



# LAC Digital Preservation Pathfinder Project: Preserving the digital memory of Canada through collaboration and stakeholder engagement

## Introduction

This document should be read in the context of the three following documents, which are available on the Library and Archives Canada website (link) *Library and Archives Canada's Story Continues*; the *Documentary Heritage Management Framework*; and the *Acquisition Orientation Instrument*.

This document is part of a series of eight discussion papers that seek, through practical projects, to validate the four guiding principles and four key roles of the *Documentary Heritage Management Framework* developed by Library and Archives Canada (LAC) during summer and fall 2009. Specifically, each pathfinder project seeks to demonstrate the applicability of these principles and roles in the context of the acquisition business pillar. Each pathfinder project will result in a final report, which will add overall conclusions about the implementation of the *Documentary Heritage Management Framework* and the *Acquisition Orientation Instrument*. Based on observations, the final report will be even more effective in contributing to the achievement of LAC's mandate, within the current operating environment.

## The Challenge

In 2008, International Data Corp. (IDC) released its report on the growth of the digital universe.<sup>1</sup> Among its many projections, IDC calculated that by 2011 the digital universe will be 10 times the size it was in 2006. The same report also noted that in addition to an explosion of digital content, there is an increase in the variety of information “containers”—files, images, packets, and tag contents. In general, the report paints a picture of a digital universe exploding in size, diversity, and complexity, and is one in which digital information is increasingly without a permanent home.

In addition to the exploding size and complexity of the digital universe, digital content is, by its very nature, fragile. It is dependent on computer hardware and software, and it is highly vulnerable to the rapidly changing technology industry as it cycles through new products and formats. While it is relatively straightforward to store digital content, the ability of users to access and use the information is at risk if the computer platforms, hardware, and software needed to interpret the information are no longer available. In short, digital preservation is a

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<sup>1</sup> *The Diverse and Exploding Digital Universe: An Updated Forecast of Worldwide Information Growth through 2011.*



complex problem that requires the active commitment of organizations, the development of appropriate plans and strategies, and the implementation of sound practices.

As highlighted by the report of the international Blue Ribbon Task Force on Sustainable Digital Preservation:

Digital information is fundamental to the conduct of modern research, education, business, commerce, and government. Future accomplishments are accelerated through persistent access to data and digital materials and their use, re-use, and re-purposing in ways both known and as yet unanticipated. Digital assets can be extremely fragile and ephemeral ... Our prolific capacity to create digital information amplifies the scale of the potential challenge.<sup>2</sup>

This challenge, to preserve, and ensure the authenticity and integrity of digital information over time is urgent and shared by all.

## Canadian Landscape

In 2008, Library and Archives Canada commissioned a survey on digital preservation practices in Canada in order to gain a clearer understanding of the current state. Yet unpublished, the intent of the survey was to determine existing practices and resources for digital preservation as well as to identify gaps and challenges. The survey respondents were from a variety of organizations—libraries, archives, government departments/agencies, museums, research institutes—and crossed a number of sectors—academic, government, and not-for profit.

While one should be cautious about generalizing the survey results beyond the sample of repositories from which they came, the survey provides an indication of the types of digital preservation practices in use in Canada, and the challenges faced by Canadian repositories. It points to a range of digital preservation readiness and practices across Canada, and multiple, alternative approaches that have arisen as many players start to wrestle with the issues related to metadata, file formats, policy, organizational requirements, technical and security infrastructures, financial and human resource capacity

At the same time, the Canadian digital preservation landscape boasts a number of organization-specific digital preservation projects, key initiatives, and broad collaborations.

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<sup>2</sup> “Sustaining the Digital Investment: issues and challenges of economically sustainable information.” [http://brtf.sdsc.edu/biblio/BRTF\\_Interim\\_Report.pdf](http://brtf.sdsc.edu/biblio/BRTF_Interim_Report.pdf)



Within the Canadian university domain, there are networks of institutional repositories and digital libraries, projects for content creation and preservation, such as Synergies. Canadian universities are also involved in significant international research projects such as InterPARES at the University of British Columbia. As well there is the Council of Prairie and Pacific University Libraries (COPPUL) Private LOCKSS Network, a pilot program that utilizes the LOCKSS digital preservation system as a means to archive collections of local interest to members.

Provincial and national initiatives such as the Alberta Digital Library and [canadiana.org](http://canadiana.org) represent collaborative approaches to addressing preservation challenges, and a number of provincial and municipal archives have begun to build digital preservation infrastructures to serve their specific mandates for preserving the authenticity and access to archival records under their care.

Federal institutions such as Library and Archives Canada and provincial institutions such as Bibliothèque nationale du Québec are fully engaged in developing Trusted Digital Repository (TDR) capacity for long-term preservation.

### **Strengthening Collaboration**

Martha Anderson, director of the National Digital Information Infrastructure and Preservation Program in the United States has described collaboration as “something you do when you realize you can’t do it by yourself.”<sup>3</sup> Given the enormity of issues within the digital preservation challenge, the need to collaborate is paramount and it is a strategy embraced throughout the world. Library and Archives Canada is reaching out to stakeholders within government, cultural, academic, and research communities across Canada to engage in conversation, to gauge our national readiness, to explore further opportunities to work together, and to share expertise, research, and tools.

Proposed starting points for sharing and collaboration would be through national meetings and the use of technologies such as open or invitational webinars. Library and Archives Canada is working with organizations such as the Canadian Library Association and the Association of Canadian Archivists to leverage the timing of their national conferences to participate in pre-conference sessions on digital preservation. It is hoped that these pre-conferences will appeal to archivists, librarians, technologists, digital collection managers, IM professionals, developers, and consultants in the field.

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<sup>3</sup> Enabling Collaboration for Digital Preservation,  
<http://www.cdlib.org/iPres/presentations/AndersonM.pdf>.



## **Expected Outcomes**

The immediate goals of the pre-conferences along with strengthened on-going dialogue are to take stock, to provide vehicles for institutions to share information, to learn about varying approaches to the issues, and to move towards an identification of gaps and potential partnerships for further collaboration within Canada. An exploration of the emerging digital preservation infrastructure in Canada (including established networks, trusted digital repositories, and successful collaborations) would set the stage for more detailed discussions regarding specific issues in Canada and it would identify what is needed and how to get there.

The ultimate goal is to strengthen the national network to preserve valued Canadian digital content. Such a network would address the range of digital information at risk as well as the standards, tools, and methodologies required, and it would contribute to the global effort.

## **Conclusion**

The final report in March 2010, will describe the results obtained by the implementation of the project described in this document and will be used to achieve the objectives of Library and Archives Canada (LAC) in two respects. On the one hand, each of the eight pathfinder projects will produce operational specific deliverables, which will develop approaches and practices of LAC in respect of certain specific activity areas. On the other hand, the lessons learned during the implementation of each pathfinder project, in the context of the four guiding principles and the key roles, feed the LAC approach to the acquisition, preservation, and the resource discovery of Canada's documentary heritage. Your comments and feedback on this discussion paper will support the modernization work of LAC, as it prepares to revise its approach to meet the challenges of the digital environment in order to continue fulfilling its mandate, and thus better serve Canadians.