Y2K

Implications of the Year 2000 Date-Change

Also in this Issue:
- New Staff
- New Classroom!
- Preferred Suppliers
- Cascading Style Sheets
From the Editor

You may be reading this in the new year, but it is being written in the old—just two days before Christmas, in fact. What a busy semester it has been. And what a busy one the next promises to be.

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This issue is somewhat briefer than others have been—you may prefer it that way! Nevertheless, it is full of useful information for you. As the year 2000 approaches, there are serious issues at hand concerning the protection of your data. Mike Jinks writes to tell you of the Millennium bug.

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We have another feature in store for you—if you are interested in creating pages for the World-Wide Web you may be very interested in new developments to help your design that much more attractive and robust. Have a look at our article on Cascading Style Sheets. It’s easier than you may think.

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In other news, we’ve bought a new colour printer, there are projectors permanently in the classrooms, and we have many new staff members.

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We hope you have had a very pleasant holiday season and wish you the best for the new year.

Ray Drainville

Colophon

The type in Keynotes consists of Palatino (the University’s official font) at various point sizes for text and an altered form of Helvetica at various point sizes for headlines, sidelines, and pullquotes.

The content for Keynotes is assembled digitally with the following tools: Adobe Pagemaker 6.5, Adobe Illustrator 7.01, Adobe Photoshop 4.01, Adobe Streamline 4.0; MetaCreations Infini-D 4.01, MetaCreations Vector Tools; Corel WordPerfect 7.0; Microsoft Word 6.01 and 7.0.

Artwork was created on an Apple Macintosh computer, and everything was thenceforth assembled on a Viglen PC running Windows 95. The material was printed by the University of York’s Printing Unit.

This issue of Keynotes was assembled by Ray Drainville; if you have any questions or comments, feel free to contact him by email at information-officer@york.ac.uk.
Information Desk News  
*Brian Souter* brings you up-to-date

A new generic post of Computing Assistant has been created within the Operations Group to combine the work of the computer operators and the staff working on the Information Desk. With the decline in the traditional role of our computer operators, and the increasing load on the Information Desk, we have created a general post with the emphasis on user support. There are still many important tasks to be performed each day, such as taking copies of the filestore, but these will be scheduled around keeping the Information Desk adequately staffed.

In number terms, we go from having two Information Assistants and five computer operators, to seven Computing Assistants. The staff rota has been designed to ensure at least two members of staff are always available to receive users at the desk and to answer 3838, with one other person processing e-mail and answerphone messages.

The Information Desk will continue to open 9am to 5.15pm (4.15pm on Friday) but some tasks previously started at 8am, such as processing central printing and checking PC classrooms, will start later at 8.45am. Following the Computing Service Review, we are required to provide service level agreements, and details of our services will be made available in this way in due course.

At the end of the day, we are aiming to provide a reliable service on the Information Desk and to restore confidence in using extension 3838. We had 1478 telephone calls in November but only managed to answer 188 of these in less than 30 seconds. We did answer 612 in total but 685 were abandoned. All this against the backdrop of 1460 users coming to the desk in person and 1051 email enquiries.

It will take some time to train the computer operators and our new recruit, Mark Cook, and for the new *modus operandi* to develop and settle down. Even so, there should be a noticeable difference from the start of the Spring Term with the changes we have made and the fact that we are back to full strength. Your comments are always welcome and should be sent by email to infodesk@york.ac.uk.

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**Disk Space Rental**  
*David Atkin* tells you about our options for extended storage space

For some years we have “rented out” disk space accessible from the central systems and Supported PCs to departments, research groups and individuals. The cost until now has been £750 per gigabyte per year.

Following the installation of the new file servers last Summer, we can now offer disk space at a much lower cost: for the calendar year 1998 a rented filestore will cost £200 pounds for the first gigabyte, and £100 pounds per gigabyte thereafter. For example a 10Gb filestore for one year would cost £1100 pounds.

Note that the minimum rental period is one year.

Users with existing rented filestores will shortly be contacted individually. Queries should be addressed to the Information Desk in the first instance.

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**Alcuin PC Room A/140**  
*Brian Souter* tells you the good news

The Computing Service has received funding from the University to purchase some additional PCs, and we are to take this opportunity to replace equipment in our non-bookable room in Alcuin College.

This news should be well-received by students who have long called for PCs to be made available during the day when the PC classrooms are booked for teaching. Currently, we only offer terminals and a few old PCs trickled down from the PC classrooms in our non-bookable facilities in A/140, L/050, G/022 and the Morrell Library.

