Billions of dollars are invested every year in research, an investment that generates vast and diverse amounts of research data. If properly managed, these data have virtually limitless potential to be re-used in innovative ways. Sound research data management (RDM) practices, with due respect for confidentiality and intellectual property, accelerates scientific progress by allowing researchers to access and re-use others’ data for their own scientific purposes, thereby adding value to those data and speeding up the rate of new discoveries. It also leads to efficiencies by preventing duplication in data creation, and enables greater transparency and verification of research findings.

In Canada, this potential remains largely unrealized. Elsewhere, countries such as Australia, Germany, Netherlands, United Kingdom, and United States are investing in national policies, infrastructure and services to support more comprehensive RDM. As stated in the 2011 Report of the Canadian Research Data Summit, “Canada is one of the few advanced countries that does not yet have a national plan for managing the research data produced through public funding. As a result, valuable data are under-utilized and an important publicly funded asset is being wasted.”

This situation, however, is beginning to change. The federal government has recently published Canada’s Action Plan on Open Government 2014-16, which contains a section on Open Science that includes deliverables on open access to publications and data resulting from federally funded scientific activities. It also calls for the development and adoption of policies, guidelines and tools to support effective stewardship of scientific data. Other organizations, including Canada’s funding agencies (e.g. Genome Canada, CIHR, NSERC, and SSHRC) and Research Data Canada, a multi-stakeholder organization, are developing policies and raising awareness of the needs and benefits of research data management. Simultaneously, there are significant efforts to develop services and infrastructure that support RDM in Canada.

This trend towards improved data management practices has important implications for institutions and the research community. Researchers will have to understand best practices for managing data during their research projects and there will need to be infrastructure and services available to support the long term management and re-use of data. There is an obvious role for universities and their libraries to provide more comprehensive support. To that end, in March 2014, the Canadian Association of Research Libraries (CARL) launched a project to develop a library-based research data management network in Canada, Portage.

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2 http://open.canada.ca/en/content/canadas-action-plan-open-government-2014-16
What is Portage?

The aim of the Portage network is to pool and expand existing expertise, services and infrastructure so that all academic researchers in Canada will have access to the support they need for research data management. The Portage network will have two major components:

- A library-based distributed centre of expertise for research data management; and
- A national preservation and discovery system for research data that will evolve and expand over time.

Centre of Expertise

RDM requires specialized knowledge and expertise, which many researchers do not have. The Portage centre of expertise will provide access to a comprehensive set of resources that point users to the most up-to-date, relevant and trusted sources about RDM. In addition, Portage will host a national web-based tool, to launch in early 2015 that will assist Canadian researchers in developing data management plans. Portage will also act as a forum for sharing expertise across the country in order to build institutional capacity. Areas of expertise will include: privacy, security, and confidentiality; skills and training; data management plans, data discovery, data curation and preservation.

National Preservation and Discovery System

Advice and support for researchers must be accompanied by viable technical solutions. To that end, Portage has also been working on a project to connect the various infrastructure and service components needed for a national preservation and discovery network. The project is being undertaken in close collaboration with Compute Canada, Research Data Canada, and some of the domain data centres to ensure that it will be both inclusive and interoperable.

The project will soon begin to ingest data into two sites that will provide long term preservation services. Once any problems have been addressed and workflows have been stabilized, the network will expand to include other repositories. The ultimate aim is to enable all interested universities to participate, whether or not they have their own local infrastructure, by coordinating shared repositories and services under a cost model that recognizes varying institutional investments and needs.

Who is Portage?

Portage is being led by the Canadian Association of Research Libraries (CARL) and has representation from all four regional academic library consortia—Council of Atlantic University Libraries (CAUL), Council of Pacific and Prairie University Libraries (COPPUL), Ontario Council of University Libraries (OCUL) and Bureau de coopération interuniversitaire (BCI)—as well as the Canadian Research Knowledge Network (CRKN). Portage involves active participation of universities from across Canada and includes some of Canada’s top RDM experts.

For more information, please contact Kathleen Shearer, CARL Research Associate, Martha Whitehead, CARL Vice-President, or Susan Haigh, CARL Executive Director.