

THE UNIVERSITY *of York*  
Computing Service

# Keynotes

Volume 30 Number 1 October 2003

## When worms attack...



## Countering security threats

*Also in this Issue:*

**Withdrawal of Windows 95**

**Classroom upgrades**

**Software updates**

**Filestore changes**

**YIMS news**

**From the Editor**

I'm pleased to present a bumper issue to start the new term. The Computing Service has been busy over the summer vacation: within these pages you can find news of classroom upgrades, new and updated software, changes to the mail service, including the launch of webmail, and the expansion of the Student Network Service.



Many of you will be aware that the University network was one of many to be attacked by the Blaster and Sobig-F worms over the summer. Fortunately, we suffered far less disruption than many universities. On pages 4 - 5, Robert Demaine and Arthur Clune detail the impact of the attacks, the University's response, and future security plans.



YIMS systems continue to progress, with the launch of the new University student record system (8 - 9), the introduction of a new student enquiry screen (10) and the YIMS Online Support Centre (9), and the provision of WebIntelligence to facilitate the creation of management information reports (11).



Joanne Casey

**Contents**

**News in Brief**

Ilid for University	1
Accessing the HYMS system	1
Windows 2000 Service Pack 4	1
Staff news	1

**News**

PC room upgrades	2
Withdrawal of Supported Windows 95 Service	2
Expansion of the Student Network Service	3
People database and Identity service	3
Mail news	6 - 7
World's biggest coffee morning?	10
Filestore changes - your questions answered	12
YorkWeb news	13
Improved access to electronic journals	15
Changes to Library resources	16

**YIMS**

Student records update	8 - 9
The YIMS Online Support Centre	9
The new Student Enquiry Screen	10
WebIntelligence for YIMS systems	11

**Software**

Windows 2000 software changes	14
Adobe Acrobat 6.0 Professional	15
Keeping software up-to-date	15

**Feature article**

<i>August is the cruellest month</i>	4 - 5
Robert Demaine and Arthur Clune address security issues	

**Keynotes on the web**

Back copies of Keynotes can be found at:  
[www.york.ac.uk/services/csersv/offdocs/keynotes/](http://www.york.ac.uk/services/csersv/offdocs/keynotes/)

## Iliad for University

### Susanne Hodges

For the first time since its inception in 1995, the Iliad for University programme is changing. Whilst still having the option of taking the programme en bloc, students will now be able to pick and choose which unit(s) they wish to take. Each unit will carry a certificate detailing the skills learned. Three units will be added to the programme – Using Spreadsheets, Further Spreadsheets and Further Word Processing for Academic Purposes. Unlike past years, students will now be able to take most units in the Spring and Summer Terms too.

It is hoped that these changes will meet more adequately the information literacy needs of new students arriving at York.

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## Accessing the HYMS System

### Sam Vines

For the past year, extensive work has been undertaken to provide registered users of the Hull York Medical School (HYMS) with a desktop accessible from anywhere in the world. The ultimate goal is still under development but we are pleased to announce that the HYMS desktop is now accessible from all supported Windows 2000 connections here at the University of York. This utilises Microsoft's Terminal Services, which is available to all supported Windows 2000 connections.

From classroom machines, HYMS users can select **Start | Programs | Teaching | HYMS** and then **HYMS** to launch the Terminal Services client.

From office machines, both **Terminal Services Client** and the **HYMS Shortcut** from Add/Remove Programs need to be installed to create the **Start | Programs | Teaching | HYMS | HYMS** link.

Having followed the **HYMS** link, HYMS users are required to log in to gain access to the HYMS desktop, using their HYMS username and password. HYMS users must ensure they log off from both desktops when they have finished their session.

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## Windows 2000 Service Pack 4

### Andrew Smith

In order to keep Windows 2000 desktop PCs up-to-date with the latest bug and security fixes, all office PCs will be upgraded to use Windows 2000 Service Pack 4. SP4 will be advertised via SMS to all supported PCs on the 15th October and compulsory installation will take place after 31st October.

The installation will be automatic but the user will be prompted to reboot their PC afterwards. The installation process will be the same as with Service Pack 3. A more detail description of the installation process can be found in Keynotes Volume 29 Number 3, January 2003.

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## Staff news

### Mike Jinks

Simon Thompson has moved to Birmingham where he will be working in the Computer Science department. Simon had been with us for two years and was responsible for the management of many of our infrastructure systems. He arrived at the start of a period of major change and quickly got to grips with the complexities of a large networked environment, making significant contributions to our operations and planning. Chris Reece who focussed on the administrative systems infrastructure whilst providing back-up for Simon, has moved more into Simon's role and we have advertised for a replacement focussed on Chris's previous role.

Paul Atherton joined us a year ago on a fixed-term, YIMS-funded post associated with the new administrative systems. Paul has left to pursue a Master's degree at Leeds.

We wish Simon and Paul every success in their careers.

Susanne Hodges of Computing Service and Gareth Johnson of University Library are the authors of an article entitled 'One size fits all? The Iliad Experience', in Information and IT Literacy: enabling learning in the 21st century, edited by Allan Martin and Hannelore Rader, published by Facet Publishing. The article is based on a paper presented by the authors at the Glasgow University IT and ILit2002 Conference.

## PC room upgrades

*Brian Souter*

As outlined in the June issue of Keynotes, rooms K/120, V/058 and W/202 have been refurbished and upgraded over the summer. All have been decorated, carpeted and fitted out with new desks and chairs, as well as having CCTV, air conditioning and projection equipment fitted where required and appropriate - there is some delay in installing air conditioning in K/120 because of the listed status of the building.



*The King's Manor classroom*

Each room has been equipped with the latest Viglen PCs running Windows 2000, thus bringing to an end the classroom Windows 95 access at York. All the new PCs have Pentium 4 2.4GHz processors, 512MB of memory, 40GB hard drives, internal 250MB Zip drives and front-facing USB2 ports.

In summary:

- K/120 is set up as a bookable classroom with 17 PCs plus one PC for the lecturer, projection equipment, and a printer
- V/058 is designed for use as a general access study room with 24 PCs and a printer
- W/202 is a graduate study room with 28 PCs, 4 network access sockets ([www.nas.york.ac.uk](http://www.nas.york.ac.uk)) and a printer.

