Making EDINA services more accessible

HELEN STRAIN

The EDINA Web pages are being revamped following an internal study aimed at increasing the accessibility of EDINA’s on-line services. One of the outcomes of this study has been the adoption by EDINA of a set of ‘accessibility guidelines’ for future work on Web pages and Web interfaces.

Although the initial purpose of the study was to find out how to make our services more accessible to people with visual impairments and other disabilities, we discovered that the issue of accessibility had a much wider context. In fact, the very methods used in making services more accessible to disabled people are directly relevant in designing services that are accessible from a range of computers and browsers.

But what does it mean to say that a service is ‘accessible’ to people with disabilities? At a minimum level it means that the service is usable by them — that they can access all of its functions and options. Ideally, it means they can use the service as easily, efficiently and effectively as any other group.

To make on-line services accessible to people with a variety of disabilities, a range of measures are required. In some cases, accessibility is primarily about having appropriate input devices (e.g., keyboard, mouse, etc.) and this is an area which is beyond EDINA’s control. But there are measures which we can take. Because our Web pages and services present information visually, the needs of visually-impaired users are a major consideration. Visual impairments include low vision, blindness and colour blindness. Users with low vision may find it hard to read text that does not contrast well with the background colour of the page, while those with colour blindness may have difficulty distinguishing between red and green, or yellow and blue. People who are blind may use screen reading software to convert pages to plain text which is then either converted to Braille or read aloud via a speech synthesiser.

Fortunately, the Web is well-suited to meeting the varied needs of different groups of users, because Web pages can be defined in terms of a logical structure rather than physical layout. For example, a certain word can be defined as a ‘heading,’ rather than as a text having a particular font and size (e.g., Times 12). Documents that are designed using logical definitions give the end user a high degree of control over how the page actually appears.

Features that will help make our new Web pages more accessible are:

- A text version of all pages that contain tables, and the provision of alternative text for all images.
- The use of relative font specifications rather than absolute font sizes. This means that Web pages still look good even if a user changes the default font size on their browser.

Many of the design features needed to improve the accessibility of our services for visually-impaired users will be ‘invisible’ to most other people. But we believe that the behind-the-scenes design will also make our Web services more useful to people with older computers or those who use text-based Web browsers like Lynx.

Along with features to improve accessibility, the re-design will also bring changes to the structure of the information on our Web pages to clarify the topic content and provide links to related sources.

We hope that all our users will find our new Web pages attractive and easy to use. Work on the re-vamp is still in progress, but for more information and a preview of the new design, please see http://edina.ed.ac.uk/dev/index.html

We would welcome your comments.

Happy 50th Birthday Manchester Computing.

In Newslinese 3.1

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- Use of colour in a way which does not cause difficulties for people with colour-blindness or low vision.
- The labelling of list items with letters or numbers so that people using screen reading software can tell where one list item ends and another begins.
EDINA sets its sights on SiteSearch 4.0

BEN SOARES

EDINA has been selected by OCLC (the On-line Computer Library Center) as one of five field test organisations — the only one in Europe — for SiteSearch 4.0. OCLC SiteSearch is a database system that EDINA currently uses to deliver two of its on-line services across the World Wide Web. PCI-Web was the first EDINA service to be run using SiteSearch version 3.1 as an alternative to the PCI Telnet service. The more recent Art Abstracts service is available only as a WWW service, again implemented with SiteSearch 3.1.

SiteSearch version 3.1

Deep down at the database end, SiteSearch uses its own indexing format and record storage system called Newton (based on a BER/MARC record format). This is what is used for PCI-Web and Art Abstracts databases. Requests to, and output from, these Newton databases are sent through a Z39.50-compliant server called Irpserv. Irpserv can also be used to operate with remote Z39.50 compliant databases. This intrinsic use of Z39.50 makes SiteSearch an attractive option, as it fits well with the general strategy of the JISC Electronic Library (e-Lib) Programme.

However, it is the next few components, collectively known as WebZ (pronounced Web-Zee — it’s American) that make up the interface seen by the user’s Web browser. WebZ consists of HTML pages with an embedded entity language called WZEL (pronounced Weasel). Several of these Web pages are tied together by CGI scripts, and a Formatting Control Language (FCL) that formats the BER/MARC records returned by Newton (via Irpserv). Following so far? Good, because with SiteSearch version 4.0 most of this changes. . .

