

Data Publication Services WG

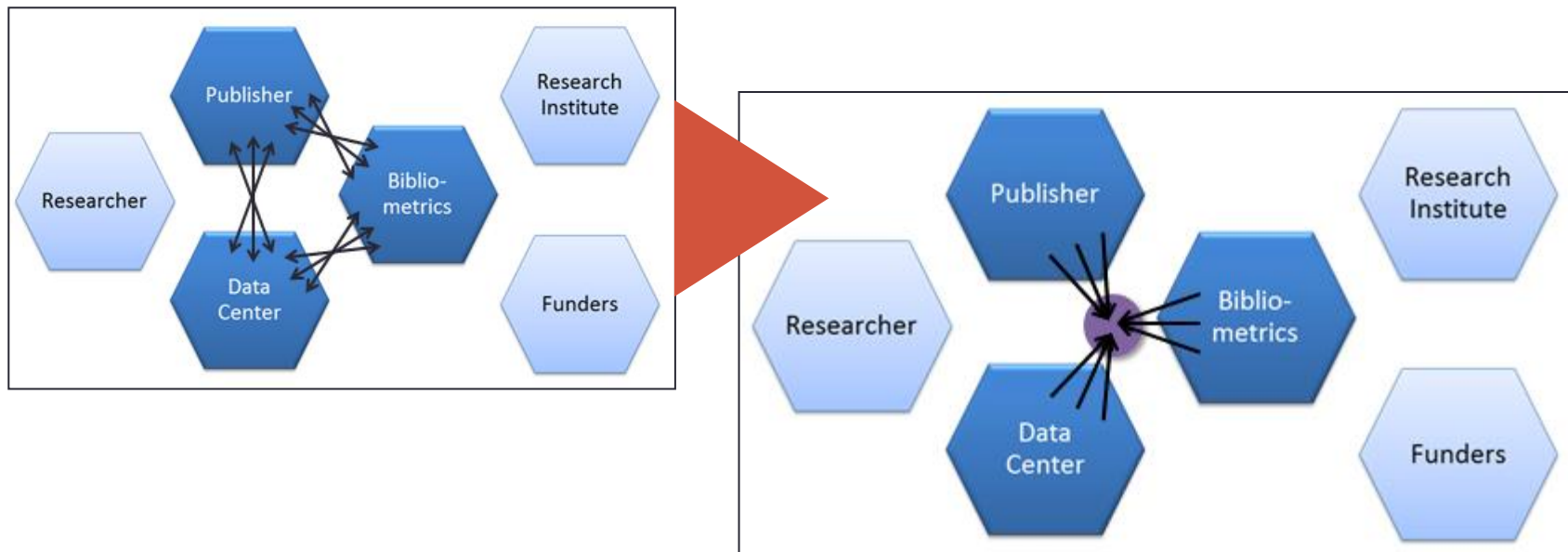
Chairs:

Adrian Burton (ANDS)

Hylke Koers (Elsevier) - presenter

Data Publication Services WG

How to move from a plethora of (mostly) bilateral arrangements to a **one-for-all service model infrastructure** for the research data publication landscape?



Objectives


Address processes, workflows, and solutions that currently exist between individual parties within the data publication landscape, and investigate how these can be lifted to one-for-all service to:

- Increase interoperability
- Decrease systemic inefficiencies
- Power new tools and functionalities to the benefit of researchers

See full case statement at

<https://rd-alliance.org/internal-groups/rdawds-publishing-data-ig.html>

Objectives



Primary Focus:
Article – Data cross-referencing service

- Given article A, what relevant data D exists – and vice versa
- Additional metadata about the nature of the relationship, e.g. supplementary data, related data, etc.
- Additional metadata for article and/or data set

