Introduction

September 2013

This booklet sets out what EDINA does. It complements what you can find at our website, edina.ac.uk, illustrated overleaf, and the Annual Review, which forms part of our formal accountability to Jisc and its stakeholders.

Our purpose, as part of the Jisc family, is to develop and deliver world-class online services and expertise in order to advance the quality and productivity of research, learning and teaching in the UK and beyond.

This means that we gear what we do so that researchers, students and their teachers and support staff can make the imagined possible as well as affordable as they save time and money. Key to this success is our collaboration with librarians and academic support staff as well as colleagues in other parts of the Jisc family. This is our opportunity to say a public ‘thank you’ to them for their valuable support and feedback.

We aim to combine a continued consumer-focus, for those that use our online services, with more explicit customer-focus as Jisc strives to work with the organisations in our sector so that they can succeed in their mission of increasing outcome and impact within limited budgets.

Universities and colleges across the UK making use of our services enjoy high-quality online support documentation and helpful case studies. Flagship services include JISC MediaHub, Digimap Collections, and SUNCAT (with respective focus on multimedia, geo-spatial data and mapping, and the scholarly statement made in journals). This booklet also highlights the essential middleware services, such as the UK Access Management Federation that EDINA developed and operates as part of Jisc, and the interoperability facilities for the UK’s digital library, including the OpenURL Router and the value-enhancing geo-enabling tools. Learning units are also provided, such as MANTRA for research data management and modules

What follows in this booklet also acts as a showcase for our current project activities: the key investments for present and future services.

These include innovation to support use on the mobile Internet, both mobility and multi-platform delivery; and interaction, as part of the national and international development of the Spatial Data Infrastructure, including leadership in the citizen observatory (COBWEB) project funded by the EU. There is also significant contribution to the wider definition of digital infrastructure, geared to ensure ease and continuity of access, both for discovery and for stewardship (preservation) of the digital resources that research and education require, such as The Keepers Registry (for e-journals) and now services to assist universities and research institutes with the Open Access agenda and research reporting, developed alongside the UK RepositoryNet+ initiative.

More about the product of our research and development project activity is found in the project archive pages of our website. We are working to make these easier for you to find, as what was pioneering as innovation and ‘Futures’, often working with leading researchers in the UK and internationally, needs to be at hand for more general use across the community we serve.

The uptake and usage of EDINA services has grown considerably since 1995/96, when we first began our part, leveraging value for the wider UK academic community from the University of Edinburgh. Having kept our focus on ‘business as usual’, with increased usage and satisfaction reports, we are re-shaping what we do as the new Jisc completes its transition – as the shared services organisation for UK higher education, further education and skills – to champion the use of digital technologies.

Peter Burnhill
Director
EDINA is a Jisc-designated centre of expertise and online services based at the University of Edinburgh. We have an office in Cheshire with three additional staff.

EDINA has a dynamic portfolio with a number of ongoing R&D projects. In addition we currently host over 20 national services, listed on the home page of our website (shown below).

Around 320 institutions are licensed to use at least one EDINA service, market coverage of over 85% of universities and about 47% of colleges within the UK. The total number of institutional licences for EDINA services is currently almost 820, of which just over 570 subscriptions are managed by JISC Collections, covering the suite of Digimap Collection services and the JISC MediaHub service.

For a small number of services, such as the Statistical Accounts of Scotland and agcensus, EDINA collects the subscriptions for what are Jisc-Approved rather than Jisc-Funded services. All of our online services are ‘free at the point of use’, given the right credentials.

EDINA also hosts services that are openly available, including:
- the GoGeo portal, the place to discover geospatial information
- SUNCAT, the national union catalogue of serials
- OpenDepot.org, a key deposit facility for researchers worldwide without an institutional repository

The structure of the Community Report reflects the home page of the EDINA website.

This Community Report, our Annual Review and Strategy and Business Development Plans can be found at: edina.ac.uk/about/docs.html
Mission Statement

We develop and deliver shared services and infrastructure for research and education. Contributed as part of the Jisc family, these are both high quality and cost-effective, drawing upon knowledge and expertise gained through research, innovation and development.

We are confident about the future, based upon excellent feedback from users and the positive experience in working with support staff in universities, colleges, research institutes and educational organisations since 1995/96 when EDINA was first established. We envisage a future in which we engage even more effectively as an active member of the Jisc family, with its renewed customer focus.

Strategy & Business Development

EDINA published its Strategy for 2013-2016 in April 2013, which is aligned with Jisc’s Strategic Vision. We are creating a series of personas for our 2020 Vision, to be published later this year, and working on achieving our 2014 Strategic Objectives, which are listed in our Strategy.

EDINA is both of and for the community, with staff having experience as researchers, teachers and managers, as well as acknowledged expertise in ICT. We put this experience to use to meet Jisc’s strategic aims: supporting and providing shared services that enable institutions to meet their objectives with a reduced cost base, simple and fast access to digital content and discovery, gaining and improving competitive advantage through technological innovation, and providing the best support and assistance to customers and users of services.

Operational Priorities

The following are the priority areas for our activity in line with our strategic objectives:

- Continued development, delivery and enhancement of content and machine-to-machine services, that
  - are optimised for multi-platform interaction, recognising the demands of mobility
  - can be embedded into user workflows and systems, including social networking
  - enhance ‘findability’ and context through metadata, including geo-tagging
- Reaching out actively to learn from customers and users of services, and to understand and engage with the business requirements of universities and colleges
- Consolidating and improving upon existing national and international collaborations and building new partnerships
- Focusing attention upon the shared task of ensuring ease and continuity of access to the resources needed for research and education, supporting effective discovery
- Initiating and managing infrastructure for research outcomes, including leadership in the creation and improvement of the UK Spatial Data Infrastructure (SDI), with the UK Location Council, and towards an academic SDI in Europe
Reference & Multimedia Services

**JISC MediaHub**

JISC MediaHub has been in service since 2011, but its content has been available for much longer in previous services.

Over a dozen of its collections were licensed for Jisc via the BUFVC in 2002 and became Film & Sound Online in 2003. The wide-ranging selection of collections includes world-famous Imperial War Museum footage, such as The Battle of the Somme, rare 1970s interviews with important 20th-century philosophers at Oxford in Logic Lane, and scientific content from the Wellcome Library and the Biochemical Society. There are also over 50 hours of classical music.