Room A/140 in Alcuin College will be equipped with twenty networked multimedia PCs running Windows 95 only. The installation will be carried out during the Spring Term as soon as the Windows 95-only service is developed. Of the existing equipment in A/140, seven terminals will be moved to Goodricke G/169 and the rest, including the scanners, moved “across the road” to Langwith L/050. A poster will be displayed in the room giving details of the changes.
Preferred suppliers of PC equipment

Doug Moncur tells you about the latest deals

As you may be aware, the University has a number of preferred suppliers of PC related equipment.

The Computing Service has recently been out to tender for preferred suppliers on behalf of the University and the following suppliers have been appointed until 30 November 1999.

**Desktop PCs**
- Viglen—supplied direct from manufacturer;
- Dan—supplied direct from manufacturer;
- Acer—supplied via Phoenix Computers of Sheffield.

**Laptop PCs**
- Viglen—supplied direct from manufacturer;
- Toshiba—supplied via XMA of Nottingham;
- Acer—supplied via Phoenix Computers of Sheffield.

Contact details are available on the web at [http://www.york.ac.uk/services/cserv/pc/purchase.yrk/info.htm](http://www.york.ac.uk/services/cserv/pc/purchase.yrk/info.htm). Anyone wanting further information should contact Doug Moncur (e-mail dgm1@york.ac.uk, phone (43)3815).

Intending purchasers are reminded that the use of the preferred suppliers is a legal requirement when purchasing computer systems for University use.

All machines designed and sold specifically for use as servers, all non-Intel architecture machines (eg Sparc, PowerPC-based systems), Network Computers and individual components (eg monitors, mice) are not covered by this agreement, although the Computing Service may be able to advise and assist in the purchase of such devices.

**Printers**

The use of HP printers remains standard and only HP printers will be supported on the network, with the exception of the OKI 6ex led printer. However we can now obtain LexMark and Epson printers on preferential terms. These printers are not supported, and cannot be used with the Windows 3.1 service.

In all other cases it’s the user’s responsibility to ensure the suitability of a printer for their purposes and to install whatever printer support software is required on their system.

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Permanent projectors in classrooms

John Illingworth tells you how to project a good image.

There is good news for those making use of the PC classrooms D/114, L/117 and G/169. All these rooms now have a permanent data projector installed and connected to the lecturer’s PC. This means that you don’t have to book a projection panel with the Audio-Visual Centre when booking the room. All you have to do is to sign out the key to the projector storage box from the relevant Porters’ lodge before the lecture.

When in the lecture room, open the box and switch on the mains. When you have logged in to the lecturer’s PC you can operate the standby/display button (marked 0|1) on top of the projector.

When you have finished with a projector it is vital to switch off its mains switch before closing the box. This is to avoid overheating that could damage the projector. It is the intention that modifications will be made so that it becomes impossible to lock the box without turning off the mains. The final step is to remember to return the key to the porter.

These excellent projectors are supplied by the Audio-Visual Centre, and if you have any problems or queries it is probably best to contact them on 3033, as this is one area where the Computing Service information desk is unlikely to have the answers!
Teaching Software
John Illingworth tells all

There is now a place on the Windows 95 system for teaching software. It is to be found under the N: device letter. The “Course” folder will contain a series of departmental folders, and the actual software will reside inside these. A menu structure will be created with a similar structure, so to find, say, STOMP (Software Teaching of Modular Physics) you would look under “Courses” and then “Physics”.

The software survey commissioned by the Computing Committee last summer has given us some idea what teaching software currently on the Windows 3.11 system needs to be transferred to the Windows 95 system, and we have had a number of requests for other items to be mounted.

Installing software on the Windows 95 network is probably more complex and time-consuming than it was on the Windows 3.11 system, so it is important that we are given a great deal of notice of a requirement.

The aim is to have all required software transferred to Windows 95 well before the start of the next academic year so that we can withdraw Windows 3.11 from the classrooms at that time.

If you have an item of teaching software that you wish to be made available on the network it is important that you mount it locally on a single computer and check it out thoroughly before handing it over; when it comes to software supplied by others, our brief is to install it, not fix it! It is also essential that you have the correct number of licences for your intended use. This is a legal requirement, so we require written confirmation.

