

Developing a Digital Preservation Policy

Introduction and Audience

This guide explains the functions and importance of a digital preservation policy. It discusses why there is a need for a policy and how it supports digital preservation within an archive.

The primary audience for this guidance is publicly funded archives addressed in the government policy on archives, “Archives for the 21st Century”¹. Other archives will also find this guidance useful in developing a policy for digital preservation. This includes archives held by institutions, organisations, groups, communities, families and individuals.

Why do you need a Digital Preservation Policy?

A digital preservation policy is the mandate for an archive to support the preservation of digital records through a structured and managed digital preservation strategy. The policy details why selected material needs to be preserved; the strategy defines how this will be implemented.

Both the policy and the strategy are essential to ensure there is a verifiable and trusted means of preserving the integrity of digital records.

The digital preservation policy also needs to identify how other policies such as the acquisition or collection policy should be applied to the collection and management of digital records the archive seeks to preserve.

The policy is also important as a means of explaining why depositors may need to take action themselves in order to have digital records accepted for preservation. Depositors need not understand all aspects of digital preservation but they will need the policy to explain how they fit into the overall digital preservation strategy.

What is a digital preservation strategy?

A digital preservation strategy should be a defined set of processes that determine how digital preservation will be supported including:

- *Actions required prior to submitting digital records (by depositors and the archive).*
- *How and when migration of file formats may take place.*
- *How and when emulation of software may take place.*
- *How digital records will be monitored to ensure they are still accessible.*
- *Process for accessing digital records.*

The reason for the digital preservation strategy is that it allows the policy to remain as an independent mandate for digital preservation and not have to be updated when a change is needed to alter the processes for preserving the digital records.

¹ [Archives for the 21st Century](#), Government Policy on archives, 2009,

Depending on the scale and complexity of digital preservation small organisations may include parts of a strategy within the policy. If an archive does this it needs to ensure that it can still make changes to the strategy without having to revise the policy as well.

Audience for a Digital Preservation Policy

A digital preservation policy should be meaningful to anyone wishing to access the records held by the archive. Given this potentially broad audience care should be taken to avoid overly technical language.

Visibility of the policy is important and it is recommended that a finalised policy should be published in an accessible format online for public users and either on an intranet or central location for users within the organisation.

Can I adapt another archive service's digital preservation policy?

It is likely that organisations from similar sectors will share similar requirements and ambitions for digital preservation. It is reasonable when developing a policy to look at what other organisations have produced.

There is little value in directly copying another organisation's policy as it will not reflect the archive's own operating environment, relationships with service providers and depositors.

The archive will still need to engage partners in developing a policy and strategy to ensure it can achieve its digital preservation ambition and capability. Missing this out in the process of drafting is usually a mistake.

What should be included in a Digital Preservation Policy?

The purpose of the policy is to articulate how digital preservation will be supported both within the archive and (for archives preserving the records of their parent organisation) across the wider organisation. This should extend to all partners involved and what they are expected to contribute to the digital preservation strategy.

Can an archive have an aspirational policy?

An aspirational policy can be very useful as a statement of intent to prepare for or move towards preserving digital records. It does, however, have limitations for digital preservation when an archive wants to begin taking action.

When an archive begins to preserve digital records actively the policy should be updated including to identify explicit roles, responsibilities and actions. This will then inform the development of the strategy.

Relationships with other documentation

The digital preservation policy should not contain all information related to the management of digital preservation. Instead it should frame and present the digital preservation strategy as the authority on how digital preservation will be managed and supported.

The policy and strategy will be supported by related documentation (some of which may already exist) defining how certain processes will be managed. The types of supporting documentation will vary but is likely to include the items listed in the following table.

Documentation	Relationship
List of accepted file formats	This is a list of the software file formats (e.g. <i>pdf-A</i> , <i>.doc</i> etc) that the archive will accept digital records in. This list should be reviewed periodically and updated to reflect technological changes and the organisation's requirements.
Standard Operating Procedures (SOP)	SOPs should provide simple and clear instructions on procedures for digital preservation tasks in a standard way to protect the integrity of the digital records. These SOPs establish a benchmark for performance that can then be measured against actual performance.
Service Level Agreements (SLAs)	SLAs for digital preservation should designate the level and extent of support provided to manage part or all of the processes within the digital preservation strategy. (e.g. support from an ICT provider to manage the servers used to store the digital records).
Formal Contracts	The existence of formal contracts, where appropriate, reinforces the accountability of service providers and can be referenced by the digital preservation policy as evidence of agreed partnerships. This agreement should provide specific remedies for breach of agreed service levels.

Relationship to other policies

The digital preservation policy should reference other policies that are not solely concerned with preserving digital records, but have an impact on how the strategy may be delivered. The nature of these relationships should be articulated within the digital preservation policy indicating where other policies must take precedence.

