





## Next steps in Digital Preservation

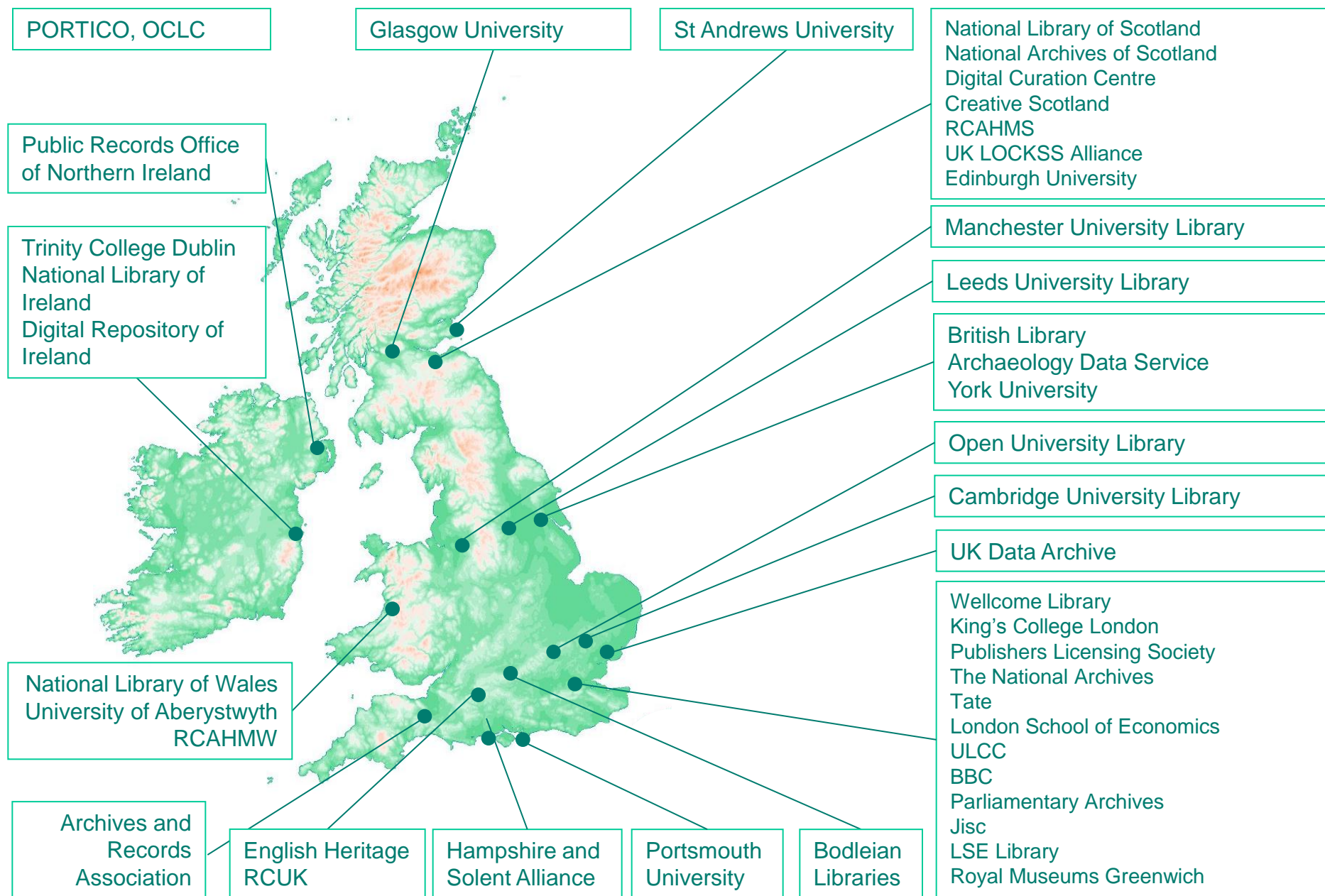
You are not alone...

**David Underdown**

4 December 2013

# Make friends







# Digital Preservation Coalition

<http://www.dpconline.org>

dpconline.org/advice

Advice | Digitisation & Digi...