Newsfilm is another major part of JISC MediaHub, which includes the 3,000 hours (some 60,000 stories) of ITN footage that were selected, digitised and catalogued in the Jisc-funded Newsfilm Online project that became the service of the same name at EDINA in 2008.

A further 11 collections were licensed for inclusion in JISC MediaHub during 2009/10. Over 56,000 images and 600 hours of film were selected by the education community to capture world, UK and local events during the last 25 years. Sources include the AP Archive, Getty Images, more ITN, Design Council Archives, Imperial War Museum, Royal Geographical Society, and PYMCA.

One of JISC MediaHub's really distinctive features as a free-to-Web discovery portal is that, in addition to providing all this subscription content, some of it not otherwise available elsewhere on the web, it also enables users to search for and link to nearly a million items in selected external media collections such as the Open Video Project, Wellcome Images, Archaeology Data Service, ARKive and the First World War Poetry Archive.

In the autumn of 2013, the IET.tv archive (The Institute of Engineering and Technology) joined JISC MediaHub. It is one of the largest sources of multimedia content in the field of engineering and technology, containing video programmes from practising engineers, technologists and key industry speakers. In total, there are over 3,000 videos, each between 20 and 45 minutes long, covering important subjects and filmed between 2002 and 2012.

JISC MediaHub is part of JISC eCollections, a community-owned content service providing UK Higher and Further Education with access to world-class collections of historical books, journal archives and multimedia content. Further Education institutions can subscribe for free to JISC MediaHub on its own.

JISC MediaHub currently has 251 subscribing institutions.

[www.jiscmediahub.ac.uk](http://www.jiscmediahub.ac.uk)

**SALSER**

Established in 1994 as one of the first web-based union catalogues of serials, and as an initiative of the Scottish Confederation of University and Research Libraries (SCURL), SALSER includes up-to-date coverage of journals available at Scottish universities, the municipal research libraries of Edinburgh and Glasgow, a number of smaller Scottish research libraries and the National Library of Scotland. SALSER also provides links to local OPACs and information on opening hours, visitor access and borrowing requirements.

Records contributed by Scottish libraries to SUNCAT (see below) are also loaded into SALSER.

[edin.ac.uk/salser](http://edin.ac.uk/salser)
SUNCAT

As the UK national catalogue of serials, SUNCAT is both the key online resource for locating serials in UK research libraries, and a source of high quality records to help libraries upgrade local catalogues (OPACs).

At the time of publication, SUNCAT holds information on the serials held in 91 of the largest research and university libraries in the UK and in Ireland.

These include the three national libraries and a growing number of smaller libraries with specialist collections. The intention is to achieve comprehensive coverage of UK universities and important research collections. SUNCAT receives regular updates from the contributing libraries, for the ISSN Register, the CONSER database and acquires monthly updates from the Directory of Open Access Journals (DOAJ).

Funded by Jisc, the success of SUNCAT depends upon collaborative effort by the Contributing Libraries.

Linking to tables of contents of journals, and henceforth to full text, continues to be provided through the Zetoc service, and it is planned to extend the coverage of journals by including data from additional services.

The downloading service, which allows staff in Contributing Libraries to obtain bibliographic records for use in local OPACs, now provides access to records from CONSER, ISSN Register, DOAJ and 17 Contributing Libraries, including all the UK legal deposit libraries, other major research libraries in the UK, and a selection of specialist libraries.

Work started in 2012 on the development of a new interface. The impetus for this redevelopment emerged from a long-held desire to not only provide enhanced functionality but also to be more responsive to user feedback regarding suggested improvements. The release is scheduled for Autumn 2013, with the current interface running in parallel whilst users become familiar with the new interface.

The value of the SUNCAT service to its users continues to be shown from comments received in the EDINA annual survey of services, and case studies published on the web site show how the service is employed by three different organisations.

www.suncat.ac.uk

OpenDepot.org

The OpenDepot.org service supports researchers worldwide who wish to make their work available on an Open Access basis. They do so either by being re-directed to their institutional repository by the Repository Junction Broker (RJ Broker) discovery tool (see page 14), or by direct deposit into OpenDepot, which is valuable for authors who do not have access to local repository services in which to deposit their papers, articles, and book chapters (e-prints).

The original service, known as The Depot, was commissioned by Jisc to support its RepositoryNet Initiative with the objective of ensuring that there was a national Open Access repository during the interim period while all universities set up their own institutional repository. That project funding ended but consultations within the Open Access movement indicated that there was a comparable need on a global stage.

OpenDepot.org is OAI-compliant, allowing e-prints to be harvested by search engines and other repositories, giving them instant global visibility.

opendepot.org

Statistical Accounts of Scotland

The Statistical Accounts of Scotland is an essential resource for the historical study of Scottish life during the agricultural and industrial revolutions in Europe.

The First and Second accounts cover life in the 1790s and 1830s respectively, based on information supplied by parish ministers. They provide a rich record of various topics: wealth, class and poverty; climate, agriculture, fishing and wildlife; population, schools and the moral health of the people.

Users can browse scanned images of the manuscripts, search transcribed text and download parish reports. A number of additional texts related to the preparation and publication of the accounts are available. These include a transcription of the questions asked of ministers by Sir John Sinclair, annotated transcripts of the manuscripts for three parishes, Specimens of Statistical Reports and Analysis of the Statistical Account of Scotland published in 1793 and 1826 respectively, and the 1801 census return for the parish of Stow.

Recently, a list of the location of maps within both the First and Second Accounts, a brief guide to key information sources on parish boundaries in Scotland and articles on contemporaries and successors were made available.

The service is actively used in schools, universities, public libraries and by individuals interested in local history.

edina.ac.uk/stat-acc-scot

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Services developed for other organisations

**Tobar an Dualchais**

The Tobar an Dualchais/Kist o’ Riches website is the result of a multi-million-pound Heritage Lottery-funded collaborative project, which was set up to preserve, digitise, catalogue and make available online several thousand hours of Gaelic and Scots recordings from the archives of BBC Scotland, the National Trust for Scotland and the School of Scottish Studies at the University of Edinburgh.

