



FIRST NATIONS MEDIA ARCHIVES

Organising Media in the Archive: A Guide to Physical Media Shelf Order and Digital File Naming Conventions

THE BASIC PRINCIPLES

In the management of First Nations media archives Aboriginal and Torres Strait Islander knowledge and Law are the guiding principles.

Local Aboriginal and Torres Strait Islander peoples are essential cultural authorities at the centre of all decision making associated with management of the archives.

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SECTION 1 INTRODUCING ORDERING ARRANGEMENTS AND LOCATION CODES

1. Overview

Effective shelf order systems and digital file naming protocols are vital for preserving the Archive and for making it available for community use. This Guide refers to these systems and protocols as ordering arrangements.

The Guide suggests some approaches for implementing ordering arrangements for physical and digital media held by the Archive. The suggestions in this guide are general only. Each Archive is best positioned to adjust the suggestions for its own purposes, or to identify its own arrangements that best meet their local cultural protocols.

Being able to find a video or a photo in your Archive sounds an easy thing to do. However, most people reading this guide will know that it can be challenging at times. The implementation of ordering arrangements saves time and effort in locating media. It also enables the protection of high priority media. Such media can be located quickly by its identified location in case a disaster means it has to be urgently moved from the Archive to a safe place¹.

It is important to note that there are two overall categories of media in the Archive – Preservation media and Access media. *Ordering arrangements are important for both types of media, and should be closely aligned as further set out in later sections of this Guide.*

“Preservation” media: this media is the core of the Archive. It is the media that is preserved now and into the future and, generally speaking, is the “original” production object in uncompressed formats if digital. By 2025, all important physical preservation media should be digitised in order to be preserved for the future². This media is not for usage or access by community members or members of the public. Preservation media is under the custodial

¹ See the Disaster Management Plan documents in the [Plan](#) section of the FNMA Archiving Resources Toolkit

² See the Digitisation documents in the [Digitise](#) section of the FNMA Archiving Resources Toolkit

care of the Archive's cultural custodians and Archivists, and needs to be in secured and temperature controlled environments.

“Access” media: this media comprises copies of the preservation media. It may be physical or digital, although as noted above all important physical media should be digitised by 2025. Access media is the media used for community and public access according to cultural protocols for access. Digital access media may be stored on the Archive's hard drives, and replicated on the web, or on public access computers. Physical access media may be in a public access Archive room, with proper loading of the access media managed by the Archive staff.

2. What are ordering arrangements: a quick summary

In general, ordering arrangements are implemented as location codes that:

- Enable the grouping together of Archive items that share the same characteristics (usually a media format such as VHS, DVD, colour photograph etc but also includes preservation media and access media).
- Further sub-arrange grouped items into useful sections.
- Result in a unique code that indicates the specific location of any given Archive item so that it can be found quickly.

Another way of looking at location codes is to consider them as a map for finding items in an Archive. A location code is usually comprised of a number of components, read from left to right with each component often separated by a hyphen or a full stop.

3 What location codes look like

You may be familiar with location codes used by libraries to organise their book collections. Libraries use the Dewey Decimal Classification system (DDC) to assign a numeric code to a book. Libraries refer to this as a call number. The books are arranged numerically on the shelves by the call number. An example of a call number is 636.1/10. The 636.1 is a code for the main subject of the book and the 10 means it is the tenth book on that same subject. Sometimes the call number will have a letter code in front of it. For example REF140.9/1. This means that the book is in a special section of the library. Large size books that can't fit

on the standard book shelves can be given a Q in front of the number and get shelved in special size shelves.

The location codes suggested in this Guide work on the same principles of indicating a location by a combination of location “markers”. Instead of using DDC the location codes suggested here are markers for groups of media of the same type and for individual media items within the media type groups. A location code using this approach could look like VHST-350-000-PM.

SECTION 2 FUNDAMENTALS OF SHELVING, ORDERING ARRANGEMENTS AND LOCATION CODES

Physical media comes in all shapes and sizes. Different types of media need different shelving types and well as storage arrangements to protect the media from environmental and physical damage³.

