

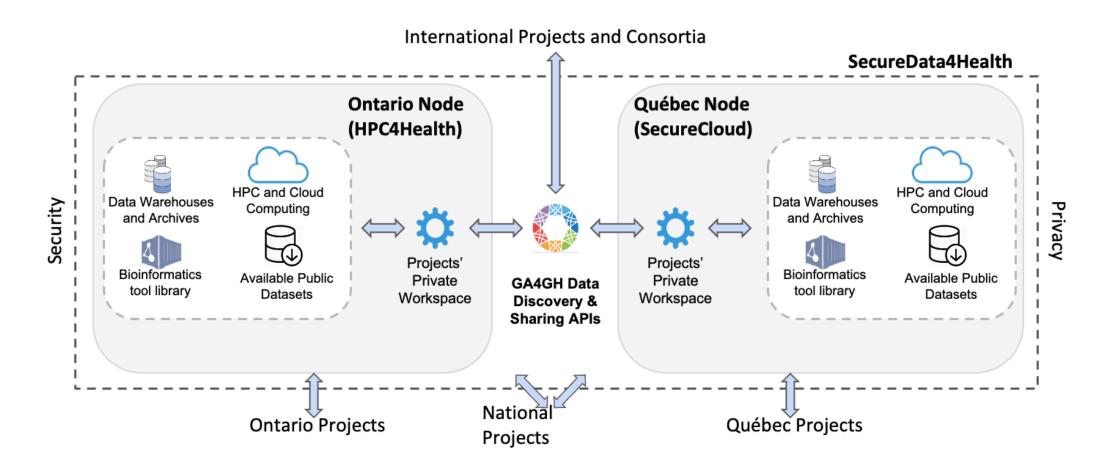
# SecureData4Health

A secure cloud infrastructure for analysis and sharing of genomic and health data

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## SD4H...@ the horizon?



- 1. Acquire & deploy infrastructure QC node + extend Ontario node
- 2. Enable the first secure inter-provincial digital platform for health data in Canada between QC and Ontario nodes
- 3. Extend; such as with the Secure Health & Genomics Data Platform in British Columbia, via the GA4GH protocols.

# SD4H...what is it for now?





- ✓ inter-nodes agreement involving 2 ON & 4 QC institutions (IIA)
  ✓ shared CFI acquisition and set up budget
- ✓ inter-nodes steering committee



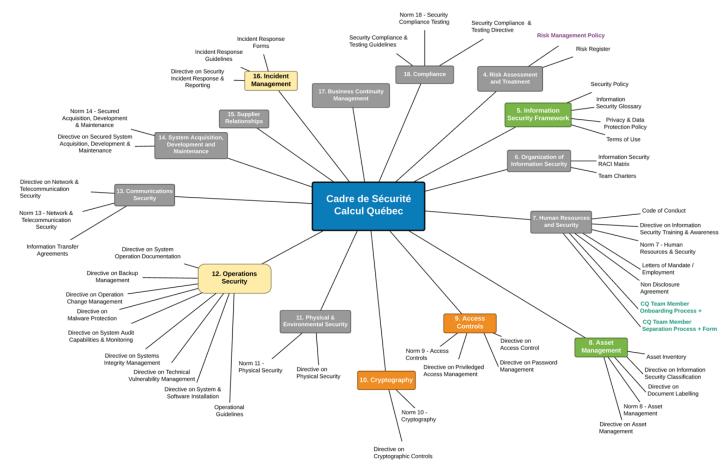




### And also...



✓ provincial infrastructures operated separately with Alliance partners✓ privacy and security frameworks