SiteSearch version 4.0

SiteSearch 4.0 is a rewrite of the complete system in the Java programming language, with a redesign of Irpserv and WebZ that presents a more unified system for the interface designer, and allows seamless navigation by the user. Replacing WZEL, FCL and the CGI scripts is a collection of Java classes (known as JaSSI) that are executed on the server-side, not by the Web browser. This means that it will continue to be accessible by the existing range of Web browsers.

Replacing Irpserv is ZBase, a server that manages Z39.50 sessions more flexibly, and allows connections to Newton databases, to remote Z39.50 servers and possibly to other types of database. Having a full programming language such as Java at the interface designer’s fingertips enables flexible control over the appearance of the interface and record formats, and facilitates improved features such as outputting records, customising the interface appearance and saving search requests between sessions.

SALSER (Scottish Academic SERials) under SiteSearch 4.0. This will make SALSER a Z39.50 compliant database, and thus enable it to be used as an automatic holdings look-up facility by any Z39.50 compliant service, such as PCI-Web and Art Abstracts.

We will also be updating our PCI-Web and Art Abstracts services to make use of many of the new features available in SiteSearch 4.0, including retrieving old searches, marking and outputting records, and individual profiling so that a user can control some of the appearance of the service which he or she is using.

We expect SiteSearch 4.0 to be in operation at EDINA before the end of the academic year.

EDINA as field tester

EDINA’s role as a field tester for SiteSearch 4.0 has so far entailed the ‘arduous task’ of two members of the Service Delivery team (manager John Murison and myself) travelling to Ohio, where OCLC are based, for four days of training in late January. The information we received there was hot off the press as some of the new SiteSearch system components were still under development. The training facilities were excellent, and the developers and trainers (pictured opposite) very friendly and enthusiastic about their new product.

Future developments at EDINA

So where will you be seeing SiteSearch 4.0 in operation at EDINA? We are working on an implementation of
ATHENS update for ‘sitereps’

MARGARETE TUBBY

In response to feedback, the timetable for EDINA’s move to ATHENS3 has been made more flexible. The existing stock of EDINA cards may now be used to register users until the end of this academic session. It is still intended that all users have an ATHENS3 ID by the start of the academic year 1998/99. Please contact us as soon as possible if you wish to discuss your timetable or other concerns.

**Selection of frequently asked questions:**

**Where do I start?** Discuss your needs with your colleagues and your ATHENS administrator. Consult with NISS about ATHENS3 functionality.

**Can users access EDINA services with shared access IDs?** No. All EDINA users must have personal IDs.

**Is there an easy way of creating personal IDs?** The ATHENS site administrator can either allow users to self-register (the easiest way); create a batch of personal user IDs and bulk-upload this into ATHENS; or create personal IDs directly through the ATHENS administrator account.

**Where can I get detailed help with these and other questions?** To find out more about how to use ATHENS3 (e.g., creating and uploading ATHENS3 IDs, etc.), contact the ATHENS helpdesk at athens@niss.ac.uk

For questions relating directly to EDINA (e.g., transition timetable, etc.) contact the EDINA helpdesk. We may also be able to put you in touch with institutions that are using ATHENS3 successfully.

FAQs are available from the ATHENS Web pages at http://www.athens.ac.uk, and from the EDINA Web pages.

**Timetable for EDINA’s move to ATHENS3 (recent changes in italics):**

1/12/97 EDINA linked to ATHENS3.

31/3/98 No longer the last day on which site representatives can issue EDINA cards. *Existing stock of EDINA cards may be used.*

15/4/98 Unused EDINA accounts will be deleted only for sites that have fully moved to ATHENS3 and with their permission.

Start of 98/99 academic year All users will require an ATHENS3 ID to access EDINA.

New improved BIOSIS!

JOHN MURISON

BIOSIS Inc., who create and supply us with the data for the EDINA BIOSIS service, are about to make improvements to their data format. The ‘Universal Electronic Format’ will result in more detail within each record than before, but also some changes in the way the information is presented. This will inevitably affect the appearance of the service to users.

The new information will include, among other things:

- CAS Registry Numbers® (a widely-used numerical coding of chemicals devised by the Chemical Abstracts Society)
- Medline’s Medical Subject Headings (MeSH) terminology
- author email address and URL
- book or article title in original language
- book publisher address

Not all the new fields will be searchable, but all will be available for inclusion when a record is displayed or output.

Some questions which you might have: When is this going to happen? What do I need to know? What about the data already in the database — will it change too?

