DIGITAL RESEARCH ALLIANCE OF CANADA OVERVIEW

EMPOWERING RESEARCH THROUGH DIGITAL INFRASTRUCTURE

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AGENDA

- About the Alliance
- Mission and Vision
- Services Offered
- Infrastructure and Tools
- Accessing Services
- Community Impact

ABOUT THE ALLIANCE

- National organization supporting Canadian research
- Evolved from Compute Canada
- Funded by Innovation, Science and Economic Development (ISED) Canada

MISSION AND VISION

- Empower researchers with world-class digital infrastructure
- Promote open science and collaboration
- Ensure equitable access to resources

SERVICES OFFERED

- Research Data Management (RDM)
- Advanced Research Computing (ARC)
- Research Software Support
- Cybersecurity for research
- Training and Outreach Programs

RESEARCH DATA MANAGEMENT (RDM)

- Organize, preserve, and share research data
- Tools: DMP Assistant, Federated Research Data Repository (FRDR)

ADVANCED RESEARCH COMPUTING (ARC)

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- Provides powerful computational systems
- Supports AI, climate modelling, genomics, physics, etc.
- Systems include Cedar, Graham, Niagara, Narval

RESEARCH SOFTWARE AND CYBERSECURITY

- Research Software Engineering support
- Best practices for secure research environments
- Training modules and community resources

RESEARCH DATA LIFECYCLE

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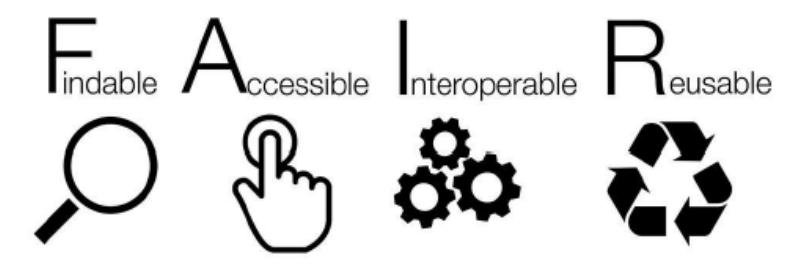
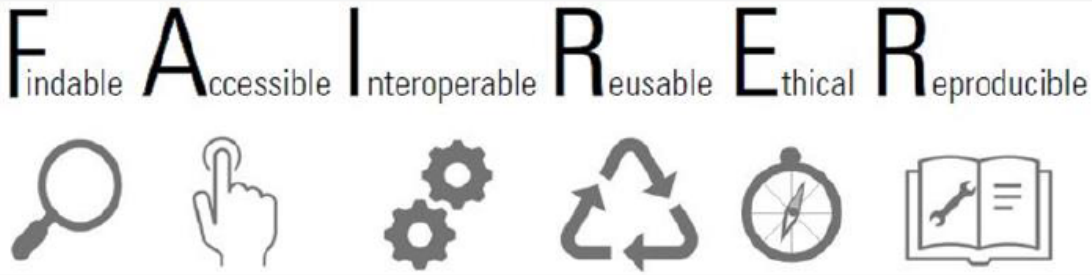
THE FAIR PRINCIPLES



- **Findable:** All data must carry identifiers and metadata that facilitate its discovery.
- **Accessible:** The community should be able to access your data.
- **Interoperable:** The data must comply with specific standards (i.e. standardized vocabularies) and formats (i.e. .csv, .tif).
- **Reusable:** The data must be sufficiently described (and licensed) to allow its reuse by the community.



- **Ethical:** Data must comply with ethical guidelines.
- **Reproducible:** Research findings and analysis workflows can be reproduced by independent researchers.

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ACCESSING SERVICES

- Register at CCDB (Compute Canada Database)
- Apply for accounts and storage allocations
- Utilize user support and training resources

COMMUNITY AND COLLABORATION

- Partnerships with Canadian universities
- Collaborative infrastructure initiatives
- Interdisciplinary research support

CONCLUSION

- Essential digital backbone for Canadian science
- Enabling innovation, discovery, and collaboration

Digital Research Alliance of Canada | Alliance de recherche numérique du Canada

THANK YOU!