



Digital Preservation Policy

December 2015

POLICY

Approving authority:	Secretary's Board
Consultation via:	Digital Preservation Group, Collections Committee
Approval date:	1 December 2015
Effective date:	1 December 2015
Review period:	Bi-annually
Responsible Executive:	Secretary of the University
Responsible Office:	Heritage and Information Governance

HERIOT-WATT UNIVERSITY DIGITAL PRESERVATION POLICY

CONTENT

Section	Page
1 Introduction	3
2 Purpose	3
3 Objectives	4
4 Scope	4
5 Lines of responsibility	5
6 Monitoring and Evaluation	5
7 Implementation	5
8 Related Policies, procedures and further reference	6
9 Definitions	7
10 Further help and advice	7
11 Policy Version and History	7

POLICY

1. INTRODUCTION

This policy sets out a framework for the management and preservation of the University's electronic records. The policy has been developed in the context of the University's Information Governance and Records Management policy and also supports the objectives of the University Museum and Archive Collections Development Policy.

Digital preservation is the process of actively managing digital resources for as long as they need to be retained for evidential, operational or research purposes. Digital information has become a valuable tool in allowing Heriot-Watt University to effectively deliver its core functions of research, learning and teaching. Access to information created and stored digitally is now central to the effective delivery of most University services. Digital resources allow staff the increased flexibility to work at home or other sites, support knowledge transfer partnerships and collaboration with industry and other higher education institutions both in the UK and abroad and have allowed the expansion of distance learning. The University also has contractual obligations to Research Funding Councils to maintain and provide public access to research datasets and outputs and to allow the reuse of datasets under relevant information laws.

Digital resources however require more active intervention in their management than analogue formats to ensure that the information they contain remains accessible, secure and authentic throughout their lifecycle. Digital information can easily be altered and both the digital objects and the storage media will in time degrade. Digital objects can only be accessed through the use of technology. The associated software, operating platforms, hardware and physical storage media, also known as the representation network, are essential to allow us to read the object. Technology is changing at such a speed that systems are often unsupported after as little as five years. Rapid obsolescence can therefore mean that digital objects are quickly rendered inaccessible if there are no strategies in place to manage them. Intervention to decide which records are archival is required at a much earlier stage in the records' life cycle than with traditional analogue formats. There can also be legal and intellectual property issues over the continued use of proprietary systems.

Failure to act now will lead to records essential to supporting the University's key business functions becoming unreadable in the future or lost because the information has only been captured in a now redundant version. This will affect the University's ability to provide key services, hinder effective decision making and pose a risk to business continuity. The survival of the documented heritage of the University and access to key collections supporting research, teaching and learning will also be threatened. Digital preservation is regarded internationally as a key resource management issue and is now underpinned by ISO 14721: 2012 Open Archival Information System (OAIS).

The University Archive, managed by Heritage and Information Governance (HIG), is the official place of deposit for archives created by and donated to the University. As such, HIG will work in partnership with IT specialists and

information managers in Schools and professional services to address the challenges involved in preserving the University's digital assets.

2. PURPOSE

- 2.1** This policy aims to create a proportionate and sustainable framework to future proof the University's key digital resources to ensure they remain authentic, accessible and reliable for as long as required for operational, legal and archival purposes.

3. OBJECTIVES

- 3.1** Develop solutions managed by Heritage and Information Governance in partnership with Information Services and other appropriate services for the long-term storage of archival digital objects to protect their authenticity, security and accessibility, with the aim of establishing a digital archive repository for the University which complies with ISO 14721: 2012.
- 3.2** Establish procedures to prevent obsolescence of digital archives by refreshing, migration or emulation where appropriate.
- 3.3** Establish procedures for the ingest of digital resources into a digital repository to capture the metadata, bitstream and content.
- 3.4** Raise awareness of the issues surrounding digital preservation through advocacy. While the solution is partly technical it is also dependant on operational and management issues and policies.

4 SCOPE

- 4.1** The policy applies to all University colleagues. Failure of colleagues to create and keep digital resources in accordance with approved policies and procedures may result in the loss or degradation of key University assets.
- 4.2** The policy applies to all born digital information resources of archival value created by, received and maintained by University colleagues in the course of University functions and activities. All resources of archival value fall within the scope of the University's Collections Development Policy.
- 4.3** The policy also applies to records which have been created in analogue format and then digitised. Records can be digitised for many reasons, to facilitate on-line working, for e-learning resources and for preservation reasons. Records of archival value should not be destroyed after scanning without the approval of the Head of Heritage and Information Governance. However even if the originals are retained, re-scanning them can have significant cost implications and in this case the digital resource should be managed as born-digital.
- 4.4** The policy applies to digital resources created externally and donated to the University Archive.

- 4.5 The policy applies to digital resources created and received by associated companies and organisations such as Edinburgh Business School and the Student Union and transferred to the University Archive under relevant service level agreements or donation.
- 4.6 The policy applies to born digital or scanned student records created or maintained by the University's Academic Learning Partners, where these records form part of the permanent archival student record as set out in the Student Records Management Policy.
- 4.7 The policy applies to all forms of digital resources including Microsoft Office applications, datasets, e-mail, CAD, student record systems, research data, websites, still and moving images and sound recordings. It is recognised that some digital resources such as student record systems, research data and audio-visual material will have specialist requirements and may require solutions involving internal and external partnership and expertise.