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Technology Watch Reports

Digital Preservation Handbook

Web Archiving

Occasional papers and conference notes


Links - Discussion Lists

DPC Reports

FAQs

Case Notes

DPC Members

 University of Portsmouth

The DPC seeks to lower the barriers to digital preservation, making long term access achievable for all. But it is hard to know where to start. Digital preservation is daunting enough: a decade or more of research has shown that long term access to data is achievable. The proliferation of projects tools and services has had the effect of putting digital preservation within reach but has also made it harder to know where to start. The DPC offers a generic advice service which tries to match advice to members' needs. The following links provide guidance to help you get started, work out who is doing what, and provide a more sustained introduction to specific technical and organisational challenges.

- **Preservation Handbook** is intended as a simple but comprehensive guide to Digital Preservation planning for all kinds of projects and institutions.
- **Technology Watch Reports** are commissioned by DPC from leading developers and are intended to provide an advanced introduction for those looking at specific issues of preservation and access
- **What's New in Digital Preservation** provides a short, frequently updated digest of new events, projects and services as they emerge.
- The **DPC Annual Reports** provide an annual overview of the DPC community. They are a guide to what a large cross section of institutions are doing to ensure continuing access.
- **Case notes in digital preservation** - from April 2010
- **Occasional papers** - from time to time the DPC commissions or publishes papers on specific topics which provide an advanced reconnaissance to those engaged in digital preservation.

Latest News

**Notes and presentations from File Formats day of Action Published**  
8 Feb 2013 | 16:11pm


**Preservation and portable documents: a briefing on the PDF/A3 standard**  
7 Feb 2013 | 10:47am

**Digital Repository of Ireland joins the Digital Preservation Coalition**  
4 Feb 2013 | 14:00pm


**Invitation to Digital Preservation Mashups: March May and July 2013**  
30 Jan 2013 | 14:39pm

**Two Vacancies at St Andrews University: Research Computing Advisor and Applications Developer**  
29 Jan 2013 | 13:28pm

DPC on Twitter



**about 35 minutes ago**  
RT @blefurgy: MT  
@ndiipp @NDSA2 releases digital stewardship glossary, seeks comments [go.usa.gov/4fuB](http://go.usa.gov/4fuB)  
#digitalpreservation



**about an hour ago**

# The National Archives

<http://nationalarchives.gov.uk/information-management/projects-and-work/digital-preservation.htm>

The screenshot displays the 'Digital preservation' page on The National Archives website. The header features the logo, a search bar, and a breadcrumb trail: 'You are here: Home > Information management > Our projects and work > Digital preservation'. A left-hand navigation menu lists various topics, with 'Digital preservation' highlighted. The main content area is titled 'Digital preservation' and includes an introductory paragraph, a photograph of server racks, and several sections with links: 'Our role', 'Guidance', 'Digital preservation FAQs', 'Digital repository', 'File format registry (PRONOM)', and 'Research and collaboration'. Each section provides a brief description of its content. The footer contains contact information for The National Archives, links to find out more, a list of websites (Blog, Podcasts and videos, Labs), and social media links (Twitter, YouTube, Flickr).

**The National Archives**

You are here: [Home](#) > [Information management](#) > [Our projects and work](#) > Digital preservation

**Digital preservation**

The National Archives is tackling the challenges of digital preservation, ensuring continued access to digital information in the future.

We play an active role in storing and preserving digital material created by UK government.

**Our role** ▶

Learn about the challenges involved in preserving digital records and the tools we've designed to help.

**Guidance** ▶

Find advice on specific topics related to the preservation and management of electronic records.

**Digital preservation FAQs** ▶

Find answers to questions frequently asked about digital preservation from archive services.

**Digital repository** ▶

Learn about our methods of storing, preserving and providing access to electronic government records.

**File format registry (PRONOM)** ▶

Go to our database containing details of more than 800 different digital file formats.

**Research and collaboration** ▶

Discover the research projects we are involved with, at The National Archives and elsewhere.

**Download DROID: file format identification tool** ▶

**The National Archives**  
Kew  
Richmond  
Surrey  
TW9 4DU

**Find out more**  
[Contact us](#)  
[Press room](#)  
[Jobs and careers](#)

**Websites**  
[Blog](#)  
[Podcasts and videos](#)  
[Labs](#)

**Follow us**  
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[Flickr](#)

# The National Archives 2

- Other resources, eg DROID/PRONOM
  - <https://github.com/digital-preservation>
- Parsimonious Preservation
  - <http://www.nationalarchives.gov.uk/documents/information-management/parsimonious-preservation.pdf> (2009)
  - <http://www.nationalarchives.gov.uk/documents/information-management/parsimonious-preservation-in-practice.pdf> (2013)
- Our digitisation standards
  - <http://nationalarchives.gov.uk/documents/information-management/digitisation-at-the-national-archives.pdf>
  - Tailored to our situation here, your situation may differ