The service contains a wealth of material such as folklore, songs, music, history, poetry, traditions, stories and other information. The material has been collected from all over Scotland and beyond from the 1930s onwards and will ensure that Scotland’s rich oral heritage is safeguarded and made widely available for educational and personal use for future generations.

EDINA and the University of Edinburgh Information Services department contributed cataloguing and production control, and a cataloguing application for the web-based input of metadata. EDINA developed and hosts the website.

[www.tobarandualchais.co.uk](http://www.tobarandualchais.co.uk)

**Carmichael Watson**

The Carmichael Watson collection is a major Scottish folklore website resulting from a project funded by the Arts and Humanities Research Council. The project digitised the papers of the pioneering folklorist Alexander Carmichael (1832-1912), and is the foremost collection of its kind in the country: a treasure-chest of stories, songs, customs, and beliefs from the Gaelic-speaking areas of Scotland.

Through cataloguing, indexing, transcribing, translating, digitisation, and conservation, the project aimed to open up and make accessible this important collection to the academic and broader community. EDINA designed and developed the website to showcase the papers and related materials, in liaison with the Centre for Research Collections at the University of Edinburgh.

The enhanced website was launched in Fort William in April 2013.

[www.carmichaelwatson.lib.ed.ac.uk/cwatson](http://www.carmichaelwatson.lib.ed.ac.uk/cwatson)
Map & Data Services

Digimap Collections

The Digimap Collections are an essential part of the UK education and research landscape. They have significance across many disciplines as key reference resources. Available for subscription through Jisc Collections, the Digimap Collections include maps and map data of various types.

Originally, Digimap provided online access to national mapping from Ordnance Survey; this Collection celebrated 13 years of service in January 2013. In April 2005, a second Collection, Historic Digimap, was created to provide access to earlier Ordnance Survey maps from Landmark Information Group.

Two further Collections have since been launched. In January 2007 mapping from the British Geological Survey (BGS) was made available through Geology Digimap, and in January 2008 Digimap was further extended to include marine and coastal zone mapping provided through Marine Digimap. In Autumn 2013 the Environment Digimap collection will be added to provide access to Land Cover Map data from the Centre for Ecology and Hydrology (CEH).

The most significant recent change across all the Collections is that all our mapping clients (known as ‘Roam’ clients) now function in the same way and user interfaces have been harmonised. To this end, all Roams have the same styling, colouring and features, although they retain the functions that are individual to each data collection. We anticipate that this harmonisation will make all the Roams easier to use and that users will find the transition from using one to another smoother.

A total of 153 universities and colleges were subscribed to the Digimap Collections for 2012/13, with a total of over 260,000 registered users during the past 12 years. During academic year 2012/13, the conservative total value for products downloaded or printed from all Digimap collections was nearly £40 million.

digimap.edina.ac.uk

Digimap Ordnance Survey Collection

The Digimap Ordnance Survey Collection includes digital map data and high quality cartographic products based on selected Ordnance Survey map products, with full coverage of Great Britain for all of those datasets. Using a variety of different applications, users can choose their own scale, control the feature content of their maps, add labels, points, shaded areas and other annotations to maps online, print maps up to A0 in size and download spatial data for use in GIS and CAD desktop applications.

The use of Digimap’s Ordnance Survey Collection continues to rise, year on year. In 2012/13 there was a peak of over 55,000 active users, accessing the service over 353,000 times throughout the year. Digimap Roam has continued to provide a huge number of maps to the users along with Digimap Carto. Over nine million screen maps were viewed in this period, a 31% increase on the previous year. Users downloaded over 770,000 km² of OS MasterMap Topography Layer data, almost 26 million km² of OS Integrated Transport Network (ITN) data, and over 1.6 million data files from other OS data products. This last figure is over a 100% increase on the previous year. The number of requests made for data has dropped since the introduction of the new Data Download service, as it allows users to take all the data they need in a single request, regardless of data product.

There are currently 153 institutions subscribing to the Digimap Ordnance Survey Collection.

Historic Digimap

Historic Digimap provides access to digital images of historical Ordnance Survey paper maps of Great Britain for the period 1843 to 1996, digitised by Landmark Information Group. Users can view maps online, save them for printing and download map images for use in Geographical Information Systems (GIS).

There are currently 81 institutions subscribing to Historic Digimap and during 2012/13 there were more than 90,000 sessions. Ancient Roam continues to provide a large number of maps to the community, occasionally more than Digimap Roam. Over six million maps were viewed, a significant increase on the previous year, and more than 395,000 files were downloaded.
Geology Digimap

Geology Digimap delivers geological maps and data created by the British Geological Survey (BGS). Users are able to view maps online, click on the map to get information on the rock units, and save maps for printing. There is also a download service where users can take the geological map data to use in their own Geographical Information Systems. The service currently contains the DiGMapGB-50, DiGMapGB-250, DiGMapGB-250 Offshore and DiGMapGB-625 datasets, which contain not only information about the rock type but also superficial deposits, faults and, in the largest scale product, many other features such as artificial ground and mineral veins. There are also textual descriptions of the rocks provided by the Lexicon of Named Rock Units. This year has seen the addition of Borehole data, which is available for download from Geology Download. Geology Roam, with an enhanced backdrop of Ordnance Survey mapping, offers photographs of geological features taken from the JIDI Image Collections. The photographs are associated with particular rock types and are mapped as clickable ‘hotspots’ within the mapping interface. With the introduction of annotation and measurement tools, maps can be augmented with labels, points, symbols and shaded areas, which can also be printed. Geology Roam has produced over 2.8million maps so far.

Some harmonisation work has been done to create a new version of Geology Download that is based on the Data Download framework of the Ordnance Survey Collection. This has made Geology Download easier to use and easier to maintain, offering greater flexibility for users in requesting multiple datasets per download.

There are currently 56 subscribing institutions to Geology Digimap. The number of sessions rose to over 47,500 in 2012/13 from a peak of over 25,000 active users. Geology Roam produced close to 1,200,000 screen maps in this period, a 24% increase on the previous year.

