10030: Tips, Tools and Toys for the Road Warrior

Thursday, August 11, 2011: 3:00 PM-4:00 PM Europe 5 (Walt Disney World Dolphin )
Speaker: Geoff Smith (IBM Corporation)
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Abstract

- Today smart phones, net-books, tablets, and e-book readers are everywhere. In many cases the lines separating what they are capable of are blurring.

- Our speaker will provide an overview of the devices and operating systems available to mobile users today. What hardware, applications and apps and are most useful for the mobile user? What are the securities threats and how can you protect your information? Is there one device that you can use to do it all?

- This is meant to be an open interactive session. What devices, technologies and applications do you find most useful? Come join the conversation.
Remember when…Hey, you can tell it’s portable, because it as wheels

- **Motorola's first cell phone weighed in at 2 pounds**
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/
Overview: Types of Mobile computers

- Laptop computer
- Netbook computer
- Subnotebook
- Tablet personal computer

Handheld computers

- Ultra-Mobile personal computer, or UMPC
- Personal digital assistant or enterprise digital digital assistant, which include:
  - Handheld PC or Palmtop computer
  - Pocket personal computer
- Electronic organizer
- Pocket computer
- Calculators
- Handheld game console
- Portable media player
- Portable data terminal
- Information appliance
- Smartphone
- Wearable computers
# Smart Phone OSes

## Symbian

<table>
<thead>
<tr>
<th>OS 9.1</th>
<th>OS 9.2</th>
<th>OS 9.3</th>
<th>OS 9.4</th>
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<tr>
<td>5.0</td>
<td>3.1</td>
<td>3.2</td>
<td>5.0</td>
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### Symbian Platform

- Symbian*2
- Symbian*3
- Symbian*4

## Research in Motion BlackBerry OS

<table>
<thead>
<tr>
<th>3.1 Branch</th>
<th>4.2 Branch</th>
<th>4.5 Branch</th>
<th>4.6 Branch</th>
<th>4.7 Branch</th>
<th>5.0 Branch</th>
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<td>4.2.1</td>
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<td>4.6.6</td>
<td>4.7.7</td>
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## Apple iPhone OS

<table>
<thead>
<tr>
<th>iPod Touch, iPad</th>
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<tbody>
<tr>
<td>1.0</td>
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<tr>
<td>1.1</td>
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## Microsoft Windows CE

<table>
<thead>
<tr>
<th>5.0</th>
<th>5.2</th>
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<tbody>
<tr>
<td>Microsoft Windows Mobile</td>
<td></td>
</tr>
<tr>
<td>5.0</td>
<td>6.0</td>
</tr>
<tr>
<td>6.1</td>
<td>6.5</td>
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<tr>
<td>6.5.1</td>
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<table>
<thead>
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<th>5.1</th>
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</table>

<table>
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<tr>
<th>Microsoft Zune OS</th>
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</thead>
<tbody>
<tr>
<td>1.x Branch 2.x Branch 3.x Branch 4.x Branch</td>
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</tbody>
</table>

## Linux - Smartphones

- **Google Android**
  - 1.5
  - 1.6
  - 2.0
  - 2.1

- **Maemo** 5.0

- **MeeGo** 1.0 (Maemo 6.0)

- **webOS**
  - 1.0/1.1 Branch
  - 1.2 Branch
  - 1.3 Branch
  - 1.4 Branch

- **Google Chrome OS/Chromium OS**
  - Intel Moblin 2.0

## Linux - Netbooks

- **Ubuntu Netbook Edition**
  - 8.04 (LTS)
  - 9.04
  - 10.04 (LTS)

