University of Cambridge Computing Service Newsletter

Number 237
July 2008

Contents

University of Cambridge
Computing Service
New Museums Site
Pembroke Street
Cambridge
CB2 3QH

tel: 01223 334600
fax: 01223 334679

Price £1 where sold

Diary

Thursday 31 July   Athens passwords withdrawn

Tuesday 5 August   Reception, Sales, Help Desk and Sales closed from 1 p.m.; all
                        services running unattended.

Monday 25 August   Reception, Sales, Help Desk and Sales closed; all services running
                        unattended.

Wednesday 1 October   CUS closes down

In this edition

Changes are being planned to the central email scanner, to deal more effectively with spam: see Mail, News and Information Services.

This is the final edition of the Computing Service Newsletter in its present form: see General News.

Computing Service opening hours will change on 1 August; see General News.

Webmasters for University Departments and Institutions see Mail, News and Information Services for new departmental templates and other web support items.

If you are still using an Athens password, you need to switch to Raven by the end of July; see Mail, News and Information Services.

See Network News for a report on the VoIP telephone migration.

Final warning of closure of the Central Unix Service (end of September): see Central Services News.

Computing Service funding

As with most institutions across the University, the Computing Service is under financial constraint to restrict its growth in spending to 4% over the next five years, which is significantly less in the short term than its projected expenditure based on predicted inflationary increases and known commitments. The consequences of this will have implications for existing and planned future CS services over the next few years, the first publicly-visible effect of which is noted under Mail News below.

The ISSS

The minutes of meetings of the Information Strategy and Services Syndicate are now available on the ISSS website at `http://www.admin.cam.ac.uk/committee/isss/meetings/minutes/index.html`

General information about the ISSS is at `http://www.admin.cam.ac.uk/committee/isss/`

Change of opening hours

From 1 August, Computing Service Reception will close at 4.30 on Fridays, as will Sales, the Help Desk and the Photographic and Illustration Service (PandIS). This change is necessary because of the harmonisation of staff terms and conditions across the University.

Changes to Lookup

The University lookup service `http://www.lookup.cam.ac.uk` was upgraded in mid July. For the most part, this was a backend upgrade, designed to help support future services provided by the Computing Service. The existing anonymous LDAP interface is not changed at all, and the web interface has only minor changes.

Part of the upgrade includes some enhancements to the web-based search engine to find people, institutions and groups. The person search now has better support for initials as well as surnames, and group and institution searches support using multiple words (or word prefixes) from the name.

General News

Bulk purchase

The University Computing Service (UCS), the IT Purchasing Group and the Central Purchasing Office (CPO) have been working, as in previous years, on a tender for the supply of desktop PCs to the University.

The selected tender was from Dell Computers, and the University is now in negotiation about the final details of the contract. Full details, with information about how to order under the scheme, will be made available at `http://www.admin.cam.ac.uk/cam-only/offices/purchasing/groups/it/deals/hardware/current.html`

The 2007-8 scheme, also with Dell, runs to the end of August 2008.

Cancellation of student accounts

The full timetable for cancellation of student accounts was published in the last Newsletter, which also gave details of what to do if you are staying in Cambridge and need to retain your account. The remaining cancellation dates are:

Cancellation date 18 August 2008:

- students following one-year postgraduate courses scheduled to be completed by 31 July. This includes a number of MPhil courses and all Diploma courses.
- fourth year MET students
- PGCE students

MPhil and one year students following later-finishing courses will be cancelled at a later date in the Michaelmas term.

On or shortly after the dates shown, all computing accounts belonging to students in the categories mentioned above will be cancelled on the PWF, Hermes, Raven, CUS, CUDN Dial-up service (Magpie) and VPDN. The students concerned were notified by email to their `@cam` addresses during May 2008. Those who have applied to continue to a further degree received a message confirming that we are aware of their application and that accounts will not be cancelled, as long as the application is live at the cancellation date.

Magpie account renewal

The charging year for the CUDN dial-up service, Magpie, runs from 1 October to 30 September. Renewal letters (and email to `@cam` addresses) will be sent in early September to all registered users of Magpie.

