



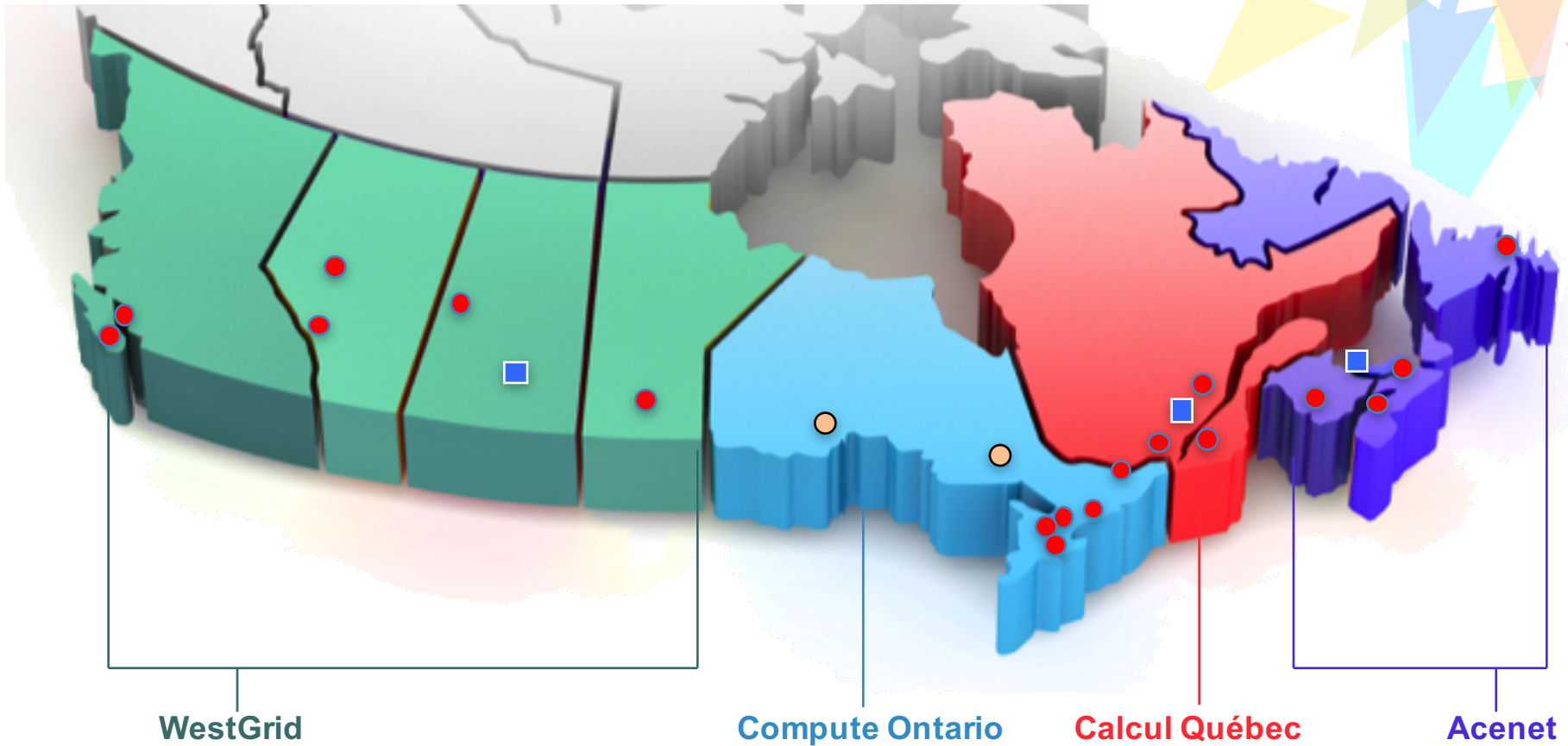
**compute**canada

## **National Research Data Repository**

Todd Trann

GlobusWorld - April 21, 2016

# Compute Canada Regions and Members



- Member University
- Member University + Personnel Site
- Member University, Personnel + Infrastructure Site



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# NRDR Project



## Building a National Research Data Repository

- In partnership with Globus and CARL (Canadian Association of Research Libraries)
- Using Compute Canada hardware
- Available to any Canadian researcher

