





Today, we are living through a data explosion. The total amount of data worldwide doubles roughly every two years. This torrent of data – and the previously unimagined computing power that has helped create it – presents researchers with many challenges, but also great opportunities.

Turning data challenges into opportunities

The Centre for Advanced Computing at Queen's University helps researchers – no matter the discipline – exploit the power of advanced research computing to harness data and to use them in exciting new ways. From helping doctors diagnose the point when a premature baby is at risk of sepsis, to predicting the future performance of a company, to analyzing the canon of great literary works through novel approaches – we at the Centre help our clients take advantage of this revolution, allowing you to look at the world in new and innovative ways.

Computing solutions tailor-made for you

The Centre supports a state-of-the-art high performance computing facility featuring advanced systems. The Centre has the capacity to provide researchers with the range of computing support they need – from thousands of processors running for weeks on a single application to more modest requirements. As an active member of the Compute Canada national platform, the Centre offers clients access to resources and to computing power nationwide. We also maintain many stand-alone systems intended for exclusive use by individual research teams. To further aid researchers, the Centre supports dozens of scientific software applications, which are often too expensive for individuals to acquire, and boasts its own scientific support team, all of whom have advanced degrees in related disciplines.

Preserving – and protecting – your data

Security and availability are “watchwords” at the Centre for Advanced Computing. The Centre conforms to the ISO 27001 security standards, and offers clients the most secure academic research environments in Canada. We are proud that we can claim, at a Centre level, 99.997% availability over the past years.

In addition to providing high availability, the Centre protects researchers' data by providing daily dual-site encrypted tape backup. We provide our users with significant data storage capacity, both on disk and on tape, for longterm retention. In its 16 years of operation, the Centre has never lost a single piece of data. From actual physical protections through to Centre policies, we provide our users with a highly-secure environment, guaranteeing the safety of highly-confidential data.

Your partner in creating the knowledge economy

Building lasting relationships with researchers is one of our central goals. We provide our clients with customized computing solutions that address their research needs. Furthermore, we work closely with our partners, often becoming integral members of their research teams.

Canada today stands on the verge of becoming a true knowledge economy, one led by its academic researchers across a range of disciplines utilizing advanced computer infrastructure. The Centre for Advanced Computing can help bring this to fruition.

Our Services

- ➔ Access to state-of-the-art computational resources
- ➔ Highly-qualified technical support
- ➔ Data storage (disk) and longterm data retention (tape)
- ➔ Daily encrypted backup to two sites
- ➔ Backup and recovery services
- ➔ Access to, and support for, dozens of scientific software applications
- ➔ 24/7 system emergency support
- ➔ Hands-on training
- ➔ Grant application development assistance
- ➔ Hosting services
- ➔ Vendor and procurement management



CENTRE FOR
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