

Directory & File Naming Conventions for Digital Objects, version 1.06

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1.01	2 Nov 2007	Changes to directory names for original photographic sources vs manuscript sources
1.02	16 August 2007	Added conventions for maps catalogued in Voyager.
1.03	22 Apr 2008	Added conventions for works of art.
1.04	26 Feb 2009	Added conventions for published works catalogued in Voyager (other than music and artist books).
1.05	20 November 2009	Added conventions for published multi-volume works and published serials catalogued in Voyager (other than music and artists books)
1.06	2 April 2012	Reformatted to more user friendly style. Amended and added conventions to accommodate new requirements for DigiTool.

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Introduction

This document details the conventions employed by the State Library of Queensland for the naming of directories and files for digital objects.

The digital object formats covered in this document are:

- Image files – of photographs, manuscripts, books, maps, music scores and artists' books;
- Audio files – of music, oral histories, public speakers or other public programs (webcasts);
- Video files – of public presentations (webcasts) and digital stories.

Related Documents

This document should be read in conjunction with *State Library of Queensland Digital Standard 2 Digital capture & format* (available on the Library's website at <http://www.slq.qld.gov.au/about/pub/pol>)

Management and control of digital objects

The management and control of directory structures and file names for digital objects is led by Resource Management (RM) through the Resource Discovery Standards Group in consultation with Information Communications & Telecommunications Services (ICTS), Queensland Memory (QM), Collection Preservation, and collection specialists or project managers.

Before capturing a new digital object format, ie, a format not covered in this document, State Library staff must discuss options with the chair of the Resource Discovery Standards Group to determine file names and directories consistent with the conventions outlined in this document. Information on the current chair can be found at <http://intra.slq.qld.gov.au/home/what/cg/int/rdsg>.

Section A – Directory Structures

Files for digital objects can pass through three storage areas as they are processed and made available online –

1. Incoming– newly digitized resources
2. Pre-DigiTool ingest – storage for archive and derivative files prior awaiting ingest into DigiTool
3. DigiTool storage

The directory structures for each of these storage locations are outlined in the following sections.

Appendix A provides a list of current organizations and their directory abbreviations.

1. Directory structure for files

1.1. Incoming Directory location for preservation masters.

The following is not a comprehensive listing of all directories. New directories will be created on an as needs basis.

Server or directory	Element	Description	Example
Server name		Files are stored on the backup1 server	
1 st Directory	Original format		Images audio video
2 nd Directory	Organisation name	3 letter code for the organisation contributing audio files.	slq
3 rd Directory	Incoming (not applicable to video files)	Files ready for derivative creation	
4 th Directory	Collection or format	photographic/image negative collection (neg) music (mus) Original material including manuscripts, photographs, oral histories, etc. (dao) artists' books (abk) maps (maps) published books (pub) digital stories (qldstories) Public Programs (pp) P&ILS (pils) Audio	neg mus dao abk maps pub qldstories pp pils audio_done

Examples -

[\\backup1\images\slq\incoming\neg](#)
[\\backup1\images\slq\incoming\dao\7980-0001\7980-0001-0001.tif](#)
[\\backup1\audio\slq\incoming\audio_done](#)
[\\backup1\video\slq\qldstories](#)

1.2. Pre DigiTool ingest - Derivatives

Derivative copies are created from the preservation master files stored in the Incoming directory. The derivatives are then stored in a separate directory structure as set out below, awaiting ingest to DigiTool.

Server or directory	Element	Description	Example
Server name		Files are stored on the backup1 server	
1 st Directory	Original format		images audio video
2 nd Directory	Organisation name	3 letter code for the organisation contributing audio files.	slq
3 rd Directory	Collection or format	photographic/image negative collection (neg) photographic/image scan collection (scan) music (mus) Original material including manuscripts, photographs, oral histories, etc. (dao) artists' books (abk) maps (maps) marketing published books (pub) digital stories (qldstories) Public Programs (pp) P&ILS (pils)	neg scan mus dao abk maps pub qldstories) pp pils
4 th Directory (Images only?)	Date (not applicable to video or audio files)	Date derivatives were created in format yyyy-mm-dd	2010-04-12
5 th Directory	Image usage	Indicates the derivative stored in that location	preview research jp2 tnl pdf mp3 mp4 wmab wmad wmvb wmvd
6 th Directory	Voyager Bibliographic Record Number	For "abk", "maps", "mus" and "pub"	664329 047320 00001

