

# Mobile Computing Today

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[http://gabbly.com/private/  
IT Futures Conference/  
mobilecomp](http://gabbly.com/private/IT_Futures_Conference/mobilecomp)



# **Mobile Computing Today**

- How do University staff use “mobile computing” today?
- We will hear from students later ...  
Others will speak about the future ...
- What are the practical problems ?
  - What can we do to improve the support ?
- I’ll talk about my own experiences
  - And we’ll use the “clickers” to find out about other people ...



## **Question 1**

*Are you ...*

1. Edinburgh academic staff ?
2. Edinburgh support staff ?
3. Other ?



# ***Desktop, Laptop or Handheld?***

- Devices -
  - Desktops - at home, at other organisations, in Internet cafes
  - Laptops
  - Handheld devices, mobile phones
- Some issues
  - Physical size/weight vs capability
  - Battery life



## **Question 2**

*Which of the following have you brought with you today ?*

1. A laptop
2. A handheld device (PDA)
3. A mobile phone
4. None of the above

*If more than one, select the first that applies*



# ***Working Remotely***

- Certain traditional assumptions are no longer valid when people are working remotely ...
  - The availability of specific browsers
  - The availability of certain applications (eg.VPN)
  - IP-based authorisation



## **Question 3**

*How much of your work do you do on mobile or remote devices - as opposed to a University desktop computer ?*

1. Most
2. A lot
3. A little
4. None



# ***Management & Ownership***

- Portable devices are usually seen as “personal”
- One device holds music, photos, and personal files as well as work files
- These are difficult for an organisation to “manage”, but managing them personally causes some difficulties:
  - Time and effort (software upgrades etc.)
  - Security (viruses)



## **Question 4**

*Which of the following best describes your (main) mobile device ?*

1. I own my own device and manage it myself
2. I have a University-owned device for my sole use, but I mostly manage it myself
3. I have a University-owned device for my sole use, and it is mostly managed by someone else
4. I occasionally use a University-owned device
5. I don't use a mobile device

*where "management" means software upgrades and installation, for example*



# *Applications*

- “Offline” Applications
  - Reading and writing papers & documents
  - Watching video
- “Online” Applications
  - Web, mail
- Data access is a problem
  - It needs to be accessed remotely or synchronised



## **Question 5**

*Which of the following best describes the applications that you use on your mobile device(s) ?*

1. I use mostly applications which do not require a network connection
2. I use networked applications such email and web (as well as the above)
3. I don't use mobile applications



# ***Communication***

- Mobile devices provide video and speech communication as well as text
- Network connections are often cheaper than phone calls from hotels
- I use Skype or iChat for sound and video
  - Or IRC/Jabber/iChat for text communications
- Firewalls can cause problems with these applications



## **Question 6**

*Do you use your mobile device for live communication ?*

1. Using video
2. Using voice (Eg. Skype/iChat)
3. Using text-based chat/IM
4. None of the above

*If you are using more than one, pick the first that applies*



# Getting Connected

- Wireless is now widely available at hotels/ conferences/airports/cafes etc ...
- Connection is usually easy but expensive
- But many Edinburgh Cafes are free!
- The University network is very difficult
  - Requires registration and installation of special VPN software
- Mobile phone data connections are slow



## **Question 7**

*Do you regularly use a wireless network ?*

1. Wireless hotspots (Eg. in cafes or airports)
2. Wireless networks at other organisations or at home
3. The University wireless network
4. More than one of the above
5. None of the above



# ***Data Protection & Encryption***

- Mobile devices are easily stolen
- They may contain sensitive personal data, business data or data covered by the data protection act
- Current encryption solutions are not perfect
  - Encryption of individual files requires explicit action
  - I use “Filevault” on the Macintosh
- Insecure protocols are vulnerable to snooping!



## **Question 8**

*How do you protect your data privacy against theft of your mobile device ?*

1. I don't store any important data on my mobile device
2. My data is automatically encrypted (eg. Filevault)
3. I explicitly encrypt important data
4. I use a login password, but no encryption
5. I don't use a login password or encryption
6. I don't use a mobile device

*If you are using more than one, pick the first that applies*



# **Backups!**

- Laptops hold large amounts of data (100Gb+)
- Backup not supported by University services
- What I do ...
  - Backup entire system to external disk (monthly)
  - Archive personal files to CD
  - Backup personal files to iPod (when travelling)
- Unencrypted backups may contain private data!



## **Question 9**

*How do you backup the data on your mobile device ?*

1. I don't store any important data on my mobile device
2. I make regular, comprehensive backups
3. I make backups of some of my data
4. I keep a copy of all my data on University systems
5. I don't make any backups
6. I don't use a mobile device

*pick the first that applies*



## ***Some Current Problems ...***

- Support for laptop/home management ?
  - Ownership and “control”
- Connecting to the University network ?
  - Registration and VPNs
- Backups & synchronisation ?
- Encryption & data security ?



## **Question 10**

*Have you attended a meeting supported by a Virtual World environment such as Second Life ?*

1. Yes
2. No
3. What is a “Virtual World Environment” ?

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