The subscription rate for this year is £30+VAT. VAT will not be charged on the following:

- departmental orders for Magpie subscriptions for staff and students
- college orders for Magpie subscriptions for registered students
- individual Magpie subscriptions for registered students.

In the two latter cases students claiming VAT exemption will be required to supply a form stating that they are registered students of the University. The required declaration form is available from Reception and at `http://www.cam.ac.uk/cs/forms/studec.pdf`

Payment is due by 1 October 2008. Accounts that have not been paid for by 20 October 2008 will be cancelled. Full details of how to renew a Magpie account will be in the letter and email. Please send any queries to `user-admin-magpie@ucs.cam.ac.uk`

Members of the University and other authorized users of the CUDN are reminded that they must not allow other people to use the network facilities accorded to them, even other members of their household including partners, spouses and children. The sharing of user identifiers, whether for logon to Magpie or to other Computing Service systems, is not permitted under any circumstances.

Changes to the CS Newsletter

As announced in the last Newsletter, the Computing Service has been considering the role and nature of the Newsletter, in the light of the UCS News Service.

The Newsletter ceased to be primarily a paper publication some years ago, though a few hundred printed copies are still circulated to Heads of Department and Librarians. Most of those who actually read it do so on the web, and a significant proportion of the material is duplicated on the News Service or on other web pages.

The decision has therefore been taken to cease publication of the Newsletter in its present form.

In order to retain the periodic trigger reminding people to catch up with UCS news (and reminding the UCS to provide the news), we plan to produce a quarterly "News Roundup", which will be a much shorter web page linking to material elsewhere rather than replicating it. We expect to retain the existing email list of those who wish to be told when a new Newsletter is published, and use it to notify users of a new Roundup page. We hope that this will be a more effective process than simply relying on people to keep an eye on the CS news pages or RSS feeds.

We also expect to produce a brief one-page printed Newsletter each quarter; this will contain one or two selected articles, and then the Roundup summary on the back. Circulation will be mainly to Heads of Department.

Comments on these plans may be sent to `newsletter-editor@ucs.cam.ac.uk`.

The first UCS Newsletter was published in November 1971 "to keep all users in touch with developments in the Computing Service but also to provide a forum for the exchange of ideas and expertise". The first issue contained 13 A4 pages (very similar to the current length), but at that time publication was monthly. Since July 1974 there have only been two Newsletter editors: Roger Stratford until January 1991 (issue 157) and the present editor since Easter 1991.

History

The following items are taken from earlier Computing Service Newsletters:

Thirty-five years ago
The IBM 370/165 (providing computing facilities to the University as a whole) had a memory upgrade from one megabyte to two.

The cricket match between the Computing Service and the Users resulted in a moral victory for the Users, but the Computing Service won on a technicality.

Thirty years ago
The IBM 370/165 was upgraded from three megabytes to four.

The default was changed so that users logging on for the first time were required to quote a password (they could still turn off all password checking thereafter).

Twenty-five years ago
Although discreet picnicking in the User Area is quite in order, odoriferous and greasy food is antisocial and to be strongly deplored. Furthermore.... computing may be an exhausting business but the User Area is not a doss-house!

Twenty years ago
A faster dial-up service was introduced, upgrading from V.21 (300/300) to V.22bis (2400/2400) connections.

Anyone intending to use national or international networks must first register with the Computing Service.

Users were adjured to make adequate arrangements for backing up their files.

Ten years ago
The Phoenix Teaching Room and Phoenix User Area were opened.

The "friendly probing" suite, to identify instances of known security weaknesses, was authorised and launched.

Mail, News and Information Services

Changes to the central email scanner

The Computing Service is currently working on a replacement for the central email anti-virus and anti-spam scanner. Although we shall continue to use most of the same components (such as SpamAssassin and ClamAV) the details of when messages are scanned and what we do about problem messages will change.

The full details of the existing setup are at `http://www.cam.ac.uk/cs/email/scanner/.` At present, more than 90% of mail is rejected by the mail switch before it even gets to the scanner; the scanner then classifies the remaining messages. It silently discards known mass-mailing viruses or phishing messages, strips suspicious attachments and replaces them with a warning to the recipient, and gives spam scores to messages before delivering them.