Collection reference code	For the “dao”, “qldstories” directory. Identifies the collection the photographic image, manuscript, oral history etc. belongs to.	API-015-0001 5545-0001 2770-1 2770-2 OM65-04-1
Title	Identifies the name of the virtual book.	steley
Project	Identifies the name of the project.	idol

Examples -

<\\backup1\images\slq\neg\2010-03-29\research\203759r.jpg>

<\\backup1\images\slq\dao\2010-01-19\preview\27257-0001\27257-0001-0001p.jpg>

<\\backup1\video\slq\dao\wmvb\2918-0009\2918-0009.wmv>

<\\backup1\audio\slq\mus\mp3\101964\101964.mp3>

<rtsp://streamingserver.slq.qld.gov.au/video/slq/dao/rvb/3066-0001/3066-0001.rv>

<rtsp://streamingserver.slq.qld.gov.au/audio/slq/pp/ramb/oscarwilde/OscarWilde.ra>

1.3. Pre DigiTool ingest – Preservation copy

Following the creation of derivatives copies, the preservation copy is stored in a separate directory structure as set out below, awaiting ingest to DigiTool.

Server or directory	Element	Description	Example
Server name		Stored on the backup1 server	
1 st Directory	Original format		images-archive audio-archive video-archive
2 nd Directory	Organisation name	3 letter code for the organisation contributing audio files.	slq
3 rd Directory	Collection or format	photographic/image negative collection (neg) photographic/image scan collection (scan) music (mus) manuscript, original photographic collections, oral histories, etc. (dao) artists' books (abk) maps (maps) marketing published books (pub) Public Programs (pp) P&ILS (pils)	neg scan mus dao abk maps pub pp pils
4 th Directory (Images only)	Date (not applicable to video or audio files)	Date derivatives were created in format Yyyy-mm-dd	2010-04-12
5 th Directory	Archive	Indicates preservation copy	archive
6 th Directory	Voyager Bibliographic Record Number	For "abk", "maps", "mus" and "pub"	664329 047320 00001
	dao Collection reference code	identifies the collection that the photographic image or manuscript belongs to. For the "neg" collection, there is no 6 th Directory as the negative number is all that exists.	API-015-0001 5545-0001 2770-1 2770-2 OM65-04-1
	neg collection	For the "neg" collection, there is no 6 th Directory as the negative number is all that exists.	
	Title	Identifies the name of the virtual book.	steley
	Project	Identifies the name of the project.	Idol qldstories nancypearl favouritethings

			introducing
--	--	--	-------------

Examples -

[\\backup1\images-archive\slq\neg\2010-03-26\archive\84716.tif](#)

[\\backup1\images-archive\slq\dao\2010-01-29\archive\27274-0001\27274-0001-0003.tif](#)

[\\backup1\video-archive\slq\dao\archive\2918-0009\2918-0009.avi](#)

[\\backup1\audio-archive\slq\pp\archive\nancypearl\001.wav](#)

2. Directory structure for DigiTool storage space

Files are allocated to specific storage spaces/directory according to their usage, format and contributing organization.

The allocation to a storage space is controlled within DigiTool through the use of Storage Groups and Storage Rules.

Storage Rules use the file format, preservation level, DigiTool Admin Unit and the contents of Partition A to allocate a file to a Storage Group.

The Storage Group specifies the storage space/directory where the file is to be stored.

2.1. Derivatives – all formats

Server or directory	Element	Description	Example
Server name		DigiTool production server	bishop.slq.qld.gov.au
Server name		Stored on the backup1 server	
1 st directory	Format	Indicates the format of the files	images video audio
2 nd Directory	Usage		derivatives
3 rd Directory	Collection or Organisation name	Indicates the digital collection the files belong to or the code for the contributing organisation	CairnsLib QPAC qldstories SLQMusic SLQPicQld SLQPublications
4 th Directory	Year	Year file was ingested	2011
5 th Directory	Month	Month file was ingested	02
6 th Directory	Day	Day file was ingested	04
7 th Directory	Batch reference	Files are stored in batches of 1000 pre ingest	file_10

2.2. Preservation copy – Formats other than video

(Video archive files are not currently ingested into DigiTool due to system constraints. These files are maintained on the backup server.)