## Collaborating with existing repository owners

- Indexing their metadata
- Sharing back a search API
- Improving cross-repository search



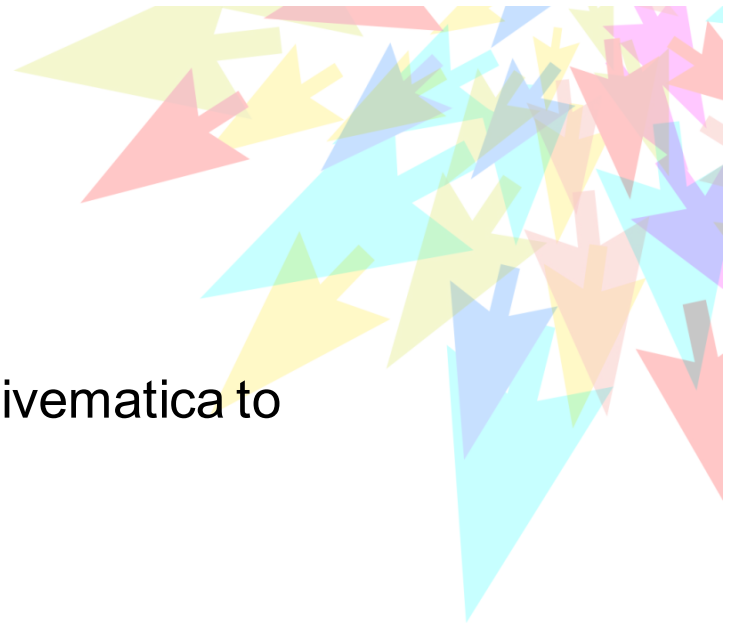
# Features

- **Federated Storage Model:** Storage and repositories can be distributed, and owned operated by organizations / institutions
- **Scalable:** Many files; large files; large total amounts of storage
- **National Data Discovery:** Single search to discover data, regardless of location