After the revamp, the scanner will analyse messages as soon as we have received them but before we have accepted responsibility for them (i.e. earlier than at present). This allows us to reject unwanted messages, which will reduce the amount of junk email that is delivered without causing collateral spam and without risk of legitimate mail disappearing silently.

Under the new policy, we intend to reject messages with a spam score above a certain global threshold, chosen conservatively so that legitimate email should not be misclassified. A global threshold of 10 would reduce the amount of delivered spam by 66%-75% or more. Virus-infected email and email with dangerously-named attachments will simply be rejected, and there will no longer be any attachment mangling. We will adjust the filename rules to minimise the problems they cause for legitimate email.

Further details of the plans were sent round to the it-support mailing list in July. Feedback on the existing scanner and on the policy outlined in this article can be sent to `mail-support@ucs.cam.ac.uk`.

Changes to Hermes quotas

An unexpected freeze on spending on equipment means that we are not able to continue our planned programme of equipment replacement on Hermes and that the increase in disk storage that was expected is not available. As a result, we need to reduce the default quota on Hermes to 500 MBytes (which was the default until Easter 2008) in order to extend the life of the existing hardware as far as possible. All accounts currently using less than 500 MBytes of space have been reduced to a 500 MByte quota. Accounts currently using more than 500 MBytes are not yet affected.

The Computing Service very much regrets this course of action. Any member of staff who is seriously inconvenienced by the reduction in Hermes disk quota should apply for an increase via the web form at `http://www.cam.ac.uk/cs/request/new-quota.html`

We will continue to monitor the situation as the new academic year approaches. Further limits may be needed if funding restrictions continue.

Spending on Hermes hardware has averaged around 1.25 UKP per active user per year since 2000. (27,500 different people log in to Hermes each week during term, 22,500 during the quietest week of the summer). The Computing Service has not had its funds confirmed for 2008/9 and the planning round for 2009/10 suggests further tightening of belts will be required.

Obviously, competition is fierce in an era where corporations with huge economies of scale are throwing money at free Webmail systems in the hope of future advertising revenue. We believe that Hermes still offers exceptional value for money for a service without data mining and privacy concerns. We also have much better guarantees than commercial suppliers about end-to-end reliability for internal email, and the ability to restore email which has been accidentally deleted.

Mail, News and Information Services

Dual use mailboxes

Dual use mailboxes are to be introduced on Hermes in the near future. A dual use mailbox (or dual use mail folder) is a mailbox which can contain both messages and subsidiary mailboxes. For example, a mailbox M1 might contain within it subsidiary mailboxes named `M1/a` and `M1/b`, as well as some individual messages.

Under the old system a mailbox could contain subsidiary mailboxes, but if it did so it was not allowed also to contain individual messages. While the IMAP specification allows either approach, some IMAP clients struggle with nested mailboxes unless dual use mailboxes are available.

This change should be transparent to most mail clients.

JANET SSL certificates

We have switched to using JANET SSL certificates for `webmail.hermes`, `imap.hermes`, `pop.hermes` and `smtp.hermes`, simply as a cost saving measure. This change should be transparent to most modern clients running on Windows, Mac and many Linux platforms (although experience suggests that some mail clients need to be restarted to pick up the change correctly).

SuSE Linux and derivatives do not ship with the CyberTrust root certificate that the JANET SSL certificate chain depends on: it is necessary to add the missing root certificate to the certificate authority bundle. Please see `http://www-uxsup.csx.cam.ac.uk/~dpc22/globalsign/` for details.

Managed Web Server

The transfer of all sites (around 100 in total) to the new Managed Web Server system was completed at the beginning of June. The old system was finally turned off on June 20th. The new system is more maintainable and scalable than its predecessor and should last well into the future. For further information on Managed Web Servers see `http://www.cam.ac.uk/cs/instadmin/mws/`

Changes to the web cache

As announced in the last Newsletter, the decision has been taken to replace the web cache by a NAT (Network Address Translation) system. A NAT system will enable machines on the CUDN to access a wider range of Internet services from private, CUDN only IP addresses. At present, these systems must proxy through the web cache to access the outside world and are limited to web traffic.