Related Policies

This table lists the key policies that the organisation may already have established which will have an impact on digital preservation, and consequently must be referenced by the digital preservation policy.

Policy	Relationship
Acquisition or collection policy	An archive must still decide if digital records are of archival value and fall within its collecting remit.
Preservation Policy (for physical or analogue material)	Highlighting a current commitment to providing proper preservation for analogue records reinforces the archive's need for preservation across the whole collection irrespective of format in traditional and newer formats.
Records Management Policy	<p>A records management policy will clarify the means by which the organisation manages the capture, aggregation and disposition of its own digital records.</p> <p>These principles are all relevant and may be used by the archive to manage digital records that are stored in organised aggregations.</p>
Digital Continuity and Information Assurance Policies	<p>A digital continuity policy defines how information should be managed to ensure it remains usable, complete and available to the organisation.</p> <p>It is sensible to use the same processes for servers that store archived digital records to give consistent management of all IT systems.</p>
Freedom of Information and Data Protection policies	<p>Both of these policies will have a bearing on how the archive catalogues digital records.</p> <p>The digital preservation policy must indicate the potential impact of both the Freedom of Information Act 2000 and the Data Protection Act 1998 in respect of their demands for being able to access information within specific timeframes.</p>

Policy	Relationship
IT security policy	<p>To protect the organisation's IT infrastructure there will be specific requirements laid out in a security policy.</p> <p>This must be taken into account if the archive is using the same IT systems for storing digital records and archives, even if on a separate server.</p>

Combined policies

Some organisations may decide that it is either more practical to have a joint policy to reflect pre-existing joint activities or business units (for example the archive may already provide a records management service).

A combined policy is acceptable providing digital preservation is not lost in the content of the joint policy. The National Archives' [Preservation Policy](#) is a good example of combining both analogue and digital preservation in one policy. The key aspect is to give equal importance and visibility to both aspects to ensure consistent management. Other possible combinations may include:

- Joint records management and digital preservation policy; designed to join up the creation, selection and preservation of digital records as a single managed process.
- Joint digital continuity and digital preservation policy; designed to ensure that all digital records are managed in the same way for as long as they are required.

This is not an extensive list of possible combinations; the main principle is that digital preservation, and other policies, should remain as visible as possible in any policy documentation. Too many combinations, or joining of very different work in one policy could result in none of the functions being adequately supported by policy.

Roles and responsibilities

Defined roles and responsibilities are essential to identify who should be involved in discussions about managing and preserving digital records both inside and outside the archive.

The policy should identify who is responsible for digital preservation and the expectations placed upon them for managing all or part of the digital preservation strategy. If unrealistic expectations are placed on the archive or a partner there is a risk that the intended aim to preserve authentic digital records will fail. To avoid this all those bodies need to be involved should be consulted at an early stage. This will allow the archive to assess whether they, or an intended partner, can realistically support the digital preservation strategy.

Even where an archive uses partners or shares services to support digital preservation, they still remain responsible for the digital records at all times.

Ownership of digital preservation

To be effective the policy needs need to be “owned” by a senior role within the organisation. This gives digital preservation an effective champion at a level where strategic decisions could impact on the long term support for digital preservation.

Service Providers and Contractors

The archive may need the assistance of others to manage to carry out parts of a digital preservation strategy. This relationship needs to be clearly identified and expected service levels formally agreed to ensure the accountability of all parties.

Depositors

Depositors and potential depositors of digital records should ensure the digital records are submitted in a suitable condition for acceptance by the archive. To enforce this, the policy needs to state what the archive’s requirements are for the acceptance of deposits of digital records. This will include:

- providing digital preservation documentation (a list of acceptable file formats and minimum descriptive and technical metadata)
- providing related documentation that covers the broader acquisition / collection questions (is the content of the records and their creator suitable for the archive to collect?).

Distinguishing Active and Passive preservation

The policy must also identify the extent to which it will use active and passive preservation in the ongoing support of digital preservation. *Active* preservation is any proactive action taken in the preservation of digital records (e.g. migration of records from at risk formats to a more stable format).

The Principle of Reversibility

Archives may need to revert to an earlier version of a digital record(s) if a chosen migration path is unsuccessful. To do this an archive will need a preservation copy of a record to which they can go back to.

Some archives may decide to revert to the bitstream code that previously encoded the record instead of a later preservation copy version of the record. This principle of reversibility, allows the archive to go back a step and try an alternative route for preserving the record without loss of record characteristics through earlier migration attempts.

Passive preservation is any action that supports digital preservation but does not engage with the digital records directly (e.g. management and backing up of servers storing digital records). An archive (or parent organisation) should already have a Digital Continuity or Information Assurance policy that would support such passive preservation to some extent.

