

About the OLRC

What is OLRC?

The OLRC Storage Service is a cloud storage network, initially created for the use of OCUL members. This storage network seeks to provide an alternative to commercial cloud storage providers to allow OCUL members to more closely control their storage costs and maintain control of their data. This storage service utilizes industry-standard APIs and interfaces to maximize compatibility with existing library use cases, including institutional repositories and other preservation repositories.

OLRC also addresses the need for geographically distributed storage, which many OCUL schools have identified as a gap in their preservation planning. Through the creation of storage nodes at multiple Ontario campuses, OLRC helps libraries mitigate risk associated with local storage failure while still maintaining full control of their assets and ensuring that they remain under Canadian jurisdiction.

The OLRC Storage cluster has been designed taking into account the following principles:

- **Durability** - All efforts will be made to ensure high levels of performance and availability for the storage cluster. The primary focus is on ensuring the durability of the content.
- **Geographic Redundancy**- An important component of the storage cloud is the separation of the nodes across separate geographic areas.
- **Cost Containment** - Wherever possible and without compromising the quality of service, decisions will be made to minimize the cost of operating and maintaining the storage cluster.
- **Standards** - Where possible, the storage cluster will utilize industry standard APIs and interfaces, with the purpose of maximizing the utility of the cluster across a range of applications.
- **Scalability** - The storage cluster will be designed to facilitate its growth over time, and to enable it to keep up with the projected storage demands of its users.

Who is OLRC?

The OLRC is a product of collaboration between 11 university libraries in Ontario. Within this collaboration, the roles are varied. The University of Toronto Libraries (UTL) provides technical and project management staff for the project through its Information Technology Services (ITS) unit and through Scholars Portal. [Scholars Portal](#) is a shared technology service supported by all of Ontario's university libraries through the [Ontario Council of University Libraries](#) (OCUL). UTL provides technology leadership and operational support for Scholars Portal, which houses and makes available millions of digital articles, books and datasets to students and faculty across the province. The other partner libraries provide local technology support and participate in the governance, implementation, and assessment of the project. All 21 university libraries will ultimately benefit from this collaboration by having a new option to acquire high-capacity archival storage through the ODLRC at cost-effective rates.

Collaboration is a critical component of the OLRC. The project partners share responsibility for implementation of the technology that ultimately will benefit all of Ontario's universities and beyond, as Canadian research communities – both within academia and without – come to terms with the challenges presented by the increasing volume of digital objects and the challenges presented by Big Data. The OLRC aims to be a common foundation on which Ontario's university libraries will develop services tailored to their particular communities.

[Steering Committee membership](#)

Technical Advisory Committee membership

Project Partners

Carleton University
McMaster University
Queens University
Wilfrid Laurier University
University of Guelph
University of Ottawa
University of Toronto
University of Waterloo
University of Windsor
York University

Development Partners

Ryerson University



Why OLRC?

Why are Ontario's university libraries developing a cloud storage service? Based on experience and analysis, the libraries have determined that alternative storage options, on campus and beyond, are not viable from a cost point of view for long-term digital preservation. Initial capital costs are too high and ongoing costs are not sustainable. OLRC will make use of scalable technologies to build large-scale storage services using low-cost disk farms and servers, providing significantly lower costs of storage for libraries seeking to deliver and preserve massive digital collections for current and future generations of students and faculty.

Further, researchers are increasingly interested in working with large bodies of digital content to explore long-term societal, cultural, and economic trends. On their own, few libraries can devote the resources needed to provide the kind of advanced text mining tools envisioned for the OLRC. Large collections of digital content, expensive to acquire and maintain, go underused because they are not accessible or not provided in a format suitable for computational analysis. The OLRC will make this data available to Ontario's academic community in formats amenable to computational analysis and will provide them with the computational resources they need, creating efficiencies and avoiding duplication of effort and infrastructure across institutions.