

Research Data Management

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Critical Challenges in Research Data Management

- Data Organization and Documentation
- Data Storage and Preservation
- Data Sharing and Collaboration
- Data Security and Privacy
- Data Quality and Integrity
- Data Analysis and Interpretation

Tools for Research Data Management

- Data Management Planning Tools: DMPTool and DMPonline
- Data Storage and Infrastructure Tools: network-attached storage (NAS), or cloud storage providers (e.g., Amazon S3, Google Cloud Storage)
- Data Sharing and Collaboration Tools: data repositories(e.g., Zenodo, Dataverse, Figshare), version control systems (e.g., Git, GitHub, GitLab), and collaboration platforms (e.g., Microsoft Teams, Slack, Mattermost).
- Data Preservation and Archiving Tools: DSpace, Archivematica, LOCKSS
- Data Analysis and Visualization Tools: R, Python, ParaView etc.
- Data Security and Encryption Tools: File encryption (e.g., GnuPG, VeraCrypt)