



Caring for your collections: Digitisation

This guide aims to provide general information and advice for digitising your collections, family treasures and precious memories.

What is digitisation?

- It is the process of turning original physical items (analogue) into electronic format (digital) that can be read on a computer or device
- It is creating a digital surrogate, electronic copy or photograph of a physical item
- Often called turned digital

Items that are commonly digitised include:

Image formats

Photographic Prints / Albums
Film Negatives
Slides
Lantern Slides
Glass Plate Negatives

Document formats

Books/Diaries
Letters / Postcards / Cards
Parchments
Certificates
Drawings / Artwork
Posters

AV formats

Videotapes
Audio reel tapes
Home Movie Films
Audio Cassettes
Records

Why digitise your collection?

1. Collection material can be fragile

Collection items are susceptible to the effects of aging, deterioration, natural disasters, pest infestations, mould, fading, and damage due to handling.

2. Access to content

Digitising gives you the flexibility to access and share your content more readily with family and friends, protecting it from unnecessary handling. With regards to audio-visual and film collections, the equipment to view your item may no longer be available and attempting to play or access them may cause damage.

3. Preserving content for the future

Digitisation of a physical item helps to preserve these memories for future generations by reducing handling and increasing accessibility. For information on how to care for your original collections after they have been digitised — www.slq.qld.gov.au/preservation



Do it yourself vs commercial digitisation

When considering digitisation you first need to decide if you have the time, equipment and technical ability to carry out the work required. If not, you may like to consider working with a commercial provider.

Commercial digitisation

Most digitisation providers servicing government and collection institutions have good quality scanners and camera equipment to meet their digitisation needs. A list of known digitisation providers is attached for your reference.

When requesting a quote or enquiring about digitisation work it would be useful to ask:

- What equipment will they use? Scanners or cameras?
- How do they handle and store heritage collections while in their care?
- What scanning quality and image/ file sizes are available?
- Will they need to edit the images? How much is digital restoration per hour?
- How do they provide the files to you? On a drive? USB? Digital delivery service?
- Ensure they supply you with both a high resolution version as your master version and a lower resolution (compressed) derivative as your user copy which will enable you to share and send electronically.

Do-it-yourself digitisation

When you digitise your own material make sure you have at least a good quality camera and scanning equipment. It is important when digitising to do it once and to do it well, as you may only have one opportunity. You will also need a computer and software to be able to process and store your digital files once they have been created.

You can digitise audio and audio-visual content (including audio recordings, video, and motion picture film collections) yourself, but the resources required to do so tend to be more complex and expensive. It is more cost-effective to outsource to a vendor with expertise in this field.

Equipment selection

The two key pieces of equipment required for digitising your own collection are:

1. Digital Camera (DSLR)

A digital camera, ideally set up on a copy stand, is most suitable for books, albums and three dimensional objects.

2. Flatbed Scanner

A flatbed scanner is most suitable for two dimensional, flat items such as documents and photographs.

Image editing software

A large variety of imaging software is available, ranging from freeware to very high-end publishing packages. Also, lower-end imaging software often comes bundled with scanners, printers and digital cameras. When making a purchase, talk to the sales staff about the capabilities of the equipment and accompanying software, to ensure it will achieve your aims. Editing software should be used for any necessary adjustments such as colour correction, cropping or digital restoration. Apply a minimalist approach, with a focus on maintaining the look of the original.

Monitor calibration software

Computer monitors commonly display colours differently. Each display reproduces colours and brightness differently, shifting over time. To ensure that the image colour accurately reflects the true colour of the scanned image it is recommended that you regularly calibrate your computer monitor. Available commercial software includes the Datacolor® Spyder suite.

Further Information: How to calibrate your monitor

<https://www.cnet.com/how-to/how-to-calibrate-your-monitor/>

Capture specifications and guidelines

The following is recommended as the minimum capability of a camera or scanner. Anything that exceeds these minimum standards would be suitable. It is important to note that the better the quality or resolution of the scans/images the larger the file size. Ensure you have adequate storage space for your files.