# British Library

- <http://www.bl.uk/aboutus/stratpolprog/collectioncare/discovermore/digitalpreservation/index.html>

The screenshot shows the 'ABOUT US' section of the British Library website, specifically the 'Collection Care' page. The page has a teal header with the 'BRITISH LIBRARY' logo on the left. Below the header is a breadcrumb trail: Home > About Us > Strategy, policies and programmes > Collection Care > Discover more > Digital Preservation. The main content area is titled 'Digital Preservation' and contains several paragraphs of text. On the right side, there is a search bar, a 'Search tips' link, and two lists of links: 'In this section' and 'Related links'. The 'In this section' list includes 'Strategy', 'What We Do', and 'Collaboration'. The 'Related links' list includes '2020 Vision', 'The British Library's Strategy 2011 - 2015', 'About Collection Care', 'Digital programme', and 'Digitisation'. The 'What We Do' section describes the R&D programme and its link to the Digital Preservation Centre of Excellence. The 'National and international collaboration' section is partially visible at the bottom.

**BRITISH LIBRARY**

## ABOUT US

### Collection Care

Home > About Us > Strategy, policies and programmes > Collection Care > Discover more > Digital Preservation

#### Digital Preservation

The British Library collects and must preserve an increasing amount of digital material for future users. The diversity of digital material and frequent changes in computer technology present ongoing challenges for long term preservation and access. The Library is at the cutting edge of international research in this area and our digital preservation team works closely with colleagues across the Library to improve the longevity of our digital collections.

#### The Challenge of Digital Preservation

The British Library is committed to preserving digital content for the long term, safeguarding our intellectual heritage so that it can be used by future researchers. The rapid rate at which technology is evolving and the relative transience of digital content make this a significant challenge.

Our British Library's Digital Preservation Team undertakes the R&D necessary to ensure the Library is able to implement the right technology to support digital preservation, at the right time.

#### A Strategy for Digital Preservation

In 2006, the digital preservation team produced a [ten year strategy](#) to ensure perpetual access to the digital material held in our collections. The mission, goal and principles of that strategy remain broadly valid.

Our understanding of digital preservation has evolved since 2006. A new strategy has therefore been produced to bring our activities in line with the Library's more recent [2020 vision](#) and [corporate strategic priorities for 2011 - 2015](#).

You can read more about our current strategy [here](#).

#### What We Do

Our R&D programme combines technical development with curatorial research to deliver policies, best practice and recommendations for operational units across the Library, disseminated via the Digital Preservation Centre of Excellence.

The R&D programme is directly linked to our strategy and strategic priorities. Activities include collection profiles, risk assessments, repository audits, quality assurance, tool and file format assessments, workflows, and a preservation watch. We work closely with colleagues across the Library to ensure these activities meet core business needs and we monitor operational activities across the Library to ensure recommendations are appropriately implemented.

[Read more](#) about our current programme of work.

#### National and international collaboration

#### Search About us

[Search tips](#)

#### In this section

- Strategy ☐
- What We Do ☐
- Collaboration ☐

#### Related links

- 2020 Vision ☐
- The British Library's Strategy 2011 - 2015 ☐
- About Collection Care ☐
- Digital programme ☐
- Digitisation ☐



# Llyfrgell Genedlaethol Cymru The National Library of Wales

<http://www.llgc.org.uk/index.php?id=3970>

The screenshot shows the website of Llyfrgell Genedlaethol Cymru (The National Library of Wales). The header includes the library's name in Welsh and English, its location in Aberystwyth, and social media links. A navigation bar contains links to Home, About NLW, Visit Us, Collections, Family History, Digital Mirror, Education, and Blog. A left sidebar lists various units, with 'Digital Preservation' highlighted. The main content area is titled 'What is Digital Preservation?' and contains a paragraph explaining the concept. A right sidebar features a 'Collections' link and a 'Digital Mirror' section with various resource links. The page is framed by a yellow border on the right side.