The final piece of news is that, under the provisions of the Computing Service Review, installation of software for specific departments is a non-core service, and as such, chargeable. However, charges will not be levied until the service definition for software installation has been published, so when you do finally have to pay, it will be clear what is included and what excluded.

New Colour Printer... and apologies for the old one
David Atkin tells us the latest

After a period of evaluation of several different colour printers, we have taken the decision to purchase a new Lexmark Optria SC SC1275N colour laser printer. This will provide high quality A4 output.

The old QMS colour printer has been broken for some weeks and the maintenance company have so far failed to fix it. We can only offer our apologies to any users inconvenienced by this.

Charges
The charge for colour output will be HALVED from 60p to 30p per page as soon as the new printer is operational.

The choice of suitable A4 film will require some testing and the cost will therefore be announced later, however it is expected to be considerably less than the current 120p per sheet.

A3 Printing
The QMS printer was also capable of producing A3 output but the volume of A3 printout was very low and this service will not be continued.

Staff News
Mike Jinks tells you about our new staff

We are pleased to welcome two new members of the MIS Group: Kay Robinson and Kevin Gardner. Kay took her degree in Environmental Sciences and joins us as a Senior Analyst/Programmer from the Biotechnology and Biological Sciences Research Council at Swindon where she was Administrative Computing Site Manager involved with the VAX-based Finance, Payroll and Personnel systems. Previously she worked in administrative computing at the University of Wales, Cardiff, again with the Personnel and Payroll systems, but here she also worked with the Physical resources that you mount it locally on a single computer and check it out thoroughly before handing it over; when it comes to software supplied by others, our brief is to install it, not fix it! It is also essential that you have the correct number of licences for your intended use. This is a legal requirement, so we require written confirmation.

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Kevin is no stranger to the University having worked in the MIS Office in the Finance Office, as it then was, after completing his degree in Computer Science. Subsequently he worked in the commercial sector as a programmer before joining the MIS function at the University College of Ripon and York St John. Kevin also has experience of our MAC software through his work with the Registry at UCRRSJ.

We wish both Kay and Kevin every success in their work with us and with the University at large. We have been fortunate to recruit new staff with some experience of our specific application environment, despite a protracted recruitment process. Three further members of staff join us in January and we will introduce them in our next issue of Keynotes.

Windows 95 and PC Classrooms
Mike Jinks tells you our plans for the classroom system

The current PC Classrooms provide the option to have either a Windows 3.1 or a Windows 95 operating environment. This has provided an effective transition between the older Windows 3.1 service and the newer Windows 95 service, and has enabled departments and individual users to make the transition at their own pace. Most teaching is now undertaken in the Windows 95 environment, most applications software is available under Windows 95, and ILLIAD provides training in the Windows 95 environment. We thus intend to provide only a Windows 95 environment in the classrooms and 24-hour study centres from the start of the 1998/9 academic year. If this will cause you any serious inconvenience, please contact John Illingworth as soon as possible.

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Windows 95 Software

John Robinson tells you about our latest offerings

We are continuing to add to and upgrade the range of software available on the Windows 95 network. We have also made the package installation process more flexible, so that fonts are available immediately, and older-style configuration files (.ini files) can be updated automatically.

The following improvements were made before the end of term:

Telnet
The arrow keys have been fixed on office machines.

Powerplay
Upgraded from 5.01 D14 to 5.01 D30, so that Transformer works on Windows 95 (Revision B) machines. We also have available a later release of these products, but they failed to run on a few machines, so have not yet been installed on the network.

WordPerfect 8
Better font install, so that special characters (Ctrl-W) should be visible without needing to re-boot;

Problems with dialog boxes on office machines (typically File | Properties | Information) will be fixed after WP8 is started, and the PC rebooted.

Navigator 3
The old Netscape Navigator 3 has been removed from the Start menu.

Java Development Kit
Release 1.1.5 of the Java Development Kit has been installed.

CHAID
CHAID (Chi-squared Automatic Interaction Detector) has been installed. Please note: Due to a bug in the current release of SPSS, CHAID is not available from the SPSS Statistics menu—instead you can access it from the Windows Start menu—Start | Programs | Maths & Stats. Manuals have been ordered for the library.

Over the vacation, work has started on installing a number of packages. It is not clear at the time of writing which will be tested and available by the start of Spring term 1998.

The packages include three ‘rapid application development’ tools for creating Windows programmes using a graphical interface, both from Borland. These are:

Delphi 3, the latest version of Borland’s Pascal-based Windows programme builder, and

J Builder, a similar product based on Java, the portable, network-distributable programming language C++ Builder, which is based on the very popular object-oriented language C++.

