

4. Central Computers & Student Computer Centre

4.1 Academic Computers

To support the academic and research activities of the University, an Academic Unix Cluster formed by 6 hosts is maintained on campus:

- **General Computing group** – consists of hosts **HKPU07, HKPU10, HKPU21** and **HKPU23** which are for general teaching and learning purposes.
- **Research Computing group** – consists of hosts **HKUP11** and **HKPU22** which are dedicated for research projects and pre-registration is required for access. For registration, please complete and return the web-based application form by visiting the “Academic Unix Cluster Services” page at <https://mydoc.polyu.edu.hk> and then click “Research Account Application”. You will be required to provide some basic information of your research projects.

A large variety of software packages on scientific applications, engineering, computer languages, management systems, statistical applications, etc. are installed on these academic computers to support the wide spectrum of disciplines and activities at the University. The list of software packages available on the Academic Unix Cluster can be viewed by clicking the “Software Packages and Utilities” button on the “Academic Unix Cluster Services” page.

Besides serving as computing platform for teaching, learning and research activities, the Academic Unix Cluster also provides “myStore”, “myWeb” and “mySurvey” services to enable you to store and manage your files and web pages in a secure way anywhere on the Internet, and to create and conduct Internet-based surveys without programming efforts. Please refer to section 6.3 - 6.5 for details of the services.

4.2 Administrative Computers

Administrative computing facilities are provided to support the University’s central administrative applications for student record administration, financial management, human resources management, student affairs management and research system administration, etc. At present, these applications are performed on the following machines:

Machine	Function
<ul style="list-style-type: none"> • one SUN SF20K 	<ul style="list-style-type: none"> - 1 production domain for supporting HRO and ITS systems - 1 production domain for supporting FO financial systems - 1 production domain for supporting AS Student Record related systems, AS statistics, RO Research Information System, MISO applications and Management Data Warehouse system - 1 production domain for supporting SAO, FMO, AADO and CPA systems
<ul style="list-style-type: none"> • one SUN Starfire 6800 	<ul style="list-style-type: none"> - 1 production domain for supporting data management of the Financial Reporting System - 1 user acceptance domain for supporting the user acceptance testing of AS, MISO, RO, FMO, SAO, AADO and CPA systems - 1 user acceptance domain for supporting the user acceptance testing of FO and HRO systems
<ul style="list-style-type: none"> • one SUN 480 and one SUN 490 	<ul style="list-style-type: none"> - Support the development of administrative systems

<ul style="list-style-type: none"> four SUN T2000s and two SUN V440s 	- Form two production application server clusters to support all web-based applications of various administrative offices
<ul style="list-style-type: none"> three SUN T1000s 	- Form a user acceptance application server cluster to support the user acceptance testing of all web-based applications of various administrative offices
<ul style="list-style-type: none"> one SUN V280 	- Acts as the development application server to support the development of all web-based applications of various administrative offices
<ul style="list-style-type: none"> one SUN V480 and one V440 	- Act as the production express server and application server for the Management Data Warehouse System
<ul style="list-style-type: none"> one SUN V440 and one SF280 	- Act as the UAT and development application server of the Management Data Warehouse System
<ul style="list-style-type: none"> one SUN V440 	- Acts as the production application server for Oracle Financials
<ul style="list-style-type: none"> one SUN SF280 	- Acts as the user acceptance application server for Oracle Financials
<ul style="list-style-type: none"> one SUN V480, one SUN V440 and one Xeon Window server 	- Act as the Essbase server and application servers to support the user acceptance testing of the Financial Reporting System
<ul style="list-style-type: none"> one SUN M4000, one SUN T2000 and one Dell PowerEdge 2950 Windows Server 	- Acts as the production Essbase server and application servers for the Financial Reporting System
<ul style="list-style-type: none"> one SUN V240 	- Acts as Isofax production server for Oracle Financials
<ul style="list-style-type: none"> one SUN V440 and one SUN 240 	- Act as the backup servers for all administrative systems
<ul style="list-style-type: none"> one SUN490 	- Supports the Library's INNOPAC System -
<ul style="list-style-type: none"> one SUNBlade 2000 	- Used as the Firewall management machine

With the implementation of the new 3-3-4 academic structure, the student-related administrative information systems have to be redeveloped / enhanced. In order to support these redeveloped systems, a new Administrative Computing Infrastructure has been implemented to provide a more powerful and flexible computing environment. The new infrastructure is composed of the following machines:

