

Chapter 1 - Introducing Islandora

What is Islandora?

Islandora is an **open source** framework developed by the University of Prince Edward Island's Robertson Library since 2006. It leverages both the expertise of PHP/Java/Python developers and of librarians and other information-professionals. Islandora is committed to utilizing open standards for data description and access, as well as high-standards for data stewardship and security over time. Islandora makes it possible to create, edit, discover, view, and manage repository assets. The system strives to strike a balance between extensibility and usability, by providing out-of-the box support for collections, while maintaining an architecture that lends itself to customization to other software and workflows. The heart of Islandora's data stewardship model is Fedora - if you are a Fedora user, you are still capable of accessing and manipulating objects in Islandora's underlying Fedora as you would in any Fedora installation. Special consideration for Fedora users is taken in [Chapter 7 - Customizing Islandora](#).

The Islandora project combines and harnesses the power of the [Drupal](#) content management system and the [FedoraCommons](#) Repository software to create a robust digital asset management system that can be used to meet the short and long-term collaborative requirements of digital data stewardship. More information about Islandora's core technologies is provided in this introductory chapter.

A list of current installations of Islandora is available at <http://islandora.ca>.

Islandora also represents a community-based approach to integrating robust **open source** software projects together. The resulting toolkit empowers users to create bespoke solutions and designs that accommodate the integration of software solutions that you already use. Additional open source applications that provide flexibility and extensibility are added to this core stack to create "Solution Packs."

What are Solution Packs?

Solution Packs reflect best-practice workflows emerging as a result of the community's experience dealing with particular types of data, such as large-format images, maps, books, magazines, and individual research articles. Solution packs combine pre-chosen **Content Models, Metadata Forms**, and Viewers based on the experience of the Islandora community. Solution packs may be customized to meet the needs of your collection and institution, or used out of the box to create collections. More information about installing and using Islandora Solution Packs is provided later on in this guide. Solution Packs often require additional applications to be installed and configured. An overview of common dependencies is provided in the Dependencies section of [Chapter 5 - Islandora Solution Packs](#).

Currently Supported Solution Packs:

- Simple Image Solution Pack
- Large Image Solution Pack
- PDF Solution Pack
- Audio Solution Pack
- Books Solution Pack

An overview of these solution packs is provided in Chapter 5: Islandora Solution Packs.

What need does Islandora address?

Islandora is a response to the necessity of integrating both born-digital and digitized materials into collections, and it addresses the need for ever-more sophisticated publishing and preservation platforms to support research and knowledge formation. In particular, Islandora addresses the following needs:

Stewardship: Islandora emerges out of an awareness of the massive digitization of data, and the creation of born-digital materials that require long-term stewardship, and the current difficulties inherent in providing this stewardship. As software continues to grow and evolve, Islandora stores important data assets securely and in a manner that preserves the accessibility and understanding of digital assets.

Collaboration: Increasingly, knowledge is created and maintained online via active communities of contributors who collaboratively create, edit, review, and catalog information assets. Islandora emerges out of the need for tools that facilitate collaboration and community surrounding information in a digital age.

Access: While the production of information has increased exponentially over the last fifteen years, this information is often difficult to access because it is not cataloged and stored in a way that optimizes retrieval. For that reason, Islandora is committed to open standards for information sharing and transferring. Moreover, Islandora attempts to increase the agency of information specialists, researchers, and librarians, by creating tools that allow for better data management and knowledge creation. Finally, Islandora is engaged with configurable security for data assets, allowing for granular control of access to data.

Flexibility: Unlike closed or proprietary software solutions, Islandora code is transparent - the system's premise is that institutions will have different reasons for using Islandora, and that their data and workflows will be different. For that reason, Islandora is built to be modified and extended. To learn more about developing Islandora, see Chapter 15: Islandora Community (Developing Islandora).

Islandora sites are not simple websites! By utilizing Fedora, sites running Islandora provide the security and sustainability of a more flexible and complex system than what is governed in a series of HTML pages or a regular relational database.

Islandora Core Technologies

Islandora's core technologies are [FedoraCommons](#) repository software, [Drupal](#), and [Solr](#). FedoraCommons Repository Software lends itself to data stewardship via a unique content and relationship modeling framework that preserves the integrity of collections and can be modified to manage any digital asset. This means that Fedora collections are uniquely persistent, no matter what new software lurks around the corner. In the Islandora system, Drupal acts as an interaction layer atop Fedora, enabling users to discover, view, and manage Fedora objects. Drupal is a very popular, module-based system that understands Islandora as a suite of modules. Through Drupal, Islandora users can create content together, and use social-networking to enrich Fedora content.

Solr represents an emerging, and important third application used in Islandora – bringing lightning-fast searching of the Fedora database, including full-text searching of any attached documents. Solr also allows for results to be refined, using faceting techniques to engage users in a process of discovery and exploration.