

1. Authority

(The Library Board of Queensland)

2. Purpose

The purpose of the Digital Preservation Policy is to:

- define the State Library of Queensland's approach to digital preservation
- define the principles the State Library will use to preserve and maintain the digital content within its collection

3. Background

The increase in digital content being collected and created by and for the State Library has resulted in associated technological and organisational challenges. The State Library will respond to these challenges through the development of new strategies to ensure the ongoing preservation and access of its digital content.

4. Scope

The policy applies to all digital content chosen for ongoing preservation in the State Library's collection including:

- digital material published in Queensland and provided to the State Library through legal deposit in accordance with Part 8 of the *Libraries Act 1988*
- digital material selected or donated for collection
- digital surrogates of material from the State Library's collections from digitisation programs
- websites and online publications not preserved in PANDORA
- audio and video collections, and digital content on physical carriers
- digital content that is created for and by the State Library chosen for preservation

Exclusions

The Digital Preservation Policy does not apply to corporate records created by State Library staff stored locally on personal computers or on the network.

Retention and Withdrawal of Digital Material

It is acknowledged that some digital material may not be selected for permanent retention and preservation. *For the State Reference Library, a balance must be sought between respecting the historical perspective of the collection and maximising storage and access. For Heritage Collections, the principle of permanent retention is upheld in all but the most exceptional cases.*¹ In accordance with the Collection Development Policy some digital material may be withdrawn from the collection. In these cases the digital preservation policy will cease to apply.

5. Policy Statement

The State Library of Queensland is committed to preserve and maintain access to digital content in its collection that is significant to Queensland's cultural and documentary heritage.

Preservation

The State Library will employ three key strategies to enable the effective preservation of its digital content.

- Creation
The State Library will determine and use best practice for the creation of digital material. The State Library will actively promote open standards-based formats and accepted industry standard formats for the creation of digital material to help facilitate future access and preservation.
- Monitor
The State Library will employ a preservation watch mechanism to help identify any formats that are at risk of obsolesce. It will also monitor the larger technological environment for signs that equipment and standards are becoming obsolete
- Action
Different approaches will be used on an as needs basis for digital material that is deemed at risk because of probable hardware or software obsolescence, media deterioration or media failure to ensure ongoing preservation and access. Activities will include:
 - When possible collected digital material that is in a non-standard or at risk propriety format will undertake a normalisation process to a pre-determined open standards-based format before being stored in the secure digital repository
 - Digital material that is collected, stored or published on physical carriers (CD, DVD, disk, tape) will be migrated to agreed formats and standards then ingested to the online secure digital repository. The original physical carrier will also be retained and be considered an archival copy
 - Digital material created by the State Library and stored on local servers will be migrated to agreed formats and standards then ingested to the secure digital repository if selected for ongoing preservation

It is recognised that strategies will have to be flexible to manage with ongoing changes in technology and standards. The State Library will monitor, investigate and adapt strategies to reduce risk and achieve best practice to preserve and maintain access to its digital content.

Priorities

Digital preservation activities are to be scheduled by appropriate priorities for action. Some digital preservation activities may be delayed without adverse effect; others may require more urgent action. In some instances the technical complexity of maintaining and preserving access to digital material will impact on the scheduling or option of digital preservation action.

Accessibility

- Storage
The State Library aims to have all of its digital content stored in its secure digital repository and provide ongoing access to the content for as long as necessary. The State Library will use the broad understandings and concepts embodied in the Reference Model for open Archival Information Systems (OAIS), ISO 14721:2003 as a conceptual model for the architecture and management of its own secure digital repository.
- Authenticity
As some digital preservation activities may result in changes to the digital material all digital preservation processes will be documented in the provenance metadata to ensure the authenticity of the digital records.

Preservation Metadata

The State Library will record preservation metadata about each digital object and allocate unique persistent identifiers to successfully manage and preserve its digital content over time. Preservation metadata will assist in ensuring essential contextual, historical, and technical information are preserved along with the digital object.

Legislative and Moral Responsibility

The Copyright Amendment Act 2006 gives provisions to key cultural institutions to make preservation copies of material that is of cultural or historical significance to Australia. The State Library will undertake all digital preservation activities in accordance with the Copyright Act 1968.

Agreements with donors with regard to special conditions for access to collections will also be acknowledged.

Relationships

The State Library will actively foster collaboration with other local, national and international organisations to share information and experiences, seek guidance and work together to address digital preservation challenges. The State Library will endeavour to provide a leadership role to organisations and public libraries in Queensland through mentoring and fostering digital preservation activities.