**LGC NLW** Llyfrgell Genedlaethol Cymru  
The National Library of Wales  
Aberystwyth

Home About NLW Visit Us Collections Family History Digital Mirror Education Blog

Catalogues  
About our Collections  
Collection Care  
Conservation Treatment Unit  
Easel Painting Conservation Unit  
Preventive Conservation Unit  
Collection Support Unit  
Good Practice  
**Digital Preservation**  
Digital Preservation in NLW

You are here: [Home Page](#) > [Collections](#) > [Collection Care](#) > [Digital Preservation](#)

## What is Digital Preservation?

Digital Preservation is a **set of activities required to make sure digital objects can be located, rendered, used and understood in the future**. This can include managing the object names and locations, updating the storage media, documenting the content and tracking hardware and software changes to make sure objects can still be opened and understood. Within the Library we are concerned with long term digital preservation where long term is 'deemed long enough to be concerned with the impacts of changing technologies, including support for new media and data formats, or with a changing user community. Long term may extend indefinitely.' [CCSDS, 2002]

**Collections**

**Digital Mirror**

**Welsh Biography**  
The lives of hundreds of Welsh people from the 18th to the 20th century.

**Manuscripts**  
The lives of hundreds of Welsh people from the 18th to the 20th century.

**Archives**  
The lives of hundreds of Welsh people from the 18th to the 20th century.

**Printed Material**  
The lives of hundreds of Welsh people from the 18th to the 20th century.

**Sound and Video**  
The lives of hundreds of Welsh people from the 18th to the 20th century.

**Photographs**  
The lives of hundreds of Welsh people from the 18th to the 20th century.

**Information**  
The lives of hundreds of Welsh people from the 18th to the 20th century.

# Library of Congress

- <http://www.digitalpreservation.gov/>

The screenshot shows the Library of Congress Digital Preservation website. At the top, there's a navigation bar with the Library of Congress logo, links for 'ASK A LIBRARIAN', 'DIGITAL COLLECTIONS', and 'LIBRARY CATALOGS', a search bar, and a 'GO' button. Below this is a breadcrumb trail: 'The Library of Congress > Digital Preservation'. The main content area is titled 'Digital Preservation' and features a large image of people working with digital equipment. To the left is a sidebar with a 'DIGITAL PRESERVATION' header, a search box, and a list of links: Home, About, Partners, Collections, Tools Showcase, Multimedia & Publications, Meetings & Events, Education & Training, and Contact Us. Below these links is a 'Resources' section with links to Digital Formats Sustainability, Federal Agencies Digitization Guidelines Initiative, Preservation and Conservation at the Library of Congress, Section 108 Study Group, Standards at the Library of Congress, and Web Archiving at the Library of Congress. The main content area also includes sections for the National Digital Stewardship Alliance, Preserving Your Digital Memories, and Digital Preservation Outreach and Education. On the right side, there are social media links for '@ndiipp on Twitter' and a 'Recent Blog Posts' section.

LIBRARY OF CONGRESS

ASK A LIBRARIAN DIGITAL COLLECTIONS LIBRARY CATALOGS

Search  GO

The Library of Congress > Digital Preservation

DIGITAL PRESERVATION

Search this site  GO

- Home
- About
- Partners
- Collections
- Tools Showcase
- Multimedia & Publications
- Meetings & Events
- Education & Training
- Contact Us

Resources

- Digital Formats Sustainability
- Federal Agencies Digitization Guidelines Initiative
- Preservation and Conservation at the Library of Congress
- Section 108 Study Group
- Standards at the Library of Congress
- Web Archiving at the Library of Congress

Digital Preservation

Print Subscribe Share/Save

This is the home of the [National Digital Stewardship Alliance](#), [Digital Preservation Outreach and Education](#) and the [National Digital Information Infrastructure and Preservation Program](#).

National Digital Stewardship Alliance

An initiative of the National Digital Information Infrastructure and Preservation Program, NDSA members work together to make a sustained contribution to digital stewardship.

[Read about the NDSA >](#)

Preserving Your Digital Memories

Just as libraries are preserving the nation's digital memory, individuals need to take steps to preserve their own digital memories. Here are some tips on what you can do.

[View the tips >](#)

Digital Preservation Outreach and Education

Fostering a national outreach and education network to encourage the preservation of digital content.

