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Information Technology Services Center (ITSC) - A Newly Formed Servicing Unit

With an in-depth review of the academic support units, VPAAO announced on 2 August 1999 the formation of ITSC, Information Technology Services Center.

http://www.ust.hk/itsc

ITSC is a consolidation of the former CCST and the functions within former ETC that supported the deployment and maintenance of equipment, particularly equipment used in teaching. This will provide a one-stop shop approach to the support of the technological infrastructure for teaching. The concept for ITSC, however, is more than a simple joining of CCST with a piece of ETC. It has developed a clear set of service priorities to provide an integrated and efficient system to support and develop the information technology environment.
Microsoft Office 2000 Available in Campus

HIGHLIGHTS


A number of features in Office 2000 are added/improved over the previous Office 97 version. With the new Office 2000 installed, you can enjoy many enriched office automation features to improve your working productivity.

All PCs in Lecture Theatres and our Computer Barns have already been upgraded to Office 2000.

MAIN ENHANCED FEATURES

Personal Productivity:
- Multiple Collect and Paste
- Word Floating Table
- Word Click-n-Type
- Word Print Zoom
- Excel PivotTables and PivotCharts
- PowerPoint Tri-Pane View
- Microsoft Office E-mail

Personalization and Resiliency:
- Install On Demand
- Self-Repairing Applications
- Personalized Menus and Toolbars
- Custom Installation Wizard

Web Publishing:
- Universal Document Viewing
- Round-Tripping HTML Documents
- Save to the Web (this requires IIS v4.0 web server with Office Server Extensions)
For more details on the new features, installation procedure, file compatibility and Chinese processing information, etc., please refer to our Microsoft Office 2000 web site at:

HKUST iMail Service

HIGHLIGHTS

To cope with heavy use of email messaging nowadays, a "high performance" dedicated email server has been setup to provide support specially for IMAP email users who are using email clients like Netscape Messenger, MS Outlook, PC-Pine, etc. This new system is codenamed "HKUST iMail Service".

MORE DETAILS

| Performance & Compatibility | ● Performance of the new dedicated IMAP email server has been much improved. A new model of email server clustering will be implemented which makes our HKUST campus-wide email service much more scalable and expandable in the future.
  | ● Advanced mail storage format which shows better compatibility and works much more efficient with email clients like Netscape Messenger, etc.

| WebMail | ● A new WebMail service for those travelling users is supported on this new dedicated IMAP email server. This WebMail is much faster and more compatible with the latest web browsers.

| Email Add-on Service | ● Email add-on service like the followings is now available on the web directly. Users will not need to know any of the UNIX commands as in the past to make use of these features.
  | ◆ Full Name Email Alias
  | ◆ Email Address Redirection
  | ◆ Auto-reply (vacation) Message
  | ◆ Mailbox Usage Check, etc

| Security | ● Support encrypted connection for retrieving and sending email messages with IMAP over SSL technology.

For more details, please refer to our Email Service web site at:

http://www.ust.hk/itsc/email
Revised Dialup Budget Scheme for Students

Our usage statistics indicates that the peak period dialup budget scheme has effectively regulated the abusive usage from those extremely high usage users. To bring the advantages forward, a revised monthly budget scheme will be implemented for the new academic year with effect from Sep 1 (Wed).

A monthly budget of 45 hours of connect time is assigned to each student. Any daily dialup usage during the 6-hour peak period (i.e. 8pm - 2am) will be deducted from the student's allocated budget. The monthly dialup budget will be reset on the first day of every month and any unused budget from previous month will NOT be brought forward to next month.

For more details, please refer to:

http://www.ust.hk/itsc/dialup/policy_stud
Special Student Offer on Broadband Internet Access

Cable & Wireless HKT (CWHKT) IMS would like to offer all current HKUST full-time and part-time students a discounted offer on their broadband Internet access service - 1.5M Ultra Line. With this scheme, students now only need to pay a monthly fee of HK$218 (HK$80 less the standard rates of HK$298). Cost of network card and installation fee, which amount to HK$1,150, are also waived. The first 100 applicants are also entitled to get a free Eyestar quickcam that worths HK$750. CWHKT had come to set up a sales booth at the Academic Concourse from Sep 7-10 (Mon-Fri) to accept the applications.

This special package, negotiated with CWHKT collaboratively by CELT and ITSC, will enable students at home to have speedier (~30 times) Internet access when compared to 56K dial-up access. As our University will be offering a growing number of online courses in the upcoming academic year, we hope our students may find this a useful and attractive utility to facilitate your online learning process.

For more details, please refer to:

http://www.ust.hk/itsc/dialup/ims
New Changes in Unix Environment

To facilitate reliable and efficient support on the Unix environment, ITSC plans to implement the following in different Unix areas for the new academic year.

Operating System

- We shall focus the support for Solaris with more updated software and phase out the support for SunOS and HP-UX.

