

Metadata in the Middle: Socio-Technical Infrastructure for Illinois Data Bank DOIs and Related Metadata

Colleen Fallaw, Research Programmer for the Research Data Service

Scholarly Communications and Repository Services, University Library, University of Illinois at Urbana-Champaign

Research Cat's DOI

*Research Cat shares files.
DOI sent to journal,
Cat resumes research.*



What makes that work?

How can people find out about the data?

How can funders track the impact of funding research?

What if the dataset was published by mistake?

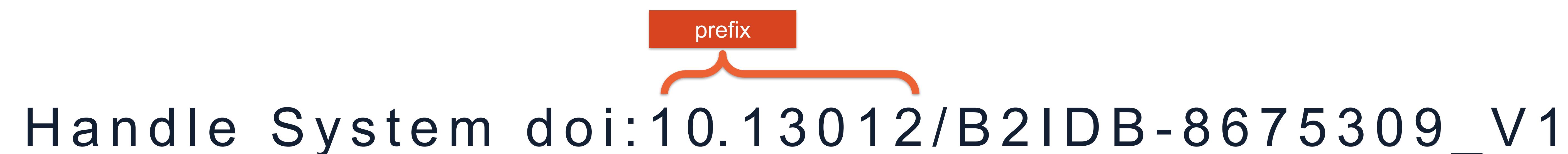
What if a typo is found in the researcher's name?

What if the journal requires a DOI for data, but does not want anything about the data known until the journal publication date?

What if the related article publication date changes?

What if data curators need time to look into potential data problems?

What if the data storage moves from one organization to another?



The DONA foundation administers the **Global Handle Registry**, authorizing administrators to allot prefixes to users of the Handle System.

The Handle System for **identifier resolution** is distributed, defined by registration and protocols.



The International DOI Foundation adds organizational commitment to the Handle System, making their identifiers **persistent** as well as **resolvable**.

Widespread adoption of DOIs for scholarly output adds meaning to utility.



As a data-focused registration agency of the International DOI Foundation, DataCite allots prefixes to allocating members, maintaining metadata and state data. DataCite provides **centralized metadata** searching and harvesting for research datasets.



California Digital Library (CDL) developed and maintains EZID, offering an **API** and a **web interface** for registering and managing identifiers.

As an allocating member of DataCite, Purdue University allots shoulders, for example to the University Library at Illinois, and partners with CDL to offer EZID services.

Illinois Data Bank

The Illinois Data Bank is a public access repository for publishing research data from the University of Illinois at Urbana-Champaign.

The repository web application uses the EZID API to **reserve**, **publish**, **update**, **query**, or **withdraw** DataCite DOI records within shoulders allocated by Purdue University.



Research Cat's Dataset In Illinois Data Bank

By providing basic identifying and descriptive metadata along with data, researchers at Illinois can self-deposit a dataset.

Illinois Data Bank automatically **assigns a DOI** to each published dataset, supporting updates and management as needed by researchers and curators.

In response to scenarios like the ones above, Illinois Data Bank uses EZID to provision and manage DataCite DOIs.

These organizations and their systems work together to provide **accurate** and **up-to-date** metadata, supporting research data discovery and access.

Acknowledgments Thanks to Tom Habing, Heidi Imker, Dena Strong, Elizabeth Wickes, and Qian Zhang for feedback on drafts of this poster.