

THE UNIVERSITY *of York*
Computing Service

Keynotes

Volume 28 Number 1 October 2001

Big box of tricks: the new backup system arrives



Also in this Issue:

Development Plan 2001/2

YorkDataNet

Web News

From the Editor

We in the Computing Service are very proud of our new arrival which reached us at the beginning of September weighing around half a tonne and measuring 0.75 x 1.2 x 1.8m. For full details of the new backup system, see Doug Moncur's article on page 6. For an insight into the drama as it arrived, see page 8.



The web news section on pages 4 - 5 has helpful news for both web users and web authors: the progress made by MIS in migrating administrative processes to web-based software, the arrival of Dreamweaver, the introduction of the web server farm, and advice on making web pages accessible.



On page 9, Mike Jinks details the developments planned for the coming year. These include further progress with the YIMS activities, moves to improve the infrastructure and the provision of networked services to study bedrooms.

Joanne Casey

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Keynotes on the web

Back copies of Keynotes can be found at:
www.york.ac.uk/services/csersv/offdocs/keynotes/

Farewell to VIVID **Robert Demaine**

During August a significant chapter in the annals of networking at York closed with the final decommissioning of the core ATM network based on Newbridge Networks VIVID product range. When it first entered service in 1997, partly funded by a successful HEFCE bid, the Newbridge product was very much state-of-the-art, delivering high bandwidth, low latency networking coupled with advanced and flexible management capabilities. As a result the Computing Service at York developed, in the words of one industry specialist, 'a network most corporates would die for'.

But change is a fact of life in IT, both in terms of technology and of the marketplace. When it became clear that Newbridge would no longer be developing VIVID as a strategic product, work began on planning a replacement. The process of migration to a core network based on gigabit Ethernet using high-performance hardware from Extreme Networks began last year, and was completed with the powering down of the last VIVID boxes in Physics on 14th August.

It is always a little sad to bid farewell to innovative and successful technology, but just as a week in politics, four years in IT is a long time.

Information Desk News **Brian Souter**

We have continued to have difficulties maintaining staffing levels on the Information Desk. Shortly after replacing Nick Walker who left in April, we lost two more experienced staff when Dave Chambers transferred to our Technicians Group in June and Paul Hodgson left in August. With Paul Conacher still away on long term illness we have often struggled to maintain a service. Our two new recruits, Aimee Phillips and Phil O'Connell, have done extremely well in keeping things running, supported by our only remaining experienced desk person, Chris Gowland. At the time of writing, Chris is away on holiday and only Aimee and Phil are available to do the work of five people.

The good news is that we have interviewed for a replacement for Paul Hodgson and are likely to have someone in post by the start of the academic year. The bad news is that we will be approaching the busiest time of the year with three trainee staff, one person on long term illness and just one experienced desk person. We do apologise for any inconvenience caused by these difficulties and ask for your cooperation and understanding should it take a little longer than usual to deal with your enquiry. Apart from recruiting new staff we are looking very carefully at the staffing structure, staff retention, training and better working conditions in order to improve things for the future.

Atlas.ti **John Illingworth**

After a concerted campaign utilising all legitimate channels of communication, a number of departments have persuaded both the Computing and Information Committees that the Atlas.ti software should be made generally available on networked PCs and funded by a small impost on the annual software charge.

We hope to have this installed at the start of the Autumn term, but at the time of writing there are licensing negotiations to be completed; this is not cheap software!

New user? **Joanne Casey**

Visit: www.york.ac.uk/services/cserv/newusers.htm for an introduction to the Computing Service

Telephone System **Brian Souter**

On Monday 24 September we switched over to using the new call management system on extension 3838.

We mentioned in the last edition of Keynotes that we were buying into the SpeakEasy NT ACD system that was recently purchased by Telephony. The new system continues to provide basic call queuing for up to six simultaneous calls but also allows callers the option of leaving a message. We have configured the system to email messages into our enquiry tracking system, to be picked up and processed by the desk staff along with email and web form enquiries. With our current staffing difficulties, this facility should be of benefit to both users and desk staff.