@ndiipp on Twitter

ndiipp .@NDSA2 releases a digital stewardship glossary. Let the lexical "discussions" begin!  
[go.usa.gov/4fuB](http://go.usa.gov/4fuB)  
3 hours ago · reply · retweet · favorite

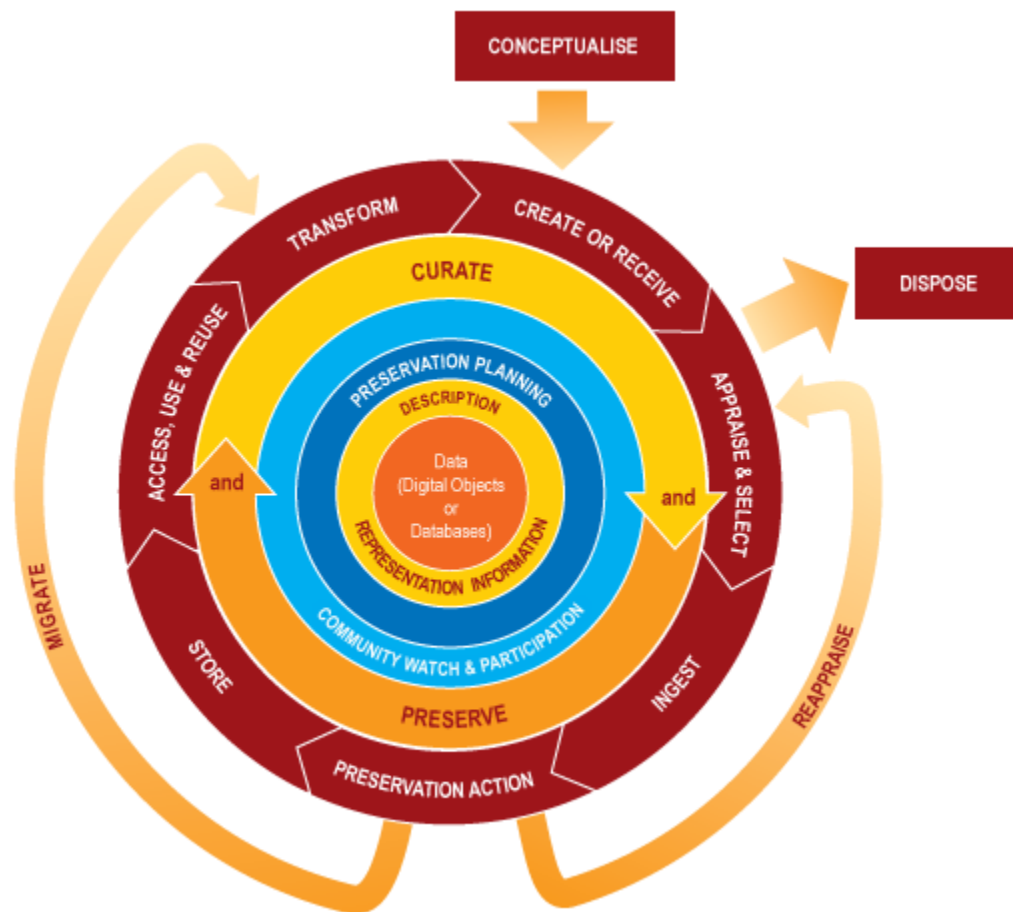
ndiipp Hey there, "Reading improves the mind. Are you fond of Reading?" MT  
@HarvardLibrary pick-up line from 1820 game  
[hvr.me/14s8ZeA](http://hvr.me/14s8ZeA)  
2 hours ago · reply · retweet · favorite

Recent Blog Posts

The Release of the NDSA Digital

# Digital Curation Centre

- <http://www.dcc.ac.uk>
- Digital information curation (data)
- Advice and help for UK higher education to store, manage, protect and share digital research data



← → http://www.dcc.ac.uk/resources Resources for digital curato... x

**DCC** because good research needs good data  **Search** [Contact us](#)

[Home](#) [Digital curation](#) [About us](#) [News](#) [Events](#) [Resources](#) [Training](#) [Projects](#) [Community](#)

[Home](#) > Resources for digital curators

### In this section

- Briefing Papers
- How-to Guides
- Curation Reference Manual
- Curation Lifecycle Model
- Policy and legal
- Data Management Plans
- Tools
- Case studies
- Repository audit and assessment
- Standards
- Publications and presentations
- Roles
- Curation journals
- Informatics research
- External resources

## Resources for digital curators

With just a few clicks, you can access any of the data curation resources collected by the DCC since we opened our doors in 2004.

Our comprehensive and easily accessible digital library is completely free to use and aims to provide you with everything you need to evaluate and implement those digital curation techniques most suited to your particular research project.


What's more, we regularly review and update our library, adding the latest resources developed for data curators.

