



Intro To WestGrid

WestGrid Seminar Series

Jill Kowalchuk, WestGrid Executive Director

September 23, 2009

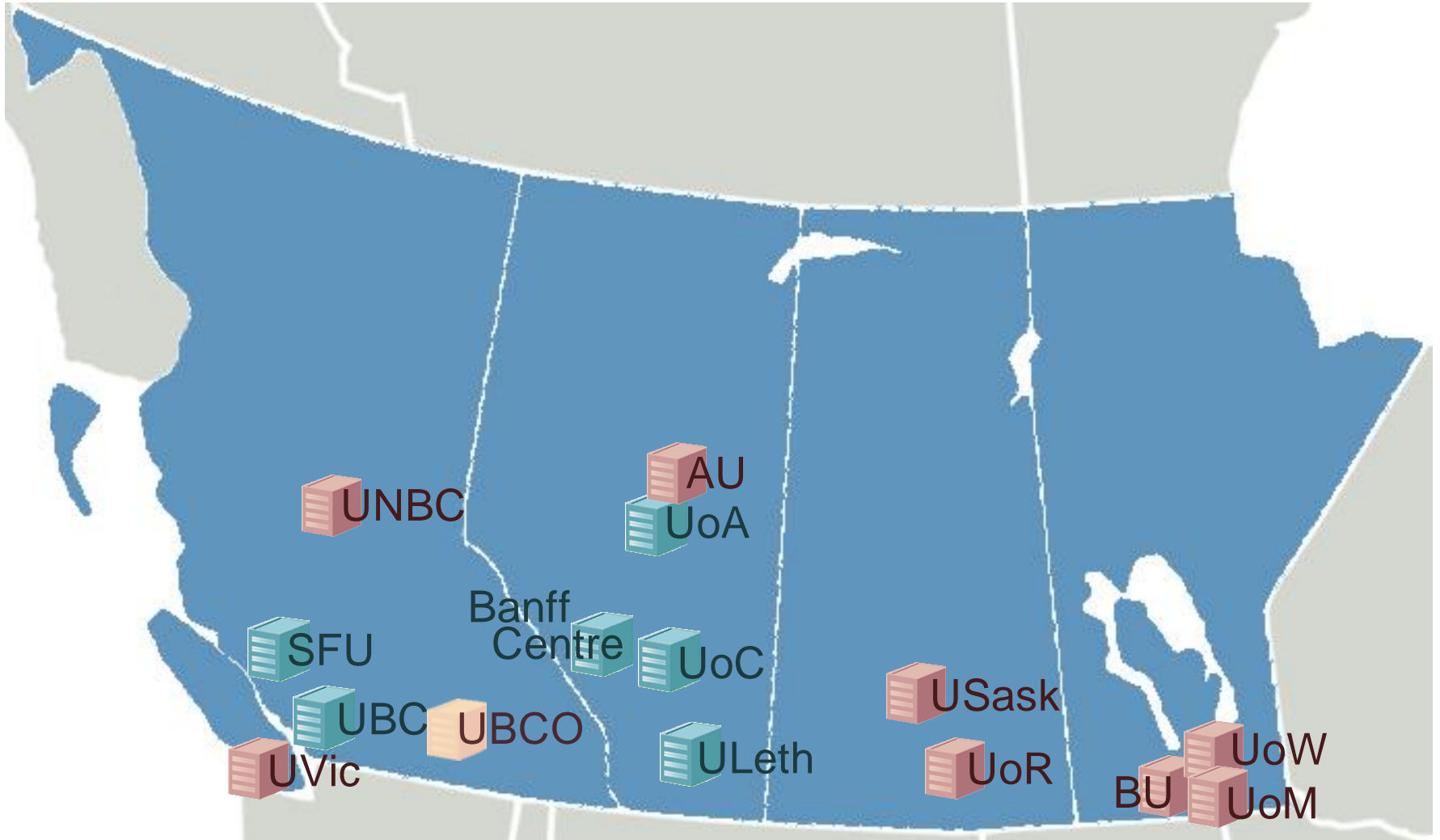
Access Grid

<http://www.westgrid.ca>

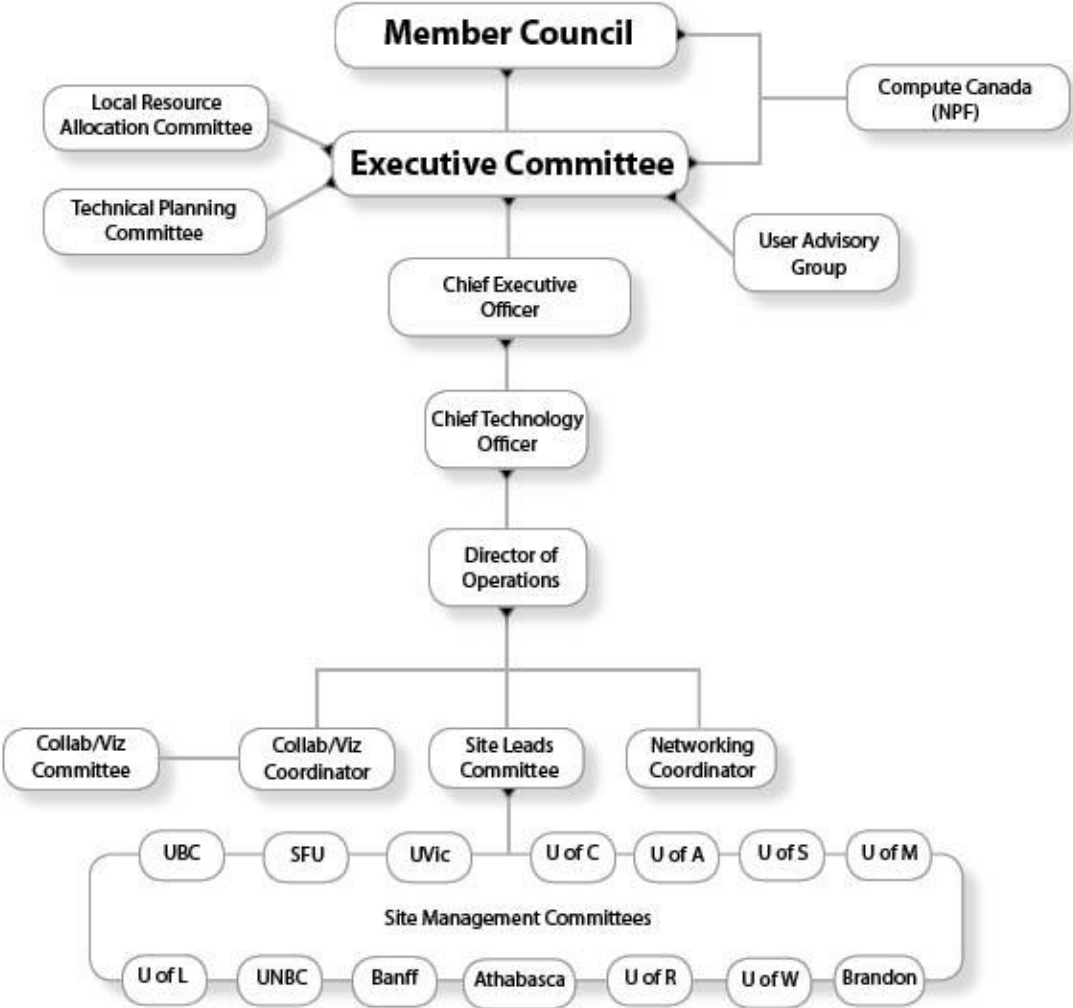
