Mobile Computing Short Subjects:
What's New and Updated Tips and Tricks

Session 8012 - Thursday, August 5, 2010: 12:15 PM-1:30 PM Room 107 (Hynes Convention Center)
DISCLAIMER

This presentation is for entertainment purposes only. The content in this presentation is targeted for the home hobbyist. The presentation does NOT represent the opinion or recommendations of IBM.

Remember - Use at all freeware at your own risk.

The trademarks used in the presentation are the property of their respective owners.
Some Wireless Security Tips for Mobile Devices

- Because you never know when your laptop or device will be lost or stolen:
  - Take full advantage of any hardware or software encryption that is available for your laptop or device.
  - If your hardware does not have hardware encryption, there are software offerings that will encrypt your hard drive.
  - If your laptop has power-on password and or hardware locking capability use it.
  - Look for devices that have remote wipe capability. Or devices like the iPhone that will erase all personal information after 10 unsuccessful attempt to log in.
    - Locate it on a map
    - Display a message or play a sound to help you find it
    - Set a pass code to lock remotely
    - Initiate a remote wipe of all data and set the device back to it default factory setting

- If you use Bluetooth:
  - Always use a nontrivial key for pairing
  - Turn discovery off once you’ve paired the device
Need an office suite and you don’t want to spend a lot of money?

You have a couple of choices. **Open Office** which includes:
- A Word Processor
- Presentation software
- Spreadsheet
- Drawing
- Database

**IBM** offers:
**IBM’s Lotus Symphony**

Both office suites are offered on multiple platforms:
- Windows
- Mac OS
- Linux
On the road and you need an application fast?
Check out what’s available in open source applications

**Web Browsing**
- **Mozilla Firefox**
  - The premier free, open-source browser. Tabs, pop-up blocking, themes, and extensions. Considered by many to be the world's best browser.
  - [Download Page](#)

**Video Player, BitTorrent, Podcasting**
- **Miro**
  - Beautiful interface. Plays any video type (much more than windows media player). Subscribe to video RSS, download, and watch all in one.
  - Torrent support. Search and download from YouTube and others.
  - [Download Page](#)

**IM - Instant Messaging**
- **Pidgin**
  - Connect to multiple IM accounts simultaneously in a single app, including: AOL IM, MSN, and Jabber.
  - [Download Page](#)

**Download helpers**
- **SkipScreen**
  - A Firefox extension that skips unnecessary clicks and wait times on RealShare, Megaupload, Mediafire, zShare, and more.
  - [Download Page](#)

**E-mail**
- **Mozilla Thunderbird**
  - Powerful spam filtering, solid interface, and all the features you need.
  - [Download Page](#)

**RSS**
- **RSSOwl**
  - Solid cross-platform RSS client.
  - [Download Page](#)

**Peer-to-Peer Filesharing**
- **Cabos**
  - A simple, easy to use filesharing program. Gnutella network.
  - [Download Page](#)

- **Gnucleus**
  - A very good Gnutella search and download filesharing program.
  - [Download Page](#)

**Video Playback**
- **Miro**
  - Beautiful interface. Plays any video type (much more than windows media player). Subscribe to video RSS, download, and watch all in one.
  - Torrent support. Search and download from YouTube and others.
  - [Download Page](#)

- **VLC**
  - Plays more video files than most players: Quicktime, AVI, DIVX, OGG, and more. Pretty good interface.
  - [Download Page](#)

- **MPlayer**
  - Similar to VLC—plays loads of video formats.
  - [Download Page](#)

- **Media Player Classic**
  - Compact, but powerful media player. Plays anything under the sun. No install necessary.
  - [Download Page](#)
More open source...

You’ll be surprised at how many quality applications are available.

Most are now available on MAC and Unix well as the ever popular Windows OS. To learn more just Google “open source” or see sites such as http://www.opensourcewindows.org/
Speaking of free, anybody have an old laptop they want to bring back to life?

is a great choice.

Revitalize that old laptop for the kids. They get to learn UNIX too

- It has a very friendly and sophisticated interface. The latest version rivals MAC OSX and Windows 7 in neat visual effects
- It’s free and easy to install.
- You can try it out just by running it from the DVD no installation necessary
- It has modest memory and hard drive requirements
- Should you decide you like it, it will cohabit nicely with your exiting windows installation
- A special “netbook edition” is also available
Want to do a little programming hobbyist programming, but you don't want to pay big bucks for an IDE?