Most Archives have limited space to set up shelving. Therefore, grouping the same types of physical media together can help maximise the use of limited space. VHS and SVHS tapes for example can be stored ten at a time in polypropylene boxes, with boxes shelved one after another on shelves set at a useful height. Photographs can be stored in folders or special purpose boxes, with shelving again set at useful heights.

The goal in organising physical media is to ensure that the shelving arrangements⁴ are:

- 1 Effective for storing the quantity of media held by the Archive on the shelving available.
- 2 Protective of media at the same time as allowing easy identification of individual media items.

The achievement of the first goal is directly relevant to an Archive's ordering arrangements and location codes. Shelving MiniDV tapes in with VHS tapes in with DVCAM tapes using a running number system is a waste of shelf space and height. Grouping of media into types, and assigning those groups to customised shelving locations, is the foundation for effective usage of shelving space and underpins ordering arrangements and location codes.

Groupings create a spatial map – what media types go where – and form the base for location codes. **In effect, location codes are map codes – they map where individual media items have been physically placed into groups.**

³ Further information on handling and protecting physical media is available in the *Storage and media handling guide* in the [Prepare](#) section of the FNMA Archiving Resources Toolkit

⁴ Shelving should also be safe (secured to wall and/or floor and/or ceiling sufficient to not allow for tipping over and should be steel rather than wood or chipboard to guard against insects and allow for easy dusting.

Location codes also provide for reduction of media handling and hence reduction of the potential for damage. Having detailed location codes mean that multiple media items don't need to be pulled off shelves or out of folders to check titles or other identifying information. **The use of location codes means that the specific media item can be identified individually.**

In summary

Efficient use of shelving space in an Archive requires grouping of media by media type. Location codes are tools for locating individual media items without the need to sort through other media items.

SECTION 3 A SUGGESTED MINIMUM LOCATION CODE SYSTEM

1 Physical media

For physical media, this Guide suggests that at a minimum level the location code comprise four components:

<i>Code for the media type (4 characters)⁵</i>	<i>Running number (minimum 4 characters)</i>	<i>Part number (3 characters)</i>	<i>Preservation or access code (2 characters)</i>
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An example of a location code generated by this structure is as follows:

<i>Code for the media type (4 characters)</i>	<i>Running number (minimum 4 characters)</i>	<i>Part number (3 characters)</i>	<i>Preservation or access code (2 characters)</i>
VHST ⁶	350	000	PM

This structuring generates the following location code **VHST-350-000-PM** that can be decoded as :

- A VHS tape
- Catalogued as the 350th VHS tape
- A single item
- Preservation media

The location code across both physical and digital media should align as far as possible.

Therefore, an access copy of the example VHS would have the location code

VHST-350-000-AC.

These location codes are recorded in the relevant field (the Location Code) in the Archive's database⁷ and used on the label placed on the media to indicate where it is to be shelved.

2 Digital media

⁵ See Appendix 1 for suggested codes.

⁶ The use of a 4 character code is recommended to provide flexibility where some media types are named in a very similar way. In this case VHST is code for VHS Tape.

⁷ For database templates see the [Prepare](#) section of the FNMA Archiving Resources Toolkit.

2.1 File names

The location code for digital media is a filename that is constructed in a similar way to physical media, but with some slight differences:

- As the media format isn't bound by a physical format, the media type code can be left off.
- The final component for the File Format Code is separated from the Preservation or Access code component by a full stop (as per computer operating systems conventions).

A minimum level location code system for digital media could comprise the following five components:

<i>Code for the media category (2 characters)⁸</i>	<i>Preservation or access code⁹ (2 characters)</i>	<i>Running number (4 characters)</i>	<i>Item number (3 characters)</i>	<i>File format code (up to 8 characters)</i>
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Example (for photograph):

<i>Code for the media category (2 characters)</i>	<i>Preservation or access code (2 characters)</i>	<i>Running number (4 characters)</i>	<i>Item number (3 characters)</i>	<i>File format code (up to 8 characters)</i>
SI	PM	0098	025	tiff

This would be expressed as **SI-PM-0098-025.tiff**, and can be decoded as:

- A still image
- A preservation media item
- The ninety eighth (98th) media set (event/project etc) catalogued
- The twenty fifth image in that ninety eighth (98th) set
- In tiff format.