Information from MIS for New Staff **Nicola Normandale**

As a new member of staff, there are a variety of central management information systems that you are able to use once you have registered with the Computing Service. Your best introduction can be found at www.york.ac.uk/services/cserv/admin.yrk/newstaff.htm. This gives details of the available systems and how to gain access to them, what help and training is available, and general security advice.

It is worthwhile checking the **Which System? Guide** at: www.york.ac.uk/services/cserv/admin.yrk/whichsys.htm to decide which facilities you actually need. Make sure you don't end up trying to use MAC when you can get the information on the Web: your colleagues may not have the latest information on what is available - this is the definitive guide.

Safe Attachments

John Illingworth

A reminder. When sending documents as mail attachments, where possible do not use .doc format as it is prone to virus infection. You can save your Word (or WordPerfect) files just as easily as .rtf (rich text format) by selecting .rtf from the **File Type** list box in the **Save As** dialogue box, and these files may be read just as easily.

Equally, when reading .doc files you have been sent, even from well known sources, don't use Word, but save the file to disk and use the Word Viewer. This is installed on all supported PCs. For unsupported and home machines, you can get it free from the Microsoft Downloads centre www.microsoft.com/downloads/default.asp - just do a keyword search on "viewer". You'll find there are viewers for Excel and Access too.

If your file is not to be edited, then the best format is .pdf (portable document format) which is designed to be a read-only format, although it has facilities for adding comments and marginalia.

To create a .pdf file you need a copy of Adobe Acrobat. Every department should probably have one copy at least. It costs about £24 for the licence and another £24 for the CD-ROM, but you can buy as many licences as you like for 1 CD-ROM.

Teach Yourself

Joanne Casey

A reminder that the Software made Simple guides to MS Office are available at: www.york.ac.uk/services/cserv/docs/sms.yku/. Available in both HTML and PDF formats, the guides feature student information and teacher's notes.

Migration to MS Office

John Illingworth

Apart from the move to the Windows 2000 operating system, the Computing Service, at the behest of the Computing and Information Committees, is introducing Microsoft Office to networked PCs. This article contains our thoughts on migration from Corel to Microsoft.

First of all, the huge number of copies of MS Office bought via the Microsoft Select deal over the last few years, makes us believe that very many people already have copies of MS Office and will not, therefore, need to migrate; they're already there.

Secondly, we considered the need for special migration training for those with years of experience of Corel WordPerfect and other Corel products. The problem is that such people each have their own skills profile and any migration course, which will itself have to assume certain profile of prior knowledge is bound not to fit many people.

The next step was to send people on an MS Office course to try it. The course was, in fact, on Excel and of the two people, one had occasionally used Quattro Pro, while the other was an expert. The beginner found the course entirely adequate as an introduction, while the expert found out both differences and similarities, and discovered that there were several things he thought were unique to Excel, but turned out to work in Quattro as well!

The conclusion was that there is no need to have special migration courses, but that the migrants should expect to complete the course much faster. The requirement is, therefore, for self-paced learning, which is already a feature of Computing Service courses. We confidently expect a number of people attending our courses this autumn to make for the door long before the appointed time is up!

Progress with the Windows 2000 Service

Andrew Smith

During August we took delivery of the server hardware which is required to support the Windows 2000 service. This consists of twelve Windows 2000 servers and a SAN (Storage Area Network) which will hold half a Terabyte of user filestore. The physical installation of these servers has been completed. At the time of writing we are installing the SAN and supporting servers, which will be completed during September.

By the time you read this we will be offering a limited service to staff who have purchased new PCs that are configured to run Windows 2000. During October we shall gain the capacity to upgrade Windows 95 users with suitably configured hardware to Windows 2000.

If you would like information on how to upgrade your PCs to Windows 2000 or to make an application for Windows 2000 to be installed on your computer, please contact the Information Desk.

Windows 2000 Hints and Tips can be found at: www.york.ac.uk/services/cserv/help/win2000/.

For information on the planned Windows 2000 classrooms, please see Mike Jinks' article on page 9.

YorkDataNet Upgrade

Doug Moncur

Many of you who use YorkDataNet will be aware that over the summer newer and faster hardware was installed. At the same time we took the opportunity to migrate the data server from Windows NT to Windows 2000 and to migrate the applications server (used for unsupported machines and off-campus access) from Winframe to Metaframe. We did this because the machines that provided the YDN service were four years old and were beginning to show their age a bit. The migration from Winframe to Metaframe was necessary as it was increasingly difficult to get new applications to work under Winframe as it was based on the NT3.51 kernel.