Site introductions

- AGTech representatives
- Questions
- Going forward

History of WestGrid



WestGrid Governance



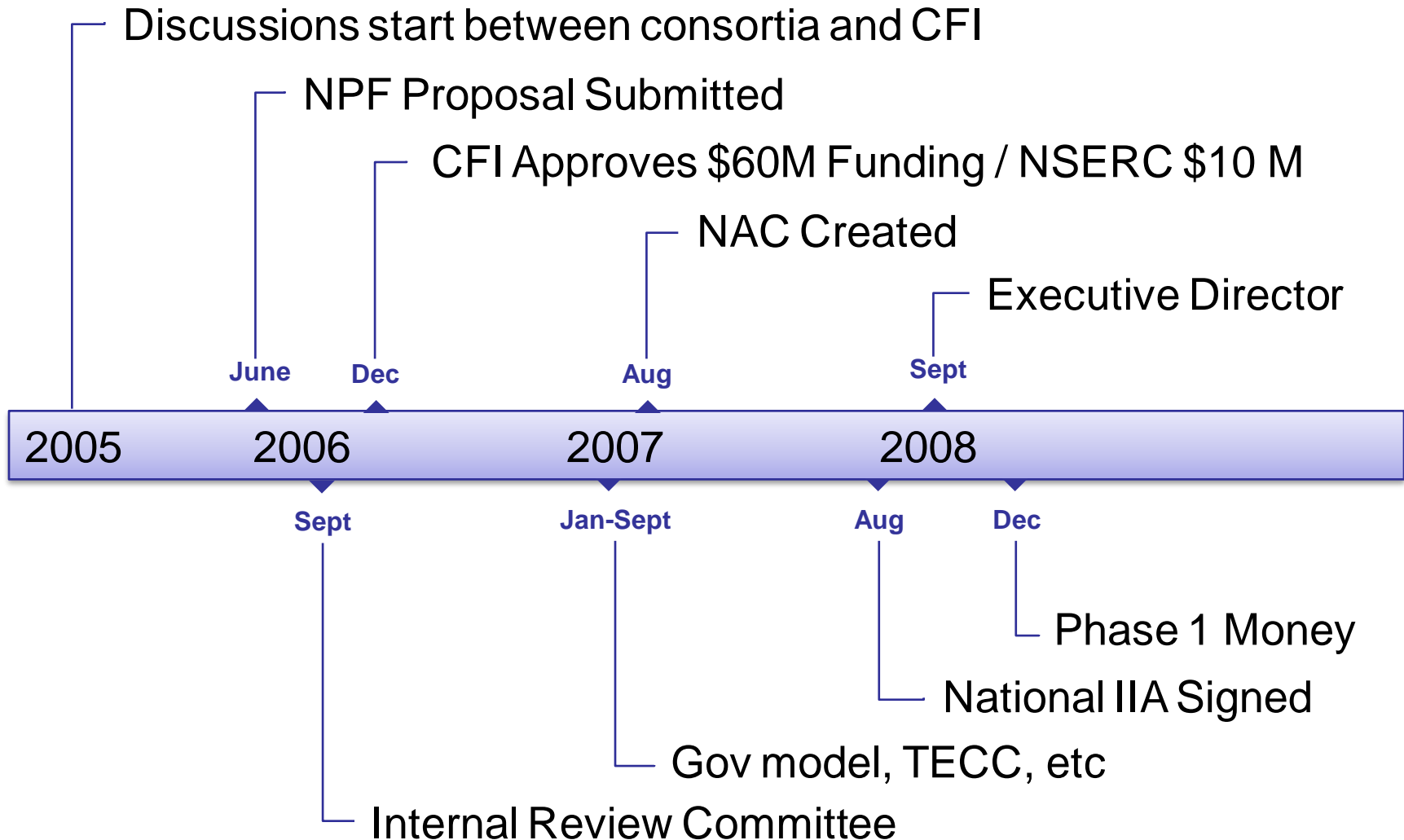
WestGrid Executive

- 8 Principal Investigators
 - Nikitas Dimopoulos (UVic)
 - Mike Vetterli (SFU)
 - Mark Thachuk (UBC)
 - Paul Lu (UoA)
 - Peter Tieleman (UoC)
 - Ray Spiteri (USask)
 - Byron Southern (UofM)
 - Keith Archer (Banff Centre/Non-Major Rep)