The web cache has already been reconfigured so that it no longer caches content, though it continues to provide a proxying service, and the centrally provided configuration files have been modified so that requests from user systems with global IP addresses will go directly to their destination. Further technical information on the plans can be found at `http://www-tus.csx.cam.ac.uk/techlink/workshops/seminarjun42008jml.pdf` and `http://www-tus.csx.cam.ac.uk/techlink/workshops/seminarjun42008rcf.ppt`

It is currently hoped that the NAT system will be in service by the beginning of the Michaelmas Term. The web cache will be turned off some time later. Users whose browsers use the recommended automatic configuration URL at `http://www.cam.ac.uk/proxyconfig.pac` or WPAD, the "automatic configuration" method supported by some browsers, will not need to take any action. Before the web cache is finally turned off, users who have configured their browsers manually to use the web cache will require to change their configuration settings.

Advice on configuring for the current setup can be found at `http://www.cam.ac.uk/cs/docs/leaflets/g63/`

Mail, News and Information Services

Athens passwords for UL resources withdrawn

Users of Athens passwords (for access to University Library electronic resources) are reminded that these will cease to work at the end of July 2008.

They are replaced by Raven (supporting the Shibboleth protocol). No new Athens passwords are being issued; anyone still using such accounts should move to Raven as soon as possible. The transition is simple and means that you need to remember fewer passwords. This change should not mean loss of access to resources or changes in entitlement for anyone currently using Athens accounts, though some people (those the University does not automatically recognise as students or staff) may need to contact the University Library to have their access via Raven enabled. Further information and guidance is provided at the University Library website at `http://www.lib.cam.ac.uk/electronicresources/athenschanges.html`

In addition, from 1 August some but not all of the electronic resources managed by the JISC data centres at MIMAS and EDINA will cease to use Athens at all. All the affected services will support direct Shibboleth authentication, but this change may alter the steps needed to gain access to them.

Departmental and Institutional web page templates

Following the introduction of the new University web pages, templates have been produced for use by Departments and Institutions wishing to follow the new University style. The template pack and guidelines can be found at `http://www.cam.ac.uk/about/webstyle/`

RSS-based news boxes in web pages

A working PHP example is now available to show how web pages can include news boxes based on RSS feeds, like those seen on `www.cam.ac.uk`. It is primarily intended for handling the RSS feeds from `www.admin.cam.ac.uk` and `ucsnews.csx.cam.ac.uk`.

There is no general solution since what is needed will vary, depending on what programming language(s) are preferred or required for generating dynamic web pages and also, to varying extents, which web server and operating system will be used. However, since PHP is widely used within the University as the chosen scripting technology for generating dynamic web pages, it seemed worthwhile to provide an example of how PHP could be used to add news boxes to PHP-generated web pages.

An initial version (0.1) of the resulting "php-rssnews" package can be downloaded from `http://www.cam.ac.uk/cs/web-examples/`

A copy of the README file from the kit is also available there, so you can see what it offers before downloading. While nominally just an example, what is provided can either be used directly with minimal change, or used to obtain the RSS-derived data for inclusion in your own HTML markup.

Change to Raven

As reported in the last Newsletter, we are proposing to change the default behaviour of Raven when users who have already identified themselves go to another Raven-protected site.

It will shortly become possible to set Raven to release an already-established identity to University web sites (host names ending `cam.ac.uk`) without asking for any further confirmation. By the start of the next academic year this will become the default behaviour. (For other sites Raven will still

Mail, News and Information Services

require confirmation, to prevent a user's identity being disclosed, without their knowledge or consent, to third-party web sites not operated by the University.)

Users will, as at present, be able to select how they actually want Raven to behave (on a session-by-session basis, or by default). They will be able either to select the new behaviour explicitly, to select the old default of asking each time before releasing an identity, to allow their identity to be released to any site without further interaction, or to suppress Raven's 'Single Sign On' functions completely.