It's fair to say that the upgrade did not go smoothly. On the first attempt, in early July, hardware problems meant that the data server could not see the cached CD images, which rather reduced the utility of the exercise.

Fortunately as we had the old servers still in place it was comparatively straightforward to roll back to the service on the old servers for the rest of the summer.

Our second attempt in late August was rather more successful. Within a day all supported Windows 95 clients were talking to the new server, with a noticeable increase in the speed of application download and searching.

The migration to Metaframe was not quite as successful. While the server worked well and the majority of the applications ran properly, a number of the databases did not work correctly, in the main because newer versions of the retrieval software were required.

However by mid-September most problems had been solved and with all commonly used databases available the service was completely migrated to the new system. Users should notice little difference other than some cosmetic changes to colours and logos on connection.

With the migration to Metaframe, X-windows connections to YorkDataNet are no longer available. However, ICA client software is available for many common Unix implementations, including Linux, from www.eu.citrix.com/download/unix-downloads.asp.

Users of the Metaframe service should not need to upgrade their existing client software, but should they wish to do so, they can be downloaded from www.eu.citrix.com/download/.

Full information regarding the status of the service and changes to the list of applications available on Metaframe will be posted at www.york.ac.uk/services/library/datanet.yrk/ydnupdate.htm.

Support of WordPerfect Thesis Template

John Illingworth

One of the effects of recent staff movements is that we can no longer support users who wish to take advantage of the WordPerfect Thesis Template. The template is written in Corel PerfectScript, and we currently have no members of staff conversant with this language.

The thesis template was originally written for use with WordPerfect 8, and use with WordPerfect 9 was never fully tested, although it should work in principle.

The instructions, help information and course materials remain available on Yorkweb at: www.york.ac.uk/services/cserv/help/wp/pages.sup/wp8/thesis.htm.

It is possible, if there is sufficient demand, that a future Computing Service project might produce a Microsoft Word thesis template.

MIS Web Systems Update

Geoff Houlton

The MIS Group have been working for some time on the steady migration of the University's administrative processes away from character-based systems (e.g. MAC) and towards web-based software. A number of small-scale and large-scale applications are in the pipeline, and colleagues may be interested in finding out more about these as they become available.

With this in mind, a **Web Systems** page is available at: www.york.ac.uk/univ/mis/cfm/websys.yku (or from the Yorkweb home page, select **Information For Staff** then **Web Systems**.)



The page provides a single point of entry into applications developed to assist colleagues in their daily work, e.g. checking a room booking, raising a Stores requisition or calculating the salary cost of employing research staff. Recent additions include a facility to process Biology Stores requisitions.

The page will also provide access into web applications introduced under the YIMS Programme. For example, the new Time & Attendance system will soon be available to supervisory staff in DoFM. During 2002 web access will also be provided to the new Personnel system.

In addition, a 'tickertape' feature on the Web Systems page enables MIS to inform colleagues of planned downtime, for example for essential maintenance work on servers.

And finally

The MIS Group are always keen to receive feedback on the services we provide, and a link on the Web Systems page allows colleagues to do this. Please let us know if there are other tasks which you feel could usefully be included.

Web Authoring Software

John Illingworth

The Computing Service, after a certain amount of investigation and consultation, has decided that the best aid to web authors in our environment is Dreamweaver UltraDev. This is a very versatile and widely used software package. It has the added attraction that it knows about Cold Fusion, the University's software for accessing databases from web pages, and the main subject of the second term of the long-running Web Strand in our Staff and Graduate training module.

The software is not available on site licence, so to get the ball rolling the Computing Service is to provide a copy to each of fifty prime web authors. The lucky fifty will be chosen by reference to a list currently being drawn up by the newly-formed Web Committee (successor to the Web Steering Group). Those web authors not receiving a free copy will be encouraged to ask their departments for further copies. These cost about £60 for a licence, assuming you have a nearby CD-ROM. The CD-ROMS cost another £41. The software deal can be accessed via one of three well-known software suppliers: Pugh Computers, Phoenix Software or Sanderson MSL. Details of the deal can be seen at the CHEST Web site: www.chest.ac.uk/software/macromedia/macromedia.html.