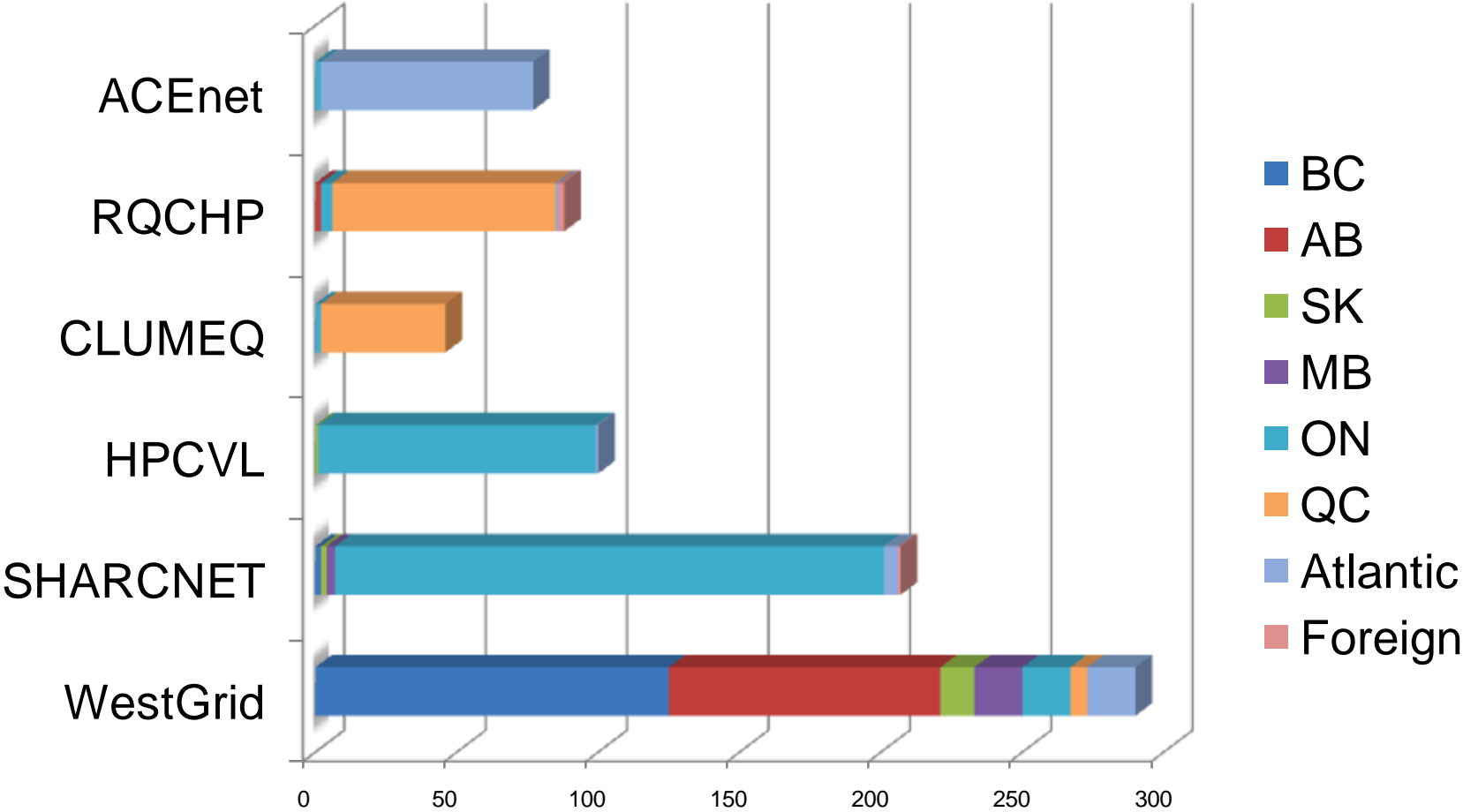
Compute Canada



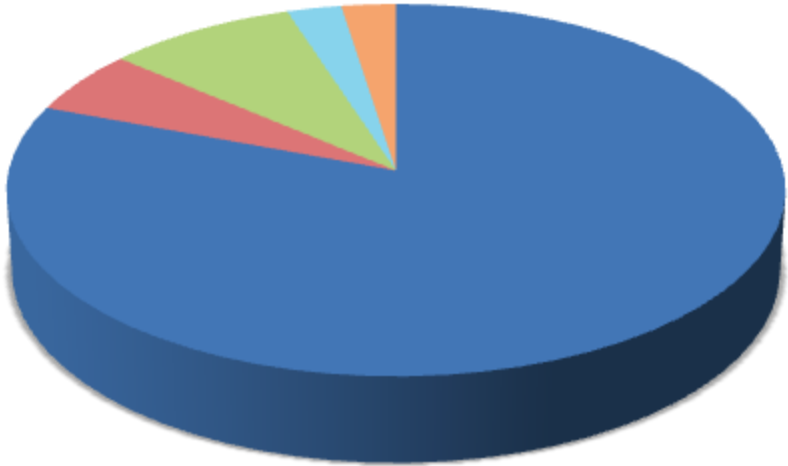
Compute Canada



WestGrid Users



WestGrid Budget



- Compute, Storage & Warranty (\$32.3M)
- Collaboration & Visualization (\$2.2M)
- Renovations (\$3.5M)
- Personnel (\$1M)
- Software (\$1M)

