Introduction to DataCite
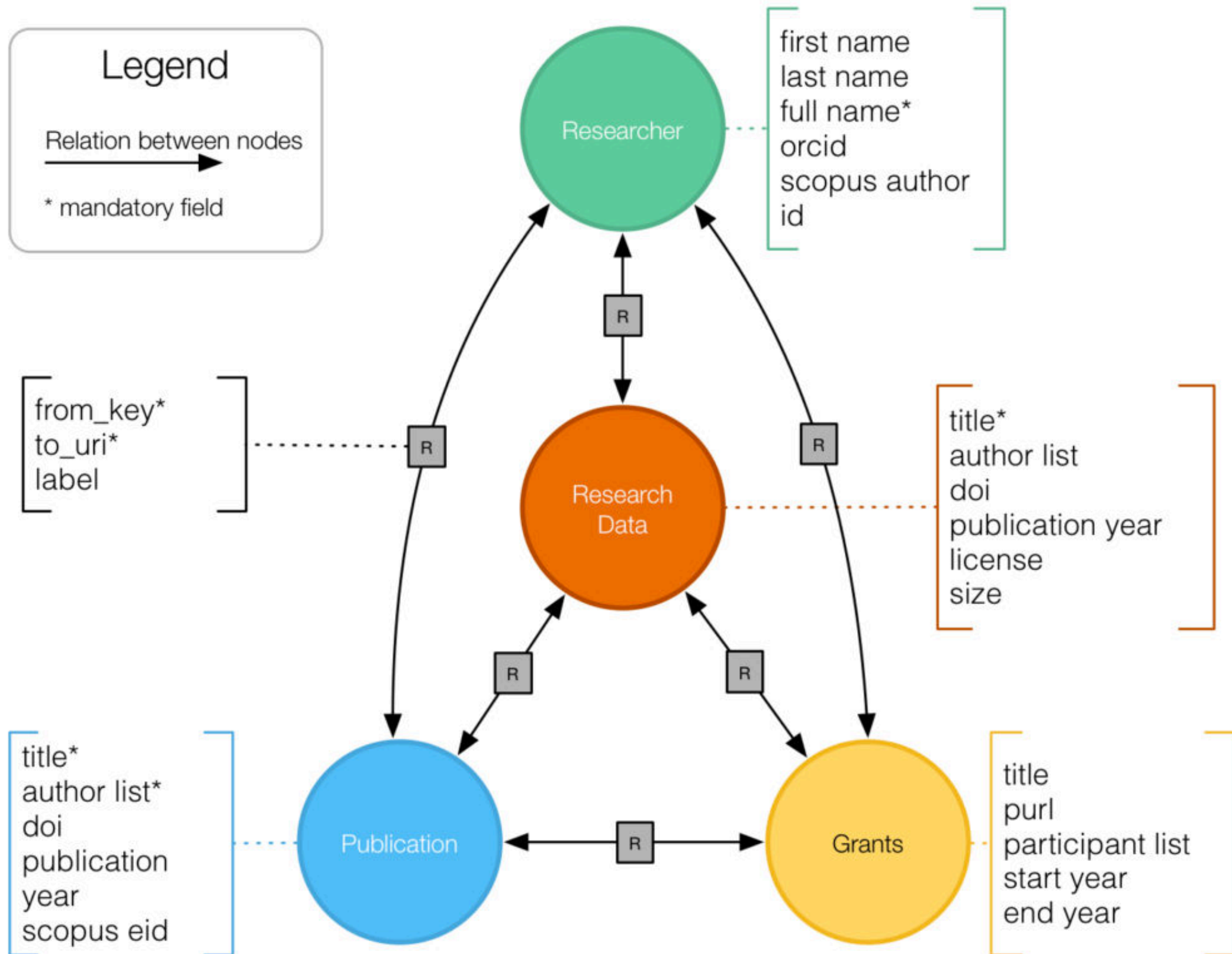
Martin Fenner, DataCite Technical Director
http://orcid.org/0000-0003-1419-2405

DataCite is the leading global provider of DOIs for research data, enabling users to register, find, use, connect and track research data.