Every effort was made to minimise disruption during the upgrades, particularly to the Masters students completing their dissertations in Kings Manor. Thanks should go to members of the Estates Department, Computing Service technicians and portering staff for helping to provide temporary facilities and to re-open these rooms on schedule.

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## Withdrawal of Supported Windows 95 Service - Summer 2004

*Mike Jinks*

The supported Windows 2000 service has been in operation for two years. During this period, Microsoft have withdrawn support for the eight year old Windows 95 operating system, and most software upgrades do not cater for Windows 95, leading to incompatibilities between output produced under Windows 2000 and Windows 95. The Computing Service stopped installing new items and upgrades to existing software a year ago and the remaining centrally managed Windows 95 classrooms and study centres have been upgraded to Windows 2000 in readiness for the new academic year.

Computing Committee and Information Committee have thus considered the longer-term implications for continued central support of the Windows 95 service. Following consultations with departments, via the Departmental Computing Officers, on departmental plans for migration to Windows 2000, Computing Committee recommended that the supported Windows 95 service should cease at the end of the 2003/4 academic year: this was agreed by Information Committee. There will have been a three year period of running Windows 95 and Windows 2000 in parallel as there was with Windows 3.1 and Windows 95. Any PCs which haven't been replaced or converted to run Windows 2000 will need to operate as 'unsupported' PCs with the individual or department taking responsibility for management of the system.

The date for discontinuation will be fixed later in the year, but is likely to be towards the end of the summer vacation.

## Expansion of the Student Network Service

*Matt Holmes*

After a successful pilot year the Student Network Service has now been expanded to cover nearly 2500 study bedrooms. Areas included in the service are Wentworth College, James College, Alcuin College, Halifax College (including Edens Court and St Lawrence Court), Derwent blocks E-F and Langwith Blocks E-F.

The SNS will be going live on the 6 October and the cost of subscription is £60 for the entire academic year; this equates to approximately £2 for each week of term-time. For the first three weeks of term, a pay point will be in place in the foyer of the JB Morrell Library, thereafter payment can be made at the Computing Service Information Desk.

The network access provides students with high-speed access to certain York University services. These include:

- **Web:** users can view campus web pages and, through the web cache, external web sites.
- **Email:** users can access their university email as well as any POP3/IMAP accounts they have elsewhere. Web-mail systems may also be accessed using the web cache.
- **Ftp:** the web cache also provides access to external ftp sites.
- **Usenet News:** the York University news server can be accessed through the service.
- **SSH/telnet:** SSH and telnet access is allowed to machines on campus, and gateway machines will allow indirect access to off-campus SSH/telnet servers.

More information on the service, equipment requirements and registration procedures can be found at [www.sns.york.ac.uk](http://www.sns.york.ac.uk).

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## People database and Identity service

*John Byrne*

The Computing Service is currently upgrading its systems and procedures for managing user resources such as PC and UNIX login accounts, printing, mail accounts, web services, and so on. As part of the upgrade it is setting up a central database, called the People Database, containing information about all staff, students and associates of the University. The database will include names and basic contact details, each person's affiliation with the University (eg lecturer in Chemistry, third year undergraduate in History), and their various job roles (eg Chair of Board, Committee member, etc). It will be frequently updated from sources including the Personnel system, the Student Records system, and the Associates Database. Additional feeds will be used to manage job roles. The database will also store information which will allow applications to detect new people and changes to existing people, for example a graduate who becomes a member of staff.

It is intended that the database will be made available to other service providers within the University via a set of standard interfaces. In addition, there will be an LDAP-based Identity service which will allow other service providers to authenticate users and determine roles for their own access control and resource management purposes.

Both the People database and the Identity service represent a data layer which can be used to support Intranet activities such as resource allocation, access control, and targeting, and to provide a single point of access for applications which need to support a wide range of University users. The system is also designed to be extensible to accommodate specific needs of service providers and to adapt to future requirements.

The system is expected to be operational in the second quarter of 2004, and further details will be published as the project proceeds. In the meantime if you have any queries, please contact John Byrne ([jcb1@york.ac.uk](mailto:jcb1@york.ac.uk)) in the Computing Service.

# August is the cruellest month

*Robert Demaine and Arthur Clune*

August 2003 witnessed the appearance of two major threats to the integrity of IT systems worldwide: the Blaster and Sobig-F worms. Either one alone was capable of inflicting serious damage on a corporate network; their near simultaneous appearance meant a war on two fronts for support staff.

The Blaster worm (and its close relative Nachi) exploited a long-standing vulnerability in the Windows 2000 and XP operating systems. Blaster scans addresses in the Internet to locate vulnerable machines. Once found, it will copy itself over and modify the target system so it will be executed every time the machine is started. Unsuccessful propagation attempts may also crash systems, or render them unstable.

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***“Either one alone was capable of inflicting serious damage on a corporate network... Air Canada had to cancel flights... the US Visa service was taken offline by Blaster”***

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Sobig is propagated by email, forging an apparently legitimate sender address, and fooling the user into opening an infected attachment. Once Sobig has infected your machine, it attempts to connect to a website to download further malicious code, leaving your computer vulnerable to security breaches. It then uses its own SMTP client to mail copies of itself to addresses culled from the victim’s hard disk.<sup>1</sup>

## Scale and impact

Blaster is believed to have infected at least 500,000 systems in the first week after its release on 11 August, while AOL alone detected over 23 million copies of Sobig-F passing through its mail servers in a single day. Corporate networks across the world suffered various levels of disruption – the mail system at MIT was badly affected, while Air Canada had to cancel flights due to an unusable booking system. The US Visa service was also taken offline by Blaster (see [edition.cnn.com/2003/TECH/internet/09/24/state.dept.virus/](http://edition.cnn.com/2003/TECH/internet/09/24/state.dept.virus/))

At York, we believe that the Sobig first entered campus via email, while Blaster/Welchia were brought onto campus by an infected laptop being placed on the network. Of the 4,000 systems managed by the Computing Service, some thirty were affected, twenty of these being brand-new machines infected during a twenty second window of vulnerability as they were being built. Of 5,000 departmental systems on campus, between 200 and 300 simultaneous infections were detected at the start of the outbreak. We estimate total infections of unsupported systems in August to be in excess of 600, mainly in the two weeks starting on the 11 August.