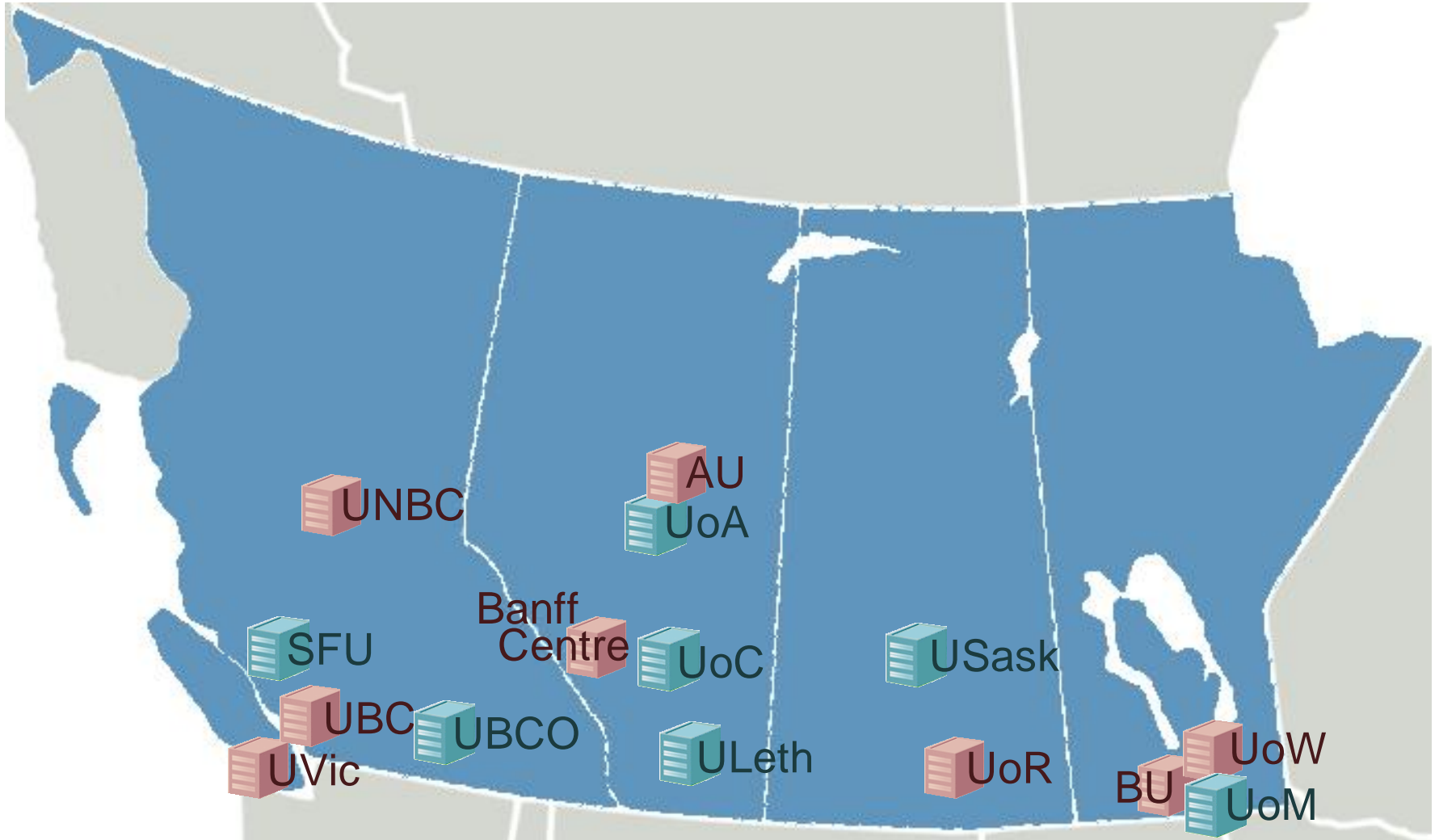
Three distinct uses

- Compute & Storage
- Collaboration
- Visualization

Access to WestGrid

- Who can use WestGrid?
 - Canadian researchers
- How much does it cost to use WestGrid?
 - Access to compute & storage is free
 - Access to collaboration facilities site by site
- How do I access WestGrid resources?
 - Compute & Storage: Get an account