Server or directory	Element	Description	Example
Server name		DigiTool production server	bishop.slq.qld.gov.au
Server name		Stored on the backup1 server	
1st directory	Format or usage	Indicates storage for preservation files	archive
2nd Directory	Usage + format	Indicates the format of the digital object	archivalimages archival audio archivalead
3rd Directory	Collection or Organisation name	Indicates the digital collection the files belong to or the code for the contributing organisation	CairnsLib QPAC SLQMusic SLQPicQld SLQPublications
4th Directory	Year	Year file was ingested	2011
5th Directory	Month	Month file was ingested	02
6th Directory	Day	Day file was ingested	04
7th Directory	Batch reference	Files are stored in batches of 1000 pre ingest	file_10

3. Directory structure for virtual books

Server or directory	Description	Example
Server name	Stored on the backup1 server - \\backup1\video	
1 st Directory	Original format	vbooks
2 nd Directory	Organisation name (3 letters). Gives name of organisation contributing video files.	slq
3 rd Directory	Identifies the name of the virtual book.	steley coolangatta
4 th Directory	Generated by virtual book publisher application.	

Section B – General file naming conventions

1. All file names will be prefixed with a reference code. This code may be one of the following –
 - Accession number (includes AP, TR, M, R, OM and G numbers)
 - Voyager Bibliographic Record Number
 - AP number
 - Transfer number
 - Negative number
 - 1.1. If State Library holds a copy print, as opposed to an original photograph, then the copy print's negative number will be used in the file name.
 - 1.2. If State Library holds a copy loan i.e. only the digital image (no negative or print), the accession number will be used in the file name.
 - 1.3. Due to past practices, files may have prefixes which do not match the parent directory. E.g. – grey albums.
2. Digital objects from multi-part collections will include an item/part number element. This may be one of the following –
 - Item number
 - Volume number
 - Volume & issue numbers
 - Date
 - Track number
3. Multipart objects will include a sequential image element. The file naming sequence will start at 0001, regardless of actual page number of the item, except in the case of maps, where it refers to the actual sheet number.
4. Recto and verso elements will be included for manuscripts, archive material, full pages from photographic album and works of art where recto indicates the front of the page and verso indicates the reverse side of the page. Recto/verso positioning gives the relational position of the image to the item as a whole.
5. Excerpts from audio or video files will include elements to indicate the time stamps for the beginning and end of the excerpt.
6. All numbers will be padded to a specific number of digits to ensure consistency in the length of file names. The only exceptions are –
 - Accession numbers
 - Copy print negative numbers
 - Webcasts
7. Image files will include a suffix to indicate the derivative type –

p	preview size
r	research size
b	thumbnail

a Image does not meet SLQ's digital capture standard

8. File names for virtual books

Some of the file names for the virtual book are generated by the publisher application at the point of publication. The publisher application requires the following directory and file structure for each virtual book:

```
..\images\  
..\mp3\  
..\music\  
..\xml\  
pageflip.swf  
index.htm
```

Detailed instructions for publishing virtual books, including file naming conventions, are contained in the readme file that accompanies the virtual book publisher module. The readme file is located at <o:\RDU\DSU\Page turning software\Publisher\2005-12-06\readme.txt>

Section C – File name elements

Format	Reference code	Item/Part Number	Usage	Sequential Number	Usage	Time Stamp	Usage
Image	AP Number	Item Number	M	image number	M		
Image	Accession Number	Item Number	M	image number	M		
Image	Transfer Number	Item Number	M	image number	M		
Image	OM Number	Item Number	M	image number	M		
Image	Extended OM number	Item Number	M	image number	M		
Image	Negative Number	Item Number		[Not applicable]			
Manuscript Archive material Works of Art Photographic album	Accession Number	Item Number	M	Recto/verso number	M		
Music Artists book	Voyager BRN	[Not applicable]		image number	M		
3 Dimensional objects	Accession Number	Item Number	M	image number	M		
Maps	Voyager BRN	Item Number (multipart maps only)	O				
Published material	Voyager BRN	Volume	O	image number	O		
Serials & Newspapers	Voyager BRN	Volume/Issue	M	image number	O		
	Voyager BRN	Issue Number	M	image number	O		
	Voyager BRN	Date	M	image number	O		
Audio	Accession Number Voyager BRN	Item number	O	[Not applicable]		Begin time_End time	O
Oral histories	Accession Number	Item number	M	Recording Number	O	Begin time_End time	O
Video	Accession Number Voyager BRN	Item Number	M	[Not applicable]		Begin time_End time	O

Usage M = Mandatory O = Optional, use where required.