Fortunately, existing measures which block outbound SMTP and ICMP traffic to all except a small number of special cases meant that the University of York did not contribute to denial of service attacks or mail floods against other sites on the Internet.

## The University Response

Members of the Computing Service Networking and Systems Groups co-ordinated the response to the twin threat of Blaster and Sobig, detecting infected systems using intrusion-detection and other tools, and acting on information supplied by Departmental Computing Officers. Compromised systems were either physically disconnected from the network or had their network access blocked at router level. DCOs and other technical staff in departments undertook the task of disinfection, advising the Service when it had been completed. While this caused disruption for individuals while their computer was taken off the network, it restricted the scale of the infection to the smallest possible number of machines (in the same way that people with infectious diseases are placed in isolation wards) giving the breathing space necessary to control the outbreak.

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<sup>1</sup> For those interested in the full technical detail, descriptions of both can be found on the Sophos web site. See: [www.sophos.com/virusinfo/analyses/](http://www.sophos.com/virusinfo/analyses/).

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Then, just as we thought we had the problem under control, over the weekend of 30/31 August the central mail service was crippled by a massive influx of virus-infected messages amounting to a full-blown denial of service attack. Some 19,000 messages, of which over 80% were infected, were left queued on the servers and had to be processed and removed during Monday. During the clean-up procedure, which took around seven hours, inbound mail from outside the campus had to be blocked. However, users could still send mail out and local delivery on campus was not affected.

Plans to implement anti-virus measures on the central mail service scheduled for October were quickly brought forward. A new mail gateway with anti-virus checking was built and configured within a week, but sadly the date set for its deployment, Monday 1 September, came just too late to stem the tide of virus-laden traffic unleashed on the University during the preceding weekend.

On Tuesday 2 September, the first full day of operation of the new gateway, traffic levels were as follows:

Total messages:	65,809
Including externally originated:	57,447
Of which:	
Number of messages blocked by existing anti-spam measures:	14,168
Number of messages blocked by anti-virus measures:	10,636 [10,550 Sobig-F]
Total messages blocked:	24,804

Hence 43% of inbound mail to york.ac.uk was either spam or virus-infected.

Continuing high volumes of virus-infected mail placed a serious load on the gateway, slowing mail delivery times during the working day. A further gateway was added on 4 September which has improved matters considerably.

## Future plans

Orders have been placed for new, more powerful hardware which should provide sufficient capacity to undertake both anti-virus checking and future additional anti-spam measures without unduly compromising delivery times. While it should be noted that no system can be guaranteed to survive a major denial of service attack totally unscathed, we hope that the installation of a pair of internal-only mail servers will ensure that email within campus will continue to function regardless of external attack.

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***"...we survived this particular attack well, and with far less disruption than many other businesses and universities"***

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The problem of stopping viruses getting onto campus through other routes is much harder – laptops used both at home and on the University network are a particular source of infection. We ask everyone running a laptop to ensure that it is kept fully up to date with both patches (visit [windowsupdate.microsoft.com](http://windowsupdate.microsoft.com)) and virus scanning (see [www.york.ac.uk/services/cserv/sw/sophos/sophos\\_antivirus.htm](http://www.york.ac.uk/services/cserv/sw/sophos/sophos_antivirus.htm)).

As a University we survived this particular attack well, and with far less disruption than many other businesses and universities. The close co-operation of Departmental Computing Officers and the Computing Service, and hard work on all sides, kept things under control. We need to ensure that we do not get complacent however, as the vital importance of patching machines and keeping virus protection up to date has been demonstrated yet again.

## Mail news

*Mike Brudenell*

### Virus scanning introduced

Over the Summer the University saw a massive influx of e-mails generated by and containing the “Sobig-F” virus. In response to this the Computing Service brought forward work to implement virus-scanning of all messages going to, and passing through, the central mail server (see article on pages 6-7).

Currently this service is running on a pair of redeployed machines. However a number of new servers have been delivered and the mail gateway service will gradually be moved onto them. There should be little or no visible effect to people using e-mail as this happens. The new servers should have plenty of spare capacity to enable us to introduce spam-tagging software in due course.

### IMAP access to your mail when away from campus

To date the only supported way for people to access their University mail when away from campus has been to use an IMAP-aware mail reading program, such as Outlook Express or Netscape Messenger. By configuring these to link the University’s mail service it is then possible to read the messages residing in your centrally stored folders. A guide to help you configure such programs can be found on YorkWeb, at: [www.york.ac.uk/services/cserv/docs/guides.yrk/eguide/eguide.htm](http://www.york.ac.uk/services/cserv/docs/guides.yrk/eguide/eguide.htm)

This method continues to be offered and supported, and may well be best for someone regularly working on their own machine elsewhere: for example, a personal computer at home. But now there is an alternative...

### Introducing webmail

Over the Summer the Computing Service has set up a webmail service as an alternative means for accessing University mail when away from campus.

The new service can be used with virtually any web browser and requires few special facilities to be supported. In particular it doesn’t use JavaScript, and doesn’t even need cookies to be enabled.

After logging in to the webmail service’s home page using your usual username and password issued by the Computing Service you are presented with a welcome page showing some useful hints about the service. From there you can then browse through your folders and read, reply to, re-file or delete your messages and, of course, compose new ones.

The system is straightforward to use and quite intuitive, featuring context-sensitive Help buttons.

To use the webmail service simply point your browser at this URL: **<https://webmail.york.ac.uk/>**

Note that this begins with “https:” rather than “http:”, signifying that your session is encrypted using a Secure HTTP connection.

If you forget and use the standard prefix you will still be able to use the webmail service, although without the benefit of a secure connection. (You will also see a reminder message on the initial page offering a link to the secure version.)

As explained above, at this stage the webmail service is primarily for use by people when away from campus: this initial service is not scaled for widespread use on-site.

However we recognise that some people may usually work away from the University and so frequently use webmail, only occasionally coming on-site. In such cases they are welcome to use the webmail service during their occasional visits to campus.

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## **Downgrading in status of Pine**

From the earliest days of its UNIX mainframe service the Computing Service has provided and supported a mail reading program called “Pine”. This has been available on the central mainframes — TOWER and EBOR - as well as the SGI workstations such as those in the D/104 classroom.