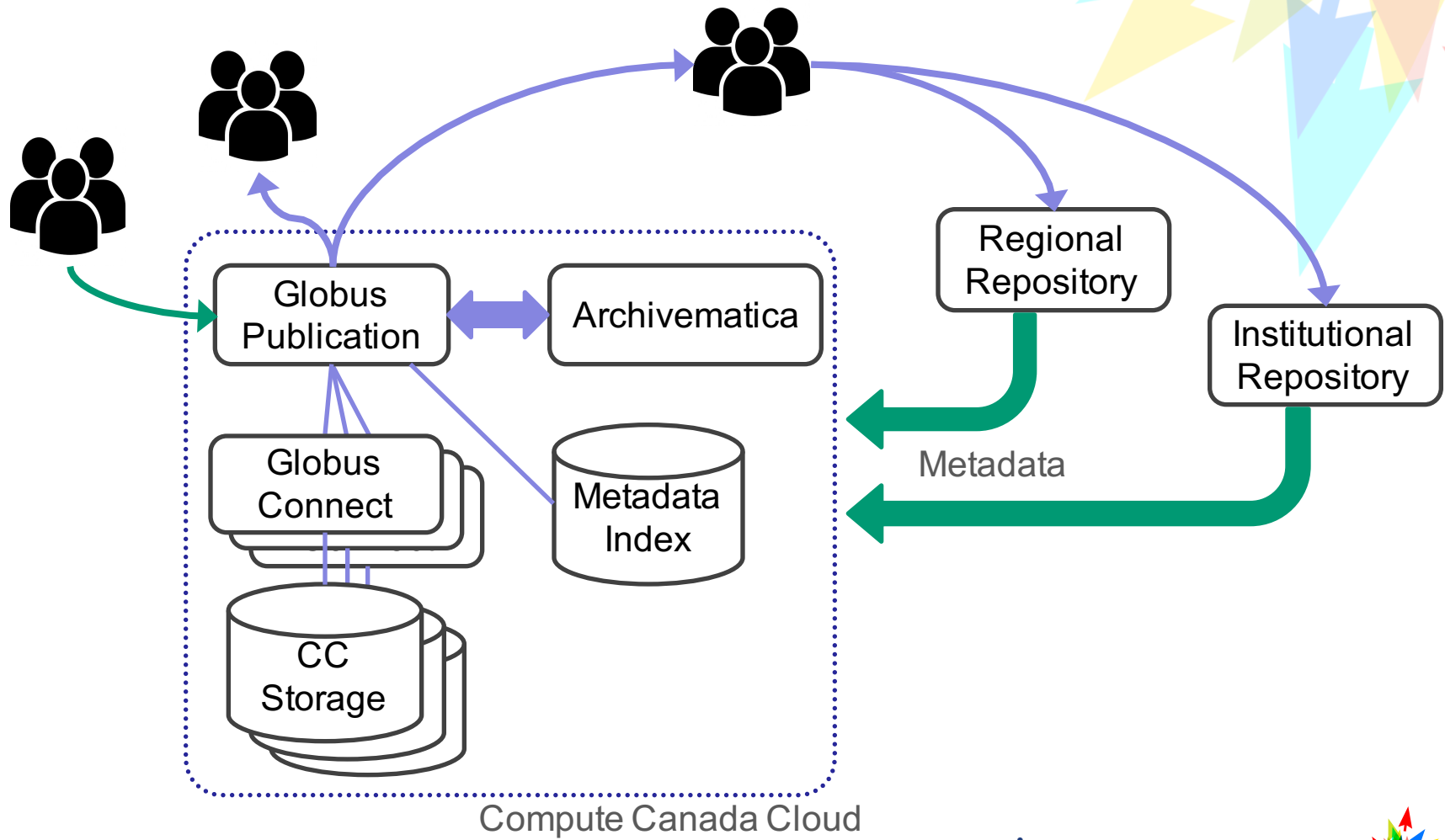


# Features (cont'd)

- **Data Preservation Pipeline:** Use Archivematica to normalize / preserve data
- **Suitable for broad range of data types**
- **Automatic geographic data replication:** Leverage Compute Canada national data infrastructure being deployed in 2016