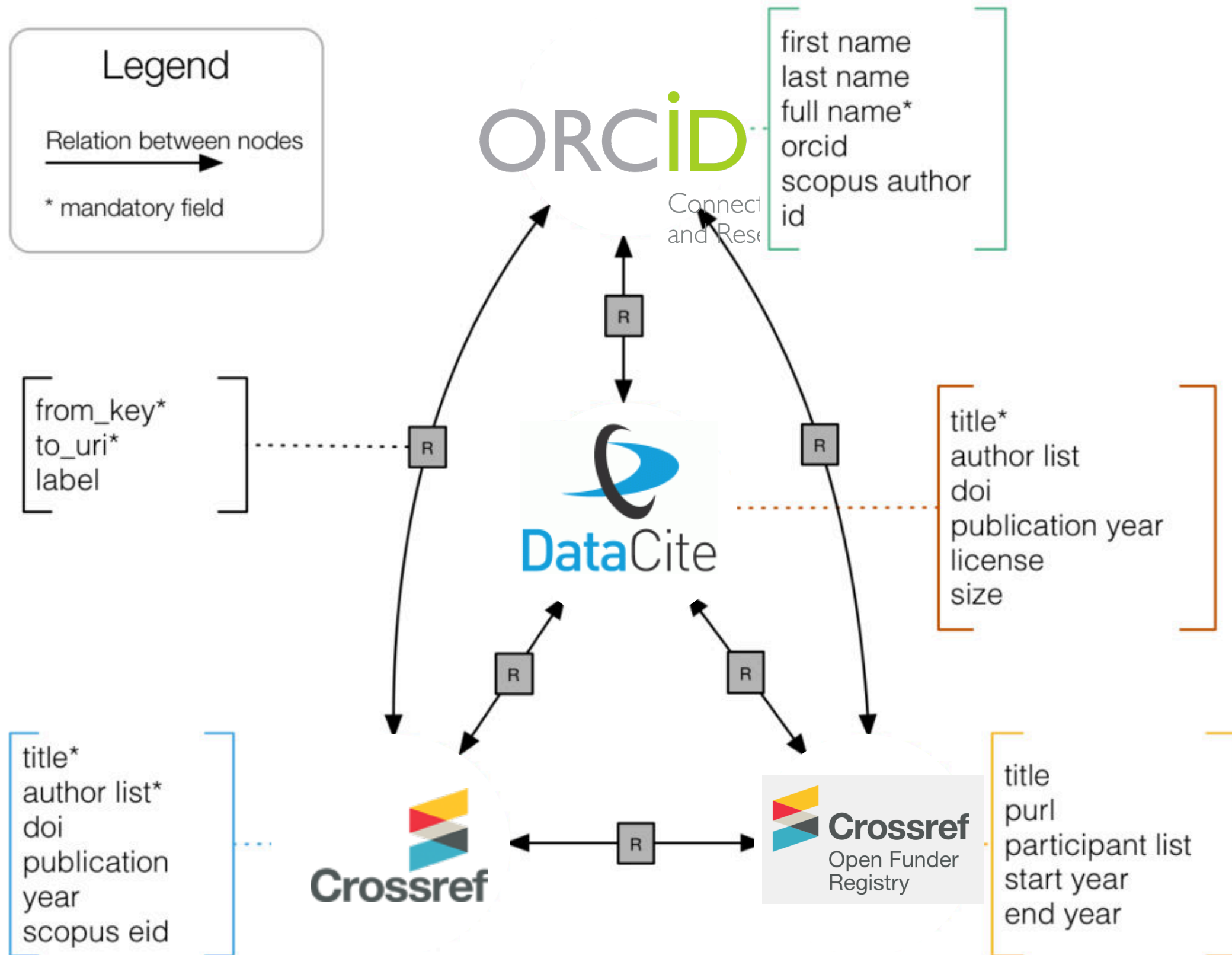DataCite was founded in 2009 as a German non-profit membership organization

8,167,111	DOIs
47	members
1,251	data centers
5	staff members

Legend

Relation between nodes →

* mandatory field

Researcher
- first name
- last name
- full name*
- orcid
- scopus author id

[Relation node]
- from_key*
- to_uri*
- label

Research Data
- title*
- author list
- doi
- publication year
- license
- size

Publication
- title*
- author list*
- doi
- publication year
- scopus eid

Grants
- title
- purl
- participant list
- start year
- end year

Research Graph Meta Model
Version 2.0 (Aug 2016)

http://researchgraph.org/schema/

Research Graph Meta Model

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https://www.flickr.com/photos/kaynich/16386180215

A DOI is not a DOI

Community and Use Cases	Members
DOI Services	DOI Registration agencies (Crossref, DataCite, KISTI, EIDR, …)
DOI	International DOI Foundation (IDF)

Some DataCite Members

DataCite DOI Services

Create

Create and manage
DOIs and metadata.

Metadata

- relatively simple schema, maintained by DataCite members
- flexible with regards to resource type
- support for collections
- multiple relation types for related content

DataCite DOI Services

Find

Find resources with DOIs and associated information.

- DataCite API
- DataCite Search
- DataCite OAI-PMH

DataCite DOI Services

Use

Access to the content that
was registered, and
information how it can be
used.

- License information in metadata
- Most of the content available
  without restrictions
- Directly access content via content
  negotiation

DataCite DOI Services

Connect

Link data to articles
(Crossref), people (ORCID),
Funding (Crossref), etc.

- Data Citations
- Links to ORCID IDs

Planned
- Links to funding information
- Links to institutions

DataCite DOI Services

Track
Indicators for re-use.

- Data Citations

Started
- DOI resolutions
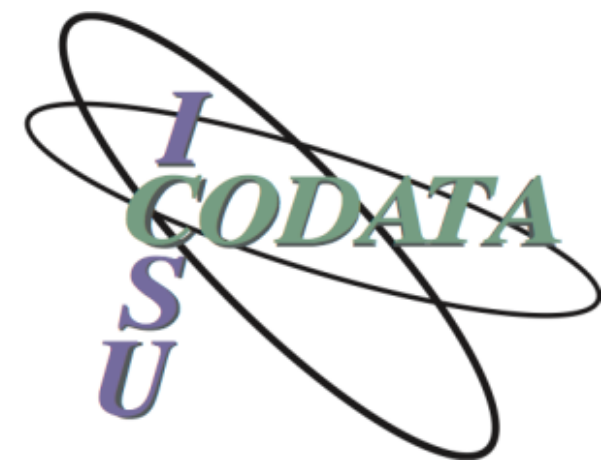- Repository usage stats

Planned
- Wikipedia
- Twitter

DataCite DOI Services

Advocate

Promote data sharing,
persistent identifiers, and
open science.

Data should be considered legitimate, citable products of research. Data citations should be accorded the same importance in the scholarly record as citations of other research objects, such as publications.

DataCite DOI Services

Support
Provide reliable, well-documented services and help members and users to use them.

- support email system
- status page

Launch in July
- Support portal with documentation