
Open Infrastructure for Research Data Stewardship with Fedora

— David Wilcox, DuraSpace
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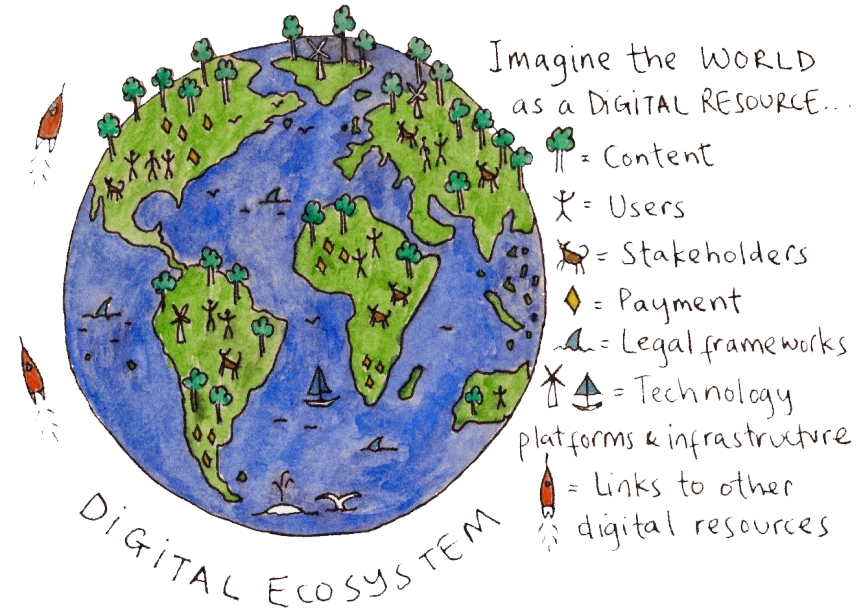


About DuraSpace

DuraSpace is not for profit organization that provides leadership and innovation for **open technologies**

We work to ensure that **current and future generations** have **durable** and **persistent access** to our **collective digital heritage**

Our **community** is part of an **interconnected, worldwide, scholarly ecosystem**



DURASPACE

DuraSpace open source projects



FedoraTM



Research data infrastructure requirements

Diverse file formats

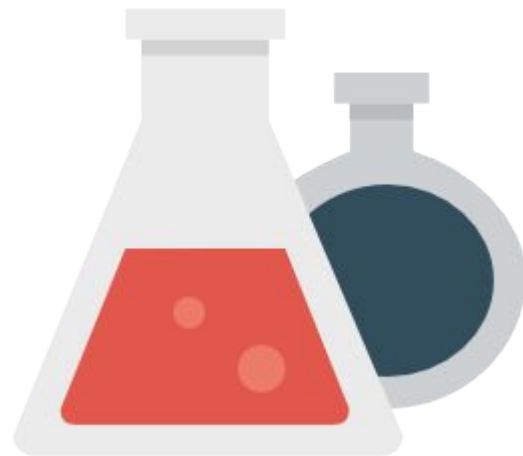
Large file sizes

Many files

Complex structures and relationships

Diverse metadata standards

Long-term preservation and access needs



FAIR Data Principles

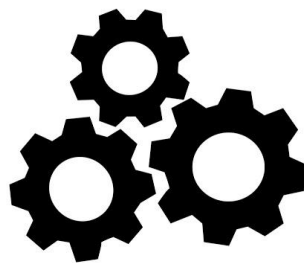
F_{indable}



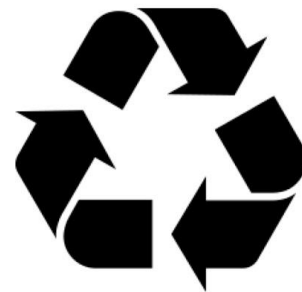
A_{ccessible}



I_{nteroperable}



R_{eusable}



Fedora...

Stores, preserves, and provides access to digital objects

Supports flexible content models for objects

Manages semantic relationships between objects using RDF

Supports any metadata standard

Supports millions of objects, both large and small

Interoperates with other applications and services

Why use Fedora?

