

# The Internet

C20168

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# History

- Grew out of USA defence and research requirements
- A network designed to withstand failures
  - including nuclear attack
- Multiple independant networks
  - all following the same rules
- Became 'public' in 1995
  - though the standards were always public
- Growth now driven by consumer interest

# Structure

- Controlled by the Internet Engineering Task Force
  - working groups discuss specific issues
- Decentralised in nature and control
- All standards are open and publicly available
  - proprietary solutions are a threat to open standards
- Changes occur slowly because of its size
  - global organisations move slowly
- But the internet hasn't finished changing!

# Connecting

- Requires hardware
  - computer, modem, phone line
- Requires software
  - TCP/IP, browser, email client
- Requires ISP
  - *eg* eircom.net indigo.ie iol.ie
- Permanent internet connections are preferable but much more expensive than dial-up ones



# Searching

- Search engines overcome the vastness of the 'net
  - some 'search engines' are just directories
- Involves standard searching techniques
  - the technology is new, but it's still just a library
- Learn the rules for one or more search engines
- Most engines will limit the number of returns
- Use extra terms to narrow your search
- Bookmarking enables easy return to useful sites

# Web Authoring

- It's relatively easy to create web pages
- Tools are freely available for all systems
- Content of pages is very important
  - imaginative people are still needed
- Most ISPs provide space for a home page
- Web pages are defined in HTML
  - browsers display the page based upon system abilities
- Is a world-wide growth industry
  - becoming an in-house skill for larger firms

# e-Mail

- The Internet's 'Killer App'
- Has rules of etiquette - just like letter writing
- The ability to send messages aided the growth of the internet
- Most ISPs will provide 1 standard e-mail address
- Some ISPs will provide more
- 'Free' web-mail addresses are available
  - web-mail can be checked anywhere in the world
  - advertising pays for the service

# Security

- Is a significant concern
- Firewalls are used to securely segment networks
- Filters are used to prevent unsuitable downloads
- Viruses are easily preventable
  - anti-viral software is freely available
- On-line purchasing should be secure
  - watch the secure site indicator
  - only purchase by credit card
  - normal rules apply - Caveat Emptor

# Confidentiality

- Reveal your personal details with care
  - The young are more trusting
- e-Mail is plain text messaging
  - PGP enables more secure transactions
- Pentium III has unique chip ID
  - enables monitoring of user activity
- Other software threats to privacy exist
  - *eg* cartoon cursors
  - cookies