Select from the links below and left to access high-level digital curation briefing papers; legal watch, standards watch and technology watch papers; case studies and interviews; and instalments from our detailed Curation Reference Manual.

### International Journal of Digital Curation

Our highly regarded digital journal, published twice a year, features general articles and peer reviewed papers and serves as an invaluable channel for the

#### DMP Online



**DMP Online** is the DCC's data management planning tool. In addition to the questions included in the DCC's Checklist for a Data Management Plan, it also contains useful guidance on how to prepare a data management plan and carry it through to execution.

[Read more](#)

# Digital Preservation Training Programme

- <http://www.dptp.org/>
- Run by ULCC (University of London Computer Centre)
- 3 day course run several times a year, various locations
- Scholarships available to DPC members
- Good grounding, ready-made peer network



# APARSEN

<http://www.alliancepermanentaccess.org/index.php/aparsen/>



The screenshot shows the homepage of the APARSEN website. The top navigation bar includes links for Community, Training, Consultancy and Services, Knowledge base, About APA, and About APARSEN. The header features the APA logo (Alliance for Permanent Access) and the APARSEN logo (Alliance Permanent Access to the Records of Science in Europe Network), along with the tagline "Keeping digital resources accessible, understandable and easy to find". A decorative border of small colored squares separates the header from the main content area.

## About APARSEN

Home / About APARSEN

APARSEN is a Network of Excellence that brings together an extremely diverse set of practitioner organisations and researchers in order to bring coherence, cohesion and continuity to research into barriers to the long-term accessibility and usability of digital information and data, exploiting our diversity by building a long-lived Virtual Centre of Digital Preservation Excellence.

The objective of this project may be simply stated, namely to look across the excellent work in digital preservation which is carried out in Europe and to try to bring it together under a common vision. The success of the project will be seen in the subsequent coherence and general direction of travel of research in digital preservation, with an agreed way of