Check out Eclipse.

Eclipse is an open source community whose projects are focused on building an extensible development platform, runtimes and application frameworks for building, deploying and managing software across the entire software lifecycle.

Eclipse open source community has over 60 open source projects. These projects can be conceptually organized into seven different "pillars" or categories:

1. Enterprise Development
2. Embedded and Device Development
3. Rich Client Platform
4. Rich Internet Applications
5. Application Framework
6. Application Lifecycle Management (ALM)
7. Oriented Architecture (SOA)
Are you a programmer with some spare time on your hands?

- Consider developing an App!
- It could help pay the kid’s tuition.
- It might help you retire early.

Doodle Jump iPhone game hits the 3 million downloads mark: Tech ...
Mar 9, 2010 ... doodle jump.jpg The App Store is awash with so many downloads these ... of $2.9 million dollars in revenue since it launched in March 2009. ...
www.techdigest.tv/2010/03/doodle_jump_iph.html - Cached
Some cool things about the Mac

- It could be just my experience, but my Mac doesn’t suffer gradual performance slowdowns as other my other OS did -- forcing me to rebuilt it every 6 months or so.
- When I bought my second Mac, it was very easy to migrate all my data and applications to the new machine. I just ran the migration assistant, connected my new computer to my old computer using a fire wire cable, then powered on my old Mac while holding down the “T” key (for transfer). In an hour, everything was there. No reinstalling apps.
- Macs have a built in back up application called “time machine” which runs automatically and lets you recover important files and applications, simply by going back in time.
- Mobile me lets Mac users sync things like address books, calendars, contacts across their machines, bookmarks, mail and it gives me access to my personal information photos documents, whatever from any web browser.
- The light-up keyboard is great for working at night or low light conditions

- The track pad and gestures make navigation easier and offer more flexibility.
- The light-up keyboard is great for working at night or low light conditions
- When things hang, it’s easier to shutdown the thread and move on.
- Although there is no blue screen of death. Macs do have a grey veil of death, but it seems to happen less often…could be my imagination.
- I especially like the virtual machine software that lets me run multiple operating systems.
- It runs Windows just great!
Cool features in Windows 7

A sample of the new, improved, or downright cool

• Windows Touch to turn your fingers into a mouse.

• Play To for streaming music or video around the house.

• Remote Media Streaming to access your home media library via the Internet.

• HomeGroup for headache-free sharing on a home network.

• Windows Search to instantly find virtually anything.
Redundancy isn’t just for mainframes anymore.

Be prepared. Here are some options:

1 **Boot Managers** let you install more than one OS on your laptop hard drive. If one system image fails, gets corrupted or worse still infected, you usually can boot the other. Often you can use one image to fix or disinfect the broken one.

2 **Virtualization software** to install multiple operating systems on one machine. Developers have used this many years to help test their code in multiple environments. If you use a MAC, running virtualization software lets you run nearly every OS that runs on the Intel platform.

3 **Carry a spare** on a flash or SD Card. Many operating systems can be installed on removable media such as a memory stick an SD card or even a CD. Again this can be useful to repair or disinfect your laptop if it becomes corrupted or infected.
Taxonomy of mobile devices

The evolution of mobile computing is ongoing. As technology changes new permutations are appearing every day.

Examples: Laptops, palmtops, mobile phones, Smart phones, PDAs, tablets, hardened laptops, Netbooks, Smartbooks, embedded computers.

Wearable examples: calculator watch, virtual retinal display, head mounted heads-up display.

To learn more:

- Wikipedia has an excellent summary and history of portable computing.
- See also Springer Journal on http://www.springerlink.com/content/106503/.

Computing from a distance

Using technologies like Remote desktop and Back to my Mac have a number of advantages:

• It lets you keep your system physically secure

• Provides access to high-speed company networks which can be helpful if when your job requires moving large files around.