Section D – Format of file name elements

Reference code	Format	Prefix	Padding
AP Number			Numbers only padded to 3 digits
Accession Number			
Voyager BRN			6 digits
Item Number (images)			4 digits
Recto/verso number	V###r###		3 digits
Volume		v	
Volume/Issue	V###i###		3 digits
Date	yyyymmdd		
Issue number (serials)			3 digits
Image number (published material only)		s	4 digits
Track number		t	2 digits
Begin time_End time	hh-mm-ss		

Section E – Specific Examples

1. Images

1.1. AP numbers

API-001-0001-0001.tif (API-1, item 1, image number 1)
 APA-025-0002-0003r.jpg (APA-25, item 2, image number 3)
 APU-101-0001-0005b.jpg (APU-101, item 1, image number 5)

1.2. Accession numbers (including copy loans where the original is not held by the State Library)

4687-0025-0001.tif (Accession 4687, item 25, image number 1)
 5248-0125-0006p.jpg (Accession 5248, item 125, image number 6)
 4600-0013-0025r.jpg (Accession 4600, item 13, image number 25)
 2354-0001.tif (accession 2354, image number 1)
 5102-0006p.jpg (accession 5102, image number 6)

1.3. Transfer numbers

M1256-0025-0001.tif (item 25 of M 1256, image number 1)
 R12-0023-0002p.jpg (item 23 of R 12, image number 2)
 TR1785-0013-0001b.jpg (item 13 of TR 1785, image number 1)

1.4. OM numbers

OM75-120-0002-0001.tif (OM75-120, item 2, image number 1)
 OM64-012-0003-0001b.jpg (OM64-12, item 3, image number 1)
 OM82-010-0001-0005p.jpg (OM82-10, item 1, image number 5)

1.5. Extended OM numbers

OM74-123-005-0002-0001.tif (OM74-123/5, item 2, image number 1)
OM69-012-004-0006-0002r.jpg (OM69-12/4, item 6, image number 2)

1.6. Negative numbers i.e., copy prints (original NOT held by the State Library)

48473.tif
48474p.jpg
76b.jpg

2. Archive material, manuscript material and works of art (2 dimensional)

2.1. Single page:

R185-1v000r001 for the front side of item 1 of R185
R185-1v001r000 for the reverse side of the page

6663-1v000r001 for the front side of the work of art
6663-1v001r000 for the reverse side of the work of art

2.2. Multipart item:

2.2.1. Unbound pages: (scanned 1 page at a time)

- R185-11v000r001 (front side of the first page of item 11 of accession R185)
- R185-11v001r000 (reverse side of the first page)
- R185-11v000r002 (front side of the second page)
- R185-11v002r000 (reverse side of the second page)

2.2.2. Bound volume: (scanned as a double open page)

- R185-12v000r001 (front side of the first page of item 12 of accession R185)
 - R185-12v001r002 (reverse side of the first page (the inside front cover and page 1))
 - R185-12v002r003 (finishing with...)
 - R185-12vxxxr000
- Works of art (2 dimensional) will predominantly be single “page” items, thus having single front and reverse sides. In the main only the recto of these works will be digitised, however where additional information is recorded on the verso of items this will also be digitised.

3. Music scores and artists' books

3.1. Artists' books, and music scores catalogued in Voyager

644301-s0001.tif (image 1 from the item with VBRN 644301)
005060-s0045r.jpg (image 45 from the item with VBRN 5060)

611065-s0001.tif
611065-s0002b.jpg
611065-s0003p.jpg
611065-s0004r.jpg

- Images of artists' books may comprise various views of the front and back cover, images of multiple items that comprise an artists' book, and individual "pages" from the book. Staff from Queensland Memory will assign the file name sequence.

4. Maps

4.1. Single sheet

769146.tif
769146b.jpg
769146p.jpg
769146r.jpg

4.2. Multiple sheets

699304-s0001.tif (sheet 1 from the map whose VBRN is 699304)
069930-s0045r.jpg (sheet 45 from the map with VBRN 69930)

5. Published books

131184-s0001.tif (image 1 from the item with VBRN 131184)
059468-s0045r.jpg (image 45 from the item with VBRN 59468)
709170-v1-s0035.jpg (image 35 from Volume 1 of the item with VBRN 709170)
1421158.pdf (pdf file of e-book with VBRN of 1421158)

- Volume numbers are only to be inserted for multi-volume titles. Ignore this element for single volume titles.
- For volumes which span more than one year, abbreviate the designation to 6 digits – 1949-1950 becomes 194950. Do not insert hyphens.
- Images of books may comprise the whole book, portions of the book, or individual page/s. File naming sequence will start at –s0001, regardless of actual page number of the item.
- File names for complete e-books are also allocated using these guidelines.