 - Collaboration & Visualization: Email local site or WestGrid Collaboration Specialist:
todd.zimmerman@ubc.ca

Collaboration Sites



Getting an Account

- Register for a CCRI:

<https://ccdb.computecanada.org/>

- Either as faculty or sponsored by faculty
- Confirm email address
- Approval from sponsor
- Get or link existing consortia accounts

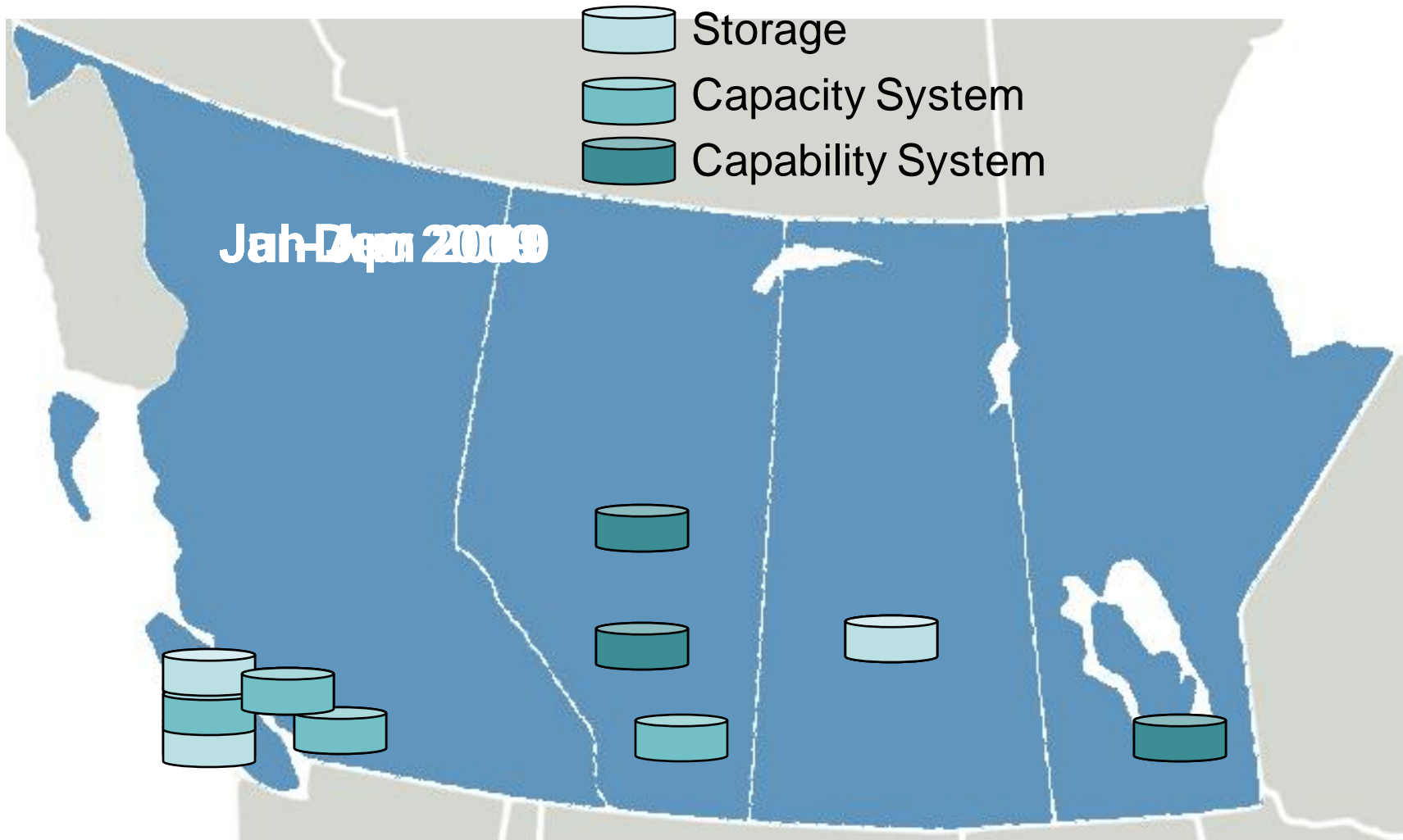
Old Infrastructure (WG I)