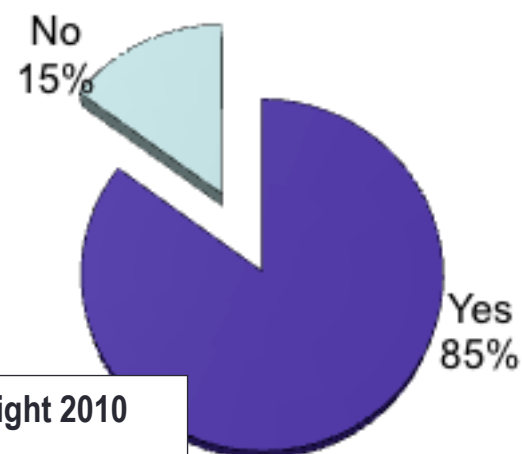
Value Proposition

- For **data repositories** and **journal publishers**: interlinking journal articles and data sets will become a simpler, more scalable process with less overhead.
- For **research institutes, libraries, bibliographic service providers, and funding bodies**: this service can power advanced bibliographic services and productivity assessment tools that track data sets and journal publications within a common and respected framework.
- For **researchers, data providers and data users**: a cross-referencing service will make the processes of sharing and of accessing relevant articles and data easier, more efficient, and more accurate.

How Article-Data linking adds value

- Increase visibility, discoverability, and usage
- Provide context, avoid misinterpretation and incorrect usage
- Ensure long-term availability of useful content and context
- Coordinate submission process / deposit mechanism

Question: Do you think it is useful to link underlying research data with formal literature?



PARSE.insight 2010
N = 1202

But it needs to be done right!

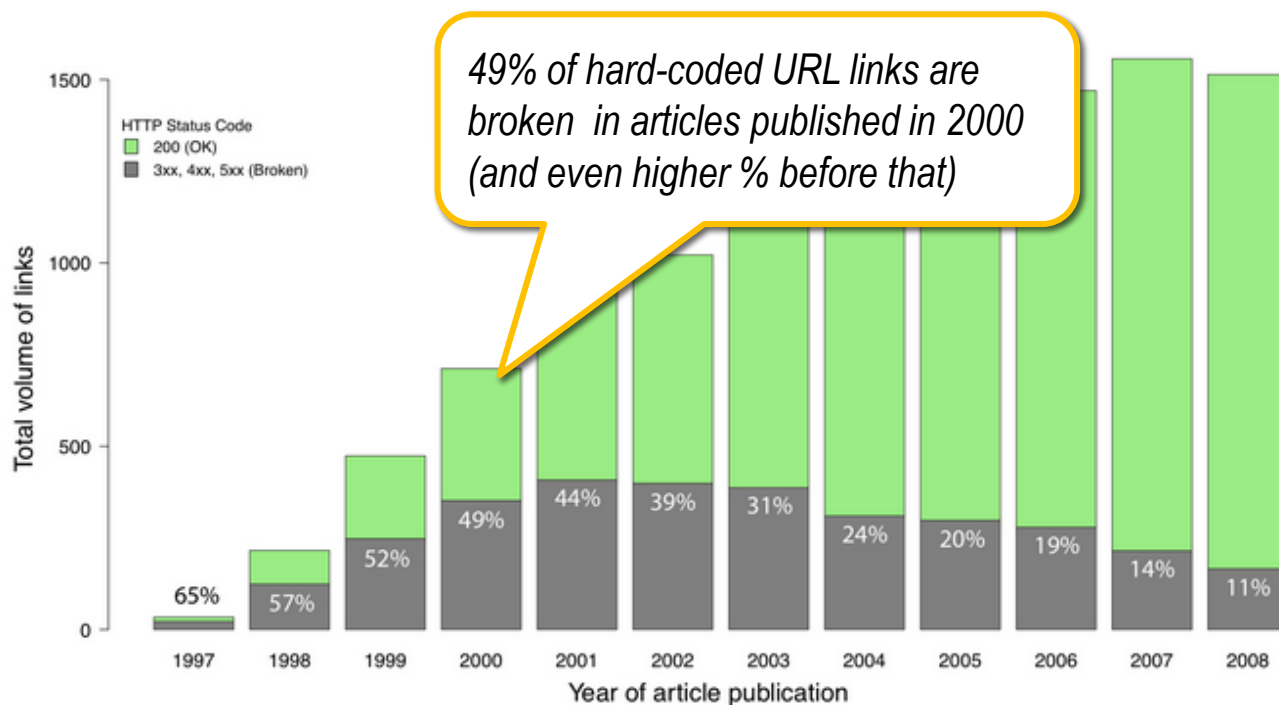



Fig. 2. Volume of potential data links in astronomy publications. Total volume of external links in all articles published between 1997 and 2008 in the four main astronomy journals, color coded by HTTP status code. Green bars represent accessible links (200), grey bars represent broken links.


