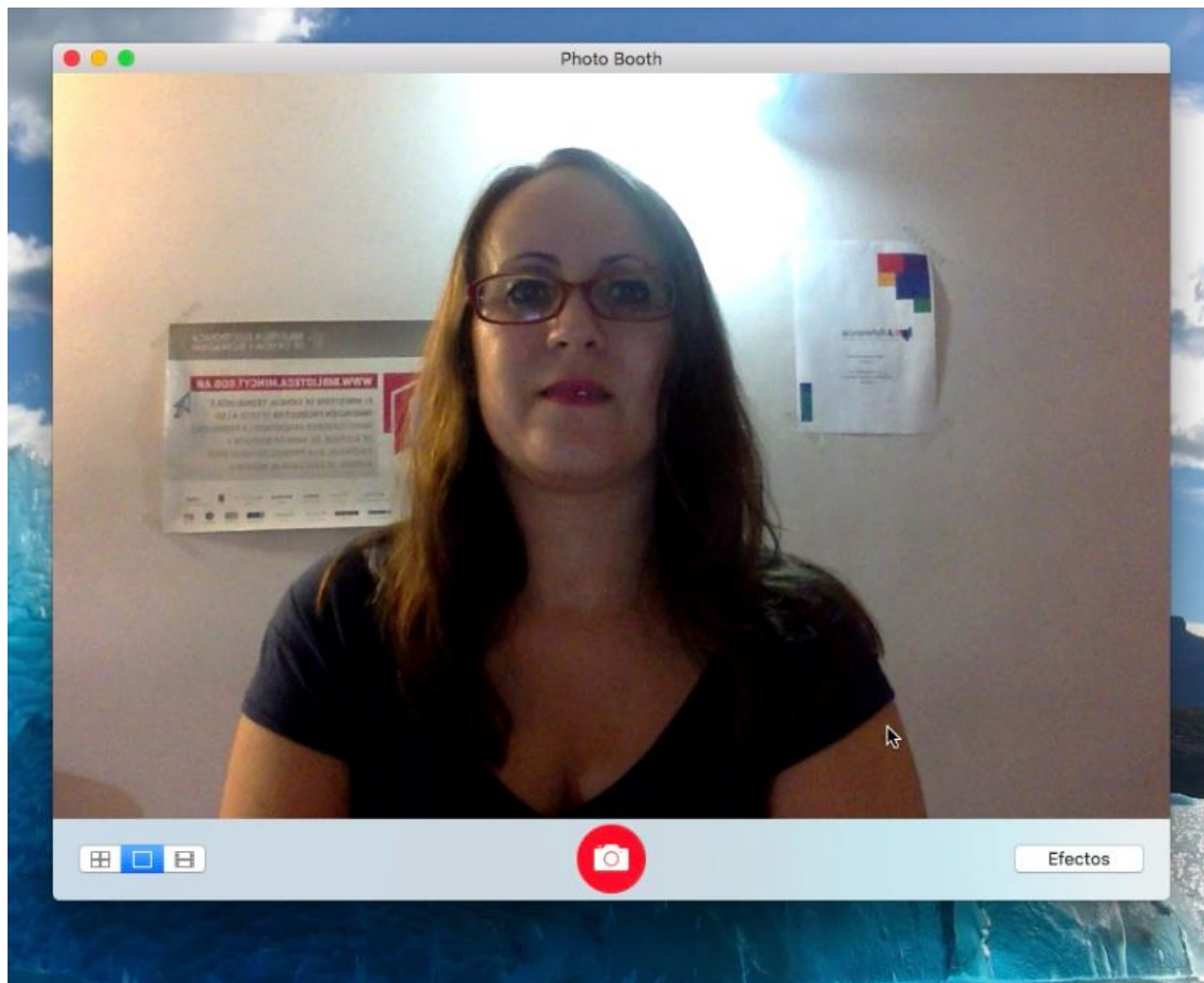
Application Profile:

- 1. Title (M)
- 2. Creator (M)
- 3. Project Identifier (MA)
- 4. Access Level (M)
- 5. License Condition (R)
- 6. Embargo End Date (MA)
- 7. Alternative Identifier (R)
- 8. Publication Reference (R)
- 9. Dataset Reference (R)
- 10. Subject (MA)
- 11. Description (MA)
- 12. Publisher (MA)
- 13. Contributor (R)
- 14. Publication Date (M)
- 15. Publication Type (M)

