



**compute**canada

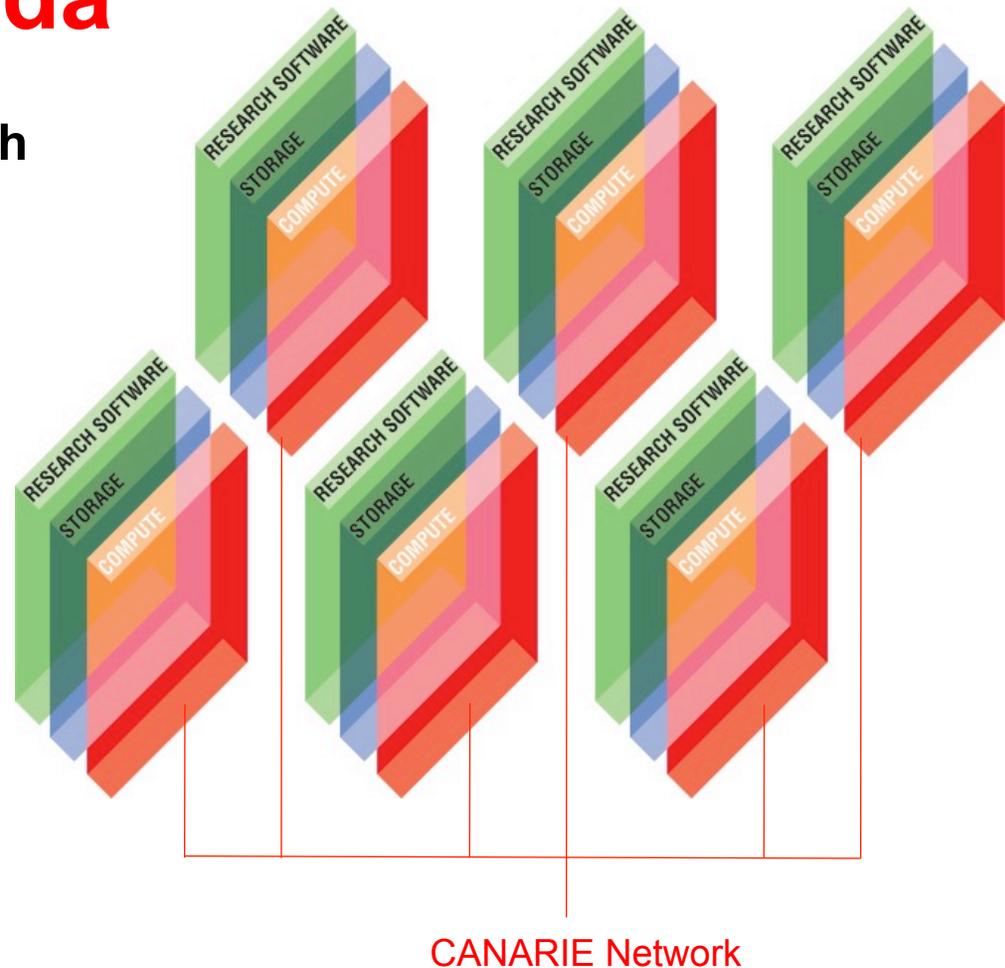
**Compute Canada's  
Globus Deployment**

