

# Topics covered



- **How the organisation of computing services in the University have evolved over the years - and is still evolving**
- **Current organisation and the basic facts**
- **Facilities for students**
- **Some interesting features and characteristics**
- **Some developments**
- **Some issues**

# Computing services



- **1965 - Computing Laboratory formed**
- **1971 - Administrative Computer Unit spun out - became Administrative & Library Computer Unit (ALCU)**
- **1983 - CL and ALCU under a common management**
- **1990 - CL and ALCU split; ALCU renamed MIS**
- **1993 - Telephone operation moved to CL**
- **1996 - CL and MIS reunited and renamed IT Services**
- **2003 - Media Services joins IT Services (ITS)**
- **2003 - ITS and Library merge to form Library and Information Services**
- **2003 - MIS function removed from LIS and renamed Business Improvements**

# The basics



- **Founded in 1413**
- **6,500 students of whom 1,000 are postgraduates**
- **Lots of buildings distributed around St Andrews**
- **Private duct/fibre optic network linking all buildings back to one of three Exchange (Comms) Rooms**
- **Exchange rooms linked together in a ring**
- **Dark fibre link to Dundee University/FaTMAN**
- **Gigabit backbone, buildings linked at 1 Gbps or 100Mbps**
- **3 main computer rooms**
- **Unix servers at the heart of the operation**
- **Main admin s/w systems are turnkey systems based on Oracle/Unix**

# Student facilities



- **Around 550 computers available for student use**
- **Most available on 24-hour basis, covered by CCTV**
- **100 located in halls of residence**
- **3,300 study-bedrooms cabled for voice/data with c85% connected to the network**
- **Students pay £90 pa for telephone and data connection**
- **Students buy telephone call credit online via credit cards**
- **Print accounting system written in-house; print operation self-financing**
- **Windows2000 desktop, Netware for application delivery, Unix filestore, LDAP for authentication**



## Some features

- Long-standing single sign-on, covering access to PC, Mac, UNIX and wireless network, email, dialup and web access to a range of services
- Primarily achieved through OpenLDAP currently
- Considerable emphasis in recent years in developing administrative systems
  - Data Warehouse created in 1998; all main admin systems send read-only data to this on a daily basis
  - As a result can inspect admin data through web interfaces (eg salary payments, student records)
  - Course catalogue, online advising, exam mark upload, exam papers online
  - All student record data held in digital form
  - Electronic payment facility in widespread use
  - Web-based memo system
  - Embryonic staff and student portal
  - Zope/Plone for web development
- Single VLE - WebCT (since 2002); interfaced to OpenLDAP and Student Record System



## Some characteristics

- 'IT' budget is approx £2,000,000
- Approx half of this is salaries and the rest is split between operations and development budget
- For the most part the development of the service relies on this regular income rather than occasional cash injections
- LIS currently has the BI (MIS) non-staff budget
- In 2002 staff moved from John Honey Building on North Haugh to Main Library and adjacent building
- Starting in 2003/04, students in residences are contributing a further £300,000 to the IT budget

# Developments



- Part-way through a backbone network upgrade that should be completed in 2004/2005 (£100,000 pa)
- When this is completed will feel more comfortable with QoS and moving other services onto IP network
- Gateway building recently acquired, £250,000 budget to equip it; new Residence, Comp Sci & Arts Buildings underway
- About to revamp of our email service organisation
- Planning significant filestore/backup initiative
- Developing server reduction strategy
- Planning to replace our helpdesk software

# Issues



- Political - working out new relationships with Library, Business Improvements, Media Services and SALTIRE
- Striking a better balance between effort in administrative and core computing services
- Role of Linux and Windows servers in our setup
- Migrating services onto IP network, UPS provision
- Upgrades to comms switches in schools/units
- Extended hours cover
- Security, and so...
- Taking more control over the desktop and devices that can attach to the network