Given the declining use of our UNIX systems it is no longer practicable to support Pine, and our intention had been to withdraw it completely.

Fortunately we have been able to obtain a pre-compiled copy of the latest version of Pine suitable for use on TOWER and EBOR. We therefore intend, at least for the time being, to continue providing Pine; however this will now be on an unsupported basis.

To reflect this change in status the Pine program will be moved to the area containing unsupported programs: **/usr/local/pub/pine**. This means anyone still wishing to use it will need to type in the full path name, rather than just “pine”.

The new version contains changes and new features compared to the old version we have been running. People wishing to continue using Pine will need to experiment and read its built-in help pages to familiarise themselves with the new version.

## **Withdrawal of MAILER**

Some years ago the Computing Service started providing a machine called MAILER for people in classrooms equipped with terminals to quickly access the mail, whilst lightening the load on the main program development machines (TOWER and EBOR). Instead of being a general purpose machine MAILER was locked down to running only Pine.

In time the terminals were phased out and replaced with PCs running Windows 3.1, and MAILER was again pressed into use as the “Quick Mail Reading” option on the login menu of PCs in Computing Service classrooms.

These too have now been replaced, with PCs running Windows 2000. Because of this, and changes in patterns of use, there is no longer need for a dedicated mail reading machine and the time has come for MAILER to be withdrawn from service.

Therefore at the end of October 2003 MAILER will be removed from service.

If you are...

...away from campus and wish to access your University mail please use the new webmail service instead, as described above.

...on campus and can do so, please use an IMAP-aware mail client on the PC or workstation you have to date used to connect to MAILER. Many such programs are available, such as Outlook Express or Netscape Messenger, and are available for a wide range of platforms. If you do not already have such a program installed you should be able to find and install one with little difficulty.

...on campus and really, truly find it impossible to use another IMAP-aware mail client then you could consider registering for access to TOWER at the Electronic InfoDesk and then using Pine as described above. (However please note that a desire to use Pine on TOWER will not be considered a sufficient reason to be granted access to TOWER from off-site; you should instead use the webmail service.)

# Student records update

*Kay Mills-Hicks*

## Student records update

During September 2003, the new University student record system was launched. The new system, called SITS, provides the basis from which we will develop and enhance all University student information systems in the next few years. As part of the launch of SITS, Computing Service has developed a new version of the web-based Student Enquiry Screen (see page 10) and a new student data warehouse. This update summarises where we are now and the plans for the ongoing development of SITS over the next year or so.

## Student data

The records for all students that were held on the MAC system have been transferred to SITS without any loss of detail. This means that all student data from 1992 onwards is available in SITS. For electronic information about students who completed their studies prior to 1992 the Student Records Office in the Registrar's department may be able to help.

## Applicant data

At the present time, the SITS database only holds data about current students. Data about applicants is still held within the MAC system and in the 'original' data warehouse. During the 2003/04 academic year, the YIMS Student Records Project team will be configuring and implementing the SITS Admissions module with the aim of using SITS for the undergraduate and graduate admissions cycles starting in October 2004.

## How do I get help and support for SITS?

The Computing Service has developed a YIMS Online Support Centre that is intended to become the main source of help and support information for users of SITS and any of the other YIMS information systems. Please refer to the article in this edition of Keynotes by Nicola Normandale for more details.

The YIMS Online Support Centre (see page 9) can be reached from the new YorkWeb pages for staff. There is a link from the Interactive YorkWeb page.

## System availability - SITS

The SITS system is available to authorised users throughout the week, including weekends. Back-ups are taken every weekday night between 10pm and 3am. During the back-up the system is unavailable.

To keep the SITS software up-to-date with the latest version provided by the supplier, there will be a weekly "at-risk" period on Monday mornings when the system may be unavailable until 09:30am. If the system is to be unavailable at this time, notices will be placed on the message screens within the SITS software at least 5 working days in advance.

Major upgrades will be applied to the SITS database twice per year. These events will be scheduled and advertised several weeks in advance. The down-time occurring with each upgrade will vary depending on the scale of the upgrade and more details will be supplied at the time.

Planned system unavailability will be advertised on York Extra in the Announcements channel, the DCO's mailing list, the YIMS Online Support Centre and on the message screens within the SITS software.

Messages relating to unplanned system unavailability, which will hopefully be very rare, will be posted on York Extra Announcements channel, the YIMS Online Support Centre and on the DCO's mailing list.

## System availability - SITS data warehouse and student enquiry screen

The SITS data warehouse is rebuilt at the end of each working day meaning that the data held within it is one day behind the data held in SITS.

The rebuild process is scheduled to complete by 7am. The data warehouse is available continuously throughout the week, including the weekend, except for approximately 5 minutes around the time that the new data becomes available at 7am.

The Student Enquiry Screen draws its data from the data warehouse, consequently the availability of this system is the same as that for the data warehouse.

Messages relating to system availability will be posted on the usual channels: YorkExtra, YIMS Online Support Centre and the DCO's mailing list.

# The YIMS Online Support Centre

**Nicola Normandale**

*continued from page 8*

## Training

The Student Records Office run a program of scheduled training courses for staff covering SITS and the new SITS data warehouse. Details of these courses and the current schedule are available in the YIMS Online Support Centre. Please note that full details of these courses will not be advertised in the Computing Service training information or Keynotes in future. Copies of all training materials are available for download from the YIMS Online Support Centre.

A copy of the SITS database (known as the “sand-pit” through the implementation project) will be available on a permanent basis to support the ongoing learning process for SITS users.

## Reporting problems

A form is available in the YIMS Support Centre to report any problems with SITS, the data warehouse or the Student Enquiry Screen. Completion of this form creates an entry in the Enquiry Tracking System which is then processed by the Student Records Office.