As above the location code would be included in the relevant field (suggested as Location Code) in the Archive's database.

2.2 Folders/directories

⁸ See Appendix 1 for suggested codes.

⁹ This component may be usefully extended to also include codes for rushes (RU) or for broadcast masters (BM).

Digital files need to be stored¹⁰ within folders/directories on hard drives¹¹. A simple way of organising the folders/directories on the relevant drives is to use the media category as the top level name for the folder/directory, followed by preservation/access type as subfolder/subdirectory.

For example:

- Still Image>PM
- Moving Image>PM
- Audio>PM
- Still Image>AC
- Moving Image>AC
- Audio>AC

¹⁰ For security purposes preservation media needs to be stored in 3 locations. These can include local storage with drives in different physical locations, with regular back up, shared cloud storage, or Virtual Private Networks.

¹¹ See the Digital Storage documents in the [Prepare](#) section of the FNMA Archiving Resources Toolkit.

SECTION 4 LOCATION CODE SYSTEMS FOR MORE DETAILED MEDIA MANAGEMENT NEEDS

1 Introduction

Location codes can be constructed to provide useful detail for staff trained in “reading” the codes. This can help with browsing the shelves for media, as well as for confirming that media is shelved in the correct section.

However, there does need to be a balance between the size and complexity of the Archive’s media collection and the level of detail encoded into the location code system. The suggested location code system following is provided as a base for Archives wanting more detailed location codes to modify or add to as needed.

2 Physical media

For physical media, an effective location code system providing for more detailed media management could comprise the following six components:

<i>Code for media category (2 characters)</i>	<i>Code for the media type (4 characters)</i>	<i>Year made (4 characters)</i>	<i>Production running number within the year (minimum 4 characters)</i>	<i>Part number (4 characters)</i>	<i>Preservation or access code (2 characters)</i>
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For example:

<i>Media category</i>	<i>Code for the media type</i>	<i>Year made</i>	<i>Production running number within the year</i>	<i>Part number</i>	<i>Preservation or access code</i>
MI ¹²	VHST ¹³	1989	0005	0000	PM

This would generate the following location code **MI-VHST-1989-0005-0000-PM**. When decoded, this means that the item:

- Is in the Moving Image collection
- Is the fifth VHS produced (or catalogued) in 1985

¹² See Appendix 1 for suggested codes for media category.

¹³ The use of a 4 character code is recommended to provide flexibility where some media types are named in a very similar way. In this case VHST is code for VHS Tape.

- Comprises a single VHS (as indicated by the 0000 code used in the fourth position).
- The preservation item and hence would be located in the secured and environmentally controlled section of the Archive.

The location code across both physical and digital media should align as far as possible.

Therefore, an access copy of the example VHS would have the location code **MI-VHST-1989-0005-0000-AC**

These location codes are recorded in the relevant field (the Location Code) in the Archive’s database¹⁴ and used on the label placed on the media to indicate where it is to be shelved.

3 Digital media

3.1 File names

As noted already in Section 3, the location code for digital media is a filename constructed in a similar way to that for physical media, but with some slight differences:

- As the media format isn’t bound by a physical format, the media type code is not needed.
- A component may be added for media content keywords.
- The final component for the File Format Code is separated from the Preservation or Access code component by a full stop (as per computer operating systems conventions).

<i>Code for the media category (2 characters)</i>	<i>Preservation or access code¹⁵ (2 characters)</i>	<i>Year (4 characters)</i>	<i>Production running number within the year¹⁶ (4 characters)</i>	<i>Media title key words (as set by Archive)</i>	<i>Part number (3 characters)</i>	<i>File format code (up to 8 characters)</i>

For example:

¹⁴ See the database templates in the [Prepare](#) section of the FNMA Archiving Resources Toolkit.