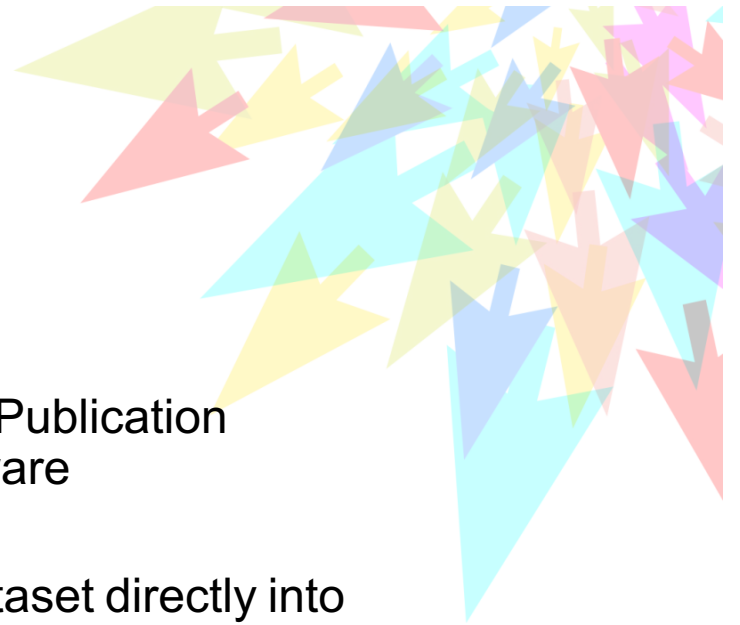
# System Diagram Phase 1



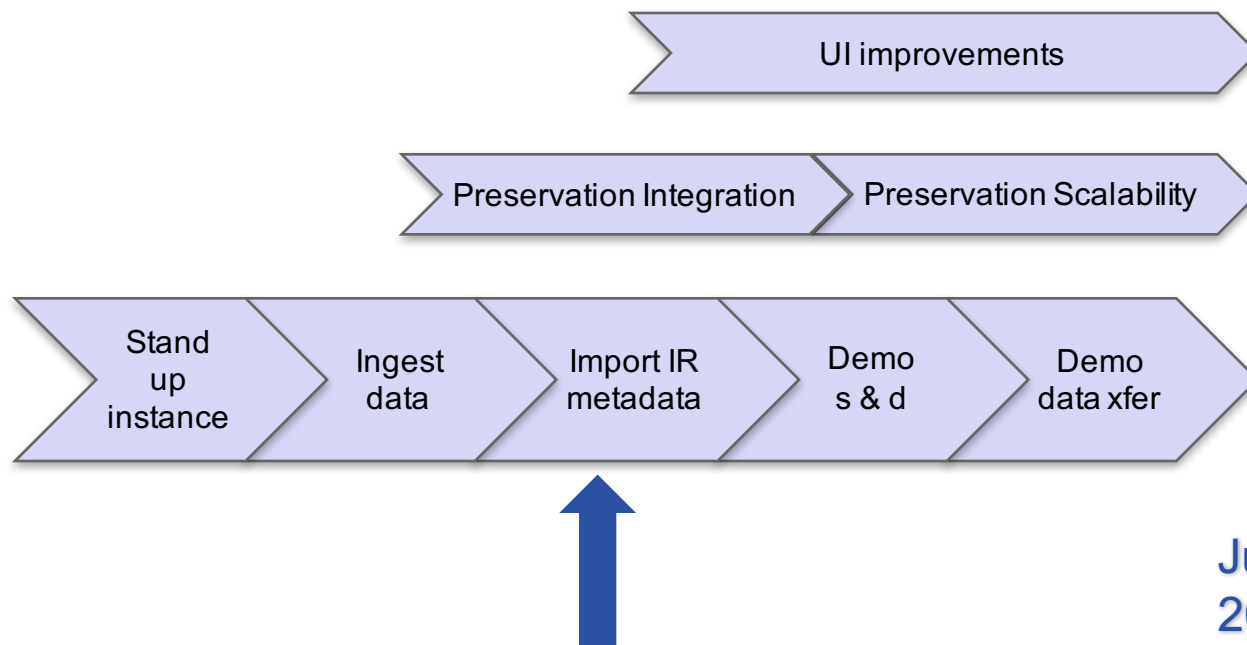
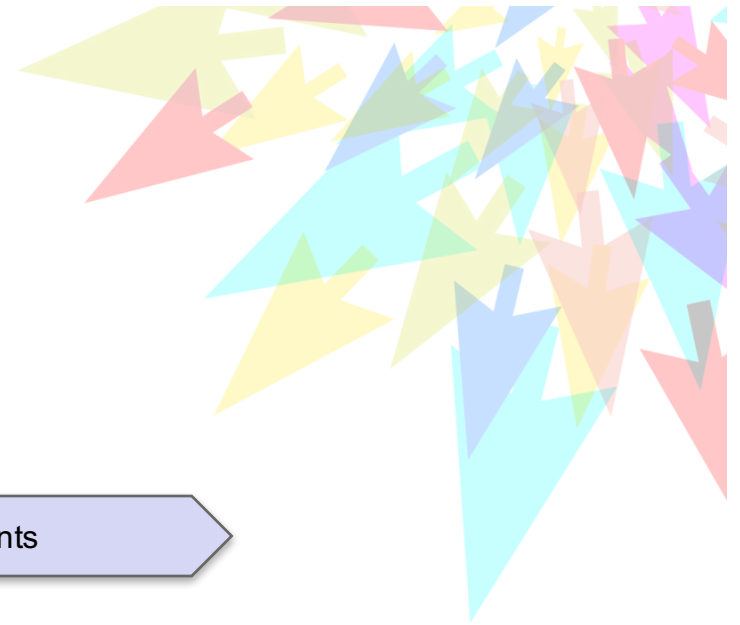
# Project Goals

## Phase 1

- Stand up an in-Canada instance of Globus Publication service, hosted on Compute Canada hardware
- Demonstrate a researcher can upload a dataset directly into the NRDR prototype
- Demonstrate automated dataset preservation
- Import metadata from existing research data repositories and allow anonymous discovery of and access to the data.  
Proposed repositories:
  - UBC's Abacus
  - uAlberta
  - SFU
  - Scholars Portal



# Timeline Phase 1



June  
2016