Courseware
We have also started installing packages to support the teaching and learning process, similar to the software available under the ‘Courseware’ group on the Windows 3.1 service. These are held on N:\Course, in folders named after the department which has provided the software. Staff and students have been patiently waiting for these packages to appear, but since many are written by much smaller groups than the large commercial packages, they are less extensively tested under different network configurations. When problems to occur, there can also be delays in isolating and rectifying them.

These packages will be placed on the Start menu, under, for instance, Start | Programs | Teaching | Econ | Microfit.

Arc/Info 7.1.2

Peter Halls tells you about the latest release

We received the latest release of Arc/Info at the end of November. It has been installed and tested and will become the standard version running on the centrally supported UNIX systems on January 8th.

Release 7.1.2 brings a number of significant bug fixes, but its most important feature is the delivery of ODE—the Open Development Environment. ODE provides the Arc/Info user with a program interface, API, which operates at a similar level to the Arc Macro Language, AML, command-scripting facility. This provides support for programmes written in C, C++, or tcl/tk, to issue Arc/Info system commands and so to perform anything that could be achieved in AML more efficiently ... and a bit more besides. ODE does not replace the Software Developer’s Library, SDL, facility of program access to the Arc/Info Object Code, but should be significantly easier to use (and program) than SDL applications! We plan to be able to support users who wish to employ the C and C++ ODE interfaces.

The most significant other change is the addition of unoops to ArcEdit, and the ArcTools Edit Tools, to reverse the effects of canceling a change with oops!

The oops and unoops commands are also known as undo and redo.
The Year 2000 Problem
The Director of the Computing Service, Mike Jinks, tells you about the implications of the computer bug.

Most of you will have read or heard about the problems associated with the year 2000 date-change and may have wondered how this will affect the University. The issue is variously called the Millenium Problem, the Millenium Bug, the Year 2000 Problem and a host of other names but at its heart is the fact that in the early days of computing, computer memory and storage were very expensive and a range of techniques were used to minimise use of these resources. In particular, only the last two digits of the date was stored eg 1972 would be stored as 72. Apart from printing out the date when the initial digits—19—could easily be added, most operations with dates involved either calculating differences or sorting in a chronological order; both of these could easily be done successfully without including the century digits.

When we reach the year 2000, the date would be recorded as 00. Calculations of differences eg 2000 - 1998 would give the answer -98 rather then 2 as expected, and sorting on the date would put the year 2000 dates earlier in time than 1999 dates, as 00 is less than 98. Programs would thus either fail if appropriate checking is included eg for a negative date (normally implying a date input error) or would give incorrect results. In the latter case these incorrect dates may or may not be noticed. There is thus a major problem if dates are stored in two-digit form.

Given that this problem has been apparent for some considerable while and computer data storage is relatively cheap, one may wonder why the issue has not been resolved by natural, life-cycle replacement of systems by those which are 'Year-2000-compliant'. To some extent this is true, but many organisations have written and the procedures you now about how the programs you have written and the procedures you

people have often developed their own procedures which would fall foul of the year 200 problem. For example, in some systems it is possible to find the oldest records in a file by entering a date earlier than that of any actual records; the system then makes the best fit by using the records with the nearest date ie the oldest dates. A common approach is to enter 00 for the date with the expectation of finding the oldest data. In future 00 would be a real date later than 99 and the system would return the actual data for the year 2000. The program could thus appear to operate correctly but would give the wrong results.

A further area of concern relates to systems with embedded microcomputers which contain date information eg telephone exchanges, lifts, vending systems, and point of sale devices. In some cases this date is used simply to date-stamp a transaction but in other cases it can be used to enforce maintenance intervals etc by calculating a time since the last service occurred. If these systems are not 'Year-2000-compliant' the date difference calculations would give incorrect results, possibly resulting in closedown of the systems.

In addition to the practical problems outlined above, the University needs to consider the implications, both for its good name and also for its contractual obligations. Since this problem is well-known, the University needs to be able to demonstrate that it has taken reasonable steps to ensure that its systems are 'Year-2000-compliant' and hence can continue to deal effectively with its suppliers and customers; failure to demonstrate this in the event of a major fault could lay the University open to a claim for negligence.