¹⁵ This component may be usefully extended to also include codes for rushes (RU) or for broadcast masters (BM).

¹⁶ The first two digits could be used to represent month (eg January = 01, December =12) with remaining two day or project number- optional.

<i>Code for the media category (2 characters)</i>	<i>Preservation or access code (2 characters)</i>	<i>Year (4 characters)</i>	<i>Production running number within the year</i>	<i>Media title key words (as set by Archive)</i>	<i>Part number (3 characters)</i>	<i>File format code (up to 8 characters)</i>
SI	PM	2012	0098	SportsWeekend	025	tiff

This would generate the following file name **SI-PM-2012-0098-SportsWeekend-025.tiff**, decoded as:

- A still image.
- A preservation media item.
- Taken in 2012.
- Created as part of the ninety eighth (98th) production (or catalogued item) of 2012.
- The twenty fifth image in that ninety eighth (98th) production/catalogued item.
- In tiff format.

The use of SportsWeekend as the fifth component of the file name is a simple way to enable a visual scan of the file directory of a digital drive when looking for specific content. It can also be used by Digital Asset Management Systems such as Neofinder to locate files matching search terms.

3.2 Folders/directories

Digital files need to be stored¹⁷ within folders/directories on hard drives¹⁸. It is strongly suggested that preservation media and access media be stored on separate drives.

A simple way of organising the folders/directories on the relevant drives is to use the media type (e.g. Still Image) as the top level folder/directory with the media categorisation (preservation master or access copy), followed by year as the subfolders/subdirectories¹⁹. This maintains consistency with the file naming protocol above.

For example:

¹⁷ For security purposes preservation media needs to be stored in 3 locations. These can include local storage with drives in different physical locations, with regular back up, shared cloud storage, or Virtual Private Networks.

¹⁸ See the Digital Storage documents in the [Prepare](#) section of the FNMA Archiving Resources Toolkit

¹⁹ Additional folders/directories may be useful for rushes, as well as for broadcast masters for TV or radio.

- Still Image>PM>2012
- Moving Image >PM>2012
- Audio>PM>2012
- Still Image>AC>2012
- Moving Image >AC>2012
- Audio>AC>2012

Whilst it may seem that this is a repetition of components of the filename it is important to remember that:

- Files are easily “lost” without a coordinated approach to storage locations.
- Files can be moved accidentally and become “orphaned”.

The use of media type, media category and year codes ensures that files can be properly stored from the start and maintained in their correct folder/directory location.

SECTION 5 ORDERING ARRANGEMENTS AND CULTURAL PROTOCOLS

1 Introduction

Before committing to an ordering arrangement, location codes relevant to culturally restricted media need to be considered. The Archive's Cultural Plan, as developed in consultation with the Archive's cultural custodians, is the primary source of information for this decision making stage.

The Cultural Plan will ideally have identified protocols for the layout and access arrangements for the Archive. These may include a separation of:

- Men's and women's restricted media into different areas of the Archive or across different digital drives.
- Sorry media in physical or digital areas that need approved access.
- Culturally restricted media in locked cupboards or password protected digital drives.

As already noted above, the location codes are a map. Therefore, where some media needs to be located separately in a men's section for example, the location code needs to include a relevant "marker". That marker is effectively a cultural restriction code.

Whether or not an item is separately located, a cultural restriction code may be a useful inclusion for media access management.

2 Including a cultural restriction code

A useful location for the restriction code is following the Preservation or Access code as follows for physical media, or before for digital media:

Physical media

<i>Code for the media category (2 characters)</i>	<i>Code for the media type (4 characters)</i>	<i>Year made (4 characters)</i>	<i>Production running number within the year (minimum 4 characters)</i>	<i>Part number (3 characters)</i>	<i>Preservation or access code (2 characters)</i>	<i>Restriction code (3 characters)</i>