Jason Hlady  
April 14, 2015

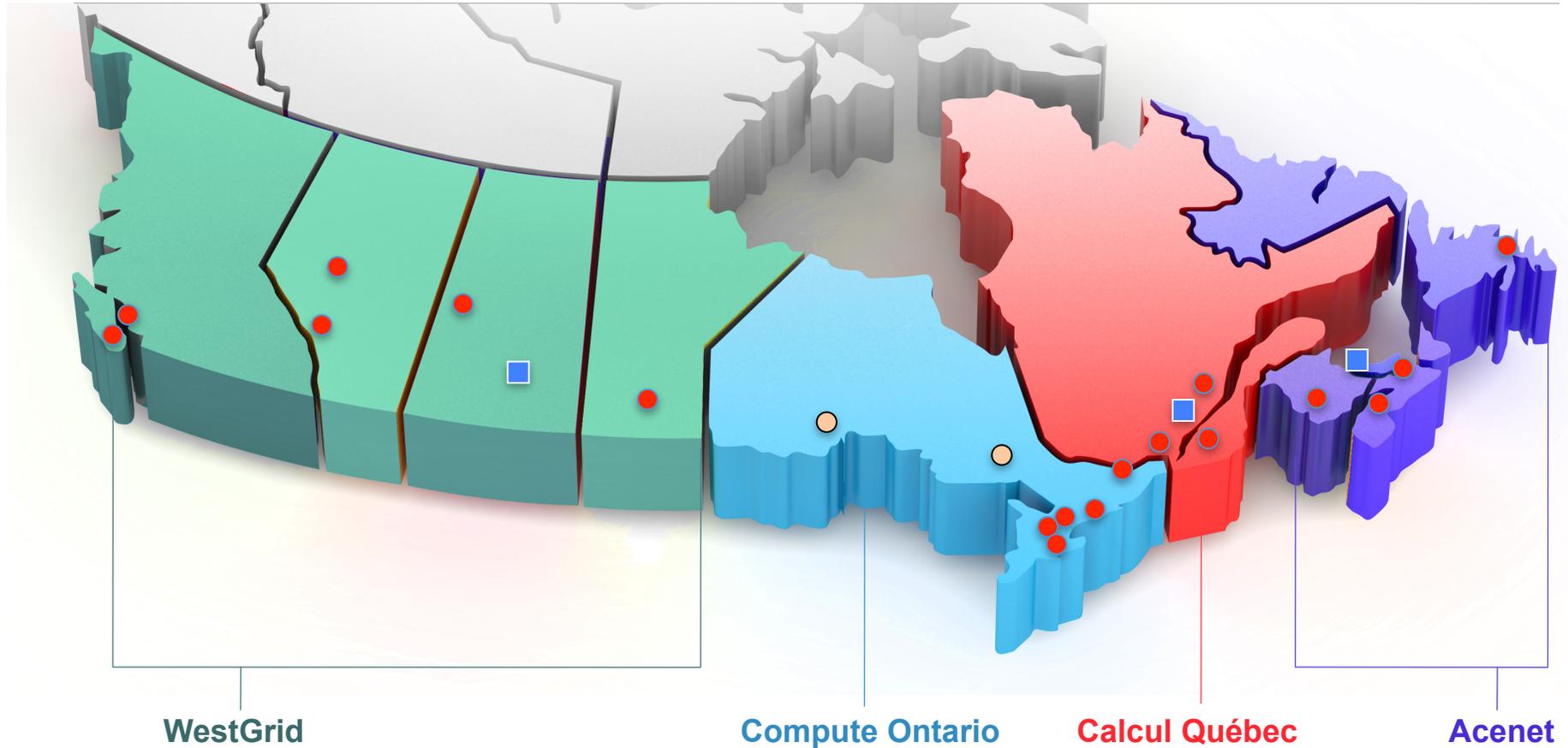
# Compute Canada

## Canada's Advanced Research Computing Platform

- CC is a not-for-profit organization that provides digital infrastructure for researchers in Canada
- 50 HPC systems
- 27 Data Centres
- 200 Experts