Marine Digimap

Marine Digimap provides access to hydrographic maps and data from SeaZone Solutions. Two data products are available:

- Hydrospatial, a vector dataset providing information in topic layers, ranging from bathymetry and elevation, to climate and oceanography
- Charted Raster, scanned images of Admiralty Charts produced originally by the UK Hydrographic Office

Users are able to view maps online, save them locally for printing, and download the marine and coastal data for use in GIS software. It is important to note that the chart data is not current and therefore should not be used for navigation.

The Marine Roam interface provides a convenient and simple means of viewing this complex dataset. It has produced almost 77,000 screen maps in the past year.

There are 22 institutions subscribing to Marine Digimap with a total of nearly 27,000 registered users, of which over 6,600 are currently active; this service has appeal beyond those studying marine and the coastal environment.

Environment Digimap

Environment Digimap is a new subscription Collection that will be added to Digimap to provide access to Land Cover Maps from the Centre for Ecology and Hydrology (CEH). The data available is a snapshot for each of three years: 1990, 2000 and 2007 at resolutions of 25 metres and 1km.

The Environment Roam application has been implemented, which provides users with a means of viewing, printing and annotating the Land Cover data overlaid on an Ordnance Survey backdrop map. The data download application will be provided allowing download of the data at each resolution for each year. Various formats will also be provided.

Land Cover Maps can be used to plan, manage or monitor agriculture, ecology, conservation, forestry, environmental assessment, water supplies, urban spread, transport, telecommunications, recreation and mineral extraction. Current examples of the application of Land Cover Maps include detection of changing land cover, landscape management, mapping bracken in the context of health studies (bracken supports ticks that carry human disease), environmental assessments of motorway extensions, and planning of telecommunication lines.
Digimap for Schools

Digimap for Schools is an online mapping service for use by teachers and pupils in primary and secondary schools throughout the United Kingdom. The service is a collaborative venture with Ordnance Survey and Jisc Collections.

Digimap for Schools offers easy access to a range of current Ordnance Survey maps, including the most detailed mapping available for Great Britain – OS MasterMap – as well as digital versions of Ordnance Survey’s famous paper maps, the Landranger and Explorer series.

Having listened to feedback from teachers, two new features will be added to the service during Autumn 2013. Users will soon be able to see an indicative extent of their requested printed map on screen, and move it around, before requesting the print file to be generated; this should prove a valuable addition. The second improvement is that teachers will soon be able to delete maps that have been created at their school using a pin-code protected administrative function, which should alleviate long, unwieldy lists. The intention is to set up a small focus group to discuss the possible development of other administrative functions, in particular the ability to create sub-folders for classes.

On 17 September 2013, over 1,200 schools were subscribing to the service across GB.

digimapforschools.edina.ac.uk

ShareGeo Digimap and ShareGeo Open

ShareGeo Digimap allows users to share and re-use derived geospatial datasets within the Digimap service under the Jisc Collections licensing arrangements. It allows data sharing to take place that would otherwise not be possible due to restrictions on re-use of licensed data.

In April 2010 a suite of core geospatial data products belonging to the Ordnance Survey were made available under new OS OpenData Licence Terms and Conditions, which are conducive to the sharing and re-use of derived data products in open repositories. Jisc’s funding of ShareGeo Open has been a valuable addition to the UK academic Spatial Data Infrastructure, enabling UK researchers, students and lecturers creating geospatial data to deposit their research and operational data in a repository that will be open to all to search and download.

In the last year there have been over 33,000 data downloads of the 217 datasets in ShareGeo Open.

www.sharegeo.ac.uk

GoGeo

The GoGeo portal enables users to discover geospatial information and services for education and research, and is a core component of the UK academic Spatial Data Infrastructure.

GoGeo enables users to find data, geospatial services and resources, learn about geospatial metadata and access tools to create and publish standards-compliant geospatial metadata. Search functionality includes keywords, map-based searching and place-name searching (through the use of Unlock Places). This year several new international metadata catalogues have been harvested and added to the content discoverable via the GoGeo data search, including the United Nations Environment Programme portal, the US Geoscience Information Network and the US National Oceanic and Atmospheric Administration catalogue. Many of these metadata collections contain metadata on data services, predominantly web map services. These remove the need for researchers and students to download data to their desktop; rather, they can pull the data remotely into their desktop GIS, removing the need for data storage and local management.

GoGeo also hosts Geodoc, an online geospatial metadata creation tool. Geodoc enables creators of geospatial data to document them using a variety of standards-compliant schemas. With its emphasis on the creation and open publication of standards-compliant metadata, Geodoc supports the Research Data Management agenda. Promoting research data management is a core message delivered during GoGeo metadata workshops.

Together, GoGeo and Geodoc ensure the UK HE sector can engage with the UK Location Programme and the INSPIRE Directive at the EU level. EDINA/University of Edinburgh are now formally registered as ‘data publisher’ on data.gov.uk, ensuring data descriptions created within Geodoc are published on data.gov.uk and the INSPIRE geoportal.

www.gogeo.ac.uk
UK Data Service Census Support (UKBORDERS)

The ESRC-funded UK Data Service provides simple and unified access to an extensive and expanding range of high-quality social research data, including data from the last five censuses of population (1971 to 2011). Census Support is an integral value-added component of the UK Data Service using bespoke interface and analysis tools to provide access to UK Census data.

EDINA as one of the organisations that contribute to UK Data Service Census Support is responsible for the development and update of the UKBORDERS dataset collection and the geographical tools that are built around this data.

The UKBORDERS dataset collection offer access to more than 450 digital boundary datasets for past and present geographic areas as well as associated geographic lookup tables, and access to a library of current and historic postcode directories. They relate principally, though not exclusively, to census geographies from 1971–2011.

Additionally, the EDINA User Support team have run a number of webinars and face-to-face workshops providing census users with training covering the use of 2011 census geographies.

EDINA UK Data Service Census Support applications were accessed by 3,233 users from 124 institutions with 24,987 sessions during 2012/13.

agcensus

The agcensus service provides online access to grid-square Agricultural Census and Survey data for England, Scotland and Wales.

The data range from 1969 to present and provide realistic estimates of what was produced, how much was produced and where it was produced. Users can visualise or download data for use in software packages, such as GIS and spreadsheets.