**APA RSEN**  
Alliance Permanent Access to the  
Records of Science in Europe Network

**Login**

USERNAME

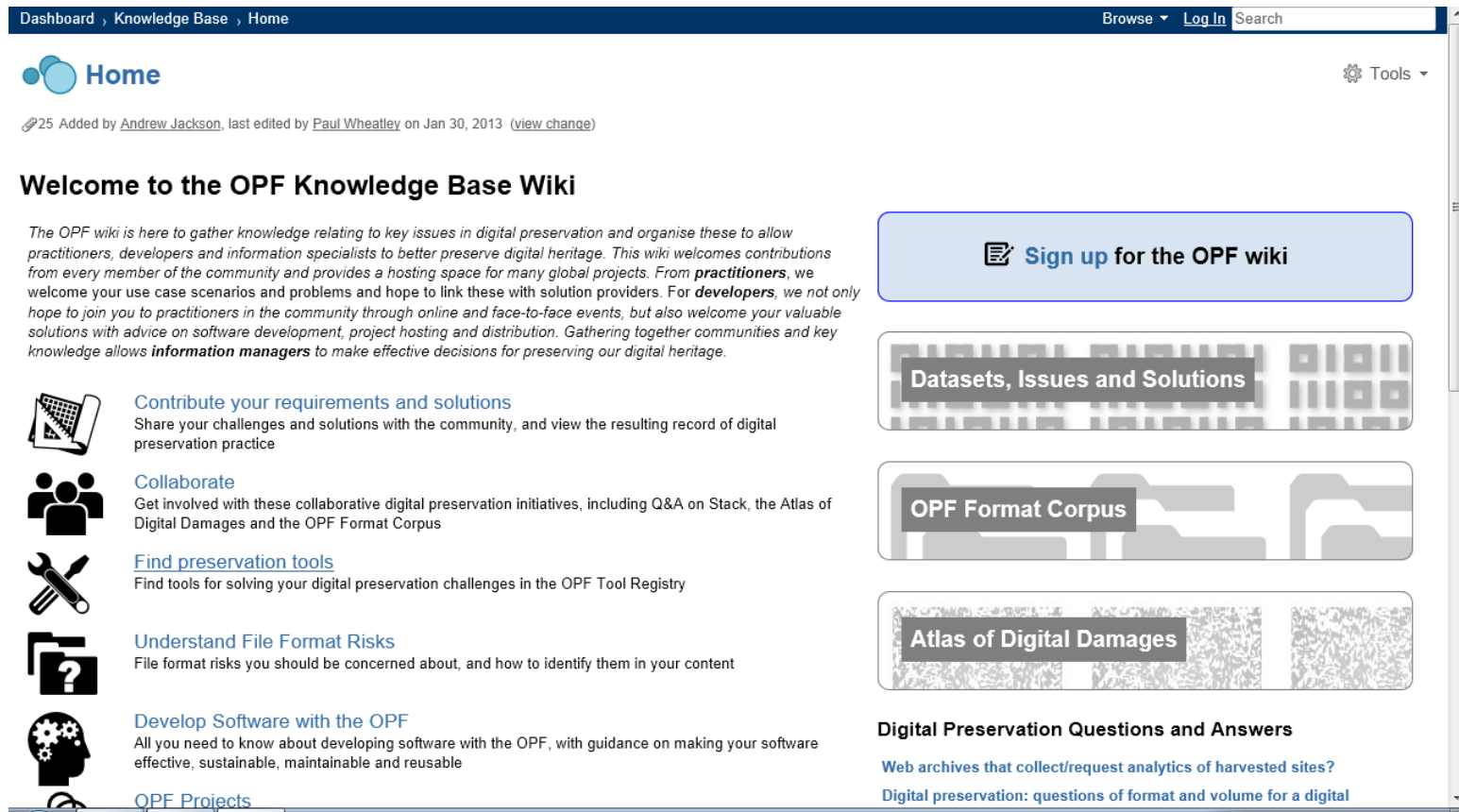
PASSWORD

☐ REMEMBER ME



# Planets -> Open Planets

- <http://planets-project.eu/>
- <http://www.openplanetsfoundation.org/>



The screenshot shows the homepage of the OPF Knowledge Base Wiki. At the top, there is a navigation bar with links to 'Dashboard', 'Knowledge Base', and 'Home'. On the right, there are links for 'Browse', 'Log In', and 'Search'. Below the navigation bar, the 'Home' section features a blue circular icon and the text 'Home'. A note indicates that the page was added by Andrew Jackson and last edited by Paul Wheatley on Jan 30, 2013. The main heading is 'Welcome to the OPF Knowledge Base Wiki'. Below this, a paragraph describes the purpose of the wiki: to gather knowledge relating to key issues in digital preservation and organise these to allow practitioners, developers and information specialists to better preserve digital heritage. The page is divided into two main columns. The left column contains five sections, each with an icon and a title: 'Contribute your requirements and solutions' (with a notepad icon), 'Collaborate' (with a group of people icon), 'Find preservation tools' (with a wrench and screwdriver icon), 'Understand File Format Risks' (with a question mark icon), and 'Develop Software with the OPF' (with a gear icon). The right column contains three large buttons: 'Sign up for the OPF wiki', 'Datasets, Issues and Solutions', 'OPF Format Corpus', and 'Atlas of Digital Damages'. At the bottom right, there is a section titled 'Digital Preservation Questions and Answers' with links to 'Web archives that collect/request analytics of harvested sites?' and 'Digital preservation: questions of format and volume for a digital'.

Dashboard , Knowledge Base , Home


Browse Log In Search


Home


25 Added by [Andrew Jackson](#), last edited by [Paul Wheatley](#) on Jan 30, 2013 ([view change](#))


## Welcome to the OPF Knowledge Base Wiki


The OPF wiki is here to gather knowledge relating to key issues in digital preservation and organise these to allow practitioners, developers and information specialists to better preserve digital heritage. This wiki welcomes contributions from every member of the community and provides a hosting space for many global projects. From **practitioners**, we welcome your use case scenarios and problems and hope to link these with solution providers. For **developers**, we not only hope to join you to practitioners in the community through online and face-to-face events, but also welcome your valuable solutions with advice on software development, project hosting and distribution. Gathering together communities and key knowledge allows **information managers** to make effective decisions for preserving our digital heritage.