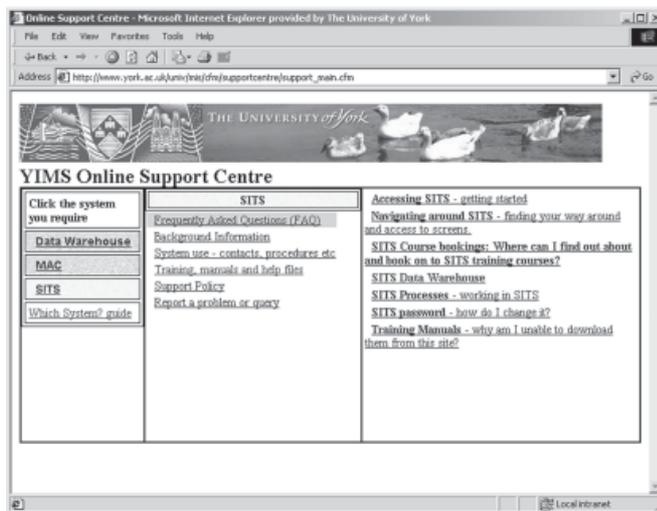
## Upgrades

As mentioned earlier in this article, software patches will be applied to the SITS system on a regular basis and there will be a weekly “at risk” period on Monday mornings until 09:30am. The next major database upgrade is scheduled for February 2004 – more details will be available from January 2004.

## Future plans

The YIMS Student Records Project Team is currently formulating its plans for the next phase of the project. These will include the implementation of the Admissions module, implementation of enhanced web-based facilities that will enable students to view and update specific information, import of module marks, modules to support examination and teaching timetable production. The Project Team will be continuing to publicise its work through ongoing departmental briefings, notices on York Extra and the YIMS Online Support Centre.

The YIMS Online Support Centre at [www.york.ac.uk/univ/mis/cfm/supportcentre/support\\_main.cfm](http://www.york.ac.uk/univ/mis/cfm/supportcentre/support_main.cfm) is a web page designed to be a one-stop shop for people requiring help and support for central information systems. Users of the SITS student records system, for example, can access a variety of ‘Frequently asked questions’ pages, details of training courses and how to book and course notes in pdf format. If they cannot find the information they require, the ‘Report a problem or query’ link allows them to enter details of the query, which is then sent directly to the SITS support team.



Previously, finding help and support for central University information systems could be quite complex. By their nature, information systems contain large amounts of data, which is the responsibility of an administrative department such as Student Records or Finance. Problems with the actual programs are the responsibility of the Computing Service. It could be quite difficult to know which department to contact or which web pages to view, and advice could often be yet another person to contact.

Therefore, the Support Centre addresses these problems. The advice on the support centre is maintained by both the administrative department and the Computing Service. Any queries raised through the ‘Report a problem’ link will be passed to the correct area without any further intervention from the person raising the query.

Currently, the Support Centre provides help on the SITS system, MAC and the Data Warehouse. This will expand as new YIMS systems are launched.

The YIMS Online Support Centre can be reached from the new YorkWeb pages for staff. There is a link from the Interactive YorkWeb page.

# The new Student Enquiry Screen

*Paul Atherton*

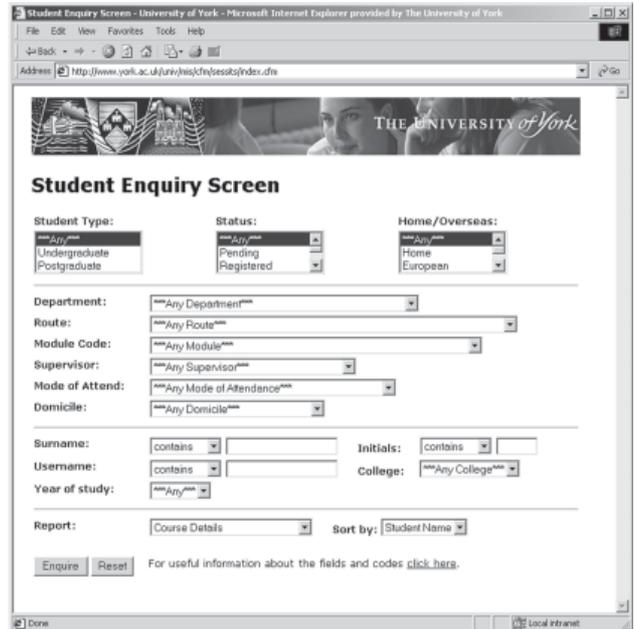
This September saw the arrival of the new student records system – SITS. With the new system came a need to update the existing student enquiry screen application that had been developed by Computing Service.

The original screen allowed registered users to search for students based on a variety of characteristics. The students matching the user’s search conditions could then be e-mailed as a group or individual student details could be viewed in more depth.

Whilst the new screen (right) maintains this existing functionality, several enhancements have been made – for example, the ability to produce CSV file lists of students, the incorporation of SITS terminology and the University’s “visual identity” for the web.

The new screen went live on September 19th and is now available online at:

**[www.york.ac.uk/univ/mis/cfm/sessits/index.cfm](http://www.york.ac.uk/univ/mis/cfm/sessits/index.cfm)**



# World’s biggest coffee morning?

*Joanne Casey*

On Friday 26 September, the Business Systems Group took time off from managing YIMS, writing Keynotes articles, and the like, to play their part in **The World’s Biggest Coffee Morning** in aid of Macmillan Cancer Relief: **[www.macmillan.org.uk/coffee/](http://www.macmillan.org.uk/coffee/)**.

They served tea, coffee, and an impressive range of home-made biscuits and cakes, to members of the Computing Service and the YIMS and Oracle projects. Those attending were asked to make a donation, and were also invited to take part in a number of competitions. The event raised over £250.