LA REFERENCIA: IMPLEMENTANDO LAS DIRECTRICES OPENAIRE EN LATINOAMÉRICA

Jun 24, 2016





Paolo Azrilevich (MINCYT, Argentina)

www.coar-repositories.org

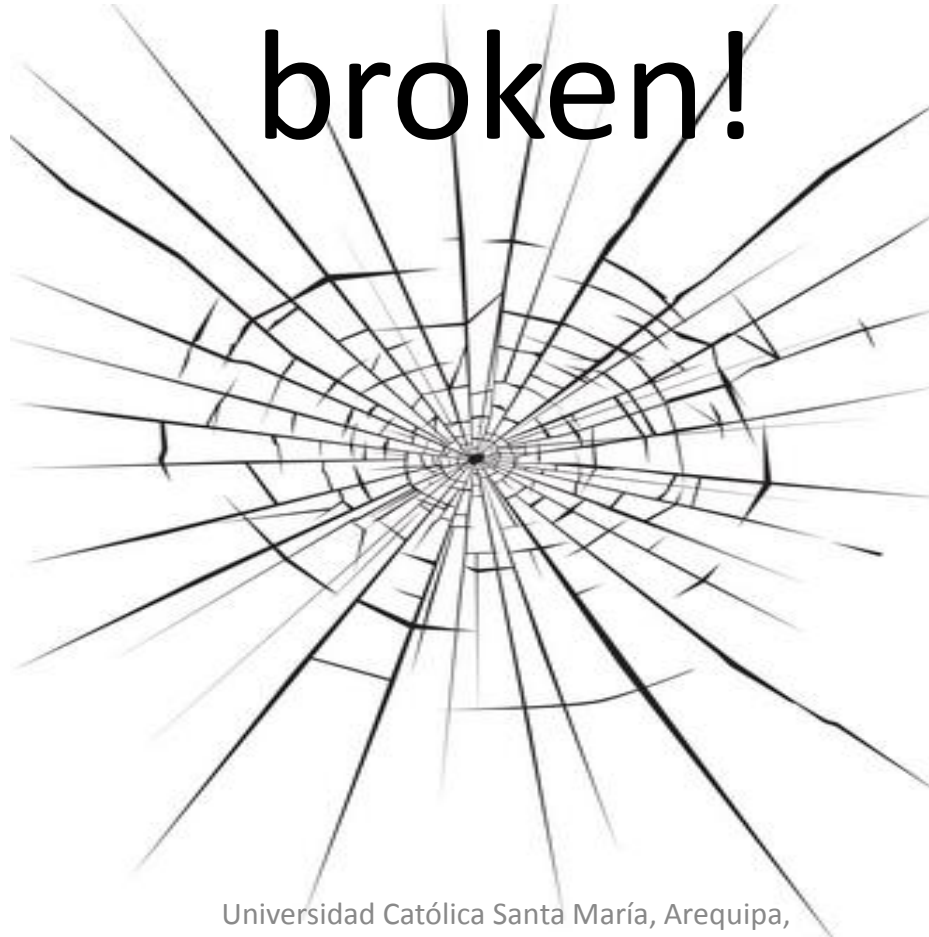
Universidad Católica Santa María, Arequipa,
Perú - July 18, 2018

Next generation repositories

NGR Working Group: Kathleen Shearer, Eloy Rodrigues, Andrea Bollini, Alberto Cabezas, Donatella Castelli, Les Carr, Leslie Chan, Chuck Humphrey, Rick Johnson, Petr Knoth, Paolo Manghi, Lazarus Matizirofa, Pandelis Perakakis, Jochen Schirrwagen, Tim Smith, Herbert Van de Sompel, Paul Walk, David Wilcox, Kazu Yamaji



The current scholarly communication system is broken!



Not Sustainable, Equitable, or Innovative

Next Generation Repositories Vision

“To position repositories as the foundation for a distributed, globally networked infrastructure...

...thereby transforming the system, making it more research-centric, open to and supportive of innovation...”