Although much work has been done of the past year or so in terms of the central computer systems, the Information Committee has set up a working group (chaired by myself) to ensure that the University as a whole has a smooth transition over the millennium date change. Responsibilities for compliance lie partly with the Computing Service and the Directorate of Facilities Management, and partly with Heads of Department for their own equipment, systems and activities. The Working Group will be keeping people informed of the state of the centrally provided systems and will be advising departments on the steps they should take to minimise problems in their own departments.

The year 2000 problem potentially affects us all. Please start thinking now about how the programs you have written and the procedures you use will be affected by the millennium date change and make any necessary changes now.
Cascading Style Sheets

Ray Drainville tells you about one of the major new trends in Web publishing.

Please note that this article assumes you have a basic familiarity with HTML.

Limitations
If you’ve ever published on the Internet, you have probably been struck by a couple of things. First, it’s remarkably simple to publish basic text. Second, it’s fairly easy to create basic structures for your text—in order to block out information in the fashion you would like. However, some aspects common to the publishing world have never been in the control of the individual creating the web page: to cite a few examples, it has been difficult to space paragraphs, for example, or add an indent for the first line of a paragraph, or control what font with which the final product is viewed. To the occasional publisher, these seem like unimportant details. But to professionals, this can become a serious problem.

There are, in other words, limitations to basic HTML: after all, it is a document-description language designed only to block out text in the most rudimentary fashion. As the World-Wide Web has grown in popularity and importance, the needs of the online publisher are greater than what HTML was originally designed to provide. Designers of course want their work to look as good as possible. More importantly, however, some people have to publish information that is legally required to be presented in a specific form: many companies, for example, require that all documentation emanating from the institution, from letter to magazine, conform to their corporate identity. The reason for this is that the content contained within the document represents an official statement.

Fortunately for such individuals, the World-Wide Web Consortium (W3C for short), an international standards-body for the Internet, has been addressing such issues in their recent work. They are progressing to a more advanced version of HTML, sometimes known as Dynamic HTML. One major aspect of Dynamic HTML is the use of Cascading Style Sheets, which have been appearing on many web pages in the last year. The aim of this article is to supply you with the basics concepts underlying Cascading Style Sheets.

A Sense of Style
Cascading Style Sheets (or CSS for short) helps set out text according to simple rules. You can specify the font, point-size and colour with which text should be rendered, and you can apply rules to pages, paragraphs, sequences of information within a paragraph, and even whole web sites at a keystroke. If you are familiar with desktop publishing programs such as PageMaker or Quark XPress, you may see an analogy with Master Sheets, by which you can automatically define the look of a paragraph. Similarly, Microsoft Word and Corel WordPerfect make use of templates which again help define the look of paragraphs. CSS is much the same as these—CSS acts as the presentation form for web pages, while HTML acts as the structural form.

CSS information is always placed in the same location within a web document: within the confines of the HEAD tag. But there are two ways in which you can call upon CSS in your web documents. The first way is to define all of the information within each document you place—for example, you can specify a specific page uses the fonts Palatino for the body and Helvetica for H1 and H2. This is good if you only wish to create styles for only one or two pages. In this case the beginnings of the code would look like:

<HEAD><LINK REL=STYLESHEET TYPE="text/css" HREF="http://www.acme.co.uk/ourlook.css"></HEAD>

Let’s say, however, that you manage a large corporate web site and would like to implement a specific look for an entire web site filled with thousands of pages. The most effective way to do so would be to link your documents to an external document (ourlook.css, for example, which is incidentally a basic text document). This method allows you to change the look of an entire web site by altering the content of one document. Pretty impressive stuff. Here’s the basic code that must be contained on every page:

<HEAD><LINK REL=STYLESHEET TYPE="text/css" HREF="http://www.acme.co.uk/ourlook.css"></HEAD>

Within ourlook.css, you would then specify the information that you would otherwise have written in the first example. Now, if you decide to change the BODY font from Palatino to Adobe Garamond, all you have to do is change one line of code—to alter a web site containing thousands of pages entirely.
of pages. Similarly, if you would like a given section of a page to have a different look from that defined in the Style Sheet, you can place the information directly within the web page within the confines of either a DIV or SPAN tag, or you can create a new style on the fly:

    <H1 STYLE="color: yellow">Bright</H1>.

But you can do more than these basic things. You can define margins (margin-left: 30%; or margin-right: 50 px). You can also ‘nest’ attributes of tags. For example, let’s say that you want all H1 tags to be red, all italicised text to be blue, but you want italicised text to be green within the H1 header. This is simple with CSS, and is what puts the ‘cascading’ in Cascading Style Sheets: aspects inherit characteristics from one another, and it’s simple to specify when and how those inherited characteristics change.