From: Pepe et al., https://authorea.com/users/3/articles/288/show_article

Example: linking between PANGAEA and Elsevier



Marine Geology

Volume 204, Issues 1–2, 28 February 2004, Pages 43–57



Calcium carbonate corrosiveness in the South Atlantic during the Last Glacial Maximum as inferred from changes in the preservation of *Globigerina bulloides*: A proxy to determine deep-water circulation patterns?

A.N.A. Volbers, R. Henrich

[http://dx.doi.org/10.1016/S0025-3227\(03\)00372-4](http://dx.doi.org/10.1016/S0025-3227(03)00372-4) [Get rights and content](#)

Abstract

The modern Atlantic Ocean, dominated by the interactions of North Atlantic Deep Water (NADW) and Antarctic Bottom Water (AABW), plays a key role in redistributing heat from the Southern to the Northern Hemisphere. In order to reconstruct the evolution of the relative importance of these two water masses, the NADW/AABW transition, reflected by the calcite lysocline, was investigated by the Globigerina bulloides dissolution index (BDX?). The depth level of the Late Glacial Maximum (LGM) calcite lysocline was elevated by several hundred metres, indicating a more corrosive water mass present at modern NADW level. Overall, the small range of BDX? data and the gradual decrease in preservation below the calcite lysocline point to a less stratified Atlantic Ocean during the LGM. Similar preservation patterns in the West and East Atlantic demonstrate that the modern west-east asymmetry did not exist due to an expansion of southern deep waters compensating for the decrease in NADW formation.


Recommended articles


Citing articles (17)

Related reference work articles

PANGAEA® – Related Data

Dissolution index of *Globigerina bulloides* in recent and Last Glacial Maximum sediments





PANGAEA®

Data Publisher for Earth & Environmental Science

Not logged in (log in or sign up)

Always quote citation when using data!

Show Map Google Earth RIS BiSTEX


Data Description

Citation: Volbers, ANA; Henrich, R (2004): Dissolution index of *Globigerina bulloides* in recent and Last Glacial Maximum sediments. doi:10.1594/PANGAEA.735719, Supplement to: Volbers, Andrea N A; Henrich, R; Rüdiger (2004): Calcium carbonate corrosiveness in the South Atlantic during the Last Glacial Maximum as inferred from changes in the preservation of *Globigerina bulloides*. *Marine Geology*, 204(1-2), 43-57. doi:10.1016/S0025-3227(03)00372-4

