Newcastle University Library Special Collections
Digital Preservation Policy

1. Introduction

1.1 *Within the collecting remit of archive repositories, a subset of records will be selected for permanent preservation because of their evidential, information and cultural values which make them of historical interest to users for multiple purposes.*

1.2 *Due to technological advances effecting working practices, organisations and individuals are increasingly creating records to evidence their activities in digital formats. These include, but are not limited to:*

Audio visual material;
Text documents;
Databases;
Spreadsheets;
Images;
Web pages;

1.3 *These digital archives contain specific integrity and functionality, often linked to the software they were created in and hardware they are stored on, which are pivotal to accessing their content and understanding the context they were intended for.*

1.4 *Due to the rapid changes to technology and short life span of digital carriers such as CDs, DVDs, hard drives or flash drives, the risk of these valuable and often unique archival sources becoming unreadable bring new challenges above the storage of traditional hard copy material. Additional and suitable records for long-term preservation may also be deposited electronically. This requires early intervention to mitigate the preservation responsibilities expected from depositors, users, and other involved parties so digital archives remain usable over time.*

1.5 *For access and preservation reasons, physical/analogue archives are also digitised as part of the responsibility of archive repositories towards greater access and as a preservation tool. Considerations also need to be made at the point of creation on how these surrogates will be preserved over time to ensure the best use of resources, avoid duplication of work, and to ensure their authenticity, integrity, and accessibility.*

2. Context

2.1 *This digital preservation policy forms part of Special Collections' overarching preservation strategy and is complemented by the following documents and other operational procedures:*

- *Collection Development Policy*

- *Preservation Policy*
- *Oral History Policy*

3. Purpose and Scope

3.1 *The purpose of this policy is to ensure long term preservation of, and access to, digital records. This includes addressing the risk of losing digital records held by Newcastle University Library's Special Collections and Archives department through material becoming unreadable due to obsolescence of the physical carrier containing digital material or the file formats they were created in.*

3.2 *For the purposes of this policy, digital material falls into 2 distinct categories;*

> *"Born Digital" archives originally created in electronic formats which form the whole or part of collections gifted, loaned, or purchased by Special Collections and Archives externally as part of its collection development, or sourced internally as part of Newcastle University's Institutional Archive.*
>
> *"Made Digital" surrogates created through scanning and photography of physical, analogue items from existing collections to provide greater access and promote the use of Special Collections holdings.*

3.3 *This policy aims to ensure both these categories of digital records remain usable over time by informing guidance and summarising processes for staff who are responsible for managing such material at the point of deposit or creation.*

3.4 *Because of their often unique and irreplaceable nature, "Born Digital" material will always take precedence. Made digital material that have original physical records can be created again from analogue source albeit taking up time and resources and hampering working practices, "Born Digital" material cannot be replicated as easily, if at all, if they become unreadable. Further guidance about 'made digital' surrogates is located within established special collections workflows.*

3.5 *The content of this policy should aim to be reviewed at least every 6 years, in line with Archives Accreditation Assessment Schedules. A review every three years where possible should be considered best practice.*

4. "Born Digital" Archives

4.1 Acquisition

4.1.1 *Archive collections are either gifted, loaned, or purchased according to Special Collections' Collection Development Policy. Additionally, they are deposited from the*

parent organisation to become part of the Institutional Archive (i.e. records of historical significance created by Newcastle University).

4.1.2 *During investigative scoping stages of archive acquisition knowledge will be gained about carrier, digital format and quantity of born digital material that are increasingly forming part of hybrid archival collections. Before ingest, the Archivist may request material to be migrated into stable formats suitable for long term preservation which are independent of non-supported proprietary software and free of digital rights management controls.*

4.1.3 *Where digital material is included and where possible, the Archivist will determine, through the deposit agreement and transfer process, the quantity of born digital material to be ingested , providing an indication of its processing priority.*

4.1.4 *If deposited as part of the Institutional Archives, the Archivist will liaise with the originating department/school/faculty to determine the necessary criteria set out in 4.1.2 and 4.1.3.*