- **Samsung bada** 1.x
Market Share of Smartphone OSes

<table>
<thead>
<tr>
<th>Source</th>
<th>Year</th>
<th>Symbian</th>
<th>Android</th>
<th>RIM</th>
<th>iOS</th>
<th>Microsoft</th>
<th>Other OSes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gartner</td>
<td>2011 Q1</td>
<td>27.4%</td>
<td>36.0%</td>
<td>12.9%</td>
<td>16.8%</td>
<td>3.6%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Gartner</td>
<td>2010</td>
<td>37.6%</td>
<td>22.7%</td>
<td>16.0%</td>
<td>15.7%</td>
<td>4.2%</td>
<td>3.8%</td>
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<tr>
<td>Gartner</td>
<td>2009</td>
<td>48.9%</td>
<td>3.9%</td>
<td>19.9%</td>
<td>14.4%</td>
<td>8.7%</td>
<td>6.1%</td>
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<tr>
<td>Gartner</td>
<td>2008</td>
<td>52.4%</td>
<td>0.5%</td>
<td>16.6%</td>
<td>8.2%</td>
<td>11.8%</td>
<td>10.5%</td>
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<tr>
<td>Gartner</td>
<td>2007</td>
<td>63.5%</td>
<td>N/A</td>
<td>9.6%</td>
<td>2.7%</td>
<td>12.0%</td>
<td>12.1%</td>
</tr>
</tbody>
</table>

For more information, see Wikipedia’s article on Mobile Operating Systems. They have an excellent chart that does a comparison of them. 

http://en.wikipedia.org/wiki/Mobile_operating_system
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 Rapidshare, Megaupload, Mediafire, zShare, and more.
  - [Download Page](#)

E-mail
- **Mozilla Thunderbird**
  - Powerful spam filtering, solid interface, and all the features you need.
  - [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 cohabitate nicely with your exiting windows installation

• A special “netbook edition” is also available
Want to do a little programming hobbyist programming, but you down 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)Service
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.
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 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!

• The light-up keyboard is great for working at night or low light conditions.
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.
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.
Team Viewer

- A free for non-commercial use application that lets you control your computer remotely with an iPad or any web browser.
- Do remote administration and support
- Allows remote reboot and reconnect
- Remote presentation of products and solutions
- Do File transfers
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. Still, I love it.
The Mobile Future Looks Cloudy

- **Cloud computing**
- From Wikipedia, the free encyclopedia

**Cloud computing** is a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction.[1]

The concept of cloud computing fills a perpetual need of IT: a way to increase capacity or add capabilities on the fly without investing in new infrastructure, training new personnel, or licensing new software. Cloud computing encompasses any subscription-based or pay-per-use service that, in real time over the Internet, extends IT’s existing capabilities.
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
What the QR?

- You’ve probably seen these funny looking barcodes.
- Initially invented for tracking car parts, these codes are now being used extensively by companies to help sell products.
- They are called Quick Response codes.
- Almost all smart phones with cameras have apps that let you take a picture of the barcode to display text, contact information, connect to a wireless network of open a webpage in the phone browser.
- Audi, Macys and many others are using them extensively to link consumers to play videos that play on their phone’s browsers.
- Some people have been creating personal QR codes to take you to a their Facebook, Google+ or other social website.
- For more information see

- Or if you are smartphone impaired, http://en.wikipedia.org/wiki/QR_code
Google offers a wide range of applications for mobile users – we will highlight just a couple:

- **Google Search**: Download Google Search app to your smartphone to search fast.
- **Google Maps**: Search Google from your phone, and never say "I don't know" again.
- **Gmail**: Never carry a paper map again.
- **YouTube**: Get your email wherever you are.
- **Google Voice**: Millions of videos right in your pocket.
- **Google Sync**: Have one phone number for life.
- **Google Latitude**: Keep your Gmail, Calendar and Contacts in sync.
- **Google Latitude**: See your friends on a map.
- **iGoogle**: Get your personalized content anywhere, any time.
- **Buzz**: See what's going on nearby and post a message tagged with your location.
- **Google Earth**: Explore the world from the palm of your hand.
- **Google Goggles**: Use pictures to search the web.