The Computing Service will have enough licences left over to be able to run training courses in Dreamweaver techniques, but the room we had hoped to use has, like many other things, been delayed as a result of University financial problems. Our original intention was to distribute the software and run the training simultaneously; under the present circumstances it might be better to distribute it in advance to those whose web skills are such that they probably wouldn't need the training.

YorkWeb Server Replacement: a new web server farm

John Byrne

Over the next few months the Computing Service will be setting up a web server farm to replace the existing YorkWeb system. After the changeover all existing YorkWeb pages and applications will be served by the new farm.

The current YorkWeb configuration consists of a UNIX-based Apache web server and an associated NT-based ColdFusion server. The combined system serves all web-based resources held on the YorkWeb filestore including static pages, CGI scripts and ColdFusion applications. Over recent years the system has operated with relatively few breaks in service, however with the increasing reliance on the web to support core University processes there has been a corresponding need to enhance server performance and, above all, server resilience.

The new YorkWeb server farm will consist of three UNIX systems each running their own Apache and ColdFusion servers but working together under the control of sophisticated integration software. The farm will act as a single server, with host name www.york.ac.uk, and the component systems will work together so that client requests are handled by the system with the lightest load, and any system failure will result in the remaining systems automatically taking over processing tasks. The integration software also ensures that ColdFusion 'sessions' are properly handled.

New security features

Enhanced access control

The web servers will implement a new general access control model, where site managers will be able to

restrict document and application access to selected groups of users, for example technical staff in the Biology Department, or graduates in the English Department. Developers will be able to choose from a large number of centrally maintained groups; they will also be able to define their own groups, and even restrict access to named individuals. Access control will be managed using simple web forms.

Encryption

The servers will also support standard encryption methods which will allow for the secure exchange of confidential information eg passwords, credit card details and personal data.

ColdFusion advanced security

ColdFusion provides a number of advanced security features which we plan to implement with the new farm, for example tags and functions which let you access your filestore and which authenticate and authorize users against our central user database.

How will it affect you?

Minimally we hope. The new farm will serve resources from the existing YorkWeb filestore, so all current documents, scripts and applications should continue to function, and we expect there to be little or no change to your development environment. Any changes will involve you taking advantage of the new security features and additional ColdFusion resources.

Further information will be made available as work progresses. In the meantime if you have any queries please contact John Byrne in the Computing Service: email: jcb1 ext. 3812).

Accessible web pages

Joanne Casey

The Special Educational Needs and Disabilities Act (SEND) places a number of requirements upon Universities: one is that the information provided via University websites should be fully accessible to all users. Some points to consider:

Images: use meaningful `<alt>` tags.

Frames: use the `<noframes>` tag to provide a link to a non-framed page and give each frame a meaningful name to aid navigation.

Font size: use style sheets or relative sizes rather than absolute font sizes so that users may increase the font size on their own browser.

Colour: certain combinations can render a page meaningless to users with colour impaired vision: aim for strong contrasts.

Text alternatives to image-heavy pages can be provided: ensure that the link is at the top of the page and that the text version provides the same level of content.

Multimedia: accessibility kits are now available for packages such as Macromedia Flash: there is no need to stop using multimedia, but provide subtitles for deaf users and speech commentary for blind users.

For more information and sources of advice visit: www.york.ac.uk/coord/docs/whb/access.htm and www.techdis.ac.uk/. Test your webpage using Bobby: www.cast.org/bobby/ - we should all be aiming for compliance with Bobby Level 1 as a minimum.

The Backup System

Doug Moncur

With the advent of the new Windows 2000 system the Computing Service was looking at having around 750Gb of data spinning at any one time.

This is a lot of data to back up at any one time and our existing backup solution was having difficulty coping successfully with having to back up our pre-Windows 2000 filestore of around 450Gb each night.

Furthermore we had the problem of having to maintain two separate backup systems, a legacy solution based on dump for the Unix and Network Appliance machines, and solutions based on Veritas for NT4.0 and the embryonic Windows 2000 service.

Management was not straight forward and would clearly, with the increasing amounts of data, become more difficult.