Key Success Criteria for a Digital Preservation Policy

The policy should be benchmarked against agreed success criteria to ensure that it is created with a clear means of measuring its effectiveness.

Irrespective of the success criteria used they must be realistic and achievable. If the criteria cannot be met there is a significant risk that the subsequent strategy for preserving digital records will be inadequate. This in turn will undermine the confidence in the archive service that the records being preserved are still authentic.

Success Measures

The following list provides the key criteria that should be included within a policy:

- Articulate why digital preservation is important and the risks if it is not done.
- Identify a responsible senior management role to own and champion digital preservation.
- Identify who is responsible for the management and support of digital preservation – including required expertise.
- Provide a clear explanation of the agreed relationships between the archive and other business areas needed to support digital preservation.
- Identify the digital preservation strategy as the authority on preferred methodology and tools, indicating that both may be subject to change over time.
- Be accessible in language and publicly available.

This is not an exhaustive list and depending on the scope of the strategy applied and anticipated scale of the work the policy may need to incorporate additional criteria for success.

Evaluating and monitoring the policy

The policy should also incorporate a requirement for a periodic review (not to exceed three years) to evaluate the policy to ensure it remains relevant to the archive's digital preservation capability and broader business aims. This should form part of a broader monitoring process that identifies any weaknesses or required changes within the overall digital preservation strategy. During implementation the strategy should be kept under constant review to ascertain its relevance and effectiveness.

Available Resources

Example Policies

The following are examples of policies adopted by a variety of organisations and provide a useful overview of the policies developed across different sectors. They can assist and inform the formulation of a new policy but each organisation's policy needs to reflect its specific digital preservation needs.

- British Library (2006) British Library Digital Preservation Strategy:
<http://www.bl.uk/aboutus/stratpolprog/ccare/introduction/digital/digpresstrat.pdf>
 - Parliamentary Archives Digital Preservation Policy:
<http://www.parliament.uk/documents/upload/digitalpreservationpolicy1.0.pdf>
 - Cornell University Library (2004) Cornell University Library Digital preservation policy framework:
<http://commondepository.library.cornell.edu/cul-dp-framework.pdf>
 - King's College London (2006) Managing Risk: a Model Business Preservation Strategy for Corporate Digital Assets:
http://www.jisc.ac.uk/media/documents/programmes/preservation/kings_final_report2.pdf
- Hampshire County Council – A partly aspirational policy that illustrates how to tie digital preservation into the broader records management responsibilities of the whole County Council:
<http://www3.hants.gov.uk/archives/hro-policies/hro-digital-preservation-policy.htm>
- National Library of Wales, Digital Preservation policy and strategy:
http://www.llgc.org.uk/fileadmin/documents/pdf/digital_preservation_policy_and_strategy_S.pdf
 - UK Data Archive Preservation Policy – large data archive with an example of a good policy where the contractor is providing a preservation service:
http://www.data-archive.ac.uk/media/54776/ukda062-dps_preservationpolicy.pdf
 - London Metropolitan Archives – An example of an interim or aspirational policy:
<http://www.history.ac.uk/gh/digprespol.pdf>

Guidance on developing digital preservation policies

- Digital Preservation Policies Study; N Beagrie et al; (2008) – this is a report focused on policies developed by Higher Education institutions though is useful to anyone considering developing digital preservation: http://www.jisc.ac.uk/media/documents/programmes/preservation/jiscpolicy_p1finalreport.pdf
- A framework of principles for the development of policies, strategies and standards for the long-term preservation of digital record: [http://www.interpres.org/display_file.cfm?doc=ip2\(pub\)policy_framework_document.pdf](http://www.interpres.org/display_file.cfm?doc=ip2(pub)policy_framework_document.pdf)

Other Guidance on developing digital preservation

There are a number of tools that may help archives assess and plan their approach to digital preservation.

- Digital Preservation Frequently Asked Questions: <http://nationalarchives.gov.uk/information-management/projects-and-work/digital-preservation-faqs.htm>
- Planning for digital preservation: A self-assessment tool. Bishoff, E and Rhodes, E (2007): <http://nedcc.org/resources/digital/downloads/DigitalPreservationSelfAssessmentfinal.pdf>
- The Cedars Project (2002) Cedars Guide to Collection management: <http://www.leeds.ac.uk/cedars/guideto/collmanagement/guidetocolman.pdf>
- Planets, Preservation and Long-term Access through Networked Services: <http://www.planets-project.eu/>

Training

There are a number of specific training courses available including the following.

- JISC-funded Digital Preservation Training Programme: www.ulcc.ac.uk/dptp
- The Digital Curation Centre: 101 digital curation course: www.dcc.ac.uk
- The annual King's College London Digital Futures Workshop: www.kdcs.kcl.ac.uk/digifutures/