*Timothy Willson serves Pete Turnbull*



*More cake than the Computing Service could manage!*



*Members of BSG puzzle over a pudding quiz*

# Keynotes

# WebIntelligence for YIMS systems

*Suran Perera*

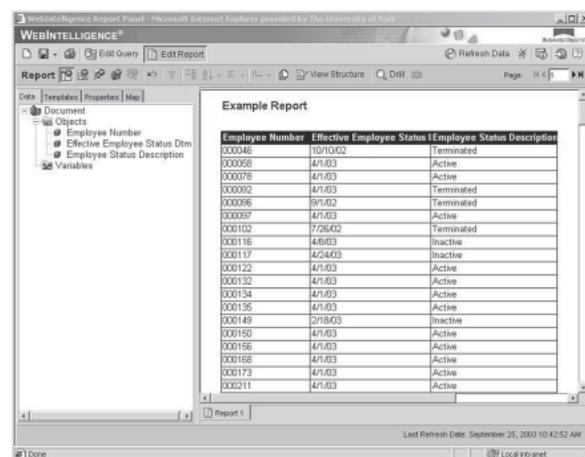
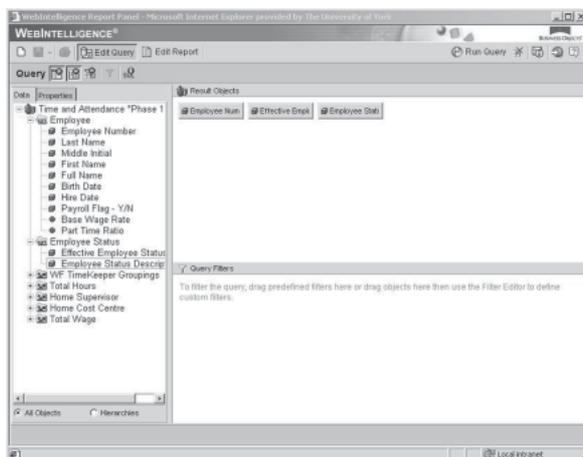
A new reporting tool, **WebIntelligence** from Business Objects Ltd, has been introduced for the YIMS Systems.

This tool will provide a web-based system for users to write and publish management information reports using their web browser, without the need for specialist software to be installed on their PC. The system is being used with the Time and Attendance System initially, but future plans include reporting from the PAMS accommodation system, the SITS student record system etc.

Before YIMS, most of the data warehousing reporting was done using Paradox. Several years ago, Cognos Impromptu was purchased for a similar purpose. User take-up was low due to the time taken to generate reports. With the introduction of the YIMS systems, the opportunity arose to review our approach to reporting, and consider using a single reporting tool across the range of YIMS systems.

Business Objects was selected following a formal tendering exercise that included bids from the leading suppliers in this sector. Business Objects offered the best combination of functionality, fit with our strategy for web-based systems and value for money.

WebIntelligence includes two software products; **InfoView** for viewing reports and **Reporter** for designing and publishing reports. Another Business Objects product, **Designer**, has been used to take database structures and other information held, and then express it in familiar terms and groupings for a department, as in the case below for Time and Attendance.



Writing reports is a simple process where predefined items can be dragged and dropped to define what information is displayed and what conditions are made. A simple query is shown below left, and the results below right.

Reports can be displayed in a number of formats including PDF and HTML. PDF format reports are displayed using an Adobe plug-in that provides useful Acrobat Reader functions such as navigation and wider printing options than are available within standard HTML reports.

For further information on the project, drop me a mail on: [sjp25@york.ac.uk](mailto:sjp25@york.ac.uk).

For further Business Objects information: [www.businessobjects.com/](http://www.businessobjects.com/).

## Filestore changes – your questions answered

**Andrew Smith**

USER: I've noticed you have been messing about with the filestore whilst I've been away.

CSERV: Yes, we have - it's been upgraded and consolidated.

USER: You what?

CSERV: We've migrated the three Network Appliance filers and two Windows 2000 servers into one Network Appliance NAS (Network Attached Storage)

USER: Is that wise?

CSERV: We think so, it gives us one homogenised filestore that is easy to manage, upgrade and support.

USER: Homogenised? Like milk?

CSERV: No. Are you taking this seriously? You'll be pleased to hear that no data was lost in the migration and the majority of users have not noticed that the physical location of their files has changed.

USER: So what do I gain from this? Or are you playing silly fools to keep yourselves in work?

CSERV: You gain a lot - more filestore, and one location for all your files whether you are using a Windows 2000 PC or UNIX.

USER: More space, how much? A measly 2 Mb increase I bet.

CSERV: Staff and research postgraduates have 200 Mb with a possible increase to 250Mb, and undergraduates / taught graduates have 70 Mb, which can be increased to 100 Mb with support from their academic supervisor. All other accounts have 25 Mb.

USER: Quite an increase then?

CSERV: Yes, and we may increase it more when we see how the current usage progresses.

USER: How much total space is now available?

CSERV: Currently 3 Terabytes and we can increase it to 8.

USER: Wow, can I have a Terabyte for my home directory?

CSERV: Yes...

USER: Great!

CSERV: ...but you have to pay for it, in the same way you pay for rented filestore.

USER: Oh, how much is it then?

CSERV: Watch this space.

USER: Going back to what you said earlier - you said most users would not notice the filestore has moved. I did!

CSERV: Go on...

USER: Well for starters, when I login into my UNIX account all my files permissions are wrong, they are set as "rwxrwxrwx". You've made my files readable to everyone.

CSERV: This is where things get complicated but only if you use two platforms (UNIX and Windows) regularly. Network Appliance provides a means of unifying Windows and UNIX filestores.

USER: That's difficult to do, as the permissions do not have a one-to-one mapping.

CSERV: Yes, so their solution is to provide a native filestore based on one OS and then provide a file mapping from clients using the other.

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USER: What have you done then?

CSERV: Well since the majority of our users are Windows based we have made the user filestore a native Windows filestore. The rented filestores and web are still based on UNIX as the majority of these users and services are UNIX based.

USER: I see, but does this mean the permissions are still wrong when viewing them from UNIX?

CSERV: No, if you view the files from Windows you'll see the true permissions.

USER: But I hate Windows and will not have it near me, or let my family and cat use it.

CSERV: That's OK, just chmod the permissions on a file and it will revert to a file based on UNIX permissions. In the Windows world it'll have it's own set of permissions that are applicable only when accessed from a Windows platform.

USER: I see, the file will have two lots of permissions depending on the platform the user is accessing the file from. Will that confuse them?

CSERV: The majority of our users are Windows only users and thus will just see what appears to be a native Windows filestore. The UNIX users will see UNIX permissions that can be altered and changed when required. Users who use both platforms regularly will have to be aware of the dual personality of the file permissions.

USER: I understand now. The RWX permissions on my UNIX files are not really that, they are protected via the Windows permissions as default.

CSERV: Yes, unless you have changed the permissions of a file the Windows permissions are in force.

USER: So what are the default permissions on my UNIX home directory?

CSERV: rwx——

USER: Good, I'm protected.

CSERV: Any more questions?

USER: Nope, I'm happy. It's all easy when it's explained to you.

CSERV: You could have read the manual.

USER: It's easier to ask someone and make them do the work in explaining it all to you.