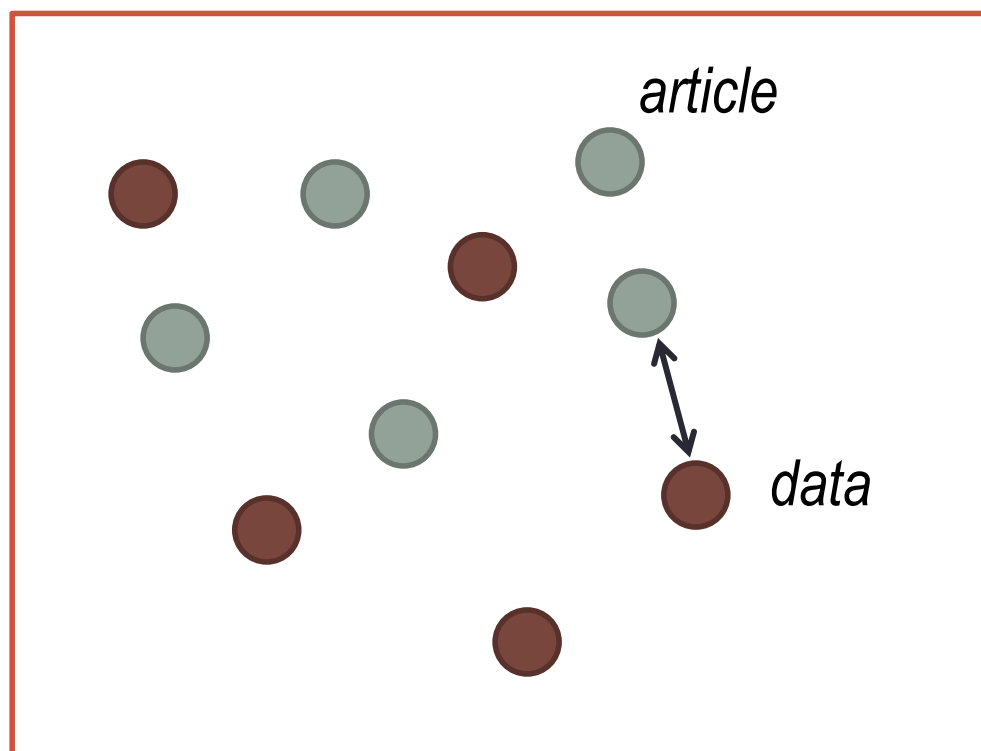
Abstract: The modern Atlantic Ocean, dominated by the interactions of North Atlantic Deep Water (NADW) and Antarctic Bottom Water (AABW), plays a key role in redistributing heat from the Southern to the Northern Hemisphere. In order to reconstruct the evolution of the relative importance of these two water masses, the NADW/AABW transition, reflected by the calcite lysocline, was investigated by the *Globigerina bulloides* dissolution index (BDX?). The depth level of the Late Glacial Maximum (LGM) calcite lysocline was elevated by several hundred metres, indicating a more corrosive water mass present at modern NADW level. Overall, the small range of BDX? data and the gradual decrease in preservation below the calcite lysocline point to a less stratified Atlantic Ocean during the LGM. Similar preservation patterns in the West and East Atlantic demonstrate that the modern west-east asymmetry did not exist due to an expansion of southern deep waters compensating for the decrease in NADW formation.

Related to: Volbers, Andrea N A (2001): Planktic foraminifera as paleoceanographic indicators: Production, preservation, and reconstruction of upwelling intensity. Implications from late quaternary South Atlantic sediments. *Berichte aus dem Fachbereich Geowissenschaften der Universität Bremen*, 184, 114 pp, um.nbn.de:gbv-46-ep000103116

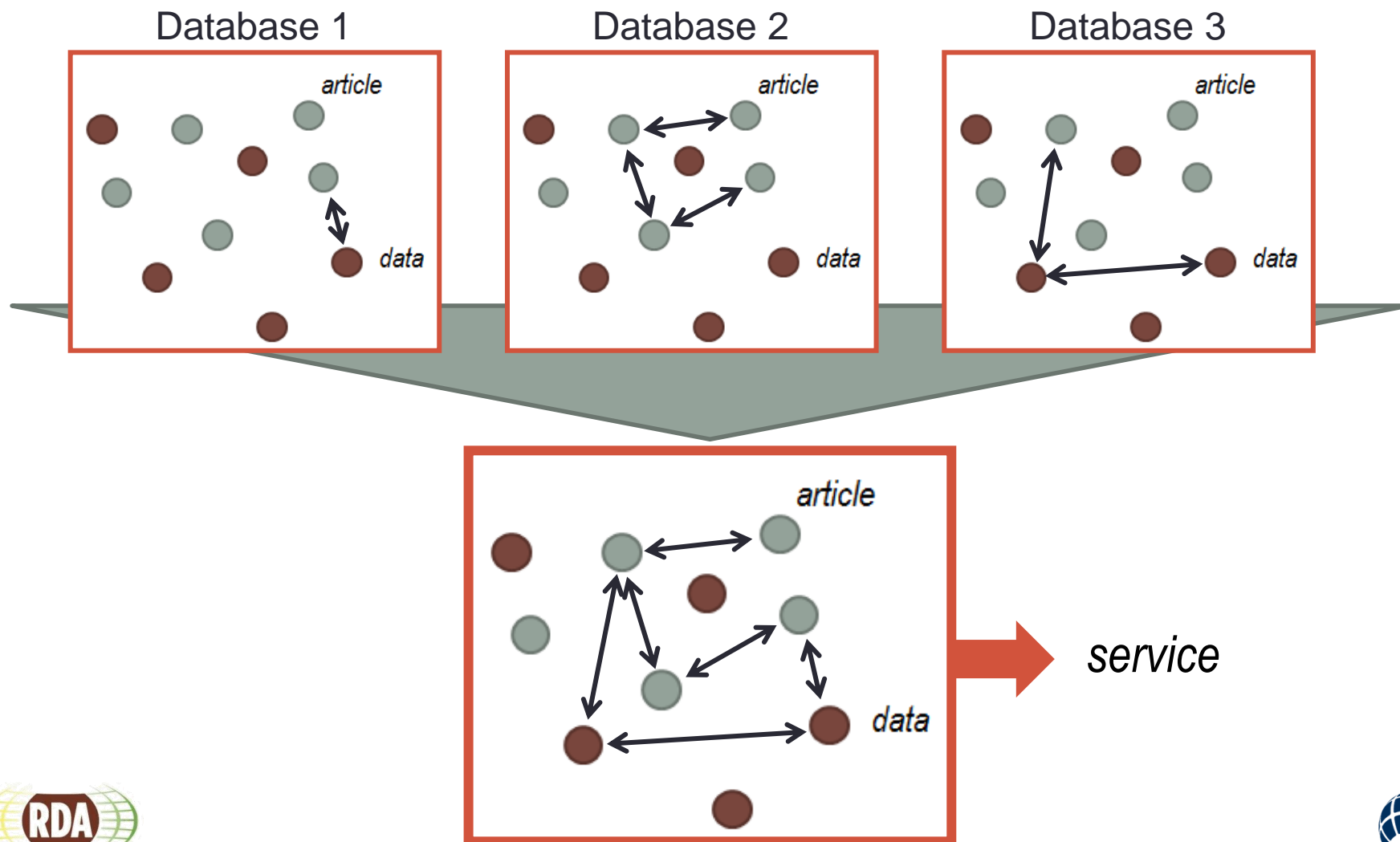
Project(s): Geosciences, University of Bremen (GeoB) South Atlantic in Late Quaternary: Reconstruction of Budget and Currents (SFB261)