<http://ngr.coar-repositories.org/>

Guiding principles

- Distribution of control
- Inclusiveness and diversity
- Public good
- Intelligent openness and accessibility
- Sustainability
- Interoperability

Key functionalities of a global network of next generation repositories

- **Discovery** - Enables better discovery including batch, navigation and notification
- **Assessment** - Supports research assessment including tracking research outputs, open peer review and standard usage metrics
- **Social networking** - Provides a foundation for a transparent social network including annotation, notification feeds, and recommender systems
- **Preservation** - Preserves and provides access to a wide variety of research outputs

2 important aspects to this vision

1. Standardized and improved functionality of repositories (interoperability)
1. Value added services on top of the resources in repositories (hubs)

Beyond the journal: All valuable research contributions should be available and recognized



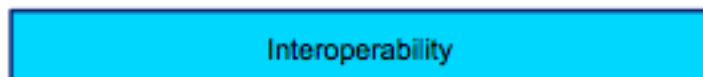
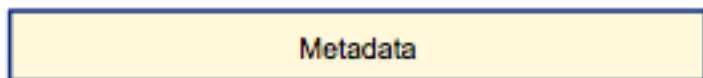
The problem: repository systems are using old technologies developed over 15 years ago that do not support the functionalities we need.



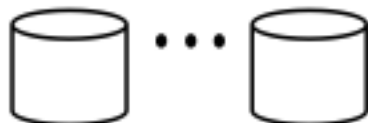
Current repositories

Services we can
develop with
repositories
today

Conceptual layer



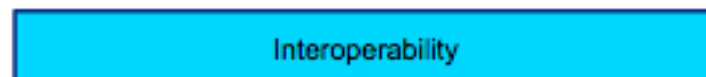
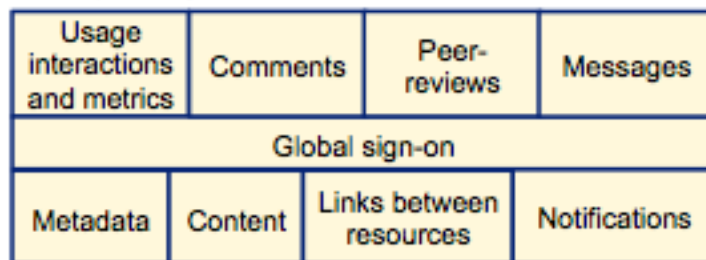
Persistence layer



Next generation repositories

Services we can
develop with the next
generation of
repositories

Conceptual layer



Persistence layer



By Petr Knoth, Open University, UK



COAR publishes recommendations for
next generation repositories

[Browse Technologies](#)