From around Easter onwards, a Computing Service project team has been looking at purchasing and installing a replacement system which would consolidate all the existing backups into one solution, and which would both allow us to actively manage the backup process, and provide a clear future plan for development.

After extensive discussions with suppliers we selected a solution based around Legato Networker and an Adic Scalar 1000 tape library using LTO Ultrium drives.

The tape library, which weighs around half a tonne, is a robotic system that holds the backup tapes and rotates them with minimal human intervention,

according to the rules set by the Legato software. It has also got to be said that as it weighed around half a tonne its delivery and installation was not quite as straightforward as it should have been but we got there in the end.

The Legato software, which is running on a dedicated Sun E250, allows us to back up all the Computing Service Solaris, Network Appliance, Linux, NT4 and Windows 2000 servers and filestore. It also incorporates facilities by which we can recover dead Solaris servers and restore them to the exact state that they were before failure - known as bare metal restore. It will also allow us to back up Oracle databases without having to freeze the database while it is being backed up.



Legato is a versatile system and it would be possible to add support for other operating systems and databases, if required at a future date. Likewise the Scalar 1000 tape library can be expanded to store up to 188Tb (1 terabyte=1024Gb or 1048576Mb) of data, a figure that should comfortably accommodate the University's

projected growth over the next few years.

Installation of the system took place in mid-September, and after three days of work we were already backing up most of the data held with Legato while continuing to back it up in parallel with our existing solutions.

This is all very interesting, but what does it mean?

Backups, disk storage technology and the like are intrinsically boring, or rather they are, until something goes wrong. The Computing Service holds the majority of the University's critical data, data without which the University would not be able to function, be they an undergraduate's essay, PhD research data, results from long term ground breaking research, or data on the financial well being of the University. The Computing Service has invested a substantial amount of its budget to ensure not only that that data is safe, but that it will continue to be able to maintain the integrity of the data over the coming years.

Furthermore we intend in the future to offer a backup service to departments to back up departmentally owned servers. Such a service will necessarily have to be self financing to cover the costs of providing additional backup capacity and media, but may offer cost savings in reducing the demands on departmental staff in administering their own backups. Anyone interested in discussing this should contact Doug Moncur (**dgm1**) in the first instance.

See the article on page 8 for the tale of the Scalar 1000's arrival and more photos.

Staff News

Mike Jinks

There have been several staffing changes since the previous issue of Keynotes, including two members of staff who have moved to new roles within the Service.

Daniel Shelton has been appointed to the new role of Software Manager with responsibility for our PC applications software, thus assuming responsibility for much of the work previously undertaken by John Robinson. We hope to have someone in post for the consequent vacancy of a Software Technician in October.

David Chambers has been appointed to the Technician post vacated by Michael Woodhead, leaving another vacancy for a Computing Assistant in addition to that created by the departure of Nick Walker. We welcome Aimee Phillips and Phil O'Connell as our new Computing Assistants. Aimee joins us from the City of York Council where she worked on the Helpdesk in the IT Department. Phil joins us from Superbreak where he was involved in IT support and also worked as a reservations advisor. We hope they will both enjoy working with us.



Aimee Phillips



Phil O'Connell



Simon Thompson

Paul Hodgson, another of our Computing Assistants, left during the summer to work for Jarvis, following Nick Walker. We thank Paul for his work with us and wish him well in his new role. We have interviewed for Paul's replacement and hope to have her in post during October.

Chris Reece, one of our Systems Programmers, responsible for the basic Unix infrastructure, leaves in October to go to Helsinki. Chris has played a major role in maintaining our infrastructure and developing the LDAP service which will permit customisation of access and interfaces. We will miss his knowledge and experience but wish him well as he develops his career in Scandinavia.

We are pleased that Simon Thompson has joined us to take over Chris Reece's role. Simon has recently graduated from the Computer Science Department so is no stranger to York. We trust he will have a stimulating time with us.