5. LINES OF RESPONSIBILITY

- 5.1 The Secretary of the University has overall responsibility for this policy.
- 5.2 All colleagues are responsible for creating and maintaining digital resources in compliance with relevant University policies and procedures, including the University Records Retention Schedules which set out how long information needs to be retained and identify records of archival value which need to be transferred to HIG for permanent retention.
- 5.3 Each Head of School and professional service is responsible for nominating one or more information governance contact for their area. Heritage and Information Governance will liaise with each contact to promote good information governance practice, agree records retention schedules and make arrangements for the selection and transfer of archival resources in all formats to the University Archive for permanent preservation.
- 5.4 The Director of Information Services is responsible for developing and maintaining information technology software and hardware systems, in partnership with the Digital Preservation Group, to ensure that digital resources in current use remain authentic, reliable and usable for as long as required in accordance with archival retention policy.
- 5.5 The Head of Heritage and Information Governance is responsible for recommending University records management and retention policy and strategy.
- 5.6 Heritage and Information Governance is responsible for the selection of university information assets of archival value, for liaising with relevant colleagues in Schools and professional services to make timely arrangements for the long term preservation of these archives. Heritage and Information Governance will catalogue and maintain the University Archive in both analogue and digital formats in accordance with professional best

practice and where appropriate in partnership with colleagues in other relevant services.

- 5.7 The Digital Preservation Group of the Collections Committee is responsible for recommending best practice for the creation, management and preservation of records of archival value and for seeking practical solutions to preserve the University's corporate memory.

6. MONITORING AND EVALUATION

- 6.1 This policy will be reviewed after a maximum of five years to ensure continued compliance with best practice and regulatory requirements

7. IMPLEMENTATION

- 7.1 The implementation of the policy will be supported by a digital preservation strategy, operational plan and underpinning procedures. The strategy will be led by a Digital Preservation subgroup of the University Collections Committee, liaising closely with the Research and Knowledge Exchange Board, the Information Governance and Security Group and the Strategic Information Systems Committee. A specific policy for research data management, preservation and access, to meet Research Council UK funding requirements, has been developed by the Research and Knowledge Exchange Board (RKEB) with support from the Digital Preservation Group and a sub-group of RKEB established to specifically address research data management.
- 7.2 Heritage and Information Governance will communicate the policy throughout the University and provide supporting procedures, advice and guidance for colleagues. The Digital Preservation Group will engage with staff to raise awareness current issues around digital preservation and the University's recommended procedures for managing digital records.

8. RELATED POLICIES, PROCEDURES AND FURTHER REFERENCE

Policies

Collections Development Policy

<http://www.hw.ac.uk/archive/docs/collections-development-policy.pdf>

Information Governance and Records Management Policy

<http://www.hw.ac.uk/documents/information-governance-records-management-policy.pdf>

Data Protection Policy

<http://www.hw.ac.uk/documents/heriot-watt-university-data-protection-policy.pdf>

Information Security Policy Framework

<http://www.hw.ac.uk/documents/information-security-policy-framework.pdf>

Student Records Management Policy

<http://www1.hw.ac.uk/registry/resources/studentrecordsmanagement.pdf>

Research Data Management Policy

<http://www.hw.ac.uk/documents/research-data-management-policy.pdf>

Procedures

University records retention schedules

Published on the HIG intranet site

<https://intranet.hw.ac.uk/ps/gls/heritage/InformationGovernance/RetentionSchedules/Pages/default.aspx>

And the external HIG website

<http://www.hw.ac.uk/heritage-information-governance/>

Heriot-Watt University EPSRC Research Data Management Procedures

<http://www.hw.ac.uk/is/research-support/research-data-management.htm>

Further reference

Digital Preservation Policies Study

http://www.jisc.ac.uk/media/documents/programmes/preservation/jiscpolicy_p1finalreport.pdf

Trusted Repositories Audit and Certification

http://www.crl.edu/sites/default/files/attachments/pages/trac_0.pdf

Open Archival Information System

<ftp://nssdcftp.gsfc.nasa.gov/standards/nost/isoas/int05/CCSDS-650.0-W-2.pdf>

AIMS Born- Digital Collections: An Inter-Institutional Model for Stewardship

<http://www2.lib.virginia.edu/aims/whitepaper/>

9. DEFINITIONS

ingest	Process to capture digital resources into a preservation environment
authenticity	Ensuring that a digital resource remains a full and accurate representation of the business activity it pertains to and has been protected against unauthorised changes
accessibility	The digital resource can be located, retrieved and the data within it is readable
archives	Resources in all formats worthy of permanent retention in accordance with the University Collections Development Policy
corporate record	A record is information created or received and maintained by the University, regardless of media, used to control, support, or document the activities and transactions of the University
digital object	A physical component of a digital resource
digital resource	All forms of digital material including records, audio-visual, complex structures such as web pages and digitised material
migration	The transfer of data into a new format
emulation	The transforming of a technology environment to allow a digital object to be accessed in its original form
refreshment	Moving data from one carrier to another to ensure continued access to the digital object
metadata	Data about data. Structured data associated with the digital resource providing administrative and technical information necessary to provide context

10. FURTHER HELP AND ADVICE

Is available from Heritage and Information Governance
Email: heritage@hw.ac.uk

11. POLICY VERSION AND HISTORY

Version No	Date of Approval	Approving Authority	Brief Description of Amendment
V. 5	1/12/2015	Secretary's Board	Minor changes endorsed by Collections Committee 23/10/2015