4.2 Security

4.2.1. *As part of the acquisition and ingest process, all born digital material will be subject to a 30-day quarantine period before ingest into the University system is attempted. This allows for necessary centralised updating of university anti-virus controls that are utilised as part of the digital accessioning and ingest procedures.*

4.2.2. *Born digital and digitised material will be housed on function specific drives which are user controlled with tracked activity patterns. Third party backups are in place for the long-term preservation drive which should be subject to regular back-ups and file recovery for a time limit agreed by the University and the third-party provider.*

4.3 Storage

4.3.1. *Storage in this context relates to both the original physical carriers, along with dedicated provision of digital storage for ingested material and created access/preservation surrogates.*

4.3.2. *Physical Digital Carriers should be identified within a hybrid collection as early as possible. Where possible, physical digital carriers should be removed from their location within a physical arrangement of archival material. Placeholders should indicate what has been removed and the physical digital carrier should be housed with other like formats, labelled with their appropriate collection and arrangement identification markers in a designated position in the archival store.*

4.3.3. *Physical digital carriers are required to be kept after the digital material has been ingested into appropriate systems and the metadata associated with the physical carrier has been captured.*

4.3.4. *Appropriately scaled and regularly backed up secure online storage is required for the consistent processing of born digital and digitised material. Selected drives house preservation and access copies of digital records. There is an agreement with a third-party provider to maintain office site copies of preservation files to mitigate disaster risks.*

4.4 Processing Born Digital Archives

4.4.1. *It is understood that the creation and modification of technical, administrative, and structural metadata is required for the appropriate custodianship of born digital archives. It is also understood that, in some instances, file format migration to non-proprietary and stable formats will need to occur in the creation of surrogate copies to maintain sustainable access to archival material for the long-term.*

4.4.2. *Ingest, format migration and cataloguing procedures are to follow guidance found in the 'Born Digital Accessioning and Cataloguing Workflow.' These procedures will lay foundations for their eventual cataloguing to ISAD(G) standards and availability on Special Collections cataloguing platform.*

4.4.3. *Special Collections staff will endeavour to conduct in house migration procedures using the resources available to them and approved at a university level. However, where this should not prove time efficient, or a resource gap is identified in either skills or equipment, a third-party provider may be approached.*

4.4.4. *An acceptable list of file formats, created based upon accepted industry standards, should be consulted when making file migration decisions or consulting third party providers. A summary list is provided in the 'Born Digital Accessions and Cataloguing Workflow.' For convenience it is also summarised in section 4.5.4*

4.5 File Formats

4.5.1 *As part of the ingest process, it will be determined if digital material is currently readable in the first instance.*

4.5.2 *Efforts will be made to identify the format the file was created in, and liaising with the University Library's Digital Library Services (DLS) and Newcastle University Information Technology (NUIT) teams where appropriate. Where digital material is not readable and cannot be migrated into appropriate file formats it will be brought to the Born Digital Working Group in the first instance.*

4.5.3 *A log will be created during the migration and cataloguing process of*

the unique item number;
a summary of the contents (where known);
any known issues with readability;
the file format and version it was created in;

any migration actions for the creation of access and preservation copies;
dates of actions taken with digital material.

4.5.4 *In terms of file formats digital material is kept in, Special Collections will migrate to open standard formats wherever practical and possible. This is to ensure that digital material is not reliant on proprietary software, which may become obsolete or unsupported due to version updates, commercial considerations, or institutional preference. Common examples include:*

.PDF/A for textual material
.tiff for image material – an exception can be made for CAD drawings; .dwg is an accepted and stable file format for this type of material.
.MPEG4 *(with appropriate codecs) for video material*
Broadcast Wave (with appropriate codecs) for audio material.

4.6 Access

4.6.1. Metadata regarding born digital objects will be made available on Special Collections discovery interface during file migration and cataloguing processes. Access statements will indicate the availability of born digital material to researchers.

4.6.2. Special Collections staff should follow procedures laid out in the requests-retrievals-reshelving document with regards to born-digital access requests.