Raven support for Joomla! and phpBB

The Computing Service has created an experimental Raven (and lookup) support package for the Joomla! content management system. Feedback, either to the `cs-raven-discuss` mailing list (preferred) or direct to `raven-support@ucs.cam.ac.uk`, would be welcome. See `https://wiki.csx.cam.ac.uk/raven/Joomla` for more details.

Modifications to provide integrated Raven support for the phpBB web forum software (recently updated for phpBB 3.0.2) are also available - see `https://wiki.csx.cam.ac.uk/raven/PhpBB3`

Central Services News

CUS closure

Users are reminded that the Central Unix Service will close at the end of September 2008. By that time you need to have moved all the files you require to another system, and made arrangements for your email if you are still using CUS mail. Personal web pages also need to be moved.

Reminders have been sent to all those affected, and advice is at `http://www.cam.ac.uk/cs/unix/cusmigration.html`

Condor

The PWF Condor service has been unavailable for some time, because of problems with new releases of the operating system and with the air conditioning and power supply in the main machine room. The latter problems have now been resolved as far as Condor is concerned, and it remains only to complete some testing under the latest release of PWF Linux. It is hoped that it will become generally available again shortly; users will be contacted when this happens.

PWF software for 2008-09

The list of planned updates to PWF software for this summer was published at `http://www.cam.ac.uk/cs/pwf/upgrades.html` in May.

The PWF Windows service will continue to run under Windows XP Pro, and PWF Linux will run under OpenSuSE 10.3. The Macintoshes are planned to move to OS10.5, but a technical problem has arisen and is under investigation. It is not clear at the time of writing whether this upgrade will be possible by October.

A number of new applications are being installed, and many others upgraded. The Office suite on the Macs is being upgraded to Office 2008. On Windows the main Office suite will continue to be Office 2003, but Office 2007 is being made available in Computing Service rooms for some courses.

Central Services News

DSpace

DSpace@Cambridge, the University's Institutional Repository (see `http://www.dspace.cam.ac.uk/`) now offers a pilot networked batch upload service. This means that data can be transferred over the network (using SFTP) to be ingested into DSpace automatically.

This facility is designed to address the needs of the academic community when submitting data via the web interface proves impractical. To use the facility users will need to present the data and its associated metadata in a simple format, documented at `http://www.dspace.cam.ac.uk/` (select Deposit Guide and then Batch upload services). This format is essentially a simple directory structure containing sets of data and associated metadata in Dublin Core XML format.

Also being piloted is a SOAP-based web services interface, allowing people to embed DSpace content into their own websites. This interface is currently being trialled by the Scott Polar Research Institute for their Freeze Frame project, illustrating DSpace's essential ability to support data types other than textual papers.

If you are interested in using the service and/or being part of either pilot project, please contact `support@repository.cam.ac.uk`.

Network News

Telephone Replacement Project

The rollout of the new VoIP telephones to Departments and Colleges is now well under way; by mid-June 1,000 handsets were live in about 25 institutions. By the end of July the whole of the School of Arts and Humanities should be complete, along with six Colleges, and the project is on target to install 6,500 phones (out of a total of 17,000) by the end of September.

Sales News

Performance Figures

Percentage of orders completed, in working days:

	< 5	5-10	10-15	15-20	>20
April	96.0%	2.7%	0.9%	0.0%	0.4%
May	94.8%	3.8%	1.4%	0.0%	0.0%
June	97.4%	2.2%	0.4%	0.0%	0.0%

Products

Available now
Adobe Master Collection CS3/MacOS
Microsoft Expression Media 2.0
Microsoft Expression Web 2.0
Microsoft SharePoint Designer 2007
Microsoft Windows Server Ent. 2008 32-bit
Microsoft Windows Server Ent. 2008 64-bit
Microsoft Windows Server Std. 2008 32-bit
Microsoft Windows Server Std. 2008 64-bit

Available shortly
Adobe Acrobat Professional 9/Windows & MacOS
Corel Graphics Suite X4/Windows
Corel PaintShop Pro X2/Windows
Corel WordPerfect Office X4/Windows
ESRI ArcGIS 9.3/Windows
Hummingbird eXceed 2008/Windows (with Connectivity Secure Shell 2008)
Maple 12/Windows, MacOS, Linux & UNIX

Progress Reports

The Progress Report made by the Computing Service to the ISSS in May 2008 included the following items not covered elsewhere in this or earlier Newsletters:

User Services

There were just over 5000 incoming network probes in April with MS SQL services as the most popular. Towards the end of the month the University had a targeted scam email, searching for 'cam' passwords. This first attempt was limited and only one person replied. The scam mail continued into May with much larger attacks, but again very few people were taken in.