    H1 {color: red}
    EM {color: blue}
    H1 EM {color: green}

Please note that you must order things in this fashion within your HTML: in this case, <H1><EM>Hello</EM></H1> is not the same as <EM><H1>Hello</H1></EM>.

What’s so important about Cascading Style Sheets? Presently, to format things they way they wish to, many people make extensive use of tables to create their layout. Accordingly, a block of text would be placed within one cell of a table, while an image would be placed within the next cell. These type of HTML pages are slow to download, and are actually fairly complex—and brittle. If you view a site with a font larger than the one imagined by the author, the entire table-defined page may look very differently than anticipated. Now, a whole new set of commands have been developed to actually do the work that developers were forcing HTML to do with tables. The result is more elegant, more robust, and less cumbersome for the poor person trying to view your page.

The bad news
If Cascading Style Sheets are so wonderful, why isn’t everyone using them? The answer is very simple: CSS has only been adopted by browser makers very recently. Microsoft’s Internet Explorer 3.0 was the first to introduce the standard, albeit incompletely; Netscape didn’t adopt it until version 4.0 of its browser. But you can be certain that Cascading Style Sheets are set to be a major element in web development.

What happens if you view a CSS-enabled page in a browser that does not support the standard—for example, with the Netscape 2.0 browsers used in our Windows 3.1 service? The beauty of CSS is that it ‘degrades gracefully’: this is a technical term which means that non-CSS-enabled browsers render a CSS page in more basic HTML. An instructive example of this is the W3 Consortium’s Style Sheet Guide, the URL for which is given below. If viewed in Netscape 4.0 (installed on our Windows 95 Service), the page is quite striking. If viewed in Netscape 2.0, all the text is still perfectly legible—if a bit dull-looking, CSS is set to change the way the World-Wide Web presents itself. If you in interested in creating web pages, it is well worth your while learning more about this powerful system.

Links of interest
WebReference’s Style Sheet Overview: http://www.webreference.com/dev/style/

W3 Consortium’s Style Sheet Guide (with links to their specifications): http://www.w3.org/style

WebReview’s Style Sheet Guide: http://style.webreview.com

Builder.Com’s CSS Tutorial: http://www.cnet.com/Content/Builder/Authoring/CSS/

STEP’s CSS Tutorial: http://t9.ucsd.edu/step/s96/styles/stylenoth.htm

About Aural Style Sheets (for the visually impaired): http://www.w3.org/TR/WD-acss

Another example of the power of Cascading Style Sheets in relation with alternate alphabets, here allied with another technology developed by Netscape and Bitstream called Portable Font Resources. Above we see how Japanese web pages look in most browsers; below, a specially-encrypted and -compressed version of the font Kanji shows the text as it should appear—the user need not have the font installed on her system. The resulting compressed font is only 61 KB, and downloads automatically.
Finding Information on the Internet: Educational Studies
Kirstyn Radford shows you where to go on the World-Wide Web.

There is an increasing amount of information on the Internet of relevance to educationalists. Much of this information relates to the academic study of education, but resources for practitioners are steadily appearing. The Educational Studies Information Resources page, accessible via York Information Connections, organises access to both types of resource, to make it easier to identify useful sites. It can be found at http://www.york.ac.uk/services/library/subjects/educint.htm. Here I will describe some of the interesting resources available from this starting point, including URLs for the benefit of those who wish to go straight there rather than follow links.

Newspapers
Both the Times Educational Supplement (http://www.tes.co.uk/) and the Times Higher Education Supplement (http://www.thesis.co.uk/) have online versions. First-time users need to register for each, in order to access selected current articles and supplementary information free-of-charge. The TES site hosts an “Internet staffroom” discussion forum for teachers and other professionals, and THES includes a searchable archive of past articles. An electronic subscription to the TES (currently £116 p.a.) allows access to job adverts days before the printed version is on sale, plus links to other resources of interest.