<http://www.digitalcollections.org.au/toolkit/prepare/equipment-and-software>

Digital Camera

Type: DSLR

Resolution: 24 mega pixels

Sensor: DX

Lens: 50mm

Save as options are JPEG, TIFF & RAW Initially select RAW (minimally processed image direct from the camera sensor)

Scanner

Resolution for images: 600 dpi

Resolution for text-based content: 300 dpi

24-bit colour

Save as a TIFF



Once processing is complete save all digital images as TIFF files as this is the recommended standard. TIFF files preserve as much information and data within that image, as it possibly can. JPG files may be smaller, but detail and information will be lost from the original image.

<http://www.digitalcollections.org.au/toolkit/digitise/image-capture>

Preservation and storage of your digital files

While digital files are commonly saved to CDs, DVDs, and USB drives, these storage devices are not designed for long-term storage. They are prone to damage and decay, and are not suitable for large quantities of data. The recommended approach to the storage of digital files is larger, more robust devices such as external hard drives, or the use of a Network Attached Storage device (NAS). NAS devices contain multiple hard drives (two or more) that are backed up across each other. If one drive fails, the files are maintained on the intact drive. Partitions can also be created within the NAS drive to keep the original master files separate from any derivatives created. It is important that the original master files are protected, and only accessible to selected individuals, to ensure they are not compromised in any way or accidentally overwritten.

An alternative solution is to use Cloud based storage. With this option the backup is uploaded to the Cloud via the Internet, and the service provider delivers a measure of support to maintain the integrity of the files. However, these services are provided on a subscription basis and the cost usually increases with the amount of storage required. A good internet connection is also vital.

Whatever solution you choose, make sure you do not put all of your eggs in one basket. Make multiple copies of your files, and store them in multiple locations (locally, and in the cloud if possible) – giving them the best chance of survival for the long-term.

See our guide "[Digital content](#)"

Do it once and do it well — you may only get one opportunity.



Useful Websites

- Digital Access to Collections project is an initiative of GLAM Peak – the peak representative bodies of the galleries, libraries, archives and museums sectors in Australia
www.digitalcollections.org.au
- State Library of Queensland, Digitisation Toolkit. <https://www.slq.qld.gov.au/research-collections/digitisation-toolkit>
- Photoshop CS2 (old version released 2004) <http://www.techspot.com/downloads/3689-adobe-photoshop-cs2.html>
- GIMP, Free, multi-platform, Image Editing Software <http://www.gimp.org>
- How to calibrate your monitor <https://www.cnet.com/how-to/how-to-calibrate-your-monitor/>

The procedures described here have been used by State Library of Queensland in the care of its collections and are considered suitable by State Library as described; however, State Library will not be responsible for damage to your collections should damage result from the use of these procedures.

Commercial digitisation services

Avantix

Unit 3, 20 Smallwood Place,
Murarrie QLD 4172
Ph: 1300 119 939
<https://www.avantix.com.au/>

Type of transfer offered: documents, microfilm, large-format, photographs, books and albums

ProLab

Suite 1,
Unit 2/38 Bishop Street,
Kelvin Grove QLD 4059
Ph: (07) 3844 9621
<http://www.prolab.com.au/>

Type of transfer offered: photographs, negatives, artwork, film

Crystal Mastering

77 Newman Street
Thornbury, VIC 3071
Ph: (03) 9484 8814
www.crystalmastering.com.au

Type of transfer offered: audiotapes, videotapes

DAMsmart

32 Essington Street
Mitchell, ACT 2911
PO Box 81, Mitchell, ACT 2911
Ph: (02) 6242 6456
<https://damsmart.com.au/>

Type of transfer offered: audiotapes, videotapes, 16 and 35mm films



Info guide

DVD Infinity

PO Box 102
Artarmon, NSW 1570
Ph: 1300 850 383
www.dvdinfinity.com.au

Type of transfer offered: 8mm, Super 8, 9.5mm & 16mm, video tapes, photos, 35mm slides and negatives.

FATS Media Lab Pty Ltd

1B/372 Eastern Valley Way,
Chatswood, NSW 2067
Ph: (02) 9417 8666
<http://www.fats.com.au>

Type of transfer offered: audiotapes, video tapes Super 8, 16mm and 35mm (NSW facility)

Nano Lab

36 Grant St
Daylesford, Vic 3460
Ph: 0400 748 864
Website: www.nanolab.com.au

Type of transfer offered: Super 8 or Standard 8

Note: State Library of Queensland does not endorse any one supplier.

Need further information?

(07) 3840 7810 | www.slq.qld.gov.au/preservation



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