The Data Conservancy (DC) was launched through a grant from the National Science Foundation’s DataNet program, which built upon prior experience with managing data from the Sloan Digital Sky Survey. The grant provided the DC team an opportunity to broaden its data infrastructure development and gain better understanding of the challenges in collecting, preserving and curating different types of research data. Since the DataNet funding, the Data Conservancy has redesigned and refactored its core infrastructure to leverage existing software and technologies and to build deeper connections with both research and technology communities. Most notably, we have embraced approach of data representation by the Linked Data Platform (LDP) by building our data archive with the Fedora 4 repository platform and leading the development of the RMap Services with funding from the Sloan Foundation.

**Current DC Components**

- Packaging Specification
  - Based on popular BagIt specification
  - Domain model agnostic
  - Adds semantic information about content
  - May be used with any RDF-based domain model

- Packaging Tool
  - A JavaFX point-and-click interface
  - Produces DC-specification compliant packages
  - Supports multiple domain models
  - Allows semantic enrichment

- Package Ingest Service
  - Deposits package content into an archive
  - Exposes content as linked data
  - Fedora 4 is the current reference implementation of a DC archive

**RMap Services**

- Protocol for Linked Data representations
- Developed through the RMap project
- Captures relationships between publication and underlying data
- Distributed Scholarly Compound Object (DiSCO) protocol for resource aggregation
- OAI-ORE based
- REST APIs are available

**Fedora API-X**

- Extends core functionalities of a Fedora 4 repository
- Facilitate:
  - Mapping between domain specific data models and Fedora data model
  - Support for commonly used web-service standards
  - Domain specific federated discovery and access
  - Support advance data curation capabilities