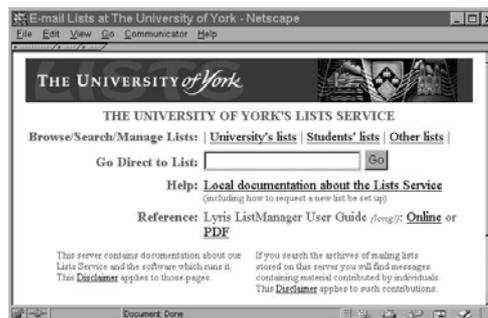
Finally, the Computing Service sees two weddings this Autumn. We pass our congratulations and best wishes to Chris Kilgour who married Anna on 15 September, and to Linda Hearn (soon to be Bailey) whose wedding to James takes place on 20 October.

The Lists Service

Mike Brudenell

Over the Summer the Computing Service purchased and installed a copy of the Lyris ListManager software package. This forms the heart of the new Lists Service: a system offering proper ownership and management of e-mail lists. This new service is very powerful and flexible enabling the owner of the list, to manage its membership and operation.

Departments and research groups amongst others are likely to find mailing lists of great value in communicating with their members, either with one-way "announcement lists", or two-way "discussion lists". You can learn more about mailing lists and the Lists Service in detailed articles in the May and June editions of Keynotes. To browse the available lists, or to apply for one yourself, please visit the Lists Service web site: lists.york.ac.uk/.



If you already own one or more old-style lists with addresses of the form "listname@york.ac.uk" you will need to migrate them to the Lists Service. You can request a replacement list using the application form on the Lists Service web site. The Computing Service can then copy over the membership of your current list to the new one.

Delivering the Scalar 1000

Joanne Casey

The arrival of the Scalar 1000 backup system was in itself a challenge. It transpired that the delivering lorry had a tail lift wider than the gap in the loading bay's safety rail. The backup plan to take it off the truck and up the ramp on a pallet truck failed as the American pallet would only go widthways onto the European pallet trolley and the ramp was not quite as wide as the Scalar 1000. Some lateral thinking later, we were able to 'borrow' a forklift and driver from the nearby building site and one very large and expensive piece of kit was deposited, with a combination of frightening speed and incredible delicacy, onto the deck of the loading bay.



Development Plan - 2001/2

Mike Jinks

The major development activities of the service for 2001/2 include:

- continuing YIMS implementation and development
- development of web-based access to internal information
- roll-out of the Windows 2000 Service
- improvements in performance and resilience of the infrastructure
- provision of networked services to student study bedrooms

The YIMS activities are overseen by the YIMS Steering Group, with the Computing Service playing a major technical and implementation role. The first new systems: Personnel and Payroll and Time and Attendance, will be implemented during the year and the tendering process for the new Finance system will be undertaken. This involves a major effort from the Service, not only from the MIS Group who are intimately involved in all phases of the work, but also with the Infrastructure Group who need to integrate the new systems into the existing technical infrastructure. The new systems will underpin enhancements to the efficiency and effectiveness of many of the University's business processes and facilitate access to information.

The University is making additional investments in its web presence by appointing a full-time Web Manager and enabling the Web Co-ordinator to work full-time on web-related activities. An institution's web presence is crucial in promoting its ethos and achievements externally, and has many applications for increasing the availability of internal information. The Service provides a technical infrastructure, recently enhanced with LDAP, as well as developing particular applications; there should be considerable developments in this area in the coming year.

The long-awaited Windows 2000 service will be rolled-out during the year. This has been a long time in gestation, due to the major technical problems in making the Microsoft-centric systems harmonise with the more varied and distributed systems necessary in a major research environment. Two new general access areas for students, in Alcuin and Halifax Court, were scheduled to be available this year, but the general financial constraints in the

University have precluded these being available for the start of the Autumn Term. In particular, it will not be possible to purchase all the PCs to fill both rooms, but we intend making some PCs available at each location and will add others later in the year, if funds permit. The Windows 2000 system for staff will give greater freedom to departments to customise systems, including regulating the availability of software, to local requirements. This will be accompanied by changes to the charging regime for the software bundle, to allow charges to reflect more accurately the access to specific application; the charging regime will be reviewed by the University during the Autumn Term as part of the scheduled review of core and non-core services.

The infrastructure has been enhanced by upgrades to the network, the firewall and the mail server. In addition, a major new back-up and storage system is being commissioned to manage the increasingly large amount of information which we need to back up. As the quantity of data had grown, the previous system had reached the stage where it was only just possible to back up the data overnight so that backup of additional information would not have been possible. In addition to providing much faster backup, the new system keeps track of the backup media and has a lot of expansion capability built in. Given this expansion capability and the high speed campus network, it may be possible later in the year to offer departments central backup of data held on departmental systems by automated backups across the network.