Fedora is **flexible**: it can handle both simple and complex use cases

Content in Fedora is **durable**: Fedora supports long-term preservation

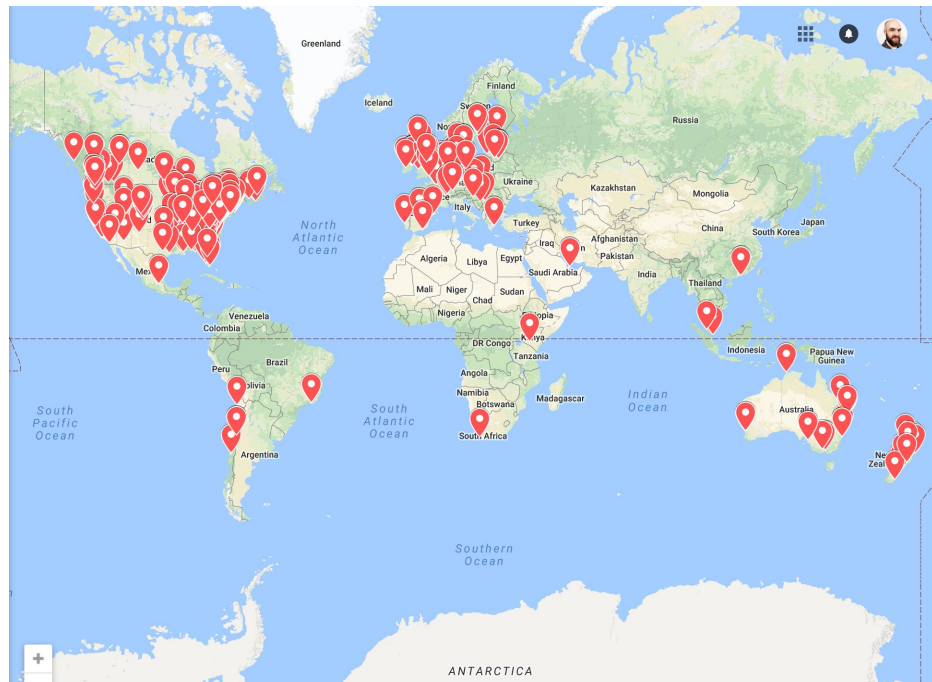
Fedora powers successful digital repository applications

Fedora is **standards-based**

Fedora is backed by a **thriving community**

Fedora by the Numbers

- 400+ deployments
- 30+ countries
- 74 member institutions
- 1090 mailing list members
- 19 active developers

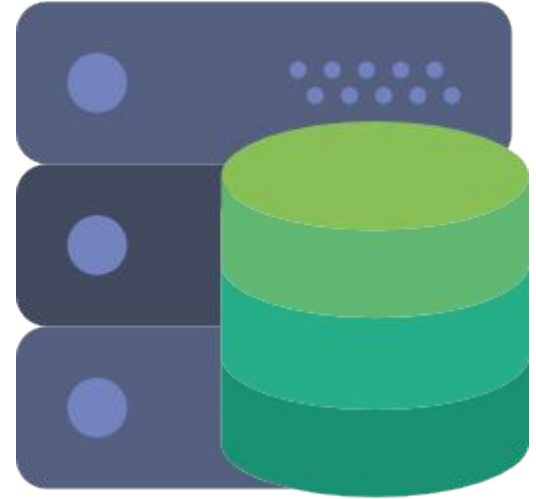


Storage and preservation

Store files in Fedora or use external file systems

Calculate, store, and verify fixity information (checksums)