Machine	Function
<ul style="list-style-type: none"> Two HP BL870C Blade Servers Four HP BL870Ci2 Blade Servers 	Database Servers
<ul style="list-style-type: none"> Thirteen HP BL460cG6 Blade Servers 	Web and Application Servers
<ul style="list-style-type: none"> Two HP BL460cG6 Blade Servers 	Upload Servers
<ul style="list-style-type: none"> Two HP BL460cG6 Blade Servers 	Audit Log Servers

• Two HP ProLiant DL380 G6 Servers	Business Objects Metadata Management Servers
• Four HP DL380 R05 Servers	Business Objects Servers

4.3 University Private Cloud Service

The PolyU Private Cloud service provides departments with a server hosting platform in a virtual environment. It operates as a rental service for departments to rent a ‘virtual server’ from ITS at the cost which is much lower than buying and operating their own. No need for server rooms, special power arrangements, air-conditioning, and no lengthy delays for purchasing and setting up the server. The service will save departments the trouble of maintaining their own servers which would need special arrangements on the physical settings and security protection. It can also achieve cost-savings for the University on an institutional-wide level.

User can access the University Private Cloud user portal page by:

- Browse the ITS web page <http://www.polyu.edu.hk/its>
- Click the tab Services & Facilities
- Click the tab Private Cloud Service
- Click the corresponding field for the User Portal or User Guides

Users need to identify themselves by their NetID and NetPassword.

4.4 Student Computer Centre

4.4.1 PC and Software Available

The Student Computer Centre (SCC) is located on the **M, 3rd and 4th floor of the Li Ka Shing Tower** where a total of over 520 PCs are accommodated for student and staff use. All the PCs in the SCC are connected to the campus network and can make remote connection to the central academic computer systems.

*For details of the computer hardware and software configuration in the Student Computer Centre, please refer to **Appendix D**.*



4.4.2 Printing and Scanning Facilities

Three types of printing services as well as scanning service are provided in the SCC:

Service	Available Locations	Charge
Dot Matrix Printing	All PC rooms except M305	Free
Laser Printing (Black & White and Colour)	M305, 3/F & 4/F Bay Window Area (charged by stored value-card) M301 – M304 (charged by Octopus card)	\$0.2 (A4, single-sided) \$0.4 (A4, double-sided)
Laser Printing (Colour)	M305 (charged by stored-value card & Octopus card)	\$3 (A4 single-sided) \$6 (A4 double-sided)
Scanning	M305, 3/F & 4/F Bay Window Area	Free

For the convenience of users, Library's stored-value card and Octopus card are adopted for printing services. To minimize the waiting time, no editing is allowed on PCs dedicated for laser printing and a maximum of 20 pages or 10 minutes printing-time for each user is allowed.

4.4.3 Wireless Access Room

Located at **Room M202**, the Wireless Access Room is equipped with wireless network access points to provide notebook users with round-the-clock access to the campus network and the Internet. In addition, 8 sets of Linux Workstations as well as laser printing and dot matrix printing facilities are also available in the Room.

4.4.4 Access to the Student Computer Centre

All legitimate PolyU users (staff or students with valid PolyU Staff/Student ID cards) can use the facilities in the Student Computer Centre on a **first-come-first-served** basis and no prior booking arrangement is necessary. To ensure that only legitimate users can enter the SCC, Smart Card-operated access control turnstiles are installed at the entrance of the SCC, and you have to place your Smart Card on the Smart Card reader for entry and exit. All users are requested to observe the *Rules for Student Computer Centre Users as set out at **Appendix E***.

4.4.5 Student Computer Centre Class Booking

A number of designated PC rooms on the 4th floor of the SCC are available for class booking by departments via the Room Enquiry and Booking System on a first-come-first-served basis. Please contact your Departmental Timetabling Officer for booking arrangements. *The Regulations on class booking at the Student Computer Centre is at **Appendix F**. The hardware and software list for each PC room is at **Appendix D**.*

4.5 PCs in Lecture Theatres and Teaching Rooms

To support teaching and learning activities, desktop PCs are provided jointly by FMO and ITS in all general teaching rooms and lecture theatres. After the PC is powered up, you will be able to access the pre-installed software and be automatically connected to the Internet.