

Computer Software

- ❖ **System Software – The Operating System**
 - ◆ **Windows:** Developed by Microsoft
 - ◆ **Unix:** Developed by AT&T for large computers
 - ◆ **Linux OS:** OpenSource versions of Unix
 - ◆ <http://distrowatch.com>
 - ◆ **Mac OS:** Only for Mac Hardware
- ❖ **Application Software**
 - ◆ **Microsoft Office**
 - ◆ **Core applications:** Word, Excel, PowerPoint, Access
 - ◆ **Personal Information Manager – Outlook**
 - ◆ **Open Source software is distributed free**
 - ◆ **Firefox Browser, Thunderbird Email Client** www.mozilla.org
 - ◆ **OpenOffice** <http://www.OpenOffice.org>
 - ◆ **Online Office** <http://www.zoho.com/>

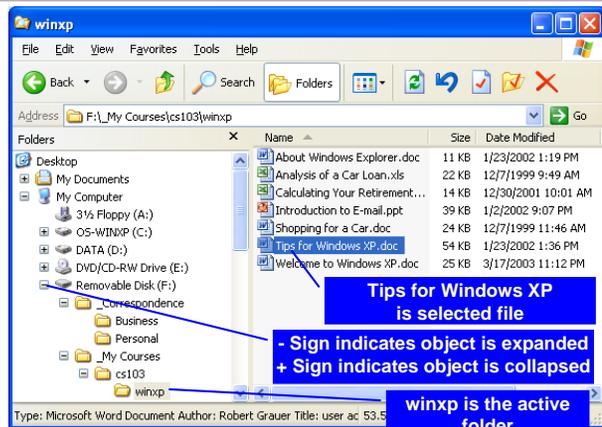
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Disk and File Management

- ❖ **A File is a module of data on hard drive**
 - ◆ **Program file:** Windows, Word, Excel, Notepad
 - ◆ **Data File:** Document file, Spreadsheet file
- ❖ **Copy, move, rename or delete a file**
- ❖ **Folders allow us to organize our files**
 - ◆ **May contain files and/or sub folders**
- ❖ **A back up strategy is critical**
 - ◆ **What (data)**
 - ◆ **When (whenever it changes)**
 - ◆ **Where (off site)**
 - ◆ **How (Windows Explorer)**
 - ◆ **Who (you)**

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Windows Explorer



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System Maintenance

- ❖ **Control Panel for Administrative functions**
 - ◆ **Add/Remove Hardware and Software**
 - ◆ **User Accounts**
- ❖ **Update software for fixes**
- ❖ **Important Software not part of OS**
 - ◆ **Antivirus: AVG, ClamWin**
 - ◆ <http://free.grisoft.com>
 - ◆ <http://www.snapfiles.com/get/clamwin.html>
 - ◆ **Anti-spyware: Spybot S&D, Spyware Terminator**
 - ◆ <http://www.snapfiles.com/get/spybot.html>
 - ◆ <http://www.snapfiles.com/get/spywareterminator.html>
 - ◆ **File Transfer Protocol Software** <http://www.winscp.net>
 - ◆ **File Compression Software:** <http://www.izarc.org>

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Introduction to Networks

- ❖ **Network environments**
 - ◆ Local Area Network (LAN)
 - ◆ Wide Area Network (WAN)
 - ◆ Internet = The unified global network
- ❖ **Protect your passwords!**
- ❖ **Acronyms Abound**
 - ◆ *ISP* = Internet Service Provider
 - ◆ *Email* = Electronic Mail
 - ◆ *WWW* = World Wide Web
 - ◆ *HTTP* = HyperText Transfer Protocol
 - ◆ *HTTPS* = Secure HyperText Transfer Protocol
 - ◆ *HTML* = The language for Web documents coding
 - ◆ *TCP/IP* = Protocols that allows computers to communicate reliably on the Internet

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Local Area Networks

(a) Home Network: A diagram showing a desktop computer, a laptop, and a printer connected to a central router. The router is connected to a box labeled 'DSL or Cable modem'. A callout points to the router: 'Router enables connected computers share Internet connection'.

(b) Local Area Network: A diagram showing a central server labeled 'File Server' and a 'Printer server' connected to a central hub or switch. Multiple desktop computers and laptops are connected to this hub. A callout points to the hub: 'Hub or "intelligent" switch is used to connect the network components to one another'. Another callout points to the printer server: 'Printer server enables connected computers to use either network printer'. A third callout points to the connection between the hub and an external network: 'Gateway enables the network to connect to other networks'.