It's all about connecting the dots



It's all about connecting the dots



Deliverables

- Cross-referencing Service
 - Inventory & Gap analysis
 - Recommendations – technical, organizational, governance, costs
 - Operational cross-referencing service (beta)
- Recommendations on other processes in the data publication landscape which may be ripe for a service model (~ Workflows WG)

Status

- Guiding principles – to be ratified end of Oct
- Accumulating test corpus – ongoing
- Draft tech infrastructure – under discussion
- Outreach, webinars, contact with other groups – ongoing

Principles

1. The WG will create a common, open, universal cross-referencing service for research articles and research data.
2. The WG functions as an open organization in which the key stakeholders are represented. Participation is open to any organization that has an interest in scholarly communication or research data.
3. The WG has a global and multidisciplinary scope.
4. The WG strives for maximal transparency and all WG meeting notes will be made publicly available.
5. All software developed by the WG will be made openly available under terms that guarantee public access and enable reuse.
6. The corpus of article-data links that will be assembled by the WG will be made openly available under terms that guarantee public access and enable reuse.
7. The cross-referencing service delivered by the WG will be open and free of charge. Terms for access to the service will be openly available and non-discriminatory.
8. The WG will advise on the long-term (beyond the lifetime of the WG) management and governance structure, according to the principle that the service shall be governed by a body with representatives from key stakeholder groups including both for-profit and not-for-profit organizations.
9. The WG will advise on long-term (beyond the lifetime of the WG) sustainability models, according that the service will be run on a not-for-profit basis. This may include a hybrid model of both free and paid-for services for cost recovery.