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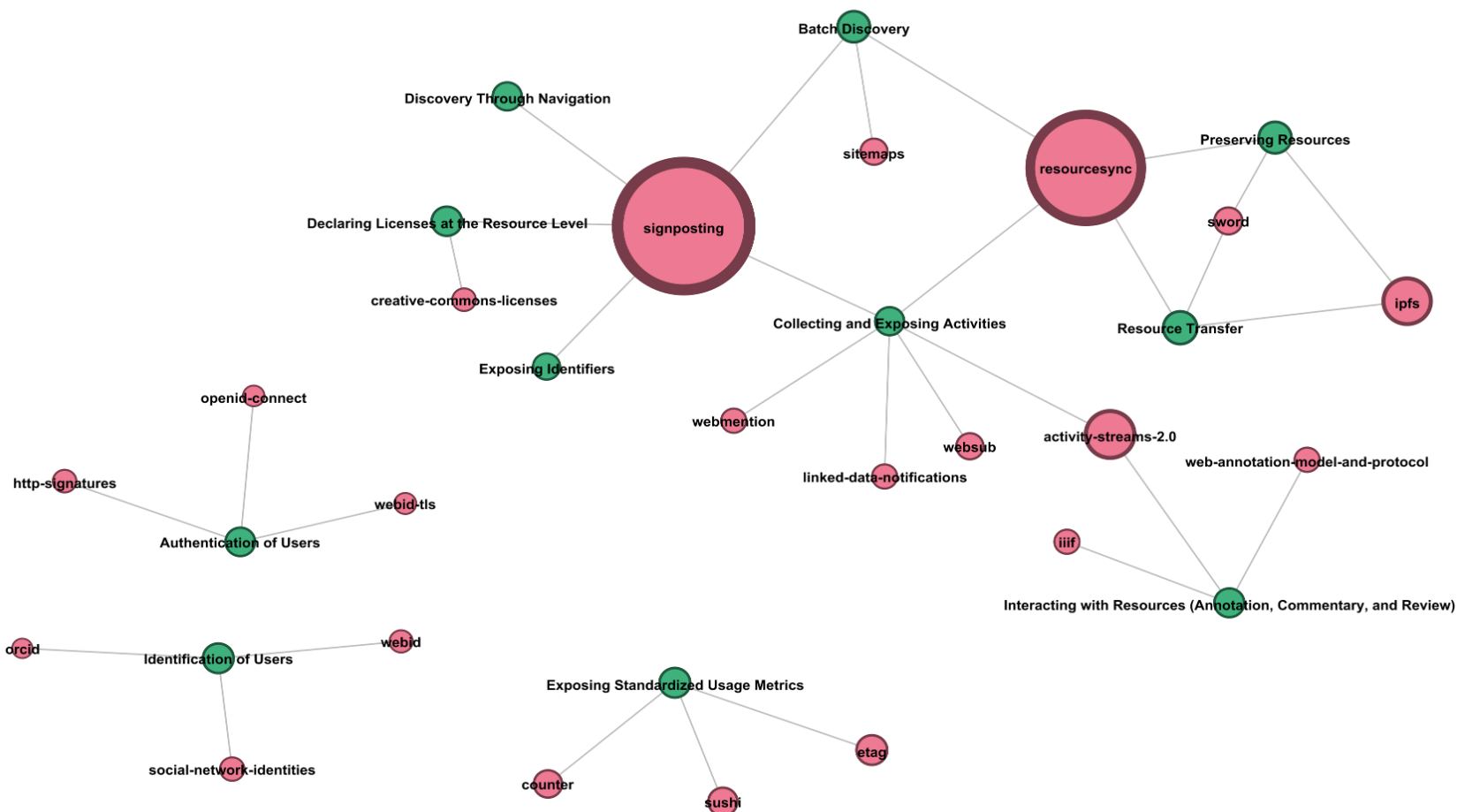
11 “Behaviors” of Next Generation Repositories

1. Exposing Identifiers
2. Declaring Licenses at the Resource Level
3. Discovery Through Navigation
4. Interacting with Resources (Annotation, Commentary, and Review)
5. Resource Transfer
6. Batch Discovery
7. Collecting and Exposing Activities
8. Identification of Users
9. Authentication of Users
10. Exposing Standardized Usage Metrics
11. Preserving Resources

19 Technologies, Standards, and Protocols

1. Activity Streams 2.0
2. COUNTER
3. Creative Commons Licenses
4. ETag
5. HTTP Signatures
6. IPFS International Image Interoperability Framework
7. Linked Data Notifications
8. ORCID and other author IDs
9. OpenID Connect
10. ResourceSync
11. SUSHI
12. SWORD
13. Signposting
14. Sitemaps
15. Social Network Identities
16. Web Annotation Model and Protocol
17. WebID and WebID/TLS
18. WebSub
19. Webmention

Next Generation Repositories: behaviours and technologies



From Andrea Bollini, 4Science / NGR Working Group

Universidad Católica Santa María, Arequipa,
Perú - July 18, 2018

Implementation: 3 major areas of effort

1. Technological adoption in repository platforms
2. Development of value added services
3. Ongoing monitoring of new technologies

1. Technological adoption in repository platforms

Already underway...

- Implementation of some technologies in open source platforms - DSpace, Fedora, Invenio, OJS and others
- Supporting adoption through information sharing - meeting of platform providers (June), webinars, extended use cases
- Coordinating resources to support development OpenAIRE (Europe), National Institute of Informatics (Japan), CARL Open Repositories Working Group (Canada), US Next Generation Repositories Implementers Group

2. Development of value added services

- 2 days of meeting of Repository Networks, May 14 & 15, 2018 in Hamburg, Germany to discuss NGR functionality and international alignment



- Pilot Projects 2nd half 2018 (Open Peer Review, Common Standards for Usage Statistics, Recommender Systems)

3. Monitoring new technologies, standards and protocols

COAR Next Generation Repositories Editorial Group

Andrea Bollini

Rick Johnson

Paolo Manghi

Petr Knoth

Eloy Rodrigues

Kathleen Shearer

Herbert Van de Sompel

Paul Walk

David Wilcox

Kazu Yamaji

Collaboration AT SCALE is necessary to change the system!