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The Internet Links LAN's Together

A world map with several server icons placed across different continents. A 'Sender' computer icon is on the left, and a 'Recipient' computer icon is on the right. Red arrows show a path from the sender, through several intermediate server nodes across the globe, to the recipient. Below the map, the text reads: 'All that matters is the beginning and ending address'.

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The Commercialization of Cyberspace

- ❖ ***E-Commerce*** is the exchange of goods and services via the Internet usually using the *World Wide Web*

<ul style="list-style-type: none"> ◆ Advantages for the Seller <ul style="list-style-type: none"> ◆ Open 24/7 ◆ Shoppers from anywhere ◆ Virtual inventory is cheaper and extensive ◆ Lower transaction costs ◆ Target your customers 	<ul style="list-style-type: none"> ◆ Advantages for the Buyer <ul style="list-style-type: none"> ◆ Open 24/7 ◆ Never leave home ◆ Easy to view and explore product line ◆ Comparison shop ◆ Web site knows you
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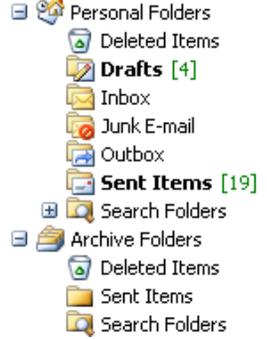
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E-Mail (Electronic Mail)

- ❖ E-mail is sending messages via computer
 - ◆ There should be no expectation of privacy
- ❖ Every e-mail address is unique and includes username and host computer separated by the '@' symbol such as johndoe@nmcnet.edu
- ❖ Get email from Internet Service Provider
- ❖ Get free email accounts at sites like
 - ◆ mail.yahoo.com (Easiest to use and 1 GB space)
 - ◆ www.gmail.com (Big 2 GB space, searchable, POP3 access)
 - ◆ www.hotmail.com (Not recommended, small)
- ❖ You have an email address at college
 - ◆ Access NMC Web Mail smail.nmcnet.edu
 - ◆ Username = RobeL Password = Laur1234 PwrCampus
 - ◆ RobeL@smail.nmcnet.edu

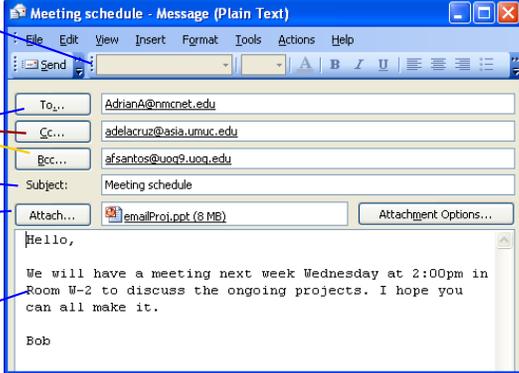
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The Mail Folders

- ❖ **Inbox** = new messages as well as messages that have been read
 - ❖ **Outbox** = Messages not yet sent
 - ❖ **Sent items** = Messages that have been sent
 - ❖ **Deleted items** = Messages deleted from any folder
 - ❖ **Custom folders** = Additional user folders
- Address Book** = e-mail contact addresses
- 
- The screenshot shows a tree view of mail folders. Under 'Personal Folders', there are 'Deleted Items', 'Drafts [4]', 'Inbox', 'Junk E-mail', 'Outbox', and 'Sent Items [19]'. Below that are 'Search Folders', 'Archive Folders', 'Deleted Items', 'Sent Items', and another 'Search Folders'.

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Anatomy of the E-mail Message



The screenshot shows an email client window titled 'Meeting schedule - Message (Plain Text)'. The window has a menu bar (File, Edit, View, Insert, Format, Tools, Actions, Help) and a toolbar with a 'Send' button and text formatting icons. The email content is as follows:

To: AdrianA@nmcnet.edu
 Cc: adelaacruz@asia.umuc.edu
 Bcc: afsantos@uoq@uoq.edu
 Subject: Meeting schedule
 Attach: emailProi.ppt (8 MB) Attachment Options...

Hello,
 We will have a meeting next week Wednesday at 2:00pm in Room W-2 to discuss the ongoing projects. I hope you can all make it.
 Bob

Annotations on the left side of the screenshot:

- Formatting**: Disabled = Text, Enabled = HTML
- Recipients**: Points to the To, Cc, and Bcc fields.
- Subject**: Points to the Subject field.
- Attachment**: Points to the Attach field.
- Message Area**: Points to the main body of the email text.

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