Contributors to corpus

Australian National Data Service (ANDS)

Cambridge Crystallographic Data Center (CCDC)

CrossRef

DataCite

Elsevier

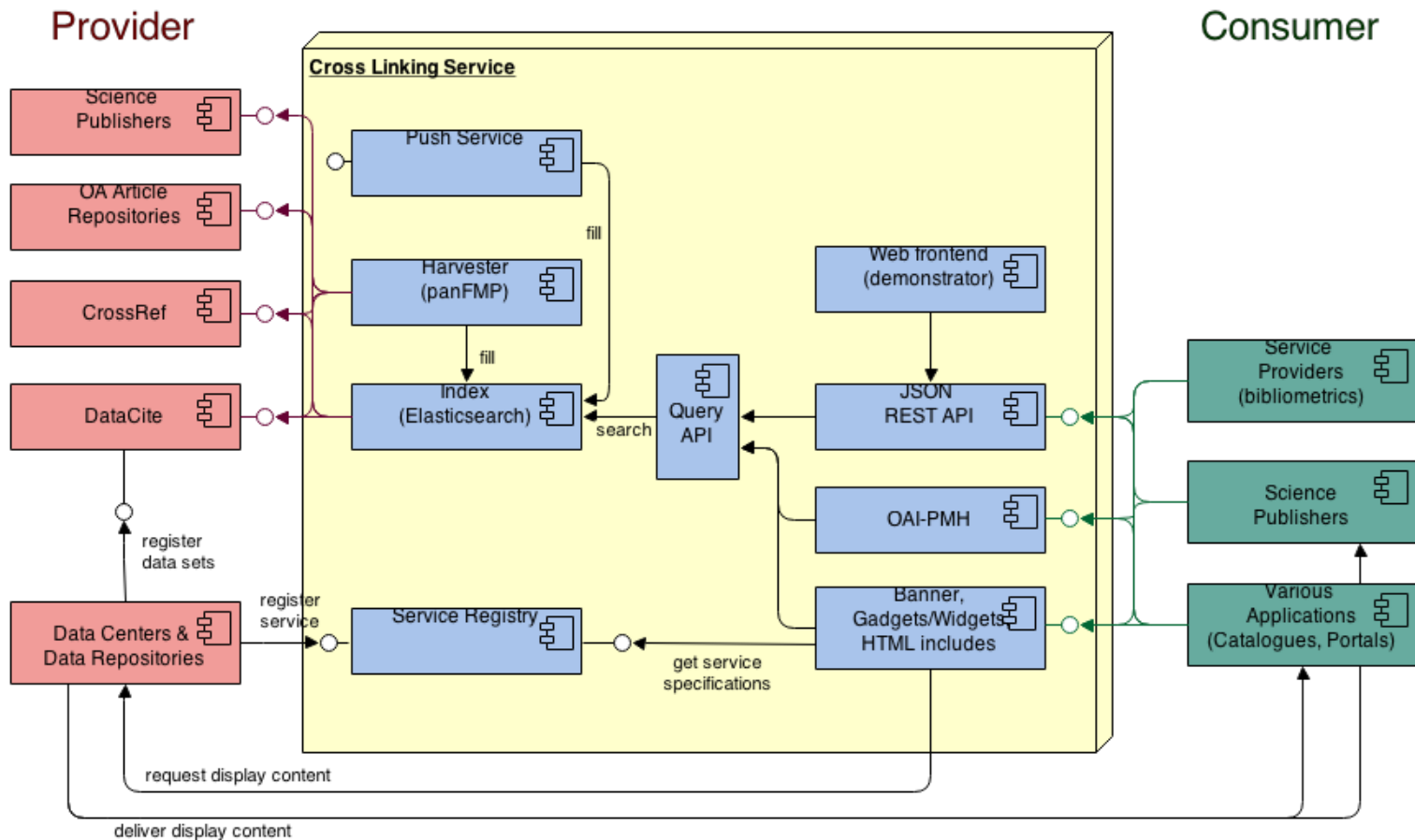
Europe PubMed Central

PANGAEA

Thomson Reuters

OpenAire

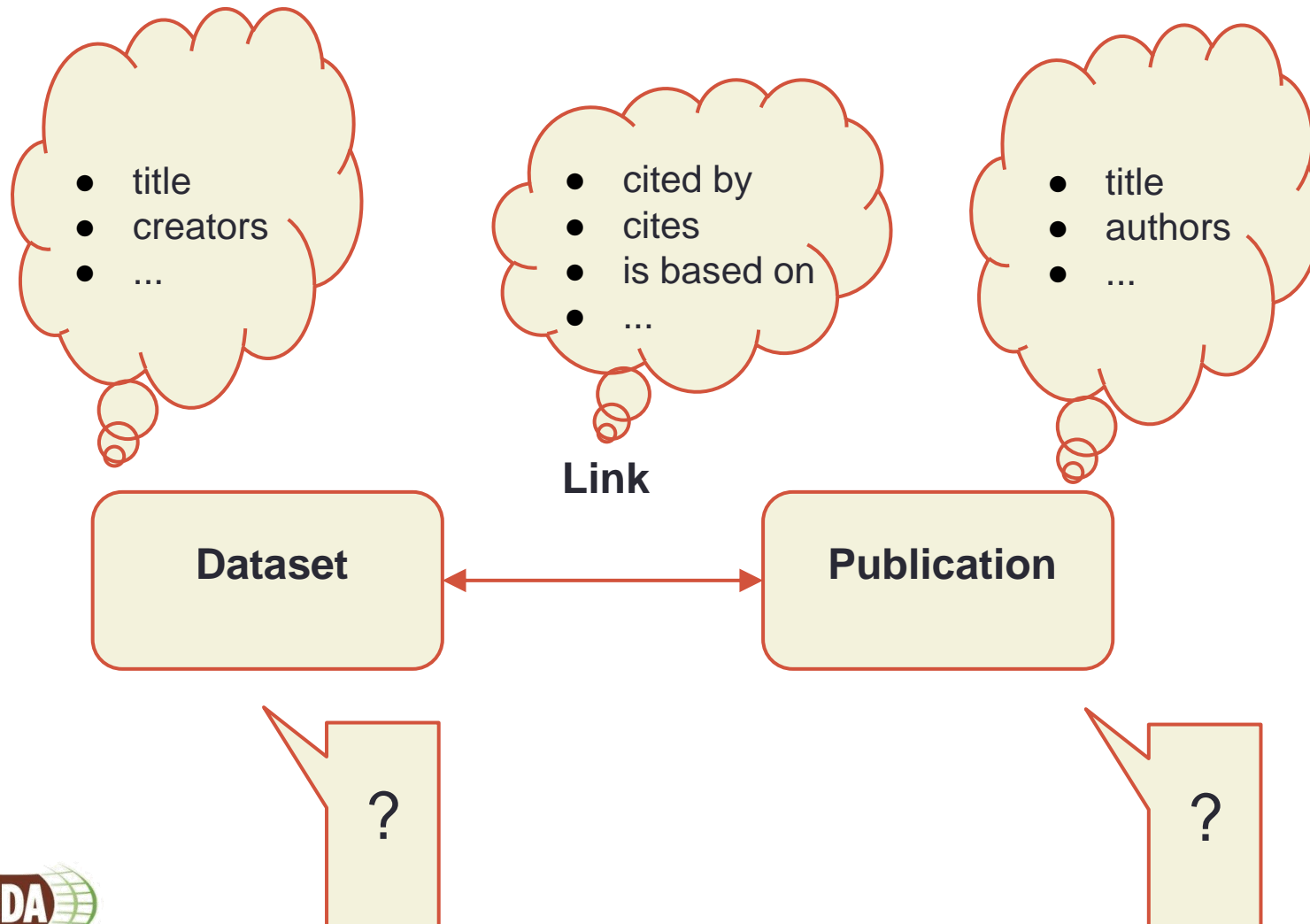
Draft tech infrastructure



Google Doc:

<https://docs.google.com/document/d/1z1C112N87eVuc65ogowAWoqlb3j20NdLtnRdjCuySY/>)

Data model



Working Group membership

Amir Aryani (ANDS)
Geoff Bilder (CrossRef)
Adrian Burton (ANDS) – co-chair
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David Carlson (ESSD)
Janine Felden (MARUM)
Laure Haak (ORCID)
John Helly (UCSD)
Francisco Hernandez (Flanders Marine Data Center)
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Paolo Manghi (OpenAire)
Caroline Martin (Sciences Eaux & Territoires Journal / IRSTEA)
Jo McEntyre (EMBL - EBI)
Lyubomir Penev (Pensoft Publishers)
Howard Ratner (CHORUS)
Nigel Robinson (Thomson Reuters)
Sergio Ruiz (DataCite)
Uwe Schindler (PANGAEA)
Johanna Schwarz (Springer)
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Eva Zanzerkia (NSF)