CSERV: See this wet fish here...?

## YorkWeb news

### **Bill Mackintosh and Sarah Mitchell**

The University of York's home page was ranked in the top three for accessibility in a recent survey of university home pages carried out by digital design company, Nomensa ([www.nomensa.com/](http://www.nomensa.com/)). The home page was relaunched last year after a redesign which prioritised accessibility. Of 100 university sites studied in the survey, one third failed to achieve even the most basic of guidelines set out by international Web standards body, the World Wide Web Consortium (W3C).

The Information for Staff section of YorkWeb has been completely revised and expanded with the intention of making key information on YorkWeb easier to find. The pages can be accessed via the 'Information for Staff' link on the University's home page or at [www.york.ac.uk/np/staff.htm](http://www.york.ac.uk/np/staff.htm). Comments on the new design and content can be sent via the feedback link.

# Windows 2000 software changes

*Dan Shelton*

In keeping with our commitment to bring our users the best and most popular software, we have been upgrading and adding software on the Windows 2000 service this summer.

Now that we have successfully rolled out Microsoft SMS ([www.microsoft.com/smsserver/](http://www.microsoft.com/smsserver/)) to the Windows 2000 network, all or most software (on office PCs) will be made available using SMS. This allows us to control better how software is distributed and helps to improve the service. Software made available via SMS can be found in **Advertised Programs**, accessible via **Control Panel**.

Please make sure that you have Advertised Programs installed on your computer. If it is missing or does not function properly, please let us know – if it is not installed not only will you be unable to install software we make available but important updates we perform may not get run on your PC.

## New/upgraded software

For those interested in desktop publishing, Microsoft Publisher has been added. Publisher is an easy-to-use DTP package and makes it easy to produce high-quality work very quickly. With more wizards and templates than you could ever need, designing posters, business cards or party invitations has never been so much fun.

For people with a keen interest in bibliographic database software, the ever-popular Reference Manager has been upgraded to version 10.

For anyone who needs image manipulation software but dislikes the complexity of Corel Draw, Paint Shop Pro is now available. Paint Shop Pro is a fully-featured graphics program with advanced graphics capabilities, but easy-to-use and quick. It also features an animation package for creating simple animations.

Exceed has been upgraded to version 8. Exceed allows users to connect to remote servers, such as UNIX. This exciting new release includes a jazzy new interface and offers the user more features than previous versions.

Corel Draw has been upgraded to version 11. Corel Draw is an advanced graphing package, and now includes a new tool called Rave, which allows users to create animations to be used, for example, in website creation.

Matlab, the premier software for computational mathematics and visualisation, has been upgraded to the latest version.

Adobe Reader (formerly Adobe Acrobat Reader) has also been upgraded – see Rob Fletcher's article opposite for full details.

Various other items have been added and upgraded - please take the time to visit the webpage below for more details: [www.york.ac.uk/services/cserv/sw/w2k\\_upgrade.htm](http://www.york.ac.uk/services/cserv/sw/w2k_upgrade.htm)

If you are a member of staff or a research graduate using an office PC, it's important that you consult the above webpage regularly (or run the **Software Upgrades** program from **Advertised Programs**) to see whether you need to upgrade any software. Please note that when you need to **upgrade** an item of software, you should remove any previous version(s) you have installed. Most software items do not work correctly if you have multiple versions installed on your PC.

If you are unsure about anything, please email us ([infodesk@york.ac.uk](mailto:infodesk@york.ac.uk)) for advice.

# Adobe Acrobat 6.0 Professional

**Rob Fletcher**

We have recently purchased 25 concurrent use licences for Acrobat 6.0 Professional. This is the full product for creating and editing Portable Document Format (PDF) files.

It is only available to those on supported Windows 2000 systems. It is NOT available on the classroom systems.

We have edited the installation package for this product such that the registered product for reading PDF files via Internet Explorer (i.e. clicking on a link to a PDF file) uses Adobe Reader 6. The consequence of this is that you MUST install Adobe Reader 6 for reading PDF documents, even if you also install Acrobat 6 Professional for creation or editing of PDF files. It's also worth noting that the YIMS documentation requires Adobe Reader 5 or higher, so users of Adobe Reader 4 should upgrade now.

Please only install Acrobat 6 Professional if you need to create PDF files so we stay within our concurrent use licence limits.

## Keeping software up-to-date

**Dan Shelton**

Security is now one of the key issues affecting PC users these days. Everyone is aware of security problems, but usually only the high-profile ones get the publicity, such as nasty computer viruses. It is however important to realise that other forms of security problems do exist.

For those who use a supported connection, the Computing Service patches and updates software on your behalf. However, for those of you who use unsupported connections, it is vital that you keep all your software up-to-date. For example, keep your anti-virus software updated - visit [www.york.ac.uk/services/cserv/sw/sophos/sophos\\_antivirus.htm](http://www.york.ac.uk/services/cserv/sw/sophos/sophos_antivirus.htm) for all the latest information on maintaining your installation of Sophos.

You should also keep other software such as Windows and Microsoft Office updated. There are frequent security issues, some very serious, concerning both Windows and Office and you should endeavour to keep both of these updated. You can visit the following webpages to see if you need to update:

- Windows Update: [windowsupdate.microsoft.com](http://windowsupdate.microsoft.com)
- MS Office Update: [office.microsoft.com/officeupdate/](http://office.microsoft.com/officeupdate/)

## Improved access to electronic journals

**Sue Cumberpatch**



The Library has launched a new service called **A-to-Z**, which lists all the electronic journals (c.5,000) available to staff and students of the University of York, and provides links to them.

Titles are listed both available alphabetically and by subject, and – for the first time – can be retrieved by title keyword. Please visit [atoz.elsevier.com/home.asp?id=york](http://atoz.elsevier.com/home.asp?id=york) and try **A-to-Z** today!

Previous links to our electronic journal listings now re-route to **A-to-Z**, though we have retained the Electronic Journals homepage [www.york.ac.uk/services/library/ejournal/](http://www.york.ac.uk/services/library/ejournal/), which will continue to provide details of new titles added, FAQs and help information.