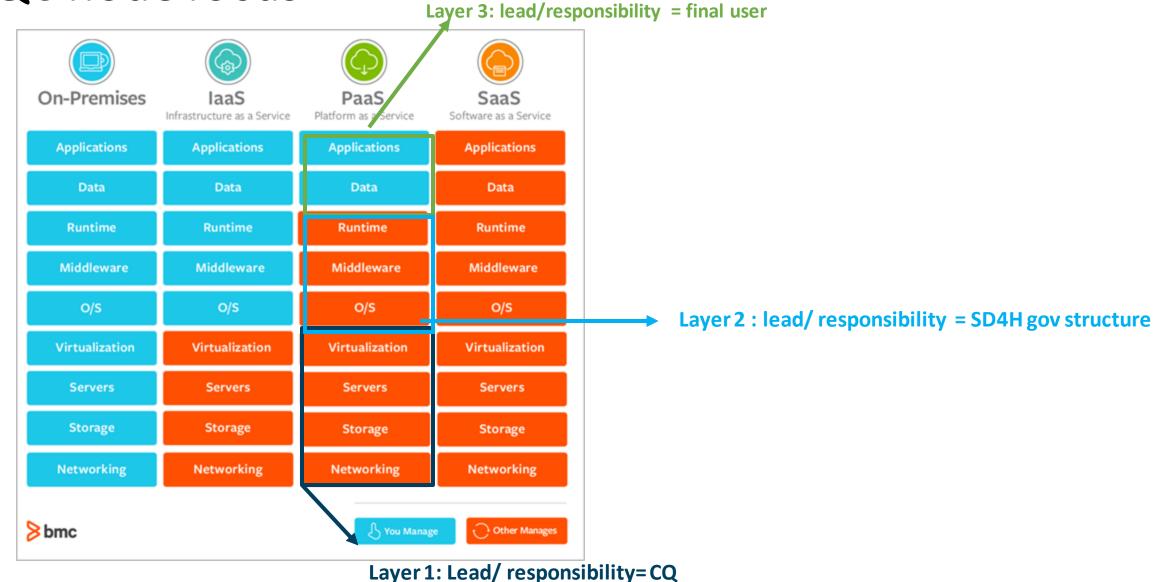


CQ Calcul Québec



## QC node focus

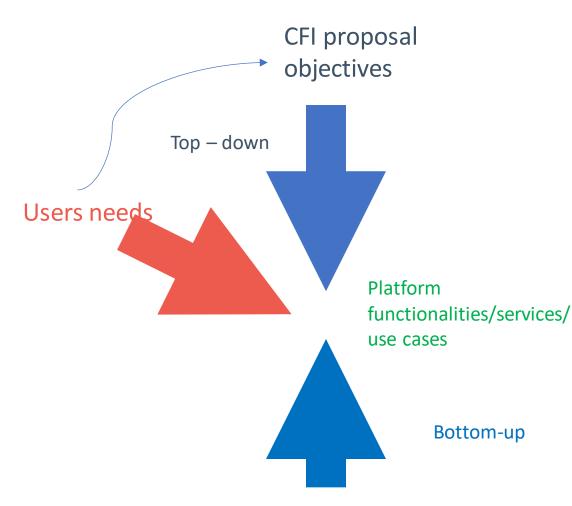




https://www.bmc.com/blogs/saas-vs-paas-vs-iaas-whats-the-difference-and-how-to-choose/

With...





Ex 1: offer a flexible data sharing platform fulfilling requests like:

- I want my data to be secure (Multi-Factor Authentication, Audit Logs, Firewall)
- I want my data to be available from the internet (or not!)
- I want to use existing collaborator identity to share data (University accounts, Google accounts, etc.)
- I want data transfer to be fast.
  - User identification & Authentication
  - Data storage & sharing
  - Run workflows

Ex 2: offer a killer feature: full SSD shared file system that can sustain HPC like loads. High throughput and low latency. This high-performance system was needed to run the C3G Genpipes analysis tools...

State of the art tools possibilities





To serve	
Marathon of Hope PROFYLE MCC SIGNATURE HEC Care4Rare Care4Rare CanCOGEn GenoRef-Q	Projects
<u>∽</u>	SecureData4Health
CanDIG Cancer Collaboratory CQDG HPC4Health EpiShare KidsFirst PARS3 GenAP C3G CGP	Foundation layer
	Infrastructure
McGill U UdeM SickKids UdeS Mont Sinai U Laval UHN	Institutions



#### Thank you!

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