BIOSIS Inc. are about to start giving us database updates in the new format; they will continue to give us updates in the old format, and will do so until the end of June. In addition, they are planning to supply ‘backfiles’ in the new format, of existing data back to the start of 1993, but not earlier.

Users of EDINA BIOSIS may know that we store each year’s data in a separate database; in fact we have 14 databases in all, from 1985 to 1998. Since the data changes are such as to require a modified database format, this means that in future we will have old format databases (1985 to 1992) and new format databases (1993 onwards). One implication of all this is that, while the interface will be changed to accommodate the new information provided, it must still be able to interwork effectively with the old format — indeed searches could straddle old format years and new format years. The changes in the user interface will be in the nature of additional search options, or perhaps a rewording of existing search options to reflect the new data, but they will not amount to a radical change in the structure: for example, all fields which are currently searchable will continue to be in the future.

Timetable: We are still working on the details of the new database format and the modified interface. We plan to have a field testing phase after Easter. (Please email edina@ed.ac.uk if you would like to take part.) We will then finalise the changes and put the new format into service before the start of July.
UKBORDERS gets a spring clean

UKBORDERS, EDINA's on-line extraction system for digitised boundary data, has a new look. On Wednesday, Feb 18th, UKBORDERS moved to an updated Telnet interface. Key improvements are:

1. a more flexible, easier to use interface
2. context-specific on-line help
3. a new generalisation algorithm tailored specifically for Census digital boundary data
4. MapInfo MIF/MID data produced much faster via MapInfo Corp translator software
5. the ability to preview retrievals graphically (on the Web) before downloading the data
6. guidance of user choice to valid options.

More information on the generalisation routine is available at: http://borders.ed.ac.uk/generalisation.html.

Complete help documentation for the new interface is at: http://borders.ed.ac.uk/newdoc.html.

A fully functional Web version of this service is under development. Please check the EDINA Web site for notices about this service.

EDINA site visits

EDINA is offering site visits to satisfy specific training needs. The response to our offer has been very good and we will evaluate the response from sites, the success of the workshops and the longer term feasibility of delivering training in this way. Comments to edina@ed.ac.uk would be welcome.

Art Abstracts

Free 30-day trial

Sites may try Art Abstracts free of charge for 30 days before deciding whether to take out a subscription. If you are interested in this offer, email the EDINA Helpdesk.

A ‘preview’ of the service is also available from the EDINA Web pages, in the form of a slideshow.

Pricing policy

The launch of Art Abstracts heralded the start of a new pricing policy for services supported by the JISC. Instead of the familiar flat-rate fee, the subscription cost for the service depends on the subscription period and the relative size of the subscribing institution.

Institutions are grouped into tiers according to the number of full time staff and students in subject areas immediately relevant to the resource, plus half the number of full time staff and students in related subject areas.

In introducing this variable-pricing scheme the JISC followed the recommendations of the Committee for Electronic Information Working Group on charging, which reported last autumn.

Pricing bands for Art Abstracts

<table>
<thead>
<tr>
<th>Institution size</th>
<th>5-yr subscription</th>
<th>3-yr subscription</th>
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</thead>
<tbody>
<tr>
<td>Large</td>
<td>£2,000</td>
<td>£3,250</td>
</tr>
<tr>
<td>Medium</td>
<td>£1,600</td>
<td>£2,000</td>
</tr>
<tr>
<td>Small</td>
<td>£1,250</td>
<td>£1,575</td>
</tr>
</tbody>
</table>

A list of institutions by pricing band is available from http://www.chest.ac.uk/datasets/artabs/sites.html.

EDINA Data & Information Access

EDINA, based at Edinburgh University Data Library, is a JISC-funded national datacentre. It offers the UK higher education and research community networked access to a library of data, information and research resources. All EDINA services are available free of charge to members of UK higher education institutions for academic use, although university subscription and end-user registration is required for some services.

EDINA services are:

- EDINA Art Abstracts
- EDINA BIOSIS
- Ordnance Survey Strategi
- EDINA PCI (Periodicals Contents Index)
- EDINA Palmer's Index to The Times
- SALSER (Scottish Academic Libraries SERials)
- UKBORDERS

Reference cards

Reference cards for EDINA BIOSIS, PCI and Palmer's Index to The Times are available for purchase at £12/100. They are also available free from the EDINA Web pages in PDF and Postscript formats.

EDINA contacts

Helen Kerr and Nicola Shields (Helpdesk)
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