6. Related Procedures

Metadata Standards

[Digital Standard 1 – Metadata for digital objects and other specified resource types, version 1.4](#)

[Guidelines for the use of metadata in the description of digital images](#)

[Directory and file naming conventions for digital objects, version 1](#)

Image Capture Standards

[Digital Standard 2 – Digital capture & format, version 2.05](#)

7. Related Policy

[Collection Development Policy](#) ¹

[State Library of Queensland Digitisation Policy](#)

8. References

Digital Preservation Coalition, *Preservation Management of Digital Materials: A Handbook*

<http://www.dpconline.org/graphics/handbook/>

National Library of Australia, *Recommended Practices for Digital Preservation*

<http://www.nla.gov.au/preserve/digipres/digiprespractices.html>

Reference Model for open Archival Information Systems (OAIS), ISO 14721:2003

http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=24683

Appendix A.

Term	Definition
Access	The method of obtaining data resources and programs. Access may be restricted in some instances because of copyright or security classification. For digital preservation purposes access also means the continued, ongoing usability of digital materials, retaining all qualities of authenticity, accuracy and functionality deemed to be essential for the purposes the digital material was created and/or acquired for.
Analogue	An electrical signal that varies continuously. Analog is the traditional method of modulating signals so that they can carry information. Amplitude modulation (AM) and frequency modulation (FM) are the two most common methods of analog modulation.
Authenticity	The quality of being reliable or trustworthy. In the case of digital materials it refers to the fact that whatever is being cited is the same as it was when it was first created unless the accompanying metadata indicates any changes. Confidence in the authenticity of digital materials over time is crucial owing to the ease with which alterations can be made.
Authentication	A mechanism which attempts to establish the authenticity of digital materials at a particular point in time. Mechanisms to assure authentication may include digital signatures, naming schemes, watermarking and various kinds of (open) encryption techniques.
Born-Digital	Digital material that was created and exists only in a digital format, for which there has never been and is never intended to be an analogue equivalent.
Digital Content	A broad term for an object of some sort (text, image, sound, and video) captured in digital format.
Digital Material	A broad term encompassing both born-digital and digital surrogates created as a result of converting analogue materials to digital form (digitisation).
Digital Object	Data stored as computer files and requiring applications software for viewing, including databases, spreadsheets, word processor documents, web pages, video, audio, images, maps, 2 and 3-D models etc.
Digital Preservation	The series of managed activities required to maintain continued access to digital materials beyond the limits of media failure or technological change for as long as necessary.
Digital preservation strategies	Technical approaches to long-term digital preservation including such strategies as data migration, normalisation, technology preservation (hardware and software) and technology (software) emulation.
Digital Surrogate	A digital copy of an analogue object that has been created using digital technologies
Digitisation	The process of converting a non-digital object into a digital object. The resulting digital surrogate would then be classed as digital material and subject to the same broad challenges involved in preserving access to it as born-digital materials.

Term	Definition
Metadata	Data about data. Information which describes significant aspects of a resource such as context, content and structure of records and their management through time. Metadata supports a variety of operations on objects.
Migration	The transfer of digital materials from one hardware/software configuration to another or from one generation of computer technology to a subsequent generation. The purpose of migration is to preserve the integrity of digital objects and to retain the ability for clients to retrieve, display, and otherwise use them in the face of constantly changing technology.
Normalisation	A process of changing digital objects of a particular type into a single archival data format that is thought to embody the best overall compromise amongst characteristics such as functionality, longevity, and preservation.
Open Format	A published specification for storing digital data, usually maintained by a non-proprietary standards organization, and free of legal restrictions on use. The primary goal of open formats is to guarantee long-term access to data without current or future uncertainty with regard to legal rights or technical specification.
PANDORA	PANDORA: Australia's Web Archive of copies of Australian online publications, established initially by the National Library of Australia in 1996, and now built in collaboration with nine other Australian libraries and other cultural collecting organisations. The name, PANDORA, is an acronym for: Preserving and Accessing Networked Documentary Resources of Australia
Preservation Metadata	Preservation metadata is intended to store technical details on the format, structure and use of digital content, the history of all actions performed on the digital material including changes and decisions, the authenticity information such as technical features or custody history, and the responsibilities and rights information applicable to preservation actions.
Preservation	The processes and activities involved in protecting something from loss and ensuring the survival of material through time.
SAN	Storage area network. A dedicated, centrally managed, secure information infrastructure that enables interconnection of servers and storage systems.
Secure digital repository	A storage system in which digital objects are stored for subsequent access or retrieval. A secure digital repository aims to provide reliable, long-term access to managed digital resources to its designated community, now and in the future.
Trusted digital repository	A storage system in which digital objects are stored for subsequent access or retrieval. A secure digital repository aims to provide reliable, long-term access to managed digital resources to its designated community, now and in the future. A trusted digital repository will also meet the assessment criteria in developed certification checklists