A recent addition is the ability to download data in the Open Geospatial Consortium Standard Keyhole Markup Language (KML) format. This allows registered users to visualise the distribution of chosen census variables using open geo-browsers.

Currently the service has 18 subscriptions.

Research Data MANTRA

Data management skills enable researchers to better organise, document, store and secure data, thus making research more reproducible and preserving it for future use. The Research Data MANTRA course is an open, online training course that provides instruction in good practice in research data management. There are eight interactive learning units with pictures, video clips and quizzes, as well as four data-handling practical exercises with open datasets for use in R, SPSS, NVivo and ArcGIS. The course was recently short-listed by the Research Information Network as a best-practice resource in information literacy training.

The site has been redesigned, and the underlying course software has been upgraded to run on HTML5 instead of flash, allowing it to be used on iPads. All the content is licensed by a Creative Commons attribution licence.

The course was developed under funding by the Jisc Managing Research Data Programme, and is being kept up to date by the Data Library team at EDINA, funded by the University of Edinburgh.

datalib.edina.ac.uk/mantra
Mobile EDINA

EDINA has activities underway to help us understand the consequences of an ever-changing technological environment for our customers. Reaping the benefits of the shift to mobile platforms is a high priority, and over the last year we have been developing multiple clients for iPhone and Android handsets, working to combine our existing services with the opportunities afforded by internet-equipped, sensor-enabled smartphones and tablets.

The Fieldtrip GB app was launched in April 2013 and is already being used to support teaching and learning in the field. It includes a unique set of high-quality base maps, optimized for remote areas, using Ordnance Survey Open Data. Maps can be cached on the device and users can create geo-referenced photos, text notes, audio notes and GPS tracks. The Authoring Tool allows users to view and export data they gathered in the field and create custom forms.

A JISC MediaHub app still in development will allow users to search and browse images, videos and audio files. Searches can be based on the user’s location to find items in the local area. We hope to release this app as soon as the metadata can be licensed for open use.

A SUNCAT mobile app is also in development that will allow users to find copies of journals and discover the nearest library to their current location. We continue to explore the delivery of services to mobile devices and aim to release other apps over the coming two years. The EDINA website itself is designed to display well across all platforms.
Unlock

Unlock is a shared terminology service that can underpin geographic searching and geo-referencing for other services. Unlock can help with data and resource linking and improve the metadata describing scholarly works.

Unlock is both a gazetteer and a geo-referencing service. It provides two suites of web services:

- **Unlock Places** compares different sources of geographic data for information about place-names. The service searches across several different gazetteers, providing worldwide coverage and includes Ordnance Survey Open Data products for more detailed UK information.

- **Unlock Text** uses text mining techniques to extract place-names from resources (text or metadata) to allow collections to be searched by location.

Unlock is being refreshed to provide updated APIs and new historical English placename data.

unlock.edina.ac.uk

Digimap OpenStream

OpenStream enables users of desktop GIS to have the most current Ordnance Survey data streamed live to their desktop without the need of storing and managing the data. For those creating web mash-ups, the service delivers up-to-date mapping in a fast, interoperable manner.

EDINA provides the latest version of OS OpenData via the OpenStream service. Datasets may be updated part way through an academic year, giving users the most up to date data available as soon as possible rather than as annual updates.

The service has over 3,128 registered users.

openstream.edina.ac.uk

OpenURL Router

This facility is generally invisible to end users, operating as middleware that helps online service providers locate the appropriate copy of the full text of a journal article for its users. The OpenURL is a form of query used to encode bibliographic references in requests sent from one service to another. Typically, institutional libraries make use of commercial OpenURL resolvers; the OpenURL Router operates a central registry of these and forwards requests onto the appropriate OpenURL resolver service.

Following a successful Jisc project, activity data from the OpenURL router are made publicly available so other service providers may use them. The data is offered for each month, and also for the whole year. The OpenURL Router showed continuing high levels of use over 2012/13, with 111 institutions registered.

openurl.ac.uk/doc
Repositories & Preservation

The Keepers Registry
The Keepers Registry is the online record of global stewardship by organisations (‘Keepers’) that have taken on responsibility for ensuring long-term continuity of access to international scholarship. The organisations are: the Archaeology Data Service, British Library, CLOCKSS Archive, e-Depot – Koninklijke Bibliotheek (National Library of the Netherlands), Global LOCKSS Network, HathiTrust, National Science Library, Chinese Academy of Sciences, Portico and Scholars Portal.

Each of the participating Keepers has provided a description of its approach to ingest and digital preservation, as well as information on access conditions to the journal content they hold. For the volumes it is ingesting, the Keeper provides metadata that is normalised and checked against the ISSN Register to produce a record of what journal titles it is preserving, together with a statement of the extent of the journal content that is held.

New features in development, to be made available via a Members Area, include allowing users to upload a file for matching with the data held in the Registry.

thekeepers.org

The UK LOCKSS Alliance
Lots Of Copies Keep Stuff Safe (LOCKSS) is an international initiative to ensure libraries remain central to the process of scholarly information management.

EDINA supports the UK LOCKSS Alliance (UKLA) by providing a technical support service for members in collaboration with Stanford University Libraries.

LOCKSS software integrates with library link resolver systems, and archived content is discovered through a library’s OPAC. Following integration, libraries can offer uninterrupted access to ceased or cancelled subscription content that is securely archived in their ‘LOCKSS box’, meaning students and researchers can readily access content that they would not otherwise be able to. Providing access to content via LOCKSS gives institutions greater confidence to dispose of low-use print and consider more seriously the cancellation of low-use subscriptions.

The goal of the UKLA is to build capacity and collaborative action to ensure continuing access to scholarly work that universities regard as important and at risk. This includes taking advantage of what is done nationally and internationally, and the UKLA collaborates with a variety of UK policy and strategy organisations to achieve this. Fifteen universities currently subscribe to the service.

Maintenance funding for the technical support service comes from annual fees received from the UKLA membership. An additional Jisc grant, running until July 2014, supports development of the UKLA as a self-governing cooperative organisation. A proposal for an alternative service model building on UKLA experiences was put to and supported by the Electronic Information Resources Working Group (EIRWG).

edin.ac.uk/lockss

CLOCKSS
As more and more content moves online, there is a concern that digital material may not always be available. Controlled LOCKSS (CLOCKSS) is an international digital preservation scheme for scholarly publications, initially for journal articles, that has been built by and is being supported by a partnership between the library community and some of the world’s largest scholarly publishers, who account for over 60% of digital journal content.