4.6.3 *Researchers requesting these items will be permitted to view access surrogates on a dedicated terminal in the Special Collections Reading Room under supervision from a member of staff.*

4.6.4. *Due to copyright and other access restrictions, researchers will not be able to view these on their own devices or elsewhere (in line with procedures for all Special Collections material).*

5. "Made Digital" Surrogates

5.1 Creation

5.1.1 *Digital surrogates will be created using technology appropriate for the size, format and physical condition of the physical item or by third parties as directed by Special Collections and Archives*

5.1.2 *These will be rendered in the first instance into open, uncompressed, lossless file formats. These will be considered the master copies and kept for high quality reproduction.*

5.1.3 *Access copies will also be created. For these, compressed formats are permitted.*

5.1.4 Any alterations made to the digital surrogates will be in keeping with the enhancement or conservation of the archival integrity of the item.

5.2 Storage Access

5.2.1 *The associated TFF and JPEG copies will be stored on designated preservation and access drives associated with other born digital material in a mirrored filing structure.*

5.2.2. Special Collections staff should periodically review file integrity and drive storage space allocations. The Z drive is intended for long-term storage and is subject to regular (Monthly, quarterly, and yearly) back up snap shots by Microsoft Azure, along with monthly reporting of modification or deletion activities.

5.2.3. All Special Collections and Education Outreach staff have access to 'made digital' surrogate files to facilitate research, teaching, and request obligations. However,, certain dedicated staff whose role relate to born of made digital management have higher management permissions associated with these long-term preservation drive.

5.2.4. When considered appropriate and dependent on other access restrictions, access copies may be uploaded to a Digital Asset Management System, along with associated metadata (see point 5.2.5.).

5.2.5. *Metadata to facilitate management and discovery is created for made digital objects at the point of request, guidance and templates are provided for this request and facilitates content discovery on the current Digital Asset Management System.*

6. Material Review and Responsibilities.

Review and responsibilities are equally applicable to both born digital and made digital material.

6.1. Material Review

6.1.1. *Storage capacity for digital will be kept under regular review and adjusted as necessary to meet demand in consultation with NUIT.*

6.1.2. Material indicated to be at risk during the born digital accession / ingest process that reaches its trigger year without further processing will be inspected for deterioration and, ideally migrated in line with born digital accessioning and cataloguing workflows.

6.1.3 If signs of deterioration are noticed during special collections requests and retrievals procedures, digital preservation specific staff should be informed.

6.2. Roles and responsibilities

6.2.1. *Special Collections Archivists are responsible for the overall implementation of this policy. They are also responsible for acting on advice given from the University Library's DLS and NUIT teams.*

6.2.2*. Archivists will consult with relevant organisations, such as The National Archives, The Preservation Advisory Centre, The Digital Preservation Coalition and the Digital Curation Centre when reviewing this policy and associated procedures.*

6.2.3. *Staff responsible for digitisation are responsible for enacting 'made digital' workflow procedures and raising workflow obstacles. All Special Collections staff are responsible for the initial creation of metadata.*

6.2.4. *Where delegating these responsibilities to other members of staff, volunteers or partners, members of Special Collections and Archives staff overseeing the work are responsible for training and ensuring adherence to this policy.*

6.2.5. *The Head of Special Collections and Archives is responsible for allocation and development of resource and operational support for digital preservation, working closely with Academic Services Strategy Group, who are responsible for any strategic decisions that impact on the long-term support for digital preservation.*

6.2.6 *NUIT are responsible for providing the university's network infrastructure, digital storage, hardware, and software. It is the responsibility of the Head of Special Collections and Archives, and departmental staff working with digital resources to highlight infrastructure challenges to NUIT and work with them to address these challenges, utilising NUIT approved software and hardware where appropriate.*

6.2.7. *All Special Collections staff will participate in relevant internal and external training relating to digital preservation, where possible, and as appropriate to their roles.*

7. Policy Review

To be reviewed every 5 years or when considered appropriate by Head of Special Collections.

This version revised and assessed November 2026.