Institution Strategy

The welcome news that ongoing central funding for the Small Institution Support Service post will be forthcoming reflects both the quality of the service provided and its value to the University.

Google were invited to discuss their Apps Education Edition with University information services staff.

Network and PWF

Planning for over one hundred CUDN upgrade backup circuits has been completed. This planned work will extend over the next year.

The primary core of the telephone system has now been signed off as completed.

The list of PWF software upgrades for next academic year includes about 80 application changes across the 3 PWF platforms (Windows, Macs and PWF Linux) and requests were received from 12 departments.

The Windows team have been continuing to investigate ways of improving application delivery and have been evaluating the Terminal Services facilities in Windows 2008 Server, with a view to using these to provide Office 2007 in UCS teaching rooms in the short term and for making applications in general available to users of personal (non-PWF) machines in the longer term.

Members of the Small Systems group have again been working to support the Examinations for those with Special Needs in the Titan rooms.

Unix Systems

Unix Support and the Development Team have begun work on the redesigned Streaming Media Service upload web system as part of the move from a pilot service to a fully live one. The new interface incorporates the lessons learnt from the past year's trial service.

The DSpace training instance has been converted to use Raven as its authentication system rather than the built-in system. Following successful testing on this system the live service will in due course move to using Raven too.

The Webmail system has been adapted to use templates. While they currently reflect the original design, the freedom granted will allow the interface to be modernized and other changes made more easily.

The Unix Support NFS server (which also provides its material via the web, SMB, rsync) has been extended to include two more Linux distributions (CentOS and Scientific Linux) and the RPMForge software repository.

A virtualisation system has been built, complete with cross-site redundant storage for power and cost saving.

Technical User Support

Members of Hardware Support were able to recover data from a number of students' USB pen drive devices that had suffered accidental damage. On average, Hardware Support is successful in recovering data from approximately 75% of failed hard drives, but 99% of USB pen drives.

The week 21-25 April recorded the busiest week ever for the UCS Videoconferencing Service when it hosted a total of ten videoconferences to destinations including Singapore, Pakistan, Japan and the USA, via both IP and ISDN.

The Macintosh Support team have extended their pilot of the Macintosh Software Update Server (MacSUS) service to CARET after an extensive internal pilot in the UCS. Two other departments have also been invited to join this pilot.

Documentation and Courses

Leaflets

The following leaflets have been updated since the last Newsletter:

G48 Dialup Networking with Windows XP
G53 Making a VPDN Connection to the CUDN with Windows XP
G55 Making a Virtual Private Dial-up Network (VPDN) Connection to the CUDN with the CISCO client and Windows 2000 or XP (Home or Professional)
G58 Making a VPDN Connection to the CUDN with Mac OSX
G63 How to use the University Web proxy and cache
H7   Guidelines for Computer Repairs & Data Recovery
H12 Software Sales
H13 Literary and Linguistic Computing Centre

Courses

Computing Service courses are free to current members of staff and students of the University. All details are available at `http://www.cam.ac.uk/cs/courses/` There is also an additional software training programme for departmental support staff, administered by the Staff Development Office - see `http://www.admin.cam.ac.uk/offices/personnel/staffdev/computing/` for details.

The most convenient way to register for Computing Service courses is to complete the booking form on the Web at `http://www.cam.ac.uk/cs/courses/` Apart from being more efficient to process, an advantage to using this method of booking is that it is possible to check the availability of places. If it is not possible to book via the Web, please email `course-admin@ucs.cam.ac.uk`, ring (3)34662 or come to Computing Service Reception.

If necessary, please cancel your booking, preferably via the Web or else by email or phone, giving as much notice as possible. This is important as it enables the place to be allocated to someone else, and avoids waste of resources.