Documents and reports
The Department for Education and Employment hosts a substantial set of pages, based at http://www.open.gov.uk/dfee/dfeehome.htm. Not only has information about DfEE staff and operation been made available, but also a large number of official documents, such as the National Curriculum (http://www.dfes.gov.uk/nc/), school performance tables searchable by LEA or institution, (http://www.open.gov.uk/dfee/perform.htm), downloadable versions of recent White Papers and so on. Another free source of full-text documents is the Education-line project, under development at the University of Leeds (at http://www.leeds.ac.uk/educol/). The project managers aim to collect and archive documents of relevance to “researchers, practitioners and policy-makers from the worlds of education and training”. The whole site is searchable, and so far includes material such as conference proceedings, preprints of journal articles, and the Dearing Report in its entirety.

Databases
Many of you will be familiar with the BIDS database services, hosted by the University of Bath. BIDS have recently developed a set of Education databases, comprising bibliographic references from the British Education Index and the U.S. service ERIC (Educational Resources Information Center). Between them, these two organisations index almost all English-language education journals (and quite a few more besides). ERIC online goes back to 1966, and the BEI to 1986 at present, although further conversions of the printed backfile are planned. The BIDS Web interface to the Education databases is found at http://www.bids.ac.uk/education.html. To access it, you will need a BIDS username and password, which can be obtained from the Computing Service. Educational Studies Information Resources provides a link to BIDS userguides, and background about the BEI and ERIC.

Of course, once you have obtained some promising references, you will want to read the original articles. If it’s not convenient to go to the Library, you may be interested to know that the site http://www.york.ac.uk/services/library/ejournal/home.htm provides links to all the journal titles available electronically to members of the University of York, together with instructions for accessing the various services.

Academic professional organisations
Staff of the University of Wales at Aberystwyth have compiled a directory of the websites of all UK university education departments: http://www.aber.ac.uk/~edwww/oherdep.html. The Mailbase service hosted by the University of Newcastle (http://www.mailbase.ac.uk/) maintains email discussion lists for academics and other professionals, including a number of relevance to educationalists. Lists are free to join, messages are archived, and instructions for joining are clear and comprehensive. Many UK and international professional bodies maintain their own websites; those directly linked to the Educational Studies Information Resources page include the National Foundation for Educational Research (http://www.nfer.ac.uk/) and the National Council for Educational Technology (http://www.ncet.org.uk/).

Directories
Several established services provide compilations of links to Internet resources. The BUBL (British Universities Bulletin Board)
Subject Tree lists and describes over 100 education websites, ranging from electronic journals to classroom materials. It can be searched or browsed by subject, and is found at http://link.bubl.ac.uk/education/. SOSIG (the Social Science Internet Gateway) provides a similar list of sites, with searchable descriptions but otherwise unclassified. The education list has been compiled by staff of the Institute of Education at the University of London, and can be accessed via http://www.sosig.ac.uk:80/welcome.html (if you then choose to “Browse”, you can go directly to the education pages).

NISS Information for Education (http://www.niss.ac.uk/) provides not only a collection of links to professional bodies, teaching resources and other useful sites, but also a link to a directory of all UK schools with their own web pages, at http://schools.sgs.uoa.ac.uk/schools/schools.html. FE and HE are equally well covered, including information for students. And Martin Myhill at the University of Exeter has compiled a page of links to almost 50 sites with potential use in teaching, including guides to the Internet, an online sample of the Encyclopedia Britannica, virtual tours of museums and so on. His list can be found at http://www.ex.ac.uk/~MRMyhill/lib/edres.html.

And finally, for light entertainment, there’s BBC Education Online (http://www.bbc.co.uk/education/index.html). These pages provide supplementary information about not only services for schools, and the Learning Zone adult education slot, but any BBC programme that might conceivably have educational content, such as nature documentaries, consumer advice shows and even 999 Lifesavers! There are links to quizzes and games for children, and to “life-long learning” resources for adults. If you are a novice Internet user, this might be the place to start. Happy browsing!

Editor’s note: Kirstyn Radford is a member of staff at the JB Morrell Library.

The Windows 95 Service—How is it?

Ray Drainville would like to hear your thoughts

In the last issue of Keynotes, we made a request that people who use the Windows 95 Service give us some feedback on it—how does it work for you? What would you like to see? Do you have any suggestions for software, organisation, etc?

To date we have not received many responses. Accordingly, we’re making out the request again. Please send e-mail to information-officer@york.ac.uk with the subject ‘Windows 95 Service’. Remember, we can’t improve a service in the way you’d like it if we haven’t any idea what you think of it!

Internet teaching

Debra Fayter wants to hear about your experiences

I am preparing a course on teaching with the Internet and would like to find out if anyone at York is currently using the Internet for teaching. If you can help please e-mail daf3@york.ac.uk or telephone x3839.