 **Contribute your requirements and solutions**  
Share your challenges and solutions with the community, and view the resulting record of digital preservation practice


 **Collaborate**  
Get involved with these collaborative digital preservation initiatives, including Q&A on Stack, the Atlas of Digital Damages and the OPF Format Corpus

 **Find preservation tools**  
Find tools for solving your digital preservation challenges in the OPF Tool Registry

 **Understand File Format Risks**  
File format risks you should be concerned about, and how to identify them in your content

 **Develop Software with the OPF**  
All you need to know about developing software with the OPF, with guidance on making your software effective, sustainable, maintainable and reusable

**OPF Projects**

 **Sign up for the OPF wiki**

**Datasets, Issues and Solutions**

**OPF Format Corpus**


**Atlas of Digital Damages**

**Digital Preservation Questions and Answers**

[Web archives that collect/request analytics of harvested sites?](#)

[Digital preservation: questions of format and volume for a digital](#)

<http://www.jisc.ac.uk/whatwedo/topics/digitalpreservation.aspx>


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[Network & IT services](#)
[Advice](#)
[Research & development](#)

[Home](#) > [Research & development](#) > [Topics](#) > [Digital Preservation & Curation](#)

[Activities by Topic](#)

[Digital Preservation & Curation](#)

## Digital Preservation & Curation

Digital preservation is the set of processes and activities that ensures long-term, sustained storage of, access to and interpretation of digital information. Curation is an applied form of preservation that focuses on interpretation and is often (though not exclusively) used in relation to working with scientific datasets. The ultimate objective of all digital preservation activity, and the focus of JISC's work, is to keep valuable and useful digital material (increasingly online) available for future generations of scholars, researchers and other user groups.

### Key digital preservation & curation activities

#### 12 Programmes

- [Managing Research Data \(JISCMRD\)](#) The scientific process is enhanced by managing and sharing research data. Good research data management practice allows reliable verification of results and permits new and innovative research built...
- [Information Environment Programme 2009-11](#) The aim of this programme is to improve the capacity of the sector to manage, discover and use information resources. There is now a critical mass of digital information resources that can be used to...
- [Repositories and Preservation Programme](#) The programme is a £14m investment in Higher Education repository and digital content infrastructure. It will fund initiatives to develop the Information Environment supporting digital repositories...
- [Digital preservation & records management programme](#) Supporting institutions in long-term digital asset management and preservation forms a central theme of JISC's Digital Preservation and Records Management programme.
- [Supporting Institutional Records Management programme](#) This programme will help institutions to implement records management programmes that will meet the requirements of the Freedom of Information Act (2000).

[all 12 programmes](#)

#### 81 Projects

- [UK theses digitisation project](#) This project will deliver a fully operational, easily scalable and financially viable prototype of an UK e-theses online service that will enable users, via one single web interface, to access the...
- [York Digital Library - Integration for the Next Generation](#) This project will implement and develop a number of technologies to enhance and embed repositories into the information infrastructure of the University of York.
- [ETHOSnet](#) The overall purpose of ETHOSnet is to build a strong ETHOS (Electronic Theses Online Service) sponsorship network amongst the HE community and to achieve a high level of technological and...

[Managing Research Data \(JISCMRD\)](#)  
[Information Environment Programme 2009-11](#)  
[International Curation Education \(ICE\) Forum](#)  
[Repositories and Preservation Programme](#)  
[Libraries of the Future](#)

# Other projects

- Spruce – **S**ustainable **P**reservation **U**sing **C**ommunity **E**ngagement (JISC funded)
  - <http://wiki.opf-labs.org/display/SPR/Home>
- Scape – **S**calable **P**reservation **E**nvironments (EU funded)
  - <http://www.scape-project.eu/>
  - <http://wiki.opf-labs.org/display/SP/Home>
- 4c Project – Collaboration to Clarify the Costs of Curation (EU funded)
  - <http://www.4cproject.eu/>

# Tools

- <http://coptr.digipres.org> – **C**ommunity **O**wned **P**reservation **T**ool **R**egister
- <http://www.avpreserve.com/avpsresources/tools/>
  - Fixity – a simple tool for updating the creation and regular checking of hash values which helps you to know files have not been corrupted
  - MDQC – simple verification that metadata embedded in digital objects meets a desired profile
- <https://github.com/digital-preservation>
  - Open source tools developed by The National Archives, will also usually be documentation and downloadable compiled version
  - Available for all to use and develop

# Blogs

- <http://digital-archiving.blogspot.co.uk/>
  - Digital Archiving at the University of York
- <http://blogs.loc.gov/digitalpreservation/>
  - The Signal – Library of Congress digital preservation blog
- <http://blog.nationalarchives.gov.uk/blog/tag/digital-preservation-2/>
  - The National Archives – entries tagged “digital preservation”

# Social media

- Twitter
  - [DavidUnderdown9](#)
    - [Digital Preservation list](#)
  - [WilliamKilbride](#)
- LinkedIn
  - [David Underdown](#)
  - Various digital preservation related groups



**QUESTIONS??**