EDINA provides a support role for the initiative taken by the University of Edinburgh as one of seven founding libraries in CLOCKSS. Edinburgh is one of the 12 steward libraries in a global network of Archive Nodes. Together with Stanford University Libraries, EDINA acts as a designated Open Access host for ‘orphaned’ journal content when a trigger event is confirmed by the CLOCKSS Boards. To date eight sets of content have been released, to test the readiness of the CLOCKSS system and to make journal articles available under Open Access that might otherwise have been lost to global scholarship.

edin.ac.uk/projects/clockss_summary.html
Repositories & Preservation

Repository Junction Broker and Organisation and Repository Identification

Based on the Open Access Repository Junction (OA-RJ) project outcomes, two independent tools were developed as two separate projects from the ‘discovery’ and ‘delivery’ functionality of the OA-RJ.

The Repository Junction Broker (RJ Broker) project designed and developed a standalone middleware tool for handling the delivery of research output between data suppliers such as publishers and subject repositories to multiple institutional repositories. This will offer an effective solution to authors and publishers wishing to deposit open access publications in relevant subject and institutional repositories. The RJ Broker parses the metadata of an article to determine the appropriate target repositories and transfers the publication to the registered repositories. It is intended to minimise efforts on behalf of potential depositors, and thereby maximise distribution and exposure of research outputs.

The Organisation and Repository Identification (ORI) project developed a standalone middleware tool for identifying academic organisations and their associated repositories. This tool harvests data from several authoritative sources and provides APIs to query and retrieve identification information on over 23,000 organisations, 3,000 repositories and 6,700 networks worldwide. The documentation for ORI and its APIs are available on the website. The final report was published in December 2012 and is available from the project summary page.

The RJ Broker project was funded until July 2013 as part of the UK Repository Net+ project while the ORI project was awarded six months funding until September 2012.

broker.edina.ac.uk/
edina.ac.uk/projects/RJB_summary.html
ori.edina.ac.uk/
edina.ac.uk/projects/ORI_summary.html

UK RepositoryNet+

The EDINA-led UK RepositoryNet+ (RepNet) project, funded by Jisc for 24 months, was completed on 31 July 2013. Jisc wanted to rationalise and put onto a sustainable footing the considerable investment that it had made over the past 10 years in shared services projects for Open Access and institutional repositories. Jisc will now be taking the co-ordination of this work forward.

RepNet investigated and created a socio-technical infrastructure capable of supporting services for the deposit, curation and exposure of Open Access research literature. The project worked with Jisc to identify candidate component services for introduction into the infrastructure. Drawing on the ITIL approach to IT service management, it established processes that would enable services to work together according to service level definitions, and gather requirements and meet these in a coordinated way.

The RepNet website provides links to the component services (which include Repository Junction Broker and Organisation and Repository Identification on this page), and a collection of the outputs produced during the extensive outreach and stakeholder engagement activity.

www.repositorynet.ac.uk
Community Report September 2013

Project Activity

Reference & Multimedia Projects

Hiberlink

Hiberlink, ‘enabling Time Travel for the Scholarly Web’, is a new collaborative project between EDINA and the Language Technology Group in Informatics at the University of Edinburgh, and the Los Alamos National Laboratory Research Library.

The Hiberlink project will investigate the extent of ‘reference rot’ in scholarly publication, i.e. when a web link in an online academic article fails to lead to the resource originally referenced. The project also aims to identify practical solutions and develop approaches to alleviate this problem.

In today’s web-based scholarly communication the range of scholarly statements and resources that are being published and referenced is wide and varied. References are commonly made to all types of resources such as software, datasets, websites, ontologies, presentations, blogs and videos, made available through a variety of publication venues on the Web. The highly dynamic nature of the Web introduces a significant challenge: the content at the end of any given referenced HTTP link is liable to change over time. This ‘reference rot’ issue is two-fold: a link may no longer work or the content referenced has evolved and has become dramatically different from it was originally cited.

The aims of this Time Travel for the Scholarly Web project are:

• to assess a large corpus of scholarly communication for reference rot using text mining and information extracting tools
• to design and develop a prototype for a proactive archival solution infrastructure for archiving citations at the point of use
• to design and develop new methods of citations for allowing time stamps in citations in order to enable access to the correct archived version of a reference

This project is funded by the Andrew W. Mellon foundation for two years and started in March 2013.

hiberlink.org
edina.ac.uk/projects/hiberlink_summary.html

The County Surveys of Great Britain 1793–1817: Exploring ‘Considered Digitisation’

The County Surveys of Great Britain, commissioned by the Board of Agriculture, are the earliest surveys of their kind in the world. They recorded comprehensive information on the agriculture, rural economy and political economy of each county in Great Britain between 1793 and 1817. They provide a unique insight into the innovation and agricultural improvement during a significant period in the making of Britain as the first industrial nation.

Despite its remarkable historical interest, this resource is currently under-used because very few surveys are available in digital format, and printed copies are difficult to locate and access. This 18-month project will explore how the creation of an online demonstrator hosting a virtual collection can unleash the potential of the County Surveys for discovery.

The project will use the approach of ‘considered digitisation’ by:

• Reviewing existing digital fragments of the County Surveys to assess their availability for public access, the quality of their digital image, OCR text and metadata, and their suitability for computer automated text analysis, search and retrieval
• Supporting re-digitisation when appropriate to offer public domain content of sufficient quality
• Identifying sources of printed copies for the County Survey and encouraging digitisation

This project is funded by EDINA, and runs for 18 months to April 2014.
edina.ac.uk/projects/county-survey_summary.html

Project Activity

Engraving of a lowland wedding.
Knowledge Base+

Knowledge Base+ (KB+) is led by Jisc Collections and is a developing community shared service. It aims to improve the quality, accuracy, coverage and availability of data for the management, selection, licensing, negotiation, review and access of electronic resources for UK HE.