Needed User Guides?

Ray Drainville asks for your opinions

As you may or may not know, the Computing Service has a large number of user guides which can help you get the most out of computing at the University of York—whether you’d like to know about the central UNIX service, how to use WordPerfect, how to FTP files, or more. At present we’re creating a guide to the Netscape Communicator Suite, which in part reflects the growing importance of the Internet in computing.

Sometimes, however, what we think you want and what you actually want are two different things. We’d like to hear from you. Do you feel we’ve missed the mark? Is there a subject you wish we would cover in one of our user guides? What do you think about retrieving documents directly from the World-Wide Web?

If you have any opinions upon this, please e-mail information-officer@york.ac.uk. We would appreciate your feedback on this issue.

Errata

Ray Drainville cries Mea Culpa

The last paragraph of our page 2 article on UNIX access to home directories should have read:

“For example ... instead of using:

```
/usr/tsa/dept/zxc3/prog
```

use

```
homedir zxc3'/prog`
```

The e-mail address for the Information Officer is information-officer@york.ac.uk, not info-officer. Lazy typing on the editor’s account!
The Computing Forum

The Secretary for the Computing Forum, Ray Drainville, tells you about the most recent meeting.

The Computing Forum is a meeting of representatives from academic, administrative and other support departments throughout the University of York with representatives of the Computing Service, chaired by the Director of the Computing Service, Dr. K.M. Jinks. It acts as a round-table whereby members of the University community can be informed by the Director of the Service’s direction, and whereby those selfsame members can inform the Director of their departments’ opinions and needs in general terms. The most recent meeting was held on 31 October 1997, but the Minutes had not been approved in time to be presented in the November issue of Keynotes. Nevertheless, the sharp reader of Keynotes will be familiar with most of the issues that were discussed in the meeting.

Summer upgrades

The Director informed the Forum of the upgrades made to the department over the Summer period. The upgrades were delayed until late in the Summer due to the failure of the Planning Committee to allocate funding (see the September 1997 issue of Keynotes). The upgrades affected infrastructure primarily. The department has purchased three new Sun systems, comprising of a new DNS server, a new mail server, and what will become the new web, print and news server. The department also purchased two network appliances to replace the aging file server. The department has also been able to purchase new chairs for the classrooms, although the Service was not allocated enough money to purchase new PCs. The department has been unable to afford new PCs for three years.

The Director then reported to the Forum about the status of the Computing Service Review implementation. Dr. Jinks had completed a draft of the Computing Service’s Core Services, and this document had been sent to heads of departments and chairs of boards of studies. The department had to write over 130 Service Level Definitions (SLDs).

Reports from the Information and Computing Committees

The Director also reported to the Computing Forum the results of the Information Committee Meeting of 14 October 1997 and the Computing Committee Meeting of 24 October 1997. Students will be able to dial into the JANET network via the UNET system, as the Information Committee had approved ACC to provide telephony to students in the colleges.

The Information Committee also noted that, given the Dearing Report’s recommendations regarding volume-based charging for international bandwidth, a system should be devised which could selectively control and account for this bandwidth use. Only then, the Committee felt, could the University be fairly charged for its use of international bandwidth.

The Information Committee also spent time setting priorities for the coming academic year. It was declared that the Committee would oversee the implementation of the Computing Service Review, develop the University’s Information strategy, monitor the expenditure of the Library and the Computing Service, and finally search for a replacement of the current MAC system. The Committee is also scheduled to examine the implications of the year 200 date-change (see the cover story this issue).

Proposed developments 1997-98

Finally, the Director told the Forum of proposed development for 1997-98. Due to the department’s fiscal constraints, there was not much scope for development. It was noted that the department had planned to purchase 60 PCs this year.

The next meeting of the Computing Forum will take place on 2 March 1998.

The Information Desk is open from 9am to 5.15pm Monday to Thursday, 9am to 4.15pm Friday (closed for training Wednesdays 2pm-3pm), for problem solving, advice and information, fault reporting, network connections, file conversion, sales, course bookings, registration and documentation. Printed output can be collected from the lobby entrance which is open from 8am to midnight.

### Contacting Computing Service Staff:

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Ext No.</th>
<th>Email</th>
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<tbody>
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<td>kmj1</td>
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<tr>
<td>Deputy Director</td>
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<td>pdr1</td>
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**YO1 5DD**

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