**Google+**: Real-life sharing rethought for the web, wherever you are.

**Google Docs**: View and edit your documents and spreadsheets from anywhere and at any time.

**Google Books**: Take millions of books with you on the go.

**Blogger**: Keep your readers posted wherever you are.

**Google SMS**: Search by text message. Text 'help' to GOOGLE (466453) to use.

**Google Translate**: Translate text in more than 50 languages and speech in 15 languages.

**Picasa Web Albums**: View and share the photos in your Picasa account.

**Google Reader**: Keep up with your favorite blogs and newsfeeds, and share content with your friends. Star items you want to read later.

**Google News**: Read and search for the latest news from anywhere, at anytime.

**Google Calendar**: No syncing necessary. Set up mobile phone notifications.

**Google Tasks**: Stay on top of your to do list with Google Tasks for mobile.

**Google Talk**: Stay connected to your Google Talk contacts right from your phone.
Google Goggles Mobile

- Available Android and now iPhone
- Lets you search the web using a photo
- Scan a business card and add it to your address book
- Identify landmarks
- Learn the title of paintings or who painted it

http://www.google.com/mobile/goggles/#text
Google Voice Can Help You Keep in Touch

- One number that rings everywhere
- So if a friend has three numbers you don’t need to call all three and leaving he or she doesn’t need to call the right voicemail to get your message
- Free calls and text messages
- Transcribes voice mail and delivers it as a text message using the Google Voice App so you don’t have to dial in to get your voicemail.
- Lets you reply to the person immediately with a free text message
- Set up separate voice mail boxes for work and personal use
- Easily block unwanted callers
- Learn more: http://www.google.com/googlevoice/about.html
Solid State Drives and Hybrid Drives

- 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” Are now becoming more affordable.

- Many vendors and recently Intel started making them.

- Great for mobile computing because:
  - There are no moving parts
  - They are lighter than traditional hard drives
  - They use less power and extend battery life
  - But best of all, they will make your machine wicked fast!
  - Breathes new life into an older machine.

- If SSD is too pricey?

- You might consider a hybrid drive.
  - Hybrids combine traditional 7200RPM drives with a memory cache
  - They provide near SSD performance for a fraction of the price
  - Typical cost for a 500GB hybrid drive is in a little over a hundred bucks
Just call me - Video calls for everyone

- Video chat is available for Android, iPhone, Blackberry,

- Skype, it's not just for laptops anymore. Skype has apps for iPhone and Android, 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 and if your device has a camera, why not video conference?

- You can show folks your new home improvements, grandparents can see how their grand kids are doing.
More toys on their way …

- Coming soon
  - Motorola Droid Bionic 4G
  - iPhone 5 with iOS 5
  - BlackBerry Phones with BlackBerry OS 7
  - Windows 7 Phones with “Mango” Review
  - Phones with Google’s Android “Gingerbread”

- Rumors:
  - An iPad 2 HD
  - A revamp of the iPod line

http://www.cnet.com/8301-17918_1-20072492-85/windows-phone-mango-hands-on-review/
Google’s Honeycomb

Honeycomb is the next version of the Android platform, designed from the ground up for devices with larger screen sizes, particularly tablets.

http://www.youtube.com/watch?v=p4mbz_bzPIs&feature=player_embedded
Learn More About It

- There are many articles on the web on all of these technologies. Wikis and specifically, Wikipedia have content that gets updated fairly regularly as new technologies and devices emerge.

- WIRED magazine has a How-To-Wiki
  - [http://howto.wired.com/wiki/Main_Page](http://howto.wired.com/wiki/Main_Page)

- [Activate Find My iPhone for iOS 4](http://howto.wired.com/wiki/Main_Page)
- [Avoid International Roaming Charges](http://howto.wired.com/wiki/Main_Page)
- [Chat With an Integrated Webcam](http://howto.wired.com/wiki/Main_Page)
- [Encrypt Your Thumb Drive](http://howto.wired.com/wiki/Main_Page)
- [Get Your Music Off of Your iPod](http://howto.wired.com/wiki/Main_Page)
- [Get the Most Out of Google Voice](http://howto.wired.com/wiki/Main_Page)
- [Go Hands-Free in the Car](http://howto.wired.com/wiki/Main_Page)
Thank You and Happy Computing!