It has resulted from the work initiated by SCONUL, funded by HEFCE, to identify the e-resource management requirements of UK academic institutions. EDINA is part of the team developing the shared service, and is also providing the supporting infrastructure. The final release of this phase is due in Autumn 2013.

[edina.ac.uk/projects/knowledgebase_summary.html]

EZID UK

EZID is a service offered by the University of California Curation Center (UC3), part of the California Digital Library. EZID makes it easy to create and manage unique, long-term identifiers for digital content.

This project is collaboration between Jisc, EDINA and UC3, and aims to investigate what infrastructure is needed to support an EZID UK service. In particular, and different from the current EZID setup, the project will investigate how individuals and organizations can more easily acquire long-term identifiers without the need to subscribe to a larger service package. This will lower the barriers for individuals and smaller organisations acquiring such identifiers. The intention is to further encourage self-publishing and other forms of scholarly communications, and open access publication.

The project will run to April 2014.

[edina.ac.uk/projects/ezid-uk_summary.html]

Maps & Data Projects

Citizen Observatory Web (COBWEB)

COBWEB is a large EU Framework Programme 7 funded project that brings together expertise from 13 partners and five countries. The overall objective of this research project is to use a small part of the UNESCO World Network of Biosphere Reserves as a testbed environment for better understanding how technological advances, particularly in respect of smartphones, can help get citizens involved with environmental governance through enabling them to collect environmental observations.

The project concentrates on three thematic areas:

Validating Earth Observation products: Many habitat and land-use maps are generated from remotely sensed data. ‘Ground truth’ (checking that what is on the map matches reality on the ground) is an activity that the project wants to get people involved in by using their smartphones. By doing so, they will help improve the quality of the products and decisions made based on information presented in the maps.

Flooding: The main development area for COBWEB is the Dyfi Biosphere Reserve in mid-Wales. As with many areas, flooding is a major issue in the Dyfi catchment and one that is only going to get worse as climate change escalates. The project aims to equip citizens with apps that help improve the resolution of information relating to flood extent and water quality.

Biological monitoring: Although volunteers have been making biological observations for a long time, over the last few years there has been an increase in activity enabled by Internet-related technology, often under the umbrella-term of citizen science. COBWEB is beginning to engage with citizens in the Dyfi area to identify which flora and fauna the project should concentrate initial development activity on.

The EU funded five citizen observatories under the FP7-ENV-2012 call, looking at areas as diverse as odour monitoring, optical water quality and air quality. What distinguishes COBWEB is that it is more of an infrastructure project; the software and processes developed should be applicable in different scenarios and in different countries.

The project is approaching the end of its first year. This milestone marks the end of initial design and stakeholder engagement. In the forthcoming year, the COBWEB platform will start to be implemented, and the first demonstrator(s) focussed on the Dyfi Biosphere Reserve built.

After initial development work in Wales, the approach will be tested under different conditions in Greece and Germany. The European interoperability dimension will be provided by using public authority web services established in compliance with the Infrastructure for Spatial Information in Europe (INSPIRE) directive.

This EDINA-coordinated project runs until 2016.

[edina.ac.uk/projects/cobweb_summary.html]
Scottish GeoPortal

Building on our expertise in delivering GoGeo and GeoDoc to the UK academic sector, EDINA develop, host and maintain Scottish Government’s INSPIRE-compliant metadata discovery service. The discovery service has three core components:

- a metadata creation interface
- a data search and discover interface
- an end point from which data.gov.uk harvests Scottish Government’s INSPIRE-compliant metadata for inclusion to UK Location Programme and EU INSPIRE geoportal

Metadata records already exist for those INSPIRE Annex I and Annex II data that the Scottish Government needs to document and describe under the terms of the INSPIRE Directive. Metadata for INSPIRE Annex III data are in the process of being created, seeing greater involvement with Scottish Local Authorities.

scotsdi.edina.ac.uk

Online Visual Dashboard

The Online Visual Dashboard (OVD) project is aimed at giving EDINA the capacity to produce a customer-focused service assessment capacity. We intend to trial OVD initially with the Digimap for Schools service. We expect that there will be a wide range of users for this service, including institutional service managers, school budget holders, EDINA service managers, and Jisc Collections.

For institutional service managers the OVD will provide answers to frequently asked questions, such as:

- How many printed maps did my institution create between September and December 2012?
- What has been the value of the data downloaded this financial year?
- Has this been value for money?

Phase 1 of the project has come to an end. The OVD project has been incorporated as part of an on-going Efficiencies project, as business intelligence and service monitoring are important strategic tools for both EDINA and its stakeholders. Funded internally by EDINA, we intend to roll out dashboard functionality to other services throughout the next two years.

edina.ac.uk/projects/dashboard_summary.html

CloudWorkbench

The aim of CloudWorkbench (CWB) is to build capacity, experience and facility at EDINA to exploit Cloud-based technology for service delivery, economic long-term sustainability and compatibility with emerging UK and global digital infrastructures. As Cloud technologies have the potential to be strategically important, it is important that EDINA experiences using and deploying Cloud-based services.

Phase 1 of the project is using a teaching-based case study, tackling a real world problem from the Geospatial Information Services domain. CWB will offer Digimap users a personal workbench where they can access all their Digimap data alongside a range of geospatial software tools in a persistent personal cloud space that is pre-configured and authenticated. OSGeo Live will be a source for the virtual machines, as it provides pre-configured applications for a range of geospatial use cases, including storage, publishing, viewing, analysis and manipulation of data. We have built a management console allowing the creation, configuration and running of instances that will be loaded onto the Edinburgh Compute and Data Facility cloud for further development.

Cloud Workbench offers a management console giving a supervisor the ability to launch multiple instances of the service. It can be configured to load a selection of software such as PostgresSQL/PostGIS, Geoserver GDAL and Spatial Lite. The user has the ability to load his or her own data and save it for reuse. Security is managed through the use of SSH Keys and the UK Access Management Federation.