• Last but not least, it gives you access to another processor without impacting your laptop. Virtual machines are great, but they still a good deal consume CPU and memory

• Lets multiple people share a workstation that may have specialized applications or hardware

• There are many Smartphone apps that make it easy to connect to the desktop or laptop back at the office as if you were sitting in front of it.
Cool Tools: Hiren’s Boot CD

- Free utility to windows users that:
  - Lets user reset passwords
  - Boot with a windows XP desktop to enable troubleshooting
  - And more…

- [http://www.hiren.info/pages/bootcd](http://www.hiren.info/pages/bootcd)
Popular Blackberry Apps

http://appworld.blackberry.com/webstore/topfree?page=3
Some Popular iPhone Apps

Web apps that run in a browser

Apps that run native on the iPhone
No Bookshelf Boundaries

- The publishing industry has changed...
  - Kindle DX, Kindle Wi-Fi, Kindle 3G
  - Nook Wi-Fi, Nook 3G
  - Sony Reader G3
  - iPad Wi-Fi, 3G

Take your library with you wherever you go...

Have a favorite book in PDF format, just email it to your Kindle address or copy it to an SD card and pop it into your SONY Reader or Nook.
iPad Fun

Cool Stuff …

Touch screen, take any place, lightweight nearly always connected, runs a long long time on one charge, almost a replacement for my laptop, plays movies great, looks cool, has tons of cool apps, geographically aware, great for e-mail, reading books, reading newspapers, listing to streaming music, MP3s, audio books, viewing my photos, learning new things, talking to other people, Bluetooth keyboard capable.

My wish list …

Multitasking, a built in camera (like all other Apple products save the iTouch), USB port for all sorts of things…easier transfer of files, printing the stuff you create with iWorks, and an SD of any size slot for easy expansion.
Have your own Cloud…

- Clouds aren’t just for corporations any more.
- Amazon provides you with your own electronic library where you can archive books, music, movies and more…
- Apple has Mobile Me which provides you with virtual disk space, the ability to synchronize mail, contacts, calendars, photos and more… across multiple devices.
- Evernote support a number of devices and lets you keep notes, pictures, web clips
- Microsoft’s new PC … the “Personal Cloud”
- Huddle App – network of secure workspaces where you can share files, manage projects, organize virtual meetings
College Courses to Go…on iTunes U

- Take a refresher on Physics
- Learn a new language
- iPods, aren’t just for music anymore…

With the ubiquitous nature of portable devices and the adoption of POD and VOD casts have made take a course as easy as a click away.

- These courses are real college classes on a wide variety of subjects by a wide variety of universities … most if not all FREE.
- They are available on iPhone, iPad, iPods, Apple TV, PCs anything capable of hosting iTunes material
Stellar Cellular

- Most cellular phone companies now offer devices that act as mini-cell towers. It uses an existing internet connection such as cable or DSL. These help deal with the all to common situation of weak cell signals inside or in remote areas. They are commonly called “Femtocell” devices.

- Some common brand names are
  - T-Mobile Mobile Hotspots
  - Sprint Airave
  - Verizon Wireless Network Extender
  - AT&T MicroCell

- There are also devices that use cellular data networks to create instant Wi-Fi networks that multiple devices can share
  - Verizon MiFi 2200

- Sprint now offers the Overdrive G4 mobile hotspot

- Some cell phones offer MiFi

- Others offer tethering

- With tethering you use either a cable or Bluetooth connection to provide your laptop with internet connectivity via a cellular data network

- Many laptop and netbook computers have built-in cellular modems, so tethering is not needed

- AT&T now offers tethering a plan for iPhone tethering
So you finally bought your new 3G phone and you thought you were all set for awhile. Not so fast! 4G is here, and you are going to want it.
But wait! There’s more…

• I neglected to mention a couple of other tips in the original presentation, so I’m adding them before I upload them to the SHARE site.

• 1. Skype, it’s not just for laptops anymore. Skype has an app for iPhone and probably other cell phones, so if your phone has wireless capability and are some place where wireless is available, use Skype to make the call instead of using your minutes.

• 2. Are you tired of slow PC performance? Consider replacing your old laptop drive with a solid state one. That’s right, it’s like having 30GB or more of memory in your laptop, but it when you power off your laptop, the content doesn’t go away. When you look for them, just Google “laptop ssd”

• SSD Advantages:
  • Wicked Fast! You’ll be amazed at how fast things boot! They are getting to be affordable.
  • Less susceptible to damage from shock

• http://en.wikipedia.org/wiki/Solid-state_drive

http://www.skype.com/mobile/reminder/
Thank You and Happy Computing!