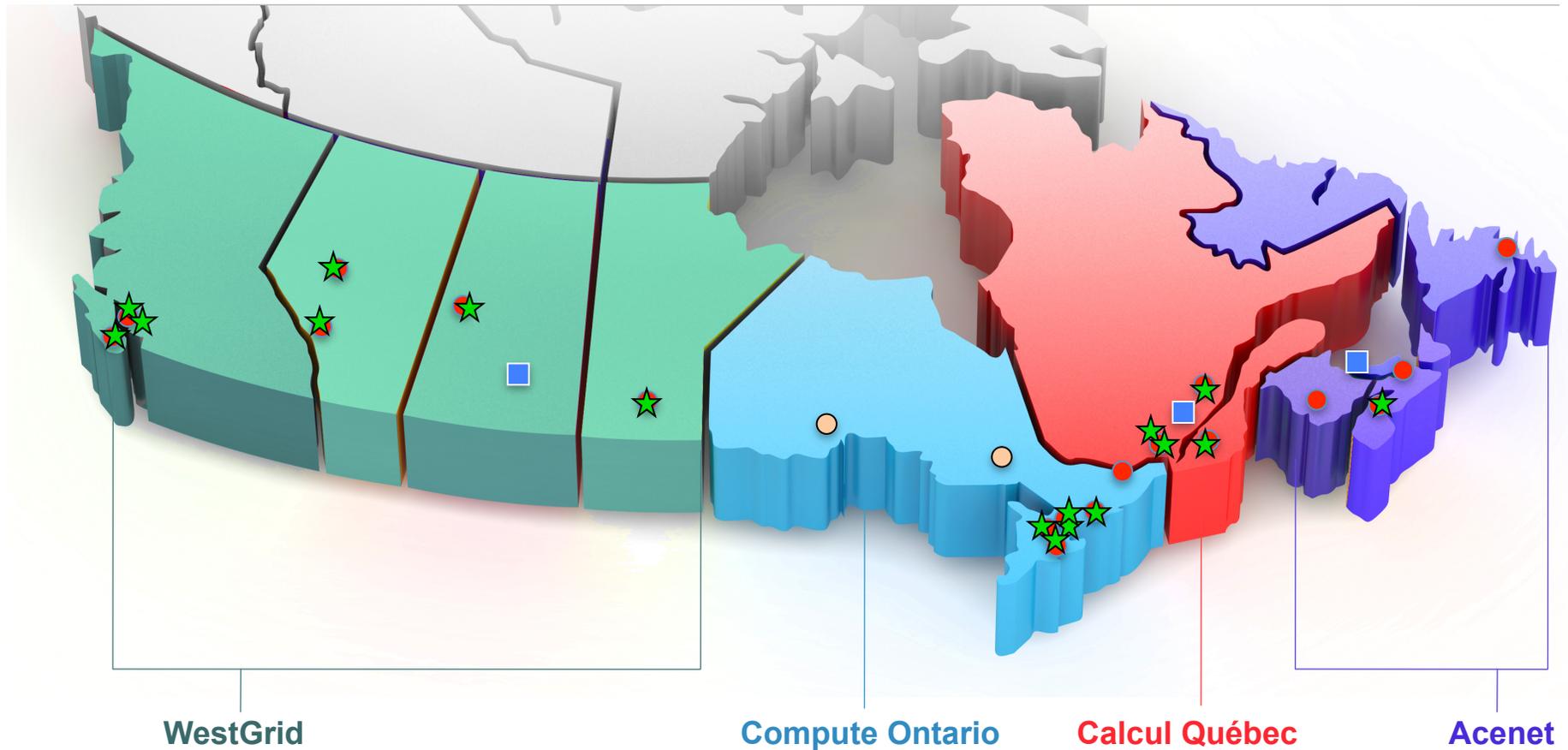
# Member Institutions and Partners



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



# Globus Deployment



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



# CC Globus Deployment Status

- 24 Compute Canada Globus endpoints
  - Each endpoint supports at least one CC system
  - Endpoints in the CC namespace: `computecanada#<systemname>`
  - Where possible, endpoints are dedicated Data Transfer Nodes (DTNs)
  - All CC regions have Globus installations
- Branded portal at [globus.computecanada.ca](https://globus.computecanada.ca)



# CC Globus Portal

Manage Data ▾ Groups Log In Sign Up



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**Sign In** [Sign Up with Globus](#)

Using your [Globus login](#). [alternate login](#)

Username

Password

[Forgot password?](#)

Compute Canada has partnered with Globus to offer this high performance file transfer service.

Calcul Canada s'est associé à Globus pour vous offrir ce service de transfert de fichier à haute performance.

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# CC Globus Usage + Metrics System

- CC Globus service is actively used by a large variety of researchers at many sites, to transfer both within CC and around the world
- Since GlobusWorld 2014:
  - 700TB+ transferred
  - 62M+ files transferred
- Compute Canada has developed a Splunk-based analytics system for CC infrastructure
  - First analytics module developed is for Globus usage



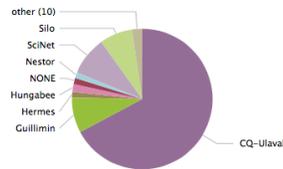
# CC-Analytics Statistics System



# CC-Analytics Statistics System

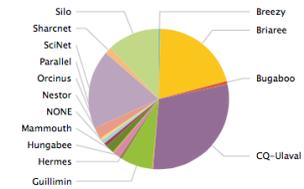
Total number of files transferred - Consortia : \*

5m ago



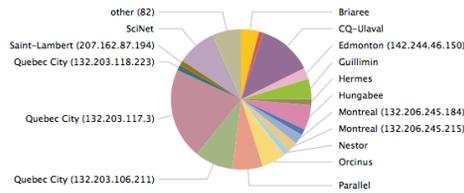
Total data transferred - Consortia : \*

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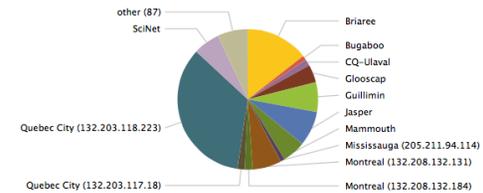
Top destination - Consortia : \*

5m ago



Top Sources - Consortia : \*

5m ago



Sources - Consortia : \*

5m ago



Destinations - Consortia : \*

4m ago



# Future Directions and Challenges

- National Services → National Support Model
  - National ticketing system (scalability for Globus Support)
- Single Sign-on / integration of CC and Globus accounts
  - Account (username/pw) at each consortium + separate Globus account needed presently
- Refresh of look and feel of branded site to align with new CC website
- Improved bilingualism on branded site
- Extend CC-analytics beyond Globus statistics
- Globus Publishing evaluation