Funded internally by EDINA, Phase 1 of the project has ended. As the two main elements of this project – Virtualisation and Cloud Computing – are important strands in EDINA’s future strategy, we hope that further development of Cloud Workbench will be part of the on-going Mobile Internet project.

edina.ac.uk/projects/cloudworkbench_summary.html
Trading Consequences

EDINA, in partnership with the University of Edinburgh's Language Technology Group, the University of St Andrews, and York University, Canada, has joined two areas of historical enquiry (trans-national history and environmental history) with innovative techniques developed in georeferencing and visualisation. The team, consisting of historians, computational linguistics specialists and computer scientists, have explored how to visualise global trade in commodities in the 19th Century and the associated environmental consequences.

Using a variety of digitised texts, this project extracts information on primary resources harvested, mined, traded and consumed in the 19th Century, geo-locates the references to these resources and correlates these mentions with a set of potential environmental impacts. The general goal has been to adapt georeferencing and visualisation techniques for historians researching with large quantities of textual data. For the computational linguists and computer scientists, historians have served as a test group for honing techniques for broader application and refinement. The exchange of information on assumptions and techniques has also demonstrated some of the limitations of research techniques.

Trading Consequences is a Digging Into Data (Round 2) project and runs to December 2013.

edina.ac.uk/projects/trading_consequences_summary.html

AddressingHistory

The six-month Jisc-funded AddressingHistory project Phase 1, which finished in September 2010, was led by the EDINA in partnership with the National Library of Scotland. It created an online crowdsourcing tool and API which enables a broad spectrum of users (particularly local and family historians, and genealogists) to combine data from digitised historical Scottish Post Office Directories (POD) for Edinburgh (1785, 1865, 1905 in the first instance), with contemporaneous historical maps. The technologies deployed are scalable for the full collection of 670 Post Office Directories currently in the public domain covering the whole of Scotland.

Phase 2, started in February 2011, sought to develop functionality to resonate with Jisc’s vision to build sustainable and durable deliverables and to compliment phase 1 by broadening both geographic and temporal coverage. As such additional content for Edinburgh as well as Glasgow and Aberdeen (1881 and 1891 to coincide with census years) were added in September 2012. Work also included the re-evaluation and enhancement of the parsing tool, the refinement of the geoparsing process, and addition of an Augmented Reality Application for a variety of mobile platforms covering Edinburgh content.

Work is continuing (in partnership with the University of Leicester) to scope and deliver an English Trade Directory (for Leicester, 1966) through the existing client. This involves reconfiguration of the POD parser.

edina.ac.uk/projects/addressinghistory_summary.html
EDINA’s services are in use around the clock with an annual target for Jisc of 99% availability. Credit for the high level of availability is shared with the University of Edinburgh’s Information Services, particularly the Infrastructure Group who manage EDINA hardware and networking. This underlines the leverage gained for the UK academic community by placing national data centres in well-founded IT environments.

All EDINA services have a range of supporting documentation including online help, animated demonstrations and user guides. Subscribing universities and colleges are encouraged to reuse our material for their own local services.

Help

The EDINA Helpdesk is the first port of call for all enquiries about EDINA services and projects, for both end-users and their support staff. Queries by email or telephone are handled promptly by the helpdesk staff, with onward referral to experts inside and outside EDINA as needed. All queries are classified, logged and then used to update and extend the online FAQs; they are a vital part of our user feedback for future developments.

We receive positive feedback on our quarterly newsletter Newsline, a print and online bulletin to assist academic support staff and others with an interest in our services to keep abreast of developments.

EDINA Service Introduction videos

A series of videos describing the details and benefits of a selection of EDINA services are available at edina.ac.uk/support

Training & Outreach

Workshops covering many of our services, aimed at ‘training the trainers’, are run throughout the country during the year. Additionally, we run a programme of short online sessions, using web conferencing software. These sessions allow EDINA’s User Support team to have more frequent interaction with site representatives across the UK than is possible using face-to-face training alone.

We welcome invitations to hold our workshops at other events, especially those organised by other Jisc-sponsored organisations; this gives us more opportunities to consult and to promote services offered by others, in the same way that others promote EDINA services as quality resources.

The collaboration with the Jisc Regional Support Centres continues and now includes joint workshops. We also collaborate with the HE Academy, and we are keen to extend this to other support networks.

edina.ac.uk/events

Engaging with Users

Social media is an important part of EDINA communications. You can access all our social media output on the following page:

edina.ac.uk/news/news_socialmedia.html

To continue to engage successfully, we need your feedback, so please do not hesitate to get in touch via edina@ed.ac.uk or by using the feedback facility on our website.
Reflecting on User Feedback

For the past three years, EDINA has undertaken user satisfaction surveys for our Jisc-funded services. A broad range of disciplines were represented in the responses and the survey showed that our services are used by undergraduates, postgraduates and staff, including information professionals for both learning and research purposes. The overwhelming majority of users found our services easy to use, saved them time or enabled them to do what would otherwise have proved impossible.

As part of the push for quality improvement, we also opted to examine in more detail what negative feedback we could find. This exercise was very useful and has informed service development.

Survey results from all three years are presented on the EDINA impact page edina.ac.uk/impact

What our users said

**JISC MediaHub:** ‘Very wide range of materials without worries about copyright issues.’
‘Couldn’t teach one of my modules if it did not exist’

**Digimap:** ‘Simple to use, very straightforward. The level of information provided with each map is brilliant. The service saves hours and hours of time that can be spent much better elsewhere.’
‘I recommend it on a weekly basis to students, colleagues and others. OS maps are the best in the world and having access to such a wide range of their products is an incredible boost to research and teaching.’

**OpenURL Router:** ‘It is very handy being able to pass everything through the router as we then only have one place where we need to change the settings.’

**GoGeo and GeoDoc:** ‘[I value the] ability to find relevant information from a single database.’

**Unlock:** ‘Almost all archaeological data has a geospatial component and Unlock Places/Text literally allows us to unlock this information from legacy data.’

**SUNCAT:** ‘Very easy to use; clear, accurate records; time-saving as don’t have to search numerous catalogues or databases to locate a library which holds a particular journal’
‘It is such a comprehensive reference source it would take me much longer to check information elsewhere’

Presentation and Publications

EDINA maintains a page on our website dedicated to the latest presentations we have given and publications we produce.

See edina.ac.uk/presentations.html

News

For further updates on our activity see the EDINA news page at edina.ac.uk/news.shtml

You can also follow us on social media.
edina.ac.uk/news/news_socialmedia.html