

- **Network capacity provisioning & plans**

- Initiated discussions regarding campus network connectivity to regional provider (BCNET), as well as with the Canadian NREN (CANARIE).
- Tier-1 centre connectivity across Canada and over transatlantic link will be provided by CANARIE with 200Gbit/s and are supportive of it. A 400Gbit/s connection will depend on future network technologies and funding.
- Off campus connection to regional BCNET provider hub will be supported with 200Gbit/s or 400Gbit/s depending on the costs. N.B. this is a shared link with Tier-2 and other projects from SFU Cedar data centre.
- By 2027, to provide 400 Gbit/s support will require a full refresh and redesign of the Tier-1 centre core and edge network. This is part of an upcoming funding request to cover initial running phase of HL-LHC.

- **Rucio / Data Access Optimization**

- Need better handles so a site is able to freely configure/optimize its services as it wishes (for the mutual benefit of both the site & the experiment).
- Recent discussions with ATLAS regarding the proper handling of direct I/O versus copy2scratch access

- **FTS**

- Ability to handle some level of prioritization/reordering of requests
- Once no SRM is used and no space tokens, we will need a way to handle and optimize tape disk buffer usage, especially for dataset recalls / bringonline requests (e.g. between data and monte carlo).