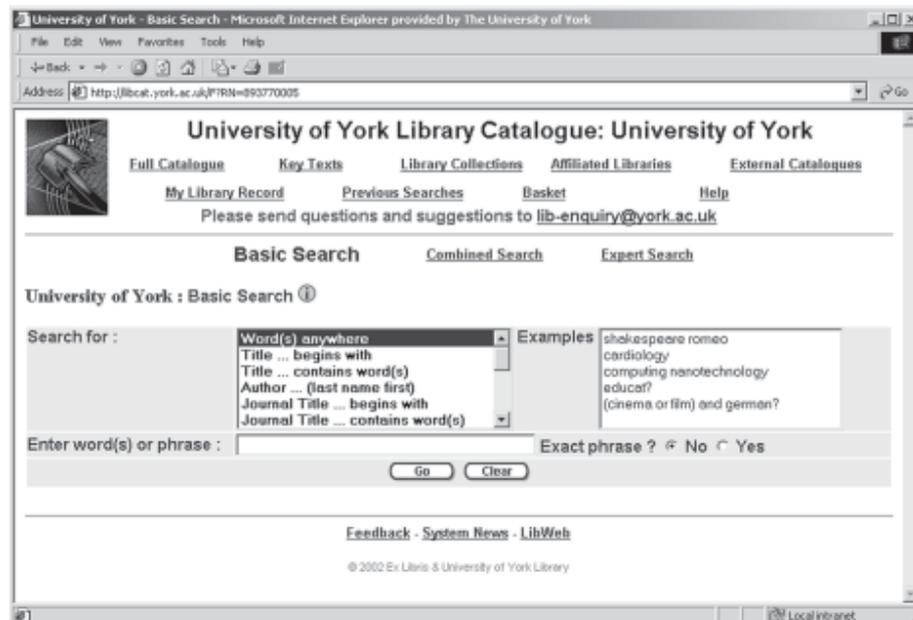
If you have any questions or comments about the **A-to-Z** service, please contact Sarah Thompson (email [lib-journals@york.ac.uk](mailto:lib-journals@york.ac.uk)) or your Subject Librarian.

# Changes to Library resources

*Sue Cumberpatch*

## New-look Library catalogue

In response to feedback and suggestions from users since our new Catalogue was launched in July 2002, we have made some changes to the way it looks. There is now a simplified layout, with clearer choices and improved online help. The location is still: **libcat.york.ac.uk**



A printed guide to the new layout is available in the Library, and is also on LibWeb at: **[www.york.ac.uk/services/library/guides/newopac.pdf](http://www.york.ac.uk/services/library/guides/newopac.pdf)**

## Web of Knowledge for access to Web of Science databases



Web of Knowledge (**[wok.mimas.ac.uk/](http://wok.mimas.ac.uk/)**) is the new interface for Web of Science (including the Science, Social Sciences and Arts & Humanities Citation Indexes) and ISI Proceedings.

Web of Knowledge provides:

- An improved search interface
- Cross searching of databases
- Ability to combine previous sets
- Access to ISI HighlyCited - a database of the most highly cited scientists and scholars worldwide

## ARC Databases on the Web



From 1 October 2003, databases which used to be available via the ARC service, will be accessible from the ARC2 WebSPIRS service (**[arc.uk.ovid.com/](http://arc.uk.ovid.com/)**).

ARC2 WebSPIRS is available from any PC with Internet access. An ATHENS account is required.

For more information about any of the above changes, please contact your Subject Librarian or email **[lib-enquiry@york.ac.uk](mailto:lib-enquiry@york.ac.uk)**.

## Contacting the Computing Service

Computing Service	Telephone:	(01904)433800
University of York	Direct dial:	(01904) 43 followed by ext no.
Heslington	Fax:	(01904)433740
YORK YO10 5DD	Email:	<i>username@york.ac.uk</i>

[www.york.ac.uk/services/cserv/](http://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 during opening hours.

### Computing Service Staff

Director:	Mike Jinks	3801	<i>knj1</i>
Departmental Secretary:	Lorraine Moor	3801	<i>lsm1</i>
Head of Infrastructure:	Robert Demaine	3808	<i>rld1</i>
Head of Information Systems:	Kay Mills-Hicks	2101	<i>knh8</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>

Kashif Amin	3817	<i>ka14</i>	John Hutchinson	3898	<i>jh57</i>
Gavin Atkinson	3738	<i>ga9</i>	Jenny Jackson	4455	<i>jj5</i>
Linda Bailey	3800	<i>lcb6</i>	Chris Kilgour	4454	<i>crhk1</i>
Sue Bolton	2102	<i>sjb28</i>	Fergus McGlynn	3822	<i>fam6</i>
Mike Brudenell	3811	<i>pmb1</i>	John Marsden	3832	<i>jpm1</i>
John Byrne	3812	<i>jcb1</i>	Darren Munday	3821	<i>dam6</i>
David Chambers	3742	<i>dac6</i>	Colin Noble	1747	<i>cdn1</i>
Michael Clark	3745	<i>mpc3</i>	Nicola Normandale	4695	<i>ncn1</i>
Arthur Clune	3129	<i>ajc22</i>	Phil O'Connell	3825	<i>paoc1</i>
Steve Downes	3741	<i>sd21</i>	Suran Perera	4689	<i>sjp25</i>
Ken Finch	4452	<i>kf1</i>	Aimee Phillips	3897	<i>amp11</i>
Rob Fletcher	3816	<i>rpf1</i>	Chris Reece	3807	<i>car7</i>
Kevin Gardner	3739	<i>pkg4</i>	Sam Scott	3817	<i>svs2</i>
Chris Gowland	3823	<i>cg1</i>	Daniel Shelton	4349	<i>ds23</i>
Dan Granville	3839	<i>dsg2</i>	Philip Smailes	3833	<i>pjrs1</i>
Sarah Hall	3827	<i>seh11</i>	Ben Thompson	3230	<i>bt4</i>
Peter Halls	3806	<i>pjh1</i>	Pete Turnbull	3804	<i>pnt1</i>
John Hawes	4347	<i>jeh11</i>	Sam Vines	3749	<i>sccv1</i>
Susanne Hodges	3839	<i>sh32</i>	Jonathan Wheeler	3818	<i>jdw5</i>
Matt Holmes	3820	<i>mjh25</i>	Timothy Willson	2123	<i>ftmw1</i>
Geoff Houlton	2100	<i>gph2</i>			