System	System Specifications
Snowpatch	256 cores, 8 cores per node, 2GB per core, GigE, HP Intel Xeon X5355 processors
Glacier	1680 cores, 2 cores per node, mainly 1GB per core (some nodes have 2GB), GigE
Arcturus	SGI Origin 3900, 240 MIPS, 400 MHz IP27 processors, 238GB RAM, Irix OS
Cortex	Cortex cluster :Two systems (cortex and dendrite): IBM pSeries 595, Power 5 1.9GHz processors, 64 cores, 256GB RAM, AIX OS
GridStore	100 TB disk space, 600 TB tape

New Infrastructure

System	System Specifications
Orcinus	HP BL2x220c, 384 nodes, 3072 cores, 2GB per core, 2 Intel Xeon E5450, 3.0 GHz, IB, 2:1 blocking 30 TB storage (existing)
Checkers	SGI Altix XE 320, 160 nodes, 1280 cores, 2GB per core, 2 Intel Xeon L5420, 2.5 GHz, IB, 2:1 blocking 80 TB storage
Bugaboo	Dell M600, 160 nodes, 1280 cores, 2GB per core, 2 Intel Xeon E5430, 2.66 GHz, IB, 2:1 blocking, 960 TB storage
Silo	450 TB usable disk, 760 TB tape

Purchase Plan



Software Policy

- Increasing the amount we are spending on software from the first round of funding
 - Creating/maintain a program library
- <https://www.westgrid.ca/support/software>
- Provide support for existing application software
 - Support new software acquisition

New Software

- Proposals will need to provide clear justification.
- Significant number of researchers should require the software, and be distributed across WestGrid sites.
- Draft Evaluation factors:
 - Demand and usage
 - Cost
 - Worthiness
 - Not rigid criteria.
- Each proposal is considered on a case-by-case basis.
- Shared-cost agreements will be considered on a case-by-case basis.

NRAC

- Mission: To ensure that the best science that is received in the proposals is put on the appropriate machine.
- Criteria:
 1. A **project** that spans more than a single consortium as and there is a need to share resources among them;
 2. A **project** that requires a substantial fraction of the resources of a consortium and/or exceeds the limits set for a category of access by the consortium; and/or,
 3. A **project** that requires resources in several consortia because it depends upon a distributed test bed even if a large amount of resources is not required.

WestGrid RAC

- Users requiring more than “default”
- Proposals evaluated on scientific merit, need and available resources
- Proposals
 - Must be submitted by PI
 - 3-pages in length
 - Brief background on PI(s)
 - Description of research project
 - Technical details

Support

- Website: www.westgrid.ca
- Support team: support@westgrid.ca
- Seminars: Using WestGrid - Oct. 7
- Suggestions? Email us: info@westgrid.ca