Digital media

<i>Code for the media category (2 characters)</i>	Restriction code²⁰ (3 characters)	<i>Preservation or access code²¹ (2 characters)</i>	<i>Year (4 numbers)</i>	<i>Production running number within the year (4 numbers)</i>	<i>Media title key words (as set by Archive)</i>	<i>Item number (3 numbers)</i>	<i>File format code (up to 8 characters)</i>

Physical media examples:

MI-VHST-1989-0001-00-PM-WOM
 MI-VHST-1989-0003-00-PM-SOR
 MI-VHST-1989-0005-00-PM-MEN
 MI-VHST-1989-0006-00-PM-SEN
 MI-VHST-1989-0007-00-PM-OPN (for open media)

Digital media examples:

SI-SOR-PM-2012-0098-SportsWeekend-025.tiff
 SI-OPN-PM-2012-0098-SportsWeekend-024.tiff
 etc

In relation to digital media, an Archive may:

- Choose to create separate folders/directories and/or drives for different cultural restrictions according to the Cultural Plan; or
- Where the culturally restricted digital preservation media is stored together on a drive, the use of a cultural restriction code in the filename will inform Archive staff of what they can look at/listen to according to their own cultural status.

²⁰ See list of suggested Restriction codes in Appendix below.

²¹ This component may be usefully extended to also include codes for rushes (RU) or for broadcast masters (BM).

SECTION 6 COORDINATING LOCATION CODE ALLOCATION

Keeping track of location code allocations needs coordination to ensure that numbers aren't skipped or duplicated.

For **physical media** there are two ways to coordinate allocations:

1. Use the proformas provided In the [Catalogue](#) section on the FNMA Archiving Resources Toolkit. The location codes can be added to the proformas as each media item is recorded, using the previous record to guide the location code allocation of the current record. Using this method, location codes can be allocated at the same time as items are being inventoried.
2. Keep a location code master book, with pages set up for each media type. On each page keep a record of the production running numbers used. Using this method, the location code is allocated after items are inventoried.

For **digital media**, the relevant file directory should be sorted by file name to identify the next available running number.

APPENDIX 1

Physical media: Suggested values for code components

Media category code

- SI for still images (photographs, etc)
- MI for moving images (videos and films)
- AU for audiorecordings (includes voice and music)
- TX for print materials

Media type code

SI (Still Image)	Media type code	MI (Moving Image)	Media type code	AU (Audio recording)	Media type code	TX (Text)	Media type code
Negative (Colour)	NEGC	16mm	16MM	¼" Open Reel	QOPR	Book	BOOK
Negative (B&W)	NEGB	8mm	8MMS ²²	8 Track	8TRK	Document	DOCU
Photograph (Colour)	PHOC	Betacam	BETC	Compact Cassette	COMC	Flyer	FLYE
Photograph (B&W)	PHOB	Betamax	BETM	Compact disc (CD)	CDSS	Poster	POST
Positive (Colour)	POSC	Digital Betacam	DIGB	Continuous Loop Cartridge (Cart)	CART	Report	REPO
Positive (B&W)	POSB	DVCAM	DVCM	Digital Audio Tape	DATS		
Proof sheet	PRSH	DVCPRO	DVPR	Digital Compact Cassette	DCCA		
Slide	SLID	DVD	DVDS	Microcassette	MICC		
		MiniDV	MIDV	MiniDisc (MD)	MDSS		
		SVHS	SVHS				
		Super 8	SUP8				
		Umatic	UMAT				
		VHS	VHST				
		Video8/Hi8	VID8				

²² The S and SS is added to provide for 4 characters where need.

Preservation or access code

- PM
- AC
- *Optionally*
 - RU (for rushes)
 - BM (for broadcast masters)

Restriction code

- MEN
- OPN
- SEN
- SOR
- WOM

APPENDIX 2

Digital media: Suggested values for code components

Media category code

- SI for still images (photographs, etc)
- MI for moving images (videos and films)
- AU for audiorecordings (includes voice and music)
- TX for print materials

Preservation or access code

- PM
- AC
- *Optionally*
 - RU (for rushes)
 - BM (for broadcast masters)

Restriction code

- MEN
- OPN
- SEN
- SOR
- WOM