Software

- Some commercial and public domain software will be upgraded for the updated functionalities and/or Y2K compliance. The updated software list and software information will be available soon.

E-mail Service

- Both the Staff/PG and UG e-mail servers have been upgraded for better reliability and serviceability.
- A new e-mail server with high performance support for IMAP Staff/PG user, namely the HKUST iMail Service, was introduced in July.
- UG e-mail quota has been increased from 8 MB to 12 MB.

Time-sharing Systems

- We have consolidated the time-sharing systems for Staff/PG and UG with more powerful and resourceful systems for better performance and reliability. There are 2 systems, uststf1 and uststf2, for Staff/PG and 2 systems, uststu1 and uststu2, for UG. All of them are running with Solaris 2.6.

File Servers

- To improve the reliability and performance of the Unix home and application access, all Unix home and application servers and their disk storage subsystems will be upgraded by the end of the year.

Default Disk Quota

- Both the Staff/PG and UG default disk quota have been increased from 12 MB to 20 MB.

Andrew File System (AFS) Support
We are exploring the feasibility of the decommissioning of AFS support in 2 years due to the diminishing demand on distributed Unix environment support for SUN desktops and its high maintenance cost.

For more details, please visit the web page below.

Usage Growth of Student Hall Residential Network - ResNet

Most probably you have come across the term ResNet which simply refers to our student hall residential network. As the first HK tertiary institution to provide student hall network service, HKUST has now installed over 3,300 network points for our hall residences. All of these connections are served by over 130 network switches, and almost all of them have its own dedicated 10 Mbps Ethernet network bandwidth for data transmission.

Since the inception of the student hall network back in 1991, each year more and more students in our dormitories are benefited through ResNet to access a vast array of university-wide network services besides the Internet. The table below indicates the growth of registered ResNet users for the past several years:

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>No. of Registered ResNet Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>96 / 97</td>
<td>1,455</td>
</tr>
<tr>
<td>97 / 98</td>
<td>1,898</td>
</tr>
<tr>
<td>98 / 99</td>
<td>2,743</td>
</tr>
<tr>
<td>99 / 00</td>
<td>2,068</td>
</tr>
</tbody>
</table>

(as at Sep 14, 1999)

This manifests an apparent trend that a growing number of our students are equipped with their own computers in the dormitories. As a matter of fact, our University has the highest proportion (almost 75% out of total no. of hall places) of concurrent registered hall network users when compared to other local institutions.

For more information of ResNet, please refer to the ResNet home page:

http://www.ust.hk/itsc/ResNet/
RichWin 97 Pro (HK) and Add-Space-I are now available

HIGHLIGHTS

ITSC is pleased to announce that RichWin 97 Pro (HK version) and Add-Space-I are now available in our campus network.

RichWin 97 Pro enables Chinese capability in English Windows environment like Microsoft Windows 95 / 98 with more enhanced features over the previous versions.

Add-Space-I provides a more convenient way to convert documents in English Word 95 with RichWin format to Word 97. Moreover, it can add tiny spaces between Chinese text in Word 97 document so that English Word 97 can wrap Chinese paragraphs correctly.

MORE DETAILS

RichWin 97 Pro provides the following enhanced features like:

- Fully support 3000 HKSAR GCCS (Government Chinese Character Set). (Please refer to http://www.ust.hk/ccst/chinese/infra/eudc for details on EUDC.)
- Improved stability with Windows 98.
- Enhanced postscript printing support.
- More fonts available.
- Truly a multi-language interface.

Add-Space-I provides basically the following features:

- Convert documents with Traditional Chinese characters created by Word 95 & RichWin to Word 97 format in a much convenient way.
- Add tiny spaces between Chinese text in Word 97 document so that English Word 97 can wrap Chinese paragraphs correctly. Without using Add-Space-I, users may need to add the space manually or use <enter> key to wrap the paragraph.

To install RichWin 97 Pro or Add-Space-I, please refer to the installation procedure found in:

http://www.ust.hk/itsc/chinese
More Internet Bandwidth for Web Proxy Access

All along international Internet access at HKUST is served by a 12 Mbps link shared by all the eight HARNET member institutions. In anticipation of the growing Internet bandwidth requirement in the new academic year, ITSC has arranged the subscription of a separate dedicated Internet link to provide additional international Internet bandwidth for HKUST. This new connection is serviced by the Internet service provider called UUNET. Under our arrangement, UUNET will provide an initial bandwidth of 2 Mbps to HKUST with a subsequent increase to 3 Mbps as indicated in the following timetable:

<table>
<thead>
<tr>
<th>Period</th>
<th>International Internet Bandwidth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sep 99 - Nov 99</td>
<td>2 Mbps</td>
</tr>
<tr>
<td>Dec 99 - Jun 00</td>
<td>3 Mbps</td>
</tr>
</tbody>
</table>

Note that the extra bandwidth subscribed will mainly be used to serve our web proxy servers. As such, in order to enjoy the improved speed of overseas web access, it is NECESSARY for our users to turn on the proxy setting of your web browser. We have configured our Internet links such that Web access via proxy servers is given HIGHER priority. Information related to proxy setting can be found at:

http://www.ust.hk/itsc/internet/proxy_setting/
Phase-out of the Old PC Environment

While Windows 9x (95 or 98) systems are commonly used among the majority of campus desktop users, we observe that the number of the old PC environment users has dropped significantly. With various reasons, there come the need to put an end to this old PC environment. We would like to draw your attention regarding the arrangement of the concerned phase-out exercise.

