Research Data Services

The College of University Libraries & Learning Sciences of the University of New Mexico offers Research Data Services supporting the data collection, management, archiving, and preservation requirements of UNM faculty conducting sponsored research. As data management planning and sharing become national priorities among sponsors including the NSF, NIH and, recently, the Department of Energy, the Research Data Services team provides a comprehensive suite of data storage, documentation, description, and publishing services including:

- Data Management Plan consultation per sponsor requirements
- Training and workshops in file management, workflow development, data transformation, metadata and documentation, data governance and security
- Cloud storage with granular user management and file level access controls
- Git-based version control
- Metadata development, publication and discovery
- Preservation and archiving

A Lifecycle Model

Emerging models of research data management, curation, and archives services present multiple points of interaction with and facilitation for researchers accessing high performance computing resources. From providing conceptual and technical support for efficient access to networked data and data streams, to standards-based documentation of workflows and procedures, to the packaging and archiving of large volumes of output, the Research Data Services unit of the UNM Libraries anticipates a need for services connecting researchers to HPC at various points within the data lifecycle:

RDS Focus Areas

- **Multi-terabyte, fast networked storage**
- **Data, code, and workflow documentation**
- **Fast network connection to HPC resources**
- **Data normalization and development**
- **Publish, archive, and preserve results**
Research Data Services (rds@unm.edu)

Research Process

Consultation/Support

Data Management Planning

Recommendations for:
- data formats for use throughout the research project lifecycle
- data collaboration, storage and backup strategies
- documentation standards to use
- research area-specific repositories/archives
- data and computer code licensing models to use
- strategies for meeting publisher data sharing requirements

Support for developing agency-specific Data Management Plans

Reference Services

Support for locating data for use in proposals, pilot or research programs, and instructional programs

Support in locating resources for use in evaluating alternative data management tools, technologies and strategies

Support linking researchers with potential collaborators on- and off-campus that have complementary skills and capabilities

Data Management Support

Recommendations for:
- data management strategies & workflows
- analysis tools and technologies
- visualization tools and technologies
- strategies for meeting computational and data intensive research needs

Integration of research data products into LoboVault, including batch import of large data collections

Support for integration of research data into other repositories

Data Management Instruction & Training

Credit courses:
- Introduction to Spatial Data Management (OILS 515)
- Spatial Data Management in Environmental Sciences (OILS 522)

General and Custom Data Management Training Sessions:
- data management first principles
- data documentation (metadata)
- collaboration tools (LoboDrive & LoboGit)

Research Process based upon the JISC Research Lifecycle

Infrastructure

Managed by UL&LS LITS / Supported by rds

LoboGit
Collaborative environment for shared software code development based on the Git version control system.

LoboDrive
Collaborative environment for data sharing and management during the research process.

LoboVault
UNM’s Institutional Repository for archival storage of research data, publications, and documentation.