Provision of network services to student study bedrooms is also an objective for the coming year, with the intention of providing a choice of services to at least some of the students entering in 2002/3. Experience elsewhere indicates that this is best undertaken in partnership with an external provider, often one also providing telephony services. It is likely that the University will tender for supply of such services: the Computing Service and the Directorate of Facilities Management will both be involved in the tendering process.

The set of developments for the year are challenging, and it is inevitable that additional activities which cannot be predicted at this stage will need also to be undertaken, as well as maintaining our normal operational services. We'll continue to provide information in Keynotes about the progress of developments and new or enhanced services as they arise.

Contacting the Computing Service

Computing Service
University of York
Heslington
YORK YO10 5DD

Telephone: (01904) 433800
Direct dial: (01904) 43 followed by ext no.
Fax: (01904) 433740
Email: *username@york.ac.uk*

www.york.ac.uk/services/cserv/

Information Desk

The Information Desk is your first point of contact with the Computing Service:

Telephone: ext 3838

Email: *infodesk*

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

Computing Service Staff

| | | | |
|-----------------------------|------------------|------|--------------|
| Director: | Mike Jinks | 3801 | <i>kmj1</i> |
| Departmental Secretary: | Lorraine Moor | 3801 | <i>lsm1</i> |
| Head of Infrastructure: | Robert Demaine | 3808 | <i>rld1</i> |
| Head of User Services: | John Illingworth | 3803 | <i>jjj1</i> |
| Head of MIS: | Kay Mills-Hicks | 2101 | <i>kmh8</i> |
| Head of Technical Services: | Doug Moncur | 3815 | <i>dgm1</i> |
| Head of Systems: | Andrew Smith | 3809 | <i>abs4</i> |
| Operations Manager: | Brian Souter | 3814 | <i>bs1</i> |
| Head of Networking: | John Mason | 3813 | <i>jrm13</i> |
| Information Officer: | Joanne Casey | 3805 | <i>jmc8</i> |

| | | | | | |
|-----------------|------|--------------|-------------------|------|--------------|
| Sue Bolton | 2102 | <i>sjb28</i> | Sue Hodges | 3839 | <i>sh32</i> |
| Mike Brudenell | 3811 | <i>pmb1</i> | Geoff Houlton | 2100 | <i>gph2</i> |
| Lisa Burkinshaw | 3818 | <i>ljb4</i> | Jenny Jackson | 4455 | <i>jj5</i> |
| John Byrne | 3812 | <i>jcb1</i> | Chris Kilgour | 4454 | <i>crhk1</i> |
| David Chambers | 3742 | <i>dac6</i> | John Marsden | 3832 | <i>jpm1</i> |
| Michael Clark | 3745 | <i>mpc3</i> | Darren Munday | 3821 | <i>dam6</i> |
| Arthur Clune | 3129 | <i>ajc22</i> | Nicola Normandale | 4695 | <i>ncn1</i> |
| Paul Conacher | 4346 | <i>pac1</i> | Phil O'Connell | 3825 | <i>paoc1</i> |
| Steve Downes | 3741 | <i>sd21</i> | Aimee Phillips | 3897 | <i>amp11</i> |
| Ken Finch | 4452 | <i>kf1</i> | Colin Rea | 3817 | <i>cr9</i> |
| Rob Fletcher | 3816 | <i>rpf1</i> | Sam Scott | 3817 | <i>svs2</i> |
| Kevin Gardner | 3739 | <i>pkg4</i> | Daniel Shelton | 4349 | <i>ds23</i> |
| Chris Gowland | 3823 | <i>cgl</i> | Simon Thompson | 3894 | <i>sjt8</i> |
| Sarah Hall | 3827 | <i>seh11</i> | Pete Turnbull | 3804 | <i>ptn1</i> |
| Peter Halls | 3806 | <i>pjh1</i> | Sam Vines | 3749 | <i>sccv1</i> |
| Linda Hearn | 3800 | <i>lch8</i> | Timothy Willson | 2123 | <i>ftmw1</i> |