Maintain a complete version history





Portability and provenance

Software changes over time so data must be able to move freely

Resources can be imported/exported in standard formats and packages

Fedora (optionally) maintains a complete audit history

Fedora front-ends

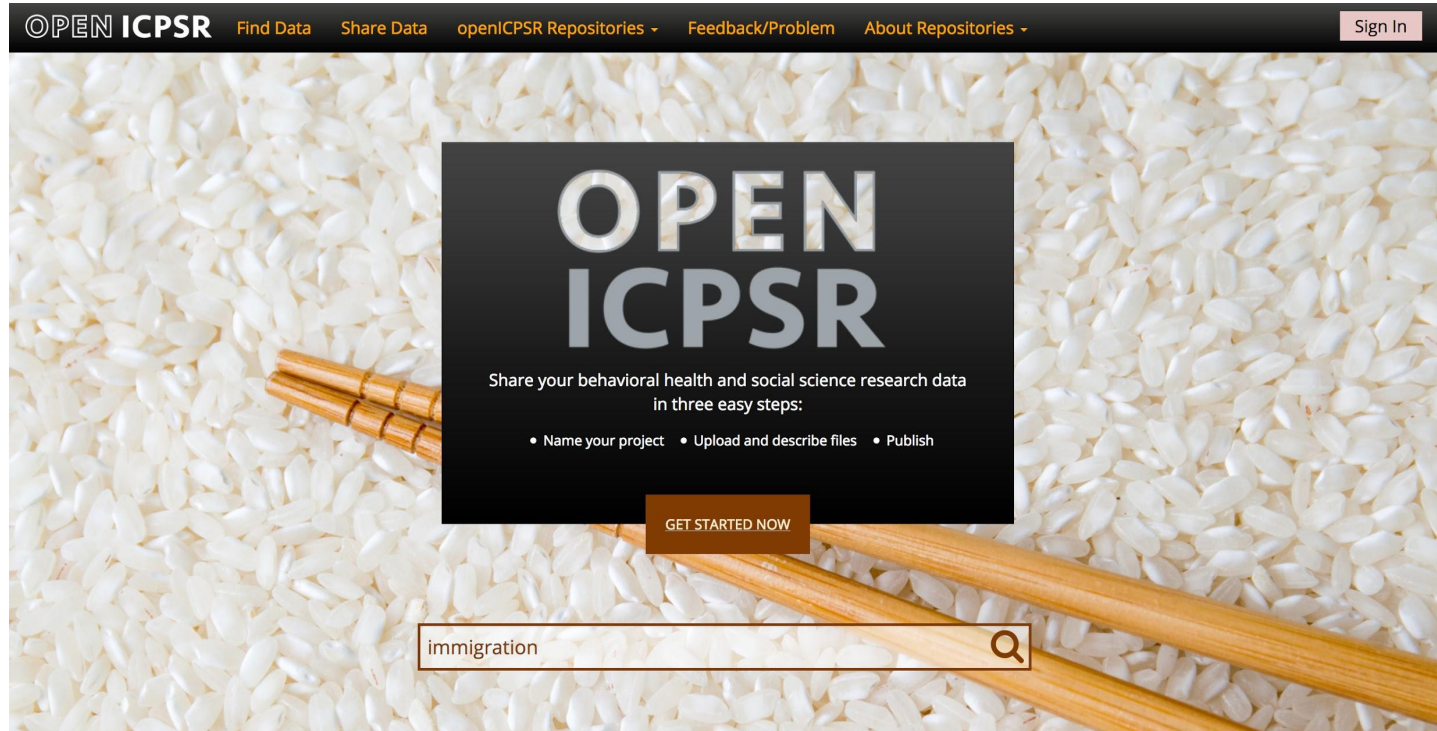
Fedora is *middleware*

You can build a custom framework, or join a broader community:



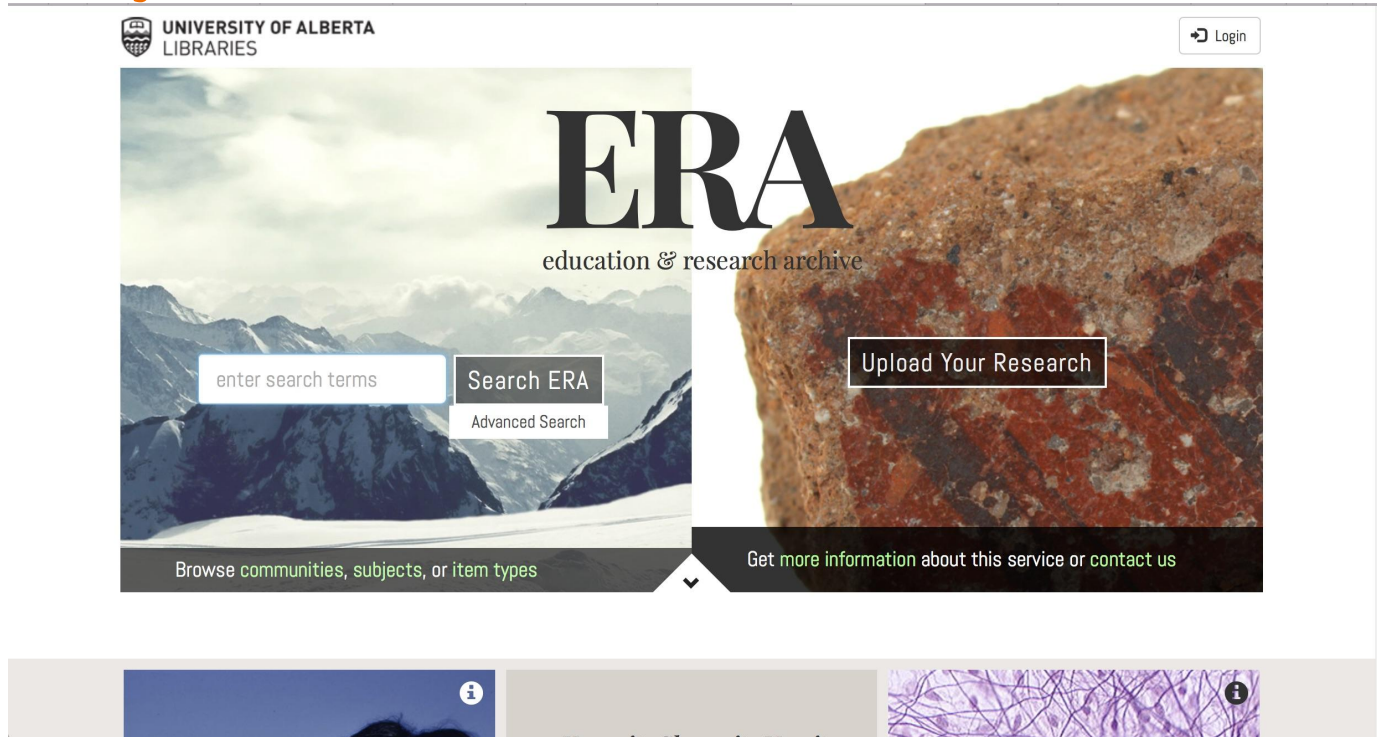
Fedora in Production

ICPSR



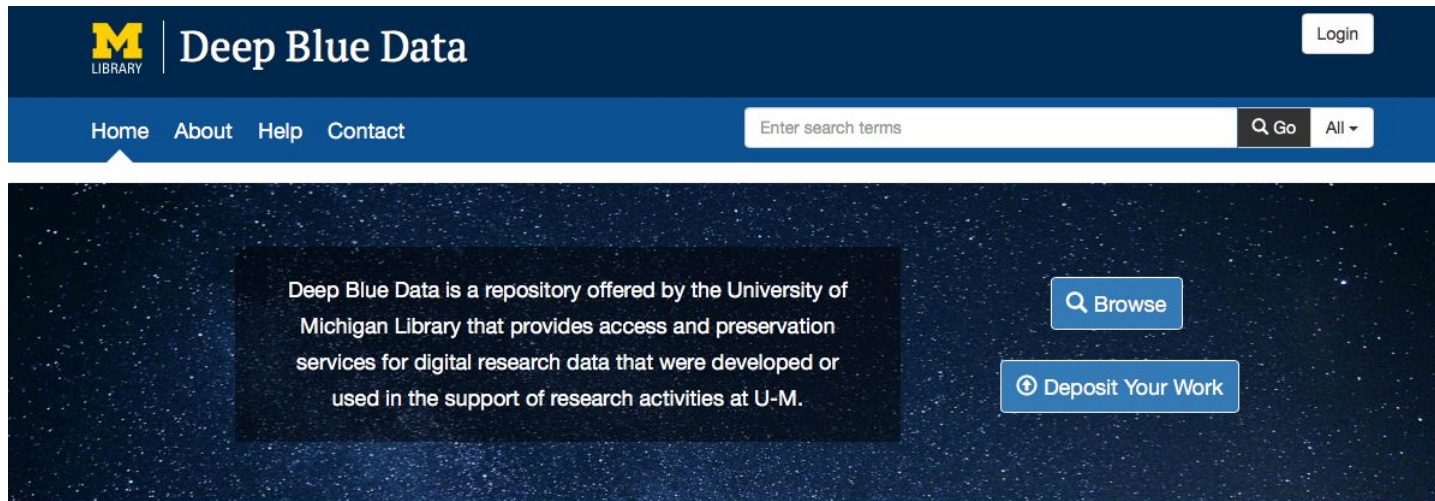
<https://www.openicpsr.org/openicpsr/>

University of Alberta



<https://era.library.ualberta.ca/>

University of Michigan



Featured Works

Neighborhood Effects...

The Observation and...

<https://deepblue.lib.umich.edu>

University of Prince Edward Island



MANAGE DATA

Use the WorkSpaces service to manage your active research data projects.



Managing Research Data at UPEI

Search Data:



In May 2015 the [Tri-Council's new open access policy](#) came into effect. In response to this, as well as the goal of facilitating good data stewardship practices, the Robertson Library, Research Services and ITSS have developed and are beta testing a suite of new supports and services for the UPEI research community. The suite of services recognizes that the research data life cycle does not start

Login Information

Faculty and staff can use their UPEI login information to access and use the services on

feedback

<https://data.upei.ca>

Community

The value of community

Custom software is difficult to support and maintain

Even large institutions can't go it alone

No single point of failure or control

DuraSpace projects are supported by a distributed, global community of stakeholders and contributors.



Training and support

Workshops hosted throughout the year at conferences and events

Multi-day **Fedora Camps** are also available

Service providers for hosting and customization

Mailing lists for ongoing support



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Useful Links

Fedora Website

- <http://www.duraspace.org/fedora>

Mailing Lists

- <https://wiki.duraspace.org/display/FF/Mailing+Lists+etc>

Contact

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