Why Phase Out?

The old PC environment was originally designed/prepared to cater for the old days' constraints such as:

- limited PC capacity (e.g. small hard disks and little memory)
- DOS-based applications
- earlier versions of Windows 3.1 applications
- earlier versions of Chinese systems
- limited choices on network operating systems

In fact, later versions of Microsoft's Windows systems as well as departmental hardware upgrades have provided solutions to the above problems.

Main reasons for the phase-out include:

- Usage statistics indicate that the user population of the old environment has been decreasing. Existing users (a small group) are recommended to migrate to Win9x.
- Many applications of the old environment are outdated.
- The network operating system (Pathworks) of the old environment is not Y2K compliant.

Phase-out Arrangement/Schedule


- Staff Offices
  - Existing users of the old environment are recommended to migrate to Win9x system as soon as possible.
  - To ensure a graceful phase-out process, ITSC will work out the exact cut-off date with each department individually.
  - Users can refer to their IDLP regarding arrangement of the cut-off date.
  - More information on why/how to migrate to Win9x can be found at:
Computer Barns / Lecture Theaters

- The old PC environment has been removed on 15-Jul-1999. In case you see the need to use an "old" application after the cut-off date, please contact our Martin Leung (ccmartin) for possible solution.

DTRs

- System administrators of DTRs were informed regarding the phase-out. For more details, please refer to individual DTR system administrator accordingly.

Further enquiry: James Tsang (ccjames) or David Shiu (ccdshiu)
Campus Backbone to be Migrated from FDDI to Gigabit Ethernet Technology

Back in the 2nd half of 1998, ITSC had begun to review its future campus backbone migration strategy. At that time there were mainly two different migration paths from a legacy switched FDDI backbone - either using ATM (Asynchronous Transfer Mode) or the newer 1,000 Mbps Gigabit Ethernet technology. By comparing the relative merits of these two backbone technologies, ITSC finally, by the end of 1998, adopted a switched Gigabit Ethernet backbone migration approach for our new campus LAN (local area network). The actual migration commenced in the summer of 1999, and it is anticipated that the whole migration will be completed by July 2000.

Our 7-years-old legacy switched FDDI backbone network currently consists of 2 FDDI switches (GIGAswitch/FDDI) and 5 high-end FDDI backbone routers (Cisco 7500 and 7000 routers). In this migration exercise, the backbone will gradually be replaced by 2 high-performance high-port-density Gigabit Ethernet switches (Cisco Catalyst 6509), employing latest hardware ASIC based routing technology (so-called Layer 3 Switching). After the upgrade, the overall aggregate routing throughput at the backbone level will be boosted by at least 10-20 times - up from several hundred thousands packets per second to over ten million packets per second. Additional redundancy of network pathways will also be introduced for better fault tolerance. At the same time most of the network pathways connecting individual workgroups (or subnets) will be upgraded with at least a 10-fold speed increase. Selected high-powered backbone servers will also upgraded with a Gigabit Ethernet connection. Click here to see a simplified network schematic of the new backbone.

This will be a major and strategic move to get HKUST well-prepared for the new 'e-learning' millenium, whereby we anticipate there will be further proliferation and dependence of campus intranets, as well as emergence of widespread deployment of media-rich online contents. More and more bandwidth intensive applications will then be comfortably supported over this new infrastructure, e.g. applications associated with our Cyberschool of Information Technology online education project, high-quality (like MPEG1) video broadcast or VOD (video-on-demand) applications, etc.
Enhanced Mailing List Service

HIGHLIGHTS

As our campus-wide Mailing List Service is getting more and more popular, ITSC is pleased to announce that a new dedicated server has been setup for this service. Besides improvement in the server performance, there are also several new features and enhancements being added for our users.

MORE DETAILS

- A dedicated mail server has been setup for handling all mailing list requests, which improves the overall performance for this service.
- New function is added for our users to check which lists he/she has authorization to send to.
- Enhanced function in checking which person is in a particular Administrative or Information Mailing list.
- A new Usage Guide on our Mailing List service has been prepared. Topics include:
  - How to Subscribe and Unsubscribe?
  - Guideline in Sending mail to a list
  - Mailing List Creation
  - Mailing List Owner's Role

For more details, please refer to our Mailing List web site at:
http://lists.ust.hk/itsc/mailinglist