Additions to the Training Programme for Michaelmas Term 2008

The Summer programme of Computing Service courses finishes in mid-July, after which there will be no further courses until the Michaelmas Term, starting in early October 2008. However, courses for loan will remain available throughout the vacation; see `http://www.cam.ac.uk/cs/courses/coursedesc/ Self-Teach/`. The following new courses will be offered in the Michaelmas Term:

- Web Skills for Researchers: Why Not to Google
- Web Skills for Researchers: Web of Knowledge
- Windows: Keeping Your PC Safe & Secure - Laptop Workshop
- Linux: Installation (Demonstration)
- LaTeX Follow-up Practical Using Texshop on a Macintosh
- Stata for Regressional Analysis
- Mathematica: Basics
- Mathematica: Graphics
- Mathematica: Linear Algebra
- Python: Interoperation with Fortran

In addition it is intended that Microsoft Office 2007 will be used on the Word, Excel, PowerPoint and Access courses.

Full information including a list of courses, timetable, brief descriptions including prerequisites, booking page etc. will be published at `http://www.cam.ac.uk/cs/courses` in late September.

Contact points

Director of the Computing Service	`Director@ucs.cam.ac.uk (334702)`
Course Bookings	`Course-Admin@ucs.cam.ac.uk (334662)`
DNS Registrations	`Hostmaster@ucs.cam.ac.uk`
Data Protection Act (DPA) registration	`Help-Desk@ucs.cam.ac.uk(334681)`
Documentation	`Documentation@ucs.cam.ac.uk`
Electronic Mail Administration	`Mail-Support@ucs.cam.ac.uk`
Electronic Mail Information (addressing problems)	`Postmaster@ucs.cam.ac.uk`
Hardware Support	`Hardware-Support@ucs.cam.ac.uk (334610)`
Help Desk	`Help-Desk@ucs.cam.ac.uk(334681)`
Information Service (World Wide Web)	`Webmaster@ucs.cam.ac.uk`
Institution Liaison	`Institution-Liaison@ucs.cam.ac.uk (336060)`
IP Registration	`IP-Register@ucs.cam.ac.uk`
Macintosh Support	`Mac-Support@ucs.cam.ac.uk`
Managed Web server	`webserver-admin@ucs.cam.ac.uk`
MIMAS national dataset service	`Joe.Gluza@ucs.cam.ac.uk (334701)`
Network Support	`Network-Support@ucs.cam.ac.uk`
Network faults	`331899`
Newsletter editor	`Newsletter-editor@ucs.cam.ac.uk`
Newsletter notification of new issues	`Newsletter-circ@ucs.cam.ac.uk`
Operations Staff	`Operator@ucs.cam.ac.uk`
Photographic and Illustration Service	`pandis@ucs.cam.ac.uk (334390)`
Reception	`Reception@ucs.cam.ac.uk (334600)`
Sales	`Sales@ucs.cam.ac.uk (334695)`
Secretarial Staff	`Secretary@ucs.cam.ac.uk`
Security reports	`cert@cam.ac.uk`
Sidgwick Computing Facility	`335029`
Small institution support	`small-inst-support@ucs.cam.ac.uk`
Speech-assisted computing	`voice-support@ucs.cam.ac.uk`
TCP/IP network address allocation	`IP-Register@ucs.cam.ac.uk`
Unix Support	`Unix-Support@ucs.cam.ac.uk (334728)`
Usenet News Administration	`Newsmaster@ucs.cam.ac.uk`
User Administration	`User-Admin@ucs.cam.ac.uk (334680)`
User Library	`User-Librarian@ucs.cam.ac.uk`
Web Support	`web-support@ucs.cam.ac.uk`
Windows Support	`NT-Support@ucs.cam.ac.uk`
WWW server administration	`Webmaster@ucs.cam.ac.uk`
Suggestions and announcements	Usenet Newsgroups `ucam.comp-serv.announce`, `ucam.comp-serv.suggest`, `ucam.pwf.suggest`
Computing Service News Service	`http://ucsnews.csx.cam.ac.uk/`