6. Published serials

102354-v010i235-s0001.tif (image 1 from Volume 1 Issue 235 of the item with VBRN 102354)

759844-n134.pdf (pdf file of Issue number 134 of the item with VBRN 759844)

- Images of journals may comprise the whole issue, portions an issue, or individual page/s. File naming sequence will start at –s0001, regardless of actual page number of the item.
- File names for e-serial issues are also allocated using these guidelines.

7. Newspapers

702692-19061027-s0001.tif (image 1 from newspaper issue dated 27 Oct 1906 with VBRN 702962)

- Images of journals may comprise the whole issue, portions an issue, or individual page/s. File naming sequence will start at –s0001, regardless of actual page number of the item.

8. Audio materials

8.1. Audio – Single track

124589.wav
347283.wma

8.2. Audio - multiple tracks

124589-t01.mp3 (track 1 of the audio item with VBRN 124589)
347283-t03.wma (track 3 of the audio item with VBRN 347283)

8.3. Audio - Excerpt

345678-t01_00-01-35_00-02-42.wav
458342_00-05-24_00-06-48.wma

8.4. Oral history audio files

31254-0001.mp3 (Oral history recording from Accession number 31254)
35214-0001-0002.ram (Recording 2 for item 1 from Accession Number 35214)

8.5. Extract from an oral history

Examples:

31254-0001_00-00-34_00-04-28.mp3
35214-0001-0002_01-34-57_01-36-21.wma

9. Video materials

9.1. Motion pictures & Queensland Stories

6088-0001.wmv (item 1 of accession 6088)
3066-0001.mp4(item 1 of accession 3066)

9.2. Motion pictures - Extracts

6088-0001_00-01-00_00-02-30.wmv (extract of item 1 of accession 6088 starting at 1min and ending at 2min 30secs.)
3066-0001_00-02-30_00-04-05.wmv

9.3. Webcasts

File names for video files created for webcasts including public lectures, staff training sessions, and interviews may comprise where appropriate:

- the first name and last name of the speaker;
- the first 3 words of the public lecture, series, etc. If less than 3 words then the first 1-2 words.

Each word will begin with a capital. There will be no spaces between words.
[FirstnameLastname].file extension

Examples:

LeahPurchell.wmv
JasonAckermanis.rv
ExtremeWeather.rv
PoliticsOfSpin.avi

If the same speaker presents more than one session, add a sequential running number to the file name:

[FirstnameLastname]-[sequential running number].file extension

Examples:

NancyPearl-001.avi
NancyPearl-002.avi
NancyPearl-003.avi

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For more information see <http://creativecommons.org/licenses/by/3.0/au>

APPENDIX A - DIRECTORY ABBREVIATIONS FOR ORGANIZATIONS

athertonlib	Atherton Shire Library (Now Tablelands Regional Council)
bananalib	Banana Shire Library
barcaldinelib	Barcaldine Shire Library (Now Barcaldine Regional Council)
boonah	Boonah Shire Library (Now Scenic Rim Regional Council)
broadsound	Broadsound Shire Library (Now Isaac Regional Council)
bundaberg	Bundaberg City Library (Now Bundaberg Regional Council)
burdekin	Burdekin Shire Library
cairns	Cairns City Library (Now Cairns Regional Council)
chinchillalib	Chinchilla Shire Library (Now Western Downs Regional Council)
croydon	Croydon Shire Library
epa	Environmental Protection Agency
hinchlib	Hinchinbrook Shire Library
ils_images	Indigenous Library Services
mtisa	Mount Isa City Library
mtmorgan	Mount Morgan Shire Library (Now Rockhampton Regional Council)
nsla	National and State Libraries Australasia
pinerivers	Pine Rivers Shire Library (Now Moreton Bay Regional Council)
qbsc	Beaudesert Library
qcdra	Caloundra Library
qhbp	Hervey Bay Library
qm	Queensland Museum
qmar	Maryborough Library
qmc	Mackay Library
qmm	Queensland Maritime Museum
qpac	Queensland Performing Arts Centre
qtol	Toowoomba Library
slq	State Library of Queensland